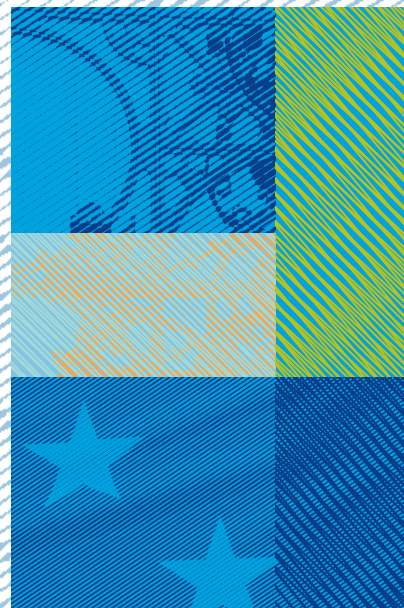


**ANNUAL REPORT**

**2008**

**BANCO DE ESPAÑA**  
Eurosisistema





The cut-off date for the information included in this report was 8 May 2009.

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## ABBREVIATIONS

AIAF	Association of Securities Dealers	GDI	Gross disposable income
BCBS	Basel Committee on Banking Supervision	GDP	Gross domestic product
BE	Banco de España	GFCE	Gross fixed capital formation
BIS	Bank for International Settlements	GNP	Gross national product
BLS	Bank Lending Survey	GVA	Gross value added
CBSO	Central Balance Sheet Data Office	HICP	Harmonised Index of Consumer Prices
CCR	Central Credit Register	ICO	Official Credit Institute
CEBS	Committee of European Banking Supervisors	ICT	Information and communications technology
CEIPOS	Committee of European Insurance and Occupational Pensions Supervisors	IDB	Inter-American Development Bank
CESR	Committee of European Securities Regulators	IGAE	National Audit Office
CEMLA	Center for Latin American Monetary Studies	IMF	International Monetary Fund
CEPR	Centre for Economic Policy Research	INE	National Statistics Institute
CiIs	Collective Investment Institutions	INEM	National Public Employment Service
CNE	Spanish National Accounts	LTROs	Longer-term refinancing operations
CNMV	National Securities Market Commission	MFIs	Monetary financial institutions
CPI	Consumer Price Index	MiFID	Markets in Financial Instruments Directive
DGSFP	Directorate General of Insurance and Pension Funds	MMFs	Money market funds
ECB	European Central Bank	MROs	Main refinancing operations
ECOFIN	Council of the European Communities (Economic and Financial Affairs)	MTBDE	Banco de España quarterly macroeconomic model
EDP	Excessive Deficit Procedure	NAIRU	Non-accelerating-inflation rate of unemployment
EFF	Spanish Survey of Household Finances	NCBs	National central banks
EMU	Economic and Monetary Union	NPISHs	Non-profit institutions serving households
EONIA	Euro overnight index average	OECD	Organisation for Economic Co-operation and Development
EPA	Official Spanish Labour Force Survey	OPEC	Organisation of Petroleum Exporting Countries
ESA 79	European System of Integrated Economic Accounts	PPP	Purchasing power parity
ESA 95	European System of National and Regional Accounts	QNA	Quarterly National Accounts
ESCB	European System of Central Banks	SCLV	Securities Clearing and Settlement Service
EU	European Union	SDRs	Special Drawing Rights
EURIBOR	Euro interbank offered rate	SEPA	Single Euro Payments Area
EUROSTAT	Statistical Office of the European Communities	SMEs	Small and medium-sized enterprises
FAFA	Fund for the Acquisition of Financial Assets	TARGET	Trans-European Automated Real-time Gross settlement Express Transfer system
FASE	Financial Accounts of the Spanish Economy	TARP	Troubled Asset Relief Program
FDI	Foreign direct investment	TFP	Total factor productivity
FISIM	Financial intermediation services indirectly measured	ULCs	Unit labour costs
FSAP	Financial Sector Assessment Programs	VAT	Value Added Tax
FSB	Financial Stability Board	WTO	World Trade Organisation
FSF	Financial Stability Forum	XBRL	Extensible Business Reporting Language

## COUNTRIES AND CURRENCIES

In accordance with Community practice, the EU countries are listed using the alphabetical order of the country names in the national languages.

BE	Belgium	EUR (euro)
BG	Bulgaria	BGN (Bulgarian lev)
CZ	Czech Republic	CZK (Czech koruna)
DK	Denmark	DKK (Danish krone)
DE	Germany	EUR (euro)
EE	Estonia	EEK (Estonian kroon)
IE	Ireland	EUR (euro)
GR	Greece	EUR (euro)
ES	Spain	EUR (euro)
FR	France	EUR (euro)
IT	Italy	EUR (euro)
CY	Cyprus	EUR (euro)
LV	Latvia	LVL (Latvian lats)
LT	Lithuania	LTL (Lithuanian litas)
LU	Luxembourg	EUR (euro)
HU	Hungary	HUF (Hungarian forint)
MT	Malta	EUR (euro)
NL	Netherlands	EUR (euro)
AT	Austria	EUR (euro)
PL	Poland	PLN (Polish zloty)
PT	Portugal	EUR (euro)
RO	Romania	RON (New Romanian leu)
SI	Slovenia	EUR (euro)
SK	Slovakia	EUR (euro)
FI	Finland	EUR (euro)
SE	Sweden	SEK (Swedish krona)
UK	United Kingdom	GBP (Pound sterling)
JP	Japan	JPY (Japanese yen)
US	United States	USD (US dollar)

## CONVENTIONS USED

M1	Notes and coins held by the public + sight deposits.
M2	M1 + deposits redeemable at notice of up to three months + deposits with an agreed maturity of up to two years.
M3	M2 + repos + shares in money market funds and money market instruments + debt securities issued with an agreed maturity of up to two years.
Q1, Q4	Calendar quarters.
H1, H2	Calendar half-years.
bn	Billions (10 <sup>9</sup> ).
m	Millions.
bp	Basis points.
pp	Percentage points.
...	Not available.
—	Nil, non-existence of the event considered or insignificance of changes when expressed as rates of growth.
0.0	Less than half the final digit shown in the series.

**ANNUAL REPORT 2008**

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## 1 OVERVIEW

### 1 Introduction

In 2008 the world economy underwent momentous changes which brought to an end the longest uninterrupted growth period since the 1960s. The turmoil on international financial markets present since the summer of 2007 turned in the closing months of the year into a deep global financial crisis, giving rise to an economic recession that has now extended to all the main economies.

The ratcheting up of the financial crisis in September 2008 heightened the process of deleveraging in which the financial system was immersed, while exacerbating its effects on real activity. The crisis spread to the emerging economies – which had until then shown signs of some resilience – and led some countries to post very negative GDP growth rates in 2008 Q4 and 2009 Q1.

The paralysis of demand prompted a drastic turnaround in inflation worldwide during the year. Until the summer, inflation had been running very high as a result of the notable rises in oil, food and other non-energy commodity prices. However, as the growing weakness of the world economy contracted the demand for oil and commodities, their prices moved sharply down and affected both actual inflation rates and inflation expectations, which fell notably against a recessionary global background.

The economic authorities reacted forcefully to this combination of adverse factors with the aim of supporting the financial system, safeguarding its workings and stimulating the economy. Governments devised financial system support plans and adopted relatively ambitious fiscal impulse packages. Central banks, for their part, altered the stance and operational framework of their monetary policies during the year to adapt them to the change in the global scenario. Following the heightening and globalisation of the financial crisis, monetary policy responses became more uniformly expansionary. Sizeable cuts were made to official rates, which fell in some cases to all-time lows, while policies geared to the abundant provision of liquidity took on a key role.

In the Spanish economy, the shocks induced by the serious global economic and financial crisis superimposed themselves on the process of domestic adjustment which had begun previously (as a result of the imbalances built up during the previous long, intense expansion), and which was being driven, above all, by the correction of the excesses in the real estate sector and of the high levels of private-sector debt. The combination of both made for a severe increase in uncertainty, a precipitous decline in confidence, a notable tightening of the conditions of access to financing and a considerable erosion of private-sector wealth. The contractionary forces behind this process pushed the Spanish economy into a sharp recession, in parallel with the global recessionary trends. Despite the change in monetary policy stance and the expansionary measures adopted, the Spanish economy showed a continuous loss of momentum, which became more accentuated in the second half of the year when, for the first time since 1993, two consecutive quarters of falls in GDP were recorded. As a result, the year closed with a 0.7% year-on-year decline in output. This recessionary pattern became more visible in 2009 Q1, with a 3% fall in GDP compared with the same period a year earlier according to the data released as this Report was going to press. The information available for Q2 appears to point to less intense contractionary trends, as is proving the case worldwide.

The inflationary outlook changed drastically during the year, in line with worldwide developments and with the sudden weakening of demand. After having increased significantly in the first half of the year, the CPI growth rate declined rapidly, reflecting the effect of the correction of oil and other commodity prices, and of the diminished momentum of spending, which led the inflation differential with the euro area to turn negative from December, for the first time since the euro area was created. The external deficit also turned around and began to narrow fairly sharply. The processes brought on by the strong adjustment of domestic spending are thus prompting a relatively swift re-absorption of some of the imbalances pending correction, although they are doing so by means of bringing activity grinding sharply to a halt, with high costs in terms – above all – of falling employment and rising unemployment.

This chapter analyses the current situation of the Spanish economy against the backdrop of the global economic and financial crisis. It sets out the economic policy challenges posed and the steps needed to mitigate the contractionary forces and forge a prompt recovery on balanced and sustainable foundations. Chapter 2, from a more analytical and selective perspective, details some of the aspects of the impact of the global crisis on the adjustment of the Spanish economy, paying particular attention to the implications for the determinants of job creation.

## **2 The world economy amid the international financial crisis**

A year of momentous change for the world economy, in which the longest period of uninterrupted growth since the 1960s was cut short.

Undoubtedly, 2008 was a year of momentous changes for the world economy. The risks identified in 2007 materialised, full-blown, and the longest uninterrupted period of growth since the 1960s was cut short. The financial turmoil accompanying us since summer 2007 turned in the closing months of last year into a deep-seated and global financial crisis, entailing an economic recession which has now extended practically to all the main economies, including the euro area. Faced with this combination of adverse factors, economic authorities reacted forcefully, practically simultaneously and, to some extent, concertedly, with the aim of supporting the financial system, safeguarding the flow of credit to the economy, restoring confidence and sustaining aggregate demand. However, the feedback loop between financial and real-sector recessionary forces have shaped an economic and financial situation of extreme fragility and one auguring a very negative outlook for 2009.

### **2.1 THE GLOBAL FINANCIAL CRISIS**

The international financial system underwent its most difficult time in several generations

In 2008 the international financial system underwent its most difficult time in several generations. The benign and relatively unvolatile macroeconomic context marking the world economy in the years immediately prior to the start of the crisis in August 2007 had given rise to a situation of underpricing of risk. And, driven by low real interest rates in historical terms and extraordinarily dynamic credit, real and financial asset prices stood at historically high levels. The degree of leverage obtained by the financial system was also high, as was the private-sector non-financial debt in some countries.

In these circumstances, the change in the real estate cycle in the United States, around whose mortgage market a web of complex mechanisms for transferring risks from loan-originating institutions to other agents had been woven, paved the way in the opening months of 2007 for an increase in subprime mortgage defaults, which would ultimately act as the trigger for the current global financial crisis. The scope for contagion of the financial turmoil that began in the summer of 2007 was soon apparent, despite its relatively local source. The sharp reassessment of risk against a background of high leverage triggered a drastic reduction in liquidity on money markets, amplified by the complexity of some of the instruments at the epicentre of the turmoil (structured products) and by the opacity with which risks were distributed through the so-called originate-to-distribute model, the expansion of which had spurred the extraordinary buoyancy of credit in the previous years. However, few could then have predicted the range of institutions, assets, markets and economies which would ultimately be affected.

In the first half of the year the financial turmoil spread, compromising the solvency of some systemically important institutions

The heightening of the crisis in September accelerated the deleveraging of the financial system and increased the risks of a severe contraction in credit

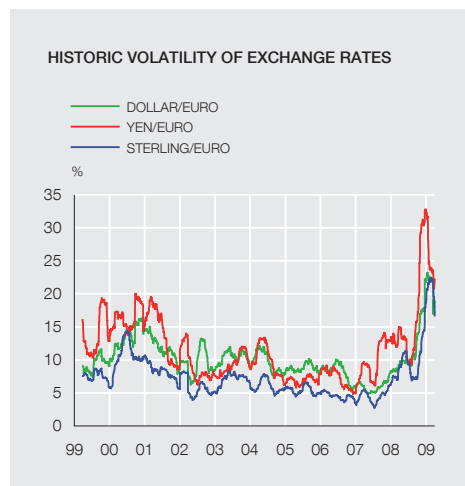
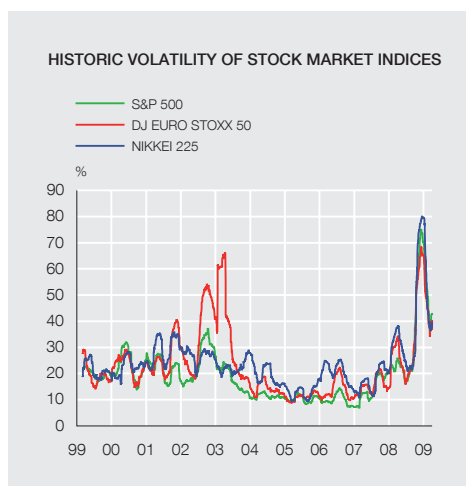
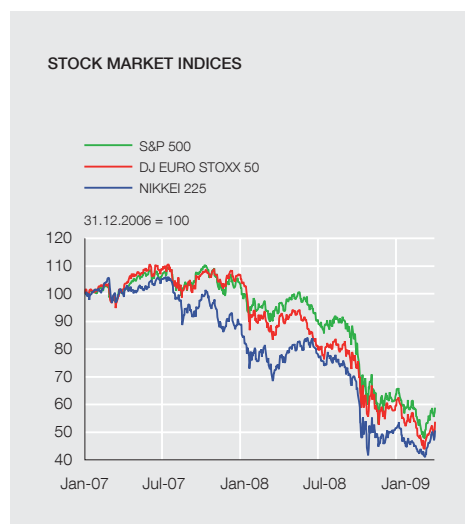
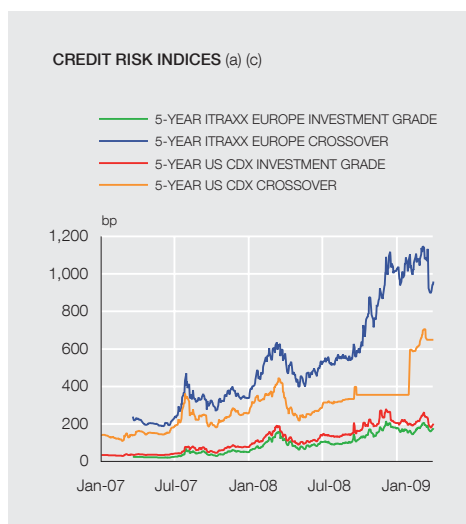
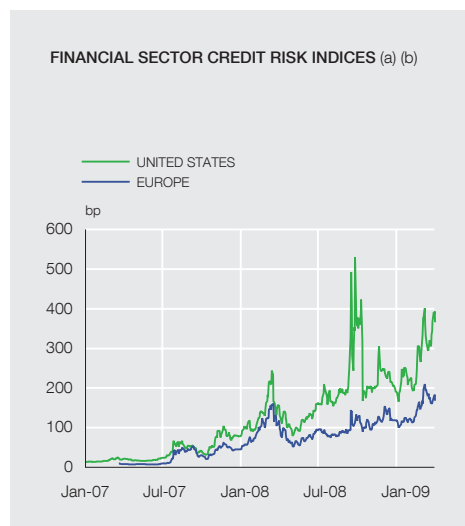
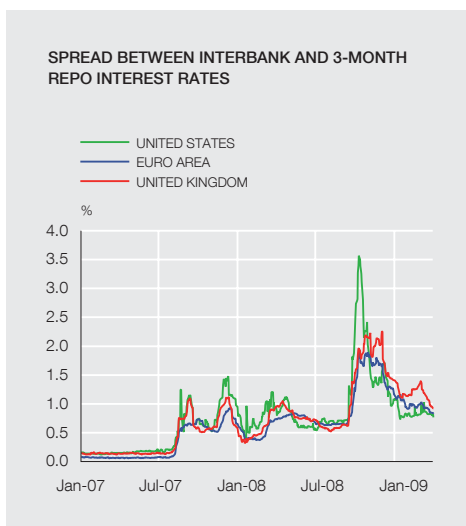
The initial turmoil progressively fed through to other assets, markets and economies, becoming what is currently a global financial crisis

In the first half of 2008, the financial market turmoil and dysfunctions persisted and spread, compromising the solvency of some systemic institutions. During this period, central banks increased the supply of liquidity on interbank markets and governments conducted selective bail-outs of ailing systemic institutions. Such was the case of the investment bank Bear Stearns which, thanks to the support of the Federal Reserve, was purchased by JP Morgan Chase in March. In September, following the placing under control of Freddie Mac and Fannie Mae (agencies which play a key role in the US mortgage market), the bankruptcy of the investment bank Lehman Brothers and the bail-out of the insurer AIG, the financial markets entered a global crisis which placed the system on the verge of collapse and which impacted with force the European banks directly involved in the distribution of risks originating in the United States.

The heightening of the financial crisis in September gave rise to a period marked by the quickening of the deleveraging process which the financial system is undergoing and which entails the risk of a sharp contraction in credit. The great uncertainty and volatility overshadowing markets (see Chart 1.1) were most visibly reflected on stock markets, which from mid-September 2008 to March 2009 fell by around 30% in the main economies, and on certain foreign exchange markets. Further, there was a marked increase in credit risk premia and, despite the easing of monetary policies, a notable tightening of credit standards.

Many factors contributed to the spread and heightening of the crisis. The loss of confidence in the pricing of the assets initially affected (some of great complexity) and the opacity of the resulting losses promptly turned into uncertainty over the financial position of those financial institutions that were holding such assets on their balance sheets or which were exposed through credit lines to off-balance sheet vehicles, giving rise to a significant increase in counterparty risk. With access to the wholesale funding markets closed except for the very short-dated terms, and with financial institutions obliged to increase their solvency ratios in a setting of high risk aversion which was far from conducive to the raising of private capital, banks were caught up in a disorderly process of deleveraging through asset liquidation. In turn, the massive sale of assets at bargain prices on relatively illiquid markets led to fresh losses and prompted negative externalities for other financial institutions not initially exposed to the assets affected at the outset; but such institutions also entered a vicious circle of losses due to the depreciation of assets on their balance sheets, worsening solvency ratios and asset liquidation.

These trends called into question the long-term viability of business models which, supported in some cases by looser regulations, had shown great dynamism in recent years and had developed a web of complex interconnections in the financial sector. Firstly, the vulnerability of those banks (the major investment banks in particular) that had depended excessively on the capital markets to fund with short-term debt the – often aggressive – expansion of their balance sheets was highlighted. Also, the losses incurred by the monoline insurance companies, which had backed in recent years the issues of some of the instruments at the heart of the credit problem, called into question their solvency, undermining the very basis on which their business was founded. Finally, hedge funds, whose high returns were based on the possibility of making investments financed largely through resort to credit, experienced significant disinvestment. In any event, set against the high integration of and complex interconnections between financial institutions, the initial turmoil progressively fed through to other assets, markets and economies – including the emerging countries, which initially showed some resilience – to become what is today a global financial crisis without parallel in the past 70 years.

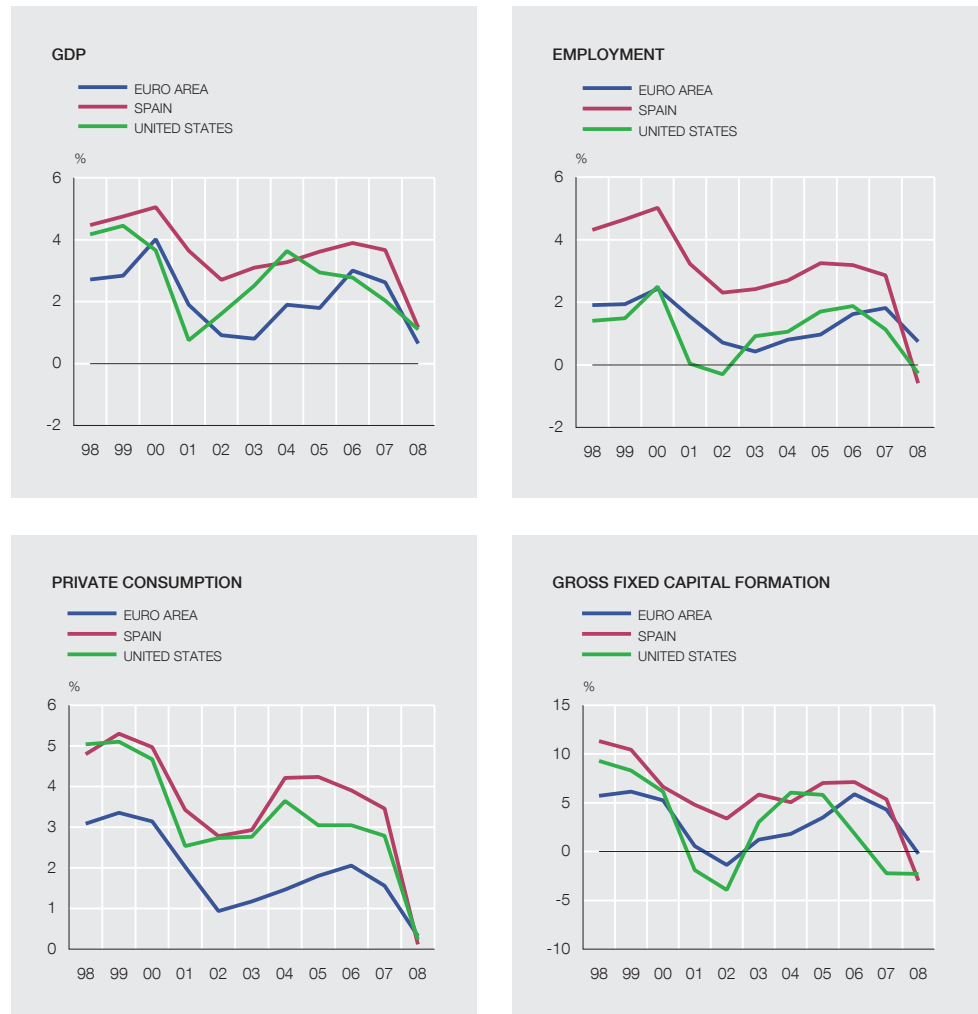


SOURCES: Banco de España, Bloomberg and Datastream.

- a. Prepared on the basis of CDS premia
- b. For the United States, the average of the major banks' CDS spreads. For Europe, the iTraxx financial index.
- c. Investment grade indicates that the index includes the debt of institutions with a rating of BBB or higher for Standard & Poor's and Fitch. Institutions with a poorer rating are included in the crossover index.

**GDP, PRIVATE CONSUMPTION, EMPLOYMENT AND GROSS  
FIXED CAPITAL FORMATION**  
Rates of change

CHART 1.2



SOURCES: Eurostat and national statistics.

The effects of the crisis on the real economy have become patent in the situation of global economic recession

In late 2008 and early 2009, the effects of the financial crisis on the real economy have been patent, giving rise to a recession which has now reached practically all the main economies. This has meant that the focus has shifted towards a new feedback loop, this time from the real to the financial sector.

2.2 THE ECONOMIC CRISIS

The economic situation deteriorated progressively throughout the year

The loss of momentum in world growth dating back to mid-2007 continued in 2008. For the year as a whole, GDP grew by around 3%, down from 5.2% a year earlier. The economic situation deteriorated progressively throughout the year, and was reflected in successive downward revisions of growth and inflation forecasts by public and private organisations. Nonetheless, from Q3 the slowdown intensified sharply and some countries posted very negative growth rates in Q4 and in 2009 Q1 (see Chart 1.2). The latest information, however, suggests the intensity of the contraction is easing.

In the first half of the year, activity in the developed countries began to be affected

In the first half of the year, activity in the developed countries began to be affected by the impact of the high commodity prices prevailing and by the financial turmoil passing through to aggregate demand via various channels. Firstly, household and corporate spending decisions progressively adapted to the much more restrictive financial conditions in place,

reflected in both higher interest rates and risk premia, and in the lesser availability of credit. Further, the reduction in the price of financial and real estate assets generated a significant negative wealth effect which, along with the fall in confidence (which prompted a deferral of consumption and investment decisions), entailed a clear slowdown in aggregate demand during the year. The emerging countries, however, continued to post high growth rates, which sustained to some extent the external demand of the advanced economies and curbed the intensity of the adjustment of activity to the new macroeconomic scenario.

The persistence and spread of the financial problems meant that towards the end of the summer the world economy was already showing unequivocal signs of intense and widespread weakness

Towards the autumn, however, the persistence and worsening of the financial problems meant that the world economy was already showing unequivocal signs of intense and widespread weakness, across both industries and regions. These signs were most patent in the marked deterioration in the global trade indicators. The relative resilience which, to differing degrees, the emerging economies had shown came to an end, and most – including China – underwent a sharp deceleration, though they still maintained positive growth rates. The correction was also evident in the financial indicators, and the economic outlook turned markedly gloomy. Some of the emerging countries with greater vulnerabilities went into crisis, requiring the activation of multilateral resolution mechanisms.

There was also a drastic turnaround in inflation during the year

Inflation also underwent a significant turnaround during the year. Until the summer, as a result of the notable increases in oil, food and other non-energy commodity prices, very high figures were recorded. However, as the growing weakness of the world economy reduced the demand for oil and commodities, their prices moved sharply downwards and affected both actual inflation rates and inflation expectations, which fell notably.

The euro area was intensely affected by global developments and the decline in external demand

Despite a relatively favourable starting situation, the euro area did not remain immune to global developments and to the decline in external demand. Although the real effects of the financial turmoil were perceived with some delay, they were quite clear in the second half of the year. As a result, 2008 ended with the euro area economy in deep recession, with the level of GDP in Q4 1.5% down on the same period a year earlier. Inflation, which was running at around 4% in mid-2008, slowed markedly in the closing months of the year and early 2009, owing largely to the fall in commodity prices but also to the notable weakening of domestic demand. The sharp change in outlook after the summer dispelled all fears that had arisen in the previous months over inflation expectations becoming unanchored, in a setting in which inflation had posted rates unknown since the start of EMU and in which wage demands, after several years of containment, had risen owing to labour market tightness.

During the year central banks modified the stance and operational framework of their monetary policies to adapt them to the change in global scenario

During the year central banks progressively adapted their monetary policy stance to the changing global scenario, which became increasingly complex. The heterogeneity of monetary policy responses in the first half of 2008 was the outcome of discrepancies in the cyclical position and outlook of each economy, and of structural differences in transmission mechanisms. These factors meant that differing assessments were made of the balance of risks to attaining objectives. The Federal Reserve continued during these months on the road on which it had embarked on 2007, aggressively cutting interest rates, while many of the emerging economies tightened their monetary policy. In the euro area, the ECB Governing Council faced a particularly complex situation in which some change in the dynamism of demand was discernible, but with the indicators of capacity utilisation not falling back and with wages growing at a very high rate. Accordingly, the ECB decided in July to raise its key rate by 0.25 pp, with the aim of preventing the risks identified to the goal of maintaining price stability in the medium term from materialising.

The change in economic outlook further to the worsening of the financial crisis in September made for greater uniformity in monetary policy responses

The radical change in economic outlook following the intensification and globalisation of the financial crisis in September tended to make for uniformity in the direction of monetary policy responses. With inflationary risks dispelled from the policy-relevant horizon, central banks coincided in giving priority to preventing the process of disinflation into which developed economies were moving from translating into inflation rates persistently below target, or in some areas into deflation. This was against a background in which the sharp contraction of aggregate demand and the marked deterioration in economic prospects threatened to feed back into the financial crisis. In a practically unprecedented and concerted move, the central banks of the main world economies cut interest rates by 50 bp in early October, and followed this up with fresh cuts in the final months of 2008 and in early 2009. In the case of the euro area, the total reduction in interest rates amounted to 325 bp, placing the main refinancing operations rate at 1% in May 2009, a level not seen since the start of EMU. These reductions saw, in several cases, the room for manoeuvre available under conventional monetary policy measures exhausted. And in a setting in which distortions in significant segments of the transmission mechanism persisted, this led to a shift in emphasis towards broadening the range of measures aimed at reinforcing the pass-through of the cut in interest rates to agents' financial costs and to making agents' access to financing easier, through the expansion of the central bank balance sheet or the change in the composition of its assets.

Liquidity provision by central banks reached extraordinary volumes

Central bank liquidity provision policies have also become exceptionally prominent since the outbreak of the financial tension in August 2007. The unfolding of the crisis during 2008 – whose effects, once again, were felt with particular virulence on the interbank markets, which ceased to function as efficient liquidity distribution mechanisms – posed major challenges to which the central banks responded in an innovative fashion, increasing the supply of liquidity in order to meet the system's gross needs directly. On the basis of the respective operational frameworks in place, innovations entailed an increase in the number of institutions with access to central bank financing, the broadening of the range of acceptable collateral for monetary policy operations and the lengthening of the terms at which liquidity was supplied to the market.

Governments, too, responded forcefully to the intensification of the financial crisis

Governments also responded forcefully to the intensification of the financial crisis. In the first half of the year, measures had focused on the selective bail-out of ailing systemic banks, supplementing the actions of central banks to prevent liquidity problems in the banking sector from becoming solvency problems. However, the risks of financial collapse and the increasingly evident and heightened prospect of global recession led from September to the widespread approval of plans to support the financial sector and to boost aggregate demand via fiscal stimulus. The breadth of the measures adopted and the volume of resources mobilised were on an unprecedented scale, although they evidenced a wide variety of approaches derived from differences in starting positions and in the various ways in which real and financial tensions were manifest. Box 1.1 sets out in a detailed though summarised fashion the main economic policy guidelines adopted to combat the crisis in the main regions.

### 2.3 OUTLOOK AND CHALLENGES

The envisaged horizon for 2009 points to a contraction of the world economy, with a deep-seated recession in the developed economies

The economic outlook for 2009 points to a contraction of the world economy and a deep-seated recession in the developed economies, in a setting in which the downside risks remain considerable. The latest IMF forecasts suggest world growth in 2009 will fall in annual average terms to a slightly negative rate, a situation not seen since the Second World War, and that this rate will be very negative in the case of the developed economies, including the euro area. It is likely in the developed world that the rate of inflation, reflecting cheaper commodities, will fall back to very moderate or even negative levels during the year and that the unfavourable economic situation will translate into downside risks to inflation and, in those cases in which medium-term expectations are insufficiently anchored, to the emergence of deflation risks. The



Since the onset of the global financial crisis in the summer of 2007, major economic policy interventions have been necessary. At first, efforts focused on alleviating the liquidity problems facing the financial system and on bailing out institutions whose collapse could signify systemic risk. Nevertheless, the rapid deterioration of the financial situation and its impact on economic activity as from September 2008 led to a redoubling of economic policy responses. The governments of the main economies approved ambitious financial support programmes and discretionary fiscal packages, and central banks deployed broader measures. Refuelling and heightening the problems were the uncertainty over the volume and distribution of the high losses expected on banks' balance sheets, the restrictions on funding markets and the spread and intensification of the economic slowdown. This situation, which is not yet over, has required successive and ever-greater public intervention measures worldwide. In turn, the high degree of interconnectedness of the world's economies, and the global nature of the crisis, were conducive to a certain degree of international coordination, especially in the financial sphere.

The monetary authorities, who met the high demand for short-term funding from mid-2007, continued to extend their liquidity provision mechanisms in 2008 and, in some cases, to cut interest rates. But the events of September 2008 triggered a ratcheting up of the monetary policy response: central banks made substantial interest rate cuts and took unprecedented concerted measures (relating to rate cuts and to the extension of foreign currency funding agreements), they increased the flexibility of the ordinary framework for liquidity provision and they started to use non-conventional tools. Thus, many central banks introduced specific facilities for the purchase and exchange of assets, with a broad range of objectives: to provide institutions with quality collateral, to bolster financial markets facing difficulties and to encourage the flow of credit to certain sectors. All these operations led to substantial growth in central bank balance sheets (see Panels 1 and 2).

In light of the serious refinancing and recapitalisation problems emerging in the banking system from October 2008, governments designed a rapid-response strategy to support the financial system under a framework of common principles agreed by the Heads of State and of Governments in the case of the EU, and, on a global scale, within the G20. The key aim behind these plans was to restore confidence. Accordingly, the limits on deposit guarantee systems were raised, to halt the threat of declining confidence among deposit-holders, and bank debt issues were backed by State guarantees, to safeguard financial institutions' funding (with public funds also provided through loans and purchases of high-quality assets). Moreover, to shore up their balance sheets, in various countries banks received injections of public capital (to the extent that some banks were effectively nationalised), whilst in others the authorities purchased low-quality assets from the banks. In addition to raising the creditworthiness of the institutions concerned, these asset purchases should help limit the uncertainty surrounding their value which has been a key aspect of the present crisis. Indeed, more recently a second raft of measures has included various asset protection schemes for financial institutions.

Against the backdrop of these support programmes – which remain in force – bail-outs of institutions that might signify systemic risk have continued, especially in the United States and in Europe. Work has also continued on the reform of the global financial system, fostered at the international level by the Financial Stability Forum and the G20, and within the EU by the ECOFIN.

The financial support packages have been particularly significant in the developed countries (see Panel 3). In terms of maximum allocations, the funds earmarked for capital injections represent more than 5% of GDP in the United States, and approximately 3% of GDP in the euro area, with a higher relative weight – 4%-6% of GDP – in some of the smaller European countries (for example, Austria, Belgium, Ireland and the Netherlands). The highest bank debt guarantees are to be found in the United Kingdom, the United States, the Netherlands and Switzerland, in all cases in excess of 30% of GDP, and in Ireland, where the exceptional circumstances seen in September 2008 obliged the government to guarantee the liabilities of the country's six largest banks, signifying more than 200% of GDP. The measures involving the purchase and exchange of assets and direct financing represent more than 10% of GDP in the United Kingdom and in France, in the latter via a new, partly State-held agency funded by means of State-backed issues. In Spain, the urgent economic and fiscal measures approved in October 2008 envisage a maximum allocation of approximately 5% of GDP for purchase of high-quality assets on financial institutions' balance sheets and guarantees for debt issues equivalent to 9% of GDP.

The spread and intensification of the crisis also warranted the adoption of a wide range of discretionary economic stimulus policies, especially measures to increase public expenditure and, in particular, public investment. In addition, most countries launched aid packages for the groups and sectors hardest hit by the crisis, including small and medium-sized enterprises, the construction and automobile industries, and the export industry in the case of the emerging economies. Overall, the IMF estimates that fiscal stimulus measures in the biggest economies will amount to more than 4% of GDP between 2008 and 2010<sup>1</sup>, albeit with significant differences from country to country. The stimulus packages announced in the United States since February 2008 and the more recent initiatives launched in Japan are noteworthy, each at a cost of approximately 5% of GDP up to 2010. In China, where the economy is more shielded from the direct impact of the financial turmoil but more exposed to the decline in world trade, additional expenditure of approximately 6% of GDP has been earmarked in the period 2009-2010. In the EU, fiscal incentives were established in the European Economic Recovery Plan approved in December 2008, with an overall impact of 1.5% of GDP. In the euro area, discretionary measures amount to 2% of GDP in the period 2008-2010, with lower figures for France and Italy and higher figures (more than 3% of GDP) for Spain and Germany. Lastly the emerging G20 economies have also made significant fiscal efforts, on a similar scale to those of the developed countries.

1. See "Update on fiscal stimulus and financial sector measures", April 2009.

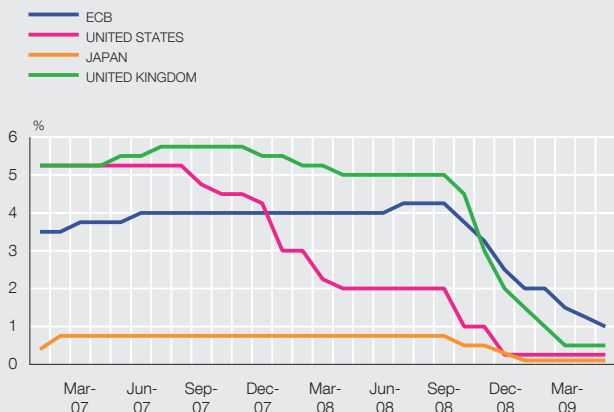
A simulation exercise<sup>2</sup> shows that these measures would have an impact of 0.3 pp – 0.5 pp on GDP growth in the euro area, with a slightly higher impact in Spain. In the United States the impact would be much higher (around 2 pp). In any case, the effect of the discretionary measures should be assessed jointly with the fiscal impulse deriving from the automatic stabilisers, which is higher in the European economies owing to the greater progressivity of their tax systems and the size of their social protection systems.

The present economic and financial crisis poses a challenge to economic authorities worldwide. In 2008, unprecedented changes were made in economic policy conduct to halt the dramatic deterioration in the financial system and in economic activity. How effective these policies prove will hinge largely on their impact on agents' confidence and on the financial system, and on maintaining

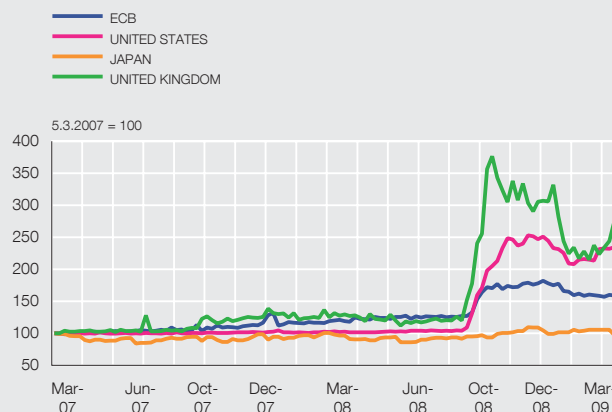
a certain degree of concerted action worldwide. Moreover, although many of the measures are temporary and, in the case of those directed at the financial sector, the sums provided are still short of the total funds committed and are, in many cases, return-bearing investments, they will have a considerable impact on public finances, particularly in the developed countries. Accordingly, continued confidence in budgetary stability in the medium term will be essential, to minimise the risk that higher interest rates and prospective tax increases may detract from the efficiency of the economic expansion measures.

2. Using the NIGEM global econometric model to make comparable simulations between countries, considering only the measures taken as from November 2008.

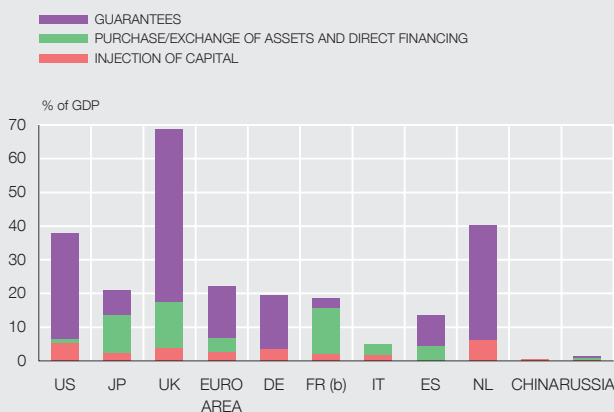
1 OFFICIAL INTEREST RATES



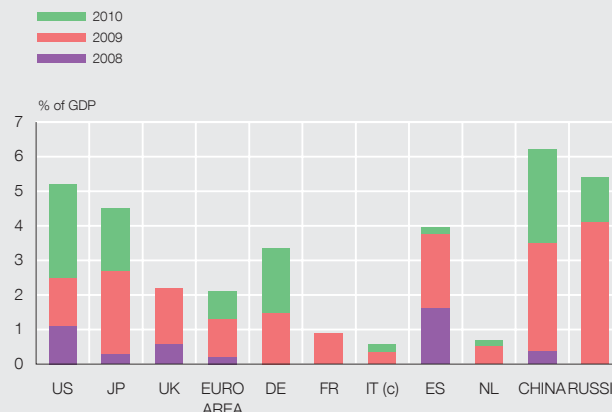
2 CENTRAL BANK BALANCE SHEETS



3 GOVERNMENT MEASURES TO SUPPORT THE FINANCIAL SYSTEM (a)



4 DISCRETIONARY FISCAL STIMULUS MEASURES



SOURCES: ECB, Datastream, IMF and Banco de España.

a. Maximum amounts committed in plan announcements and in rescue action.  
 b. A partly State-held agency (SFEF) was set up, the issues of which are guaranteed by the State and which lends to banks. In France the guarantees exclude those provided for Dexia.  
 c. The budgetary impact in Italy will be significantly lower because it is financed via taxes.

forecasts available also point to a central scenario in which activity would begin to recover gradually towards late 2009 or in 2010, according to the region involved, assisted by the resolute monetary and fiscal policy action and the financial sector support measures, and, in some economies, by the restoring to health of the starting position. However, the current economic situation is the outcome of intense and global shocks, of a financial origin, that have exposed serious vulnerabilities in the balance sheets of financial institutions, companies and, in some cases, households, the absorption of which may prove slower than these central scenarios currently envisage.

The effectiveness of economic policy responses will determine the prospects of recovery

In any event, the prospects of recovery hinge enormously on the effectiveness of the responses adopted by governments and central banks. The exceptional measures urgently applied in all economic policy areas have been intended to resolve the most pressing challenges of the financial crisis and to prevent the deterioration in activity from feeding back into the crisis. The fact that these policies are moving into uncharted territory means the significant uncertainty over their ultimate effectiveness has not abated.

Correctly calibrating public intervention is exceptionally complicated...

Gauging public intervention correctly is essential, but its calibration and its necessary insertion in a medium-term outlook that recognises the exceptionality of the circumstances and envisages a path of return to a situation of greater normality both prove exceptionally complicated. In terms of government financial sector support measures and fiscal policies, the need for action that helps resolve the still-latent uncertainty over the long-term solvency of financial institutions and to appropriately stimulate aggregate demand may clash at some point with the need to ensure the sustainability of public finances in the medium term. The solvency problems in some segments of the financial sector must not feed through and become a problem in the form of a build-up in risks in the public sector that ultimately raises long-term interest rates. In the euro area, this is a relevant concern in some cases in light of the developments in sovereign spreads. Also, the global nature of the shocks affecting the economy require cross-country cooperation and some coordination – particularly at EU level – not only in the responses to the crisis, but also in exit strategies once normality begins to return to the economy.

... but it is crucial for intervention not to distort competition...

To properly bound the perimeter of public intervention is another difficult task. Support measures to certain financial sector segments, and fiscal support in some cases to specific economic sectors particularly afflicted by the crisis, pose the problem of their potential effect on the areas that remain outside the realm of public intervention. For example, guarantees extended to debt issued by certain banks have had the desired effect of reducing the risk of such banks, but in turn they have a bearing on the financing of other banks and non-financial corporations, which see their borrowing costs rise. Further, public injections of capital and the extension of backing to the financial systems of some countries expose the financial systems of those others (e.g. the emerging economies) that have less leeway as regards the credibility of their public finances. On designing measures in the various economic policy areas, it is vital to try and avoid unwanted collateral effects, in particular on competition.

... and for governments not to succumb to the temptations of protectionism

Above all, it is vital not to succumb to the temptations of protectionism. The financial sector support programmes are of a national scope and designed with the aim of restoring the flow of credit to national agents. This poses a whole series of challenges for financial market integration – in Europe in particular – and the future of international banking, as is the case of countries with a banking system comprising subsidiaries and branches of foreign parents. Likewise, there are incentives for national fiscal plans to prevent, in some cases with administrative measures, the leakage of fiscal impulses abroad and to protect certain economic sectors from international competition. This is an extraordinarily complex matter. But history has taught us that protectionist measures are a sure-fire recipe for disaster. Here, too, some coor-

dination of responses both at the international level and, in particular, at the level of the EU is needed, owing to the potential consequences for the single market.

Beyond the most immediate challenges, it is vital to tackle the appropriate reforms in the area of macrofinancial policies

It now seems clear that the prolonged period of stable and non-inflationary growth in the global economy in recent years led important lessons from the past to be forgotten. The financial crisis that began in the summer of 2007 and the deep-seated economic recession it has entailed are a powerful reminder of the enormous costs that financial instability inflicts on society and of the fact that the vulnerabilities that lead to this arise precisely in boom periods, characterised by excessive optimism. As well as boldly facing up to the most immediate challenges, it is vital that the pertinent reforms in the area of macrofinancial policies should be tackled in parallel with the dual aim of restoring confidence and rebuilding sounder foundations with which to underpin the recovery. Appropriate regulation and supervision are the first and main line of defence against financial instability, as has been particularly stressed in the agreements reached at the G20 meeting on 2 April in London. Regulation and supervision need to be reinforced with a view to limiting the intrinsic procyclicality of the financial system and to increasing resilience in the face of systemic risks, while preserving the benefits of innovation. Reforms in this area should most particularly include the extension of the regulation perimeter to systemic institutions that have been left outside the regulatory framework, and the review of the incentives for financial institutions and investors. But recent experience also casts greater light on the link between financial stability and macroeconomic policies – particularly monetary policy – and strengthens the argument that such policies should act pre-emptively in the face of medium- and long-term risks associated with the emergence of imbalances, frequently connected to excessive debt and to unsustainable asset price dynamics.

### **3 Developments in the Spanish economy in an international context of crisis**

#### **3.1 THE EXTERNAL DETERMINANTS OF THE ADJUSTMENT OF THE SPANISH ECONOMY**

The international financial crisis, which superimposed itself on the adjustment that the Spanish economy had begun, ...

Developments in the Spanish economy during 2008 were governed by the worsening of the international financial crisis and the progressive weakening of the world economy. Both shocks superimposed themselves on the domestic adjustment that had begun previously, driven by the correction of the real estate sector and the high level of private-sector debt, and both have ultimately taken a leading role in the unfolding of the crisis. Although the channels through which the financial and real crisis spread were similar to those described in the previous section at the international level (tightening of financing conditions, crisis of confidence, fall in wealth, decline in trade flows), the pass-through to the Spanish economy of the shocks evidenced specific differences. In its initial stages, the virtually non-existent direct and indirect exposure of Spanish credit institutions to US subprime mortgages, along with Spanish banks' favourable financial situation, lessened the impact of the shocks on their balance sheet position. Also contributing to this was the long average life of outstanding debt, which meant that short-term funding requirements were moderate. However, the clogging up of wholesale funding markets increasingly affected Spanish intermediaries owing to their high dependence on external saving, and they had to react by replacing long-term securities issues with short-term instruments and by raising funds on interbank markets, including resort to the Eurosystem.

led to a tightening of financing conditions, ...

The resort to these temporary solutions in the face of the closure of wholesale markets was limited. In turn, the growing feedback loop between the financial tensions and the weakness of the real economy gave rise to further impacts on banks, the effects of which were much more difficult to avoid. In particular, perception of the risk associated with credit operations increased substantially, in a setting in which default ratios, which had started from very low levels, were growing rapidly. Indeed, in the other resident sectors segment (households, companies and financial institutions other than those of the credit system) this ratio stood at 3.4% at the end of 2008, compared with 0.9% one year earlier. In step with the habitual procyclical behaviour of credit supply, intermediaries progressively tightened credit standards in light of the deterioration in the macroeconomic outlook in general and in the outlook for certain indus-

		2003	2004	2005	2006	2007	2008
DEMAND AND OUTPUT (b)	GDP	3.1	3.3	3.6	3.9	3.7	1.2
	Private consumption	2.9	4.2	4.2	3.9	3.5	0.1
	Government consumption	4.8	6.3	5.5	4.6	4.9	5.3
	Gross capital formation	5.2	5.2	6.5	7.7	5.0	-2.8
	Equipment investment	4.1	5.1	9.2	10.2	10.0	-1.1
	Construction investment	6.2	5.4	6.1	5.9	3.8	-5.3
	<i>Housing</i>	9.3	5.9	6.1	6.0	3.8	-10.9
	<i>Other construction</i>	3.5	5.0	6.2	5.7	3.9	0.9
	Exports of goods and services	3.7	4.2	2.5	6.7	4.9	0.7
	Imports of goods and services	6.2	9.6	7.7	10.3	6.2	-2.5
EMPLOYMENT, WAGES, COSTS AND PRICES (c)	Total employment	2.4	2.7	3.2	3.2	2.9	-0.6
	Employed labour force (d)	60.8	62.0	64.3	65.7	66.6	65.3
	Unemployment rate	11.5	11.0	9.2	8.5	8.3	11.3
	Compensation per employee	3.6	3.0	3.7	3.9	3.7	5.3
	Unit labour costs	2.9	2.4	3.3	3.2	2.9	3.4
	GDP deflator	4.1	4.0	4.3	4.0	3.2	3.0
	Consumer price index (12-month % change)	2.6	3.2	3.7	2.7	4.2	1.4
	Consumer price index (annual average)	3.0	3.0	3.4	3.5	2.8	4.1
	Consumer price differential with the euro area (HICP)	1.0	0.9	1.2	1.4	0.7	0.9
SAVING, INVESTMENT AND FINANCIAL BALANCE (e)	Resident sectors: saving (f)	24.5	23.5	22.9	22.6	21.6	20.5
	<i>General government</i> (f)	3.3	3.1	4.5	5.7	6.1	0.1
	Resident sectors: investment	27.4	28.3	29.5	31.0	31.2	29.6
	<i>General government</i>	3.5	3.4	3.6	3.6	3.9	3.9
	Resident sectors: domestic net lending (+) or net borrowing (-)	-2.9	-4.8	-6.5	-8.4	-9.7	-9.1
	<i>General government</i>	-0.2	-0.4	1.0	2.0	2.2	-3.8
	General government gross debt	48.7	46.2	43.0	39.6	36.2	39.5
MONETARY AND FINANCIAL INDICATORS (g)	ECB main refinancing rate	2.3	2.0	2.0	2.8	3.9	3.9
	Ten-year government bond yield	4.1	4.1	3.4	3.8	4.3	4.4
	Synthetic bank lending rate	4.4	4.0	3.8	4.6	5.7	6.2
	Madrid Stock Exchange General Index (DEC 1985 = 100)	706.4	863.3	1,066.1	1,344.0	1,637.0	1,263.1
	Dollar/euro exchange rate	1.1	1.2	1.2	1.3	1.4	1.5
	Nominal effective exchange rate vis-à-vis developed countries (h)	100.0	100.7	100.8	101.1	102.3	104.1
	Real effective exchange rate vis-à-vis developed countries (i)	104.2	106.7	109.1	111.8	114.4	117.2
	Real effective exchange rate vis-à-vis the euro area (i)	103.7	105.4	107.7	110.3	111.6	112.1
	Cash and cash equivalents	12.0	11.3	14.4	11.5	-2.9	-3.2
	Liquid assets (j)	8.8	5.8	11.2	8.2	8.9	11.0
	Households: total financing	19.1	20.2	20.9	19.6	12.5	4.4
	Non-financial corporations: total financing	13.4	13.2	21.4	27.9	17.7	7.3

SOURCES: INE, Intervención General del Estado, AMECO and Banco de España.

a. The National Accounts data are calculated on the basis of base year 2000.

b. Volume indices. Rates of change.

c. Rates of change, except the unemployment rate, which is presented as a level.

d. Employed labour force (16-64).

e. Levels as percentages of GDP.

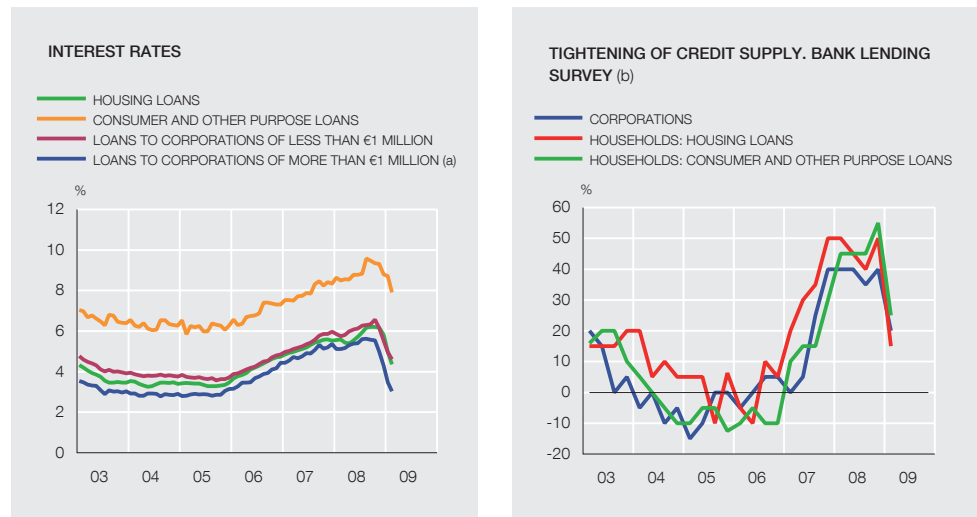
f. Includes net capital transfers received.

g. Annual average levels for the Stock Exchange General Index, interest rates and exchange rates, and rates of change for financial assets and liabilities.

h. 1999 Q1 = 100.

i. 1999 Q1 = 100.

j. Includes cash equivalents, other bank liabilities and money-market funds.



SOURCE: Banco de España.

a. The interest rate is obtained by adding to the NDER (Narrowly Defined Effective Rate), which does not include commission and other expenses, a moving average of these expenses.

b. Indicator = % of institutions that signal a considerable tightening  $\times 1$  + % of institutions that signal some tightening  $\times \frac{1}{2}$  - % of institutions that signal some easing  $\times \frac{1}{2}$  - % of institutions that signal a considerable easing  $\times 1$ .

tries (such as the real estate sector) in particular. Also contributing to this were market demands concerning the capital ratios required of banks and the greater difficulties in obtaining funds on international markets, although according to what may be inferred from the replies to the Bank Lending Survey, these last two factors played a less significant role.

The tightening of financing conditions also operated through the dearer cost of funds, since the notable increase in interbank rates fed through to lending interest rates (see Chart 1.3). Further, in some cases (as, in particular, in lending to SMEs and to households for purposes other than house purchase), the spreads over interbank yields widened. The cost of companies' own funds also increased. The remaining credit conditions other than price also became more rigorous. The average term of transactions shortened and the guarantees required increased. However, in the second half of the year, the significant cuts in intervention rates began to feed through to the costs of private-sector financing, a trend which became more pronounced during the opening months of 2009.

... a deterioration in agents' confidence

The financial crisis and its impact on the real economy have also given rise to a progressive and generalised deterioration in agents' confidence and a notable increase in uncertainty over the economic outlook. While this is a global phenomenon, it was initially somewhat more acute in countries such as Spain, whose business cycle is more closely linked to the real estate sector and is more dependent on external financing. The confidence crisis and uncertainty contributed to discouraging spending by agents beyond what might be warranted by the domestic adjustment or the rebalancing of private-sector balance sheet positions. Generally, the loss in confidence has proven one of the facets of the crisis that is posing the biggest challenges to economic policy.

... a decline in household wealth, prompting a slowdown in credit and a fall-off in domestic demand,...

The international financial crisis has unfavourably impacted Spanish household wealth. The value of financial assets fell by around 12%, essentially as a result of the decline in stock market prices.

As regards the real estate component, although the indicators habitually used to measure it showed that it scarcely altered in 2008 in nominal terms, since the decline in property prices (3.2%, on data from the Spanish Ministry of Housing) was more or less offset by a similar increase in the stock of housing, it is very likely that these figures underestimate the decline during this period. Set against low activity in the real estate market, the stock of housing held by households may have grown less than what the information on housing starts infers, while under the current conditions the statistic published by the Ministry of Housing foreseeably reflects with some delay the actual course of changes in valuations. Under these circumstances, the INE price indicator on second-hand housing, which shows a decline of 10.7% over the past year, may be more representative. Considering both factors, the loss in real estate wealth recorded last year might be somewhat more than 8%.

Overall, the declines in the value of the household financial position generated a wealth effect that contributed to the contraction in consumption and in investment in housing. The increase in borrowing costs and the deterioration in expectations of future income and of appreciation of real estate and financial assets checked corporate and household demand for borrowed funds. This development, along with the decline in the supply of funds, translated into a strong slowdown in credit to these sectors, with the year-on-year growth rate falling from 16% to somewhat less than 6%. However, this figure was still above the nominal increase in GDP at the close of the year. In 2009 to date, the pace of bank financing has continued to moderate, reaching a year-on-year rate of expansion of around 3% in April, according to the figures released as this Report was going to press.

... and the disappearance of the external supports which, under other circumstances, would have cushioned the decline in domestic spending

As is occurring in most countries, one propagation channel which has been increasing in significance as the financial crisis has become more pronounced and as its effects pass through to activity is the one through which trade flows run. In this respect, the progressive weakening in world economic activity over the course of 2008 affected the foreign demand for Spanish products, more sharply so as the year unfolded, although the high import content of exports and of the other components of final demand softened this effect on growth.

In sum, the scale and persistence of the global financial crisis and its impact on the world economy have radically transformed the environment in which households and firms make and commit their spending plans. Compared with the previous long expansionary phase, lending standards tightened notably, sizeable declines in private-sector wealth built up, there was a considerable weakening in the external environment, and all this against a backdrop of diminished confidence and growing uncertainty. The combination of all these factors on an economy which had already initiated a process of adjustment, in response to the imbalances that had built up, intensified the ongoing weakening in activity and activated the aforementioned feedback loops between the financial and real sectors.

### 3.2 FROM ADJUSTMENT TO RECESSION

These contractionary forces compounded the severity of the adjustment and led to a recession in the second half of 2008 ...

The Spanish economy showed an ongoing loss in momentum which became accentuated in the second half of the year, when GDP posted a decline in its quarter-on-quarter growth rate for two consecutive quarters (for the first time since 1993), as a result of which it ended the year with a fall of 0.7% in terms of its year-on-year rate. This recessionary pattern became more visible in 2009 Q1, with a year-on-year decline of 3% in GDP according to the data released as this Report was going to press. The information available for Q2 points to a contraction in activity, albeit at a less sharp rate.

In 2007, activity in the Spanish economy began to slow, leading to negative year-on-year rates of expansion in output being recorded from 2008 Q4. This box compares the current recession in Spain with that occurring in other economic regions and with other similar episodes in the Spanish economy in the period from 1970 to the present day.

The identification of business cycles is not exempt from ambiguity, and several alternative methods can be used. For the identification of recessionary cycles, this box uses a procedure based on deviations by GDP in respect of its trend. The periods in which the positive deviation attains its highest value are the cyclical peaks (which do not necessarily match the moment in the cycle in which the year-on-year rate reaches its highest value). Under this procedure, the peak of the current cycle was in 2008 Q1, both in Spain and in the euro area and in the United States, which gives some idea of the high cyclical synchrony between the three economies.<sup>1</sup> Chart 1 depicts the year-on-year growth rates for GDP in the quarters subsequent to the peak in Spain, the euro area and the United States, where the figures observed have been lengthened in the first case with the projections path plotted by the Banco de España for its March 2009 *Spanish economic projections report*, and, in the remaining two cases, with the *Consensus Forecasts* projections for the same month. According to these projections, the trough for the year-on-year rate is expected to be reached in 2009 Q2 in the euro area and in the United States, and in Q3 in Spain. Thus, according to the *Projections Report*, six quarters would pass by from the peak of the current cycle to the minimum year-on-year growth rate. Given that the year-on-year rates reflect with something of a lag the changes in the quarter-on-quarter rates, the troughs in terms of the latter would be reached somewhat earlier. Furthermore, the recovery of the Spanish economy is expected to be less intense, particularly when compared with the United States.

In addition to the current recessionary cycle, the Spanish economy has recorded two others since 1970 whose previous peaks are dated in 1974 Q1 and in 1991 Q4 (see Chart 2). As can be seen, the trough of the year-on-year growth rates in the two previous recessionary cycles was reached, as is projected for the current cycle, six quarters after the peak, i.e. in 1975 Q3 and in 1993 Q2, respec-

tively. Among the three episodes considered, that most distant in time was characterised by GDP growth rates that were substantially higher throughout the deceleration phase, meaning that GDP scarcely contracted.

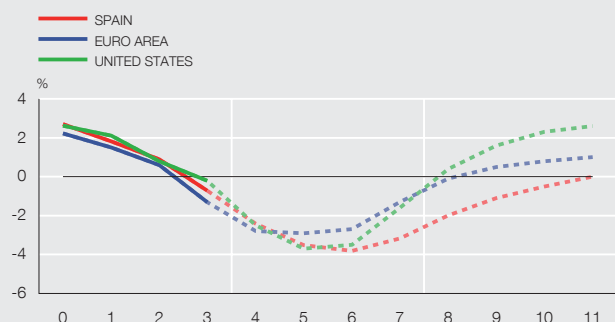
Compared with the recession in the 1990s, the current recession departs from a year-on-year growth rate that is similar in respect of the cyclical peak. However, in the three subsequent quarters for which there are figures, the slowdown has been more pronounced in the current episode, with this difference set to intensify – according to the Banco de España projections – in the coming quarters, meaning the trough would be lower and the subsequent recovery milder. All the components of private national demand help explain the greater intensity of the slowdown in output in the current cycle in the three quarters observed since the peak. Nonetheless, mention may be made of the more unfavourable behaviour of private consumption, and especially of residential investment, immersed in a far-reaching period of adjustment following its prolonged boom (see Chart 3). As a result, it is household – as opposed to business – spending that would account for a greater extent for the fact that the current recession is proving more severe. The worse behaviour of household spending compared with the previous cycle is closely related, among other factors, to the adverse impact of the greater intensity of job destruction on household incomes and on their future expectations (see Chart 4).

Following the initial, relative resilience of exports (see Charts 5 and 6), the current cycle is being characterised by a much more pronounced deterioration in this demand component, as a result of the strong fall-off in world trade. Thus, while between 1991 and 1993 the growth rate of Spain's export markets fell by 4 pp, the related decline between 2007 and 2009 is expected to be almost 15 pp. Further, in the previous cycle the contribution of exports in helping exit the recession was very high, owing to the gain in competitiveness arising from the devaluations of the peseta. On this occasion, since Spain's euro area membership will not allow for gains in competitiveness of a similar magnitude and speed, the pick-up in exports will have to reside on the recovery of our foreign markets and on containment of the growth of costs and margins. In any event, since imports, in step with the greater sluggishness of final demand, are slipping in the current cycle at notably higher rates than those previously observed, the external sector is making a considerably higher net contribution to sustaining activity.

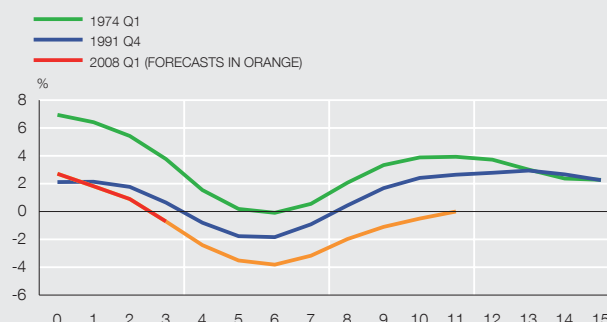
1. In the United States, where cycles are officially dated, the start of the recession is set at December 2007.



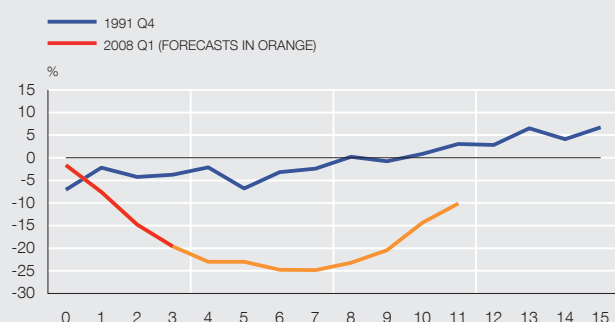
1 COMPARISON OF THE CURRENT CYCLE (PEAK 2008 Q1)  
(Forecasts in broken line)



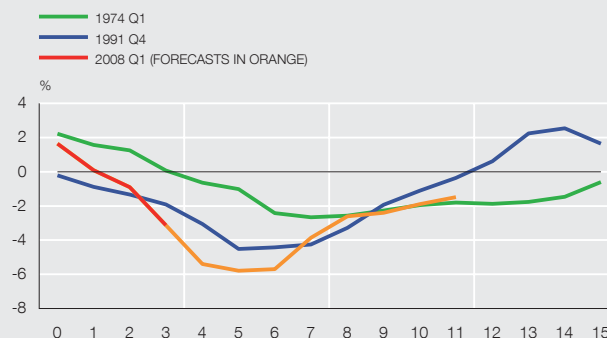
2 RECENT CYCLES IN SPAIN: GDP



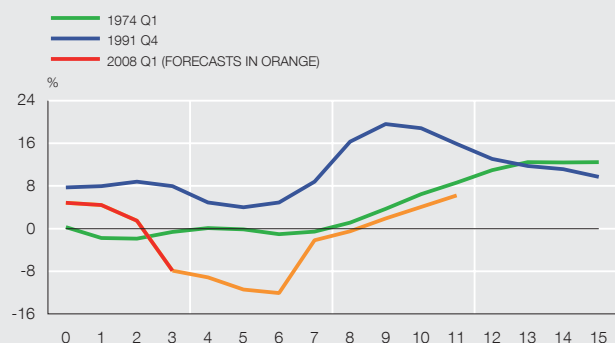
3 RECENT CYCLES IN SPAIN: RESIDENTIAL INVESTMENT



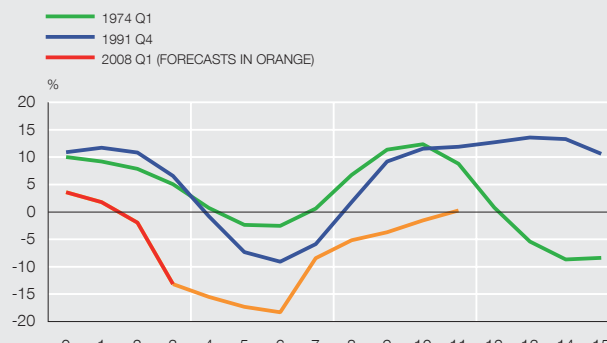
4 RECENT CYCLES IN SPAIN: EMPLOYMENT



5 RECENT CYCLES IN SPAIN: EXPORTS OF GOODS AND SERVICES



6 RECENT CYCLES IN SPAIN: IMPORTS OF GOODS AND SERVICES



SOURCES: INE, Consensus Forecasts and Banco de España.

... as a result of the weakening in national demand, since the contribution of external demand was positive

The average increase in output over the course of 2008 – which amounted to 1.2%, against 3.7% in 2007 – marked a path of rapid deceleration and a deepening of the change in the role played by national demand and net external demand in spending, initiated in the second half of 2006. In this respect, national demand contracted during the year, posting a 2.8% decline in its year-on-year rate in Q4, while net external demand showed a pronounced increase, with a contribution of 2.3 pp to GDP growth in the same quarter, thereby softening the contractionary effect of national demand on GDP. Significantly, set against the progressive weakening in the world economy, the improvement in the contribution of the external sector was due to the notable slowdown in imports.

The collapse in spending had very negative repercussions for activity and employment, which began to fall for the first time since 1994

Household spending underwent a very severe adjustment. The sharp check in consumption and the recovery in the saving ratio were a reflection of the strong deterioration in confidence

Residential investment fell markedly and the adjustment of housing prices and of the real estate sector became sharper

Households' net borrowing declined substantially and their debt ratio began to turn down as from October

Business investment collapsed in the closing months of the year...

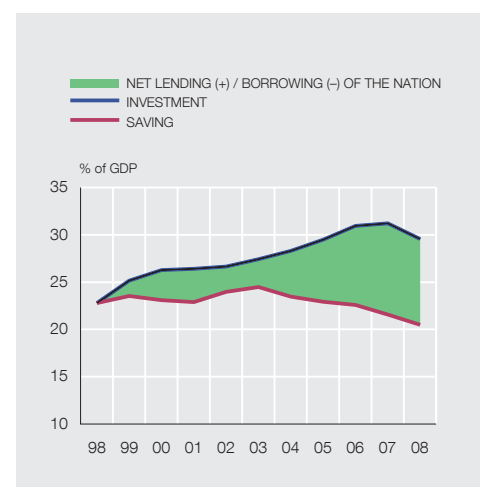
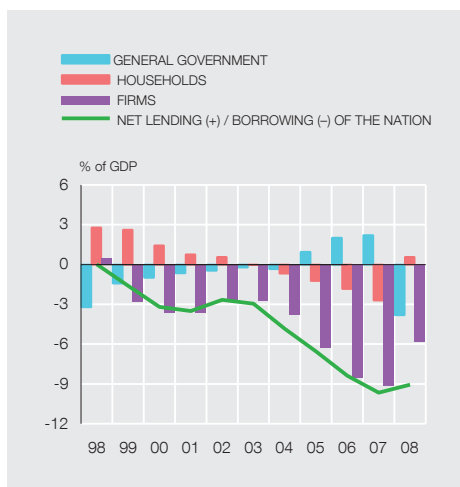
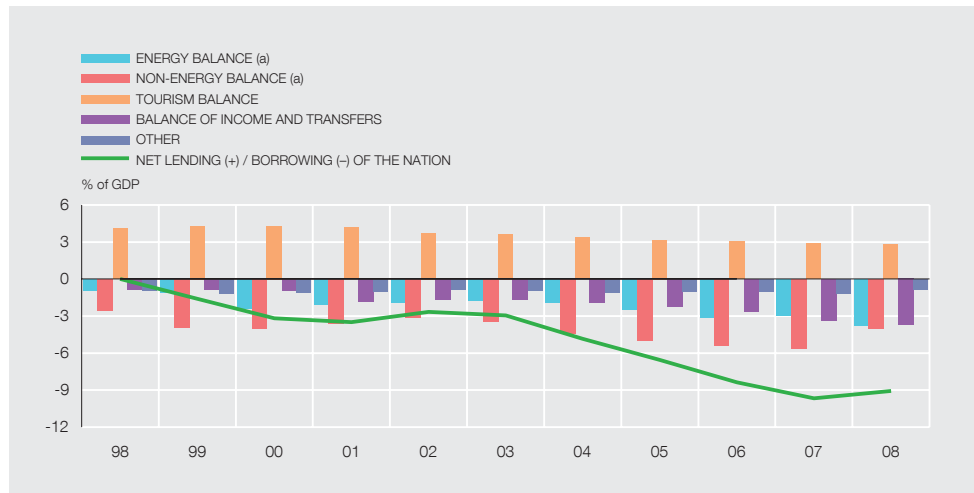
On the supply side, the collapse in activity bore most unfavourably on employment, which increased moderately in the first half of the year and fell in the second half (for the first time since 1994). This was as the process of job destruction in the construction industry stepped up and progressively spread to other productive branches, to the point of recording a 3% decline in Q4.

In response to these circumstances, household expenditure underwent a very severe adjustment. Affecting it were the aforementioned contractionary factors, compounded by a particularly determinant factor in the form of the decline in employment (Box 1.2 offers more detailed information on the differential nature of this cycle in Spain). Household consumption was abruptly curtailed during the year, as a result of which it was the domestic demand component that most contributed to the slowdown in GDP in 2008. And this despite the fact that household disposable income rose, reflecting the expansionary impact of the fiscal measures adopted, which are described elsewhere in this report, and the marked fall in inflation in the second half of the year. Conversely, the tightening of financing conditions and the worsening in the labour market tended to lessen the contribution of these sources of income, and the loss of value in wealth acted in the same direction. The deterioration in consumer confidence and work prospects played a key role in the weakening in household consumption, as corroborated by the sharp recovery in the saving ratio, which rose to 13% of disposable income, following five years of consecutive falls.

Residential investment showed a marked reduction, which gained in intensity over the course of the year, posting a decline of 20% in Q4. Real estate supply reacted sharply to the fall in residential demand, the expression of which was a substantial cut in the number of housing starts, which was 40% less on average than in 2007. Despite the intensity of this correction, the stock of unsold property continued to increase, since the houses started at the height of the expansion in the residential sector, around 2006, were progressively completed during the course of 2008. The surplus supply accumulated contributed to intensifying the slowing course of house prices, which began to fall in the second half of the year, after having increased strongly in prior years. That generated further expectations of declines and inhibited residential demand. Under these circumstances, the real estate sector embarked on a far-reaching restructuring process during 2008, contributing decisively to the collapse in activity and employment, which generated very powerful contractionary effects on the rest of the economy.

The rise in the saving ratio and the reduction in residential investment led to a strong decline in household net borrowing, meaning that over the year as a whole households generated net lending for an amount equivalent to 0.6% of GDP. The slowdown in household debt steepened in the wake of the tightening of bank lending conditions and began to be reflected in a slight reduction in the debt ratio, as from the final quarter. However, this did not translate into a decline in the associated interest burden, owing to the increase in the average cost of liabilities over the year as a whole.

Business investment was more resilient in the first half of the year, but collapsed in the final months owing to the unfavourable course of demand, the sharp deterioration in expectations and heightening financial tension. This latter factor is adversely affecting the financing conditions for new investment projects, as bank lending standards have tightened and there are difficulties in raising resources through this channel, especially following the events in financial markets in the last quarter. The decline in productive investment led to a sharp reduction in net borrowing. In step with this, borrowing by businesses slowed notably in 2008 across the board but particularly sharply in real estate services and con-



SOURCES: INE, Customs and Banco de España.

a. The energy balance and non-energy balance are estimates by the Banco de España drawing on Customs data.

... and the external sector contributed to sustaining activity...

As indicated, the external sector cushioned the adjustment of domestic demand, against a background in which the contribution of external demand contributed positively to sustaining activity with growing intensity over the year, despite the fall-off in exports.

... and the nation's net borrowing fell during 2008

Against this, a correction of the nation's net borrowing began in the second half of 2008, underpinned by the narrowing of the deficit on goods and services. The reduction in the trade imbalance was particularly sharp in the closing months of the year, when the decline in the non-energy balance steepened and the energy balance began to fall, reflecting the decline in oil prices initiated during the summer (see Chart 1.4). As a result, and on Balance of Payments data, the economy's net borrowing declined in 2008, for the first time since 2002, to a ratio of 7.9% of GDP in Q4, 1.5 pp down on the same period in 2007 (for the year as a whole, the decline was smaller, at 0.6 pp, to 9.1% of GDP). The correction in the nation's net borrowing

has become more marked in 2009 to date, evidencing the depth of the contraction in domestic demand.

From the viewpoint of saving and investment decisions, the improvements in net borrowing reveals a reduction in the weight of investment in GDP that is higher than that recorded by the saving ratio. From the standpoint of the sectors' net debt, the reason lay in the significant correction in the net borrowing of non-financial corporations and households, in the latter case reaching a surplus position for the first time since 2002. Conversely, there was a drastic change in the public sector surplus position of recent years; it moved from a situation of net lending of 2.2% of GDP in 2007 to net borrowing of 3.8% in 2008, a reversal of 6 pp of GDP in only one year. The significance and scope of this reversal will be discussed later.

The weakening in activity spread to all productive branches...

On the supply side, the weakening in activity fed through to all the productive branches, although particularly sharply to construction and industry, which both showed declines in value added, earlier and more acutely in the former case. Market services showed greater resilience in the first half of the year, but could not remain immune to the widespread climate of deterioration; accordingly, at the end of the year they were running at a positive but very moderate rate of increase. Indeed, only non-market services sustained levels of activity similar to previous years.

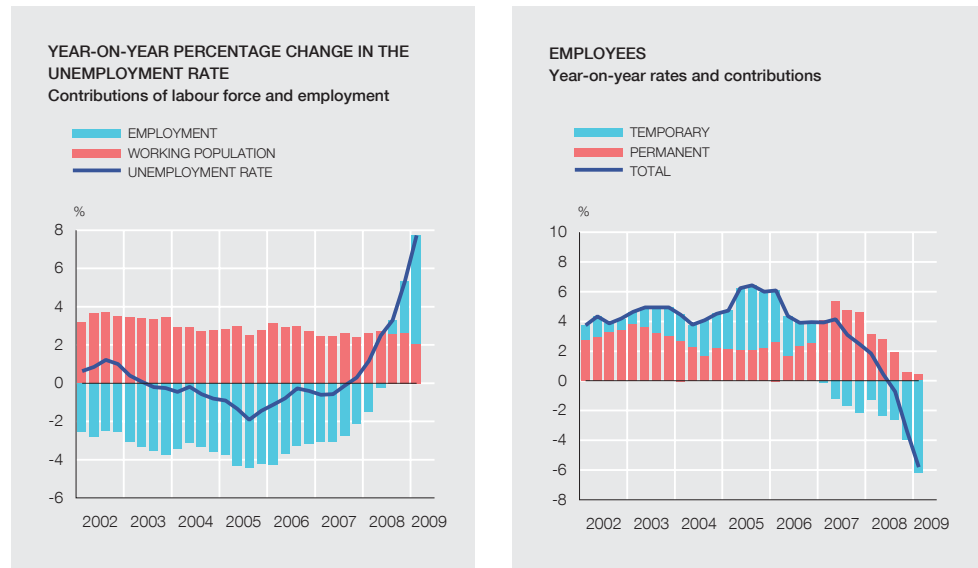
... and resulted in net job destruction as from the summer

As a result, the process of employment generation came to a halt after the summer (following 14 years of uninterrupted job creation), giving way to a marked decline in employment in the closing months which has run into the opening months of 2009 (employment, on EPA figures, fell at a year-on-year rate of 6.4% in 2009 Q1). Overall, the adjustment in employment was greater than that in value added, whereby apparent labour productivity recovered, once again showing a countercyclical pattern of behaviour, unlike the pattern prevailing in most economies. Yet this behaviour reflects significant composition effects and scant genuine gains in efficiency. By productive branch, the decline in employment in construction had already begun in 2007, while it started in the industrial branches in the second half of 2008. At the same time, employment weakened progressively in market services.

As had occurred in previous downturns, the adjustment in employment fell mainly on temporary workers (prompting a 3 pp decline in the ratio of temporary to total employees to 25.4% in 2009 Q1), the young and the least skilled. The labour market deterioration is thus one of the most powerful channels through which the contractionary impulses besetting the economy are spreading.

Despite the labour market deterioration, the labour supply continued increasing, meaning the unemployment rate climbed rapidly...

Despite the cyclical downturn, the labour supply continued increasing in 2008, at a similar rate of intensity to that observed during the boom years. Supply was driven by the increase in female participation, although the growth rate of the population began to slacken after a decade of continuous rises, since a significant slowdown was seen in the pace of migrant inflows. The far-reaching deterioration of the labour market, both in terms of speed of adjustment and of scale, against this background of dynamic working population growth, had a most adverse impact on unemployment. Consequently, the unemployment rate rose most significantly to a level of 17.4% in 2009 Q1, compared with the historical low of 8% in the summer of 2007 (see Chart 1.5). Joblessness affected above all the young and the less skilled, the unemployment rate for whom exceeded 20%. Long-term unemployment also began to rise in this period and, should it continue, it might ultimately affect the structural component of unemployment.



SOURCES: INE and Banco de España.

a. The EPA (Spanish Labour Force Survey) series are linked on the basis of the 2005 Q1 control survey.

... and labour costs rose significantly, showing scant sensitivity to the worse cyclical conditions

Despite the weakening in activity, labour costs showed considerable inertia. Wage settlements under collective bargaining agreements stood at 3.6%, 0.5 pp up on 2007, in response to the poorer performance of inflation in the first half of the year. This greater wage pressure was amplified by the effect of the wage indexation clauses, the activation of which in 2008 marked an increase of somewhat over 1 pp on collectively bargained wage rates. Both compensation per employee (5.3%) and unit labour costs (3.3%) showed growth higher than in previous years and above that of our trading partners.

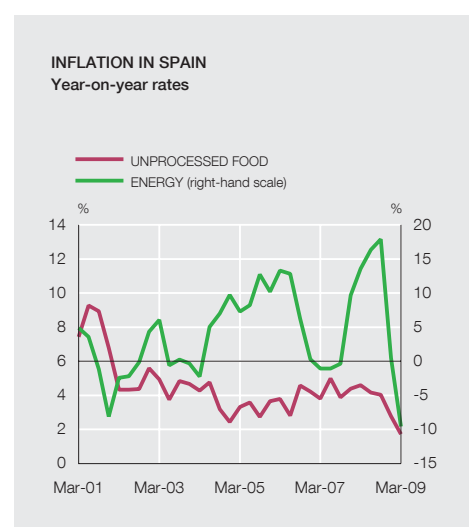
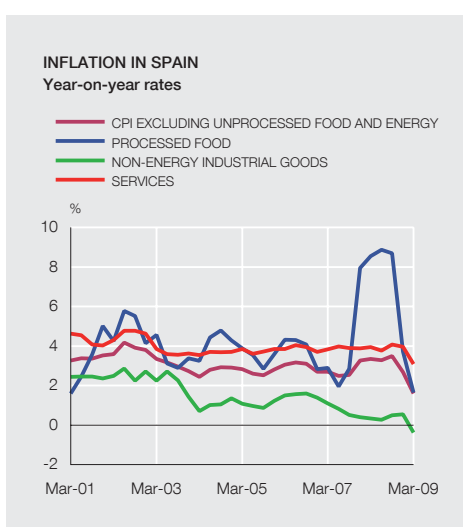
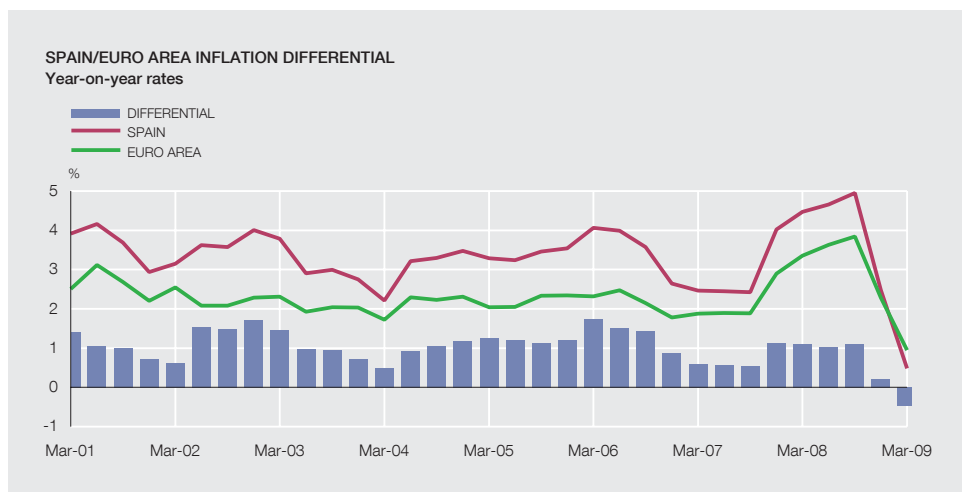
Inflation posted successive falls from the summer onwards, evidencing negative differentials with the euro area from December, which had not occurred since the start of EMU

Inflation underwent a sharp turnaround during the year. For the year as a whole, the CPI stood at 4.1%, peaking at 5.3% in July, in the face of the sharp increase in oil and other commodity prices (see Chart 1.6). Thereafter, however, its growth rate fell swiftly, reaching a negative rate of -0.8% in May, according to the HICP flash estimate, which was released as this Report was going to press. This reflected the effect of the correction in oil and other commodity prices, but also the sluggishness of demand, as shown by the decline in the prices of non-energy industrial goods and the slowdown in services price increases, departing from their historical path, which had indicated their scant sensitivity to changes in cycle. The reduction in inflation was sharper in Spain than in the euro area in the closing months of 2008, whereby the inflation differential in terms of the HICP turned negative from December. This development is indicative of the severity of the contraction, although it may also reflect greater price flexibility that would help activate the improvements in competitiveness needed to underpin the recovery. The strong reduction in inflation provides, in any event, a reference that should be conducive to a substantial easing in negotiated wage rates in the direction required by the cost adjustments needed to promote job creation.

#### 4 Economic policies, outlook and challenges

Economic policies progressively adapted to the change in cyclical position during the year...

Economic policies progressively adapted to the change in cyclical position during the year. On the fiscal policy front, the State Budget for 2008 had been designed with a markedly expansionary bias, as detailed in chapter 5 of this *Annual Report*. This was reinforced with the adoption in April of a series of fiscal stimulus measures, essentially tax-based and general in nature, and designed in the main to remain in place. The abrupt halt in activity also activated the automatic stabilisers, which exerted their effects throughout the year through the usual channels



SOURCE: Eurostat.

(an increase in unemployment benefits and a decline in tax revenue), lessening the impact of the progressive weakening of growth on household disposable income.

... and received a further impulse in the closing months of the year, with policies geared to stimulating demand and supporting the financial system

Subsequently, given the exacerbation of financial tensions in the closing months of 2008 and the rapid deterioration in activity, the government likewise adopted policies geared to stimulating demand and supporting the financial system that were along the lines of those implemented at the international level. In the financial arena, and within the common framework of coordinated action at the European level, measures were implemented to restore confidence, to offer means of providing liquidity at maturities longer than those envisaged in monetary policy operations and to restore funding channels on the wholesale markets. To this end, the limit of the deposit guarantee fund was raised in October, a fund for the acquisition of financial assets funded by the Treasury was created and the granting of public guarantees to banks' bond issues was approved. The possibility was also considered that the State might acquire equity securities, if it were judged necessary at some point to resort to this instrument to capitalise banks.

Another batch of measures was aimed at smoothing access to credit for specific sectors or agents that are particularly vulnerable to the financial tensions, such as SMEs, and to soften the impact of the crisis on indebted households in particularly difficult circumstances, through

the deferral of a portion of their loan instalment payments. These measures have been carried out through the extension and creation of new ICO credit lines.

Approval was also given in November to the creation of a State Fund for Local Investment and of a Special State Fund for the Reinvigoration of the Economy and Employment, for a cumulative amount equivalent to 1% of GDP. In line with the guidelines of the European Economic Recovery Plan, what is involved here is a transitory fiscal measure aimed at boosting public investment at the municipal level and in strategic industries.

Foreseeably, the effects of the measures will unfold over the course of this year...

The raft of measures available is, therefore, very extensive, and the resulting expansionary effects will foreseeably unfold over the course of this year. The sizable cuts in interest rates by the ECB since October – the transmission of which is being reinforced by the changes introduced in its operational framework (see Box 4.2) – will act along these same lines, and have been reflected in subsequent reductions in the 12-month EURIBOR of somewhat more than 3 pp. The lower interest rates have already begun to feed through to private-sector borrowing costs and to the average cost of outstanding loans. Foreseeably, too, as a result of the prevalence of floating-rate loans, this feed-through will take place relatively swiftly, freeing up private-sector resources that will bolster the impulse stemming from the reduction in oil prices and from the decline in inflation.

...although the macroeconomic projections available point to a deepening of the current recession in 2009, with significant depressive effects on the inflation rate

The macroeconomic projections available, though subject to an exceptionally high degree of uncertainty, point to a deepening of the recession in Spain in 2009, which might lead GDP to contract by around 3%. Foreseeably, however, the intensity of the contractionary effects will progressively diminish during the year, being gradually offset by the impact of the economic stimulus policies implemented and by the plans to provide public backing to the financial system, whereby the contraction should have slackened by 2010.

To restore confidence and for spending plans to be reactivated, the imbalances built up must be reabsorbed

To restore the appropriate foundations for recovering confidence and rekindling spending plans, the imbalances built up during the long expansionary phase must be redressed and reabsorbed. To do this, soundness must be restored to the private-sector financial position and there must be an effective improvement in competitiveness and in labour market conditions. The financial system, for its part, must face the challenges to its stability and efficiency posed by the new scenario brought about by the financial crisis and the deterioration in the macroeconomic conditions in which it has to operate.

The soundness of the financial system is an advantage that must be preserved

The stability of the financial system is a vital asset for ensuring credit flows and embarking on a recovery, and it must be preserved and strengthened. The financial sector performs a crucially important transversal task for market economies in terms of the selection of productive projects and of the redistribution of risks among the individuals best able to bear them. And here the experience, reputation and confidence of intermediaries are fundamental factors. Accordingly, when the crisis turning point is reached, the momentum of the economy will depend greatly on the soundness and efficiency of the financial system, which will provide the capacity for effective intermediation and provide the credit flows that underpin household and corporate spending decisions.

The effectiveness of demand-side policies depends on their design being appropriate

In the current circumstances, the scale of the global recession and the unfavourable outlook concerning its duration warrant the implementation of expansionary demand-side policies, monetary and fiscal alike. However, their effectiveness hinges crucially on their being designed appropriately. In the fiscal policy realm, the magnitude of the impulses should bear in mind the starting position of public finances and, above all, their sustainability in the medium term. Hence, the expansionary policies applied must be temporary and medium-term-oriented, en-

visaging a return to stability once the economy moves on to a normal footing. Likewise, it is important that the measures are geared to the agents most affected by the crisis, to those on whose income the expansionary impact may be greater, and that they contribute to improving the quality of public finances and the economy's efficiency (for greater details on the pros and cons of discretionary fiscal policy in times of crisis, see Box 1.3).

In Spain, the fiscal position is strongly governed by the scale of the fiscal impulse already under way and by its high budgetary impact...

Bearing in mind the foregoing, it is essential to take into account the scale of the fiscal drive made, along with its budgetary impact. It should be noted that when the adjustment began, the Spanish economy was starting from a relatively healthy budgetary position, which gave fiscal policy some leeway to act in a countercyclical fashion without endangering budgetary stability. During 2008, however, the impact of the automatic stabilisers – of a much greater magnitude than initially foreseen given the greater severity of the crisis – was compounded by the loss of tax revenue-raising capacity, prompted by the substantial correction in the real estate sector, and by the numerous discretionary measures adopted. The outcome was a significant deterioration in the fiscal position, with a deficit standing at 3.8% of GDP compared with a surplus of 2.2% of GDP the previous year, and an increase in the public debt ratio to 39.4% of GDP, triggering an excessive deficit procedure in keeping with the requirements of the Stability and Growth Pact. Having regard to the macroeconomic projections published by the Banco de España in early April, this deterioration in the fiscal position will run throughout 2009 and 2010, with a further increase in the deficit, which might rise to over 8% of GDP in both years, under the assumption of the measures already agreed being implemented without changes. Against this background, it is foreseen that the public debt ratio will increase very rapidly, whereby it might be at a level close to 60% in 2010, more than 20 pp above the low reached in 2007.

... which highlights the limits on the room for manoeuvre of fiscal policy and the need to avoid measures that may endanger budgetary stability in the medium term

This highlights the limits on the room for manoeuvre of fiscal policy – above all if the measures adopted need time for their effects to unfold – and the importance of holding to a path of budgetary consolidation in the medium term. That way, when more favourable macroeconomic conditions begin to settle, the position of public finances is not a drag on the recovery.

It is therefore necessary to avoid measures that may call into question the commitment to budgetary stability in the medium term, which might have adverse repercussions in terms of the cost of raising resources, of confidence and of generating expectations of tax rises that might ultimately sterilise the expansionary effects of the measures adopted. While the relative level of public debt is still below the EU average, the high increase foreseen in the coming years is worrying for three reasons: the difficulty its reversal would entail; the influence it may exert on the costs of financing the economy (since risk premia appear to have become more sensitive, among other factors, to the perception of the sustainability of public finances); and, in sum, because maintaining low public debt ratios is crucial for being better placed to withstand the future increase in pension spending, projected to be one of the highest in the EU.

In this connection, the framework of the Stability Pact and the budgetary stability laws remain appropriate, and stemming from this are substantial consolidation requirements which stave off the risk of the budget deficit running out of control and which mark the path for its future reduction. Against this backdrop, it is a priority to define a credible strategy for ensuring compliance with the requirements laid down by the laws on budgetary stability and the medium-term limits and objectives of the Stability and Growth Pact. In this respect, when an excessive deficit was reported in Spain, the European Council recommended its correction following a schedule that would allow it to be reduced to 3% in 2012. Lastly, the collaboration of regional and local government continues to be crucial. Accordingly, the regional government financing arrangements that arise following the review currently under



As a stabilisation tool in the face of economic crisis, discretionary fiscal policy has acquired significant importance in the past year. Practically all the EU countries and the main OECD economies have submitted more or less ambitious fiscal packages to stimulate demand over the 2008-2010 period. The characteristics of the packages differ greatly in terms of their composition, incorporating measures on the revenue side through cuts in the rates of specific taxes or through tax incentives, and/or increases in current spending and in public investment. Furthermore, their budgetary cost also varies greatly; it is relatively low in some cases, such as in France and Italy, and very high in others, such as in Spain and the United States (see Box 1.1). Beyond a description of the fiscal package is adopted, it is crucial to analyse the role that expansionary fiscal policy discretionary measures may play in the current economic circumstances. In this respect, a review of the specialist literature suggests various aspects to bear in mind when assessing the timeliness, design and effectiveness of discretionary fiscal policies.

The timeliness of discretionary policy measures should be analysed in conjunction with the countercyclical impacts that fiscal policy automatically provides in the economy, i.e. with the role of the automatic stabilisers. The transfer of income from the public sector to the rest of the economy through this channel is not in response to any discretionary action by governments and, therefore, is not affected by the lags in the implementation of fiscal policy which affect discretionary policies. In this respect, the fiscal stimulus provided by the automatic stabilisers is higher in the EU than in the United States, given the more progressive tax systems and the social protection policies in place. The automatic flow of income from the public sector towards households and firms caused by a deterioration of 1% in the growth rate of GDP is estimated at 0.5 pp of GDP in the case of the euro area aggregate, at 0.43 in the case of Spain, and at between 0.25 and 0.34 pp in the case of the United States.<sup>1</sup>

While there is some consensus that discretionary fiscal policy, if implemented without significant delays, may exert positive effects on the economy in the short term<sup>2</sup>, it is also pointed out that the greater or lesser effectiveness of discretionary policies depends on a series of factors. One fundamental aspect is the composition of the fiscal impulse, given that, despite the enormous heterogeneity present in the findings of empirical studies, there appears to be evidence that, in the very short term, increases in public spending in the form of, for example, temporary purchases of goods and services show greater multipliers than tax cuts, since a significant portion of the latter tends to be saved. However, if the aim were to affect economic growth in the medium term, tax cuts and productive public investment – with their added effects on productivity – would provide better tools than an increase in spending (either current or capital) geared merely to the short term. Hence, the mix of short and medium-term tools should take into account the expected duration of the situation of

economic weakness.

It should further be stressed that the findings described referred to normal periods, while in the current situation marked by loss of financial wealth and high uncertainty, even the short-term multipliers might be below their average historical values. Along these same lines, another important factor for the effectiveness of fiscal stimulus measures is that they are aimed at groups who are in fact more likely to spend. In the current situation, the loss of disposable income due to the rise in unemployment and the prevailing degree of financial restriction have raised the proportion of households and firms facing difficulty in financing themselves in the credit markets.<sup>3</sup> Accordingly, the discretionary measures aimed at these groups would be more likely to be effective, whether implemented through direct income transfers or whether involving the bearing of risks by the public sector, in the form of credit backing and guarantees for households and firms. Nonetheless, the measures aimed at specific groups should be designed with care, given that they have the potential to distort free market mechanisms and the optimal allocation of productive resources among alternative economic activities.

The academic literature also points out that the effectiveness of discretionary measures depends on how they are communicated to the public and, therefore, how they affect expectations. If fiscal packages are announced clearly and credibly, and include a medium-term consolidation strategy, they can increase their effectiveness. If, on the other hand, they consist of series of one-off measures or ones that are difficult for the public to understand, they may contribute to raising overall uncertainty in the economy and to ultimately exerting adverse effects on activity.<sup>4</sup>

Fiscal policy effectiveness further depends on the monetary and financial conditions in place. In this respect, in a low-inflation, low-growth environment in which monetary policy has an expansionary stance consistent with maintaining expectations of price stability, the potential upward effects that fiscal policy may exert on interest rates prove more limited, with the subsequent crowding out of private-sector activity.

In any event, it cannot be ruled out that expansionary fiscal policy may prompt an increase in sovereign risk premia, thereby hampering the financing of private investment. The risks concerning premia are related to the perception that economic agents have of the sustainability of public finances in the medium term. There is evidence that for levels of public debt that are high, or that are deteriorating rapidly, the values of the fiscal multipliers are low, and may even be negative if economic agents raise their savings rates to cushion themselves from the medium-term risks that may be posed by potential problems of solvency or sharp hikes in taxes in the future to balance public finances. These mechanisms may operate with great virulence in small

1. See N. Girouard and C. André (2005), *Measuring Cyclically-Adjusted Budget Balances for OECD Countries*, OECD Working Paper no. 434. 2. A representative paper here is that of R. Perotti (2007), *In search of the transmission mechanism of fiscal policy*, NBER Working Paper 13143.

3. See A. Tagkalakis (2008), *The effects of fiscal policy on consumption in recessions and expansions*, in *Journal of Public Economics*, vol. 92, pp. 1486-1508. 4. For an illustration of this, see T.H. Hoon and E.S. Phelps (2008), *Future fiscal and budgetary shocks*, *Journal of Economic Theory*, 143, pp. 499-518.

and very open economies that are sensitive to potential spillover effects between economies, particularly in cases in which the level of foreign debt is high. In this respect, government-co-ordinated fiscal policy action would be more effective. Furthermore, many of the papers available on the effectiveness of discretionary fiscal policy tend to find more significant effects of temporary as opposed to permanent measures on economic activity, especially as regards public spending, given that such measures do not affect the medium-term fiscal position.

Given the diversity of measures included in the different countries' fiscal stimulus packages (see Box 1.2), it is difficult to make a broad

assessment of their potential impact, in light of the determinants discussed in the foregoing paragraphs. In any event, there appears to be a general tendency, as the crisis unfolds, to improve the quality of the measures relative to their effectiveness, e.g. in terms of their temporary nature and of their bias towards items with theoretically higher multipliers, such as public investment. Nonetheless, it should be borne in mind that the fact that a certain discretionary response may be appropriate at one point in time does not mean that discretionary fiscal impulses may be unlimited, since the room for manoeuvre available may be running out owing to the large scale of the funds committed, both in the strictly fiscal area and in the financial realm.

discussion should set the appropriate incentives for the disciplined behaviour of these governments.

All told, the intensity of the recovery and of long-term growth are conditional upon the necessary adjustments being made to sustain growth potential...

Beyond the major challenges posed by addressing and resolving the economic and financial situation, it should be borne in mind that the intensity of the recovery and the capacity for long-term growth are conditional upon the necessary adjustments being made. That raises significant challenges for economic policy, in a situation in which it is not possible to resort to exchange rate adjustments to restore competitiveness and in which there is a risk that contractionary trends may ultimately diminish the possibility of expanding output potential.

The risks that the lesser use of productive factors during the adjustment phase may ultimately generate permanent effects on output potential stem from various sources. On one hand, it will prove difficult for productive investment to offset the sharp correction residential investment is undergoing, a correction which is in any event necessary after the excesses accumulated over the past decade. On the other, there is a risk that the sharp increase in joblessness will instil a high degree of persistence in unemployment, as occurred in the past. If this were the case, there would be a notable reduction in labour utilisation, while the labour supply would foreseeably tend to slow, as the impulses derived from women joining the labour market and from migrant inflows eased, which might have durable effects on growth potential. Compounding this are the difficulties of boosting the pick-up in total factor productivity.

...which requires the adoption of structural reforms aimed at containing the employment adjustment, increasing productivity and promoting the channelling of investment towards more productive sectors

To avert these risks, demand-side policies are insufficient. What are needed are structural reforms aimed at containing the intensity and persistence of the employment adjustment, increasing productivity and promoting the channelling of investment towards more productive sectors with greater potential for growth. In the labour market, the scale of the reaction by employment to the change in cyclical conditions highlights the presence of rigidities which emerge with intensity in downturns and intensify contractionary trends. To correct these features, there is a pressing need for reforms that allow wages to react to a greater extent to changes in cyclical conditions and that prevent the cyclical adjustment from resting excessively on employment. As is analysed in greater detail in Chapter 2, that requires a change in collective bargaining arrangements and in employment protection legislation, providing for new hires in this contractionary phase and allowing, once demand picks up, the resumption of an employment generation path on sounder foundations that is consistent with more intensive and efficient labour utilisation.

Persistent unemployment must be avoided through improvements to market intermediation services and training systems for the unemployed...

At the same time, efforts should be made to prevent the strong increase in unemployment from leading to situations of persistence that might hamper recovery. In this connection, it is essential to continue improving active employment policies – in terms both of job-search systems and of matching the training of the unemployed to the job skills in demand – and to strengthen their coordination with the unemployment benefits system. In this respect, public employment services must be improved, in particular concerning market intermediation services, involving private placement agencies and ensuring greater coordination among the regional governments. That would allow for a more widespread sharing of information on vacancies and job offers, it would improve the mechanisms for monitoring the degree of activism in job-search and it would enable training plans to be designed on bases better tailored to actual demand.

Further, guidance and training for the unemployed should be improved, in particular for those groups that are at particular risk of being excluded from the labour market. This is because the rise in unemployment is most acutely affecting the lesser-skilled and workers in construction, a branch that is scarcely likely to regain the employment levels of recent years.

... and regional mobility for the unemployed must be provided for, which may partly be done through a reform of the rental market

Another constraint on placing the unemployed is the limited regional mobility of workers, motivated in part by the scant wage differentials across regions, though also by the under-developed rental market. Here, a reform of the rental market might prove appropriate in the current circumstances, in that it would provide an outlet for the stock of unsold housing, facilitating the demand for lodgement at a time when housing affordability is difficult and, moreover, it will promote regional mobility of workers. In this respect, two aspects of the current legislation merit particular attention. First, the effectiveness of the various measures that have been adopted to improve legal security for owners should be guaranteed. Further, certain aspects of the current legislation should be made more flexible, such as those relating to contract duration. In addition, the funds assigned to public programmes for owner-occupied subsidised housing should be redirected to developing a sufficiently extensive stock of rental housing. Headway also needs to be made towards a more neutral and balanced tax treatment of owner-occupied housing, in which connection possible future measures have recently been announced.

Also, however, the quality of human capital and of technological capital should be enhanced...

Also, however, as indicated earlier, the change in productive pattern needed to resume high potential growth rates requires investment be encouraged in sectors other than construction and an increase in productivity. To do this, human and technological capital should be enhanced, competition increased and the environment in which companies pursue their activity improved.

In the case of human capital, the increase in the labour force's level of educational attainment in the second half of the 20th century has been checked over the past decade, meaning that the proportion of youths who have not attained an advanced secondary level of education has stagnated at a very high level (close to 40%, compared with 26% in the euro area), with adverse repercussions in terms of the lower increases in aggregate productivity.

Other factors have tended to lessen advances in the quality of human capital. First, as a result of the pattern of specialisation followed by the Spanish economy in the recent period, the demand for skilled labour has grown less than the supply thereof, prompting a mismatch that has tended to reduce the individual incentive to continue studying. In this respect, support must be given to the innovation drive needed to boost the demand for skilled labour and to adapt study programmes at the most advanced levels to business demands. Also, the effect that the collective bargaining system may have had on the rigidity of relative wages should not be underestimated, as should neither the fact that the recent minimum wage increases may

have led to an artificial wage squeeze. While these policies may respond to social goals in the public interest, the cost entailed in terms of fewer incentives to attain greater levels of educational attainment should be assessed. Nor does labour market segmentation encourage youths to extend their training, since too often this effort culminates in their joining the labour market as a temporary hire. The headroom for improving continuous training is also most considerable.

Turning to technological capital, the level of expenditure on both R + D and on information and communications technologies (ICT) remains significantly lower in Spain than in other EU countries. While in recent years considerable effort has been expended by the public sector in this area, drawing the private sector in its wake to some extent, significant favourable effects have not yet been perceived. Moreover, in Spain's case the bulk of private investment in R + D continues to be concentrated in few industries, although the problem of low investment is extensive to all sectors.

... and the competitive environment in which companies take their decisions improved, through the liberalisation of the services sector...

To improve competition and sectoral liberalisation, priority attention should be focused on the services sector, as it accounts for a very high percentage of value added and employment in the economy, albeit still lower than that observed in more developed economies. Further, the sector encompasses the most dynamic activities, those that lead the employment generation process and in which the new forms of labour relations can best be found. The growing interaction between industry and services has tended to raise the influence of the latter on international competitiveness and on trading results.

In this respect, the transposition of the Services Directive should play a crucial role in the liberalisation of the sector. The approval by the Council of Ministers of the laws now in the initial stages of transposition should help reduce the administrative burden on companies, lowering their costs and enhancing their competitiveness. As the Spanish productive structure is characterised by the small size of its firms, the impact of this measure will be greater than in the rest of the euro area. This should likewise contribute to significantly lowering the obstacles to business start-ups imposed by the current legislation and the overlapping of State, regional and local government rules. Deeper liberalisation is also called for in the case of professional services, which are characterised by their high value added and which, in some cases, also have very high export potential.

Within the services industry, retail trade plays a crucial role given that its activity involves placing a large part of consumer goods at the disposal of consumers. This sector is characterised in Spain by very extensive regional government regulation, with evidence that the heavier regulation in some regions has been associated with higher inflation and with lower employment in the sector. In particular, the entry barriers in place may be particularly inhibiting competition.

... and of the network industries

Although liberalisation of the network industries has been relatively deep in recent years, some shortcomings persist. Evidence of this has been the still-low growth of productivity in some of these branches. In the energy sector, the rise in oil prices in the first half of 2008 had particularly adverse consequences for the Spanish economy, owing to its greater dependence on this energy source and to the greater intensity in its use in productive processes. That calls for these biases to be corrected, in line with the progress other industrialised countries have made in this area. Turning to the electricity sector, prices remain distorted, while international interconnections continue to be insufficient. In the telecommunications market, the market share of the former monopoly is still very high, both in fixed telephony and, above all, in Internet access, which might be restricting the degree of actual competition.

## 2 THE IMPACT OF THE FINANCIAL CRISIS ON THE SPANISH ECONOMY

## The impact of the financial crisis on the Spanish economy

The international financial crisis and its consequences for the global economy have radically altered the scenario for the Spanish economy. The crisis, whose source and development are analysed in detail in other chapters in this *Annual Report*, has entailed a series of financial and macroeconomic shocks which have superimposed themselves on the process of adjustment that had already begun domestically to correct the main imbalances that had built up during the 1995-2006 expansion. The correction of these imbalances, which essentially turn on a high concentration of financial and real resources in the real estate sector and excess indebtedness, remains a crucial condition for exiting the crisis. The strong contraction in domestic demand is causing a rapid reduction in the external deficit and in the weight of the construction sector, but at a very high cost in terms of economic activity and employment. This form of adjustment evidences the patent need to substantially improve productivity levels and the working of the markets for goods, services and production factors so as to increase competitiveness in the Spanish economy, particularly in view of the far-reaching deterioration of the external environment, and to thus lay once again the foundations for sustained economic growth.

This chapter delves deeper into the analysis of the main channels through which the international economic and financial crisis is affecting the adjustment that began in the Spanish economy in late 2006. In this regard, the first section briefly reviews the nature of the imbalances that triggered the adjustment and the dynamics arising from the correction of the imbalances, initially in the absence of external shocks. The following section addresses the main additional contractionary impulses induced by the crisis: a reduction in wealth, stemming from the loss of value of household financial and real estate assets; revised disposable income growth expectations, which are now less favourable; and tighter credit conditions, as a result both of the increase in the costs of financing spending decisions and of greater difficulties in obtaining funds with which to finance such decisions. Finally, the main transmission mechanisms of the shocks are characterised, focusing on those which involve the behaviour of consumption and employment, as it is developments in these variables which, at the end of the day, will foreseeably most influence the scale of the crisis beleaguering the Spanish economy. The role these mechanisms play is very important for properly understanding the challenges that economic agents and economic policy will face in such adverse circumstances.

### **1 Background: the imbalances and their correction**

The financial crisis affected the Spanish economy when a process of adjustment was beginning, following a long expansion...

During the expansion of the Spanish economy, a series of interdependent imbalances built up, which may essentially be condensed into two categories: burgeoning household and corporate debt which, as it was not sufficiently offset by greater public-sector saving, translated into sizeable recourse to foreign saving; and the excessive weight of the real estate sector, in terms of the concentration of productive resources in this sector (much higher than that observed in other countries) and of the substantial materialisation of household wealth in real estate assets.

Throughout the 1999-2006 period, demand in the Spanish economy showed forceful momentum: domestic demand grew at an average annual rate of 4.7%, with respective increases in consumption, investment in capital goods and investment in construction of 4.2%, 5.5% and 6.7%. Set against this growth in spending, supply also increased significantly, but at a lesser pace: output expanded at an average annual rate of 3.8%, driven by intense job creation underpinned by the dynamism of immigration and the rise in the participation rate of female nationals. Conversely, there were scant gains in productivity during this period.

This imbalance between spending and output growth gave rise, first, to growing external debt and, further, to pressure on prices that contributed to maintaining the positive inflation differential with the euro area countries and, therefore, an appreciation of the real exchange rate and a loss in the competitiveness of Spanish goods.

... driven by an increase in spending fuelled by growing household and corporate debt...

Unlike in other previous expansions, the resort to financing was not chiefly by the public sector, which reduced its debt throughout the period. It was rather Spanish households and firms that swiftly increased their rates of debt, taking advantage of the ready access to credit in a setting marked by very low risk premia and accommodating monetary conditions, with nominal – and, no doubt, real – interest rates below what demand conditions in Spain would have warranted.<sup>1</sup>

In turn, the expansion entailed strong growth in the employment rate, which improved expectations of higher growth disposable income and, therefore, further boosted the demand for credit. This was likewise propelled by the growing dynamism of the real estate market and the surge in house prices.

As a result the Spanish economy, which needed virtually no foreign funding in 1996 (net financial transactions with the rest of the world actually registered a surplus of 0.8% of GDP at the end of the year), recorded net borrowing of 9.7% of GDP (11.1% for non-financial corporations and 2.7% of households), despite the fact that general government net lending stood at 2.2% of GDP. In 2008, total net borrowing from the rest of the world stood at 9.1% of GDP.

... which is not compatible with “realistic” paths for borrowing costs and economic growth

The rate of increase of Spanish household and corporate debt was excessive, even in such a favourable setting as that described. From both an individual and overall perspective, the increase in debt is warranted if the future growth in income allows payments to be met without it being necessary to subsequently adjust the planned path of spending. In this respect, the results available drawing on the simulations of various versions of intertemporal substitution models of consumption especially designed to identify debt determinants suggest that, for this condition to hold, the increase in liabilities observed during the period 1995-2005 would require Spanish per capita income to grow at a rate of over 2% over the next ten years.<sup>2</sup> The simple extrapolation of the interest rates and income growth rates observed over the past decade would give an increase in the Spanish economy’s rate of indebtedness (the external debt/GDP ratio) some 8 pp below that actually recorded.<sup>3</sup>

The looseness of financial conditions also prompted an excessive concentration of productive resources in the real estate sector...

By its very nature, the real estate sector is particularly sensitive to financial conditions. House-building involves a lengthy production process and is usually carried out through property developments encompassing a large number of units, which is why it is greatly influenced by the availability of financing. As housing is a durable good with a considerable weight in the household budget, the usual means of access to a house is through taking out a mortgage loan. This means that changes in lending standards directly affect both supply (developers, builders) and demand (households, in the main) in the real estate market, causing considerable variations in the number of transactions and in prices.

Most new household debt was thus directed at house purchases, in the same way that a significant portion of credit to companies was earmarked for real estate development. The number of real estate transactions grew exponentially (to 955,000 in 2006), while the con-

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1. See J. Andrés, S. Hurtado, E. Ortega and C. Thomas, *Spain in the Euro: a General Equilibrium Analysis*, Working Paper, Banco de España, forthcoming. 2. See *Annual Report*, 2006, Box 2.2. 3. See Á. Estrada, J. F. Jimeno and J. L. Malo de Molina (2009), *The Spanish economy in EMU: the first ten years*, Occasional Papers, no. 0901, Banco de España.

struction of new houses rose substantially, meaning that the stock of housing increased at an average annual rate of 2.7% between 1995 and 2007 (from 18.3 to 25.1 million), encouraged too by the rising trend of prices and by expectations of property appreciation. Between 1990-1998 and 1999-2007, the weight of residential investment in GDP increased by almost 2 pp from 5% to 6.8%, it rose in the United States from 4.4% to 4.8%, and it held steady in the euro area as a whole at around 5.5%. The increase in the weight of the construction sector was also notable in terms of employment: in 2007 it accounted for 13.2% of total employment, 2.7 pp up on the 1999 figure. In the United States this percentage edged up from 7.1% to 8% over the same period. Significantly, however, at play in Spain are idiosyncratic factors such as demographic dynamics, the country's attractiveness as a tourist destination and a greater need to improve our infrastructures, as befits an economy immersed in a convergence process.

... and rapid growth in house prices, which was not sustainable

The buoyancy of activity was accompanied by a rapid increase in house prices, which climbed from an average rate of 1% between 1995 and 1997 to 18% between 2003 and 2004. The average annual increase between 1995 and 2007 stood at 10%. Consequently, the ratio of house prices to gross household income almost doubled in this period from 3.8 to 7. As early as 2003, some studies were already warning that this growth in real estate prices was excessive. For example, Ayuso and Restoy (2003) indicated that the overvaluation of house prices might, at end-2002, be standing at between 20% and 30%. More recent estimates drawn from stylised macroeconomic models broaden this range somewhat, reducing the lower limit and increasing the upper one.<sup>4</sup>

Also, the weight of real estate assets in household wealth rose to very high levels

The strong investment in housing and the prolonged and sharp growth of real estate prices also led real estate wealth to increase significantly. On EFF (Spanish Survey of Household Finances) data, in just three years, from 2002 to 2005, the increase was at an average annual rate of 18% in real terms. Of these 18 points, around 15 were the result of the increase in house prices, while the remainder resulted from the accumulation of new properties. Around 40% of households who owned properties in 2002 saw their value increase by over 75% in real terms. 23% of those who did not own properties other than their main dwelling in 2002 did so by 2005, meaning that the proportion of households with other properties, apart from the main dwelling, rose from 30.1% to 34.5%, while that of owner-occupiers in the principal residence held approximately stable (81.9% in 2002 and 81.3% in 2005).<sup>5</sup> In 2002, 61% of households owning a second residence used it for vacation or other purposes. This percentage had fallen to 55.9% in 2005, suggesting that the motive behind a significant portion of real estate transactions during this period was not the direct use of housing as a durable consumer good.

In sum, real estate wealth as a proportion of total Spanish household wealth increased from 78.7% to 80% between 2002 and 2005. On estimates based on aggregate data, this ratio might have increased even more (by around 3 pp) over the last three years. In any event, Spanish households' concentration of wealth in real estate assets is high compared with other countries. Taking as a reference countries with data comparable to those of the EFF, Italy's ratio can be seen to be around 75%, while in the United States it rose from 36.7% to 43.4% between 2001 and 2004.<sup>6</sup>

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4. See J. Ayuso and F. Restoy (2003), *House prices and rents: an equilibrium asset pricing approach*, Working Paper no. 0304, Banco de España; IMF (2008), *Economic Outlook*, April, and Á. Estrada, J. F. Jimeno and J. L. Malo de Molina (2009), *The Spanish economy in EMU: the first ten years*, Occasional Papers, no. 0901, Banco de España. 5. See O. Bover, *The dynamics of household income and wealth: results from the panel of the Spanish Survey of Household Finances (EFF) 2002-2005*, Occasional Papers no. 0810, Banco de España. 6. See O. Bover, C. Martínez-Carrascal and P. Veilla (2005), "The wealth of Spanish households: a microeconomic comparison with the United States, Italy and the United Kingdom", *Economic Bulletin*, July, Banco de España.



The mechanisms for redressing these imbalances were insufficient...

Efforts to contain and redress these imbalances were not sufficiently intense as to prevent their excessive build-up. First, interest rates, set by the single monetary policy on the basis of the needs of the euro area as a whole, proved lower than what the Spanish economy, given its inflation and the intensity of growth in spending, would have needed. Further, fiscal policy, though it enabled surpluses to be attained which led to a rapid reduction in debt, did not sufficiently offset the increase in private-sector indebtedness and did not anticipate in full the consequences that the adjustment of the economy might have on the State budget. Moreover, from a medium and long-term perspective, the public finances position was not a comfortable one once spending arising from population ageing, which will begin to be more evident within a decade, was taken into account. The regulation of land-use and of real estate development policies coupled with the insufficient correction of the favourable tax treatment of owner-occupied housing did not help either in redressing the sizeable build-up of productive resources in the construction sector and of wealth in real estate assets. Finally, the measures aimed at boosting productivity gains and greater labour mobility, so that the necessary reallocation of employment from the construction sector towards other industries might be less costly, were adopted belatedly when the cycle was already maturing.

and the adjustment is taking the form of a sharp decline in activity...

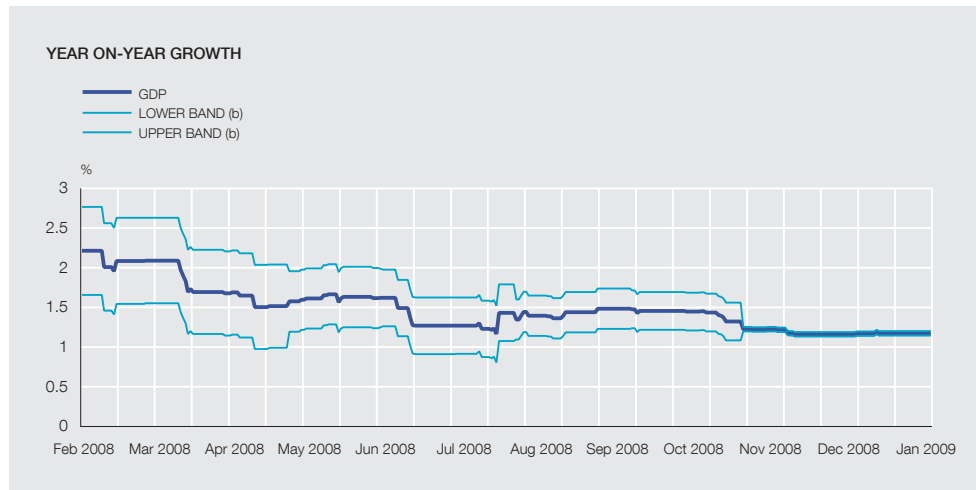
The lowering of the debt rates of households and non-financial corporations and the real estate adjustment are taking the form of a sharp reduction in demand, which is translating into a rapid improvement in the inflation differential with the euro area and in the external deficit, and into acute job destruction, particularly in the construction sector. Such rapid reabsorption of the imbalances should not however be interpreted as a durable correction thereof; this will only be achieved once a competitive position is successfully entrenched which provides for a greater contribution of the external sector to GDP growth in normal cyclical conditions, and for job creation in other sectors that absorb the surplus labour that built up in real estate activities. Should this not come about, the Spanish economy would end up simply replacing its external deficit with a domestic imbalance characterised by an excessively high unemployment rate and a level of GDP below potential.

...meaning that the challenges posed by the correction of the imbalances are still present...

The adjustments the Spanish economy must make to set more balanced foundations in place and to resume sustainable growth against the background of euro area stability requirements thus remain necessary. Euro area membership offers significant protection, without which all adjustments would have been deeper and more painful. But within the euro area, productivity and the response of production costs to the conditions prevailing in the markets are decisive factors for attaining and maintaining a competitive position. Accordingly, the intensity of the adjustment turns basically on the ability to reverse the losses on competitiveness through growth in productivity, on the moderation of business margins and of labour costs, and on the flexibility of the labour market in being able to absorb the sectoral reallocation of employment.

However, improving productivity and containing margins and costs entails major difficulties. As regards productivity, the measures to permanently raise its growth rates need, in order to be fully effective, a long period of time. As to containing costs and margins, it will be difficult to make significant progress unless the structural problems in the working of certain markets, derived from regulations that do not sufficiently promote competition and flexibility, are tackled more forcefully.

Turning to the real estate adjustment, an oversized sector is always costly to redress, as a reallocation of productive resources is needed. In this case, given the intensive use of labour in the production of real estate, the costs of the adjustment will also depend crucially on the capacity of the labour market flexibly to accommodate this reallocation process and thus avert excessive and lasting growth in the unemployment rate.



SOURCE: Banco de España.

- a. GDP in real terms.  
b. 95% confidence bands.

## 2 The consequences of the financial crisis

During the first phase of the international financial crisis, the economic slowdown was moderate...

In the second half of 2007 and the first half of 2008, the soundness of the Spanish financial system and the Eurosystem's rapid response to the liquidity tensions allowed the effects of the first wave of the crisis to be cushioned, so that the path of deceleration on which Spanish economic activity had already embarked did not steepen significantly. The average GDP growth rate in the four quarters following mid-2007 was 1 pp down on the related average for the 1999-2007 period (2.8% against 3.8%), while in the case of household consumption and of gross fixed capital formation, the differences were 1.8 pp and 3.6 pp, respectively. Only in the construction sector, where the slowdown had already begun in 2006 Q4, was the growth differential between both periods particularly marked (almost 6 pp). Chart 2.1 offers estimates of the year-on-year growth rate of GDP provided by a real-time forecasting model of the Spanish economy over the course of 2008. This illustrates that the conjunctural indicators did not begin to anticipate until late March the strong slowdown that would ultimately take place, more clearly so from late June.<sup>7</sup>

To properly assess the slowdown seen until mid-2008, it should be borne in mind that, aside from the start of the financial crisis, interest rates had held on an upward course since late 2005, although they still remained at moderate levels. The strong increase in oil and commodity prices should also be recalled, as it only turned around from 2008 Q3, although the effect of these increases on activity in Western economies was generally less than in previous episodes of strong rises.<sup>8</sup> In short, the slowdown under way to mid-2008 did not appear to depart from a path of relative gradualism.

...but amplification mechanisms have been set in train as it has heightened...

From September 2008, the international financial crisis worsened. The serious solvency problems of international financial institutions spread, having appeared in previous months to be concentrated, with few exceptions, in US investment banks and in commercial banks excessively geared to highly complex securitisation formulas via special vehicles. The bank-

7. This real-time forecasting model of the Spanish economy is designed in a similar fashion to the EUROSTING. See M. Camacho and G. Pérez-Quirós, *Introducing the EURO-STING: Short-Term Indicator of Euro Area Growth*, Working Paper no. 0807, Banco de España. 8. See A. Nakov (2008), "Una modelización de equilibrio general de las fluctuaciones del precio del petróleo", *Boletín Económico*, January, Banco de España.

ruptcy of Lehman Brothers and the AIG debacle seriously exacerbated the situation of uncertainty and the crisis in confidence. As Chart 1.1 shows, stock market prices fell sharply and their volatility increased substantially, far exceeding the figures hitherto attained. Risk premia on corporate bonds also grew strongly, and the information from various available surveys shows that credit standards tightened further. Against this background of turmoil on capital markets, there was an across-the-board increase in financial intermediation costs. This in itself has an adverse effect on activity, similar to those stemming from a decline in productivity, since as the user cost of capital increases, productive investment falls.

... prompting a perceived loss in wealth...

One of the main consequences of these extraordinary events has been the loss in wealth. On one hand, financial asset prices have fallen considerably. And on the other, the tightening of credit standards has exerted further pressure in favour of a swifter correction of real estate asset prices which, in normal conditions, would usually follow a relatively slow pattern of adjustment.

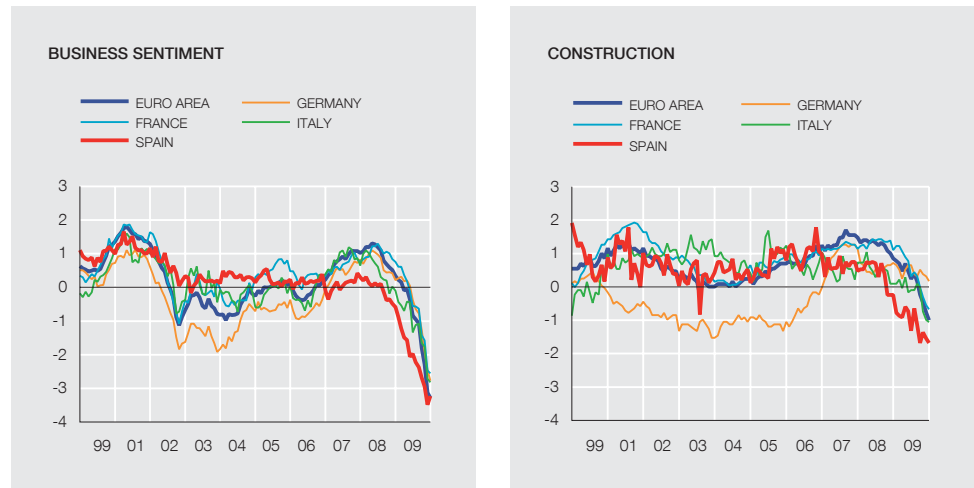
The effects of this fall in wealth on activity are amplified in situations such as the present, in which uncertainty hinders asset valuation and the lack of confidence about agents' solvency becomes widespread. These conditions lead households to increase precautionary saving, and firms to maintain their working capital and to postpone new investment projects. And, in turn, the reduction in the value of the collateral that households and firms can offer to obtain credit with which to finance their decisions leads banks to demand greater guarantees in exchange for the risks they assume. Spending, therefore, is further constrained and financial conditions thus become an amplifying mechanism of the original shock that caused the initial decline in wealth. This phenomenon is what is known as the "financial accelerator" in the literature on the propagation of economic fluctuations. Indeed, according to the empirical evidence available in this field, shocks with a financial origin and the above-mentioned financial acceleration mechanism explain a significant portion of past fluctuations in GDP, inflation, consumption and investment, both in the euro area and in the United States. In particular, it has played an especially important role in amplifying monetary shocks, which move prices and output in the same direction.<sup>9</sup>

... a drastic change in household and business expectations...

The crisis has not only altered agents' expectations about the future returns on their financial and real estate assets; it has also affected their outlook in respect of future earnings. Chart 2.2 shows that the economic sentiment indicators fell back fairly markedly from mid-2007, a trend which intensified during 2008. This decline came about in a similar fashion in Spain and in the euro area as a whole. Thus, between June 2007 and December 2008, the economic sentiment indicator posted a fall of 35.1 points in Spain (42.1 points in the euro area). The pattern was very similar in the other confidence indicators, except that for the construction sector. That said, consumer confidence fell somewhat more in Spain in this period (by 33 points, compared with 28 points in the euro area as a whole). In the construction sector, where the confidence indicator trended more unevenly (owing to Germany in particular), the decline in confidence has also been higher in Spain than in the other countries. This slump in confidence reflects lesser expectations of household disposable income growth associated with the adverse behaviour of employment and, perhaps, with the potential repercussions of the tax costs of the crisis. However, there might also be a component of temporary overreaction to the spate of bad news stemming from the international financial crisis.

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9. See L. Christiano, R. Motto and M. Rostagno (2008), *Financial Factors in Business Cycles*, mimeo.



SOURCE: European Commission.

a. Normalised data.

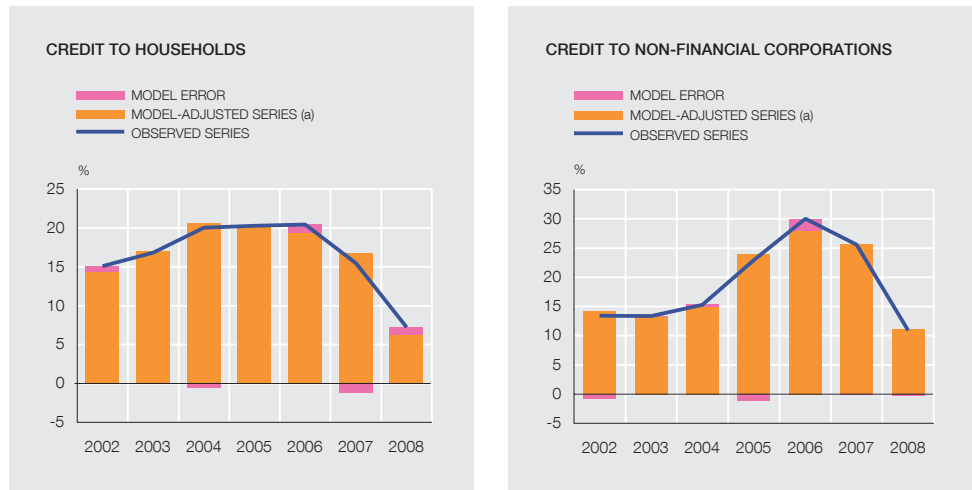
... with significant effects on the demand for credit...

Household credit, which was growing at a rate of over 20% during the final quarters of the expansion, fell to a year-on-year rate of around 5% in late 2008. The slowdown was even sharper at non-financial corporations, especially in the case of construction and real estate activities. In addition, the indicator of bank financing to companies, which takes into account the volume of funds available through open credit lines along with the credit on balance sheets, was less buoyant. Less favourable expectations about growth in the medium and long run, diminished prospects of an appreciation in real estate wealth (the principal collateral of households and of certain firms when it comes to requesting a loan), the turnaround in interest rates at the end of 2005 and the levels of debt reached have made for a progressive tempering of private agents' demand for credit.

... and on supply, affected also by other factors related to the crisis...

But the behaviour of credit has also been affected by cyclical factors on the supply side. Hence, given the current and foreseeable weakening in economic activity, financial intermediaries have lowered their estimates of borrowers' ability to pay and they have reassessed upwards the risks associated with funded projects, which has translated into a tightening of their credit standards. Compounding this negative cyclical impulse to the supply of credit in the current setting have been other impulses more directly linked to the financial crisis, such as the across-the-board re-pricing of risk, the diminished international availability of funds and market pressures on financial institutions' capital ratios in an environment of growing mistrust.

Chart 2.3 shows that the key cyclical determinants of the behaviour of credit (interest rates, wealth, the unemployment rate and the GDP growth rate), which influence both the demand for and supply of credit, provide for a reasonable explanation of the course of this variable during 2008. As Box 2.1 illustrates, information from surveys of financial institutions, which allow for a more in-depth analysis of the role played by the various supply and demand factors underlying the observed course of credit, also tends to confirm the importance of these cyclical factors. In particular, the information indicates that it is financial institutions' expectations about economic developments, and not so much potential problems concerning the availability of funds or the level of capitalisation, that best explain the contraction in the supply of credit over the past year.



SOURCE: Banco de España.

a. Drawn from the equations presented in *The determinants of household credit in Spain* [Nieto (2007)] and in *Una aproximación a los determinantes de la financiación de las sociedades no financieras en España* [Marqués et al. (2005)], re-estimated with information to 2008 Q2.

... shaping a scenario in which the adjustment of debt and of the real estate expansion must be made under particularly difficult conditions

The international financial and economic crisis has drastically curtailed the possibility of external demand playing a compensatory role in the necessary containment of domestic demand, and it has brought further contractionary impulses to bear which have intensified the decline in activity and job destruction. These additional negative impulses have been operative through a reduction in wealth and a tightening of credit access conditions, which have depressed the demand for consumption and investment, adding severity to the loss of dynamism in activity. In a few short months, there has been a shift from a scenario of deceleration based on a gradual correction of spending and of house prices, which had some degree of support in fiscal policy and in external demand, to another scenario marked by: a grave deterioration in agents' confidence and a tightening of credit conditions which are more severely weighing on spending decisions; a global recession, which limits the capacity of external demand to offset, at least in part, lower domestic demand; and a substantial change in the public-sector budgetary position, as a result of the increased spending the crisis entails and of a proportionately greater moderation in public revenue than in GDP as a consequence of a significant fall-off in direct and indirect taxes, in particular those associated with real estate activity, which had during the 1998-2006 period led to a cumulative increase in revenue of around 2 pp of GDP.<sup>10</sup>

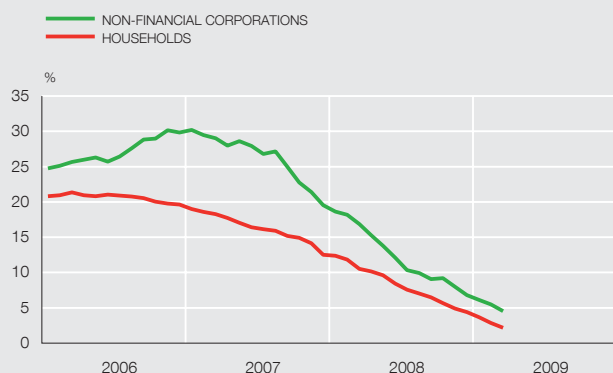
The recession also has effects on productivity that run in both directions. On one hand, the destruction of less productive jobs and the sectoral reallocation of employment tend to generate productivity gains in the short run. On the other, it cannot be ruled out that, in the medium and long term, the economic crisis will have an adverse effect. This is because companies and the general government sector may be forced to cut R + D spending to a greater extent than other current expenditure, while the increase in risk premia and the tightening of credit standards may check those investment projects potentially more beneficial to productivity growth, which are in general those that have most risk associated with them.

10. See F. De Castro, Á. Estrada, P. Hernández de Cos and F. Martí (2008), "Una aproximación al componente transitorio del saldo público en España", *Boletín Económico*, June, Banco de España, pp. 71-81.

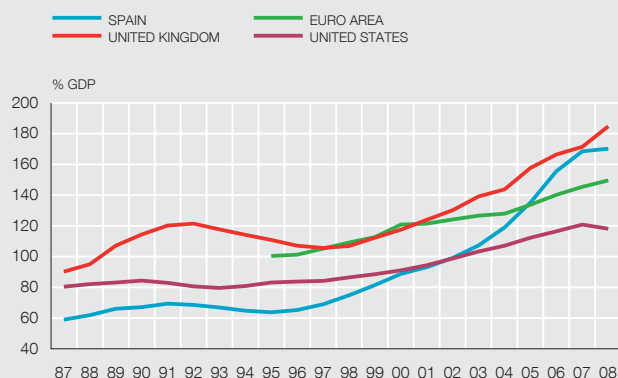
Credit granted by financial institutions to households and firms has slowed rapidly over the past year, and has therefore continued on the moderating slope on which it embarked in late 2006 (see Panel 1).

Specifically, the year-on-year growth rate of bank lending to households declined from end-2007 to December 2008 by 8 pp to 4%, while lending to companies did so by 13 pp, to somewhat less than

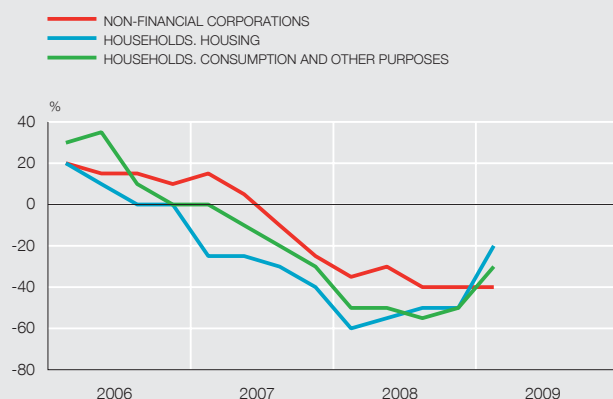
1 CREDIT GROWTH. YEAR-ON-YEAR RATES



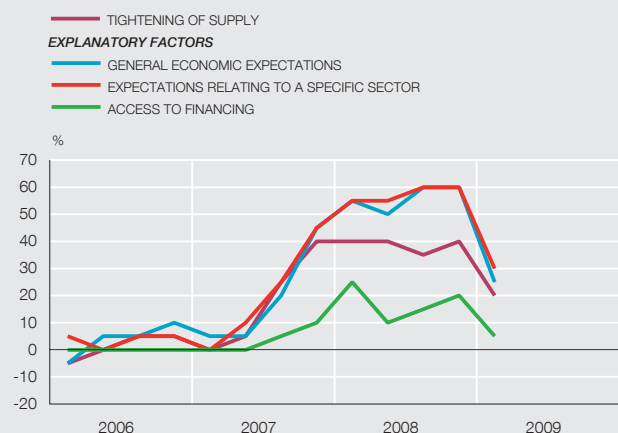
2 CREDIT TO THE NON-FINANCIAL PRIVATE SECTOR AS A % OF GDP



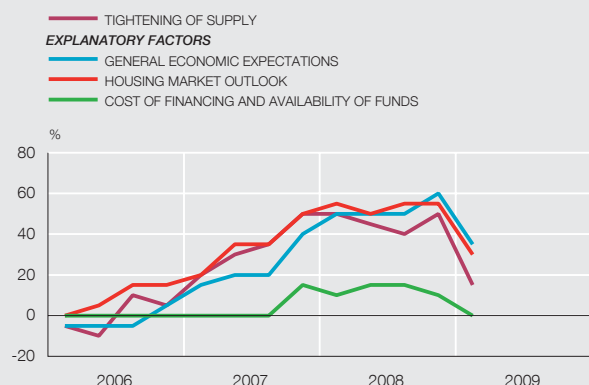
3 CHANGE IN THE DEMAND FOR CREDIT (a)



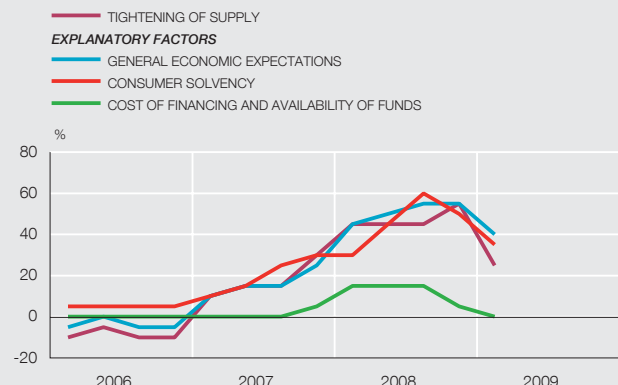
4 TIGHTENING OF CREDIT SUPPLY. COMPANIES (b)



5 TIGHTENING OF CREDIT SUPPLY. HOUSEHOLDS. HOUSING (b)



6 TIGHTENING OF CREDIT SUPPLY. HOUSEHOLDS. CONSUMPTION AND OTHER PURPOSES (b)



SOURCE: Banco de España.

a. Indicator = % of institutions that indicate a considerable increase x 1 + % of institutions that indicate some increase x 1/2 - % of institutions that indicate some decrease x 1/2 - % of institutions that indicate a considerable decrease x 1.

b. Indicator = % of institutions that have considerably tightened standards x 1 + % of institutions that have tightened standards to some extent x 1/2 - % of institutions that have relaxed standards to some extent x 1/2 - % of institutions that have considerably relaxed standards x 1.

7%. The indicator of bank financing to companies obtained by adding to balance sheet loans the volume of funds drawable through open credit lines, which better proxies developments in the supply of credit to this sector, evidenced a lesser pace of increase (below 2%) at the close of last year.<sup>1</sup> In 2009 to date, the pattern of diminished buoyancy of borrowed funds raised by the private sector has continued.

For a proper assessment of these developments, it should be borne in mind that credit is highly procyclical. In particular, during the upturn it tends to increase rapidly, since both those demanding and supplying funds usually form optimistic expectations about the generation of future income by demanders, while the opposite occurs in recessionary phases. Suppliers and demanders alike tend to be more lax in their assessment of the risks associated with this future income. When, as at present, the downside of the cycle begins, these same forces act in the opposite direction, meaning that the growth of bank financing is checked.

To set the latest credit developments in context, it is worth recalling their notable dynamism between 1996 and 2005. In that period the credit-to-GDP ratio, which started in 1995 from a low value compared with other developed economies, exceeded average euro area levels, although it did not match the figures in economies such as the United Kingdom (see Panel 2). The high growth rates of loans during this stage should be understood as a temporary phase of adaptation of the Spanish economy to the new environment of greater macroeconomic stability and of low interest rates as a result of Spanish euro area membership. That said, the accommodating financing conditions on international financial markets during this period were also a contributing factor. Subsequently, the progressive rise in the cost of private-sector debt following the change in monetary policy stance initiated in late 2005 and lower expectations of house price appreciation had tended to reduce private-sector demand for borrowed funds, and a period of diminished momentum in this variable began. More recently, the Spanish economy's cyclical position and the international financial crisis have accentuated the slowing profile of credit, affecting both the supply of and demand for funds.

To make a correct diagnosis of the factors behind the latest credit developments, a distinction should be drawn between supply-side and demand-side elements, though this is a highly complex exercise. A useful tool to this end is the Bank Lending Survey (BLS), which is conducted in coordination with the euro area countries. Quarterly, the survey asks participating banks (10 in Spain's case) directly about changes in the demand for and supply of financing during the reference period and about the explanatory factors behind these develop-

ments.<sup>2</sup> Although the replies to the questionnaire are qualitative, they may prove very useful for identifying certain trends.

The results of the BLS conducted in 2008 confirm that the sharp slowdown in loans to households and firms last year could be explained both by demand-side and supply-side factors (see Panels 3 to 6). The diminished dynamism of the demand for financing would be linked both to lower expectations about income growth, further to the turnaround in the business cycle, and to changes in the prospect of certain assets appreciating (real estate, in particular, the price of which fell by 3.2% in 2008 according to figures from the Spanish Ministry of Housing). Also, the rise in the cost of financing for much of the year would have contributed to checking applications for funds.

According to the BLS, the tightening of the criteria used by banks to approve new loans was due mainly to the progressive deterioration of banks' expectations about economic developments in general and the housing market in particular. It was also due to banks' perception of borrowers' diminished solvency (see Panels 4 to 6). In this respect, it should be recalled that the doubtful assets ratio of other resident sectors (which includes, in addition to households and firms, financial institutions other than those of the system) rose from 0.9% in 2007 to 3.4% at the end of 2008.

Credit institutions' problems in gaining access to international funding markets, to which they had resorted to fund part of the growth of their assets, would also have contributed – along with the attendant high costs – to reducing the supply of loans, albeit to a lesser extent than the foregoing factors, according to the BLS. The relative weight of factors relating to banks' capitalisation levels would also have been comparatively less.

The latest BLS (April 2009) reveals that both the pace at which credit standards were tightening and at which applications for funds were declining began to be checked in 2009 Q1, although both the supply of and demand for credit had continued falling. According to banks' expectations, these same trends should continue over the following quarter.

In short, the results of the BLS suggest that the factors linked to the deterioration of the macroeconomic outlook played a substantial role in the decline of both the supply of and demand for bank financing during 2008. The international financial crisis coupled with high private-sector debt have undoubtedly contributed to the ongoing intensity of the adjustment of both variables to the change in the business cycle.

1. For more details, see Box 6 of the "Quarterly report on the Spanish economy", *Economic Bulletin*, January 2009, Banco de España.

2. For more details on the content of this Survey, see J. Martínez and L. Á. Maza (2003), "Resultados de la Encuesta sobre Préstamos Bancarios en España", *Boletín Económico*, May, Banco de España; and for the latest data, J. Martínez (2009), "Resultados de la Encuesta sobre Préstamos Bancarios en España: abril 2009", *Boletín Económico*, April, Banco de España.

### **3 Crisis transmission mechanisms: the impact on consumption and employment**

The acceleration in the adjustment of the real estate market...

The real estate adjustment, which began in mid-2006, quickened during 2008. Housing starts, which peaked at a total of 760,000 in 2006, fell to 360,000, with open-market housing accounting for this reduction almost in its entirety. As regards transactions, these fell from 955,000 in 2006 to 565,000 in 2008. As a result, investment in housing dipped from 9.4% of GDP in 2006 to 7.2% in 2008 Q4, while total investment in construction fell by a similar amount (2.4 pp), declining from 18% of GDP in 2006 to 15.6% of GDP.<sup>11</sup>

House prices, too, have embarked on a phase of correction of the strong rises previously accumulated: the price index compiled by the Spanish Ministry of Housing posted a year-on-year reduction of 3.2% for open-market housing at end-2008. The new INE statistic, which offers a more refined estimate of these prices, gave a figure of 5.4% for this contraction. Significantly, both statistical sources tend to record the changes in prices with some delay. In the case of the INE statistic, which is based on information provided by the public deeds of transactions, second-hand house prices are likely to reflect the changes more promptly, as there is a lesser interval in this case between the time of the transaction and that of the signing of the related deed. At end-2008, the year-on-year decline in second-hand property prices was, according to this source, 10.7%.

... has adversely affected household wealth

Household wealth encompasses, on one hand, the value of financial and real estate assets accumulated at each moment in time. In mid-2007, before the initial episodes of the international crisis broke, the respective ratios of real estate assets, financial assets and debt to Spanish household gross disposable income were 8.45, 2.90 and 1.38, giving financial and real estate wealth (net of debt) of 9.96 times such income. Only one year later, these ratios had fallen in 2008 Q3 to 8.17 (real estate wealth), 2.45 (financial wealth) 1.37 (debt) and 9.3 (total wealth net of debt).

However, as regards the value of real estate wealth, the estimates indicated are based on the statistics available on the real estate market, with which it is difficult to accurately estimate the decline during 2008, and it is likely that the indicators habitually used are underestimating it. Firstly, the stock of owner-occupied housing may be growing less than what the information available on housing starts would indicate. If the historical relationship between both variables holds, the stock of housing may be expected to have increased by approximately 3% during 2008, reflecting the high number of housing starts in 2006; but it is likely that, in a scenario marked by low activity in the real estate market, the lead time for the production of housing will have lengthened, raising the proportion of starts that have not yet become household property. Taking as a reference the reduction (practically 33%) in the number of real estate transactions, the quantity effect might have boosted household real estate wealth by 2%. Secondly, as previously indicated, the overall indices of house prices, owing to the way in which they are constructed and given the current sluggish conditions in the housing market, capture actual developments with something of a lag. Against this background, the fall in second-hand housing prices might be more representative of the loss in value of household-owned real estate assets. Thus, taking the reduction in the foregoing prices at 10.7%, according to INE, the estimated loss in real estate wealth recorded during 2008 would be 8.7%. As regards financial wealth, which poses fewer estimation problems, the related decrease would be 12.1%, reflecting above all the decline in the value of stock market assets.

Wealth also comprises the expected present value of the income flows household foresee having in the future, which is known as "human wealth". Accordingly, changes in expectations

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11. These ratios to GDP are in current prices.



about these flows have a direct impact on total household wealth, which is all the greater the lower the discount rate applied to these future flows and the longer the related life cycle for saving-related decision-making.

The reduction in real estate wealth feeds through to consumption through various channels...

The effects of the changes in wealth and consumption depend on several factors, such as the interest rate, risk aversion and individuals' life horizon, the type of wealth in question and its distribution among different population groups, and the source of the change in its value. A particularly interesting case in this connection is that of real estate wealth, since real estate assets, contrary to financial assets, have an intrinsic user value. Consequently, a fall in house prices brings about, on one hand, a decline in household wealth, but, on the other, it also reduces the cost of the residential or accommodation services provided by the dwelling, whereby the end effect on consumption is not in principle evident.

There are, however, other mechanisms through which the fall in house prices might lead to the containment of consumption. Firstly, if a portion of households' precautionary saving were to be deposited in real estate assets, a fall in house prices might lead households to have to offset the related loss of capital by increasing their saving, especially in a setting of high uncertainty as at present, which is conducive to higher saving for this reason. This effect will be all the greater the higher the proportion of the population that owns real estate assets. Secondly, the frequent use of real estate assets as collateral in credit transactions establishes a further link between real estate wealth and household spending. In this connection, the characteristics of the debt associated with real estate wealth also exert their own influence, since the higher the percentage of mortgage loans granted with variable interest rates (more than 90% in Spain's case), the greater the effect on households' gross disposable income of the changes in interest rates that may arise.<sup>12</sup> Finally, since housing is a complementary good to other durable goods (furniture, household electrical appliances, etc.), a decline in the number of real estate transactions, irrespective of how prices behave, feeds through to the consumption of these goods.

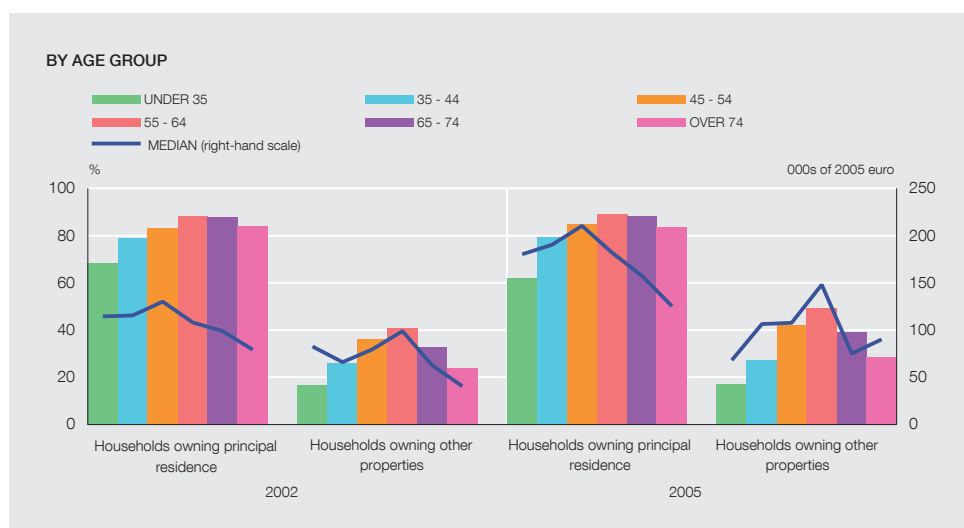
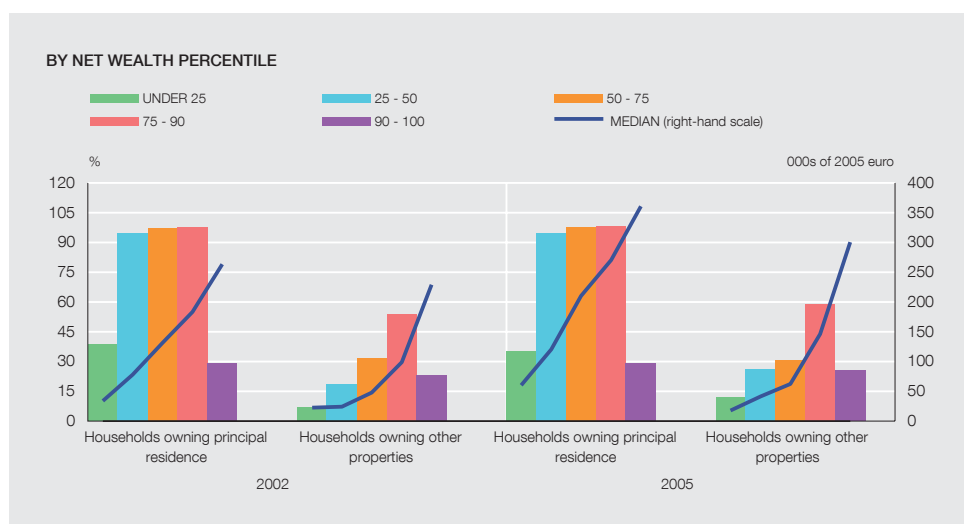
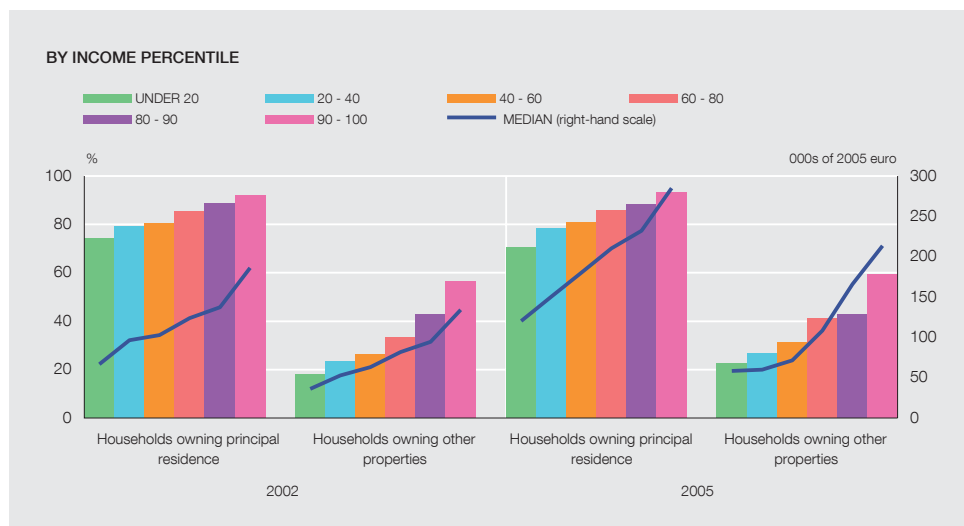
...the importance of which depends on the distribution of wealth

The net effect on consumption of all these channels of transmission for changes in house prices is difficult to estimate, especially when the degree of uncertainty and credit standards are in flux. In Spain's case, and on the latest EFF findings, the households with most real estate wealth are those whose head is between 45 and 64 years of age and who is, therefore, in the "saving" stage of his/her life cycle. And, although the value of real estate wealth grows commensurately with total levels of wealth and income as is to be expected, the population with lower income levels (and, therefore, with a greater marginal propensity to consume) also has real estate assets for a high-value (see Chart 2.4). Accordingly, the conditions are, at least potentially, in place so that a change in real estate wealth may impact consumption to some degree.

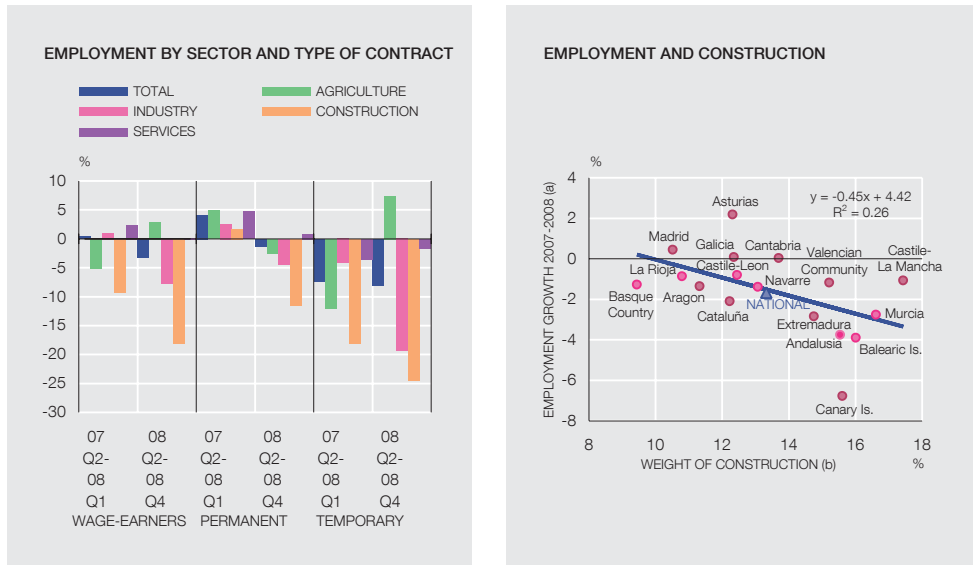
According to estimates drawing on microeconomic data, the change in Spanish household consumption induced by a change in real estate wealth (the marginal propensity to consume based on wealth) is approximately 3%, while changes in financial wealth do not cause significant changes in consumption, given the scant weight of financial wealth in Spanish households' asset portfolio.<sup>13</sup> Nonetheless, these effects vary considerably depending on the type of household. For instance, for those in which the household head is younger than 35 or older

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<sup>12</sup>. See M. Rubio (2009), *Fixed and Variable-Rate Mortgages, Business Cycles and Monetary Policy*, Working Paper no. 0903, Banco de España. <sup>13</sup>. See O. Bover (2005), *Wealth effects on consumption: microeconomic estimates from the Spanish Survey of Household Finances*, Working Paper no. 0522, Banco de España. The figure corresponds to a long time horizon, of sufficient length so that spending decisions have adjusted in full to the new conditions.



SOURCE: Spanish Survey of Household Finances.



SOURCE: INE.

- a. Employment growth refers to the annual average rate for the period 2007 Q2-2008 Q4.
- b. The weight of the construction sector is defined as the number of jobs in that sector relative to total employment.

than 74, changes in real estate wealth do not bring about appreciable changes in consumption. Yet for households whose head is aged between 35 and 44, the estimates available indicate that the wealth effect is double that estimated for the population as a whole. Further, estimates based on macroeconomic models – e.g. the Banco de España Quarterly Model (MTBDE) – tend to reduce the marginal propensity to consume based on real estate wealth to around 1.5%, and to raise slightly that relating to financial wealth to 1%.

The wealth effect might have contributed to the slowdown in consumption during the year

In nominal terms, consumption grew by 7.2% in 2007 and by only 3.5% in 2008 (3.7 pp down). Taking the aforementioned estimates of the reduction in wealth recorded during the year (8.7% for real estate wealth and 12.1% for financial wealth) and an intermediate value between the microeconomic and macroeconomic estimates available for the marginal propensities to consume (2.25% for real estate wealth and 0.5% for financial wealth), the resulting decline in consumption stemming from the loss of wealth would be around 1.8 pp (1.7 pp for real estate wealth and 0.1 pp for financial wealth), which might account for around 50% of the decline in the growth rate of consumption observed in 2008.

Employment also fell, and not only in the construction sector...

On EPA (Spanish Labour Force Survey) figures, numbers employed have fallen since 2007 Q2 at an annual average rate of 1.7%. Job destruction has been uneven across the economic sectors. Initially, it originated in the construction sector, where employment declined by 8% between 2007 Q2 and 2008 Q2, and by 14.5% in the second half of 2008, while in industry and employment it held more or less stable in the first half of the year and decreased by 6.5% in the final six months. Conversely, the services sector showed an increase in employment of 2.1% from mid-2007 to mid-2008, and of 0.2% thereafter.

The excessive concentration of resources in the construction sector helps explain the acute job destruction in the Spanish economy in the past year. As Chart 2.5 shows, the decline in employment has been greater in those regions in which the weight of the construction sector in employment was greater, meaning that this factor alone explains 25% of the regional variability in this variable.



SOURCE: ECB.

- a. Year-on-year growth of quarterly GDP and employment series.  
 b. Data not seasonally or calendar effect-adjusted.

... confirming, once again, its high cyclical variability in Spain...

The strong job destruction under way highlights once again one of the particular characteristics of the cyclical behaviour of the Spanish economy, namely the high variability of employment. The scale of net job destruction in Spain during 2008 is partly due to the size of the decline in output over the same period. However, in other euro area countries in which the fall in GDP has been comparable, such a sharp contraction in employment has not been seen (Chart 2.6). Whereas in Spain, in the period from 2006 Q1 to 2008 Q4, the 4.4 pp reduction in the rate of change of GDP (from 3.5% to -0.8%) was accompanied by a 5.2 pp decline in employment growth, a very similar economic growth performance (-3.5 pp) in Italy and France entailed a slowdown in employment of only 1.7 pp. In Germany, economic activity varied less (-3.1 pp), but the fall in employment growth (0.6 pp) was proportionately much smaller: the ratios of the decline in employment growth to that in GDP were 0.2, 0.5 and 1.2, respectively, in Germany, France and Spain.

This greater relative amplitude of the employment response in Spain is not a particular phenomenon of this episode of crisis; rather, it reflects a historical pattern. Table 2.1 offers some cyclical indicators of GDP and of employment in the four major euro area countries, for the period 1992 Q1-2008 Q3. As can be seen, the volatility of employment relative to that of GDP (measured by the ratio of standard deviations) is much greater in Spain than in the other large euro area countries. Indeed, Spain is the only one of the four countries where employment fluctuates more than GDP, while in Germany and France the opposite is the case and in Italy both variables display approximately the same volatility. Likewise, the correlation between employment and GDP is also stronger in Spain than in the other countries. In sum, over the past two decades the same fluctuations in GDP increases have prompted employment growth responses in Spain that are proportionately greater than in the other large euro area countries.

... which is due to certain institutional characteristics of the labour market

Behind this high response of employment to cyclical conditions are certain institutional characteristics of the Spanish labour market. Indeed, faced with a contraction in demand, which may lead companies in many cases to downsize their workforce, the actual adjustment of manpower will depend on several factors, such as the perceived duration

	Germany	France	Italy	Spain
VOLATILITY (%)				
Employment (1)	1.0	1.0	1.4	2.3
GDP (2)	1.4	1.2	1.4	1.8
Ratio (1) / (2)	0.8	0.8	1.0	1.3
CORRELATION				
GDP-Employment	0.5	0.7	0.3	0.8

SOURCE: ECB.

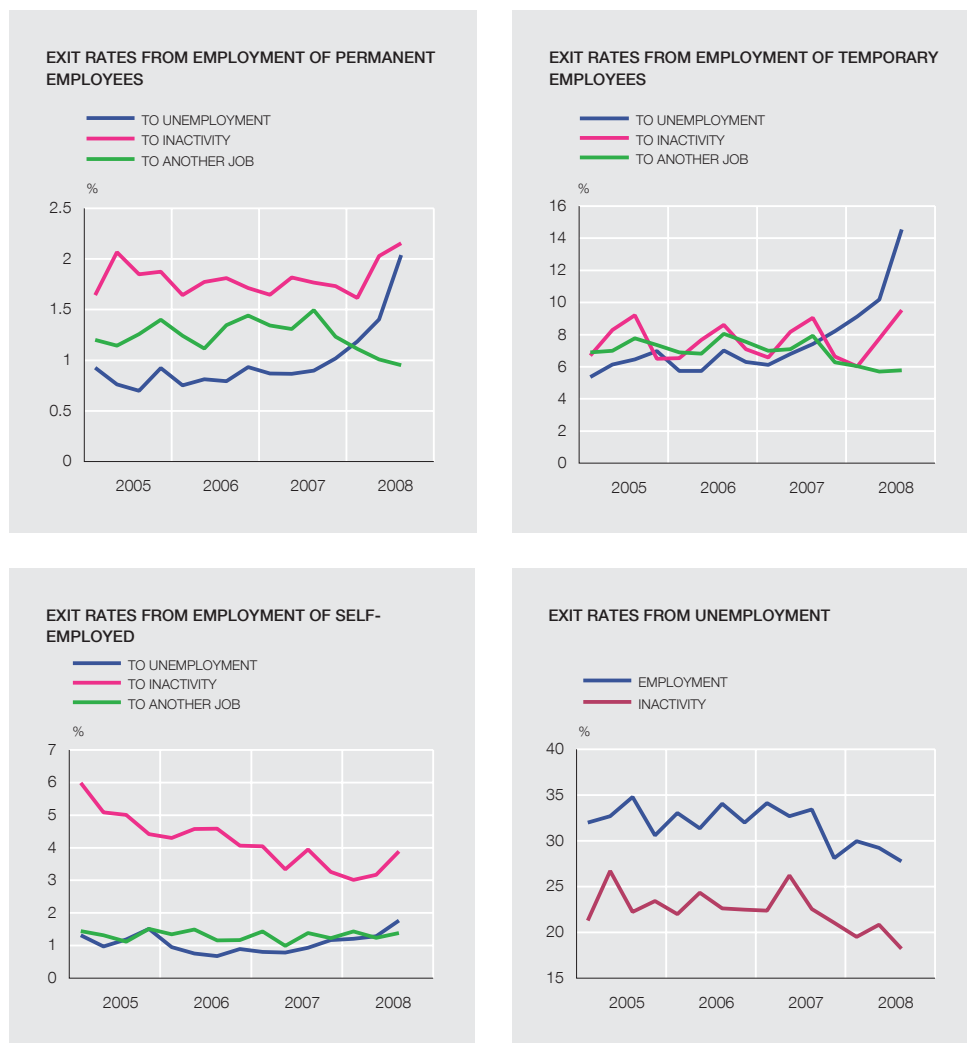
a. Quarterly GDP and employment series; year-on-year growth rates.

of the shock, employment adjustment costs, the possibility of organising production differently and production costs (inter alia, labour costs). In Spain, the structure and content of collective bargaining agreements mean that it is difficult for firms to adjust labour costs when demand falls. The differentiation in adjustment costs brought about by the existence of two types of employment contract (permanent and temporary) leads to the contraction in employment falling in the main on temporary workers. As can be seen in Chart 2.7, which shows labour flow figures from employment (by type of contract) and from unemployment, in the current recession there has been a significant increase in the exit rate from employment to unemployment in the case of temporary workers (from 6% to 14% of employees with this type of contract), which differs greatly from that observed in the case of employees with a permanent contract (whose exit rate edged up from 1% to 2%). As usually also occurs in downturns, exit rates from employment to inactivity have increased, and exit rates from unemployment to employment and inactivity have declined.

To assess the extent to which these institutional characteristics of the Spanish labour market contribute to exacerbating employment volatility, Box 2.2 performs some simulations with a general macroeconomic model with a labour market subject to several types of frictions and calibrated to reproduce the characteristics of the Spanish economy. The results show that the response of employment in the short and medium run to fluctuations in demand is greater in a labour market with two types of contract (temporary and permanent) than in a market with a single type of contract and similar adjustment costs.

Turning to the cyclical behaviour of wages, attention has often focused on the high inertia arising from the wage bargaining model and, in particular, from the presence of indexation clauses, which bring positive but not negative deviations in inflation to bear on the wage increases agreed under collective bargaining.<sup>14</sup> Given the speed and intensity with which the current recession has come about and the sharp decline in inflation, this wage inertia is having particularly adverse effects. During the second half of 2007 and the first six months of 2008, wages continued to grow, driven by optimistic expectations about economic activity and by the indexation of wages applying the inflation deviations of the previous year, prompting a wage rise concurrently with the decline in demand (see Box 2.3).

14. See *Annual Report, 2007*, Box 2.2.



SOURCES: INE and Banco de España.

Exiting the crisis will require labour regulations more favourable to new hires and to the recovery of productivity in the medium and long run...

In short, the employment and wage-determining mechanisms derived from the institutional configuration of the Spanish labour market are tending to amplify the impact of the adverse demand shock associated with the crisis. In these circumstances, measures aimed at checking job destruction and encouraging job creation are needed. To date, however, these measures have focused on increasing hiring subsidies and on extending unemployment protection, without amending the institutional mechanisms that are distorting the incentives to hire and eroding job stability.

Indeed, exiting the crisis will require restoring the confidence of households about their future work income, and that of companies about the profitability of their new investment projects. In both cases, two factors will prove pivotal: first, the conditions under which new labour hires may be made; and second, productivity, which, in the medium and long term, will be what allows higher growth in real wages and in business profits. To achieve a more favourable scenario for new hires and productivity growth, changes in labour legislation are needed that will allow job stability to be squared with companies' capacity to organise their labour resources efficiently.

... in particular, legislation on employment contracts...

In Spain there is a wide range of employment contracts. Alongside permanent contracts, where firing costs are based on the causes behind contract termination and on the result of

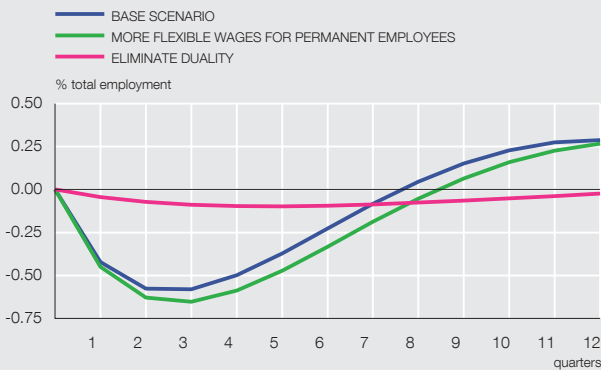
The recent economic literature has highlighted wage rigidity and employment adjustment costs as the main determinants of the response of labour market flows – and, therefore, of fluctuations in employment – to economic shocks.<sup>1</sup> If wages responded flexibly to changes in productivity, then economic fluctuations would cause high wage volatility, but would leave the level of employment relatively unaffected. Conversely, if wages do not adjust readily to changes in productivity,

then there will be notable changes in hiring and firing and, therefore, employment will fluctuate more over the cycle. Evidently, employment adjustment costs reduce employment volatility; higher adjustment costs reduce both new hires and dismissals, with an ambiguous impact, in principle, on the mean level of employment.<sup>2</sup> However, when employment adjustment costs differ for different population groups,

1. See R. Shimer (2005), “The cyclical behavior of equilibrium unemployment and vacancies”, *American Economic Review*, 95 (1), pp. 25-49, and R. Hall (2005), *Employment fluctuations with equilibrium wage stickiness*, *American Economic Review*, 95 (1), pp. 50-65.

2. See S. Bentolila and G. Bertola (1990), “Firing costs and labour demand: How bad is Eurosclerosis?”, *Review of Economic Studies*, 57 (3), pp 381-402, and A. Cabrales and H. A. Hoppenhayn (1997), *Labour market flexibility and aggregate employment volatility*, *Carnegie-Rochester Series on Public Policy*, 46, pp. 189-228.

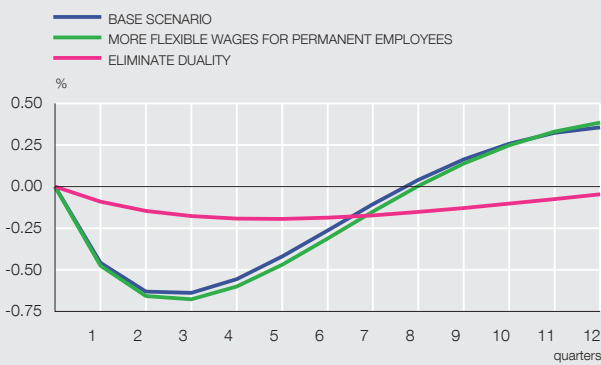
1 TEMPORARY EMPLOYMENT



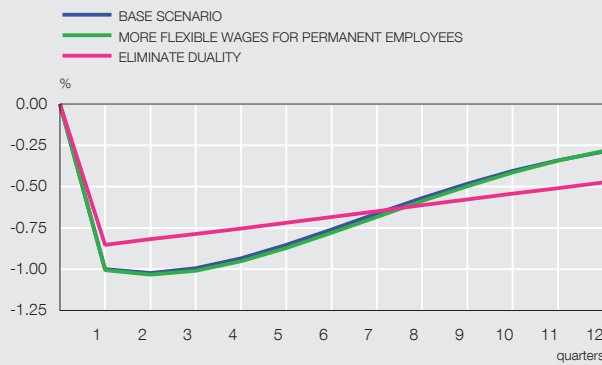
2 PERMANENT EMPLOYMENT



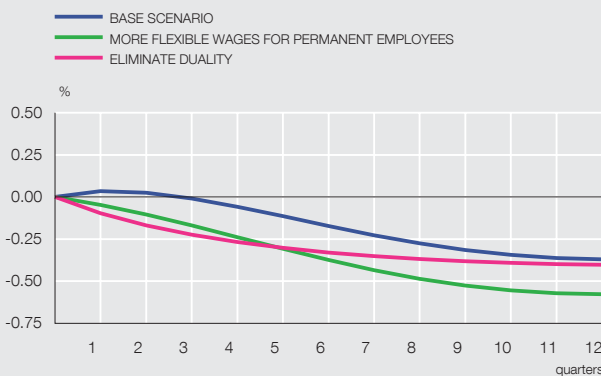
3 TOTAL EMPLOYMENT



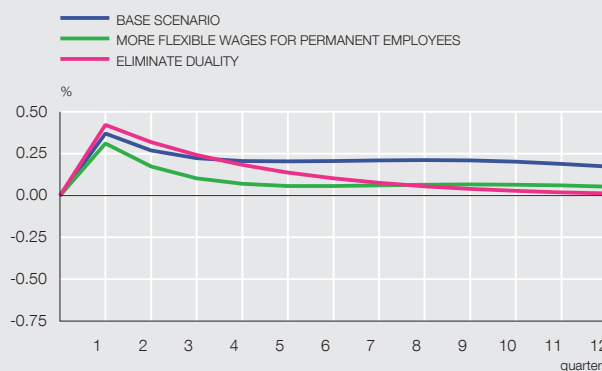
4 OUTPUT



5 AVERAGE WAGES



6 UNIT LABOUR COSTS



SOURCE: Banco de España.

as is the case in Spain, the attendant fluctuations may be greater than in a homogeneous market with equivalent adjustment costs.<sup>3</sup>

To quantify the impact that wage rigidity and adjustment costs have on employment volatility, several simulation exercises have been performed in a macroeconomic model calibrated to reflect the behaviour of the Spanish labour market. The main ingredients of this model are as follows: i) there are two types of employment contract, permanent and temporary, which give rise to two different dismissal rates; ii) newly hired employees join the firm with no specific experience in their job; iii) in each quarter, an inexperienced employee has a certain probability of gaining experience, thereby increasing his/her productivity in the firm; iv) the cost of hiring depends negatively on the unemployment rate and positively on the number of hires; v) the marginal cost of dismissals is increasing, and is much greater for permanent than for temporary contracts, and vi) wages are determined by bargaining, with greater rigidity and bargaining power in the case of permanent workers.

Under these assumptions, a firm whose employees mostly have permanent contracts will save on hiring costs, and will have a workforce with a greater average productivity. Alternatively, a firm might consider it more advisable to avoid a high proportion of permanent employees in its workforce, either to reduce wage costs, given the relatively high wages of permanent employees, or in anticipation of possible future reductions in demand that would lead it to shed employment and, therefore, to incur high adjustment costs.

Panel 1 shows the response of employment, depicted in its aggregate, temporary and permanent components, to a persistent reduction in productivity, under different scenarios: i) a dual labour market

calibrated to the behaviour of the Spanish labour market (base scenario); ii) a market equivalent to the previous one, except that the wage rigidity of permanent contracts is lower, equalling to that of temporary employees in the base scenario (flexible scenario), and iii) a labour market in which all duality has been stripped out, replacing the two types of contract with a single contract that implies aggregate adjustment costs similar to those of the dual labour market of the base scenario and in which wage rigidity equals the average of that of temporary and permanent employment in the base scenario (elimination of duality scenario). The productivity shock, whose scale is such that it causes a 1% decline in output in the first quarter of the base scenario, causes a fall in total employment of around 0.55% over the course of the first year, broken down into a 0.49 pp decline in temporary employment and a 0.06 pp decline in permanent employment, whereas if the wages of temporary and permanent employees were equally flexible, employment among the latter would fall less (by 0.01% of total employment) and that among the former by slightly more (by 0.58% of total employment). However, in the labour market with a single contract, the reduction in total employment is 0.19%, approximately one-third of the fall in the base scenario, which is essentially due to the fact that higher dismissal costs for permanent employees in the base scenario prompt a very high turnover of temporary employees which tends to exacerbate flows into and out of unemployment, shortening employment spells and thereby inhibiting growth in workers' productivity. With regard to wages, the decline in productivity brings about a reduction of 0.06% and 0.24% in the base and flexible scenarios, respectively, and of 0.27% in the case of a market with a single contract. Given that real wages have a certain degree of rigidity in all three scenarios, the decline does not prevent unit labour costs (the ratio of wages to labour productivity) from undergirding increases of 0.21%, 0.07% and 0.18%, respectively.

In sum, according to these simulations, reducing heterogeneity of adjustment costs would significantly reduce the volatility of employment and of output, without much increase in that of wages. Accordingly, the volatility of disposable income would be lower (approximately by half), and so too, possibly, would that of consumption.

3. See J.J. Dolado, M. Jansen and J.F. Jimeno (2007), *A positive analysis of targeted employment protection legislation*, *B.E. Journal of Macroeconomics (Topics)*, vol. 7, no. 1, art. 14, and C. Alonso-Borrego, J. Fernández-Villaverde and J.E. Galdón-Sánchez (2004), *Evaluating labour market reforms: a general equilibrium approach*, IZA Discussion Paper, no. 1129.

legal or administrative control (in the case of collective dismissals), there are a welter of temporary contracts, which have lower firing costs and, by their very nature, may be terminated without legal and/or administrative sanctioning. Temporary contracts can be entered into under specific circumstances, provided the duration of the job is of a fixed term (causality principle). The excessive incidence of temporary hiring (duality), the scant conversion of temporary into permanent contracts (employment segmentation) and intense job turnover involving one sub-group of workers (the concentration of the employment adjustment in temporary workers) are the consequences of this excessively complex hiring model. In practice, this model means that companies use employment as the main source of adjustment in the face of economic fluctuations. There is also empirical evidence upholding the fact that the unfavourable trend of productivity over the past decade is due in no mean part to the scant incentives temporary workers and their employers have to invest in training and, in the case of the latter, to innovate

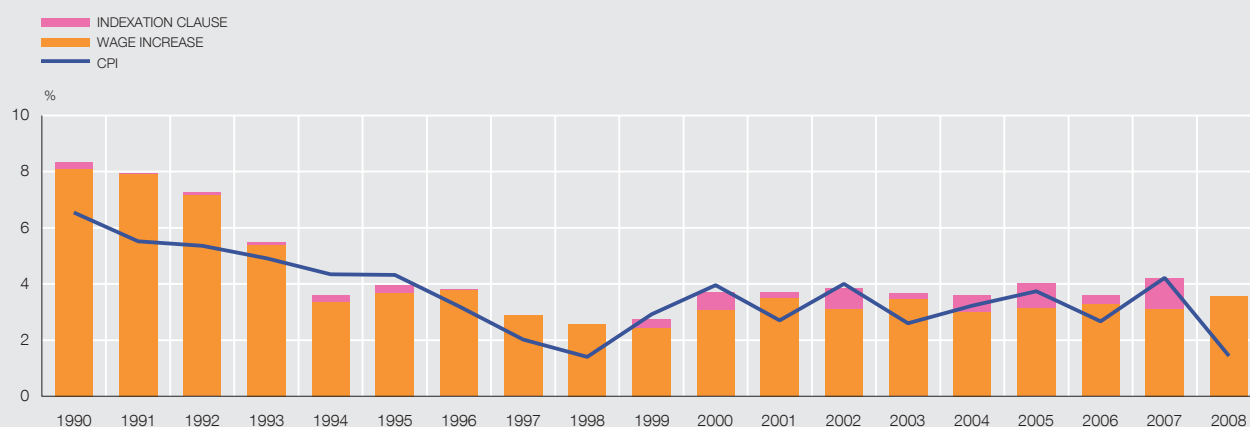


Despite the marked deterioration in the labour market during the year, wage developments in 2008 entailed a rise in labour costs, in both nominal and real terms, which largely came about due to the extensive indexation present in the collective bargaining mechanism. The automatic adjustment of wages to the inflation outturn at the end of 2007 by means of the activation of the indexation clauses gave rise to an increase in wage rates in the first half of the year. In the closing months of the year, when the deterioration of the labour market was already most acute and inflation had begun to fall, the sensitivity of collectively bargained wages to cyclical conditions in the labour market was limited. Thus, whereas for the year as a whole the revisions of pluriannual agreements signed in previous years included a 3.5% wage increase, newly signed agreements showed an even higher rise (of 3.8%) in those recorded to December, with a very slight moderation in the final stretch of the year, registering an increase of 3.5% in the final quarter. The figures available for 2009 show this behaviour has continued, since agreements registered to February (mostly revisions of pluriannual agreements entered into in previous years) incorporate wage growth of 2.7%, which is a marked rise in real terms in light of recent inflation developments.

This wage behaviour does not differ greatly from that observed in the Spanish economy in previous periods. Firstly, the degree of nominal indexation present in collective bargaining is very high and wage increases are predominantly determined, with some lag, by the course of inflation. Panel 1 shows agreed wage increases and inflation in December each year from 1990 to 2008. There is a very close relationship between wage increases and past inflation, which is reinforced by the impact of the indexation clauses, present in most agreements, which automatically pass through any increase in inflation to wages. Significantly, however, the relationship to inflation is not symmetrical in view of the characteristics of the indexation clauses. And, indeed, as Panel 1 shows, periods in which a decline in inflation is seen, such as 1998 or, more recently, 2001, 2003 and 2006, are usually accompanied by increases in wages in real terms, as occurred in 2008.<sup>1</sup>

1. Overall, from 1980 to 2008, the correlation between the change in inflation and the increase in real wages is -0.6.

### 1 NEGOTIATED WAGE INCREASES AND INFLATION



### 1 IMPACT OF INFLATION AND CYCLICAL CONDITIONS ON NEGOTIATED WAGE INCREASES (a)

Dependent variable:

Negotiated wage increase

Explanatory variables

	Revised agreements		Newly signed agreements	
	Coefficient	t-statistic	Coefficient	t-statistic
Positive deviation by inflation at t-1	0.92	108.6	1.13	148.8
Negative deviation by inflation at t-1	-0.21	-3.3	-0.34	-4.5
Change in unemployment rate at t-1	0.02	2.5	-0.24	-34.7
Constant	2.66	30.8	2.45	-27.1
Observations	39,537		52,610	
Adjusted determination coefficient	0.3		0.3	

SOURCE: Database of collective agreements recorded between 1990 and 2008, Ministerio de Trabajo e Inmigración.

a. The regressions include dummy variables of the sector of activity (NACE-93 two-digit level), bargaining level and presence of indexation clause.

As regards the impact of the cyclical position of the labour market on collectively bargained wage increases, the accompanying table shows the results of several regressions in which the agreed wage increases in each of the collective bargaining agreements signed since 1990 is related to inflation and the change in the unemployment rate at the regional level, controlling for other characteristics of the agreement, such as type (newly signed, revisions of pluriannual agreements entered into previously), bargaining scope (firm-level or wider) and the sector of activity of the firms affected by the agreement. In each year, only around one-third of the agreements with economic effects were negotiated the same year, given that most agreements are pluriannual<sup>2</sup>, for which less contemporaneous sensitivity to cyclical factors is to be expected.

In relation to inflation, the estimates shown in the accompanying table reflect the impact of expected inflation on wage increases with the constant term of the regression, and they attempt to capture the potential asymmetrical relationship of wage increases to this variable, allowing the coefficient to vary depending on whether inflation ended the previous year above or below 2%. The results clearly show marked asymmetry in the wage determination mechanism, since positive deviations by inflation pass through with a coefficient close to

unity to wage increases, whereas, given the asymmetry caused by the indexation clauses, this pass-through does not take place when inflation falls below the 2% benchmark.<sup>3</sup>

Turning to the impact of the unemployment rate, the accompanying table shows that only in newly signed agreements is some sensitivity to the labour market situation detected. In particular, in these agreements a 1 pp increase in the unemployment rate would reduce the agreed wage increases in newly signed agreements by around 0.2 pp. Conversely, no negative relationship between the unemployment rate and wages in revised agreements is observed.

Overall, therefore, the characteristics of the collective bargaining system shape a labour market in which wage increases are strongly determined by inflation, although the existence of downside asymmetries in wages limits the pass-through of reductions in inflation. As to wage sensitivity to labour market conditions, a reduced response is detected which, moreover, entails a lagged adjustment of wages and only in newly signed agreements in the year, which account for around one-third of total agreements with economic effects in each year.

2. Average duration has been progressively increasing from somewhat over two years in the early 90s to somewhat over three years since 2004.

3. In fact, the negative coefficient means that inflation deviations below 2% give rise to wage increases.

... and also collective bargaining...

by adopting new forms of organising work.<sup>15</sup> To promote job stability and to help companies better organise their workforces, it is vital in the current circumstances to introduce and encourage forms of permanent hiring that can be used broadly and whose termination does not entail such high redundancy payments as those associated with the permanent contracts currently in force.

The means by which the determination of wages and employment conditions is responding to the crisis also highlights the dysfunctions generated by the collective bargaining model. The wage settlement arrangements on which this model is based, as laid down in the agreements entered into by employers' associations and the main trade unions from 2001 [wage growth resulting from adding to the ECB inflation target ceiling (2%) a percentage point attributed generally and uniformly to productivity gains, along with indexation clauses that add wage increments if inflation exceeds this ceiling], have led to great inertia in the growth of labour costs. The upshot of this behaviour has seen high wage increases coinciding in time with a strong reduction in activity and employment, which is indicative of the economy's difficulties in restoring competitiveness and the depreciation of the real exchange rate needed to redress the external imbalance without incurring sharp increases in unemployment. As regards other employment conditions, while companies with their own collective bargaining agreements are able to face the crisis by resorting to combinations of wage adjustments and other measures

15. See J. J. Dolado and R. Stucchi (2008), *Do temporary contracts affect TFP? Evidence from the Spanish manufacturing firms*, CEPR Discussion Paper no. 7055, and IZA Discussion Paper no. 3832.

aimed at maintaining employment, those that are subject to industry-wide, regional or nationwide agreements are much more constrained here.

Looking ahead, there are other reasons to conclude that wage-setting arrangements in recent years have not been the best framework for promoting the adjustments needed in circumstances such as the present. On one hand, the necessary depreciation of the real exchange rate requires the Spanish economy to achieve a GDP deflator growth rate that is lower than that of its trading partners for some period of time. Moreover, the necessary sectoral reallocation of employment will call for relative wage adjustments. Given the low inflation rates being posted, in Spain and internationally, both adjustments are particularly constrained by the high downward nominal rigidity of wages imposed by the centralised and little-coordinated collective bargaining system that currently prevails.

... with temporary measures needed, while this reform proceeds, to reduce job destruction

The design of a far-reaching labour reform, which substantially redresses problems relating to employment contracts and collective bargaining and which is liable to enjoy broad-based social consensus, may need some time before coming to fruition and procedures that cannot be activated immediately. However, job destruction is proving most intense and, if this dynamic is not halted, the surge in the unemployment rate might have lasting effects on the Spanish economy's capacity to generate new employment opportunities. To avert such effects, it might be desirable while specific reforms are being designed and implemented and until some consensus is reached on them to resort to temporary measures, such as the introduction of new hiring arrangements and the prevalence of company-level agreements over industry-wide, regional or nationwide agreements. This type of measure would be immediately effective and would increase the beneficial effects of others introduced in recent months, such as hiring incentives, government support to sustaining employment and extended protection for the unemployed.

### 3 THE EXTERNAL ENVIRONMENT OF THE EURO AREA

### 1 The world economy in 2008

#### 1.1 INTRODUCTION

A global financial crisis broke in 2008 and the world economy entered a recession whose scope, duration and consequences are difficult to predict

After progressive deterioration, the financial system teetered on the brink of collapse in September, prompting a contraction in activity worldwide

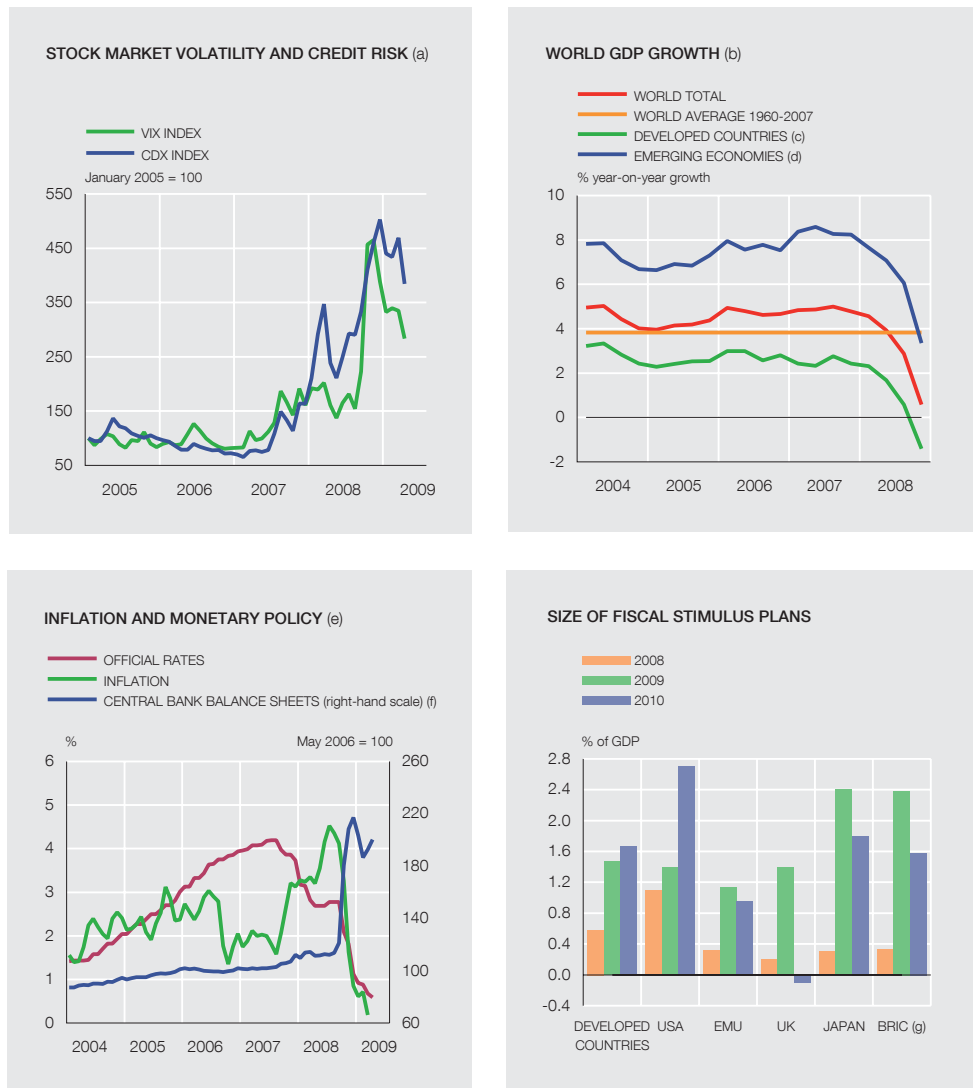
The economic authorities' response was emphatic, generalised and, to a certain extent, coordinated,...

The world economy is undergoing its most difficult period in recent decades. 2008 was marked by the gestation and subsequent eruption of a financial crisis, a corollary of the turbulence first seen in the summer of 2007. The crisis acquired global proportions, undermining agents' confidence and resulting in a worldwide economic downturn. The data available for the first half of 2009 signal an unfavourable outlook for the year, despite the intense economic policy response. The depth and scope of the crisis have brought about major changes, not only in how economies work but also in economic priorities and in the framework in which the authorities may act, raising uncertainties about how agents may respond and the effectiveness of economic policy. In short, the economic and financial situation has deteriorated significantly, with serious consequences that will make it difficult to return to a period of high sustained growth like that which was so abruptly interrupted in 2007. And not only because the present crisis has very probably lowered economic growth potential worldwide for a considerable time, but also because the bases for this renewed growth will necessarily be different from those that supported the last growth phase, which ultimately proved unsustainable.

The extent of the financial difficulties facing the developed economies acted as a growing restraint on real and financial activity in 2008, eventually spreading to the emerging economies. In this respect the year divides into two distinct parts, separated by the financial stress witnessed in September (see Chart 3.1). Until then, the financial turmoil first seen in the summer of 2007 when the subprime crisis broke had gradually eroded (with varying degrees of intensity) the solvency of a growing number of financial institutions, fomenting a process of generalised deleveraging, making it impossible for some markets to function and gradually reducing the international financial system's intermediation capacity. As from September, these developments evolved into a global financial crisis, marked by extreme market instability, the fall of systemic financial institutions, a credit market freeze and the collapse of agents' confidence, significantly heightening the interplay between the difficulties facing the financial sector and the real economy. Economic activity, whose slowdown had intensified and spread geographically up to the summer, contracted sharply on a global scale in 2008 Q4. The developed economies fell deeper into a recession that in many cases had already begun, as the signs of financial weakness multiplied, while the emerging economies, far from remaining immune to the adjustment process, were hit by the combined impact of a halt in external demand and in capital inflows towards these economies.

Nevertheless, the global economy still managed to grow by 3.2% in 2008, a relatively high figure, albeit considerably lower than the average of 4.9% of the previous four years (see Table 3.1). But average growth in 2008 masks the significant decline in the year-on-year rate (from 4.8% at end-2007 to 0.2% in 2008 Q4) and the low growth in the developed economies in the year overall (0.9%, in comparison with 2.7% in 2007). The emerging economies posted economic growth of 6.1% for the year, in comparison with 8.3% for 2007. The inflationary tensions that had peaked mid-year (when inflation in the industrialised economies reached 4.5%, the highest figure recorded since July 1991) disappeared in Q4, as economic activity collapsed and commodities prices, which had started to decline in the summer, rapidly corrected.

As from September 2008, this combination of circumstances prompted an emphatic, generalised and, to a certain extent, coordinated response by economic authorities worldwide, but most especially in the developed economies. As the lower half of Chart 3.1 shows, the economic response covered all fronts: monetary policy (in many cases including the adop-



SOURCES: Datastream, IMF and Banco de España.

- a. VIX Index (stock market volatility of the S&P 500) and CDX Index (5-year US investment grade credit default swap index).
- b. Compiled by the Banco de España, based on data from 57 countries representing 90% of world GDP. The aggregates have been calculated using the weight of the countries in the world economy in the previous year, in purchasing power parity (PPP), based on IMF data.
- c. Western Europe, United States, Canada, Japan, Australia, New Zealand, Israel, Slovakia and Slovenia.
- d. Latin America, emerging Asia, central and eastern Europe (except for Slovakia and Slovenia) and South Africa.
- e. United States, euro area, Japan and United Kingdom aggregates.
- f. Total assets as a percentage of GDP. Up to May 2006 the figures are for the United States, the euro area and Japan only.
- g. Aggregate of Brazil, Russia, India and China.

	2004	2005	2006	2007	2008
UNITED STATES					
GDP	3.6	2.9	2.8	2.0	1.1
CPI (a)	2.7	3.4	3.2	2.9	3.8
Current account balance (% of GDP)	-5.3	-5.9	-6.0	-5.3	-4.7
General government balance (% of GDP)	-4.4	-3.3	-2.2	-2.9	-6.1
JAPAN					
GDP	2.7	1.9	2.0	2.4	-0.6
CPI (a)	0.0	-0.3	0.3	0.0	1.4
Current account balance (% of GDP)	3.7	3.6	3.9	4.8	3.2
General government balance (% of GDP)	-6.2	-5.0	-4.0	-2.5	-5.6
UNITED KINGDOM					
GDP	2.8	2.1	2.8	3.0	0.7
CPI (a)	1.3	2.0	2.3	2.3	3.6
Current account balance (% of GDP)	-2.1	-2.6	-3.4	-2.9	-1.7
General government balance (% of GDP)	-3.3	-3.3	-2.6	-2.6	-5.4
CHINA					
GDP	10.1	10.4	11.6	13.0	9.0
CPI (a)	3.9	1.8	1.5	4.8	5.9
Current account balance (% of GDP)	3.6	7.2	9.5	11.0	9.8
General government balance (% of GDP)	-1.3	-1.2	-1.0	0.6	-0.4
LATIN AMERICA (b) (c)					
GDP	6.3	4.7	5.6	5.7	4.2
CPI (a)	6.3	6.4	5.2	5.4	7.9
Current account balance (% of GDP)	1.6	1.9	2.0	0.8	-0.3
General government balance (% of GDP)	-0.8	-0.6	-0.6	-0.1	-0.3
NEW EU MEMBER STATES NOT IN EURO AREA (b) (d)					
GDP	5.9	4.8	6.6	5.9	4.1
CPI (a)	5.3	3.7	3.3	4.4	6.5
Current account balance (% of GDP)	-6.1	-4.5	-6.6	-8.2	-7.9
General government balance (% of GDP)	-3.8	-3.5	-3.4	-1.9	-3.3
PRO MEMORIA: GDP GROWTH					
World	4.9	4.5	5.1	5.2	3.2
Euro area	2.2	1.7	2.9	2.7	0.9

SOURCES: Banco de España, IMF and national statistics.

a. Year-on-year percentage change in average CPI index.

b. The aggregate for the different areas has been calculated using the weight of the countries making up such areas in the world economy the previous year, in PPP, based on IMF data.

c. Argentina, Brazil, Chile, Mexico, Colombia, Venezuela and Peru.

d. Latvia, Lithuania, Estonia, Czech Republic, Hungary, Poland, Bulgaria and Romania.

... but it failed to lift the uncertainty overshadowing the global economy

tion of unconventional measures), financial sector support policies and fiscal policies. The steps taken were designed to uphold liquidity and keep credit flowing, to strengthen financial institutions' solvency and to sustain activity, aiming to restore agents' confidence and break the increasingly powerful negative spiral between economic and financial deterioration.

The scale of the response, which has involved committing a very substantial volume of public funds, halted the collapse that threatened some of the world's key financial systems. However, the global outlook remains highly uncertain, in light of the persistent financial fragility (especially due to the lack of sufficient progress in financial system restructuring) and extreme economic weakness, all of which means that it may be some time before confidence returns and the outlook stabilises.

## 1.2 THE FINANCIAL MARKETS: FROM TURMOIL TO CRISIS

The financial turmoil first seen in 2007 intensified throughout 2008, posing a serious threat to global financial stability

Far from abating, the financial turmoil first seen in 2007 gained in strength in 2008, setting the scene for what would become a global financial crisis. One of the underlying elements of this crisis, in addition to ample global liquidity and highly accommodating financial conditions, was the complex web of risk transfer from credit originators to investors worldwide, via complex financial products which, in turn, helped increase leveraging opportunities even further. The serious implications that these risk transfer mechanisms held for financial stability were revealed when the subprime mortgage crisis broke in the United States. Many mortgage credit risks – which had supposedly been passed on – returned to the banks' balance sheets via the liquidity commitments assumed when the loans were refinanced. Throughout 2008, as the losses associated with these complex products emerged and mistrust between banks grew in light of the lack of transparency and the lack of data on exposure to these products, risks were reappraised and stress in the money and credit markets heightened. All this gradually undermined credit institutions' solvency, and tensions spread to a growing number of financial agents and market segments. In September, the situation evolved into a global financial crisis whose depth and duration remain far from certain.

Up to mid-September, high financial volatility and the deteriorating economic outlook compounded the pressure on financial institutions...

Up to mid-September, against a backdrop of high market volatility, the deteriorating financial climate gradually eroded agents' confidence and effective credit conditions for firms and households in the main developed economies tightened, meaning that the financial difficulties began to pass through to the real economy. This progressive deterioration of the economic outlook was accompanied by further house price declines in the United States, which heightened the underlying mortgage securitisation problems, prolonging the uncertainty over the value of troubled assets in individuals' and financial institutions' investment portfolios and fuelling distrust between institutions. The growing losses recorded by financial institutions deriving from their more traditional portfolio assets and from some assets with a high credit rating which, in origin, appeared to represent no risk, added to these difficulties. All these factors blocked market recovery, and a growing number of firms went into liquidation or faced State intervention.

... and some systemic institutions experienced severe difficulties,...

This phase was thus marked by the problems seen at a number of systemic institutions, such as the investment bank Bear Stearns, which was acquired by JP Morgan in mid-March, and the government-sponsored enterprises Freddie Mac and Fannie Mae. More generally, the high losses emerging at various financial institutions in the United States and Europe, and the credit rating downgrades seen at the main monoline bond insurers in June, contributed to a further deterioration of the financial situation. In particular, these credit rating downgrades triggered uncertainty about possible valuation problems relating to the insured instruments and gave rise to large-scale sales of a wide range of assets.

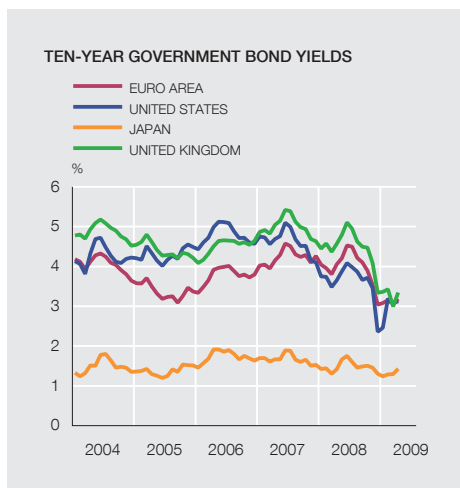
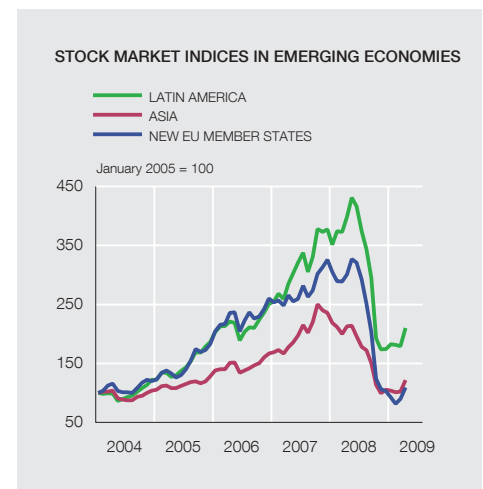
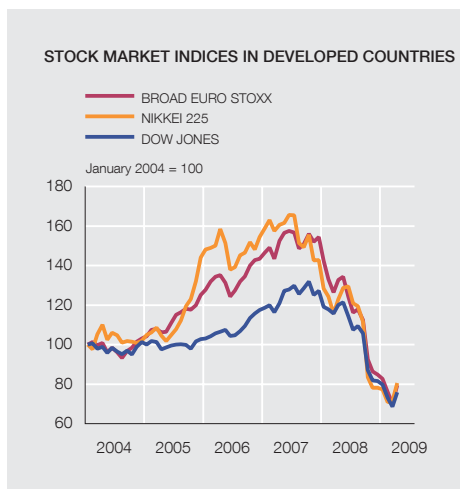
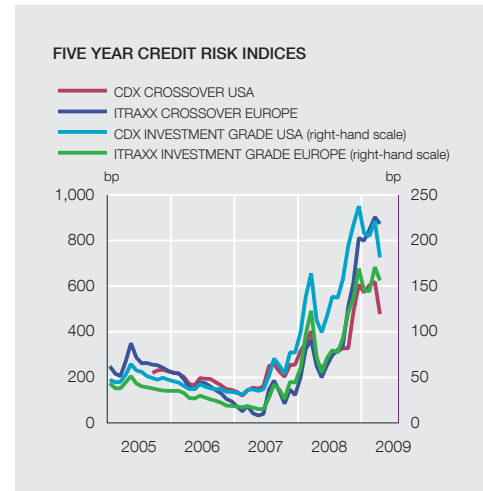
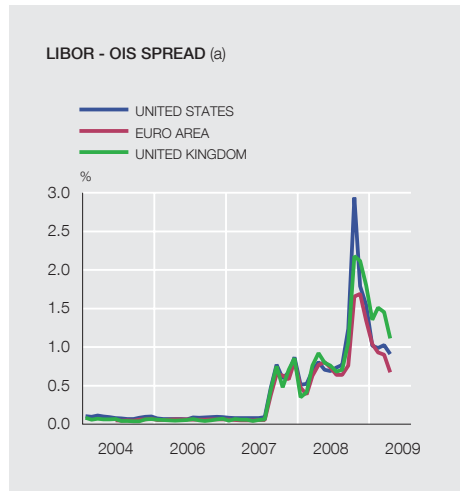
... while liquidity remained in short supply

Liquidity had been in short supply at banks since the beginning of the financial turmoil and remained so throughout this period, obliging central banks to maintain extensive liquidity provision. Nevertheless, as the LIBOR/OIS spread shows (see Chart 3.2), the interbank markets failed to return to normal, as counterparty credit risk continued to rise. On the stock markets, the bearish trend that began in 2007 continued, in light of the poor corporate earnings performance and the lower economic growth outlook, while on the foreign exchange markets the dollar depreciated, to stand at almost \$1.60/euro in mid-July.

The emerging economies' markets coped relatively well in the first half of the year,...

The emerging economies' financial markets coped relatively well with the financial turbulence in this period, although market sentiment gradually deteriorated as the economic situation worsened. Sovereign spreads widened moderately and, in general, the stock markets outperformed those of the developed economies, while currencies appreciated in the first half of the year. But the emerging markets began to deteriorate over the summer, in a scenario dominated by inflationary pressures.





SOURCES: Datastream and Bloomberg.

a. 3-month spread. US: LIBOR-effective Fed Funds rate OIS; UK: LIBOR-EONIA swap; euro area: EURIBOR-EONIA swap.

b. EMBI+ for Latin America and Global EMBI for Asia and central and eastern Europe.

... but everything changed in mid-September as the financial situation deteriorated further

In mid-September 2008, following the takeover by the US administration of Freddie Mac and Fannie Mae, the collapse of Lehman Brothers – the first large firm not to be bailed out – marked a radical change in events in the financial system. The failure of this major US investment bank revealed its systemic nature, given the volume of securities issued and of the derivatives contracts in which it acted as counterparty, significantly raising the counterparty risk in the clearing and settlement of these contracts. The fall of Lehman Brothers further reduced confidence and paralysed the credit and money markets, placing the entire financial system on the brink of collapse.

A series of highly adverse developments followed, prompting large-scale State intervention: the bail-out of the insurance firm AIG; significant corporate consolidation moves in the United States, with the takeover of Merrill Lynch, another investment bank, and other commercial banks (Washington Mutual and Wachovia); and support for other smaller institutions, in Europe also.

Stress spread rapidly, driving down the prices of all but the safest and most liquid assets

Stress spread rapidly to the different financial market segments and the flight to quality drove down the prices of all but the most liquid and safest assets which acted as a safe haven. The world's stock markets recorded the highest losses since the crash of 1929, and volatility soared in all markets; the VIX index, for example, which measures the implied volatility of the S&P 500, hit new all-time highs. Lower credit-rating corporate and sovereign credit spreads widened dramatically and, in general, the cost of non-bank lending to firms, irrespective of their credit rating, rose significantly. Moreover, higher counterparty risk gave rise to a sharp rebound in credit default swaps (see Chart 3.2).

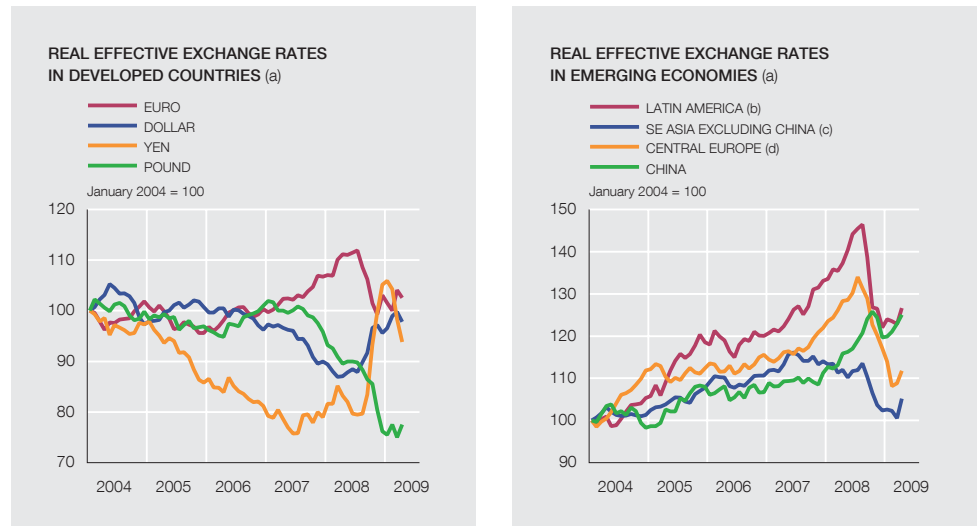
Government debt – especially US government debt – came to act more and more as a safe haven, accentuating the downward trend in long rates in the United States in this part of the year. This was also due, albeit to a lesser extent, to the poorer economic outlook and the lower inflationary pressures in the long term. Subsequently, as the flight to quality abated and the authorities' fiscal and financial efforts revealed the need for larger debt issues in the future, government debt yields rebounded somewhat, while at the shorter end of the yield curve rates fell, in step with the successive interest rate cuts seen in numerous countries as the economic and financial situation deteriorated.

The foreign exchange markets were extremely volatile in the period

As from September, the foreign exchange markets became extremely volatile. The dollar acted as a safe-haven currency, appreciating against most other currencies (see Chart 3.3) to stand at around \$1.25/euro. The yen also appreciated significantly against the main currencies as a result of growing risk aversion and unwinding of carry-trade positions (in which investors borrow currencies with low interest rates to invest in others, mainly in emerging economies, with high interest rates). Sterling fell to all-time lows against the dollar and the euro, due to the severe deterioration of the UK economy and the difficulties facing the financial system.

The relative resilience displayed by the emerging economies' markets up to September subsequently crumbled and capital inflows fell sharply

The relative resilience exhibited by the emerging markets since the start of the financial turmoil crumbled in mid-September, as external credit conditions deteriorated and investor confidence collapsed. The extensive deleveraging and reduction in capital flows from the developed markets – specifically in portfolio and banking flows – had a profound and sudden impact on the emerging markets. The initial effect was indiscriminate, despite the reduced vulnerability and relatively widespread improvement in the fundamentals of some of the emerging economies, especially in Latin America, in recent years. The external origin of the financial crisis explains why, at first, it was precisely the economies with more liquid and deeper capital markets that were most affected by the lack of external credit. This explains the sharp stock market falls and the currency depreciations seen in Brazil, Mexico and South



SOURCE: Datastream.

- a. CPI-based. An increase (decrease) denotes an appreciation (depreciation) of the currency.  
 b. Argentina, Brazil, Chile, Mexico, Colombia, Venezuela and Peru.  
 c. India, Singapore, Malaysia, South Korea, Indonesia, Thailand, Hong Kong, Taiwan and Philippines.  
 d. Czech Republic, Hungary and Poland.

Korea. Gradually, however, these effects passed through to countries or regions with higher financial vulnerability, including, in particular, the countries of eastern Europe and, within this region, some of the new EU Member States. These countries rely on external credit flows in foreign currency, and a growing number of them have needed external financial support. Reflecting the general deterioration of the emerging economies' markets, sovereign spreads, measured by the EMBI+, widened considerably and stock markets recorded losses (higher, in many cases, than in the developed economies, especially in eastern Europe and commodity exporting countries). Moreover, on the foreign exchange markets, the deterioration in the financial situation and the need for dollar liquidity meant that the local currencies depreciated against the dollar.

Net private capital inflows to the emerging economies fell dramatically in 2008, interrupting the upward trend seen since the start of the decade. The decline from the all-time high recorded in 2007 (\$93 billion, in comparison with \$638 billion) was due to the combination of lower capital inflows and high capital outflows, affecting mainly portfolio investments and international bank loans.

A wide range of measures was quickly taken to shore up the financial system,...

Once the financial crisis broke in September, a wide range of measures was quickly taken, aiming to stabilise the financial systems of the developed economies. In addition to the supply of unlimited liquidity by the central banks, these measures initially took the form of State guarantees for bank deposits, up to a certain limit, public capital injections to restore the solvency of the main financial institutions and State guarantees for bank debt issues. Subsequently, other measures were introduced, aimed at restructuring bank balance sheets and managing assets that had become impaired as a result of the crisis (see Box 3.1 and section 1.3 below). In the emerging markets, where the problems related mainly to foreign currency funding, measures were adopted to alleviate the pressure on exchange rates and facilitate foreign currency borrowing, through domestic credit swap facilities with the main central banks and multilateral organisations.

Numerous initiatives designed to provide support to financial institutions in difficulties were instigated throughout 2008 and early 2009. These rescue plans were implemented fundamentally at a national level, although with a certain degree of international coordination, and grew in number as the financial crisis worsened. To date, the authorities' response has prevented a collapse of the financial system, although the situation is still far from normal. Moreover, the global nature of the crisis, the urgency in the rescue of some systemic institutions, the scale of the losses seen and the uncertainty surrounding the final extent of these losses have resulted in some improvisation and emulation in the different countries' responses. This box offers a brief summary of the key financial rescue initiatives launched internationally, focusing particularly on the United States and the United Kingdom, classifying these initiatives and endeavouring to explain the reasons behind them at each different stage<sup>1</sup>.

Up to September 2008, the authorities had responded to financial institutions in difficulties on an ad hoc basis, providing support to those that were considered systemic<sup>2</sup> and intervening in the others<sup>3</sup>. However, as the year progressed, the number of institutions in difficulties increased, as did the size of the losses receiving public sector backing. This trend heightened sharply in the wake of the collapse of Lehman Brothers on 15 September, following the breakdown of negotiations to find a private-sector solution for the investment bank. This bankruptcy raised global instability levels significantly, revealing the complexity and interconnectedness of the international financial system.

From then on, the authorities' rescue plans began to target the entire financial system, which was facing a serious risk of collapse, rather than specific financial institutions. The type of measures adopted gradually changed, as the crisis heightened and amplified and as crisis management became more and more difficult. On 3 October the US Congress approved the Troubled Asset Relief Program (TARP), originally designed to alleviate institutions' financing pressures and restore price formation mechanisms for illiquid assets, via Treasury purchases of troubled assets. However, these measures proved difficult to implement in the short term, and this, together with the heightening of the crisis and the emergence of other initiatives in other countries, meant that this strategy was abandoned before it was implemented.

1. The box focuses exclusively on the financial rescue measures seen in the period, thus excluding, inter alia, the unconventional monetary policy measures implemented by some central banks. A summary of these initiatives may be found in the Banco de España's Financial Stability Report of May 2009. 2. Up to mid-September, the public authorities backed rescue operations coordinated with the private sector in institutions such as Bear Stearns, Countrywide, Merrill Lynch and AIG; they also provided credit facilities and injected public capital into Fannie Mae and Freddie Mac. 3. The takeovers of Northern Rock and IndyMac, in addition to interventions in some small banks, stand out.

In this setting, on 8 October a financial sector rescue plan was announced in the UK, aimed at helping credit institutions win deposits. The plan envisaged capital injections in the form of preference shares, subject to fulfilment of certain conditions, and State guarantees for bank debt. Soon several countries – including many in Europe – were introducing similar plans. Moreover, on 14 October, just 11 days after approval of the TARP, the US Treasury announced a change in this programme, to permit capital injections. It also established a programme to guarantee bank debt, backed by the Deposit Guarantee Fund. Although these measures proved effective in halting the rapid and serious deterioration of the financial situation, they failed to bring market operations back onto a normal footing and restore agents' confidence, not only because of the new losses that began to emerge, linked to complex assets, but also because of the significant deterioration in activity as from the end of 2008. At the same time, signs of restrictions in credit available to the private sector began to appear, even though one of the objectives of the rescue plans was to preserve the availability of credit for households and firms, thus increasing the risk of a feedback loop between the deterioration of the financial and the economic situation.

Thus, between the end of 2008 and early 2009, the financial rescue plans entered a new more ambitious phase, with higher volumes of funds committed and a broader scope. Several countries included a series of public sector initiatives, aimed at directly encouraging private sector credit, and measures were approved to limit losses and to remove impaired assets from banks' balance sheets, with a view to restoring confidence in these institutions. Nevertheless, these measures were not uniformly implemented. Thus, in the United Kingdom, an asset protection scheme was announced, establishing a system for distribution of portfolio losses between banks and the public sector. Meanwhile, in the United States, the new administration announced a new rescue plan, including, inter alia, the creation of several funds for the purchase of troubled assets, permitting their removal from banks' balance sheets. These funds will be managed by the private sector but will be primarily funded by the public sector, which will also assume the bulk of the risks assumed by the funds. Initially, these funds will be able to purchase assets (loans and financial assets) worth up to \$500 billion, extendable up to \$1 trillion if and when necessary.

Recently, government influence on the decisions adopted by the institutions that have received a significant volume of funds has increased, as the number of conditions included in these programmes has increased, without this implying any transfer of management to the public sector. In this respect, in some cases the authorities have replaced the preference shares they held in banks' capital with ordinary shares, granting them, in principle, enhanced voting rights in these institutions.

... bringing temporary relief to the markets, but normalisation remains a distant prospect

Although the financial system has by no means normalised, the relative market stability seen from mid-October to the time of this report going to press is, above all, a reflection of the wide range of extraordinary measures that prevented an even greater loss of confidence. Nevertheless, this extensive State support has not prevented the deterioration in the financial situation from passing through to the real economy: the markets have become dominated by the prospect of recession and the scale and effective implementation of the financial policies announced is still shrouded in uncertainty. This explains the continued tensions on the money and credit markets, the lack of clear signs of recovery on the stock markets, the high volatility levels and the continuing deterioration of indicators in some emerging markets, all of which signify that the financial system is still in a very delicate position. However, as State support gradually restores confidence among investors and the financial institutions, the first signs of recovery should start to emerge.

### 1.3 THE SHARP ADJUSTMENT IN THE WORLD ECONOMY

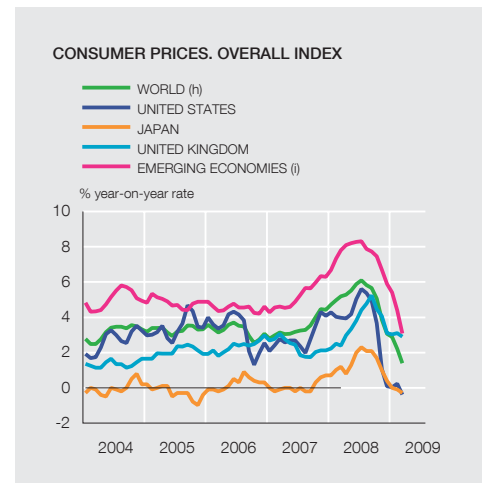
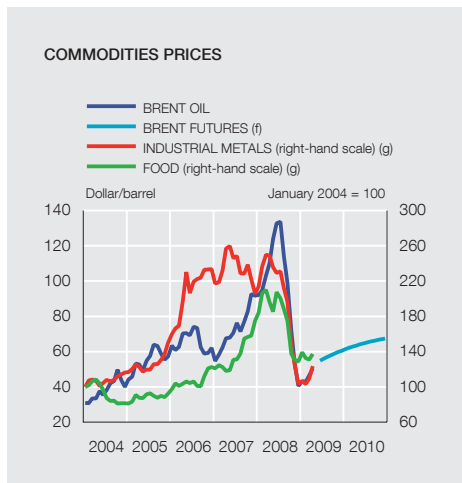
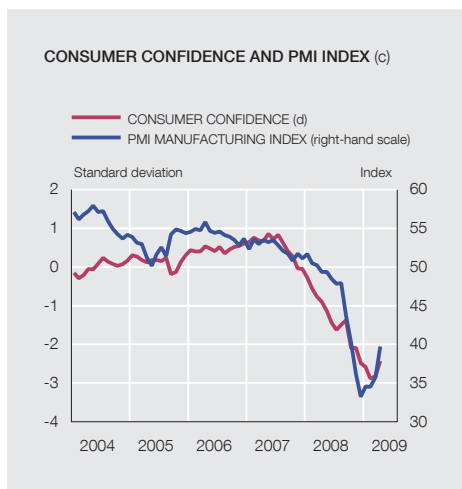
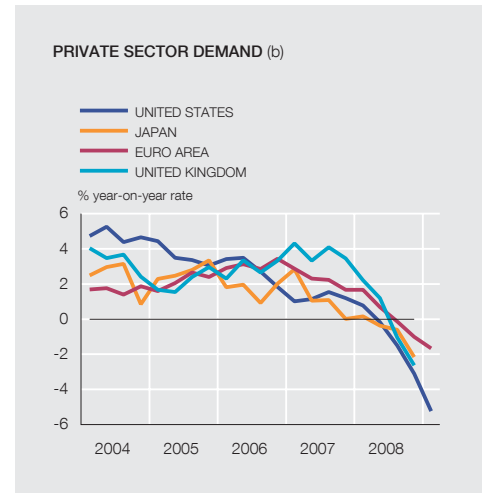
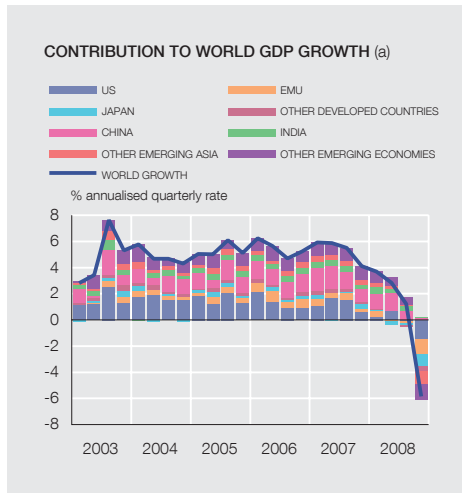
In 2008 the world economy grew by 3.2%, 2 pp less than in 2007, fundamentally due to the contribution of the emerging markets

The financial stress of mid-September marked the turning point between a gradual slowdown, albeit intense in the more developed economies, and a severe and generalised slump in global activity. The global economy decelerated considerably in 2008, growing by 2 pp less than in 2007, although it still managed to record positive growth (3.2%). The negative quarterly growth rates seen in a rising number of developed economies over the year reflect the intensity of the adjustment; in fact, by year-end, many of these economies were in recession (see Chart 3.4). The emerging countries were, once again, the main growth drivers, posting growth of 6.1%, in comparison with 8.3% in 2007. China, in particular, with growth of 9%, contributed 1 pp to world growth, while the rest of emerging Asia contributed 0.6 pp and Latin America 0.4 pp. The industrialised economies, where the rate of growth was very low in 2008 (0.9%, in comparison with 2.7% in 2007), contributed just 0.5 pp to global GDP growth. In the United States, growth fell from 2% in 2007 to 1.1% in 2008, due to the severe adjustment in residential investment and private consumption. In the United Kingdom, the decline in investment, especially residential investment, was a key factor in the significant deceleration in activity (from 3% to 0.7%), while the generalised contraction in Japan, where the growth rate fell from 2.4% to -0.6%, was due to the structural fragility of the Japanese economy since the 1990s.

To September, activity in the industrialised countries gradually weakened, through various channels, while the emerging economies saw a moderate slowdown,...

Activity gradually weakened in the industrialised economies in the first three quarters of 2008, bearing the brunt of the significant financial deterioration and its effect on the determinants of private sector demand. In particular, the deepening of the adjustment in the real estate sector in some countries fuelled the negative spiral between the decline in house prices, the deterioration of the quality of collateral held by financial institutions, the tight credit supply and the economic slowdown, although the impact of the financial deterioration on the real economy also intensified in other areas. Effective credit conditions tightened, even though official interest rates remained relatively stable, and were even cut in the United States. Consumer confidence fell as the economic outlook deteriorated, unemployment rose and consumer wealth diminished, against a backdrop of high household indebtedness in many countries. Business confidence also declined, as the demand and profit outlook deteriorated. All this weakened private sector demand in the industrialised economies (see Chart 3.4) and led to a gradual adjustment in activity. As a result, the year-on-year rate of growth went from 2.4% in 2007 Q4 to 0.6% in 2008 Q3 and a number of countries went into recession.

By contrast, in the emerging economies the relative strength of domestic demand, together in some cases with high commodities prices, helped sustain the pace of activity. Nevertheless, there was some deceleration, as these economies were not completely immune to the fall in external demand or the decline in consumer purchasing power as a result of rising inflation.



SOURCES: Datastream, Goldman Sachs, JP Morgan, PMI Premium, CPB Netherlands Bureau for Economic Policy Analysis and Banco de España.

- a. Contribution, in percentage points, to the annualised quarterly change in global GDP.
- b. Year-on-year growth in private-sector demand (consumption + investment) in real terms.
- c. Aggregate of United States, euro area, Japan and United Kingdom.
- d. Normalised variable, measured as the difference between the indicator and its historic average, expressed in standard deviations.
- e. Year-on-year growth in export volume.
- f. Brent futures from the week of 1 - 7 May 2009.
- g. Goldman Sachs indices.
- h. Aggregate calculated drawing on the data from 47 countries representing 86% of world GDP.
- i. Aggregate of 21 emerging countries of Latin America (5), central and eastern Europe (8), emerging Asia (7) and South Africa.

... but from then on, activity contracted on a global scale

As from September, the situation of extreme financial instability saw household and business confidence collapse. This, together with even tighter credit conditions, the sharp decline in wealth due to the intense stock market correction and job destruction, led to a collapse in private sector demand and a generalised contraction in economic activity of an intensity and scale unprecedented in recent decades. Against this backdrop, the main industrialised economies moved further into recession, recording year-on-year growth rates verging on -1.7% at end-2008. The crisis quickly spread to the emerging economies, as a result of the collapse in global demand, which contributed to a notable decrease in international trade flows, and the significant decline in capital flows, in light of the heightened financial stress, all of which added to the sharp drop in commodities prices first seen in the summer, with most impact on the economies that were in most need of external financing and most dependent on external demand. Thus, in 2008 Q4, global GDP contracted by 1.5% in comparison with the previous quarter and only a few countries – including China – managed to continue to post positive growth rates in the period. On the data available as at the date of this report going to press, global GDP growth is estimated to have contracted by a further 1.5% in quarter-on-quarter terms, also on a generalised basis, in 2009 Q1.

International trade was particularly affected by the fall-off in demand and the credit freeze

As indicated above, international trade was particularly dented by the slump in demand and the financial crisis (see Chart 3.4). The volume of trade fell dramatically between October and February: by some 15% in the developed economies and 19% in the emerging economies. This collapse in trade (see the analysis in Box 3.2), which has been much more intense than would normally be warranted by the decline in global activity, could have been fuelled, to a certain extent, by the scarcity and the rising cost of trade credit, especially in the emerging economies, caused by the funding difficulties on the wholesale markets. In 2008 as a whole, the volume of world trade decelerated to 3.3%, almost 4 pp less than in 2007; in February 2009 it recorded a year-on-year contraction of 15%. Accordingly, world trade could well decline in 2009, for the first time since 1982.

Commodities prices reflected the decline in demand and the global growth outlook...

Inflation rates reflected the rise and subsequent fall in commodities prices and the deteriorating global demand conditions. In fact, the developments on the commodities markets largely mirrored the change in the demand outlook, although supply disruptions and the dollar exchange rate also played an important part. Prices continued to climb in 2008 H1, in light of persistently high demand prospects for the emerging economies and a number of factors conditioning supply. In particular, the price of Brent oil rose by 54%, in dollar terms, between January and June (in euro terms, by a slightly lower 44%) to over \$145/barrel, an all-time high in both nominal and real terms. In the same period, metal prices rose by 19% and food prices by 34%. In July, however, commodities prices turned sharply downward, coinciding with a general deterioration in global growth expectations, which intensified when the financial crisis broke in September. Thus, despite successive production cuts, the price of oil fell by 66% in dollar terms, to around \$50/barrel at end-April 2009. Dollar appreciation against the euro halted the drop in price in euro terms, which amounted to 58% in the same period. Prices of metal commodities also fell substantially (by 38% between July 2008 and April 2009, in dollar terms), as did food prices and prices of agricultural commodities, reflecting not only demand factors but also good harvests. Lastly, prices of precious metals, such as gold, rose as from September, in light of their role as a safe haven. In any case, since the start of 2009 Q2, the main commodities prices have picked up.

... and were largely behind the major fluctuations in inflation rates

Against this backdrop, since early 2008 global inflation has fluctuated between record highs for the last decade, seen in the summer, and record lows since March 2004 (2.5%), seen in February 2009 (see Chart 3.4). In the first half of the year, inflationary pressures heightened considerably, as oil and food prices rose, although in the industrialised economies these pres-

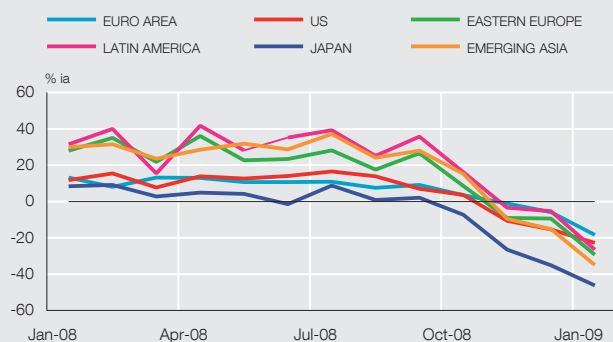
International trade has undergone a sharp correction since 2008 Q4: the volume of trade fell by some 6% in monthly terms in November and December 2008 and in January 2009 (see Chart 3.4). This decline in trade, although generalised, has been most intense in Asia (see Panels 1 and 2), where it is comparable with the decline seen in the 1998 crisis. Accordingly, the volume of world trade growth in 2008 was significantly lower than the average of the last 20 years (3.3% against 7%) and the main international organisations are forecasting a contraction of around 10% in 2009, which would be the first since 1982 and much more intense than the figure recorded in that year.

Much of the collapse in international trade is a direct result of the sharp decline in global economic activity as from 2008 Q4 (estimated at 5.9% in annualised quarterly terms). Nevertheless, although trade tends to be more volatile than activity, Panel 3 shows that the decline in the volume of trade in 2008 Q4 was significantly greater than that which was to be expected on the basis of the historical relationship between trade and global GDP growth. The high level of outsourcing and segmentation of production processes across countries, as a result of the integration of global production chains seen in recent decades, may explain why the decline in demand has had a greater

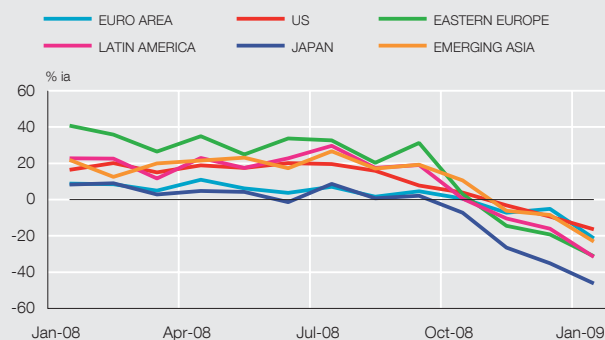
impact on trade than in the past. Moreover, the fact that this decline in demand has been most severe in durable goods, especially automobiles, whose production chains tend to be more internationally fragmented, may also explain the extraordinary decline in trade in relation to activity. However, even bearing in mind these considerations, this decline continues to seem disproportionate.

A further factor that may have contributed to the sharp contraction in trade flows in 2008 Q4 is the drought in trade finance stemming from the problems on the financial markets, which intensified thereafter. Trade finance, through direct or indirect finance, insurance or guarantees, is behind 80% to 90% of the approximately \$14 trillion worth of goods exported every year and is recognised as a fundamental factor in the growth of trade in recent decades, especially for the emerging countries which face more restrictions on financing. The most usual forms of trade finance are documentary credit (especially letters of credit), trade credit and, increasingly, syndicated loans (especially for commodities) and structured financing through securitisations (forfaiting and forwarding). In addition to providing finance for import and export transactions, these products facilitate hedging of risks (commercial, exchange rate or political-institutional risks) and supply of working capital.

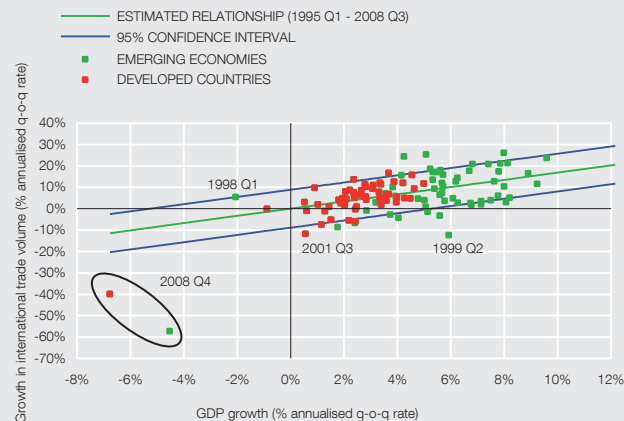
1 IMPORTS



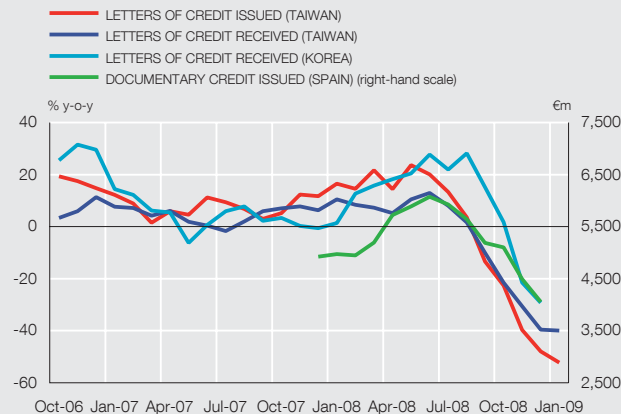
2 EXPORTS



3 WORLD GROWTH AND VOLUME OF INTERNATIONAL TRADE (1995 Q1 - 2008 Q4)



4 LETTERS OF CREDIT AND DOCUMENTARY CREDIT IN KOREA, TAIWAN AND SPAIN



SOURCES: JP Morgan, CPB Netherlands Bureau for Economic Policy Analysis, Datastream and Banco de España.



Trade finance is primarily short term, it requires high collateral and extensive documentation and it is normally low risk. All these factors probably explain why this market weathered the financial turmoil of the closing months of 2007 and the first half of 2008 relatively well, despite warnings by the World Trade Organization during this period of rising costs and liquidity restrictions for some countries. Nevertheless, there is some evidence that the heightening of the financial crisis as from September 2008 has had a particularly harsh impact on this market, which continues to face serious difficulties. Since September it has become more difficult to obtain letters of credit, especially in Asia, and the few firms that have managed to do so have seen how these letters of credit have been rejected owing to mistrust of the issuing banks: Panel 4 depicts the sharp decline since October in letters of credit issued in Taiwan (for imports and exports) and Korea (exports only) and in documentary credit issued in Spain. Lastly, it seems likely that unintermediated finance (direct credit between firms) will also have been severely hit, judging by recent trade credit patterns in most countries.

Although this fragmented evidence points to a decline in trade finance as from 2008 Q4, it does not indicate how much is due to a decline in supply and how much to a decline in demand. Recent surveys conducted among the main finance providers in the banking sector<sup>1</sup> point to restrictions in the supply of trade finance. These restrictions would appear to be most severe in the emerging economies (especially in Asia, which would be consistent with the sharp contraction seen in trade flows in this region in comparison with others), and as yet non-existent in the developing countries. The surveys

1. The first survey was conducted jointly by the International Monetary Fund and the Bankers Association for Finance and Trade (BAFT). The subsequent survey carried out by the International Chamber of Commerce reinforces the idea that there are supply-side problems in trade finance.

also reflect the notable rise in the cost of trade finance, from an average of 10 to 20 bp over LIBOR to 250 to 300 bp. Moreover, the banks surveyed expect these costs to continue to climb throughout 2009.

Trade finance is in short supply for the same reasons as other types of credit, but its very nature may hinder its recovery. First because, as they have deleveraged, credit suppliers have tended to withdraw funds from these markets, which involve mostly short-term credit, having committed these funds to other more long-term credit segments. Second, because the trade finance sector is highly concentrated and many players are among those most affected by the financial crisis, meaning that they have withdrawn from this market segment or have disappeared altogether. And third, because the financial sector support plans launched have focused on keeping domestic credit flowing, to the relative detriment of trade credit.

All in all, although to date there is no clear evidence of the extent of the contribution of the trade finance drought to the decline in international trade, if it fails to recover it could hamper global economic recovery in the short and long term. In the short term, restrictions on the supply of trade finance could hinder a return to normal for global production chains and trade flows. The first stage of many of these production processes is in Asia, where the shortage of trade finance appears to have been most acute. In the medium term, if the restrictions continue, international production chains may tend to relocate to their home territories, or to countries which, although not the most efficient in production terms, offer a competitive edge in terms of access to finance. This would signify a considerable efficiency loss in the utilisation of global resources and a step backward in globalisation. The recent G20 agreement to earmark \$250 billion to reactivate trade finance is an acknowledgement of the importance of these considerations for recovery from the crisis (see Box 3.3).

sure were barely passed through to core inflation. In July, the global inflation rate stood at 6.1% year-on-year, 1.4 pp more than at the start of the year. In the emerging economies, inflationary pressures were even higher (the year-on-year rate stood at 8.3% in July), due to the greater weight of prices in the consumption basket, the higher relative contribution of commodities to products' final prices and, in some countries, domestic demand pressures, and these were passed through in part to core inflation, prompting monetary policy tightening, in contrast to the situation in most of the developed countries.

In the second half of the year, as commodities prices corrected and demand collapsed, inflation fell rapidly to very low rates, undershooting monetary policy targets in some of the developed economies. At the end of 2008, average global inflation stood at 3.1%, substantially below the figure one year earlier and close to zero in the United States and in Japan. Inflation rates have remained very low in the opening months of 2009, helped by the favourable base effect stemming from the increases seen in commodities prices in early 2008, and have turned negative in some developed countries. Nevertheless, in the main industrialised economies, long-term inflation expectations remained well-anchored throughout the year.



SOURCES: Datastream and IMF (WEO).

- a. OPEC countries plus Russia and Norway.  
 b. Country aggregates based on the IMF (WEO) definition.  
 c. Data as a percentage of GDP. (+) surplus; (-) deficit.  
 d. Argentina, Brazil, Chile, Mexico, Colombia, Venezuela and Peru.  
 e. India, Singapore, Malaysia, South Korea, Indonesia, Thailand, Hong Kong, Taiwan and Philippines.

Global imbalances lessened slightly in the second half of 2008 and accumulation of external assets by the emerging economies slowed

Global imbalances, measured in terms of external balances, remain significant, but there were some signs of a correction as from the second half of 2008. The global current account surplus amounted to \$1.3 trillion in 2008, unchanged at 2.1% of world GDP (see Chart 3.5). In the second half of the year, weakening domestic demand in the United States and the lower energy bill prompted a decline in the US trade and current account deficits, while the deceleration in world trade and falling commodities prices reduced surpluses in some regions (Latin America, emerging Asia – excluding China – and the oil exporting countries). The most striking exception is China, whose current account surplus continued to grow, albeit at a lower rate than in previous years.

Thus, the correction in real effective exchange rates between January 2008 and March 2009 was not, in many cases, consistent with the correction in global imbalances (see Chart 3.3). Albeit with significant fluctuations in the period considered, the US dollar appreciated, while

the emerging market currencies generally depreciated, with the exception of the Chinese renminbi. The intense process of accumulation of reserves and assets in sovereign wealth funds by some of the emerging economies concluded in 2008, as oil prices fell sharply in the second half of the year and some countries delved into their international reserves to maintain exchange rates or limit exchange rate volatility in Q4.

#### 1.4 THE ECONOMIC POLICY RESPONSE

The economic policy response has grown in scope and strength as the economic situation has deteriorated

The economic policy response has grown in size, strength and geographical scope, with a qualitative and quantitative leap as from September 2008. Initially, following the onset of the financial turmoil in 2007, the authorities in the developed economies responded by supplying liquidity to banks, to alleviate the shortage in the interbank markets, cutting interest rates in some cases and sporadically bailing out financial institutions. However, as from 2008 Q4, the economic policy response stepped up a gear, as a wide range of complementary and interconnected financial, monetary and fiscal measures were introduced in many more countries, aimed at stabilising the financial markets and halting the collapse in aggregate demand, to restore private agents' confidence and sever the interplay between the problems facing the financial sector and the real economy.

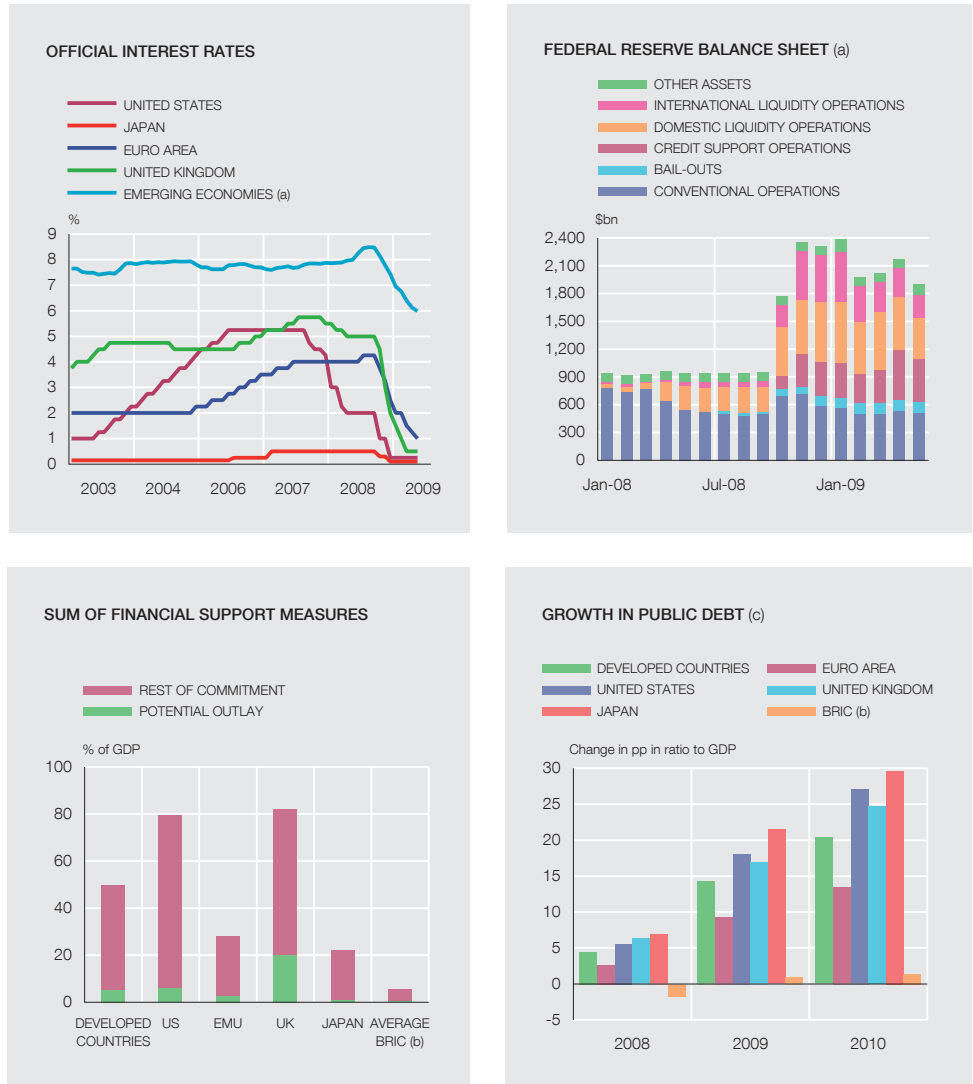
Official interest rates were conditioned by inflation developments

As regards monetary policy, official interest rates were conditioned by price developments throughout 2008. During the first half of the year, the generalised rise in inflation posed difficulties for most monetary authorities in the developed economies, which were facing growing inflationary pressures on the one hand and the risk of economic slowdown and financial instability on the other. The initial response varied from country to country. The United States cut its official interest rates quickly and substantially as from the end of 2007, with a brief pause in mid-2008, against a backdrop of severe financial market instability. By contrast, official interest rate moves were less intense in other industrialised economies, and some countries even raised rates. In the emerging economies in general the monetary policy stance tightened.

The rapid decline in commodities prices as from July, and the heightening of the financial crisis in September, altered the scenario facing the monetary authorities dramatically, as the risks to financial stability loomed larger, amidst clear signs of economic slowdown and even recession. This prompted substantial interest rate cuts, including an unprecedented coordinated 50 bp rate cut by the main central banks – with the exception of the Bank of Japan – in October 2008 (see Chart 3.6). Most of the emerging economies also cut their official interest rates, although this monetary easing came in differing degrees of pace and intensity and was, in some cases, initially limited by the risks of exacerbating exchange rate depreciation and encouraging capital outflows. However, the rate cuts had only a limited impact on financing conditions: the generalised decline in inflation offset the impact on real interest rates, which nonetheless remained substantially below the levels seen before the start of the financial turmoil in 2007; and the pass-through of these lower rates ran counter to the tight credit conditions that continued to be applied to firms and households.

The sharp decline in inflation brought rates close to zero in most industrialised economies, giving rise to the use of unconventional instruments and increasing the size of central banks' balance sheets

These dramatic rate cuts brought official interest rates very close to zero in most industrialised economies, meaning that the monetary authorities were obliged to use other less conventional measures to ensure that monetary easing passed through to agents' effective credit conditions. Thus, in addition to continuing to provide almost unlimited liquidity to financial institutions, the main non-euro area central banks began to intervene directly to support the credit markets, purchasing private assets and granting credit and guarantees to intermediaries in certain markets. They also began to purchase government bonds, aiming to drive down long rates. As a result, the central banks' balance sheets, which were stable in terms of size up to September, even though their asset composition may have changed, expanded significantly (see Chart 3.6). In the United States, other measures directly associated with support



SOURCES: National statistics, IMF and Banco de España.

- a. Conventional operations: includes T-bonds, primary credit and repos. Bail-outs: support given to Bear Stearns and AIG. Credit support operations: purchase of GSE debt, mortgage securitisation assets issued by the GSEs, the TALF, AMLF and CPFF. Domestic liquidity operations: includes the TAF, TSLF and PDCF. International liquidity operations: currency swaps with other central banks.
- b. Aggregate of Brazil, Russia, India and China.
- c. Expected increase in debt in each year in comparison with 2007.

for certain financial institutions also added to the Federal Reserve's balance sheet. Accordingly, by early 2009, the balance sheets of the Federal Reserve and the Bank of England had more than doubled since September, and although in recent months they have declined slightly, the measures approved in March could double them once again. This package of measures underlines the key role that the central banks are playing in support of the financial sector and the erosion of the dividing lines between monetary and financial policy. Thanks to the direct support received by certain credit market segments, yield spreads have corrected somewhat from the levels seen at the beginning of 2008 Q4.

The financial sector support measures are wide-ranging and include guarantees, capital injections and asset purchases

The financial sector support measures first introduced when the financial turmoil erupted in mid-2007 continued through the first half of 2008. The central banks continued to inject liquidity into the system, against a backdrop of considerable mistrust between financial institutions, to alleviate the credit freeze, while a number of firms facing particular difficulties were bailed

out, either by State intervention (Northern Rock in the United Kingdom) or by State support for private-sector transactions (Bear Stearns and Countrywide in the United States).

Once the financial crisis broke in September, the authorities' response became more emphatic, more generalised and more coordinated, encompassing a wide range of measures, including extended State guarantees for bank deposits, injections of public capital and purchase or guarantee of assets, it being assumed, in the last two cases, that the public sector would bear the bulk of any losses (see Box 3.1). Moreover, considering how difficult it was, in these circumstances, for the financial sector to play its role of financial intermediary satisfactorily, the authorities also took direct measures to stimulate credit in certain strategic sectors, such as the automobile industry and SMEs. Two aspects of the economic policy response are particularly noteworthy: the huge volume of funds involved in the financial support plans; and the appearance of certain mechanisms coordinating the national authorities' response, in light of the global nature of the problems faced. In this respect, the emergence of the G20 as a crisis-response discussion and coordination forum, not only at a financial level but also in terms of economic policy in general (see Box 3.3), should be highlighted.

Fiscal policy has generally been the last tool to be used, and to a different extent from country to country

With the notable exception of the United States, until 2008 Q4 no country had introduced discretionary fiscal stimulus measures in response to the worsening economic and financial situation. However, as a result of the economic slowdown (with the consequent activation of the automatic stabilisers) and the difficulties facing the financial sector, together with the real estate sector adjustments seen in some countries (reducing tax revenue, as real and financial asset values diminished), fiscal positions gradually deteriorated from the start of the year in most of the developed economies. Once the crisis broke in September, fiscal expansion became one of the most potentially effective economic policy instruments to stimulate activity and staunch private agents' loss of confidence, considering, in addition, the scant or non-existent upward pressure that fiscal expansion would exert on interest rates in the short term in the present circumstances. Accordingly, fiscal stimulus plans, of very different sizes, were introduced in numerous countries in the last quarter of 2008 and in early 2009. The overall fiscal stimulus in the developed economies is estimated at around 0.6% of their GDP in 2008, rising to 1.5% in 2009 and to 1.7% in 2010 (see Chart 3.1), with the United States playing a leading role.

In the emerging economies the fiscal impulse has also been considerable, although it was introduced rather more belatedly

In some emerging economies, rising commodities prices and their social impact inspired consumer support measures which had an adverse effect on fiscal balances in the first half of the year. The decline in commodities prices as from the summer halted revenue growth for commodities exporters. Although the fiscal impulse was introduced later than in the industrialised economies, it is expected to be more intense in the emerging economies in 2009, and similar in 2010, with China, Russia and Saudi Arabia leading the way. Specifically for the G20 member countries, the fiscal impulse should amount to 0.4% of their GDP in 2008, 2.3% in 2009 and 1.6% in 2010. The initial caution may have been due, in part, to possible difficulties funding these fiscal plans, in light of the abrupt decline in external financial flows.

The fiscal impulse has leant heavily on public spending measures, especially infrastructure

Fiscal plans have leant heavily on public spending measures, especially infrastructure. On the revenue side, tax cuts have targeted personal and, to a lesser extent, corporate income tax, while indirect tax cuts have been only symbolic. This bias towards public spending measures is due to the private sector's lower marginal propensity to consume and invest, against a backdrop of economic and financial fragility and an adverse economic outlook, thus making tax cuts, in general, less effective. Nevertheless, delays in implementing spending plans, at a time when urgent demand momentum is needed, may limit their effectiveness in the short term.

The international crisis is having a profound impact on the global economic and financial system, giving rise to a review of the three key pillars of the international financial architecture: the coordination of economic policy decisions, granting the G20 a key role; the supranational aspects of the financial regulatory and supervisory framework; and the international financial institutions. This box analyses the main elements of this review and the role played by Spain in this process.

One initial element of the reform process is the key role assumed by the G20. The global nature of the crisis and the extent to and speed at which it has spread across national boundaries have revealed the limitations of the G7 as a decision-making forum and the need for greater international concertation, to include not only the developed economies, but also the emerging countries, in decision making. The G20's new leading role became evident at the first summit of Heads of State and Government of the G20 countries held on 15 November 2008, and was reaffirmed at the second summit, held on 2 April 2009, both preceded by meetings between ministers and central bank governors. These sessions directly approached the subject of coordination of macroeconomic and financial policies, designed to facilitate recovery from the crisis, with special emphasis on establishing a coordinated fiscal effort and financial sector support plans, to bring the market situation back to normal and restore credit flows.

The guidelines for reforms in financial regulation and the international financial system were also set at these summits and meetings. In this respect, detailed work programmes were established and four working groups were created within the G20, on regulation, international cooperation and integrity in financial markets, the International Monetary Fund (IMF) and development banks. Each working group has been co-chaired by two officials, one from an emerging market and one from a developed economy, and has involved international financial institutions in their work. Each group has progressed in the design of reforms and responses to the global crisis and has taken the technical discussions directly to the G20, parallel to the executive bodies of the international financial institutions.

Spain is not a G20 member but it was invited to take part in the summits of Heads of State and Government, in recognition of its economic weight and financial system, which place it among the world's ten leading economies. In addition to participating in the summits, Spain has made a notable contribution in various European and international fora, working to achieve convergence on common positions for the reform process. In this respect, in addition to taking part in the European Council sessions and ECOFIN meetings, Spain also played an important role in the meeting of European leaders held in Berlin on 22 February and in the meeting of Ibero-American ministers held in Oporto on 2 March, and, on a more technical level, in the work conducted from the chairs of the ECB's International Relations Committee and the Economic and Financial Committee's Working Group on Procyclicality.

As regards the changes in the financial regulatory and supervisory framework, it is commonly agreed that they should envisage the higher degree of interconnectedness between the different national economic and financial systems. The G20 is promoting multiple re-

forms in this field, to meet this aim and to strengthen international coordination. In general, the challenge these reforms face is to strike a correct balance between preventing excessive regulation, a difficulty parallel to determining the limits of the fiscal impulse or of public sector intervention in the financial system, and securing effective implementation of the measures proposed, which requires a high degree of international coordination to standardise guidelines and basic rules and ensure monitoring and control of the measures adopted.

In this respect, the creation of the Financial Stability Board (FSB) to succeed the Financial Stability Forum (FSF) is one pillar of the reform. The FSB was founded with expanded membership to include the G20 countries that were not FSF members<sup>1</sup>, Spain and the European Commission. It is the reference forum in international financial regulation, to the extent that it has been described by some authoritative voices as the fourth institution of the international financial system, together with those established at Bretton Woods (the IMF, the World Bank and the WTO). The FSB aligns the reality of a global and highly interconnected financial system with a more coordinated and inclusive regulatory framework, updating obsolete structures that excluded the emerging economies. Once again, Spain's membership of the FSB is the recognition of its weight in the international financial system.

The areas of review of financial regulation and supervision include: (i) enhancing market transparency and extending the scope of the regulatory and supervisory framework to all institutions and markets that are relevant for the stability of the financial system (understood in a wide sense, this includes the various initiatives to strengthen or include in the regulatory framework tax havens, credit rating agencies and hedge funds, or the need for transparency in exposure to off-balance-sheet products); (ii) reducing the procyclicality of the financial system and solvency standards, to ensure that capital requirements and accounting standards help safeguard the solvency of the financial system instead of amplifying the effects of crises (in this area, with special priority given to the dynamic provisioning system of the Banco de España); (iii) introducing a macro-prudential approach in supervision, to ensure that an institution's potential systemic risk is taken into account in addition to its accounting and financial position; (iv) strengthening international coordination of supervision and surveillance of the financial system, including the introduction of colleges of supervisors for transnational banking groups and creation, jointly by the IMF and the FSB, of an early warning system for financial risks; and (v) adopting principles for executive remuneration schemes in financial institutions, to bring them more in line with the time horizon of the risks assumed.

Regarding reform of the international financial institutions (IFIs), the G20 has promoted a significant increase of up to \$1.1 trillion in their funds: an additional \$500 billion for the IMF, as described in detail below, as well as a \$250 billion SDR allocation by this institution; an extra \$100 billion in development bank loans; and \$250 billion to bolster international trade finance. It has also promoted a policy over-

1. Argentina, Brazil, China, India, Indonesia, South Korea, Mexico, Russia, Saudi Arabia, South Africa and Turkey.

haul, to enable the IFIs to face up to the new challenges posed by the crisis with more guarantees. The rapid response from the IFIs reflects the recognition of the need for a multilateral approach to what is a global crisis and the need to provide financial support to the emerging and developing economies, which are bearing the brunt of a crisis that originated in the developed world. In this respect, the proposals to adapt governance of the IFIs to better reflect the economic weight of the different countries and raise the weight of the emerging and developing economies (changing representational criteria determined by past inertia), represent another common element of reform.

In connection with the IMF, three key reforms stand out: increased funding, review of lending policies and enhanced surveillance.

The international community has resolved to triple the resources for IMF loans, granting \$250 billion immediately (via bilateral contributions) and up to a further \$250 billion in the short term via extension of the New Arrangements to Borrow (NAB). Moreover, the option remains for the IMF to assume debt on the open market. As regards the bilateral contributions, Japan took the first step, contributing \$100 billion in February 2009; it was followed by the European Union, after approval by the European Council on 19 and 20 March of voluntary

contributions by the Member States totalling €75 billion (the Spanish contribution is estimated at €4.1 billion).

As regards lending policies, the IMF, adapting its lending framework, is widening access limits and reviewing the conditionality of its programmes, strengthening the principle of ownership and reducing the number of performance criteria, focusing on those that are critical for crisis resolution. The IMF has also approved a new lending facility, the Flexible Credit Line (FCL), with preventive nature, which enables rapid access to a large volume of funds, with ex-ante conditionality, granting countries access to IMF funds in accordance with pre-set qualification criteria, based on the implementation of sound economic policies and the existence of solid fundamentals.

Lastly, on surveillance, the IMF has progressed in including financial supervision in countries' Article IV, in fomenting analysis of the links between the real economy and the financial sector and in early detection of risks, through activation of a new early warning system in co-ordination with the FSB. It is also considering making the Financial Sector Assessment Programs (FSAPs) more regular, undertaking to conduct them at least in all the G20 countries, and using them for peer reviews within the FSB.

The automatic stabilisers and the fiscal stimulus and financial bail-out plans have led to a significant and generalised deterioration of public finances

This fiscal activism and the economic slowdown have pared down present and future fiscal balances. Moreover, the financial support plans, and even some aspects of the unconventional monetary policy measures, also entail a high level of commitment of public funds, amounting to more than 50% of GDP in the industrialised economies (see Chart 3.6). Although only some of these funds will require disbursement at the time of use (9% of GDP in this group of countries), and much of the total invested is expected to be recovered, these measures may raise the public debt/GDP ratio by more than 20 pp in 2010. They could also result in substantial losses, due to guarantees or purchases of assets whose value at maturity is far from certain.

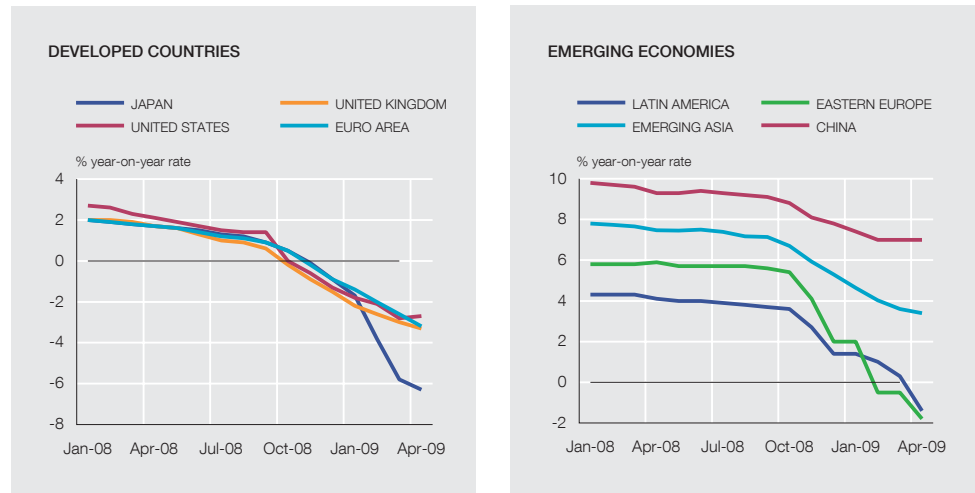
Despite the efforts made, a return to normal is still a long way off

In any case, these wide-ranging economic policy measures, which brought the global financial system back from the brink of collapse at the end of 2008, are still a long way from achieving their aim to stabilise the situation on the financial markets, restore agents' confidence and improve the global economic outlook.

## 2 Outlook and risk factors

The outlook for 2009 points to a sharp decline in activity in the developed economies and to an abrupt slowdown in the emerging economies, followed by a very gradual recovery towards the end of the year...

Throughout 2008 Q4 and 2009 Q1, growth forecasts for 2009 for the developed and the emerging economies were revised down dramatically (see Chart 3.7). This reflects the intense adjustment in activity seen in 2008 Q4, which has had a significant impact on average growth in 2009, and the weak economic situation at the start of the year, as a result of the continued adverse interplay between the deterioration of the financial sector and the real economy. Thus, according to the leading international organisations' growth forecasts, world GDP will shrink by some 1.3% in 2009, the largest decline, at least, since the Second World War. This contraction is expected to be most profound in the developed economies, where it is estimated that GDP will fall by more than 3.5%, to be only partially offset by some of the emerging Asian economies (especially China and India), which should continue to post positive growth rates,



SOURCE: Consensus Forecasts.

a. Growth forecasts for 2009 issued as at the dates indicated on the horizontal axis.

albeit well short of those seen in 2008. The developed economies should start to see a timid recovery in activity by the end of 2009 or early 2010, recording positive quarter-on-quarter growth rates marking the start of a gradual recovery from the crisis. Nevertheless, these forecasts are shrouded in uncertainty and many risks remain.

... as the financial markets stabilise and private sector demand recovers

This outlook points to a gradual recovery in business and household confidence in financial institutions and to a severing of the interplay between the deterioration of the financial sector and the real economy. For this to happen, two conditions would seem necessary. First, that as a result of the financial sector support measures, progress is made in the reshaping, resizing and restructuring of financial institutions, and market stability enhanced. A sustainable recovery is most unlikely if no decisive steps are taken to reorganise the financial system on a solid base. Moreover, to trigger a recovery in activity, credit conditions will have to gradually improve and real estate market adjustment processes will have to be completed (in the United States, the real estate market adjustment was at the source of the deterioration of the bank balance sheets which began now more than three years ago). The second condition is that the economic stimulus measures taken be effective in sustaining demand and activity.

In any case, given the harm inflicted on the economy and the financial system, the recovery in growth is likely to be a very gradual process. This is generally the case when recessions are accompanied by a financial crisis, exacerbated, in this case, by the virtually global scale of the downturn. Moreover, the adverse effect of the crisis on growth potential worldwide is likely to be felt for a considerable time, not only because credit conditions will foreseeably be tighter than in the past, but also because of the possible decline in production capacity and productivity, as a result of the prolonged decline in investment and the long-term unemployment situation.

If the negative spiral between the financial sector and the real economy were to intensify, or the policy response were to prove less effective than expected, the outlook for recovery would be jeopardised

In short, the main risks to economic recovery in the developed countries in the short term are, first, that the above-mentioned negative spiral between the financial system, the real estate sector and the real economy becomes more acute again; and second, that the effectiveness of the support measures is impaired, due to adverse collateral effects on effective financing costs or market mechanisms, or if their impact on confidence ultimately disappears as they absorb more and more public funds.



In the case of the emerging economies, the recovery will hinge on a return to normal access to external financing

In the case of the emerging economies, there is a risk of a higher-than-expected decline in capital inflows, due to higher public sector borrowing in the industrialised countries (as a result of the bail-out plans and fiscal impulse measures), along with the generalised deleveraging process and the increase in home bias among investors. This risk is especially high in the economies that are most reliant on external financing, which have high external deficits and whose financial or corporate sectors have high borrowing requirements, as it would exacerbate the effects of the adjustment already under way in many of these countries.

More protectionism and fewer capital inflows are additional risk factors

More globally, the main risk is that the economic and financial adjustment, and in particular the measures taken from the different national perspectives, result in greater segmentation of the product and financial markets, marking a step backward in the process of economic and financial globalisation seen in recent decades. In this respect, it is important to reaffirm and put into practice the commitments assumed at the G20 summit meetings, to adopt a concerted approach to the crisis and to recovery from the crisis and to continue along the free trade road under the Doha round (see Box 3.3).

Global capital flows pose a further risk, since although global imbalances are diminishing, many countries still need to borrow extensively, and they may find it difficult to meet these needs against a backdrop of higher volatility on the financial markets and tighter credit conditions than in the past. This could affect not only the emerging economies but also the United States, where borrowing requirements are high, investors have suffered very substantial capital losses and the net international investment position has deteriorated significantly.

But there is no imminent risk of deflation

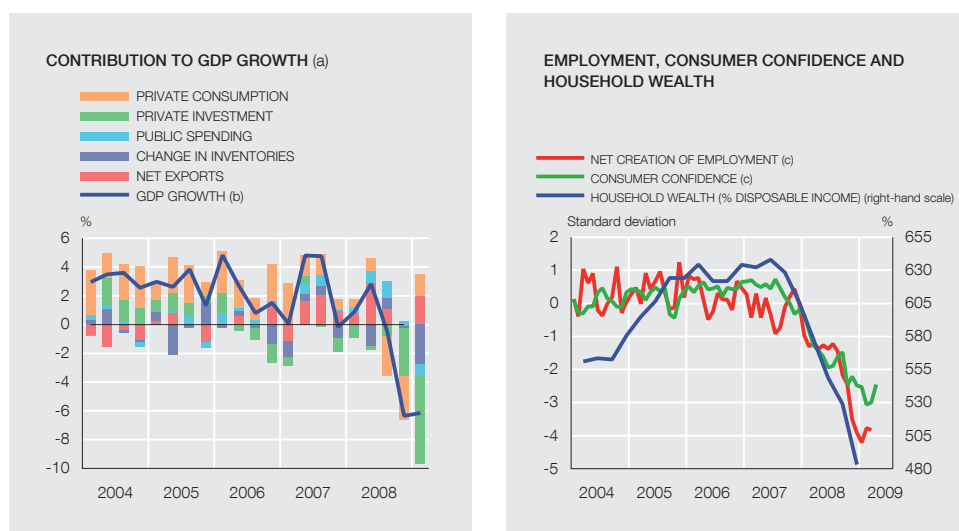
Lastly, as commodities prices and capacity utilisation decline, there is a possibility that some industrialised economies may post negative inflation rates in 2009. Nevertheless, this would not imply deflation, even if economic activity were to continue to contract for some time, provided that it was temporary and that medium- and long-term inflation expectations remained anchored around central bank targets, as has been the case up to the date of this report going to press.

The policies implemented to combat the crisis could have adverse effects in the medium term, if the monetary impulse is not withdrawn in time...

The scale of the economic and financial policies adopted may have undesirable consequences when the world economy recovers from the crisis. Accordingly, the implementation and subsequent withdrawal of the significant monetary impulse, which has helped limit the recession and sustain the financial markets, must be carefully calibrated, to prevent the risk of it being passed through to future inflation rates, undermining the anti-inflationary credibility of the central banks, or to real and financial asset prices, sowing the seeds for a new cycle of future financial excesses.

... or if public sector indebtedness proves unsustainable in the medium term

In addition, the substantial rise in public sector borrowing underlines the need to make fiscal discipline a priority in the medium term. In the short term, the fact that government bonds act as a safe haven in times of high uncertainty, the decline in wealth and the increase in the propensity to save in the private sector have meant that the growing fiscal imbalances are being funded at relatively low cost. But the huge increase in public debt depicted in Chart 3.6 generates concern as regards its sustainability, especially in economies with high debt ratios and whose public finances are under pressure due to population ageing. As the financial situation returns to normal, the increase in debt will eventually drive up long rates, thus adding to the pressure on the debt position.



SOURCES: National statistics, Datastream and Federal Reserve.

- a. Contributions to annualised quarterly GDP growth.
- b. Annualised quarterly rate of change.
- c. Normalised variable, measured as the difference between the variable and its historic average (since 1952 for employment and since 1969 for consumer confidence), expressed in standard deviations.

Growing State involvement in the functioning of some sectors may affect efficiency in the allocation of resources; this support should be withdrawn as and when circumstances permit

Growing State involvement, largely driven by the circumstances, in economic activity and in the financial sector also entails risks. In the medium term, State involvement beyond its traditional role could lead to efficiency losses in the allocation of resources. Moreover, public support for sectors in crisis may delay or even prevent necessary restructuring and resizing. Accordingly, when it comes to withdrawing public support, the economic policy response must be equally rapid, timely and decisive. Clearly the scale of the monetary stimulus measures will hinder their withdrawal, as will the difficulty in establishing precisely the right time for this withdrawal, in a situation in which potential growth rates may have declined, making it more difficult to assess the cyclical position, and in which the policy transmission mechanisms have changed significantly. The withdrawal may also be hindered by considerations unrelated to the economy, which means that it is important to design an exit strategy well in advance. In any case, the withdrawal of the current stimulus measures cannot signify a return to the situation prior to the crisis, as one of the essential lessons to be learnt from this crisis is that there must be much closer monitoring of financial imbalances – both national and global – and that the perimeter and scope of financial regulation and supervision must be extended and enhanced.

### 3 The main industrialised countries

#### 3.1 UNITED STATES

The US economy went into recession as a result of the profound adjustment in both the financial sector and the real economy

The US economy has deteriorated significantly since the end of 2007 (according to the National Bureau of Economic Research, it officially went into recession in December that year), despite recording positive quarter-on-quarter growth rates in 2008 Q1 (see Chart 3.8). Growth in 2008 overall amounted to 1.1% (the lowest annual rate of growth since 2001), down from 2% in 2007. The real estate sector adjustment, which has proved deeper and longer-lasting than was first expected, heightened the adverse interplay between house prices, financial asset quality and economic activity. In addition, consumer confidence and, consequently, private consumption have deteriorated in the face of declining consumer wealth and the weakening labour market (a net total of three million jobs were destroyed in 2008, half of these in Q4 alone, followed by two million more in 2009 Q1).

The signs of weakness became increasingly evident in 2008 H1, although the impact of the first fiscal stimulus plan – launched in February – and external demand support helped foster seemingly robust growth in this period. In 2008 Q3, however, GDP declined in quarter-on-quarter terms, before contracting sharply in 2008 Q4 (–6.3% in annualised terms) and in 2009 Q1 (–6.1% in annualised terms, on the preliminary estimate), as the deterioration of both the real economy and the financial sector heightened. While residential investment contracted throughout the year, consumption and non-residential investment weakened in 2008 H1, before collapsing in 2008 H2. External demand offset the fall in domestic demand up to the third quarter, but was subsequently dragged down by the sharp slump in international trade. As a result, the trade deficit narrowed to 4.8% of GDP in 2008 and the current account deficit closed the year at 4.7%, 0.6 pp less than in 2007.

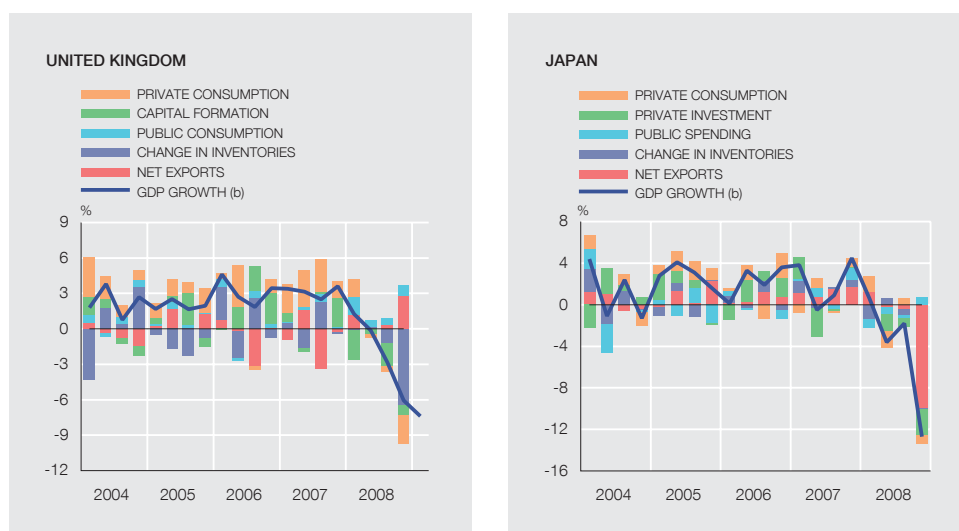
Inflation decelerated considerably in the second half of the year, posting negative rates by March 2009

Consumer prices rose by 3.8% in 2008 overall, in comparison with 2.9% in 2007, but the breakdown for the year reflects two very distinct halves. Thus, inflation rose gradually up to July, to peak at 5.6%, driven by energy and food prices, before declining sharply thereafter, as commodities prices collapsed, to negatives rates in March 2009. Core inflation remained relatively stable in 2008, at 2%-2.5% year-on-year, although it declined slightly at the beginning of 2009.

The economic policy measures adopted to halt the serious deterioration of the financial system and of economic activity were increasingly determined and decisive

The economic policy measures adopted to halt the serious deterioration of the financial system and of economic activity were increasingly determined and decisive and were closely coordinated between the Federal Reserve and the US Treasury, especially following the events of September. The Federal Reserve gradually eased its monetary policy stance, cutting the target federal funds rate from 4.25% at the beginning of the year to 2% in April, when it paused in light of the inflationary pressures. It then made further rate cuts in response to the severe financial crisis, down to a target range of 0%-0.25% in December 2008. Moreover, throughout the year the Federal Reserve gradually extended its liquidity-providing measures to a growing number of financial institutions. As from September, it began to use the asset side of its balance sheet to keep credit flowing in the economy and to keep the financial markets, including the money, commercial paper and mortgage securitisation markets, functioning. And in March 2009, in line with the new monetary policy approach, it began to purchase Treasury bonds to help reduce long-term borrowing costs.

The Treasury responded decisively to the deteriorating situation in the financial system. At the beginning of September, it took control of the government-sponsored enterprises Freddie Mac and Fannie Mae, recapitalising them. And then in October, faced with the risk of financial system collapse, it secured approval for the \$700 billion Troubled Assets Relief Program (TARP), originally designed to purchase toxic assets but whose funds were subsequently earmarked for recapitalisation and bail-out of financial institutions. This was followed, in 2009, by an integral plan to guarantee assets, recapitalise institutions and restructure banks' balance sheets, via a public-private initiative for purchase of problem loans and assets (see Box 3.1). State support targeted not only the financial sector, but also other economic sectors, fundamentally automobile manufacturing. Initiatives were also taken to facilitate the renegotiation of doubtful and impaired mortgage loans and the supply of mortgage credit. Lastly, in early 2009, a \$787 billion fiscal stimulus package was approved (representing 5.5% of GDP, of which 1.3% will be disbursed in 2009). As a result of the measures taken and of the deterioration in economic activity, the fiscal position worsened significantly in 2008: the budget deficit reached 6.1% of GDP in the year, against 2.9% in 2007, and gross public sector debt amounted to 70.5% of GDP, an increase of 7.4 pp on the previous year.



SOURCES: National statistics and Datastream.

a. Contributions to annualised quarterly GDP growth.  
b. Annualised quarterly rate of change.

The economic outlook for 2009 has worsened significantly; recovery would need to be preceded by stabilisation of the real estate market and recovery on the financial markets

The economic outlook for 2009 has worsened significantly due to the severe deterioration of the real economy, presaging not only a profound contraction but also a slow recovery that is not expected to start until H2. As at the date of this report going to press, the main international organisations expect GDP to shrink by more than 2.5% in 2009. A return to growth would need to be preceded by stabilisation of the real estate market and by a partial recovery in the functioning of the financial markets, although there is uncertainty regarding the effectiveness of the policies implemented. The risks remain on the downside, given the possibility of further difficulties in the financial system, or of a deeper adjustment in the residential sector or the labour market.

3.2 UNITED KINGDOM

The UK economy decelerated considerably in 2008, weighed down by domestic demand

The UK economy decelerated considerably in 2008, growing at a rate of 0.7%, in comparison with 3% a year earlier. Following low growth in Q1, activity contracted sharply as from Q2 (see Chart 3.9), to fall by 6.1% in annualised quarter-on-quarter terms in Q4 and, on the preliminary estimate, by 7.4% in annualised terms in 2009 Q1. There was a sharp deceleration in domestic demand, with a notable decline in gross capital formation and inventories. Private consumption was also weak, against a backdrop of credit market restrictions and falling property and financial asset prices. The intensity of the financial crisis in the United Kingdom, and the weight of this sector in the UK economy overall, also had an adverse impact on activity. By contrast, the contribution of external demand improved, as sterling depreciated and imports declined. As a result, the current account deficit fell back from 2.9% of GDP in 2007 to 1.7% in 2008.

Inflation rose for much of the year, and subsequently evidenced considerable downward stickiness, which conditioned the monetary policy response

Inflation rose for much of the year, to peak at 5.2% year-on-year in September, and subsequently evidenced considerable downward stickiness due, inter alia, to the depreciation of sterling. During the first half of the year, the rise in inflation conditioned official interest rates. However, as financial stress heightened as from September, the Bank of England launched a series of successive and far-reaching rate cuts which brought the base rate down from 5% to 0.5% – an all-time low – by March 2009. It also decided to pursue monetary expansion through higher liquidity provision and purchases of private financial instruments and Treasury bonds. Moreover, since October 2008, the UK government has introduced vari-

ous rescue measures for the banking sector, via guarantees for debt issues and bank assets, asset purchases by the Bank of England and recapitalisations of credit institutions facing grave solvency problems (see Box 3.1). As a result, the State has gained control over most of the capital of a growing number of banks. As regards fiscal policy, the 2009-2010 budget contained a fiscal stimulus package for households and SMEs worth 1.4% of GDP. This included a VAT rate cut, distinguishing it from the packages announced in other countries.

Activity is expected to contract notably in 2009

The outlook for 2009 points to a sharp contraction in GDP (around 4%), reflecting continued deterioration of domestic demand and the external economic climate. As regards policy measures, there is little room for manoeuvre, as the budget deficit will already be high in 2009 and further base rate cuts are virtually impossible. The main risks are on the downside, if the financial crisis proves deeper and longer-lasting than initially expected.

### 3.3 JAPAN

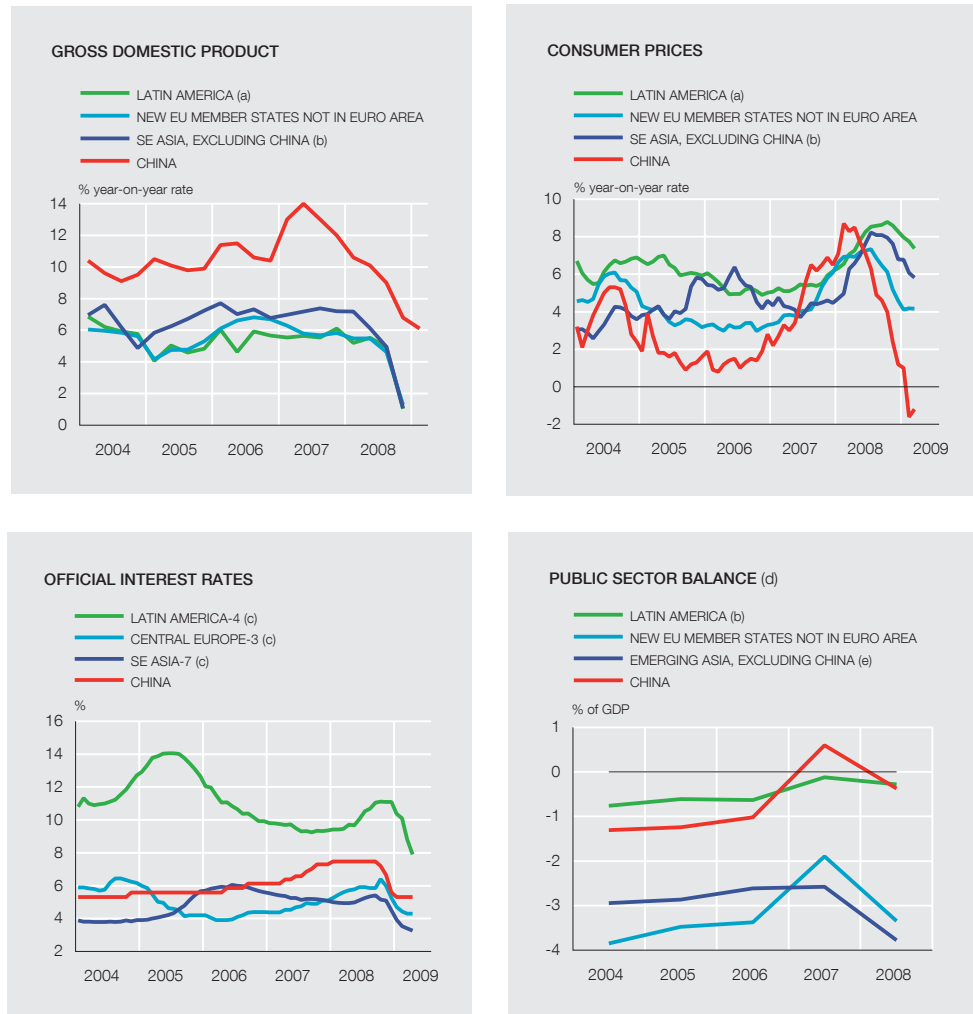
GDP contracted in Japan in 2008, dragged down by all its components and by the growing financial difficulties

The Japanese economy contracted by 0.6% in 2008, after growing by 2.4% in 2007, reflecting the sharp drop in private investment, sluggish private consumption and growing external demand weakness. Activity recorded negative rates of growth in quarter-on-quarter terms in 2008 Q2 and declined abruptly to 12.1% in annualised quarter-on-quarter terms in Q4 (see Chart 3.9), the sharpest fall in any of the developed economies. The progressive deterioration in financial conditions was particularly intense towards the end of the year, as the stock markets slumped, the yen appreciated and credit restrictions heightened. That prompted a loss of confidence and a sharp fall in expectations, which had an adverse impact on domestic demand. Moreover, by 2008 Q4 the sharp deceleration in the export sector had become an intense contraction and, as a result, the current account surplus declined to 3.2% of GDP in 2008, 1.6 pp lower than in 2007.

Inflation fluctuated in line with commodities and food prices and with developments in domestic demand. In July 2008, inflation peaked at 2.3% year-on-year; by March 2009 it had fallen to -0.3%. The GDP deflator and core CPI displayed latent deflationary tensions throughout the year. Up to September, the Bank of Japan held its interest rates unchanged at 0.5%, and monetary policy was marked by the dilemma between inflationary pressures in the overall index and the decline in activity. When the financial crisis intensified, spreading quickly to the real economy, the central bank made two rate cuts as from October, so that by December 2008 the official interest rate stood at 0.1%. At the same time, the Bank of Japan introduced measures to increase liquidity in domestic and foreign currency in the money markets, followed by initiatives designed to facilitate corporate financing, including purchases of debt and shares by the central bank. As regards fiscal policy, the economic and financial crisis put an end to the correction of the fiscal imbalance and the path of adjustment of public debt, which stood at -5.6% and 196.3% of GDP, respectively, at end-2008. Since September, the Japanese government has announced various economic stimulus plans, including mainly initiatives to support financial institutions and supply credit to SMEs, as well as smaller-scale fiscal measures (representing some 2.5% of GDP) designed to sustain household income and promote public investment and employment.

The outlook for 2009 points to a notable contraction in activity

The outlook for 2009 points to a profound contraction of around 6% in GDP. Considering the sharp deceleration in world trade, the high weight of the external sector hinders recovery, while the loss of confidence and the weak labour market make a recovery in investment and private consumption more difficult. The risks to this central scenario are on the downside, if the global slowdown were to intensify and, in particular, if it were to have a knock-on effect on China.



SOURCES: Datastream, IMF (WEO) and Banco de España.

a. Argentina, Brazil, Chile, Mexico, Colombia, Venezuela and Peru.

b. India, Singapore, Malaysia, South Korea, Indonesia, Thailand, Hong Kong, Taiwan and Philippines.

c. Areas analysed: SE Asia-7 (Malaysia, South Korea, Indonesia, Thailand, Hong Kong, Taiwan and Philippines), Central Europe-3 (Czech Republic, Hungary and Poland) and Latin America-4 (Brazil, Mexico, Chile and Colombia).

d. Percentage of GDP. Surplus (+) or deficit (-).

e. Country aggregate based on IMF (WEO) definition.

## 4 The emerging economies

### 4.1 CHINA AND THE REST OF ASIA

China proved relatively resilient in the face of the crisis, despite the deterioration in international trade and the real estate sector adjustment

The pace of economic growth decelerated to 7.7% in emerging Asia in 2008, in comparison with 10.6% in 2007, with a relatively strong performance in particular from China and India.

China's GDP grew by 9% in 2008, in comparison with 13% in 2007. Activity decelerated slightly in the first half of the year and then sharply in the second half, bringing year-on-year growth in 2009 Q1 to 6.1% (see Chart 3.10). This was attributable to sluggish domestic demand that was due, in turn, to the real estate sector adjustment and the effects of the deterioration in world trade. Nevertheless, external demand made a direct positive contribution to growth in 2008 (albeit smaller than in 2007), and the current account surplus rose to \$426 billion (9.8% of GDP), as imports adjusted to a greater extent than exports.

The rate of growth moderated in the other Asian economies, especially in those most reliant on external demand and international borrowing

The other main Asian economies recorded growth of 4.8% on average in 2008, in comparison with 7.2% in 2007. After a very strong Q1, economic growth decelerated gradually in Q2 and Q3, before slowing abruptly to a rate of 1.1% in Q4. The adjustment was especially intense in South Korea and in the more open and smaller economies, which went into recession as a result both of external and domestic demand (especially investment and private consumption), in a setting of weak employment and declining consumer and business confidence. This situation was exacerbated in 2008 Q4 by the sharp correction in trade flows (to which this region is particularly vulnerable as it is highly export-gearred), the collapse in confidence and tightening credit conditions.

Monetary policy responded to the sharp fluctuation in inflation, before being oriented, as from September, towards sustaining activity and mitigating the impact of the financial tensions

Monetary policy in the region tightened up to the summer to combat the growing inflationary pressures stemming from the rise in food and energy prices. As from September, the deterioration in activity and the decline in inflation – which was especially notable in China – prompted significant and generalised official interest rate cuts. Some countries, such as China, also reduced the bank reserve requirement and eliminated credit controls. Among the unconventional measures taken, some central banks introduced liquidity-providing instruments in local currency and dollars (in the case of South Korea and Singapore, with the backing of the Federal Reserve). As regards exchange rate policy, in July the Chinese authorities tacitly suspended the policy of sustained renminbi appreciation against the dollar, in light of the more unfavourable external demand outlook. In other countries, as repatriation of investments by non-residents in the closing months of 2008 and scant dollar liquidity prompted significant currency depreciation, a number of central banks intervened on the foreign exchange markets. Fiscal policies became expansive in 2008 H2, and were strengthened with support measures for the financial sector, albeit with varying degrees of scope and intensity from country to country. The Chinese and South Korean plans are the most extensive, representing an estimated 5.8% and 5.1%, respectively, of GDP in the period 2009-2010.

The outlook for 2009 envisages a sharp deceleration in growth

The outlook for 2009 envisages a contraction in many of the region's economies, especially in those that are most reliant on trade, with closer financial links and in most need of funds. China, which is expected to post growth in the order of 6.5%, and to a lesser extent India, could put up more resistance if the authorities manage to sustain domestic demand momentum. China's capacity to isolate itself from the external conditions will be key in the global scenario.

#### 4.2 LATIN AMERICA

Activity also decelerated in Latin America as from the summer; the turnaround in commodities prices was an added adjustment factor

In Latin America, aggregate GDP rose by 4.2% in 2008, in comparison with 5.7% in 2007. After three quarters of very strong and even higher-than-expected growth, activity decelerated sharply in Q4, placing some economies on the brink of recession. This was due, in part, to commodities prices – which continued to provide strong support for activity up to the summer, before subsequently heading downwards – and, as from September 2008, to the slump in external financing and global demand. In this setting, the trade surplus decreased considerably, initially as a result of strong imports and subsequently due to lower export prices, resulting in a current account deficit of 0.3% of GDP.

On average, consumer prices in the region accelerated up to October 2008, rising well above central bank targets, save in Brazil, so that inflation expectations eventually deteriorated. The monetary policy response was marked by significant interest rate hikes, in some cases in the wake of alternative measures taken to mitigate currency appreciation pressures. Inflation peaked at 8.9% in October, and began to decline gradually in the closing months of 2008, prompting most of the region's central banks to make successive sharp interest rate cuts – rather belatedly in comparison with the rest of the world – between December 2008 and April 2009. As from September the central banks were quick to react, providing dollar liquidity

to bring the money and foreign exchange markets back onto a normal footing and prevent the risk of a credit freeze. This response was possible, in many cases, due to the volume of international reserves built up in recent years, in addition to the dollar credit facilities granted to a number of countries by the Federal Reserve in October and subsequently by the IMF. In this setting, most of the region's economies tried to introduce counter-cyclical fiscal policies, although these varied from country to country and were generally quite small in scale. The decline in State revenue as a result of the correction in commodities prices and external financing conditions limited the fiscal room for manoeuvre.

The outlook for 2009 points to a contraction in activity throughout the region

The outlook for 2009 points to a contraction in activity of around 1.5% throughout the region. In the present circumstances, the difficulties in covering net borrowing, which will grow due to the prospect of a higher current account deficit, may act as a constraint on economic growth.

#### 4.3 THE NEW EU MEMBER STATES

The impact of the global financial crisis was particularly intense in the new EU Member States, due to their high exposure to external financing

In the new EU Member States, GDP decelerated sharply in 2008. On average it grew by 4.1%, in comparison with 5.9% in 2007, as a result of the adverse impact of the global financial crisis on the availability and the cost of financing. This was especially the case in these countries and in some of their neighbours, such as Russia and Ukraine, due to their high exposure to external financing in foreign currency. That led to a significant adjustment in domestic demand, just as external demand – especially from the euro area – was also deteriorating. In 2008 the Baltic States and Hungary went into recession, while the rest of the region's economies slowed more gradually. On average, the current account deficit declined slightly, to 7.9% of GDP, with a particularly significant adjustment in the Baltic States.

Inflation rose to 6.5% on average in 2008, in comparison with 4.4% in 2007, but it declined across the board as from July, as a result of the drop in commodities prices and the economic slowdown, prompting gradual monetary easing throughout the region. In the fiscal sphere, public finances deteriorated – save in Bulgaria and Hungary – due to the impact of the slowdown, while the budget deficit for the region overall rose from 1.9% of GDP in 2007 to 3.3% in 2008.

The policy response was constrained by external financing restrictions and some countries resorted to international financial aid packages

In response to the financial crisis, the authorities adopted a series of support measures for the banking sector, including extended deposit guarantees and, in some cases, recapitalisations and guarantees for bank debt. Moreover, in light of their foreign currency liquidity problems, Hungary, Poland and Latvia had to apply to other central banks for help (via swap facilities with the Swiss National Bank and the Swedish and Danish central banks, and repo transactions with the ECB), while some of the countries in greater need of external financing had to apply for financial aid packages – conditional upon fiscal adjustment and financial sector restructuring plans – from the international financial organisations and the European Union.

Slovakia joined the euro area on 1 January 2009. Within the Exchange Rate Mechanism (ERM II), the Latvian lats underwent intense depreciation pressure, especially as from September, trading at the lower limit of its fluctuation band of  $\pm 1\%$ . Exchange rates in Lithuania and Estonia, both with pegs to the euro, remained stable, despite the financial tensions. The currencies not participating in ERM II depreciated considerably against the euro in 2008 H2 and, more intensely so, in the opening months of 2009.

The outlook points to a decline in activity and high risks in the financial sphere

The outlook for 2009 has deteriorated substantially and the region faces particularly high risks associated with possible financing difficulties. GDP will foreseeably decline significantly in the Baltic States and in Hungary, while activity in the other economies is expected to slow considerably.



#### 4 THE EURO AREA AND THE COMMON MONETARY POLICY

## The euro area and the common monetary policy

### **1 Economic conditions in the euro area**

Economic developments in the euro area in 2008 continued to be influenced by the international financial instability. The further tightening of financial conditions and the considerable weakening in the external environment, in a climate of diminishing confidence and growing uncertainty, brought about a recessionary situation which was exacerbated in late 2008 and early 2009 following the heightening of the global financial crisis in the autumn. The notable deterioration in the situation during the year was reflected in public and private agencies' forecasts, which successively and substantially revised expected growth for 2009 downwards and set back the prospects of recovery, as analysed in Box 4.1.

Inflation in the euro area also turned around considerably in the course of the year. In mid-2008 prices were posting growth close to 4%, an unprecedented rate since the start of EMU and the result of dearer oil, food and other non-energy commodities. However, the weakness of global economic activity in the second half of the year contracted the demand for commodities and prompted a downturn in their prices. This, combined with the change in the economy's cyclical position, gave rise in the closing months of 2008 and early months of 2009 to a marked reduction in inflation and to a substantial downward revision of medium-term inflationary expectations.

This radical change in economic outlook was reflected in monetary policy measures, which focused from the autumn on preventing the disinflationary process in which the euro area was immersed from translating into inflation rates persistently below the medium-term price stability target. Thus, the ECB Governing Council decided from October on successive cuts to its official interest rate, taking it to 1% in May 2009. In parallel, the ECB made its liquidity provision policy more flexible in response to the heightening of the financial crisis, as detailed in Box 4.2.

The remaining strands of economic policy also adapted during the year to the change in cyclical conditions, and unprecedented measures were implemented in the closing months in all areas and, in some cases, as part of an internationally concerted move. Faced with worsening financial tensions, the euro area governments, in addition to bailing out certain systemic institutions, designed comprehensive plans to support the financial system. At the same time, and given the recessionary economic outlook, governments approved an ambitious economic recovery plan in December to ensure financial stability and counter the risks of a feedback loop between the worsening real economy and the financial tensions. The plans encompassed fiscal stimulus measures, structural reform and improved credit supply for the most vulnerable groups. At present, it is extraordinarily difficult to assess the effectiveness of these plans in stimulating demand in the short run. In any event, the strong impact the crisis is exerting on the euro area countries' public finances, combined with the commitments associated with population ageing and the increase in contingent liabilities derived from the financial bail-out plans, poses the need to ensure that the sustainability of public finances is not called into question. That will require firm budgetary consolidation commitments that allow a return to compliance with medium-term objectives once the current situation is overcome.

Despite all these measures, the prospects for growth are very unfavourable. On the latest estimates from public- and private-sector agencies, a sharp contraction in GDP for 2009 and a very gradual recovery in activity during the following year are projected, based largely on these economic policy initiatives. The scenario of recovery will be subject to downside risks arising essentially from the difficulties of containing the feedback loop between economic activity and

During 2008 and, especially from the autumn, the international financial crisis worsened considerably and became a global one. The real effects of the turmoil were felt in Europe with some delay, but they became evident in the second half of 2008. The year ended with the euro area economy deep in recession, and the level of GDP in Q4 was more than 1% below that a year earlier. The deterioration in the economic situation over the course of the year, and the way it intensified in the final stretch of 2008, were reflected in the successive downward revisions of growth expectations by public and private agencies.

As Panel 1 shows, in the first half of 2008 the projections of the main international organisations and of private analysts for 2009 were only moderately down (by 0.5 pp) to around 1.5%, while for 2010 an increase of close to 2% was envisaged. Underpinning this relatively favourable outlook was the expectation that the international financial crisis would not be of such a size as to deeply affect an economy such as that of the euro area, which had solid fundamentals thanks to the soundness of households' and companies' finances, the virtual non-existence of the subprime segment in its mortgage market

and the greater weight of trade with regions which at that point seemed less exposed.

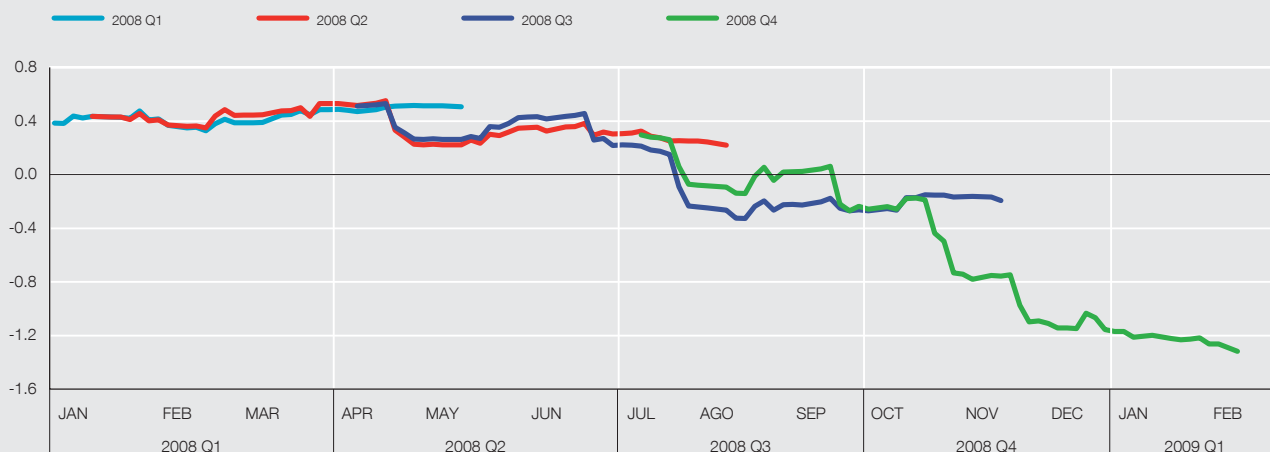
During the summer months, the build-up of unfavourable conjunctural data generated some doubts about the true scale of the turmoil and the capacity of the euro area to withstand it, which led to further, moderately downward revisions of projections for the whole forecasting horizon. However, the escalation of the financial crisis in September demonstrated its depth and global nature, and the potential of contagion to the real economy, which entailed a significant change in growth expectations. In November and December, the estimate for 2009 turned clearly negative, although it was still expected that the recovery would take place in the second half of that year. Finally, following the collapse of all conjunctural indicators in early 2009, the projections for that year sank and recovery was put back to late 2010.

To illustrate how the progressive deterioration in the economic situation during 2008 affected the revision of the growth outlook, Panel 2 shows the changes in the real-time forecasting of growth in euro area

1 PROJECTIONS FOR 2009 AND 2010



2 RTE MODEL ESTIMATES OF EURO AREA QUARTER-ON-QUARTER GDP GROWTH



SOURCES: Consensus, European Commission, Eurobarometer, IMF, OECD and SPF.

activity by the EUROSTING model.<sup>1</sup> This model predicts euro area GDP on the basis of nine indicators, four of which are survey-based, while the other five refer to quantitative variables. The projection is made up to six weeks ahead of the publication of the National Accounts figure. More specifically, Panel 2 shows the (almost) daily changes in the EUROSTING projections for each quarter of the year 2008. Each point of these lines reflects the projection of the GDP flash estimate for the quarter in question with all the information available up to that day.

According to this model, the economic situation in the euro area during the first half of 2008 was relatively favourable, with an estimated increase for Q1 close to potential, and somewhat less for

Q2 and Q3. The first sign of deterioration in the economic situation came about in late July, when the first indicators available for Q3 reduced the projection for this period to below  $-0.2\%$ . This more unfavourable perception was confirmed with the release on 14 August of a decline in GDP of  $-0.2\%$  for Q2, which was a negative surprise since both the model and most analysts had estimated slightly positive growth. This fall in activity, combined with that expected by the model for Q3, placed the euro area in a virtual situation of technical recession. Following the bankruptcy of Lehman Brothers in late September and, above all, as the indicators relating to the closing three months of the year came to light, the model affirmed the sheer depth and scale of the recession in the euro area. The estimation of growth for Q4 progressively collapsed with each new figure, from values close to zero in late September to below  $-1\%$  in mid-November. At that time EUROSTING was one of the models offering a more unfavourable view, but it was however outdone by the figure released by EUROSTAT.

1. M. Camacho and G. Pérez-Quirós (2008), *Introducing the EURO-STING: Short-Term Indicator of euro area Growth*, Working Paper no. 0807, Banco de España.

the behaviour of the financial markets. Against this background, inflation would hold at a very low level over a long period of time.

#### 1.1 ACTIVITY AND EMPLOYMENT

Economic developments in the euro area were determined by the worsening of the financial crisis...

Set against the international financial instability and the progressive weakening of the world economy, euro area GDP showed a continuous loss of momentum during 2008 which intensified late in the year and ran into the opening months of 2009. Output posted negative rates of change from Q2 and ended the year with a quarter-on-quarter decline of  $-1.6\%$ , a rate not seen since the 70s (see Table 4.1). This translated into growth of  $0.7\%$  in annual average terms, almost 2 pp down on the 2007 figure.

... which, through various channels, affected both euro area internal demand...

The financial crisis affected economic activity through various channels. As explained in section 3, the strong rise in credit premia raised the cost of financing through loans, securities and debt issues. Banks adjusted their lending standards to the new economic environment, which meant these standards duly tightened. Further, the crisis caused a loss in household real and financial wealth and prompted a decline in corporate earnings, a strong increase in uncertainty and a deterioration in expectations about future activity and employment. All these developments eroded business and consumer confidence, causing private productive investment and private consumption decisions to be deferred and saving to rise, which notably weakened internal demand (see Chart 4.1). Households also held back their spending on residential investment, which compounded the real estate adjustment process that certain countries in the area had embarked upon and led to a slowdown in credit for house purchases.

... and external demand

Another propagation channel whose significance grew as the financial crisis became more pronounced and global was the trade channel, with trade flows showing a gradual deterioration. That gave rise to a stagnation of euro area exports in mid-2008, to which the appreciation of the euro in the first half of the year also contributed, and to a sharp subsequent fall (see Table 4.1). In turn, the moderation of internal demand led imports to trend similarly, albeit with a less marked decline, which prompted a deterioration in the contribution of the net external balance to GDP growth.

	2006	2007	2008	2008			
				Q1	Q2	Q3	Q4
<b>DEMAND AND OUTPUT</b>							
Gross domestic product	3.0	2.6	0.7	0.7	-0.3	-0.3	-1.6
Private consumption	2.1	1.6	0.3	0.0	-0.3	0.1	-0.3
Government consumption	1.8	2.2	2.0	0.4	0.9	0.6	0.4
Gross fixed capital formation	5.9	4.3	-0.2	1.0	-1.3	-0.7	-4.0
— Non-residential private investment	6.4	5.5	1.4	1.0	-0.7	-0.9	-1.8
— Residential investment	6.7	1.4	-3.4	1.1	-3.0	-2.2	-2.5
— Public investment	1.0	3.2	3.0	2.3	-0.8	0.4	0.5
Exports	8.5	5.9	1.1	1.5	-0.2	-0.2	-6.7
Final demand	4.5	3.4	0.8	0.8	-0.3	0.2	-2.6
Imports	8.3	5.3	1.2	1.1	-0.5	1.3	-4.7
Contributions to GDP growth (b)							
Domestic demand	2.8	2.3	0.6	0.3	-0.3	0.0	-1.0
Change in stocks	0.1	0.1	0.1	0.2	-0.1	0.3	0.3
External demand	0.2	0.3	0.0	0.2	0.1	-0.7	-1.0
<b>PRICES AND COSTS (c)</b>							
Consumer prices (annual average)	2.2	2.1	3.3	3.4	3.6	3.8	2.3
Final demand deflator	2.4	2.0	2.6	2.7	2.9	3.1	1.8
GDP deflator	2.0	2.3	2.3	2.2	2.3	2.3	2.4
Unit labour costs	0.8	1.7	3.3	2.4	2.8	3.4	4.5
Compensation per employee	2.2	2.5	3.2	3.1	3.2	3.4	3.0
Labour productivity	1.4	0.8	-0.1	0.6	0.3	0.0	-1.4
<b>GENERAL GOVERNMENT (d)</b>							
Total expenditure	46.7	46.1	46.7				
Current expenditure	42.9	42.3	42.9				
— Interest payments	2.9	3.0	3.0				
Public investment	2.5	2.6	2.5				
Total revenue	45.4	45.5	44.8				
Primary deficit (-) / surplus (+)	1.6	2.3	1.1				
Deficit (-) / surplus (+)	-1.3	-0.7	-1.9				
<b>LABOUR MARKET</b>							
Total employment	1.6	1.8	0.8	0.3	0.1	-0.1	-0.3
Unemployment (e)	8.3	7.4	7.5	7.2	7.3	7.5	8.0
<b>BALANCE OF PAYMENTS (d)</b>							
Current account	0.0	0.2	-0.9	-0.7	-1.3	-0.9	-0.9

SOURCES: ECB, European Commission and *OECD Economic Outlook*.

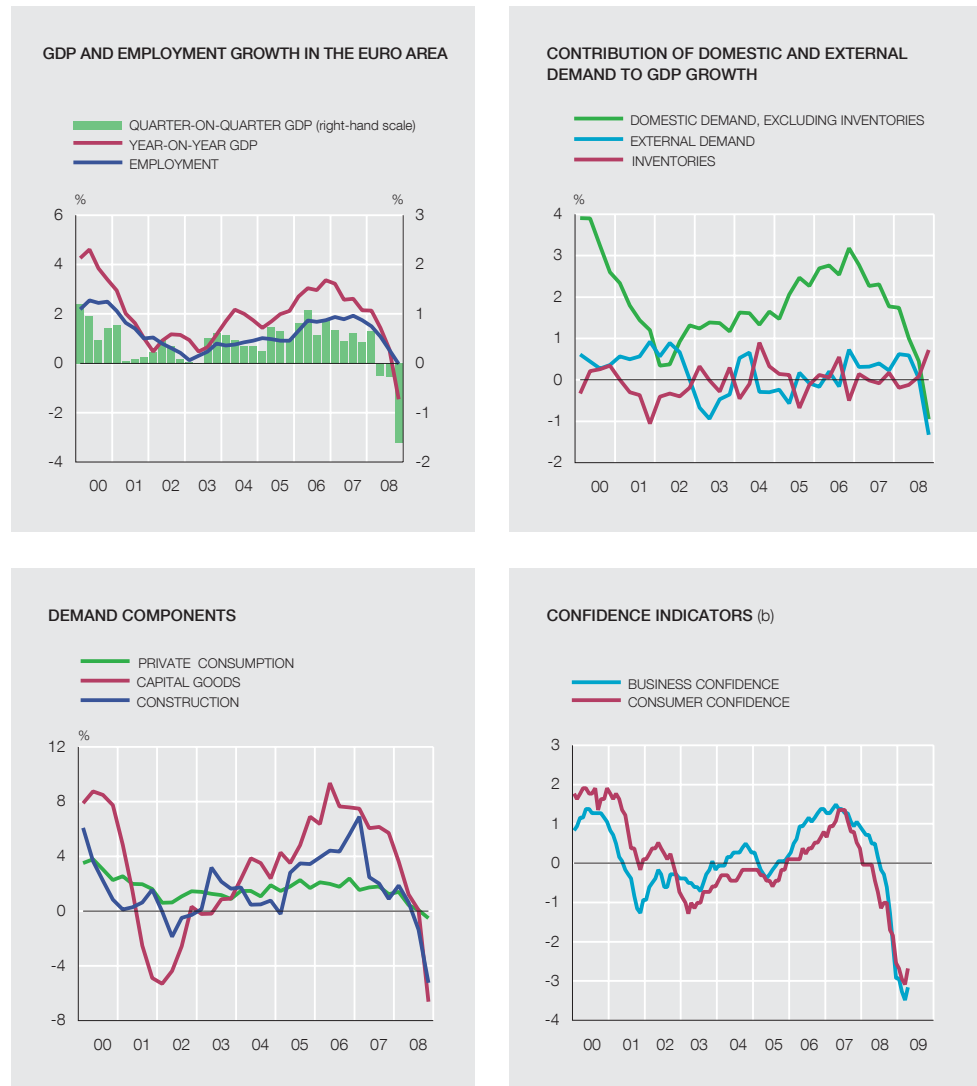
- a. Quarter-on-quarter rates, unless otherwise indicated.  
b. Percentage points of the percentage change in GDP.  
c. Year-on-year rates.  
d. As a percentage of GDP.  
e. As a percentage of the labour force.

Action by the general government sector and the ECB mitigated the deterioration in activity

Action by the general government sector and the ECB contributed to sustaining expenditure. In the case of the former, this was through an increase in government consumption and public investment, the activation of the automatic stabilisers and the adoption of a broad raft of measures in the second half of the year; and in the case of the ECB, through a rapid and substantial cut in interest rates from October.

The recession spread to most productive branches...

On the supply side, the weakening in activity passed through to all the productive branches, with the sole exception of non-market services. Declines in value added were sooner and sharper in the construction and manufacturing industries, and only late in the year did they reach market services.



SOURCES: ECB, European Commission, OECD and Banco de España.

a. Annual percentage changes, unless otherwise specified.  
 b. Balance statistic. Normalised series.

... and adversely affected employment and productivity

After two years of very high growth, the employment generation process was interrupted in the second half of the year, making way for a decline in employment in Q3 and Q4 which continued into the opening months of 2009. That made for a substantial rise in the unemployment rate, from 7.3% in January 2008 to 8.9% in March 2009. Overall, the adjustment in employment was less than that in value added, whereby apparent labour productivity progressively slowed, to the point of posting negative rates of change and evidencing procyclical behaviour (see Chart 4.3).

Virtually all the euro area countries felt the impact of the recession

From Q2, almost all the euro area Member States experienced a significant decline in activity, although there were significant differences in terms both of the scale of the decline and its composition. The biggest reductions in output were in Germany and Italy, essentially as a result of the performance of the German net external balance and of Italian domestic demand. In the countries with the sharpest contractions in domestic demand and employment, mainly Spain and Ireland, the strong adjustment in imports prompted a more moderate decline in GDP.

The short-term outlook is negative, while in the medium term economic policy conduct is expected to be conducive to a progressive recovery in activity

The global, synchronised and deep-seated nature of the crisis augurs a prolongation of the recession in the euro area for some quarters more, followed by a gradual recovery in activity underpinned by several factors: the favourable effects of the financial system support plans on financing conditions; the sharp easing in monetary policy in the euro area and in the rest of the world; and the strongly expansionary nature of the fiscal authorities' aggregate demand stimulus plans, coupled with the effect of the automatic stabilisers. Further, the downward effect on consumer prices of the notable decline in commodities prices acts as an impulse to real household income. The effect of all these factors should enable the deterioration in confidence, demand and production to be contained, and later be propitious, into 2010, to a gradual economic recovery in the euro area. Nonetheless, this recovery scenario is subject to a high degree of uncertainty and the risks are on the downside, owing to the difficulty of stopping the feedback loop between the financial markets and real activity. Additional risk factors relate to the introduction of protectionist measures and to the possibility that the very duration of the uncertainty may force changes in economic agents' decision-making that entail not only the deferral of spending, but also a downward change in its permanent component.

## 1.2 PRICES AND COSTS

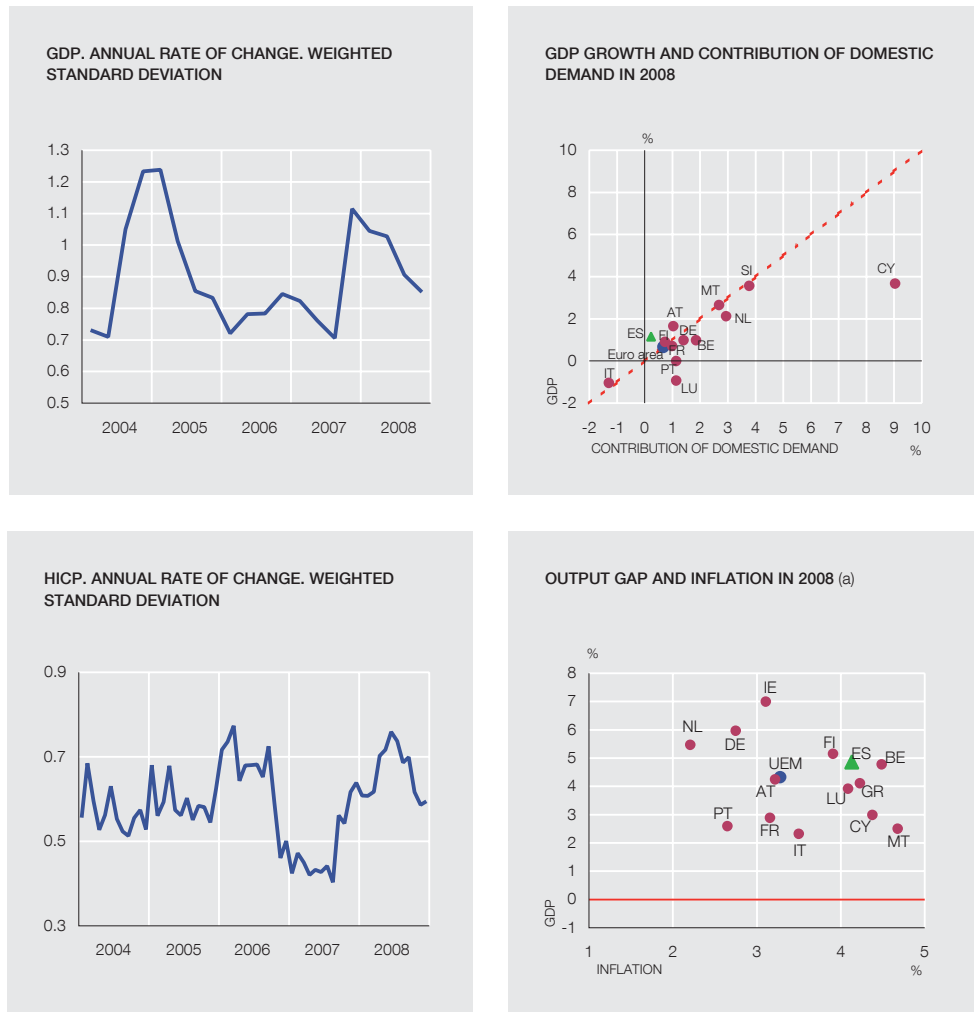
Commodities prices influenced the behaviour of consumer prices

Inflation changed substantially during 2008. Over the year as a whole, the growth of the harmonised index of consumer prices (HICP) stood at 3.3%, peaking at 4% in July (the highest rate since the start of EMU) owing to the effect on its energy and food components of the rise in commodities prices on international markets. Thereafter, by contrast, the weakening of global activity began to have a negative bearing on commodities prices, which translated into a sharp reduction in inflation. However, the rate of change of the prices of the less volatile components of the HICP – non-energy industrial goods and services – held relatively stable in 2008 and in the opening months of 2009.

During 2008 and to date in 2009, the year-on-year rate of change of the HICP moved on a similar trend in all countries in the euro area, although marked differences were seen in the intensity of the acceleration and subsequent slowdown in inflation. That resulted in an initial increase in the dispersion of inflation rates within the area, followed by a decrease (see Chart 4.2). Essentially, this was a consequence of the different response of energy goods prices to dearer oil and other fuels, owing to the differing degree of energy dependence and to the welter of indirect taxation and price-setting arrangements for these goods.

Wages accelerated and business margins contracted, interrupting the trend observed in previous years

Wages accelerated substantially, as a result of the application of wage settlements reached at the end of the previous upturn, characterised by the high degree of labour utilisation (as attested by the historically low unemployment rate), which brought to an end the wage restraint prevailing in previous years. The growth of real wages outpaced labour productivity, giving rise to an increase in the wage share in total income, following a long period of progressive reduction (see Chart 4.3). Further, the loss of momentum in apparent labour productivity, combined with the increase in compensation per employee, led to a rise in unit labour costs. The decline in business margins – which, in annual average terms, had not been seen since 1997 – enabled the effect of wage costs on final prices (proxied by the GDP deflator) to be cushioned. Initially, the reduction in margins may have been attributable to the relative decrease in the demand for goods whose consumption is of a more discretionary nature, given the increase in spending on staple consumer products (food and energy goods), caused by the increase in the prices and the low price elasticity that characterises the demand for them. The subsequent steepening of the decline in margins may be explained by the generalised weakening in demand.



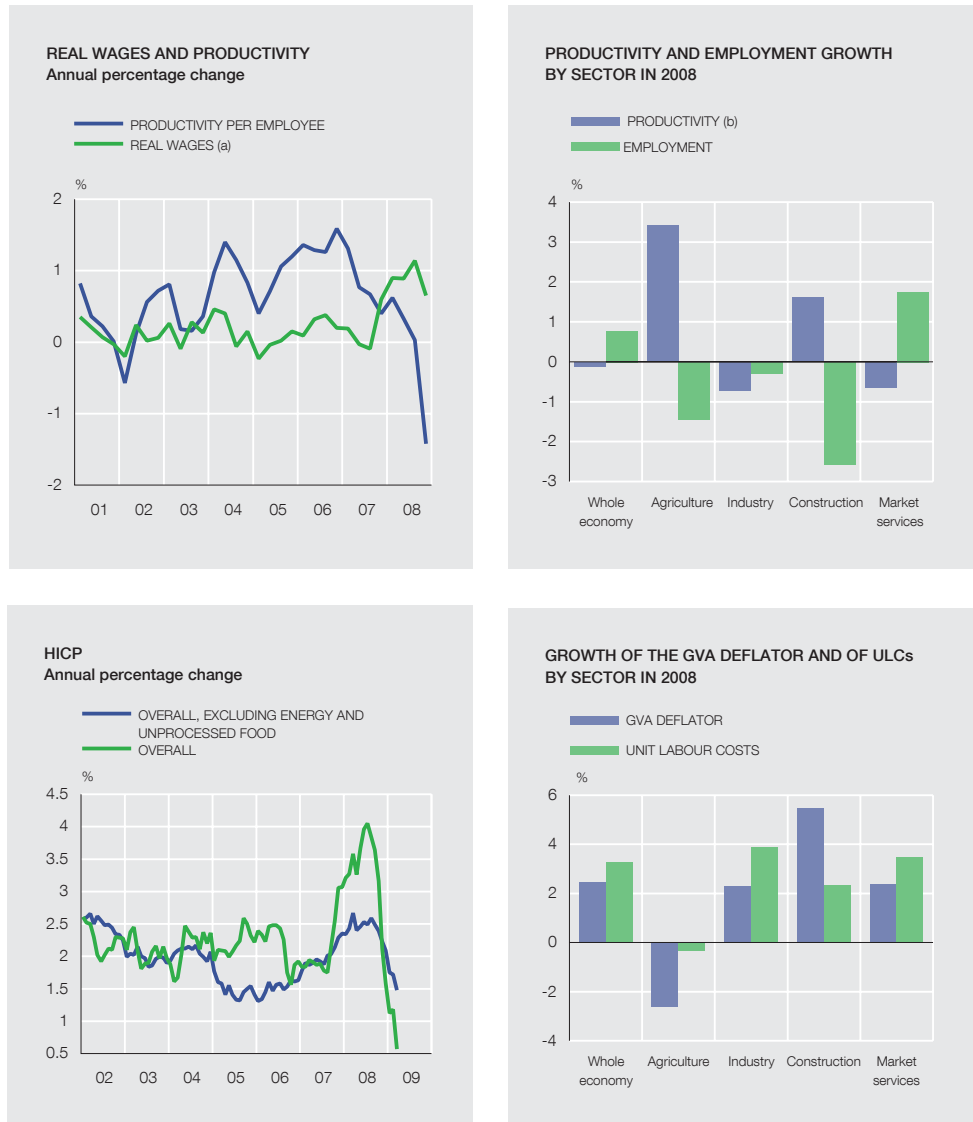
SOURCES: European Commission, Eurostat and Banco de España.

a. The output gap is defined as the difference between actual and potential GDP, as a percentage of potential GDP. European Commission estimates.

Inflation is expected to hold at a low – and even slightly negative – level, although there are both downside and upside risks to these expectations

Current forecasts point to inflation holding at a low level into 2010, which might turn negative around mid-2009, as a result of several factors: the decline in the cost of commodities; diminished wage pressures, linked in turn to the lower growth of consumer prices and to the weakness of the labour market; and greater competition, associated with the fall in demand and with overcapacity. That inflation expectations continue to be anchored at levels compatible with price stability reduces the risk of more unfavourable and extreme scenarios materialising, although marked uncertainty persists over the future course of activity, feeding through logically to that of prices. On one hand, a sharper-than-expected fall-off in demand would raise the present low risks of deflation. But on the other, a swifter-than-expected recovery in aggregate spending, set against the foreseeable reduction in the economy's growth potential – linked to the decline in investment and in employment – and the pursuit of expansionary policies, might lead to a rise in inflation.





SOURCES: ECB, Eurostat and national statistics.

a. Difference between the change in compensation per employee and the GDP deflator.

b. Difference between the change in GDP and employment for the whole economy, and between the change in GVA and employment for the various sectors.

## 2 Economic policies

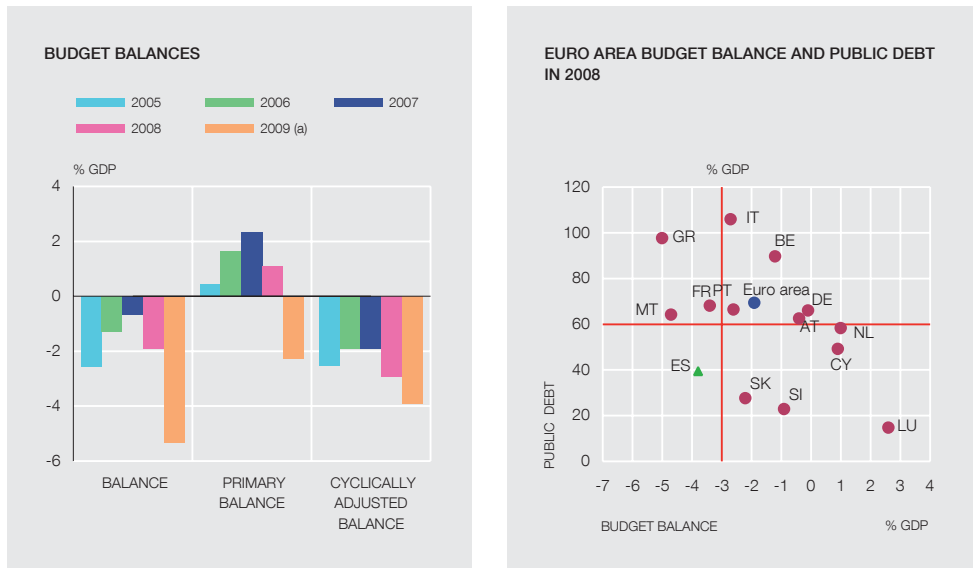
### 2.1 FISCAL POLICY

The financial crisis is strongly impacting euro area countries' public finances

As part of the European Plan for Economic Recovery, demand-stimulating discretionary fiscal measures were adopted...

Fiscal policy in the euro area was influenced by the change in macroeconomic conditions observed in the second half of the year, which led the economic authorities to adopt exceptional measures aimed at stabilising financial markets, easing the rapid deterioration in activity and restoring confidence.

Most euro area countries introduced demand-stimulating discretionary measures from the autumn, in line with the objectives of the European Plan for Economic Recovery approved at the European Council summit on 12 December 2008. The plans unveiled to date amount overall to the equivalent of 1.1% of the area's GDP in 2009 (and 0.8% in 2010), with significant differences from country to country regarding both the scale and the composition of the response. Generally, the scale of the measures has been commensurate with the margin for manoeuvre available in each case, with such measures proving more ambitious in Germany



SOURCE: European Commission.

a. EC forecasts.

and relatively moderate in France and Italy. As to the instruments involved, the programmes combine tax cuts and, above all, increases in public spending that tend to concentrate their effects on the groups and sectors most affected by the crisis. Finally, most of these measures have a temporary impact on public finances, although permanent rebates have been introduced into social security contributions and personal income tax in some countries. In any event, the exceptional situation that the euro area and the global economies face means that it is very difficult to assess the ultimate effectiveness of the fiscal impulse adopted (see Box 1.3).

... along with financial system support plans, which are having a high budgetary impact

The seriousness of the crisis also advised adopting sizeable financial system support plans, to avert the risk of certain systemic banks collapsing and to prevent an excessive adjustment of credit supply (see Box 1.1). From the standpoint of public finances, the public capital injections and asset purchases by governments in the period to April 2009 have had a limited impact on the deficit, but they could account for approximately 3 pp of public debt. The risks associated with guarantees of debt issues, which have notably increased general government “contingent” liabilities (by an amount close to 18% of GDP), must also be added to this.

Activation of the automatic stabilisers

Further adding to the foregoing was the activation of the automatic stabilisers. In Europe, and unlike in the United States, these are relatively powerful and are prompting an increase in spending on social benefits and a decline in tax revenue.

Consequently, in 2008 and 2009 there will have been a very sharp deterioration in fiscal balances and in public debt...

As a result of these developments, and on European Commission estimates, the euro area budget deficit stood at 1.9% of GDP in 2008, more than 1 pp up on the previous year. It is expected to rise to 5.3% of GDP in 2009, the highest level seen since 1996. The impact of the business cycle would account for 0.3 pp of the increase in the deficit seen in 2008, and for 2.4 pp in 2009, although these estimates may be subject to significant revisions since the uncertainty over the scale of the output gap and over the sensitivity of certain items to the business cycle is now extraordinarily high. Of particular note is the disappearance of revenue linked to the real estate market boom and to the rise in the value of financial assets, which in recent years contributed decisively to the budgetary improvements in various countries. Public debt rose to 69.3% of GDP in 2008 (3.3 pp up on the previous year) and might draw close to 78% in 2009 (see Chart 4.4).

... across the board

Most euro area countries in 2008 posted a deterioration in their budgetary balances compared with their estimates in the end-2007 stability programmes, which were framed in a much more favourable macroeconomic scenario than at present. The latest projections for 2009 suggest that this year 13 Member States will run a deficit of more than 3%, exceeding 6% in the cases of Spain, France, Ireland and Portugal.

The European Commission has opened an excessive deficit procedure in the case of several countries, applying the margins of flexibility laid down in the SGP

In this setting, the European Commission decided in February 2009 to initiate the excessive deficit procedure envisaged in the so-called “dissuasive arm” of the Stability and Growth Pact (SGP) for those countries whose deficit exceeded 3% of GDP in 2008: France, Spain, Ireland, Greece and Malta. The European Council reaffirmed that the Pact continues to provide an appropriate regulatory framework for the coordination of EU countries’ budgetary policies and that it would apply the margins of flexibility introduced by the 2005 reform in respect of the periods laid down to correct excessive deficits and of the possibility of avoiding sanctions in exceptional circumstances. Indeed, France and Spain have until 2012, and Ireland until 2013, to bring their deficits below 3%.

There is a need to ensure the sustainability of public finances in the medium and long term

The magnitude of the crisis warranted adopting far-reaching measures to stabilise the financial system and stimulate demand, as agreed by the governments of the G20. But the budgetary impact of these measures is proving high, against a background in which the commitments arising from population ageing are compounded by the strong repercussions that the decline in asset prices is exerting on private pension schemes and public pension reserves. This poses new challenges and needs.

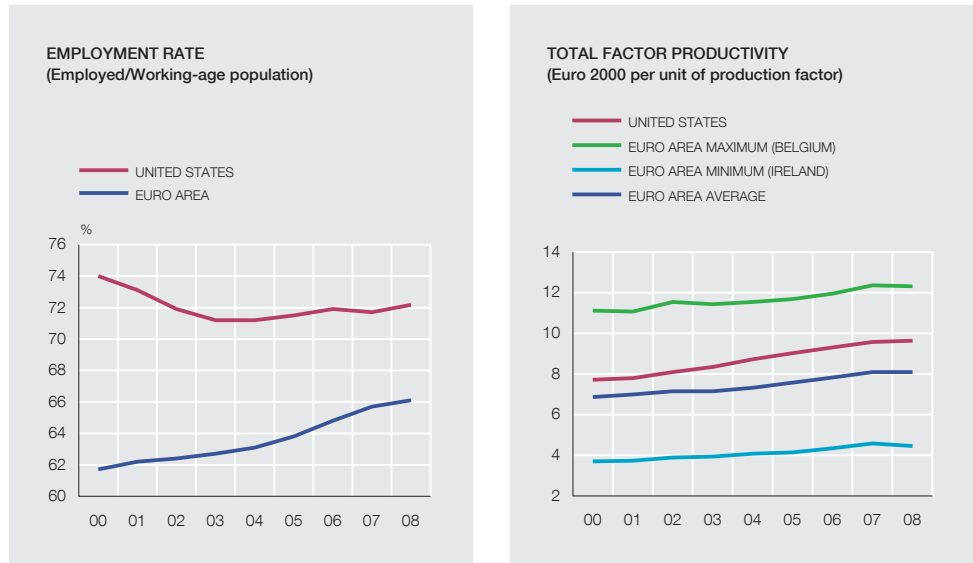
Accordingly, one of the main challenges the economic authorities currently face is to maintain confidence in the sustainability of public finances, so as to avert possible increases in long-term interest rates that would ultimately lessen the effectiveness of fiscal responses. In this connection it is necessary to lay down firm budgetary consolidation commitments and to resume compliance with the medium-term objectives established in the SGP as soon as possible. Further, these efforts must be consistent with maintaining the quality of public finances, preventing spending cuts from affecting those items which have most influence on long-term growth (such as spending on R&D and on education). Finally, it is essential to increase the degree of policy coordination and not to succumb to protectionist temptations, so that the measures adopted should not distort competition conditions and the functioning of the single European market.

## 2.2 STRUCTURAL POLICIES

To ensure a rapid and sustained recovery, progress on the structural reform of the economy must continue

The consequences of the financial crisis, by inhibiting business investment and the participation in the labour market of certain groups, may continue for some time and affect the economy’s growth potential in the medium term. Accordingly, although the economic policy response has focused on action aimed at averting the risks of financial collapse and at alleviating the recession, it is essential to increase the flexibility and efficiency of the euro area in order to pave the way for new investment opportunities and to retain the incentives for active job search.

With this rationale, the European Plan for Economic Recovery, along with the aforementioned fiscal stimulus measures, emphasised the need to make further headway with reforms in order to attain the medium and long-term targets set in the Lisbon strategy. In particular, it is vital in the current circumstances to make labour markets more flexible so as to contain the employment adjustment, without forsaking the social protection of the groups most affected by the crisis; to promote entrepreneurial initiative and improve access to funding for small and medium-sized enterprises (SMEs); to foment innovation and knowledge with a view to redirecting productive activity towards sectors with higher value added; and, ultimately, to foster competition, especially in services.



SOURCES: Eurostat and Banco de España.

Most euro area countries introduced measures to ease the adjustment of labour markets

The pace of job creation was drastically corrected in late 2008 and the European Commission's projections suggest that the unemployment rate might exceed 11% in 2010. The employment rate held virtually stable (at around 66%) in 2008, far from the level of 70% set as a target in the Lisbon Agenda for 2010. This marked the interruption of a period of continuous advances in the use of the labour factor, to which the favourable economic conditions had proved conducive, as had too the labour market reforms tackled by most Member States in recent years centred on the strategy of "flexicurity", which concurrently promotes labour market flexibility, the protection of unemployed workers and active employment policies (see Chart 4.5).

Along these lines, practically all national economic recovery plans included employment-promoting measures. Most countries increased the funds for improving public services geared to assisting in job-search and training for the unemployed. Some governments also expedited their plans to reduce the "tax wedge" – the difference between the gross wage cost borne by the employer and the net wage received by the employee – by means of cuts to the social security contributions paid by workers and employers and to income tax, generally targeting the lowest-paid population segments. To the fore, however, were the initiatives allowing working hours to be more flexible while the crisis persisted, without terminating the contractual relationship. Overall, all these measures contrasted with those in the past, which sought to alleviate the employment adjustment by resorting to early retirements or to an increase in public-sector employment, and which ultimately exerted an unwanted effect on participation rates and public finances.

And headway was made in lifting barriers to worker mobility

At the European level, there were efforts to increase worker mobility, with the approval of the European Qualifications Framework in April 2008, which provides for the comparison of student and worker levels of qualification in the different Member States, although there are still considerable restrictions as far as pension and welfare benefit transfers are concerned.

It is essential to eliminate the barriers to hiring so as to avoid a deterioration in the incentives to participate in the labour market and a rise in structural unemployment

The progress in *flexicurity* has placed the euro area as a whole in a better position to face the crisis. But generally, few countries have embarked on reforms to employment protection legislation, which regulates the hiring and firing of workers. Accordingly, the weight of the adjustment is likely to fall mainly on workers with a temporary contract and on those groups with greater difficulties finding a job when the market is less dynamic (such as youths and elderly

workers). At present, then, it is all the more necessary to further the reform of labour markets through the lowering of barriers to new hires and through boosting training and labour re-insertion policies in order to increase economies' adjustment capacity and to smooth the transition of workers to new jobs that arise after the crisis. The overriding challenge is that the social protection mechanisms being activated should not weaken the incentive to participate actively in the labour market. It is also important to eliminate rigidities in wage bargaining systems that prevent wages from adapting more rapidly to companies' situation, as reflected by the fact that, in 2008 Q4, wage settlements increased by 3.6% in the euro area as a whole, the highest rate seen since 1995.

The euro area's degree of efficiency has scarcely improved in recent years

The increase in labour utilisation in recent years has not been accompanied, however, by a substantial improvement in the economy's degree of efficiency. This is depicted in Chart 4.5, which shows total factor productivity for the euro area and for the United States. This illustrates the need for greater efforts in creating a sufficiently competitive business environment and for incorporating technological advances into productive processes.

Headway in incorporating technological progress and knowledge into productive processes has been limited

The insufficiency of the effort made is particularly notable in the case of innovation and knowledge. Specifically, the latest indicators show advances in the spread of the information society to households and in the availability of sources of funding for innovation (venture capital funds) (see Table 4.2). Nonetheless, research and development expenditure by the economy as a whole has yet to take off and remains rooted at 1.9% of GDP, far from the target of 3% set in the Lisbon strategy for 2010. Of particular significance is the lag vis-à-vis the United States in the effort in R&D conducted and financed by companies, the reflection of which is limited weight in the technology-intensive sectors with greater expansion potential. During 2008, the Commission set in train several initiatives in an attempt to move towards the creation of the European Research Space, promoting the international mobility of researchers, the reform of higher education to improve university performance and greater co-operation among research centres, universities and companies. But greater efforts are still needed by the Member States to eliminate the barriers to innovation, to smooth the passage of funding to innovative companies and to improve intellectual property regulations.

In the case of education, although the proportion of the population with higher studies has increased in recent years, rising to 21.3% of the working-age population in 2008 (5 pp up on the 2000 figure), the early school leavers rate remains high, and the quality and attractiveness of vocational training systems are insufficient.

The lowering of administrative barriers continues at a sound pace

In contrast to the foregoing, the progress made in promoting entrepreneurship and in improving the business environment are proving notable. During 2008 most Member States and the European Commission undertook projects geared to identifying and reducing the administrative and regulatory burdens that block the creation and expansion of companies. Moreover, bearing in mind the importance of SMEs (they account for 99% of total EU companies and for 70% of employment), the European Parliament approved the so-called "Small Business Act" in December 2008, establishing maximum periods for the creation of companies (one week, compared with the current 16 days) and for obtaining business permits and licences. Proposals are also included to foment the entrepreneurial spirit of SMEs, and to improve their innovation drive and openness to international markets. However, greater effort is still needed in simplifying accounting requirements and, especially, in improving SMEs' access to funding sources; after administrative barriers, the lack of financing is the obstacle most frequently mentioned by companies among the factors restricting their expansion, even in the period prior to the financial crisis breaking. Boosting the development of specialised institutions, such

	2000		LATEST DATA		LATEST DATA
	EURO AREA	EURO AREA/US US = 100	EURO AREA	EURO AREA/US US = 100	
<b>GDP PER CAPITA AND COMPONENTS</b>					
GDP per capita (€ 1000 current ppp)	21.6	71.9	27.4	72.2	2008
Population aged 15-64 / Total population	67.2	101.5	66.5	98.9	2008
Employment rate	61.7	83.4	66.1	91.6	2008
Unemployment rate	8.3	207.5	7.5	129.3	2008
Total factor productivity	6.9	89.0	8.1	84.0	2008
<b>TECHNOLOGICAL LEVEL</b>					
Spending on R&D/GDP	1.8	67.4	1.9	71.3	2007
Spending on private R&D/GDP (EU 15) (a)	1.2	65.0	1.2	62.7	2007
Triadic patents per million inhabitants	29.5	57.5	29.9	56.2	2006
ICT spending per capita	1,153.7	34.9	2,242.6	65.6	2007
Broadband penetration per hundred inhabitants	0.4	16.9	21.9	100.4	2007
Venture capital in the early stages of the investment	0.1	22.9	0.0	60.6	2007
<b>QUALITY OF HUMAN CAPITAL</b>					
Public expenditure on education / GDP	4.5	77.7	5.3	100.2	2005
Private expenditure on education / GDP	0.6	24.7	0.6	25.0	2005
<i>Labour force with tertiary education</i>	22.1	63.4	24.0	40.1	2005
<i>Labour force with secondary education</i>	43.4	84.2	38.7	128.6	2005
<i>Labour force with primary education</i>	33.8	247.0	36.2	362.4	2005
Graduates in science and technology (EU 15)	10.0	103.1	12.8	124.3	2006
Continuous learning	5.4	—	8.4	—	2007
<b>BUSINESS ENVIRONMENT</b>					
Business start-up cost (% of GDP pc) (b)	9.6	1,371.9	7.6	1,090.9	2008
Time to start a business (days) (b)	46.3	772.4	16.6	277.3	2008
<b>ENERGETIC EFFICIENCY</b>					
Energy intensity of the economy (EU 15)	185.6	55.5	179.0	61.5	2006
Electricity generated by renewable sources (%) (EU 15)	14.6	—	15.3	—	2005

SOURCES: Eurostat, OECD, World Bank and Banco de España.

a. The series for spending on private R&D starts in 2002.

b. The series for business environment starts in 2004.

as venture capital companies and other individual investors (business angels), will contribute to lessening this limitation.

The implementation of the Services Directive might entail new employment opportunities and diminish the persistence of inflation in these activities

As regards promoting competition and strengthening the single market, one of the key features of the current recession is the downward stickiness being shown by services inflation in the euro area, despite the slowdown in the demand for services. Accordingly, the full implementation of the Services Directive envisaged for December 2009 is one of the cornerstones of the European reform strategy. To date, the Member States have conducted an exhaustive analysis of the national and territorial legislation that must be amended to eliminate the barriers to the international provision of services and to freedom of establishment. Progress can also be seen in the establishment of single windows, whose aim is to simplify companies' administrative formalities. But at present it is difficult to determine whether the transposition of the Directive is moving at the appropriate pace, since the most demanding phase must be implemented in the course of 2009. Moreover, there are some professional services for which the regulation is restrictive, and these have been left outside the scope of the Directive. It should further be said that there is still room to reinforce competition in certain network industries, such as electricity and gas, where progress must be made towards the effective segregation of production and distribution and where price regulation must be eliminated, and also in railway transport and in retail trade.

Far-reaching regulatory changes are needed in financial markets

Turning to the financial markets, the current circumstances have highlighted numerous shortcomings in financial regulation and supervisory arrangements. To palliate these deficiencies, European institutions are developing a series of plans and measures consistent with the guidelines agreed internationally (Financial Stability Forum and G20), the ultimate aims of which are to increase the transparency of financial reporting systems so as to raise supervisory capacity and improve risk assessment and investor protection. Also under discussion are reforms to reduce the procyclicality of the financial system, an increase in capital requirements, and changes in the regulation of risk rating agencies and of hedge funds (see Box 3.3).

A plan was approved in 2008 to increase energy efficiency and combat climate change

The high commodities prices prevailing until mid-2008 and the emergence of discrete problems in energy supply highlighted the importance of promoting energy efficiency and diversifying supply sources, as envisaged in European energy policy objectives. Along these lines, on 17 December the European Parliament approved the "Climate Change and Energy" package, which makes a commitment to lowering greenhouse gas emissions, along with a series of measures aimed at reducing energy consumption and at promoting the use of renewable energies. To attain these objectives, it will be necessary to develop interconnection infrastructures with energy-producing countries, to improve the functioning of the emission rights exchange system and, above all, to prevent the most environmentally respectful European companies facing competitive disadvantages. In that connection, headway must be made in the international coordination of policies to combat climate change at the Copenhagen summit in December 2009.

### **3 The common monetary policy and monetary and financial conditions in the euro area**

#### **3.1 MONETARY POLICY DECISIONS**

The outlook for monetary policy in the first half of 2008 was particularly complex

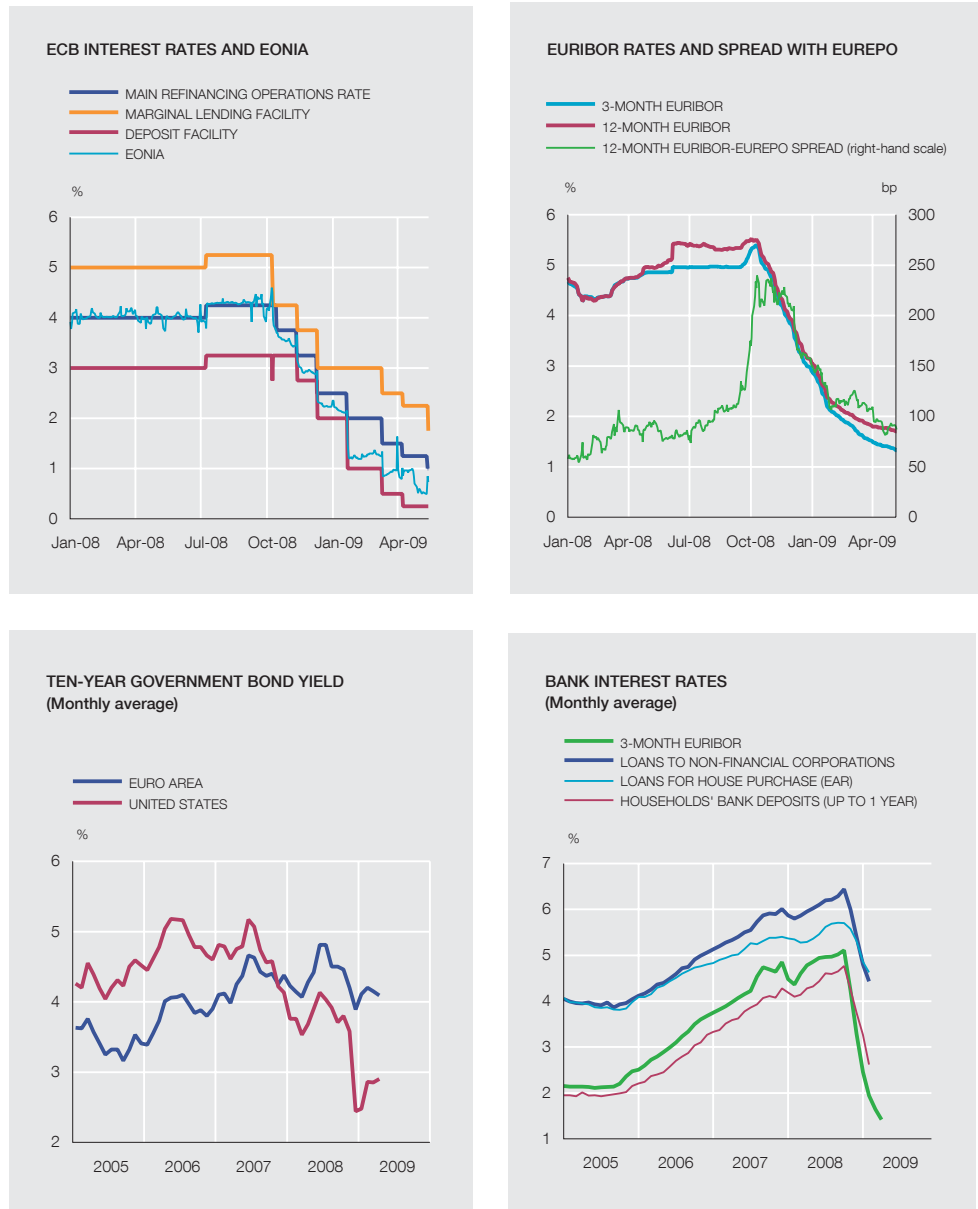
During the first half of 2008 the outlook for monetary policy was particularly complex: on one side there were notable inflationary pressures derived from the cumulative increase in oil prices, and, on the other, contractionary risks stemming from the continuing strains on financial markets. As regards prices, the HICP grew at a year-on-year rate of over 3% from the start of the year and the analyses available projected a persistent deviation of above 2%. Further, the capacity utilisation indicators did not ease off and wages were increasing at a high rate. Against this background it was essential to ensure that medium and long-term inflation expectations remained at levels compatible with the price stability objective and that second-round effects did not emerge. In turn, the continuing financial tensions shaped more restrictive financing conditions than the level inferred by official rates, which exerted a contractionary effect on expenditure. Despite the fact that the high risk premia on markets were sustaining rising bank rates and that the Bank Lending Survey pointed to a progressive contraction in supply, the credit aggregates remained relatively robust. Moreover, as elsewhere indicated in this Report (see Box 4.1), the indicators of activity did not reflect until after the summer that the economy was moving into a sluggish phase as is today evident.

In July the ECB decided to raise its official rate by 25 bp while continuing to apply a policy of ample liquidity provision

In these circumstances, the ECB Governing Council held its official interest rate at 4% until mid-2008 (see Chart 4.6). In July, when the risks to inflation became more perceptible, it raised its intervention rate by 25 bp in order to ensure that medium and long-term inflation expectations remained anchored. These decisions combined with the continuation of a sufficiently accommodating liquidity injection policy which, as explained in Box 4.2, allowed euro area credit institutions' greater needs to be met and sought to ease the tensions prompted by the market dysfunctions.

From September, the change in the economic and price scenarios gave rise to a rapid easing in monetary policy and to added flexibility in the operational framework

From September, the deterioration in the growth scenario and the disappearance of the upside risks to price stability led to a full turnaround in the monetary policy stance. Hence, in October, a rapid process of easing began, starting with a cut in rates of 50 bp as part of a concerted and unprecedented action by the main central banks of the more developed economies. This decision was followed by further cuts, some of which on a sizeable scale (75 bp in December),



SOURCE: ECB.

which took the main refinancing operations rate to 1% in May 2009, a level not seen since the ECB was created. Also, as explained in detail in Box 4.2, the seriousness of the crisis required that the flexibility of the ECB's operational framework be harnessed to expand the supply of liquidity.

3.2 FINANCIAL DEVELOPMENTS IN THE EURO AREA

Financial conditions tightened and some markets showed very high volatility

The worsening of the financial crisis in September

Financial conditions in the euro area became more restricted during 2008, as a result of the rise in the cost of financing, stricter credit standards and the loss in value of assets. Capital and foreign exchange markets also showed very high volatility, particularly in the last quarter of the year.

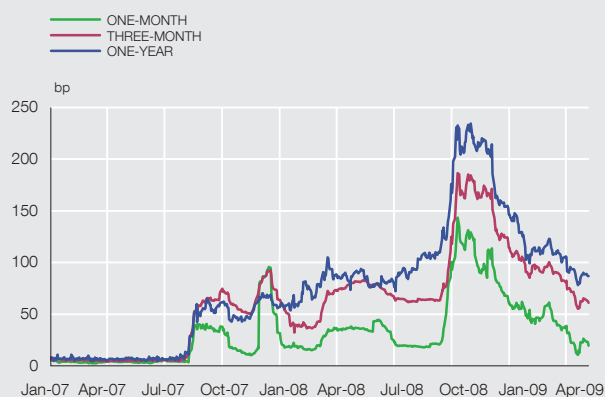
The worsening of tensions in the international financial system towards the end of the summer swiftly spread to the euro area, to the extent that several systemic institutions – such as Dexia,



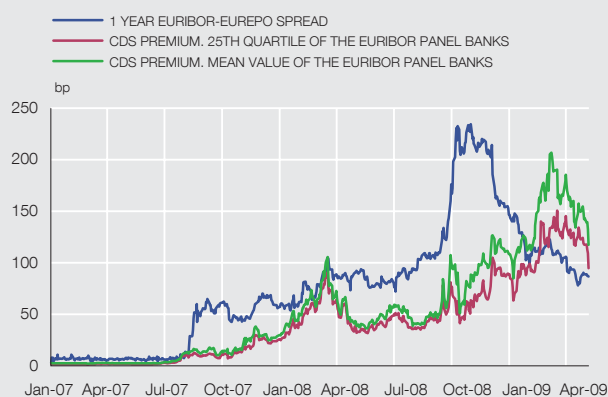
The international financial crisis that broke in the summer of 2007 had one of its most visible and immediate effects in the interbank markets. The change in the perception of credit risk in the banking sector and greater liquidity needs attributable to the precautionary motive were reflected in a substantial increase in the risk premia incorporated into EURIBOR-EUREPO spreads, and in a drastic reduction in activity in non-collateralised forward transactions. As

Panels 1 and 2 show, these difficulties persisted in 2008 and 2009, and such a lengthy period of malfunctioning interbank markets is proving unprecedented. Moreover, the intensity of events heightened during specific high-tension episodes, such as the close of the year 2007, the collapse of Bear Stearns in March 2008 and, most notably and persistently, the bankruptcy of Lehman Brothers in September.

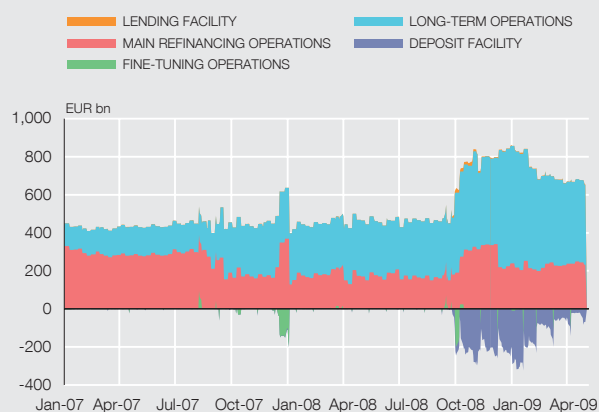
1 EURIBOR/EUREPO SPREAD



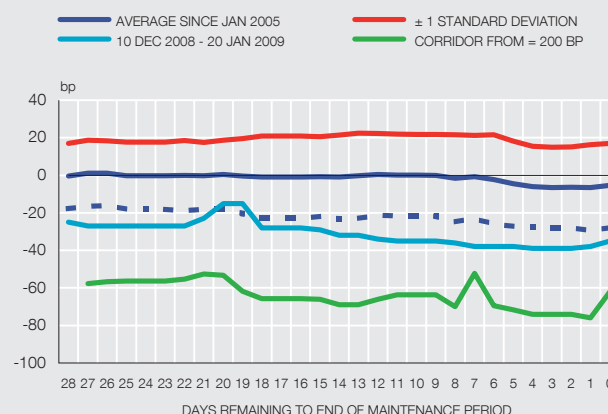
2 TWELVE-MONTH INTERBANK CREDIT RISK PREMIA



3 LIQUIDITY SUPPLY



4 EONIA-MRO SPREAD



5 ECB BALANCE SHEET. TOTAL ASSETS



6 DEPOSIT FACILITY (a)



SOURCES: Datastream and ECB.

a. The period between the broken vertical lines coincides with the reduction of the marginal facilities corridor to 100 bp.

The importance of the interbank market in monetary policy transmission meant that further flexibility had to be added to the liquidity provision policy during 2008. To September, the measures introduced in 2007 were extended and reinforced without having to modify the operational framework. Firstly, banks' preference to satisfy reserve requirements in advance continued to be catered for, this being reflected in a greater supply of liquidity at the start of maintenance periods. Secondly, the number of supplementary three-month injection operations was increased, and additional six-month operations were added, further stretching out the maturity of the funding granted. Lastly, to meet banks' dollar requirements, the provision of funds in this currency was broadened by means of TAF (term auction facility) operations, extending the agreement with the US Federal Reserve.

The worsening of the crisis in September 2008 meant that the 12-month EURIBOR-EUREPO spread – which is a measure of the risk premium incorporated into the EURIBOR – surged to over 200 bp. This affirmation of the fact that the interbank market had ceased to function as an efficient interbank liquidity distribution mechanism led the ECB to take far-reaching measures, satisfying the gross liquidity requirements of the system and introducing modifications into its operational framework that would substantially increase the size of its balance sheet.

In particular, the traditional variable-rate auction system was replaced by a fixed-rate, full allotment procedure, which entailed giving up control of quantities. The change was applied to regular auctions, both weekly and LTRO (longer-term refinancing operations), effective at least until after the close of 2009, and also to forward operations in dollars. Also, the spread between the deposit facility and the marginal lending facility interest rates was narrowed to 100 bp. Furthermore, longer-term financing continued to be reinforced, by means of the rollover of the LTROs that were maturing and the introduction of new ones, so that at end-2008 LTROs accounted for more than 75% of the total funds lent in euro (see Panel 3). Adding to these measures were new liquidity-injection operations in dollars, with seven-day auctions supplementing the existing 28- and 84-day auctions, and the possibility of conducting currency swaps. Likewise, following an agreement with the Swiss central bank, liquidity in Swiss francs was provided, via swaps, initially at seven days and subsequently at 84 days, too. Finally, in the event of a shortage of collateral to resort to such a broad supply of liquidity, the ECB increased the list of eligible instruments, adding lower-graded securities (up to BBB– excluding asset-backed bonds), bond issues by

credit institutions including certificates of deposit, negotiable subordinated debt and foreign-currency-denominated assets provided that they are issued and settled in the euro area.

Reflecting the situation of abundant liquidity was the tendency of the EONIA to stand systematically below the weekly tender rate, at a much greater distance as from January, when the spread between the marginal facility rates was restored to 200 bp (see Panel 4). In fact, from October the full allotment of applications in the weekly tenders came to replace the role of the credit facility, which has effectively shifted the ceiling for the EONIA rate.

As a result of these decisions, the ECB balance sheet increased considerably. Relative to the situation as at mid-2007, the ECB's assets grew by around 70%, accounting for around €800 billion or 8% of euro area GDP (see Panel 5). However, the net provision of liquidity was lower because surplus funds were not placed in the market; rather, banks made use of the deposit facility (see Panel 6). Encouraging this drainage mechanism was the reduction in the spread between this facility and the main refinancing operations. To restrict this practice, the facilities corridor was restored in January, which has contributed to the contraction of the balance sheet since mid-February (along with lower demand for refinancing in dollars).

In sum, the worsening of the international financial crisis in 2008 required, as in other parts of the world, an unprecedented adaptation of liquidity provision systems. The ECB's interventions contributed to alleviating the financial strains derived from the drying up of wholesale funding markets. However, these support measures, while necessary, have an inherently limited capacity to resolve the fundamental problems of confidence and attitude towards risk that continue to stifle the sound functioning of markets. Accordingly, interbank spreads and the indicators of credit risk in the banking sector have held at relatively high levels, despite falling gradually from their October highs.

At the ECB Governing Council meeting on 7 May 2009, when it cut its main refinancing operations rate to 1%, it also narrowed the corridor between the marginal lending facility and deposit facility rates from 200 bp to 150 bp and held the interest rate of the latter facility at 0.25%. In parallel, it announced the introduction of three new liquidity-injecting operations at as term of twelve months, and the broadening of non-standard measures to encompass the purchase of covered bonds issued by euro area banks.

necessitated extraordinary action by the ECB and by governments, which launched financial system support plans within an agreed framework of common principles

Fortis and Hypo Real Estate – had to be bailed out, and the ensuing alarm became manifest in large-scale demand for cash. These episodes and the high uncertainty over the strength of financial institutions' balance sheets prompted, as in other parts of the world, sharp downward reactions in asset prices and a heightening of financing problems. Action by the ECB and the launching of ambitious national support plans averted any far-reaching consequences, but high risk premia and tighter lending standards remained in place even in early 2009, despite the fact that banks gradually passed through official interest-rate cuts to their customers. The national financial system support plans, referred to in other sections of this Report, had

amounts equivalent to more than 20% of euro area GDP assigned to them. Moreover, they were to some extent coordinated by the framework of common principles agreed by the Eurogroup on 12 October, with the aim of contributing to the greater effectiveness of the measures and avoiding potential distortions to competition. To maintain the flow of loans to the economy, some countries – including Germany, France, Spain and Ireland – made their measures conditional upon banks' expanding their supply of credit. This initiative was complemented in December with the European Commission's adoption of a framework of temporary measures (to 2010) to directly stimulate credit as part of the European Economic Recovery Plan.

The interbank market was particularly affected by the crisis, with the EURIBOR containing high risk premia that peaked in October

Capital market dysfunctions were most apparent in the interbank market, where there was an enormous reduction in activity, particularly in non-collateralised longer-dated operations. Reflecting this situation, EURIBOR rates throughout the year contained very high risk premia which rose at the times of the greatest financial instability, exceeding 200 bp at their peak in October. Thereafter, risk premia gradually declined, falling to levels similar to those prevailing before the bankruptcy of Lehman Brothers. This reduction and, above all, the sharp easing in monetary policy resulted in a notable decline in the three-month EURIBOR, which fell below 1.5% in April, down from over 5% in October 2008.

Public debt continued to be a safe haven and the spreads between sovereign bonds widened

Sovereign bonds acted as a safe-haven asset during the greatest bouts of financial turmoil, giving rise to wide fluctuations in their returns. Over the year as a whole, 10-year rates in the euro area declined moderately to close to 4%, which entailed a widening of the negative spread relative to US rates, where a sharper fall was observed. As the year unfolded, the prospect of lower growth in the economy and in prices coupled with the easing of monetary policy exerted downward pressure on long-term rates, while the foreseeable deterioration in public finances stemming from the fiscal stimulus and financial support packages tended to raise the cost of public debt issues. Indeed, sovereign bond spreads in the euro area over the German benchmark bond widened substantially and remain at a high level, which reflects the increase in credit risk premia and also a greater preference for liquidity (see Box 6.2).

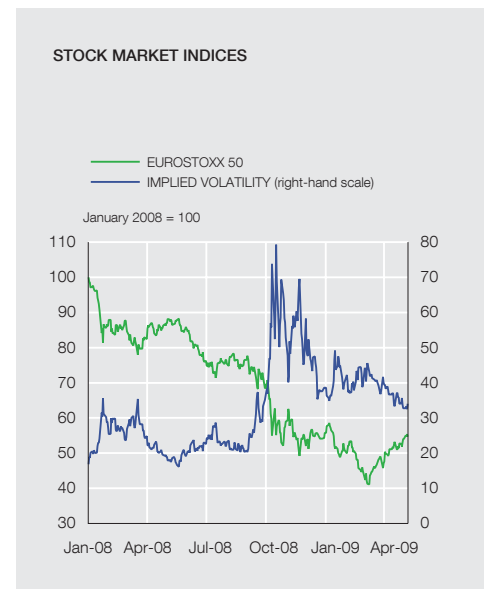
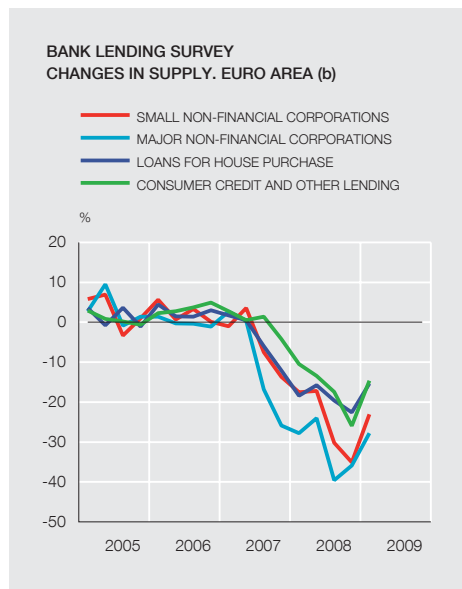
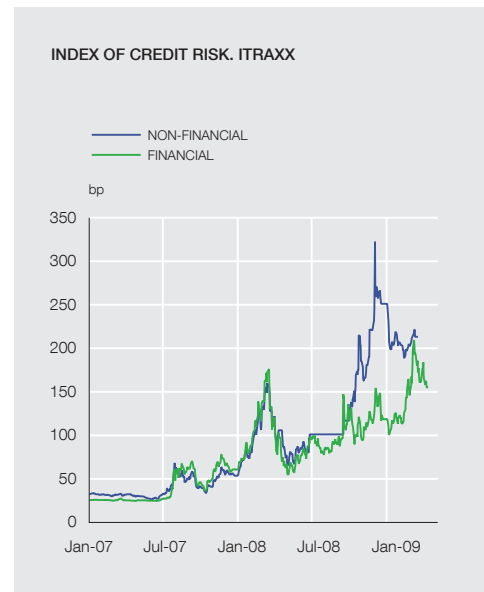
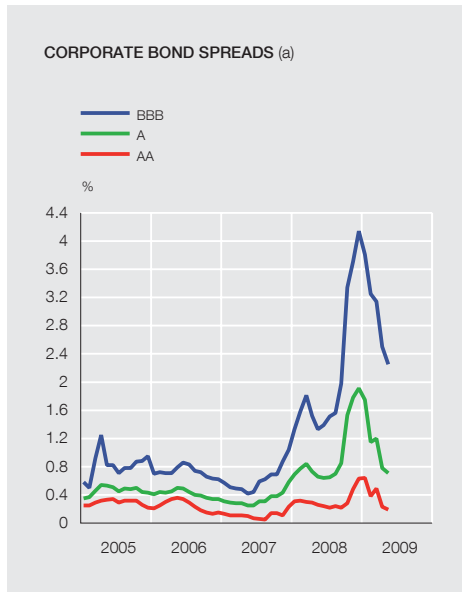
Risk premia increased on private debt markets and financial institutions made sizeable securitisations which they retained on their balance sheets

Funding conditions also tightened on private debt markets, where there were extraordinary increases in yield spreads, particularly in 2008 Q4, for financial and non-financial corporations alike (see Chart 4.7). Against this background, primary markets performed unevenly in respect of their various instruments. Low-grade bond issues declined substantially, as did covered bonds (which offer very high credit quality). However, financial institutions made sizeable securitisations, which they retained on their balance sheets in order to have collateral and thus the potential to gain access to Eurosystem financing. As from November, the State-backed issues envisaged in government support schemes also began to proliferate.

The supply of bank loans became more restrictive and credit to the private sector slowed, more markedly so in the final quarter

In the market for bank loans, interest rates also moved on a rising trend for most of the year, in line with the EURIBOR. This trajectory was interrupted in November when the cost of bank financing began to fall substantially as part of the more accommodating monetary policy transmission process. Nonetheless, the Bank Lending Survey continued to show a progressive tightening of supply conditions, reflecting above all the substantial deterioration in economic activity and in real estate markets in some of the Member States, and which took the form of greater requirements in respect of collateral, maturity and other non-price conditions.

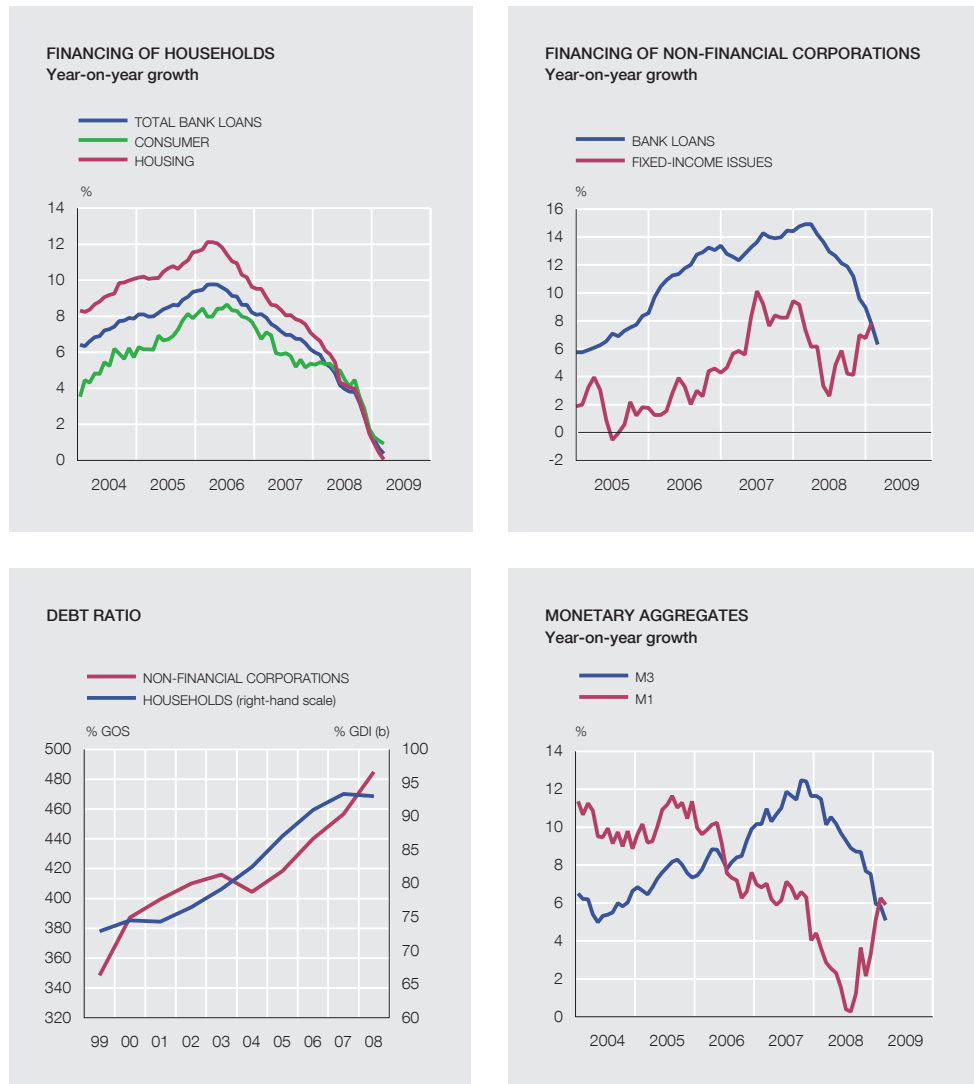
Against this backdrop, credit to the private sector progressively lost momentum, more sharply so as from mid-2008 (see Chart 4.8). Loans to the private sector slowed by almost 5 pp to a growth rate of around 7% in 2008 in securitisation-adjusted terms, a trajectory



SOURCES: Datastream, ECB and Banco de España.

a. Issued by non-financial corporations and denominated in euro. Spread over AAA-rated bonds.  
 b. Indicator = % of institutions that report a considerable increase + % of institutions that report a certain increase x 0.5 - % of institutions that report a certain fall x 0.5 - % of institutions that report a considerable fall. A positive (negative) value denotes an increase (decrease) in the supply of loans from institutions with respect to the previous quarter.

that has become more accentuated in the opening months of 2009. In the case of households, both consumer loans and house-purchase loans were slacker. Their growth on bank balance sheets did not exceed 2% in 2008, compared with 6% in 2007, a reduction that has continued in 2009 to date. As a result, households' debt/gross disposable income ratio held stable, following six years of continuous growth. Loans to non-financial corporations also slowed, although they retained a higher growth rate (9%) over the year as a whole, entailing a further increase in the sector's debt ratio. Loans over €1 million were particularly dynamic, revealing that the slowdown particularly affected small and medium-sized enterprises, for which declines in year-on-year terms have been recorded since spring 2008.



SOURCES: ECB and Banco de España.

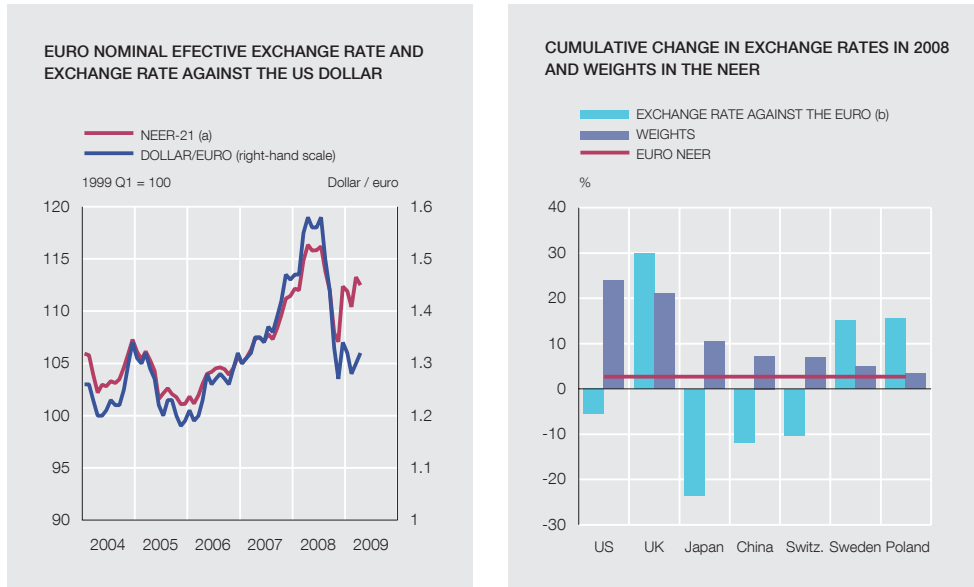
- a. Gross operating surplus.
- b. Gross disposable income.

Stock market prices plummeted while evidencing high volatility

Stock market prices began to fall from the start of the year and volatility was very high. As the financial crisis worsened and its impact on economic activity became apparent, the fall in equity prices gathered pace and spread to all sectors. In 2008 as a whole, the EUROSTOXX 50 index fell by almost 45%, with declines of over 60% in the value of the bank sector. This behaviour continued into early 2009, but they began to be corrected as from March, when European stock markets, like other international equity markets, welcomed specific new measures from governments and central banks, particularly in the United States and the United Kingdom.

The euro appreciated in effective terms and showed high volatility

The exchange rate of the euro was also highly influenced by the instability of the international financial system and economic developments. In 2008 as a whole, the real effective rate of the euro appreciated by almost 3%, albeit with very marked upward and downward fluctuations and evidencing heterogeneous behaviour in relation to various currencies (see Chart 4.9). Over the course of 2008, the euro depreciated by 5% against the dollar and by 23% against the yen. By contrast, it appreciated by over 28% against sterling. In 2009 the euro has remained



SOURCES: ECB and European Commission.

- a. The NEER-21 is the nominal effective exchange rate of the euro against 21 countries: non-euro area EU-27 countries in 2009 plus United States, Canada, Australia, Norway, Switzerland, Japan, China, Hong Kong, South Korea and Singapore.
- b. A positive (negative) value denotes an appreciation (depreciation) of the euro.

volatile and on a rising trend as from March, particularly against the currencies of those countries that most aggressively eased their monetary policies.

There was an easing in the growth rates of the monetary aggregates, particularly the most liquid measures

Finally, the dynamism of the monetary aggregates was substantially contained in 2008 and early 2009. However, investment flows towards time deposits held up strongly for most of the year, owing to the attractive return involved, though this behaviour was interrupted in 2009. By contrast, the most liquid assets – M1, which includes cash and sight deposits – slowed notably, although at the height of the financial turmoil (in September and October) there was great demand for these instruments.



## The Spanish economy

In 2008, the slowdown that had already begun in the Spanish economy gave way to a sharp adjustment, with a decline in activity in the second half of the year, so that by end-2008 the economy was immersed in a deep recession. The factors that determined this performance have been described in detail in Chapters 1 and 2: domestic factors, linked in particular to the adjustment process in the real estate sector; and external factors, especially the international financial crisis and its implications for the world economy. GDP continued to grow in Spain in 2008 (1.2%), but it declined by 0.7% in year-on-year terms in 2008 Q4, and deteriorated further (-3%) in 2009 Q1. A breakdown of GDP in the period shows that it was marked by growing weakness of the main components of national demand, while net external demand made a positive contribution to GDP growth for the first time in several years, as exports recorded a good performance in the first half of the year and imports declined. The deterioration in the economic climate had a virulent impact on employment, which fell by 0.6% in the year as a whole but by more than 3% year-on-year in Q4. Moreover, there was no sign of any change in wage bargaining trends, with labour costs rising in excess of 5%. Despite this adverse economic climate, the labour force continued to grow at a strong pace (3%) and this, combined with job destruction, prompted a sharp increase in the unemployment rate, to 13.9% in 2008 Q4, almost 6 pp higher than in mid-2007. The authorities launched expansive fiscal measures in an endeavour to offset the economic weakness; together with the abrupt decline in activity, this brought the budget deficit to 3.8% of GDP, an increase of 6 pp on the 2007 budget surplus. The nation's net borrowing fell moderately in 2008, to 9.1% of GDP, although, as in the other indicators, the correction in the second half of the year was more significant, as imports declined rapidly and the price of oil returned to more moderate levels.

Energy prices were one of the key factors behind the sharp fluctuations in inflation over the year. After peaking in the summer of 2008, the CPI has decelerated very quickly, recording negative rates in the spring of 2009, partly as a result of these fluctuations in the price of oil but also due to the impact of the recession on price setting. As a result, the inflation differential with the euro area has been increasingly negative since December 2008.

### 1 Monetary and financial conditions

Monetary and financial conditions tightened in 2008, ...

... although the cost of debt fell towards the end of the year

The cost of issuing public debt declined and the effective exchange rate appreciated

Household and corporate financing conditions continued to tighten in 2008 (see Chart 5.1). Interest rates on loans rose throughout the first nine months of the year, in line with the increase in interbank market yields that was basically due to the prevailing financial tension, and the cost of corporate debt and equity issues also rose, as risk premiums rebounded. In addition, credit standards applied by the banks became more restrictive.

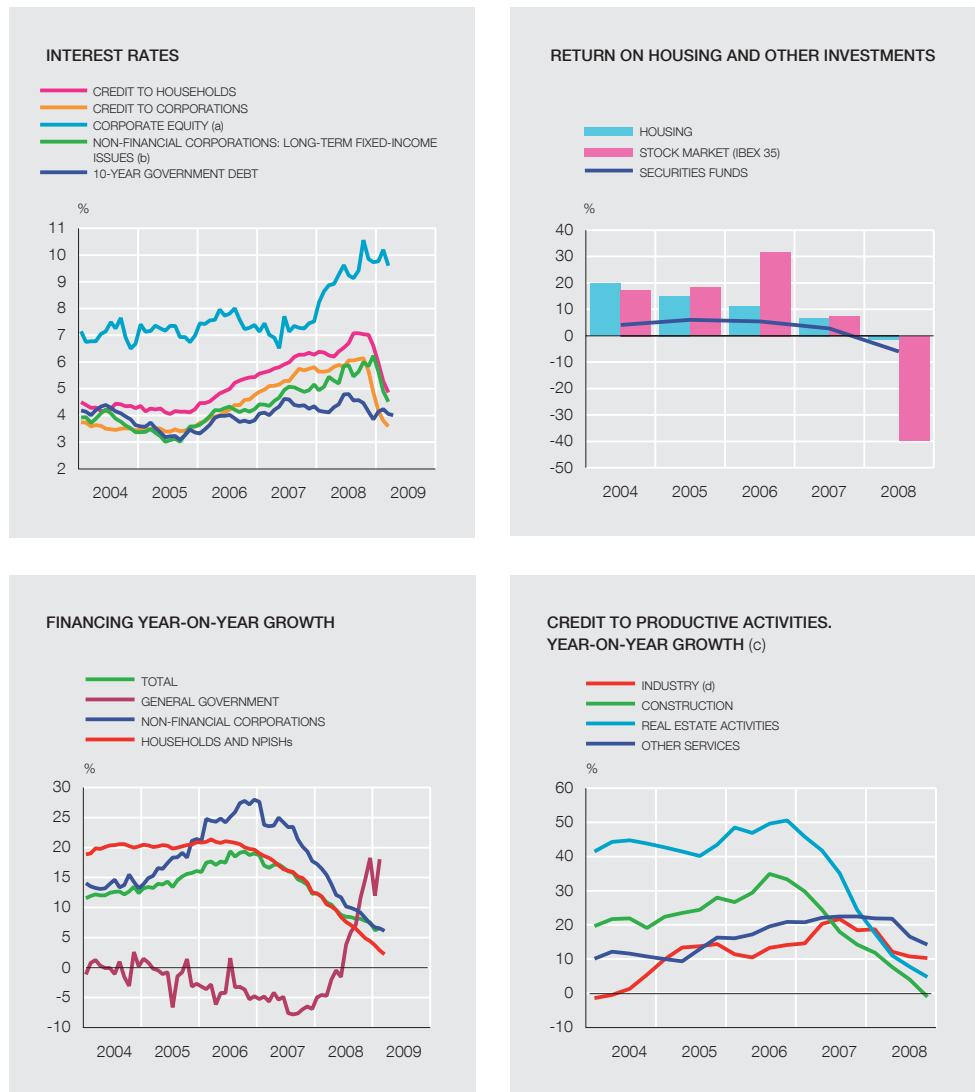
Nevertheless, interbank market rates headed down during the closing months of the year, as official interest rates were cut, interest rate expectations were revised down and risk premiums declined, and this began to be passed through to new bank loans and, albeit more slowly, to the average cost of outstanding debt, given the high proportion of floating-rate loans.

The cost of issuing public debt also declined in the year as a whole. Thus, at end-2008 the yield on Spanish twelve-month Treasury bills stood at 2.1%, 1.9 pp less than a year earlier, while that on ten-year bonds stood at 3.9%, down from 4.3%. As in the case of most euro area sovereign debt, this decline was smaller than that in the German bund, so that the spread between them widened, to around 80 bp at December 2008 and more than 120 bp in February 2009. However this spread then narrowed again, to around 70 bp in early May. The effective nominal exchange rate appreciated by 2.7 pp in cumulative annual terms, having a slightly contractive effect on monetary conditions.



## FINANCING OF RESIDENT NON-FINANCIAL SECTORS AND ASSET PRICES

CHART 5.1



SOURCES: Datastream, MSCI Blue Book and Banco de España.

- The cost of equity is based on the three-stage Gordon dividend discount model.
- The interest rate on long-term fixed income is calculated as the sum of the 5-year euro swap rate and the weighted average of the credit risk insurance premia of Spanish non-financial corporations at that same term.
- Securitisation is included in the total series, but not in the different sectors, since there is no information to assign it to the latter.
- Excluding construction.

Net household wealth declined in real terms

The international financial crisis had an adverse impact on the value of households' financial and real estate assets: the IBEX 35 closed 2008 down almost 40% and house prices fell by 3.4% in real terms in the year. Thus, net household wealth declined, with the consequent adverse impact on consumption and residential investment. Stock market losses also discouraged business investment.

Household and corporate indebtedness ceased to grow, but the debt burden rose

Tightening credit conditions, along with declining household confidence and diminishing wealth, meant that the rate of growth of household liabilities continued to slow (see Chart 5.1). In the year as a whole, the rate of growth of borrowing fell by 8 pp year-on-year, down to 4% at end-2008. Accordingly, the debt ratio fell slightly, but as yet with no decline in the associated debt burden, due to the increase in the average cost of outstanding debt.

The rate of growth of corporate financing fell more sharply (by more than 10 pp), to around 7% at year-end. The rate of growth of credit, which is the main component, moderated in all areas of activity, but most especially in real estate services and construction (where growth rates fell by some 20 pp and 15 pp, respectively). The corporate debt ratio remained virtually unchanged, as the increase in debt was similar to the increase in revenue, but this, together with the rise in the average cost of borrowing, drove up the debt burden ratio once again. Lastly, as a consequence of the worsening of the fiscal balance of the general government, borrowing by this sector rose significantly in 2008, posting year-on-year growth of almost 16% at year-end, in contrast to the negative rate of change seen a year earlier.

## 2 Economic policies

### 2.1 FISCAL POLICY

An expansive fiscal policy was designed for 2008, ahead of an expected slowdown in growth

In the wake of a fiscal surplus amounting to 2.2% of GDP at end-2007, and ahead of an expected gradual slowdown in activity, the fiscal policy envisaged in the State budget for 2008 included hardly any significant regulatory changes. Nevertheless, revenue would be affected by a number of measures taken in previous years, including, inter alia, the residual impact on tax payable of the reduction in personal income tax and the corporate income tax rate cuts. On the spending side, the growth rate budgeted for non-financial State expenditure in 2008 was 9%, if compared with the outturn for 2007, significantly higher than the nominal GDP growth forecast. The regional (autonomous) governments' budgets were drawn up along similar lines, projecting an increase in non-financial expenditure in excess of 8% when compared with the initial figures for 2007. So all in all, an expansionary fiscal policy.

As economic slowdown accelerated, new fiscal measures were approved in the year, leading to greater fiscal expansion, ...

As economic slowdown accelerated, new fiscal measures were approved in the year. Together with the budget measures, these represented a strong fiscal impulse and a significant budget cost, estimated as 1.6 pp of GDP (see Table 5.1 which lists and quantifies the stimulus measures adopted in 2008 and 2009, distinguishing between permanent and temporary measures; see also Box 5.1). The key new measure, in terms of its impact on revenue, was the personal income tax rebate of up to €400, via lower withholdings on earned income, which was approved in April 2008 and came into force in the year. In addition, in November two new funds were created, endowed with total resources amounting to 1% of GDP, to foment local investment and investment in strategic sectors in 2009 (the State Fund for Local Investment and the Special State Fund to Invigorate the Economy and Employment). The impact on activity of the measures introduced in 2008 may have been lessened by the climate of uncertainty, the situation of private-sector saving at the start of the year and the decline in expenditure.

... a sharp decline in revenue and a significant increase in unemployment benefits

The economic slowdown, and in particular the deceleration in national demand, led to a sharp decline in tax revenue, confirming that the increase in revenue seen in the expansionary phase included a significant temporary component, linked above all to the strength of the real estate sector. Accordingly, the sharp adjustment in this sector quickly passed through to revenue. At the same time, the automatic stabilisers were activated, prompting a significant increase in unemployment benefits, which rose by 0.4 pp as a percentage of GDP.

As a result, by end-2008 the surplus recorded in 2007 had been transformed into a sizeable budget deficit

As the extraordinary revenue linked to the property boom of recent years disappeared, and in light of the automatic stabilisers' responsiveness to the business cycle, the new measures introduced and the continued dynamism of public expenditure, the budgetary situation deteriorated significantly. Thus, by end-2008, the surplus recorded in 2007 had been transformed into a general government deficit of 3.8% of GDP (see Box 5.1).

By sub-sector, only Social Security continued to post a surplus (0.8% of GDP), although short of that seen in 2007. Central government (the State and its autonomous bodies) recorded a deficit of 2.7% of GDP, as opposed to a surplus of 1.3% of GDP in 2007, while territorial government deficits widened somewhat, to 1.4% of GDP in the case of the regional (autonomous) governments, and

€m			
FISCAL MEASURES	2008	2009	2010
<b>TOTAL IMPACT (I - II)</b>	<b>-18,121</b>	<b>-22,577</b>	<b>-1,075</b>
<b>I Non-financial revenue</b>	<b>-17,940</b>	<b>-14,377</b>	<b>-75</b>
I.a PERMANENT IMPACT	-14,640	-8,002	
2% deflation of tax rates, personal and family allowances and earned income allowance under personal income tax	-1,030		
Expected impact of 2007 personal income tax reform	-2,400		
Tax relief under personal income tax for birth or adoption of children	-1,090		
€400 tax rebate on earned income under personal income tax	-4,100	-1,900	
Tax relief for tenants under personal income tax		-350	
Expected impact of corporate income tax reform (2007-2008)	-5,520	-3,452	
Freeze on excise duties	-500		
Elimination of wealth tax		-2,300	
I.b TEMPORARY IMPACT	-3,300	-6,375	-75
Inclusion of tax credit on home ownership (main residence) in calculation of personal income tax withholdings		-1,200	
Extension of period for realisation of home-purchase savings accounts		-15	-15
Corporate income tax: income delayed due to lack of application of new chart of accounts in prepayments in 2008		2,600	
Tax exemption for interest on public debt held by non-residents under corporate income tax	-500	-500	
Incentives for temporary hires		-1,200	
Consolidation of VAT returns in corporate groups	-2,800		
Monthly VAT refunds brought forward		-6,000	
Temporary partial moratorium on mortgage repayments		-60	-60
Extension of two-year period for sale of main residence for purposes of exemption due to reinvestment		NA	NA
Unrestricted depreciation or amortisation of new assets under corporate income tax		NA	NA
<b>II Non-financial expenses</b>	<b>181</b>	<b>8,200</b>	<b>1,000</b>
II.a PERMANENT IMPACT	181	-1,500	-1,000
Reduction in expenses (a)	-20	-1,500	-1,000
Extraordinary vocational guidance, training and integration plan	201		
II.b TEMPORARY IMPACT		9,700	2,000
Unemployment benefits (b)		700	
State Fund for Local Investment		6,000	2,000
Special State Fund to invigorate the Economy and Employment		3,000	
<b>III With impact on public debt (no impact on balance)</b>	<b>9,339</b>	<b>20,661</b>	
Fund for the Acquisition of Financial Assets (maximum €30 bn)	9,339	20,661	
OTHER MEASURES	Entry into force	Funding	
<b>I ICO (Official Credit Institute) credit facilities</b>			
<b>Total funding</b>			<b>49,100</b>
ICO credit facility to guarantee local corporations' debts to firms and the self-employed	26.04.2009		3,000
ICO liquidity facility for SMEs and the self-employed (c)	23.12.2008		10,000
ICO liquidity facility for medium-sized companies (c) (d)	March 2009		6,000
ICO corporate support facilities 2009	2009		10,900
New ICO moratorium facility for SMEs (e)	2009		
ICO-PROINMED credit facility (investment projects for medium-sized companies)	Expected March 2009		3,000
Extension of Treasury FTPYME facility (securitisation SPEs for SMEs)	2009-2010		6,000
ICO housing credit facility: loans for completed housing used for rental housing (main residence)	2009		3,000
Extension of ICO guarantee for asset-backed securities linked to government-subsidised housing (FTVPO facility)	2009		5,000
Plan Renove Turismo (tourism industry modernisation programme)	2009		1,000
Plan VIVE (vehicle renewal programme)	2008-2011		1,200
<b>II Other support measures</b>			
State subsidies for car purchases (€500 per unit)	2009-2010		100
Extension of mortgage repayment periods at no cost for two years	22.04.2008		
Special conditions for deferral of payment of Social Security contributions	2009		

NA: No quantitative estimate is available.

- a. The estimate does not include the impact of the reductions in headcount or executive pay.  
b. The estimate does not include the impact of the new treatment of redundancy programmes.  
c. The ICO contributes 50% and the banks the other 50%.  
d. Supplementary to the ICO Liquidity facility, but for larger corporations.  
e. Amount deferred: €5 bn.

One of the key features of the development of the Spanish economy in 2008 was the extent of the budgetary deterioration, as by end-2008 the general government surplus of 2.2% of GDP in 2007 had been transformed into a deficit of 3.8%.

This deterioration in public finances (6 pp of GDP) in 2008 was primarily due to three factors: cyclical deterioration, the effects of the discretionary fiscal measures applied, and the disappearance of a certain amount of temporary revenue associated with the developments on the real estate and financial markets (see accompanying table). First, the cyclical deterioration, which drove down the general government balance by some 0.7 pp of GDP in comparison with the previous year, largely due to the increase in unemployment benefits as the jobless total rose. Second, the discretionary measures, which had a negative impact of slightly more than 1.5 pp of GDP, and in particular the new package of measures announced in April 2008 that included, *inter alia*, a cost of 0.5 pp of GDP in the form of the €400 personal income tax rebate. Moreover, the impact of other discretionary measures that were known at the beginning of 2008 proved greater than was initially expected. Thus, the impact of the CUNA Programme and of the personal and corporate income tax reforms warranted a decline in revenue of almost 0.8 pp of GDP in 2008, while the impact of the new VAT system on consolidated groups also detracted from revenue to the tune of some 0.3 pp of GDP.

The rest of the budgetary deterioration, more than 3.5 pp of GDP, is chiefly due to two factors. First, the tax revenue losses over and above those warranted by the development of the theoretical bases used to predict the behaviour of the different tax headings and their respective elasticities. These revenue deviations are thought to be largely connected to the decline in the extraordinary revenue that was obtained during the economic growth phase from the boom on the real estate and financial markets. According to a Banco de España

study,<sup>1</sup> this extraordinary revenue accounted for more than 2 pp of GDP in cumulative terms up to 2007. And second, the growth in public expenditure that is not directly linked to economic performance, which is estimated to have risen substantially above trend GDP. Thus the ratio of primary expenditure adjusted for cyclical effects (the latter, basically connected to unemployment benefits) to trend GDP would have risen by approximately 1.5 pp in 2008, with a significant contribution from compensation per employee.

Public finances will foreseeably deteriorate again in 2009; according to the latest Banco de España projections report, the deficit forecast for 2009 will amount to 8.3% of GDP, an increase of 4.5 pp on 2008, fundamentally as a result of the increase of 4.3 pp in the expenditure ratio.

There are three key factors behind the expected growth in the budget deficit in 2009: the marked cyclical deterioration, the impact of the discretionary measures, and the change in trend in public debt servicing payments. First, the macroeconomic climate is expected to worsen significantly in 2009, prompting further deterioration of 2.5 pp of GDP in the general government balance connected to the economic cycle. It should be noted, in this respect, that when tax figures are analysed in terms of ratios to GDP, the automatic stabilisers have most impact on public expenditure, as government receipts as a whole have elasticity close to one relative to GDP. Specifically, more than 0.5 pp of the increase in the expenditure ratio are directly due to unemployment benefits. Second, the bundle of discretionary measures with effect in 2009 will have an adverse impact on the

1. F. de Castro, A. Estrada, P. Hernández de Cos and F. Martí (2008), "Una aproximación al componente transitorio del saldo público en España", *Boletín Económico*, June, Banco de España, pp. 71-81. And on the same lines, the European Commission Economic Paper by C. Martínez-Mongay, L. A. Maza and J. Yáñez (2007), "Asset Booms and Tax Receipts: The Case of Spain 1995-2006", *European Economy Economic Papers*, nº 293.

## FACTORS BEHIND THE CHANGES IN THE GENERAL GOVERNMENT BALANCE

Changes in variables over the previous year, expressed as a % of GDP

	2008	2009
Change in the general government balance	-6.0	-4.5
<i>Due to the change in the cyclical position (a)</i>	-0.7	-2.5
<i>Due to the impact of the discretionary measures</i>	-1.6	-1.8
<i>Due to debt servicing</i>	0.1	-0.2
<i>Remainder</i>	-3.8	-0.0
Change in total resources	-4.4	-0.2
Change in total uses	1.6	4.3

SOURCE: Banco de España.

a. The cyclical impact on the budgetary balance is obtained by applying an elasticity of 0.43 to the output gap calculated using the Phillips curve.

deficit, estimated as 1.8 pp of GDP, considering that certain temporary measures that had an impact in 2008 should be reversed in 2009. The measures for 2009 include, in particular, earlier-than-usual VAT refunds, which will add 0.6 pp of GDP to the deficit, the elimination of wealth tax, with a cost of approximately 0.2 pp of GDP, and approval of the State Fund for Local Investment and the Special State Fund to Invigorate the Economy and Employment, which represent 0.6 pp and 0.3 pp of GDP, respectively. And third, debt serv-

icing payments are expected to add to budgetary deterioration by 0.2 pp of GDP more than in 2008, as public debt expands.

In short, all the above shows that, although part of the deterioration in public finances seen in 2008 and forecast for 2009 is due to cyclical deterioration, much of this deterioration is structural and that, in consequence, a return to healthier public finances will necessarily require considerable budgetary adjustment.

0.4% of GDP in that of local governments. Thus, after declining as a percentage of GDP since 1997, public debt rose by 3.3 pp on a year earlier, standing at 39.4% of GDP at end-2008.

By component, fiscal pressure declined considerably ...

One of the main reasons behind the deterioration in public finances in 2008 is the decrease of slightly more than 4 pp in the tax burden (tax revenue relative to GDP), which contrasts with the increase of more than 5 pp in this variable between 1995 and 2007 (see Table 5.2). Revenue from direct and indirect taxes declined, while social security contributions remained unchanged as a percentage of GDP. Against the backdrop of contraction in activity, the decline in revenue was concentrated on taxes linked to corporate profits, the real estate sector and consumption: specifically, corporate income tax revenue fell by almost 2 pp of GDP, VAT revenue by almost 1 pp and revenue from stamp and registration duties by 0.7 pp of GDP. By contrast, personal income tax revenue fell only marginally, despite the impact of the new tax rebate and the employment adjustment, sustained by tax withholdings on capital gains and, to a lesser extent, on earned income which continued to post positive rates of change due to the strong growth in wages.

... and public spending grew as a percentage of GDP, driven by government consumption and social benefits

Public spending rose by 1.7 pp as a percentage of GDP to 41%. This growth was due almost exclusively to primary current spending, in a setting in which interest payments held steady as a percentage of GDP for the third consecutive year. As in previous years, final public consumption grew significantly. In this respect, the high inertia in health and education spending, which represent a very significant proportion of public consumption, is particularly noteworthy, as is the growth in the public-sector wage bill which, on the back of high wage drift in recent years, amounted to 9% in 2008. Social benefits rose by 0.7 pp as a percentage of GDP, primarily as a result of the growing volume of unemployment benefits, but also due to the increase in contributory pensions associated with the acceleration in the average number of pensions and the new benefits for birth and adoption of children. Lastly, capital expenditure decelerated in 2008, as the rate of growth of investment fell to 2.4% (from 10.3% in 2007), although it continued to represent 3.8% of GDP, in line with the pattern seen in previous electoral cycles of more moderate capital expenditure growth in post-election years.

The introduction of new economic stimulus measures and the impact of the unfavourable macroeconomic climate point to a budget deficit in excess of 8% in 2009 and 2010, ...

Fiscal policy in 2009 will remain clearly expansionary, as a result of the measures that have come into force in the year, in particular the State Fund for Local Investment, mentioned earlier, and the decision to bring forward monthly VAT refunds. These are mainly temporary measures, directed at specific sectors and targets, so they may have a more expansionary impact on activity. On Banco de España estimates, the State Fund for Local Investment could add 0.3 pp to GDP growth on average in 2009 and 2010.

All in all, considering the high budget deficit recorded in 2008, the various steps taken and the contraction in activity could lead to a budget deficit in excess of 8% in 2009 and 2010. This would also entail a rapid increase in the public debt to GDP ratio, which could approach 60% in 2010.

% of GDP	2003	2004	2005	2006	2007	2008
<b>1 NON-FINANCIAL RESOURCES</b>	38.5	38.9	39.8	40.9	41.5	37.1
Current resources	37.8	38.1	39.1	40.2	41.0	37.0
— Taxes on products and imports	11.5	11.9	12.2	12.4	11.7	9.8
— Taxes on income and wealth	10.1	10.2	10.9	11.7	12.9	10.7
— Social contributions	13.0	13.0	12.9	12.9	13.0	13.0
— Other current resources (a)	3.3	3.1	3.0	3.2	3.4	3.4
Capital resources	0.7	0.9	0.8	0.7	0.4	0.1
<b>2 NON-FINANCIAL USES (b)</b>	38.7	39.3	38.9	38.9	39.3	41.0
Current uses (b)	33.9	34.0	34.0	33.8	34.0	35.7
— Final consumption	17.4	17.8	18.0	18.1	18.3	19.1
— Social benefits other than social transfers in kind	11.7	11.7	11.6	11.5	11.6	12.3
— Subsidies	1.0	1.0	1.0	1.0	1.1	1.1
— Interest (b)	2.3	2.0	1.8	1.6	1.6	1.6
— Other transfers	1.5	1.5	1.5	1.6	1.5	1.6
Capital uses	4.8	5.2	4.9	5.1	5.2	5.3
— Gross capital formation	3.6	3.4	3.6	3.7	3.8	3.8
— Other capital uses (c)	1.3	1.9	1.4	1.4	1.4	1.5
<b>3 NET LENDING (+) OR NET BORROWING (-) (b) (3=1-2)</b>	-0.2	-0.3	1.0	2.0	2.2	-3.8
<b>MEMORANDUM ITEM:</b>						
Primary surplus	2.1	1.7	2.8	3.7	3.8	-2.3
Gross debt (b)	48.7	46.2	43.0	39.6	36.2	39.5

SOURCES: INE, Ministerio de Economía y Hacienda and Banco de España.

a. Includes gross operating surplus.

b. According to the Excessive Deficit Procedure methodology.

c. Includes net acquisitions of non-financial non-produced assets.

... which will necessitate development of a consolidation strategy in the medium-term

In terms of fiscal policy, all this severely constrains the room for manoeuvre, making a return to budgetary stability a key priority in the medium term. In particular, it is vital that the deterioration of the fiscal position is not seen as a persistent deviation, as risk premiums on government debt seem to have become more sensitive to the perceived sustainability of public finances, inter alia. Although, in relative terms, government debt is still lower than the average in the euro area, the speed of its growth could make a subsequent reversal more difficult and could drive up borrowing costs. Moreover, it is essential that government debt ratios remain moderate, to provide favourable conditions for the future increase in spending on pensions.

The consolidation strategy must be consistent with the commitments acquired within the framework of the European Union

In 2008, Spain's central and territorial (regional and local) governments ran budget deficits in excess of the limits established in the budgetary stability regulations. In April 2009, the European Council determined that Spain was running an excessive deficit<sup>1</sup> and recommended that this situation be corrected by 2012 at the latest, requiring annual average fiscal adjustment of at least 1.25% of GDP, to start in 2010. In the end, the Council set 27 October 2009 as a deadline for the corrective action to be taken.

1. Considering that the 2008 budget deficit had exceeded the 3% reference value set in the Stability and Growth Pact (SGP), and that this situation could not be qualified as temporary or as having been reached in exceptional circumstances, both factors that could have prevented the launch of the Excessive Deficit Procedure (EDP) under the SGP. In effect, the Council considered that the economic circumstances of 2008 could not be qualified as exceptional, as both the estimated output gap and real GDP growth for that year were positive. Moreover, the divergence from the deficit target could not be considered temporary, as the fiscal projections presented by the European Commission and contained in the Spanish Stability Programme in January 2009 envisaged that the budget deficit would exceed 3% in 2009 and in 2010.

## 2.2 OTHER ECONOMIC POLICIES

The emergence and the scale of the economic crisis conditioned all other economic policies

Thus the Official Credit Institute extended and launched new credit lines for households and firms ...

... and various measures were adopted in connection with housing and modernisation of the tourist industry

By contrast, there was little significant change in the labour framework

The reforms in the goods and services markets focused on promoting transposition of the Services Directive

The main aim behind all other economic policies was to alleviate the impact of the economic crisis. A first set of measures was designed to help certain sectors and agents gain access to credit, while others aimed to support activity in the productive sectors most affected by the collapse in demand, such as residential building, tourism and, in 2009, the automobile industry.

Through the ICO (Official Credit Institute) the government launched a series of extraordinary credit facilities for the groups most affected by the liquidity problems on the financial markets. As is customary, these measures were instrumented in collaboration with the private banking sector, which selected the borrowers and assumed the majority of the default risk. In the case of households, a credit facility was created to allow mortgage holders who had lost their jobs to defer part of their mortgage repayments, while for SMEs funds were earmarked to finance cash flows. The bulk of these measures will come into force in 2009 (see Table 5.1), meaning that so far the impact has been limited.

In January 2008, the 2005-2008 Housing Plan was amended and, in December 2008, the new 2009-2012 National Housing Plan was approved, in an endeavour to adapt to the sharp slowdown in the sector. To this end, more emphasis was placed on rental housing, with the introduction, *inter alia*, of rentals with purchase options and enhanced tax treatment for home refurbishment. The Plan also calls for a large volume of subsidised housing to be built in coming years. In the case of the tourism industry, the ICO launched a €1 billion credit facility to help the industry modernise its infrastructure. Lastly, in 2009 a comprehensive plan for the automobile industry was approved, affecting both the demand and the supply side; this was subsequently extended to include direct subsidies for new car purchases.

On the labour market, a new Inter-Confederal Collective Bargaining Agreement (AINC) was signed in 2008, similar to those signed in previous years, and the minimum wage rose by 5.3% to €600 per month. In any case, wages were marked by activation of the indexation clauses which, together with the rebound in wage rates, helped drive wages up by more than 5%, the highest rate of growth in the last 15 years, despite the considerable cyclical weakness.

Two of the fundamental features of the present collective bargaining system, namely its high nominal inertia and its lack of responsiveness to changes in the economy's cyclical situation, together with the high degree of labour market segmentation, made this market more vulnerable to the decline in economic activity, prompting a sharp rise in unemployment in the second half of 2008 which has continued in the opening months of 2009. In this respect, reform of the wage-setting mechanism, establishing a closer link between wages and productivity and, in general, between wage rises and the position of specific firms or industries, would present a more appropriate basis for economic recovery. In addition, in the short term, a strong commitment to wage moderation by the social agents would help contain job losses (see Chapters 1 and 2 above).

On the goods and services markets, the focus was on making progress in the transposition of the Services Directive, culminating in March of this year when the legislation required to start this process was approved. This legislation establishes free access to and exercise of service activities, with no need for prior authorisation, it removes the barriers to the free development of services by providers without an establishment in Spanish territory and it simplifies the administrative procedures. These aspects of the draft legislation are positive and should help liberalise the services sector and lessen the administrative burden for firms, in line with the government's commitment to reduce this burden by 30% by 2012. Once it has been passed by Parliament, the success of the reform will depend, however, on its correct implementation

(in particular in key sectors such as professional services and retail trade) and on strict control of the exceptions permitted by law, nationally and at regional (autonomous) government level.

Investment in R&D rose slightly, but there were no improvements in human capital indicators

In the case of technology, in 2008 the public sector maintained the level of investment in R&D seen in previous years. Several measures were announced, including reorganisation of the public research bodies, entry into force of the Avanza2 Plan, which aims to give a new boost to the introduction of information and communication technologies (ICT), and a new Science and Technology Law to establish the guidelines for future government policy in this area. The Ingenio Programme continued on the scale of previous years, although investment in R&D grew by barely 0.1 pp in 2007, to 1.3% of GDP, still far from the levels seen in the main developed economies, due to lower business investment (which fell, once again, as a percentage of total R&D spend to 45.5%). There were no signs of significant progress in human capital indicators; in fact, in some indicators, such as the early school leaving rate, there was a step backwards.

The severity of the crisis reveals the need for further structural reforms

In short, the severity of the crisis, which in 2008 prompted, for the first time since 1993, a slight decrease in income per capita, reveals the need, beyond the short-term measures, for structural reforms in the product and factor markets and for improvements in human and technological capital stock, to ensure that the present adverse economic situation does not detract from future economic growth potential.

### 3 Demand

#### 3.1 NATIONAL DEMAND

Weakness in national demand, and especially in household spending, heightened in 2008

The slowdown in national demand heightened as the year progressed: all private spending components lost momentum, but especially household spending, as both private consumption and residential investment fell sharply (see Chart 5.2). Private productive investment also moderated significantly, most particularly in 2008 Q4, and in fact only government spending on current goods and services posted higher growth than a year earlier. The persistent financial tension, which heightened in the last four months of the year, was a major contributing factor to this weak private demand, and this on top of the adjustment that had already begun in the Spanish economy in 2007. The financial crisis affected national demand through its adverse impact on credit availability and credit conditions and on agents' confidence, which was also hit by the speed and extent of the deterioration in the labour market. Job losses, along with their direct impact on income, were probably the key factor behind the decrease in spending, especially in household spending.

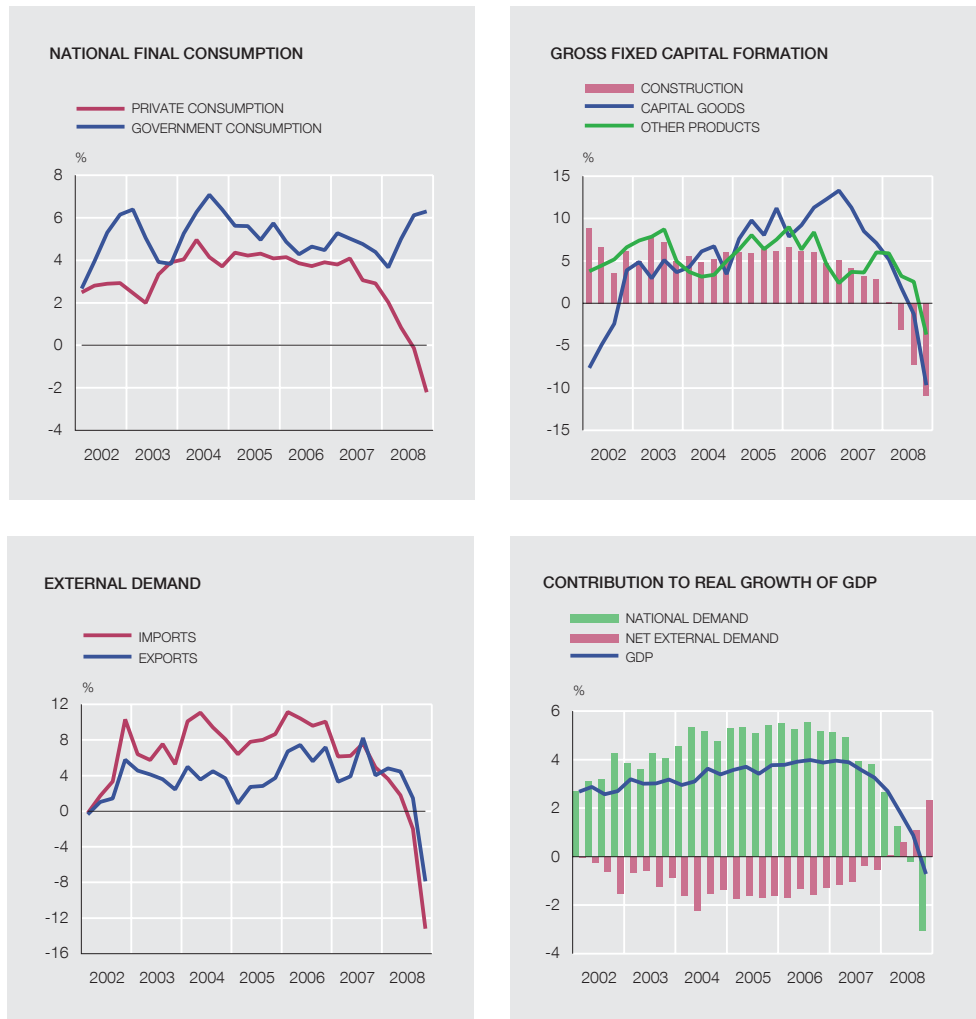
Private consumption was the key contributing factor to the slowdown in GDP in 2008, with durable goods recording the sharpest contraction

Growth in private consumption stagnated in 2008: the year began with year-on-year growth of 2%, but by Q4 this had gradually been transformed into a negative rate of change of -2.2%. All consumer spending components showed signs of lost momentum, but most particularly durable goods purchases, affected not only by the above-mentioned causes but also by the decline in other factors that had boosted demand for these goods in the past, such as the property boom and the number of immigrants becoming established in Spain (see Table 5.3). Car purchases by individuals fell by 30% in the year, with the sharpest rates of decline seen after the summer (-46% year-on-year in 2008 Q4, followed by -37% in 2009 Q1). The rate of growth of purchases of non-durable goods and services proved more resilient, although it also declined significantly on previous years.

Real household income grew at a relatively strong pace in 2008, ...

Despite the progressive deterioration in the macroeconomic climate, real disposable income rose by 3.8%, due, above all, to the considerable expansionary effect of the public sector support measures on household finances (see Chart 5.3). By contrast, the rebound in compensation per employee did not lead to an increase in the wage bill, given the extent of job losses. Net interest payments continued to detract from household income, although less so than in the





SOURCE: INE.

a. National Accounts, base 2000. Year-on-year rates of change based on seasonally-adjusted series of volume indices.

previous year, an effect that was particularly noticeable towards the end of 2008 and in the opening months of 2009, following the extensive interest rate cuts on the money markets. Lastly, the significant rise in the price of oil up to the summer of 2008, and its impact on consumer prices, eroded the purchasing power of households' current revenue and this also drove down confidence. Nevertheless, the inflation outlook changed dramatically as from July, when the rates of change of consumer prices began to gradually decline, and by March 2009 prices were falling in year-on-year terms, facilitating some recovery in households' purchasing power.

... but tighter credit conditions, diminishing household wealth and the sharp rise in unemployment took their toll on household confidence, prompting a decline in consumption ...

Although income growth was higher than a year earlier, all other consumption determinants performed less well than in 2007, helping to explain the sharp adjustment in household spending in 2008. Thus, real interest rates (proxied ex-post, deflating interest rates with developments in consumer prices) rose, and all other credit conditions tightened. At the same time, household financial wealth diminished considerably, as the stock markets and residential property values fell. Rising unemployment and, towards the end of the year, the heightened financial crisis, added to these factors, driving household confidence down to all-time lows. The fall-off in consumption was particularly intense considering the continued strong population growth; consumption per capita contracted in 2008 as a whole.

	% of GDP (a)		RATE OF CHANGE (b)					
	2000	2008	2003	2004	2005	2006	2007	2008
<b>HOUSEHOLDS AND NPISHs</b>								
Final consumption expenditure	59.7	57.2	2.9	4.2	4.2	3.9	3.5	0.1
<i>Durable consumption</i>	6.3	4.4	6.0	10.7	6.4	4.6	3.9	-10.1
<i>Non-durable consumption</i>	53.4	52.8	2.6	3.6	4.0	3.8	3.4	1.1
Housing	6.1	8.0	9.3	5.9	6.1	6.0	3.8	-10.9
<b>CORPORATIONS</b>								
Private productive investment (c)	16.6	17.6	4.5	6.4	7.4	7.7	5.8	0.5
<i>Construction</i>	4.8	5.8	3.3	11.4	5.7	4.8	2.5	2.1
<i>Equipment</i>	7.3	6.5	3.5	4.3	9.1	10.9	10.2	-1.9
<i>Other products (d)</i>	4.4	5.3	7.2	3.8	7.1	7.1	3.9	1.9
<b>GENERAL GOVERNMENT</b>								
Final consumption expenditure	17.2	19.1	4.8	6.3	5.5	4.6	4.9	5.3
Gross fixed capital formation	3.2	3.8	4.8	-2.6	7.7	7.3	7.3	0.0
<i>Construction</i>	2.3	2.8	3.7	-6.8	7.1	7.8	6.9	-1.6
<i>Equipment</i>	0.8	1.0	8.6	11.0	9.3	5.9	8.3	4.7
<b>MEMORANDUM ITEM</b>								
Gross fixed capital formation	25.8	29.4	5.9	5.1	7.0	7.1	5.3	-3.0
<i>Equipment</i>	8.1	7.5	4.1	5.1	9.2	10.2	10.0	-1.1
— <i>Machinery</i>	5.7	5.3	1.9	3.5	6.9	11.1	11.7	0.8
— <i>Transport</i>	2.4	2.2	9.4	8.7	14.0	8.5	6.5	-5.3
<i>Construction</i>	13.3	16.6	6.2	5.4	6.1	5.9	3.8	-5.3
— <i>Housing</i>	6.1	8.0	9.3	5.9	6.1	6.0	3.8	-10.9
— <i>Other construction</i>	7.2	8.6	3.5	5.0	6.2	5.7	3.9	0.9
<i>Other products (d)</i>	4.4	5.3	7.2	3.8	7.1	7.1	3.9	1.9

SOURCES: INE and Banco de España.

a. National Accounts, base 2000, current prices.

b. National Accounts, base 2000, rates of change of volume indices.

c. Includes investment by sole proprietors.

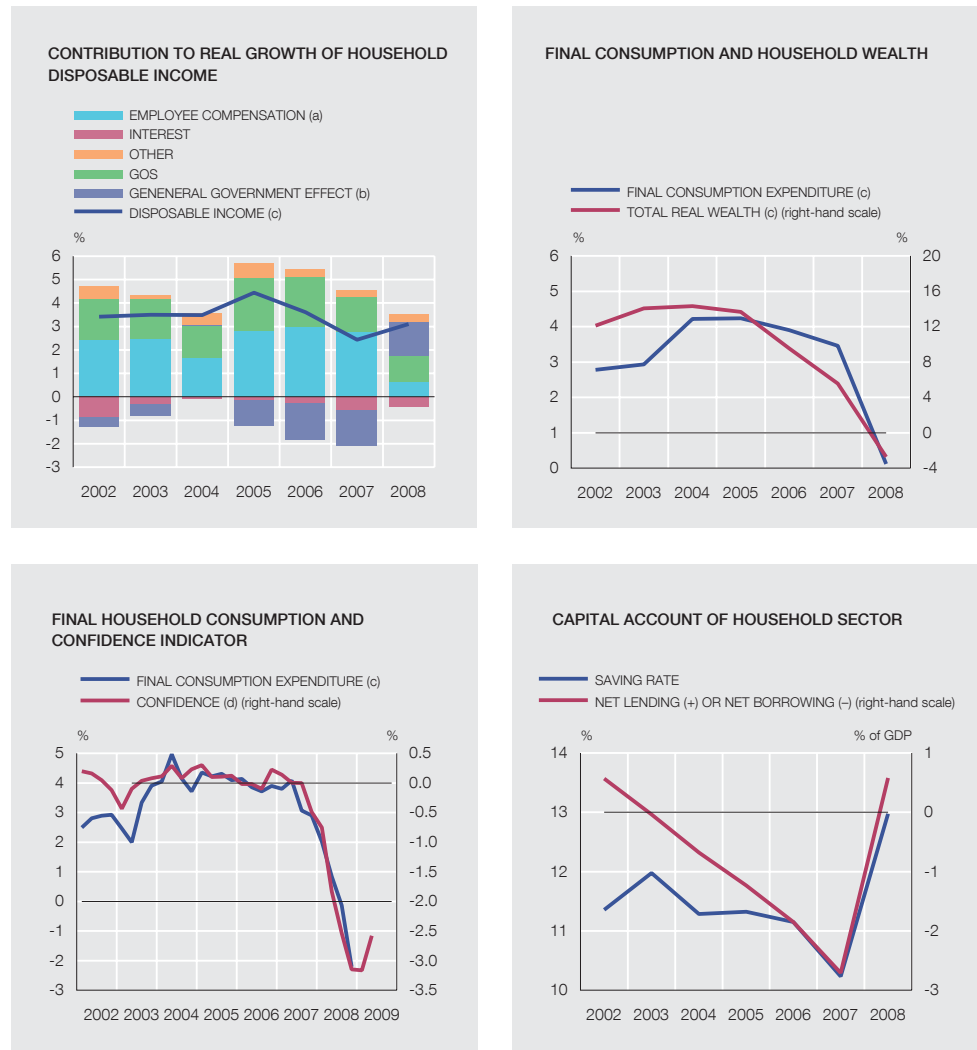
d. This investment includes real estate, legal, accounting, consultancy and software services, among others.

... and a sharp rebound in household saving rates

As spending moderated sharply and disposable income grew, household saving rates rose significantly, by almost 3 pp to 13%, after falling gradually for several years. In this respect, the considerable uncertainty surrounding households' investment decisions has meant that part of the increase in disposable income resulting from the budgetary measures has been saved rather than spent.

The change in expectations regarding house prices, along with tighter credit conditions, drove down residential investment in 2008, ...

The adjustment in residential investment, first seen at the end of 2006, intensified in 2008, as expectations regarding property values worsened, in light of house price developments, and credit conditions tightened. For much of the year, the affordability indicators deteriorated significantly, as a result of interest rate moves and the reduction in typical terms to maturity and in the maximum loan-to-value ratio of mortgage loans, discouraging residential investment, which contracted sharply in 2008, falling by 11% over the year as a whole, but by almost 20% in Q4 (see Chart 5.4). The number of property market transactions also declined sharply: second-hand housing sales, which tend to reflect the market position more accurately and may serve as a leading indicator for future demand for new housing, fell by more than 40% in 2008, while sales of new housing, which could in part reflect purchasing decisions taken in the past, also fell, albeit more moderately (-20%), but with an increasingly negative rate of change as the year progressed.



SOURCES: INE and Banco de España.

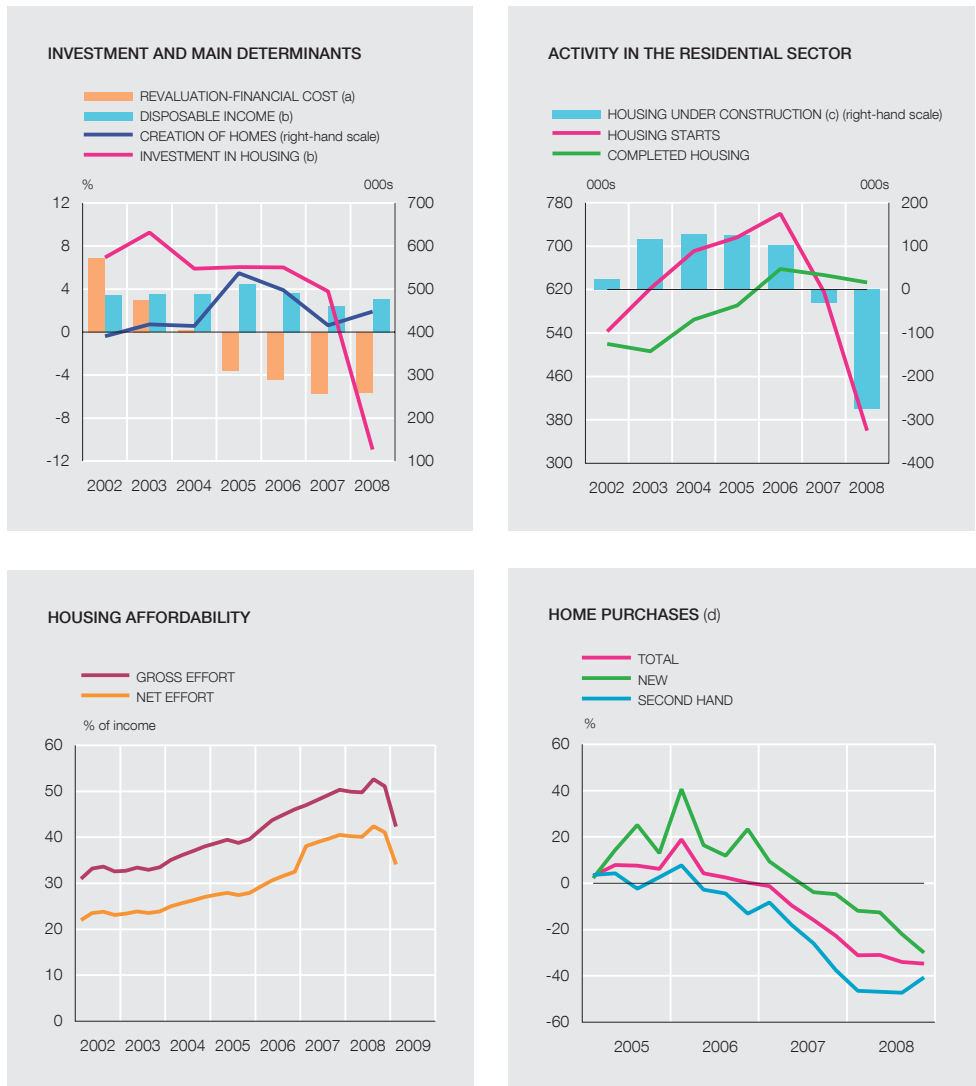
- a. Gross compensation per employee.
- b. Includes social benefits, social contributions and income and wealth taxes.
- c. Rate of change of volume indices.
- d. Normalised data (difference between the series and its mean value divided by its standard deviation).

... resulting in excess supply ...

This intense adjustment in demand was accompanied by a sharp reduction in the number of housing starts: 360,000 in 2008, approximately half the annual average in the period 2004-2007. Nevertheless, the supply of unsold housing grew considerably in the year, as developments begun in the previous growth years were completed. This drove down house prices and may have deterred potential homebuyers, encouraging them to wait until prices stabilise.

... that will gradually be absorbed going forward

The number of housing starts is likely to remain low in the near future, until the stock of unsold properties begins to be absorbed. Accordingly, the decline in residential investment expected in this adjustment phase will be more severe than that seen in other economic cycles in Spain (see Box 1.2). Until the factors that weighed on household spending in 2008 disappear, rapid take-up of the excess supply is unlikely, although there are also several factors that would act in favour, once this occurs. The affordability indicators began to improve significantly at the end of 2008, as both interest rates and house prices fell. Moreover, some of the demographic factors behind the creation of new households in the expansionary phase, which could serve as



SOURCES: INE, Ministerio de Vivienda and Banco de España.

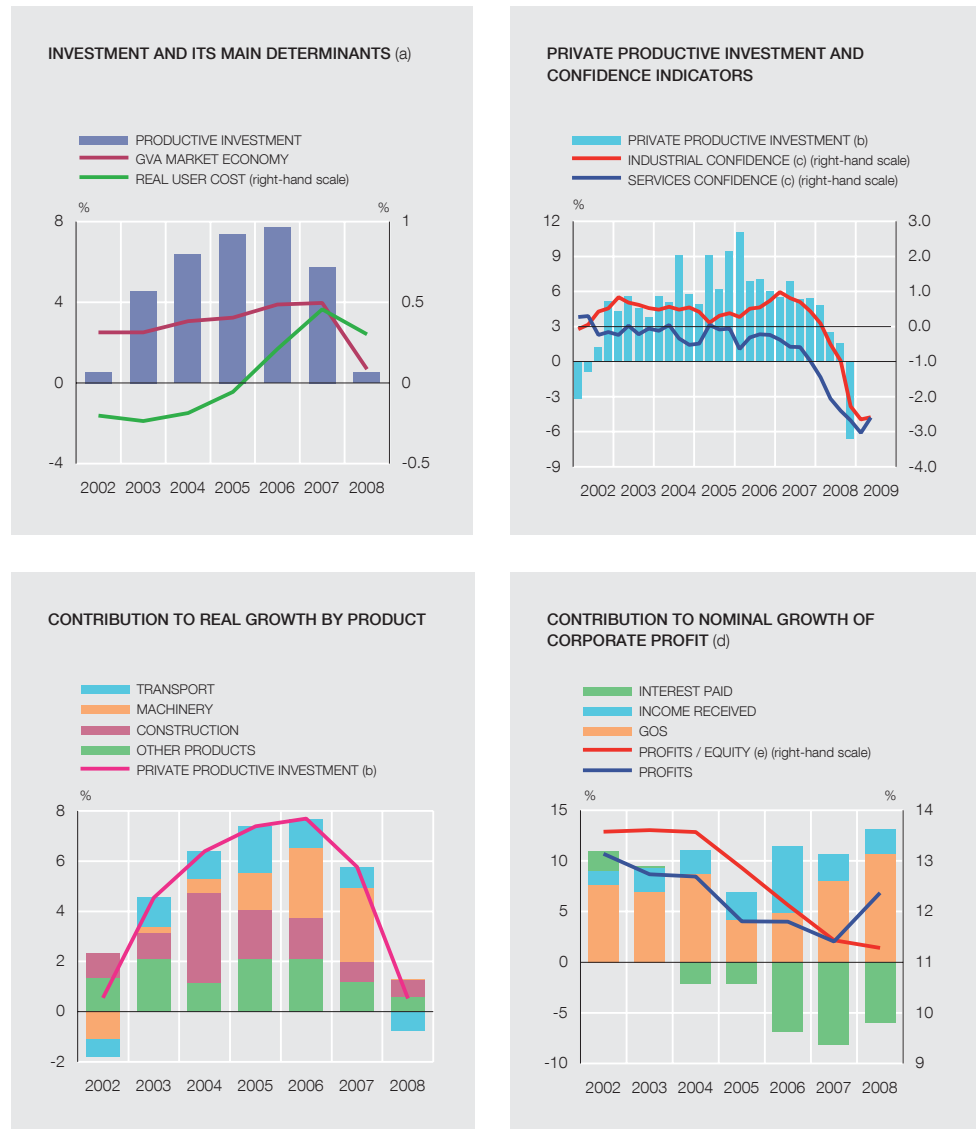
- a. Change in the rate of growth of the price of housing less the change in the interest rate on housing loans. This proxies the change in user cost with the sign reversed.
- b. Real rate of change.
- c. The difference between housing starts and completed housing, which proxies the rate of change in housing stock in construction.
- d. Ministry of Housing real estate transaction statistics. Year-on-year rates of change.

a basis for future potential housing demand, remain present, such as the smaller average size of households, the coming of age of the latest generation of baby boomers and, although to a lesser extent than in the past, the influx of immigrants.

As a result of the decline in residential investment and the increase in the saving rate, households returned to a position of net lending in 2008 (0.6% of GDP), having recorded growing net borrowing since 2003.

General government made a positive contribution to the growth in demand

General government demand remained highly dynamic in 2008, on the back of strong public consumption which rose by 5.3%, almost 0.5 pp higher than in 2007. This rebound was due to the increase in net purchases of goods and services, while compensation per employee continued to grow significantly, at a similar pace to the previous year. By contrast, general government investment in real terms was virtually flat in 2008, for the reasons indicated earlier.

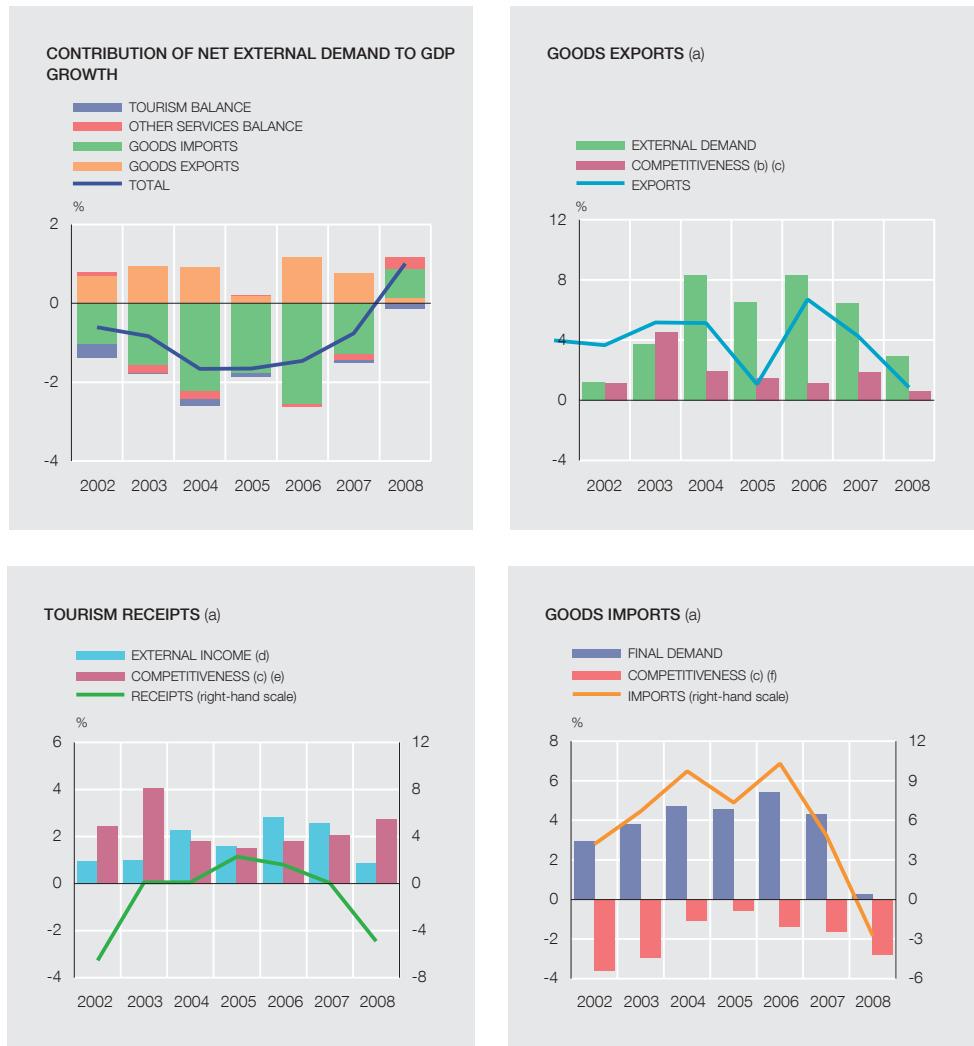


SOURCES: INE and Banco de España.

- a. Real rates of change and changes in the real cost of financing.
- b. Rates of change of volume indices.
- c. Normalised data (difference between the series and its mean value divided by its standard deviation).
- d. Profit is obtained, using National Accounts data, by adding interest and dividends received and other net current transfers to the gross operating surplus, and subtracting interest paid. Thus, the profit in question is after interest and before tax.
- e. Nominal private productive capital stock obtained from the aggregate of private productive investment.

After demonstrating greater resilience in the first half of the year, business investment decelerated sharply towards the end of 2008, ...

Business investment was markedly less dynamic in 2008, posting average growth, in real terms, of 0.5%, as opposed to almost 6% in 2007. Weak (national and external) demand, the increasingly unfavourable economic outlook and harsher external financing conditions for firms were all behind this sluggish performance. On the one hand, as indicated above, the banks began to apply increasingly stricter criteria for approval of new loans, at the same time as the user cost of capital rose in real terms. And on the other, internal financing became more difficult to come by, as the stock market fell and earnings expectations were revised down. The slowdown in investment was particularly significant in 2008 Q4, with a contraction of some 6% on the 2007 close, and it will probably intensify in 2009 since the factors that led to weak business investment in the final stretch of 2008 have remained unchanged to date in 2009.



SOURCES: IMF, OECD, INE and Banco de España.

- a. Real year-on-year rates of change.
- b. Spanish exports deflator in relation to rest-of-the-world export prices, exchange rate-adjusted.
- c. Positive values denote a loss in competitiveness of exports, imports and the Spanish tourism industry, negative values a gain.
- d. Average of GDP growth of the main countries of origin of tourists to Spain, weighted according to the relative significance of the number of visitors.
- e. Real effective exchange rate, measured with consumer prices, vis-à-vis developed countries.
- f. Inverse of producer price index in relation to Spanish imports deflator.

... with a decline in capital goods spending, in particular in transport

All private productive investment components decelerated, but particularly capital goods, which declined by almost 2% (see Table 5.2 and Chart 5.5). Under this heading, the contraction in the transport component was especially noteworthy (5.3% on average in 2008). This was reflected in a slight decline in investment in the services sector, which accounts for 90% of spending on transport, while investment in machinery rose by just 1%, in line with the contraction in industry which accounts for 40% of demand in this segment. Lastly, private investment in non-residential construction decelerated more moderately, sustained by the momentum in infrastructure investment projects undertaken by certain State-owned enterprises, while non-residential building declined significantly, as evidenced by developments in the number of approvals for this type of projects.

High corporate debt and declining returns discouraged investment

The corporate indebtedness ratio remained high and the debt burden rose (see Chart 6.9), discouraging firms from taking on new investment projects. Declining corporate returns, seen in the

profit to productive capital stock ratio (defined using National Accounts variables), which in 2008 continued on the declining path seen since 2004, and in the corporate profits reported to the Central Balance Sheet Office (CBSO), which fell sharply, also acted as a deterrent to investment.

As business investment declined and saving rates rose, firms were able to cut their borrowing

The increase in gross operating profit and, in particular, the sharp decrease in corporate income tax payments, following the latest tax reform, prompted growth in corporate saving in 2008. This, together with the decline in the business investment ratio, led to a significant drop in corporate borrowing, to 7.5% of GDP, as opposed to a high of 11.1% in 2007.

### 3.2 EXTERNAL DEMAND

External demand made a positive contribution to growth in 2008, for the first time since the end of the 1990s

For the first time since 1997, net external demand made a positive contribution to GDP growth in 2008 (1 pp, as opposed to a negative contribution of -0.8 pp a year earlier). This was due to the notable slowdown, in real terms, in imports of goods and services, which fell by 2.5% (after rising by 6.2% in 2007), as the rate of growth of exports moderated in 2008, rising by 0.7%, in comparison with 4.9% a year earlier.

Goods exports decelerated towards the end of 2008, but over the year as a whole the share in world markets was stable

Goods exports were relatively dynamic, in real terms, in the first three quarters of 2008, but by year-end they had declined considerably, and continued to do so in the opening months of 2009. Spanish exports, which grew by just 0.9% in the year as a whole, as opposed to 4.3% in 2007, thus reflected the impact of the growing weakness of world economic activity in 2008, and its sudden collapse in the last few months of the year. As a result of the globalisation of activity and trade, and in particular of the fragmentation of the production process, trade is playing an increasingly important role in the spread of the present financial and economic crisis (see Box 3.2).

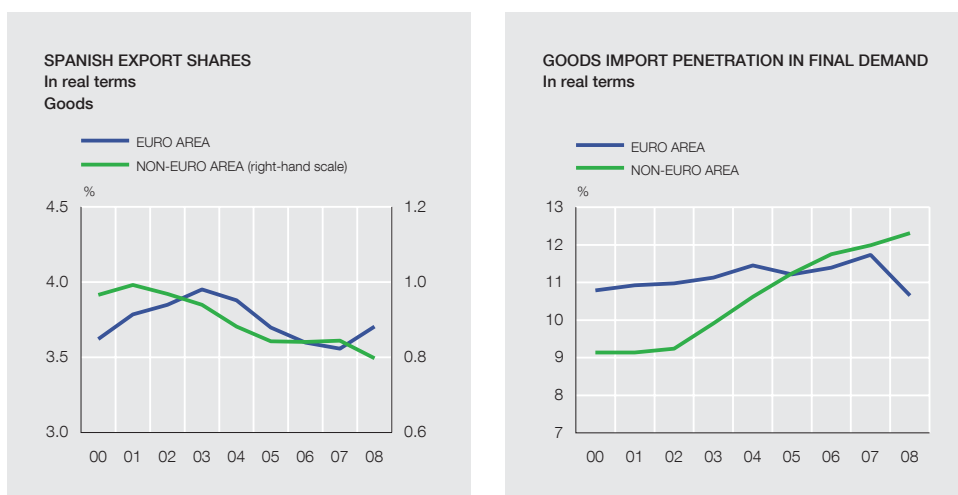
Nevertheless, over the year as a whole, Spain's world export share remained stable, in real terms, for the third consecutive year, as the gains in export share in the euro area offset the loss in share in the rest of the world (see Chart 5.7). The moderate growth in export prices could indicate that export firms, subject to internal cost pressures, may have had to cut their margins once more, in an increasingly competitive environment, so as to maintain their presence on the export markets.

The export slowdown affected almost all products

The breakdown of real exports by product shows that the slowdown was felt across the board, but most particularly in durable goods, which bore the brunt of the contraction in sales of products such as automobiles to the developed countries, and in capital goods, hit by the poor performance of exports of transport equipment. Exports of intermediate industrial products, boosted in 2007 by demand from the emerging economies, moderated considerably in the second half of 2008, consistent with developments in industrial activity worldwide. Lastly, energy exports performed rather better, although they represent only a small proportion of the total, as do highly technologically intensive products (especially, aircraft and pharmaceuticals) which, along with textiles, helped lift exports of non-durable consumer goods.

Services exports also decelerated, although services other than tourism continued to post positive rates of growth

Services exports other than tourism rose by 4.6% in real terms, although this is a lower rate of growth than in the previous two years. In this case also the slowdown was concentrated in the second half of 2008, although it was much less intense than that seen in goods exports. In recent years, services have become more globalised, as technological advances have opened up new marketing possibilities and Spain's big corporations have seized the opportunity to compete in different sectors. According to balance of payments data, construction services, communications, royalties and services provided to companies were the key growth areas in 2008.



SOURCES: IMF, OECD, Eurostat, INE and Ministerio de Economía y Hacienda.

Tourism receipts contracted sharply, against a backdrop of economic uncertainty and euro strength

Tourism receipts fell in 2008 as a whole, but most particularly after the international financial crisis heightened in September. This was part of a worldwide pattern, exacerbated in the case of Spain by the adverse impact of the appreciation of the euro against the dollar and sterling on price competitiveness in comparison with other tourist destinations in the eastern Mediterranean. All this, along with the slowdown in activity in the EU countries, from where most of the tourists coming to Spain originate, brought about a decline of 2.6% in the number of visitors in 2008, in contrast to the growth of 2% in tourist numbers worldwide. Nevertheless, there are signs that the tourists visiting Spain come from an increasingly wide range of countries, and that the minority segments of the tourism market (such as city tourism) which, in addition, attract visitors with higher spending power, are becoming relatively more stable. In the short term, tourist numbers cannot be expected to grow at the same pace as in the past, although this unfavourable outlook for the sector could be mitigated by Spanish nationals choosing to holiday in Spain rather than abroad.

The decline in imports, the first since 1993, intensified as the year progressed, ...

The rate of growth of goods imports moderated as the year progressed, unlike that of exports, although similarly to the case of exports, the fall intensified in Q4 and has continued to do so in 2009. In 2008 as a whole, imports fell, by 2.7% in real terms, for the first time in 15 years, in comparison with growth of 4.8% in 2007, driven down by the loss of momentum in industrial activity and in final demand, which is highly dependent on imports, especially inputs for industry and high-tech capital and consumer goods.

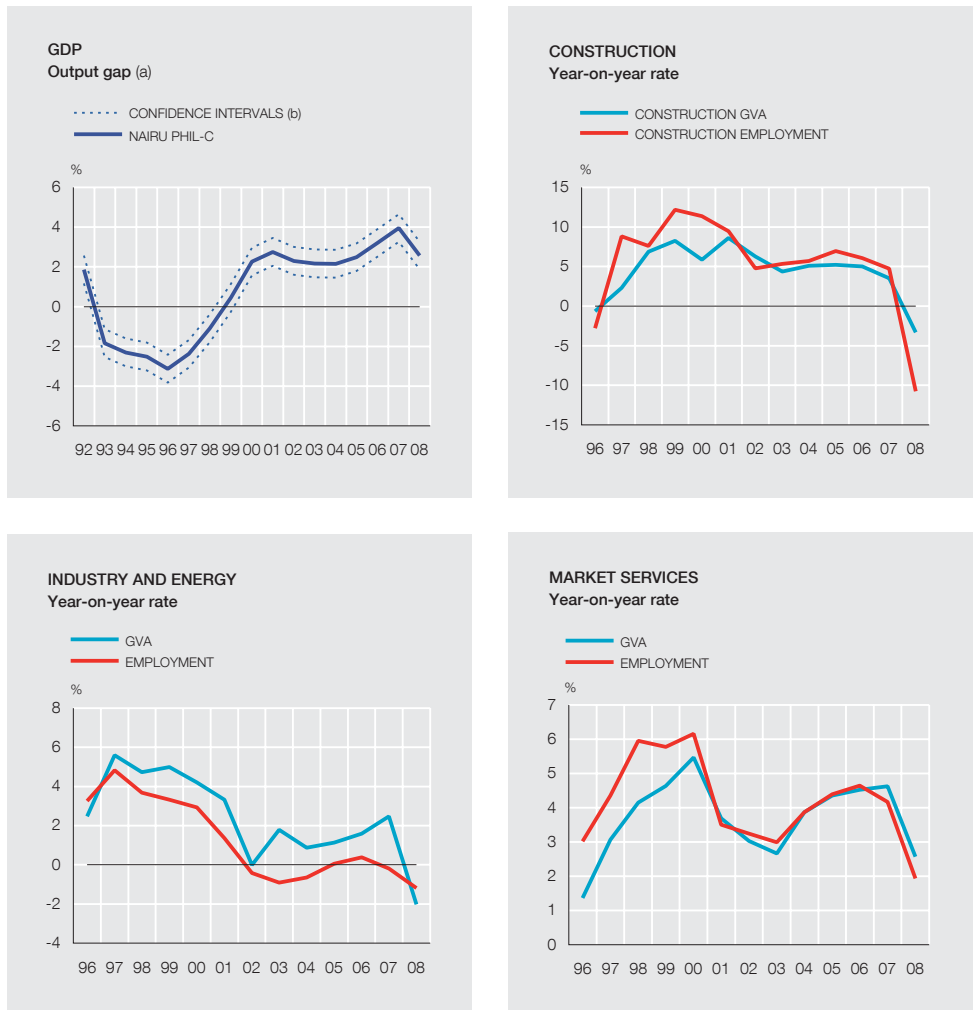
... resulting in a drop in import penetration as a proportion of final demand

The decline in imports was particularly marked in capital goods (in machinery and, above all, in transport equipment), in consumer durables (especially automobiles), and, within industrial intermediate goods, in minerals and products for use in the manufacture of transport equipment. By geographical area, it was concentrated, in real terms, on goods imports from within the EU, which fell by 7.4%, while goods imports from the rest of the world rose by 3.8%, although they too fell in 2008 Q4. Worldwide, trade is declining at a faster pace than activity, and Spain proved no exception to this rule, as the decline in imports exceeded that which was to be expected in light of final demand. Thus, import penetration decreased as a proportion of final demand in 2008, interrupting the continued growth pattern of previous years.

Tourism expenditure fell in 2008, for the first time since 1993

Services imports also fell in 2008, after several years of significant growth. Tourism expenditure declined by 4.5% over the year as a whole, but, similarly to other variables, most intensely in





SOURCES: INE and Banco de España.

a. The output gap, defined as the percentage difference between actual GDP and potential GDP, has been calculated using the NAIRU (the structural rate of unemployment) based on an estimate of the Phillips curve (see the article "Estimates of the potential growth rate of the Spanish economy", by M. Izquierdo and J. Jareño, in *Economic Bulletin*, January 2007, Banco de España).

b. 95% confidence interval considering only the uncertainty in the estimate of the structural component of unemployment.

Q4. High economic uncertainty and the development of the fundamental determinants of tourism expenditure explain the behaviour of this component of household spending, which presents high income elasticity. The decline in imports of other services, which also heightened in the closing months of 2008, was due to royalty payments, insurance, and IT and communications services.

#### 4 Activity

As a result of the sharp slowdown in activity, the output gap narrowed considerably in 2008, although it remained positive

The economic slowdown that had begun in 2007 gradually intensified as the year progressed, gaining in strength as from 2008 Q4. Over the year as a whole, GDP growth, at 1.2%, was short of its potential rate, although this also decelerated, so that the output gap, which had grown throughout the expansionary phase, began to shrink in 2008 (see Chart 5.8).

All areas of activity lost momentum: construction declined sharply ...

The deceleration in the rate of growth of the market economy, down 3.2 pp on the previous year at 0.7%, was much more pronounced than in GDP. By branch of activity, only the energy industry showed greater dynamism in 2008, while value added in agriculture and fisheries declined substantially, with an average rate of growth of -0.6%, 3.6 pp below the 2007 figure.

The fall in production was especially marked in the construction sector (-3.3%), which decelerated sharply in the year, going from positive growth of 1.5% year-on-year in 2008 Q1 to a decline of 8% in Q4. As indicated in the section on national demand, this poor performance was primarily due to housing, while all other building and civil engineering components performed somewhat better. The sharp drop in housing demand, the high stock of unsold properties and the increasing difficulties in accessing financing put a sharp brake on new residential investment projects. Moreover, worsening expectations regarding house prices deterred builders, as the expected returns from new housing supply headed down. Non-residential building also decelerated over the year, as firms reined in their medium-term investment plans in light of the international economic crisis, the deteriorating economic outlook and tightening credit conditions.

... and industry somewhat more moderately, ...

Despite the positive performance of the energy sector, GVA gradually lost momentum in industry and energy in 2008, shrinking at an annual rate of 2%. This was due to the fall in demand for intermediate goods from the construction sector, exacerbated, as the year progressed, by the effect of the decline in consumer goods purchases by households and in capital goods purchases by companies. Moreover, the collapse in international trade in 2008 Q4 prompted a cutback in export goods production. Accordingly, the decline in industrial activity became more pronounced as the year progressed, going from a virtually flat rate of growth year-on-year in Q1 to a negative rate of -4.7% in Q4. This decline was most marked in industries producing goods with lower (especially medium-low) technological content, while more advanced industries posted growth on 2007. In the energy sector, value added rose by around 2%, primarily as a result of greater momentum in gas distribution, while weak electricity demand led to modest growth of scarcely 1% in electricity generation.

... while market services, although recording positive growth, decelerated significantly in the year

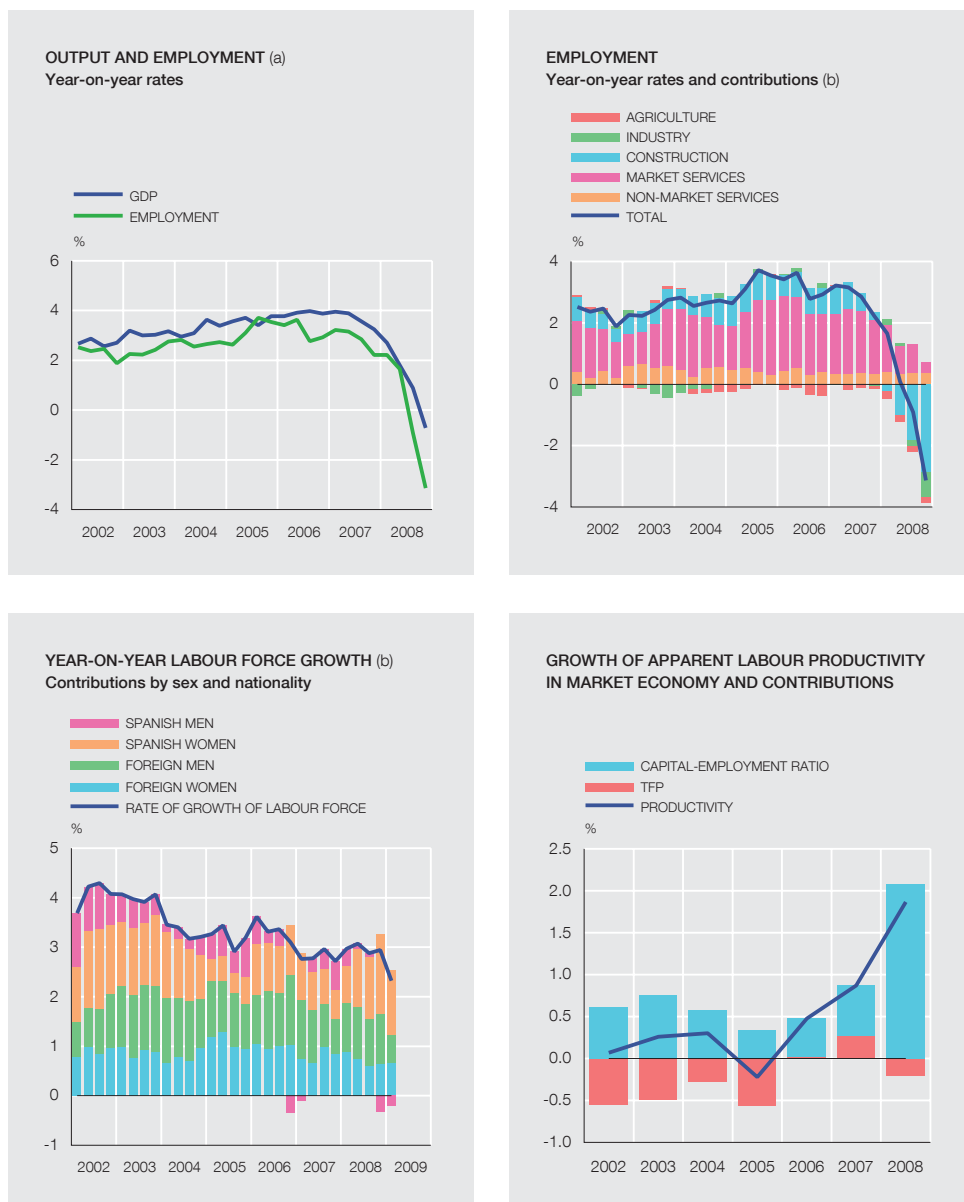
Activity in the services sector as a whole decelerated sharply in 2008, growing at an average rate of 3.1%, on the back of the progressive deterioration in market services, whose GVA grew by 2.6% in the year (0.7% in Q4), as opposed to growth in excess of 4% in the three previous years. This loss of momentum was seen across the board, both in domestic market and export services, but most particularly in services connected with the automobile and tourism industries and in business services.

## 5 The labour market

Jobs were destroyed in 2008, after a lengthy period of strong employment growth

After 14 consecutive years of employment growth, at an annual average rate in excess of 3%, in 2008 employment fell by 0.6%, although the labour market deteriorated much more severely in the second half of the year, shrinking at a rate of 3.1% in year-on-year terms in Q4 (see Chart 5.9). The decline was worse in the market economy, where employment fell by 1.2% on average in the year.

The adjustment in employment was much higher than that seen in economic activity due, among other factors analysed in Chapter 2 of this Report, to wages which rebounded sharply, both in nominal and real terms. The rate of growth of apparent labour productivity stood at 1.8% although, as shown in the bottom-right panel in Chart 5.9, which presents an estimated breakdown, this increase was due to the sharp fall in employment, which lifted the capital-employment ratio, with no gains visible in estimated total factor productivity.



SOURCES: INE and Banco de España.

a. Seasonally-adjusted QNA series. Full-time equivalent employment.  
b. The EPA (Spanish Labour Force Survey) series are linked on the basis of the 2005 Q1 control survey.

By branch of activity, the deterioration, although generalised, was particularly notable in construction

Construction bore the brunt of the adjustment: employment fell by slightly more than 10% over the year as a whole, with negative rates of change as from Q1 and a decline of more than 20% in Q4. In industry, despite the recovery seen in the first part of the year, employment fell by 1.2%, with extensive job destruction in Q4. In market services, employment rose by 1.9%, less than half the rate of growth seen in 2007, and with virtually flat growth by year-end. Lastly, in agriculture, jobs were destroyed again, for the sixth consecutive year, and at a higher rate than in 2007. Nevertheless, non-market services offset part of this adverse performance, growing at a steady rate of 2% throughout the year, very similar to the previous year.

The strong growth in productivity in the construction sector (8.3%) explains the bulk of the rebound in productivity in the economy overall, after a long period of decline. Productivity

growth was more modest in services and was even negative in industry, falling sharply in the first half of the year.

The decline in employment brought about a reduction in the ratio of temporary to total employees.

The employment breakdown based on contract duration shows that employees with temporary contracts bore the brunt of job destruction, as their numbers fell by 8% in the year and by more than 12% in Q4. The number of employees with permanent contracts rose by 3%, although this rate of growth slowed markedly in the year and was virtually flat at end-2008. The ratio of temporary to total employees thus stood at 29.3%, more than 2 pp below the 2007 figure. This decline is primarily due to the cyclical pattern of temporary employment, which has borne the brunt of the adjustment. Thus, for example, on EPA (Spanish Labour Force Survey) data, 14.5% of employees with temporary contracts in 2008 Q3 were unemployed three months later, in comparison with 2% of employees with permanent contracts. Job destruction in the construction sector, where the proportion of temporary to total employees is very high and a third of workers with temporary contracts lost their jobs in the year, also contributed to this decline. Hirings of foreign workers continued to increase in 2008; however, the rate of growth was much lower than in 2007, and fell sharply as the year progressed, becoming virtually flat in 2008 Q4.

Despite the deterioration of the labour market, the rate of growth of the labour force quickened in 2008

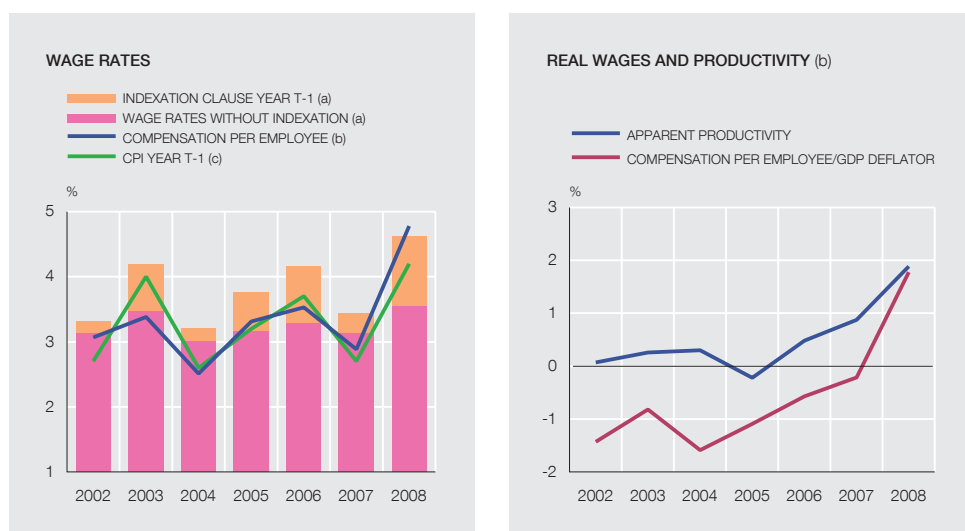
The labour force regained a certain degree of momentum, growing by 3% in the year, although the rate of population growth moderated, from 1.8% in 2007 to 1.4% in 2008. This lower rate of growth was due to the slowdown in net migrant inflows, which although still high (some 450,000 persons over 16 years of age), reflected some reaction to the deterioration in activity. Accordingly, the rebound in the labour force was due to the higher rise in the participation rate, which at 59.8% was up 0.9 pp on 2007 and in line with the growth seen in the years of strong job creation. This is due, primarily, to the growing numbers of Spanish women joining the labour market, whose participation rate rose by 1.4 pp (as opposed to 0.9 pp in 2007), partly as a reaction to growing unemployment among other groups (in fact the participation rate rose among women whose husbands were unemployed). After declining in 2007, the participation rate among foreign nationals regained the momentum of previous years, rebounding by almost 1 pp, primarily as a result of the female segment.

The severity of the employment adjustment and the growth in the labour force led to a sharp rise in unemployment

Unemployment rose by more than 1.2 million (66.4%) in 2008, closing the year at more than 3.2 million, with an unemployment rate of 13.9%, in sharp contrast to the all-time low of 8% a year earlier. The increase in unemployment was particularly marked among younger and less-skilled workers, and among foreign workers whose unemployment rate rose by some 5 pp to 17.5%. This sharp rise in unemployment continued in 2009 Q1; at end-March the unemployment rate stood at 17.4%, with the jobless total in excess of four million. The estimates available on the structural component of unemployment point to a more moderate increase in NAIRU than in the unemployment rate in 2008. For 2009, however, a bigger increase in structural unemployment, associated with a significant rise in long-term unemployment, cannot be ruled out.

Wages rebounded both in nominal and real terms in 2008, showing scant sensitivity to the worsening economic climate

Wage increases under collective bargaining agreements stood at 3.6% in 2008, 0.5 pp above the increase agreed for 2007, despite the progressive deterioration in the labour market in the year (see Chart 5.10). Nevertheless, wage rates mainly reflected the poor inflation performance in the first half of the year, but with no sign of a turndown in the new agreements signed in the closing months of the year, when inflation had begun to moderate and the labour market situation was significantly worse. Moreover, as inflation missed the 2% target set for end-2007 (by 2.2 pp), the indexation clauses were activated, thus increasing wage pressure, with an impact of 1.1 pp on wages paid in 2008.



SOURCES: INE and Ministerio de Trabajo y Asuntos Sociales.

- a. Information on collective bargaining agreements recorded to April 2009.  
 b. Market economy.  
 c. Year-on-year rate of change in December.

These developments in collective bargaining agreements were reflected in QNA estimates of compensation per employee, which showed wage costs rebounding to 4.8% in the market economy, the biggest increase since the early 1990s. This represents virtually flat wage drift<sup>2</sup> in 2008, in the wake of the negative figures of previous years, related to the disappearance of the composition effects that were behind this negative wage drift. In real terms, labour costs borne by firms, using the GDP deflator of the market economy as a price index, rebounded sharply in 2008 (see Chart 5.10), closing the gap with labour productivity seen in previous years.

## 6 Prices and costs

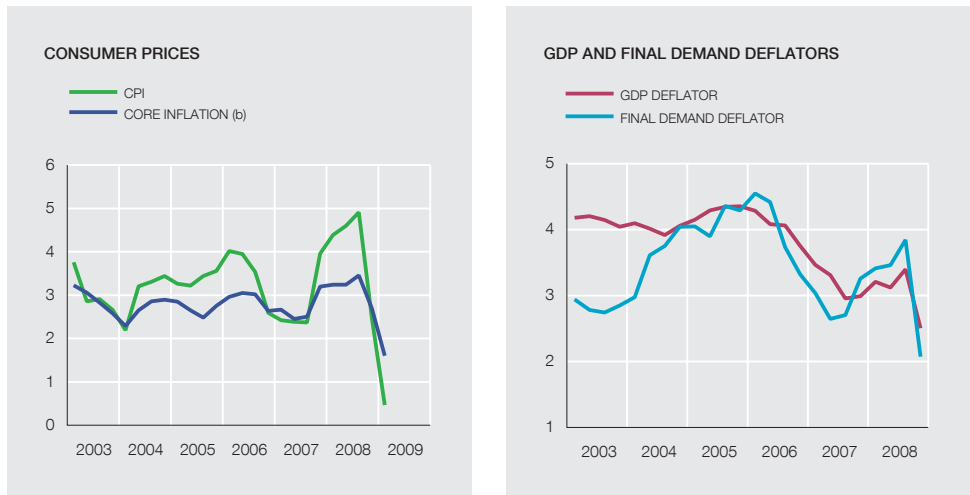
Inflation declined sharply as from mid-2008; this process has intensified in 2009 to date, with negative rates of change year-on-year

Inflation in 2008 reflected the fluctuations in the price of oil, ...

For the consumer price index (CPI), 2008 was a year of two very distinct halves. In the first half of the year, inflation rose significantly, continuing in the pattern seen since the summer of 2007, reaching 5.3% in July. It then headed down even more pronouncedly, closing the year at 1.4%. This decline has continued in 2009 to date, so that by end-March the year-on-year rate of growth was negative at -0.1%, the lowest rate of inflation since 1952. Two key factors in this decline were the decreases in energy and food commodity prices, against a backdrop of extreme economic weakness worldwide, and the decline in national, especially household, spending. This meant that companies had to adjust their prices, cutting their margins or searching for productivity gains to offset the impact of labour costs. Moreover, the effects of the shocks were more intense in Spain than in the euro area, so that the inflation differential (measured with the HICP), which had remained on average at around 1 pp since 1999, narrowed significantly as from 2008 Q4. Since December it has been increasingly negative, standing at -0.7 pp at March 2009, the lowest level since the start of monetary union.

Inflation measured by the CPI rose by 1.3 pp over the year as a whole to 4.1%, the result, as indicated above, of two very different half-year periods. In the first half of the year, the price of crude oil on the international markets rose substantially: the price of Brent oil verged on \$150 per barrel in July, an all-time high in nominal terms. It headed down thereafter, closing the year at slightly more than \$40 per barrel, and has then rebounded somewhat in 2009 to date. The

2. Defined as the difference between the increase in wage settlements under collective bargaining, including the effect of the indexation clauses, and the increase in compensation per employee in QNA.



SOURCES: INE and Banco de España.

- a. Year-on-year growth rates.
- b. General index, excluding unprocessed food and energy prices.

euro exchange rate against the dollar, which appreciated when the price of oil rose and depreciated when it fell, cushioned, to a certain extent, these fluctuations in the oil price when measured in euros. In comparison with the euro area, the higher spending on oil derivatives as a proportion of total household spending in Spain, and the lesser weight of excise duties on these products, mean that fluctuations in the oil price have a greater impact on prices in Spain than in the euro area. That explains, in part, the narrowing of the inflation differential with the euro area described above. The pass-through of oil price fluctuations to the prices of non-energy products was moderate (in line with the econometric estimates available), although the rising prices of energy products, which helped keep inflation rates high in the first half of 2008, are partly responsible for the rebound in wage settlements in the year.

... food prices ...

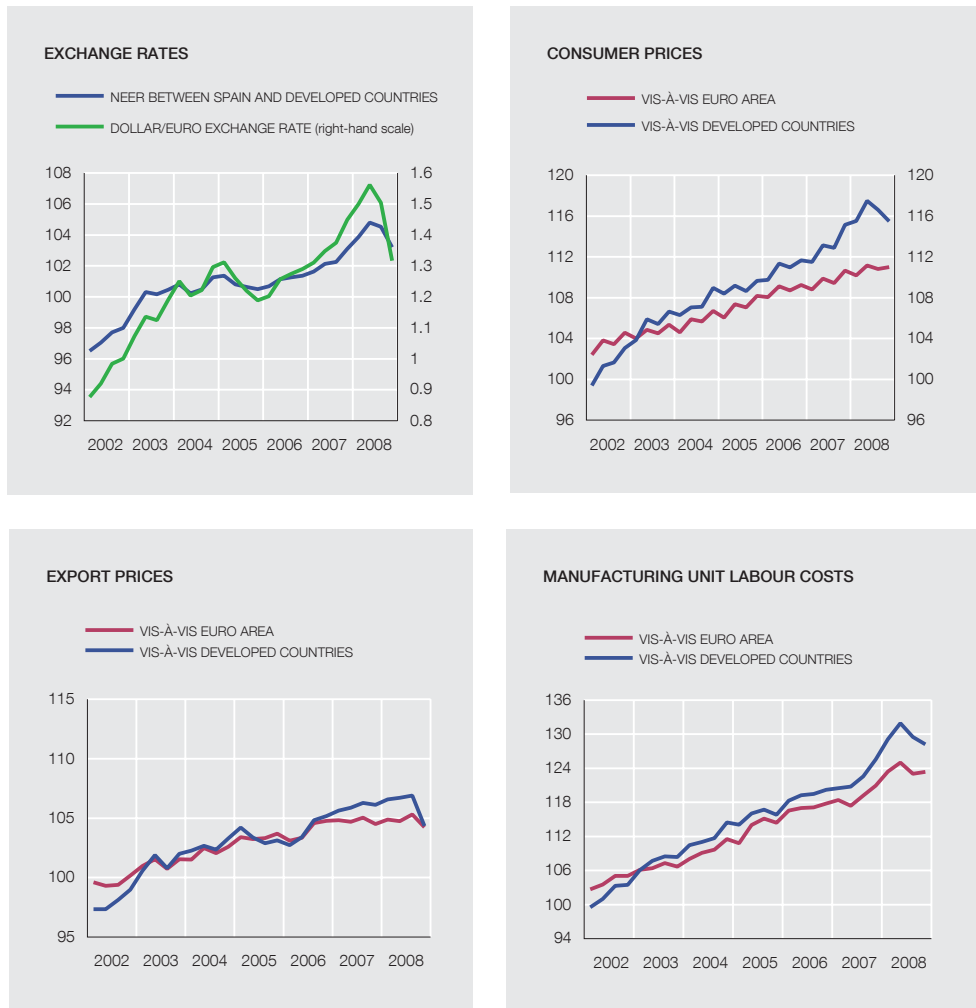
Inflation likewise reflects prices of foodstuffs, which rose on the international markets in 2007, prompting an increase in crop-growing worldwide. This, accompanied by generally favourable weather conditions, boosted global production and stock levels. In this setting, food commodity prices on the international markets have fallen substantially, especially since mid-2008, helping rein in the rate of growth of consumer food prices in Spain and, to a lesser extent, in the euro area.

... and the impact of recession

In 2008 as a whole, services prices rose at a rate of 3.9%, very similar to that of previous years. However, these prices decelerated in the final stretch of 2008 and have continued to do so in 2009 to date, pointing to an adjustment in prices and margins to the decline in household spending. Accordingly, by March 2009, the rate of growth of services prices had dropped to 2.7%, narrowing the attendant differential with the euro area. The rate of increase of prices of non-energy industrial goods declined on average in 2008 to 0.3%, 0.4 pp below the 2007 figure. In 2009 the rate of change has decelerated even further, to -0.6% in March, substantially below the rate for the euro area. This intense price adjustment seems to be due to the contraction in demand, and possibly to the high competitive pressure in some markets (such as clothing and footwear) stemming from the growing weight of the new producer countries.

The GDP deflator decelerated in 2008, especially in the second half of the year

The GDP deflator rose by 3% in 2008, 2 pp below the previous year's rate. The slowdown was most intense in the second half of the year, bringing the rate of change to 2.5% in 2008 Q4. All demand components decelerated in the final stretch of the year, in contrast to the more disparate earlier performance. Specifically, inflationary pressure in the commodities markets in



SOURCE: Banco de España.

a. An increase in the index denotes a loss of competitiveness, and vice versa.

the first quarters was clearly discernible in the import and consumption deflators. The export deflator also rebounded in the first half of 2008. By contrast, the gross capital formation deflator decelerated throughout the year, due, above all, to residential investment which reflected developments in house prices.

Unit labour costs rebounded, as wages rose significantly, ...

Despite the severe deterioration in the economic conditions, the rebound in compensation per employee exceeded the increase in apparent labour productivity, so that labour costs per unit of value added in the market economy accelerated.

... prompting a loss of price-competitiveness in 2008 as a whole, although this reversed in part in the second half of the year

The different price-competitiveness indices vis-à-vis the main developed countries continued to deteriorate in the year as a whole, although the depreciation of the euro and the generalised correction in price differentials prompted some degree of improvement as from the second half of the year. Vis-à-vis the euro area, the price-competitiveness indicators were similar, in general, to the previous year's, with the exception of those based on unit labour costs in manufacturing, which deteriorated, and those based on export prices, which improved markedly. By contrast, outside the euro area, the losses in price competitiveness were higher than in 2007, since the narrowing of price and cost differentials, which in some cases became negative, was more than offset by the appreciation of the euro in the year as a whole (see Chart 5.12).



SOURCES: INE, Departamento de Aduanas and Banco de España.

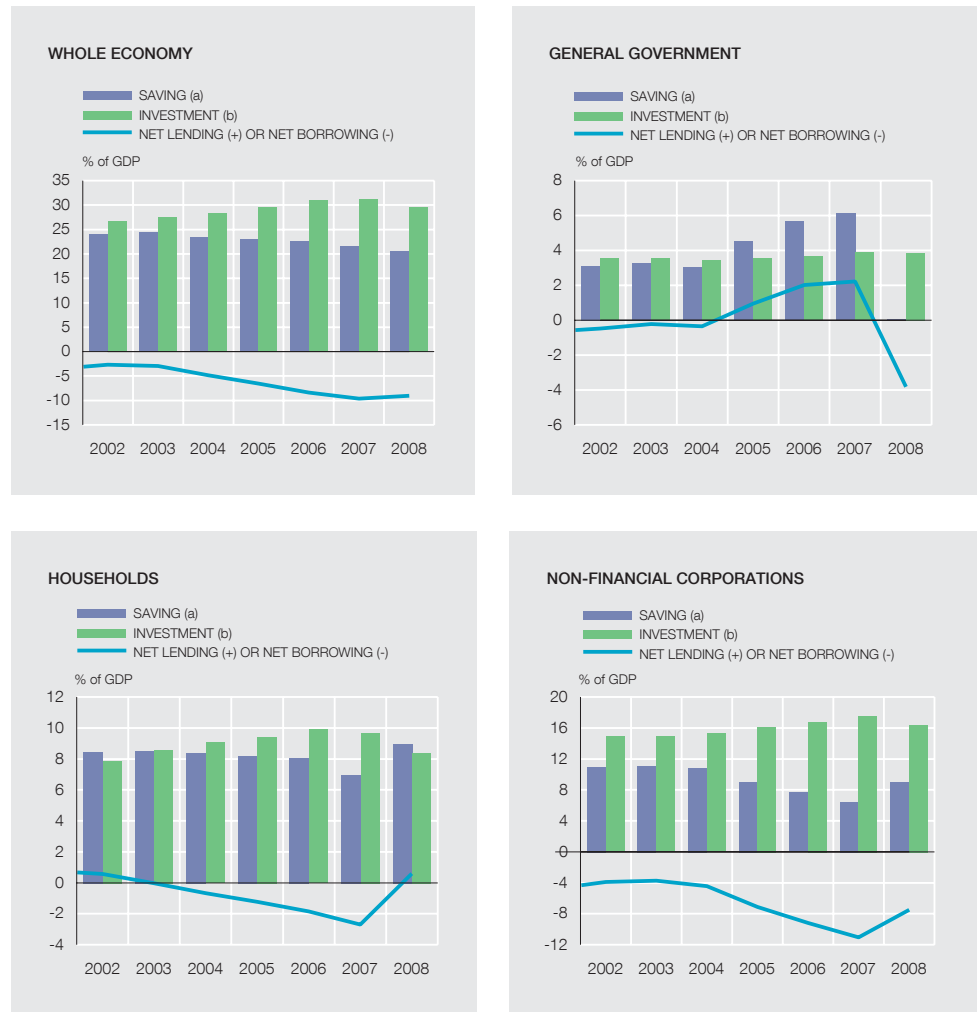
### 7 Net borrowing of the nation and the capital account of the institutional sectors

The nation's net borrowing fell, for the first time since 2002

As Spanish economic growth decelerated, net borrowing moderated, posting negative rates of change year-on-year in the second half of 2008 and in 2009 to date. The decline in the external deficit has been strengthened in recent months by the severity of the contraction in national demand, which drives down imports, and by the falling price of energy, which has led to a substantial reduction in the energy deficit.

Over the year as a whole, the nation's net borrowing fell to 9.1% of GDP, 0.6 pp below the previous year's figure, interrupting a persistent upward pattern. As indicated above, the correction became more intense as the year progressed: thus, net borrowing in 2008 Q4 represented 2 pp of GDP, below the figure a year earlier, while the trade deficit was more than 3 pp below the 2007 Q4 figure. Returning to the total for the year, the improvement in the external balance reflects the decline in the current account deficit, to 9.5% of GDP, as the surplus on capital transactions held steady at around 0.5% of GDP (see Chart 5.13). In the year as a whole, the decline in the trade deficit (0.8 pp to 7.7% of GDP) offset the deterioration in the investment income balance and, to a lesser extent, in the current transfers balance. By geographical area, the correction focused on trade with the EU, as the deficit with the non-Community countries continued to grow, primarily reflecting the impact of the rebound in average annual commodity prices.





SOURCES: INE and Banco de España.

- a. Gross national saving.
- b. Gross capital formation.

The tourism surplus continued to decline in 2008

As in the previous year, the tourism surplus continued to decline as a percentage of GDP in 2008, although in this case tourism receipts and expenditure headed down, most notably in Q4. Non-tourism services continued to post positive growth rates in the year as a whole, but they also decelerated considerably as the year progressed, especially imports, prompting a correction of almost 0.3 pp in the attendant deficit, to 0.9% of GDP.

The income deficit continued to grow, ...

The international financial crisis made access to international financing more difficult, especially on the capital markets. As a result, interest rates on funds raised abroad by the banks rose and there was a shift away from long-term issues and towards short-term instruments, including, notably, an increase in resource to the Eurosystem. In this setting, although the external debt of the Spanish economy remained at the high levels seen in 2007 (around 80% of GDP), the investment income deficit as a proportion of GDP widened by 0.2 pp to 2.9%, reflecting the increase in the negative balance associated with portfolio and other investment income, which the increase in the surplus on direct investment income failed to offset.

The nation's net borrowing stood at 9.1% of GDP at end-2008, signifying an interruption in the growth pattern of recent years (see Panel 1). Although this correction amounted to only 0.6 pp of GDP over the year as a whole, it was more significant in H2, with a decline of 2 pp of GDP in Q4, and all the indications are that this decline intensified in the opening months of 2009. Moreover, this aggregate economic performance conceals important changes in the imbalances between saving and investment in each of the institutional sectors. Thus, after five years of net borrowing, households returned to a position of net lending (0.6% of GDP), and net borrowing by non-financial corporations fell by more than 3.5 pp of GDP to 7.5%. However, while the private-sector balances improved, the imbalance between general government saving and investment deteriorated significantly, going from net lending in the period 2005-2007 to net borrowing of 3.8% of GDP.

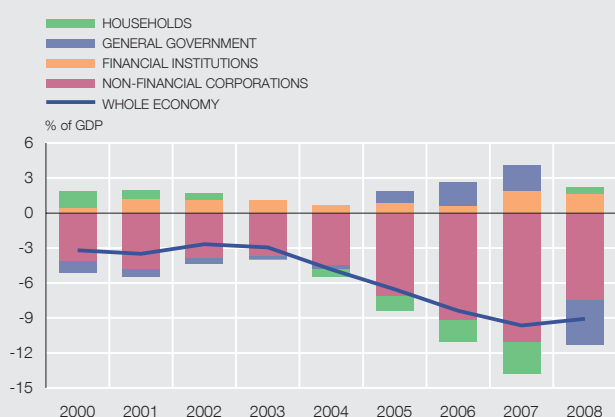
These changes came about against a backdrop of declining saving and investment rates, based on relatively different contributions from the different economic sectors. Thus, the major slowdown in business investment and the sharp adjustment in residential construction in 2008 gave rise to a decline in investment by households and non-financial corporations. This passed through to total gross capital for-

mation, which declined as a proportion of GDP for the first time in the last decade (see Panel 2). However, general government gross capital formation continued to represent 3.9% of GDP, which is relatively high in comparison with other European countries.

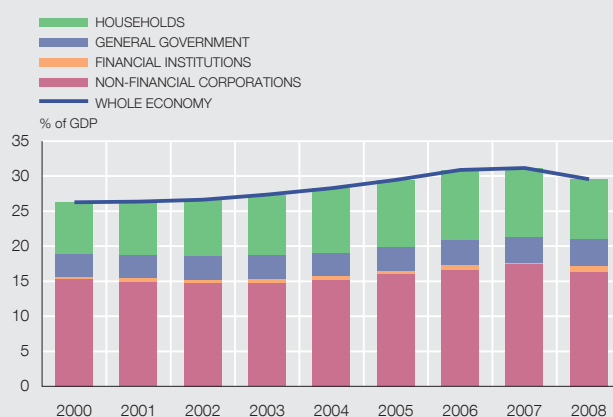
National saving continued to decline in 2008, in line with the negative growth pattern of recent years (see Panel 3). Nevertheless, the breakdown by sector shows significant changes in comparison with previous years. The household saving rate, which had gradually dropped to 10.2% of gross disposable income by 2007, rose to 13% at end-2008, resulting in an increase of 2 pp as a percentage of GDP. Likewise non-financial corporations' saving, which also rose by 2 pp of GDP, after declining in the previous three years, due, above all, to the increase in debt servicing payments. By contrast, general government saving fell sharply (by more than 5.5 pp of GDP), more than offsetting the growth in private-sector saving.

These figures reflect some correction in households' and non-financial corporations' net borrowing positions in 2008, although this was due, in part, to a transfer of funds from the public to the private sector. Among the possible channels for this transfer of funds (taxes, transfers, social contributions and benefits), the role of the automatic

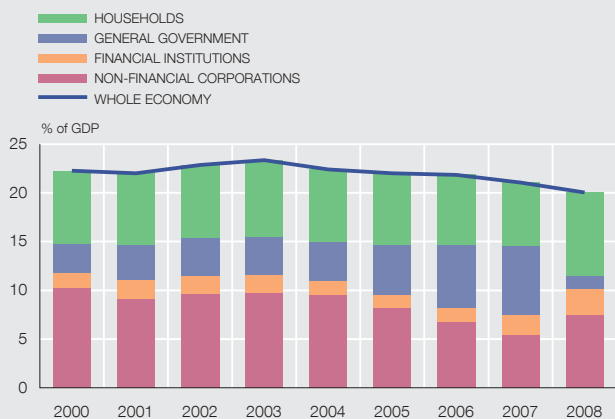
1 NET LENDING (+) OR NET BORROWING (-) OF THE NATION



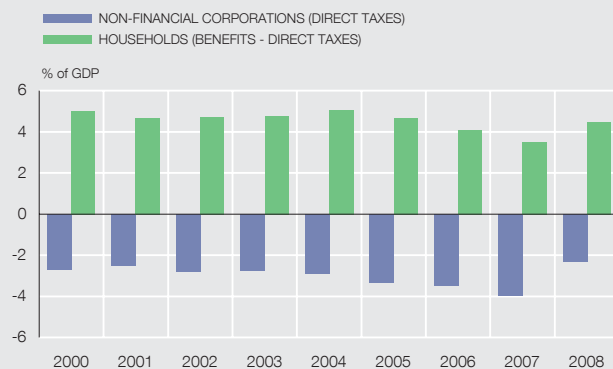
2 GROSS CAPITAL FORMATION



3 GROSS NATIONAL SAVING



4 IMPACT OF DIRECT TAXES AND BENEFITS ON HOUSEHOLD AND CORPORATE INCOME



SOURCE: INE.

stabilisers and of the expansionary fiscal measures adopted are particularly noteworthy. In this respect, the institutional sectors' accounts show that increased social benefits and lower direct tax payments raised households' disposable income by 1 pp of GDP in 2008 (see Panel 4). In the case of non-financial corporations, lower corporate income tax payments, due not only to regulatory amendments made before the onset of the financial crisis (such as the second part of the lower corporate income tax charge) but also to the decline in corporate earnings growth, signified an increase in income equivalent to 1.7% of GDP. There were no significant changes in the effect of social contributions on agents' income in 2008, as these were stable as a percentage of GDP.

In short, the institutional sectors' accounts show that household and corporate imbalances began to adjust in 2008, as investment declined and saving rates rose. The adverse impact on activity was cushioned by the behaviour of general government, which helped sustain disposable income in the private sector. The decline in the nation's net borrowing, which can be expected to continue through 2009 and 2010, had a balancing effect on this process. The latest Banco de España macroeconomic projections point to a decline in net borrowing up to 2010 of some 5 pp of GDP, due, as in 2008, to an adjustment in households' and non-financial corporations' spending, while it is estimated that the budget deficit will continue to grow throughout the projection period.

... as did the current transfers deficit, as the balance with the EU deteriorated, in contrast to the relative stability of the surplus on capital transactions

The deficit on net current transfers stood at 0.8% of GDP in 2008, an increase of 0.2 pp in 2007, as expenditure rose moderately and receipts declined. The fall-off in migrants' remittances, in the wake of the sharp growth seen since the beginning of the decade, was more than offset by the increase in general government expenditure, related to the EU and to donations. For its part, the decline in receipts reflects the decrease in Community funds. The surplus on capital transactions was steady as a percentage of GDP at 0.5%, interrupting the declining path of previous years. Capital transfer receipts from the EU rose slightly, in contrast to 2007. Overall, the positive balance on the general government's current and capital transactions with the EU fell significantly in 2008.

Net borrowing declined, especially in the private sector, as the public-sector balance deteriorated considerably

The decrease in net borrowing in the Spanish economy in 2008 was due to the decline in investment (down 1.7 pp of GDP to 29.6%), as the gross national saving rate continued to fall (by 1.1 pp of GDP to 20.5%) (see Chart 5.14). The aggregate pattern was due to a very disparate performance by the public and private sectors. Thus in 2008, for the first time since 2003, households recorded moderate net lending, as a result of the decline in residential investment and the substantial recovery in the saving rate, connected, to a certain extent, to the considerable fiscal stimulus applied (see Box 5.2). At the same time, net borrowing by non-financial corporations fell in the year, as business investment moderated as the year progressed. By contrast, in the public sector, general government net borrowing rose in 2008, with a deficit of 3.8% of GDP, in comparison with the surplus of 2.2% of GDP a year earlier, reflecting the impact of the economic crisis and of the various expansionary measures approved in the year. The developments described for the different institutional sectors will foreseeably continue in 2009, with a more substantial correction in the nation's net borrowing, as increased net lending by households and non-financial corporations should outpace the growth of the budget deficit.



## Financial developments in Spain

### 1 Introduction

Financial developments were influenced by the financial and real international crisis

Financial developments in the Spanish economy during 2008 were largely influenced by the worsening international financial crisis and by the macroeconomic downturn in Spain and in the rest of the world (see Chapter 1 of this Report). Against this background, and in concert with the other European countries, the Spanish government adopted a series of measures to reinforce the financial system. It raised the deposit guarantee threshold to €100,000; it created a fund for the acquisition of high-quality financial assets (FAFA) channelled through auctions among potential interested banks; it agreed on the granting of State guarantees of which intermediaries could avail themselves in order to issue bonds, and it authorised the State purchase of securities to shore up banks' capital, although it has not used this latter option to date. ICO intermediation facilities were also notably reinforced with the aim of providing financing flows to specific agents, such as SMEs, which may have seen their access to regular channels more restricted.

Private-sector financing conditions continued tightening...

In this setting, private-sector financing conditions tightened continuously during the year, via two channels. First, the cost of funds increased both in the case of bank funding, since banks passed through to lending transactions the increase in the risk premia incorporated into non-guaranteed money market rates, and in that of securities issuance (see left-hand panel of Chart 6.1). Conditions other than interest rates also became more demanding, and there was an observable reduction in maturities and an increase in the guarantees required. Further, lending standards also became tighter. The deterioration in the macroeconomic outlook and in borrowers' solvency and, to a lesser extent, the drying up of the wholesale markets and the international trend towards less leverage account for the tightening of the credit supply.

During the closing months of the year the decline in interbank rates began to pass through to the cost of credit, although the tightening of the supply of loans continued and did not begin to show signs of moderation until early 2009.

... which, together with diminished demand, made the slowdown in household and corporate debt more acute

Household and corporate debt slowed notably, not only owing to the above-mentioned supply factors but also in response to other factors operating on the demand side, such as the deterioration in confidence and in future income expectations, greater uncertainty and the attendant high costs, which checked applications for funds. In the case of business credit, which is the main component of the borrowed funds raised by the corporate sector, the decline in the growth rate was particularly marked in the industries linked to the real estate sector (construction and real estate development).

The private-sector debt ratio fell, but the interest burden continued to increase

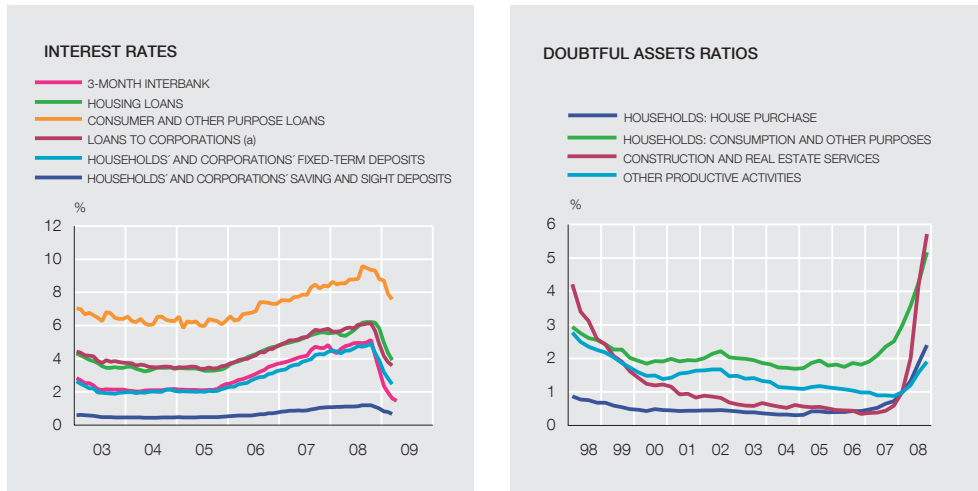
The slowdown in financing raised by the private sector contributed to the slight reduction in the ratios of debt to household and to corporate income, following the strong growth recorded during the upturn (see Chapter 2). Nonetheless, the associated interest burden continued increasing in both sectors due to the rise in the average cost of liabilities.

Household wealth fell

Despite the diminished buoyancy of liabilities, net household wealth fell as a result of the decline in financial asset values and, above all, of the fall in property prices. On Spanish Ministry of Housing figures, this fall began at the end of 2008 and has run into the current year.

Private-sector doubtful assets ratios increased notably...

The growing degree of financial pressure experienced by some private-sector segments was reflected in notable increases in the doubtful assets ratio, defined as the proportion of doubtful to total loans in the credit portfolio (see right-hand panel of Chart 6.1). In the case of loans to



SOURCE: Banco de España.

a. Calculated as a weighted average of interest rates of various operations grouped according to their volume. For loans over € 1 million, the interest rate is obtained by adding to the NDER (Narrowly Defined Effective Rate), which does not include commission and other expenses, a moving average of these expenses.

the construction and real estate services industries, this ratio rose to 5.7%, set against the sharp adjustment in the sector following its overdimensioning during the upturn (see Chapter 2).

... prompting a fall in credit institutions' profits, which has lessened the leeway available to absorb further asset impairments

Spanish credit institutions were less prone than those of other developed countries to the adverse effects associated with the direct impact of the turmoil that broke in the summer of 2007, since they were not exposed to toxic products and had no commitments to the structured vehicles investing in such assets. However, the strong rise in doubtful assets ratios accompanying the deterioration in the macroeconomic scenario has led to a decline in profits that has lessened the leeway available to institutions to absorb further asset impairments. Their capital ratios have held at comfortable levels, albeit in an environment in which their international competitors are addressing intense deleveraging processes, accompanied in some cases by government capital injections.

There was a decline in fixed-income issues and in external funds routed through financial institutions

Given the difficulties in resorting to international markets, banks notably reduced their volume of issues, meaning that these were negative in net terms for the year as a whole. In the opening months of 2009, however, the primary markets have been discernibly more buoyant, this being linked in part to operations transacted with State backing.

Accordingly, financial institutions (excluding the Banco de España and institutional investors) contributed to a much lesser extent than in previous years to channeling the Spanish economy's external funding requirements. As this decline was not offset in full by net capital inflows via institutional investors and non-financial corporations or by the foreign resources raised by general government, a portion of the funds needed to finance the current-account deficit was, as in the previous year, covered by a reduction in the credit balance of the Banco de España vis-à-vis the rest of the world. This reflected the foreign financing difficulties faced by other agents.

The macroeconomic downturn is raising the financial pressure on the different sectors of the economy, and it will foreseeably continue to do so

The macroeconomic downturn, along with the rise in the cost of debt, has translated into greater financial pressure on the private sector (especially the most indebted households and firms). These developments have been accompanied, moreover, by a decline in agents' wealth. The prospect of the predominance of contractionary trends in the short term will likely continue contributing to weakening the financial position of households and firms over

the coming quarters. However, the recent reduction in interbank market interest rates will tend to pass through to a sizeable portion of outstanding loans, given the prevalence in Spain of floating-rate operations, thereby easing the interest burden borne by private agents and thus countering, at least in part, the adverse effect arising from the recessionary environment.

Persisting tensions on international financial markets may continue hampering the raising of funds abroad by the Spanish economy, although the fall in private-sector funding requirements, which has already begun and which will foreseeably continue, mitigates these risks to some extent, as does too the application of the financial system support measures adopted in the final quarter of the year. In any event, high private-sector debt and the weak macroeconomic outlook will continue to stifle credit.

Spanish financial intermediaries have to date felt the effects of the financial crisis to a lesser extent than is the case in other financial systems, but they are not immune to the notable macroeconomic downturn. Accordingly, their financial position will be subject to greater pressures over the coming quarters, while the room for manoeuvre they had to withstand these shocks will progressively lessen. Against this background, it is vital to preserve the soundness of the financial system, so that it should not check the recovery in Spain once the obstacles arising from the international financial crisis lift.

## **2 Financial flows in the Spanish economy**

### **2.1 HOUSEHOLDS**

Household net borrowing declined, and a sharp slowdown in credit was discernible...

Households' net financial transactions were slightly positive, in contrast to their net borrowing equivalent to 1.6% of GDP in 2007. This was the result of the marked decline both in asset and, especially, liability flows, which stood at 2.9% and at 2.7% of GDP, respectively (see Chart 6.2).

On the liabilities side, there was a sharp slowdown in financing raised by households, the year-on-year rate of change of which at end-2008 stood at 4% (compared with 12% the previous year). Loans for house purchases and lending for consumption and other purposes trended similarly, growing over the year as a whole at rates of 5% and 4%, respectively, around 8 pp and 7 pp below the related 2007 figures (see the left-hand panel of Chart 6.3).

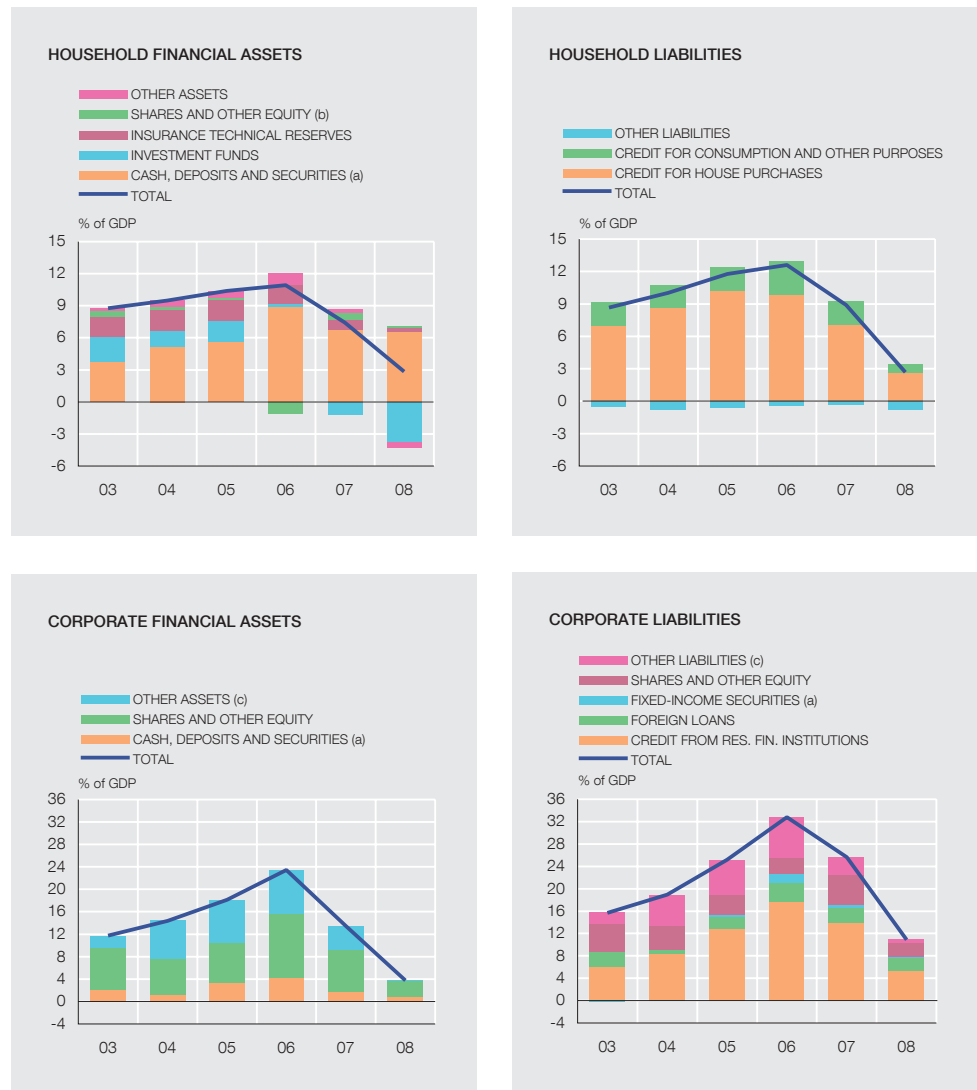
According to the Bank Lending Survey (BLS), the slowdown in credit was in response to the fall-off both in demand – prompted by the decline in consumer confidence, the fall in their wealth and poorer expectations about property prices – and in supply (see the right-hand panel of Chart 6.3). As indicated by the respondent Spanish banks, the worsening outlook for the economic situation in general (and for the housing market in particular) and the deterioration in consumer solvency were the main factors behind the tightening of standards for the approval of new loans to households last year. The problems of access to wholesale funding and their high cost also seem to have contributed, albeit to a lesser extent, to reducing the supply of funds. The contraction was similar in loans for house purchase and in lending for consumption and other purposes.

... and, to a lesser extent, household financial investments fell

In the case of assets, the trends observed the previous year remained in place. Thus, against a backdrop of greater uncertainty and spurred by more attractive yields, much of household investment was concentrated in time deposits. These amounted to a sum equivalent to almost 8% of GDP, to the detriment of holdings of sight deposits and of investment funds, for which negative flows were posted (see Chart 6.2).

**FINANCIAL TRANSACTIONS OF THE NON-FINANCIAL PRIVATE SECTOR**  
(Changes in and contributions of components)

CHART 6.2



SOURCE: Banco de España.

- a. Not including unpaid accrued interest, which is included under "other".
- b. Excluding investment funds.
- c. These are largely made up of commercial loans.

2.2 NON-FINANCIAL CORPORATIONS

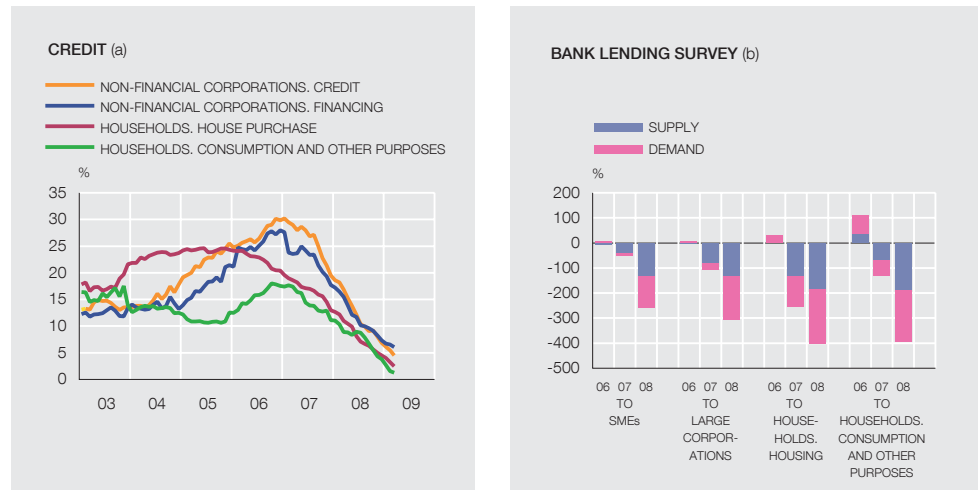
Corporations' net borrowing declined...

...and both debt and investment in assets slowed

Non-financial corporations' net borrowing relative to GDP fell by 5 pp compared with 2007, as a result of the considerable slowdown in fixed-capital investment. Nonetheless, the sector's net financial transactions continued to show a debit balance of 7% of GDP. The financing gap, which approximates the funds needed to cover the difference between the sector's gross saving and gross capital formation plus foreign investment of a permanent nature, fell by a greater extent (8 pp), to around 10% of GDP, in line with the diminished dynamism of direct investment in the rest of the world.

Corporations' liability flows fell substantially to 11% of GDP (against 26% in 2007). The decline was more or less across the board in terms of instruments. Specifically, the year-on-year rate of increase in the sector's financing dropped significantly to stand at around 7% in December 2008 (against 18% a year earlier). Bank credit, which is the main component here, showed a somewhat more marked slowdown, and its rate of expansion was marginally less than 7% at the close of last year, compared with 20% the previous year (see the left-hand panel of





SOURCES: ECB and Banco de España.

a. Year-on-year rates.

b. Cumulative changes in the diffusion index (with the sign reversed in the case of supply), so a negative sign denotes a decline in the corresponding variable.

Chart 6.3). This easing was discernible in all the productive sectors, but was much more pronounced in the construction and real estate development branches, where the respective year-on-year growth rates were  $-1\%$  and  $4.8\%$ , signifying declines of around 20 pp and 15 pp on 2007.

As in the case of households, the replies to the BLS indicate that the slowdown in credit was in response to a contraction both in demand and in supply (see the right-hand panel of Chart 6.3). The decline in applications for funds is due to the slowdown in investment in fixed capital and to the scant number of mergers, acquisitions and corporate restructuring operations. Meantime, the tightening of credit standards for new loans was brought on primarily by banks' deteriorating expectations regarding the macroeconomic scenario and the particular circumstances of the various sectors and companies, and by the risks associated with the required collateral, and to a lesser extent by the problems of gaining access to funding on markets and the costs related to the level of capital.

In terms of company size, diminished buoyancy in credit to small and medium-sized companies was witnessed in the closing months of 2008, apparently reflecting the more contractionary behaviour of supply in loans to SMEs (see Box 6.1).

Companies' financial investment also contracted significantly. In terms of four-quarter cumulative flows, this variable accounted for  $3.7\%$  of GDP, compared with  $13.5\%$  in 2007 (see Chart 6.2). This decline was across the board in terms of instruments, but particularly marked in the case of equity acquisitions, in an environment not propitious to purchases of these instruments owing to high uncertainty, to financing difficulties and to sales by companies with greater pressure on their balance sheets.

### 2.3 GENERAL GOVERNMENT

The general government budget balance deteriorated most significantly

For the first time since 2005, general government recorded net borrowing equivalent to  $3.8\%$  of GDP (see Chart 6.4). In the previous year there was a surplus of  $2.2\%$  of GDP, entailing a deterioration of around 6 pp. This result was the outcome of the change in the net central government position (which posted a deficit of  $2.7\%$  in 2008), the increase in the territorial government deficit and the slight reduction in Social Security net lending. The breakdown by

As discussed in the main body of the text, credit to non-financial corporations, which retained its still-high buoyancy in 2007, slowed much more clearly during 2008 as a result of declines both in the supply of and demand for funds. This was consistent with the existence of a degree of cross-company heterogeneity. The increase in credit for construction and real estate development companies thus fell to a greater extent, which no doubt reflects the intensity of the correction in the activity of and outlook for these sectors. This box analyses the extent to which there are also divergences linked to company size. This aspect is significant insofar as the dependence on bank credit at small companies is usually greater than at large ones, owing to the fact that the former – in general – cannot resort to the financial markets as an alternative source of funds. However, in the information available on the loans granted by Spanish credit institutions, there is no segregation based on borrower size. Accordingly, other available statistics are used for this study, enabling the issue to be broached.

Firstly, the information contained in the central credit register (CCR) can be used to classify credit granted in terms of the company's total volume of outstanding loans, a variable that can be taken as an approximation to company size. To this end, Panels 1 and 2 show the growth rates of bank credit to companies, for two sectoral groupings (construction and real estate development, on one hand, and other activities, on the other).<sup>1</sup> It can be seen how, in 2008, there was a strong and fairly generalised slowdown, though one sharper in the activities most closely linked to the real estate market and, under the other sectors, in transactions with companies with a lower volume of borrowed funds. In the first instance, and with the exception of companies with debt levels of less than €1 million, the increase in financing last year was virtually zero in all the groups considered. Nonetheless, in the remaining branches differences can be seen on the basis of outstanding loan balances, with still-high growth being observed in the higher categories and very low growth in the lower ones, with the exception once again of the first category included in the panel.

Another source of useful information for analysing the differential behaviour of credit according to company size is that provided by new loans granted. This includes a breakdown based on whether the transactions are below or over €1 million. As Panel 3 shows, from 2007 to mid-2008, the slowdown in credit to companies would have been essentially due to large-value loans (granted to a greater extent to large corporations), which began to decline in late 2007, while small-value transactions (associated essentially with credit to SMEs) held stable or fell only slightly. During the second half of last year there was a turnaround in this behaviour, with positive growth

once again in large-value loans and notable declines in the rest, a trend which became more accentuated in the opening months of 2009.

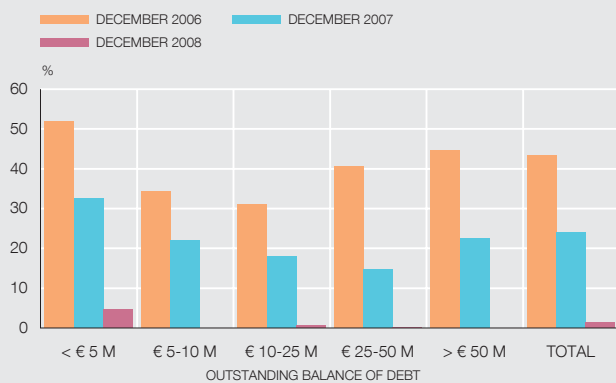
The divergences highlighted may be due to differences in the supply of or demand for funds by type of company. In this respect, the Bank Lending Survey (BLS), although it offers only qualitative information, may help draw a distinction between these two elements. To this end, Panels 4 and 5 offer two indicators which measure, respectively, changes in the supply of and demand for funds, both for small and medium-size enterprises and for large corporations. As can be seen, in the second half of 2007 (at the onset of the financial turmoil) the respondent institutions indicated a greater tightening of lending standards to large corporations during this period. Subsequently, however, no significant differences can be seen from one group to the other. In the case of the demand indicator, the related comparative trend shows less contractionary behaviour in SMEs' applications for funds from mid-2007, but especially in 2008, whereby this factor would appear unable to explain the different behaviour of credit observed recently.

Finally, the findings of a survey commissioned by the Banco de España and conducted between 18 March and 3 April 2009 using 1,385 Spanish companies of different sizes show that, in the six preceding months, the percentage of applicants who did not manage to obtain the funds requested fell in step with the size of the applicant (see Panel 6), indicating greater difficulty for SMEs to raise external funds. Nonetheless, this is probably a structural characteristic, derived from the greater risk entailed by lending to companies with a small volume of assets; accordingly, the absence of a point of comparison at some other moment in time restricts the scope of the possible conclusions. In any event, it can be inferred from the response to the question about the factors that explain why companies have not obtained all the funding they requested that a high proportion of the companies (around 60%) has detected a change in banks' lending policy stance.

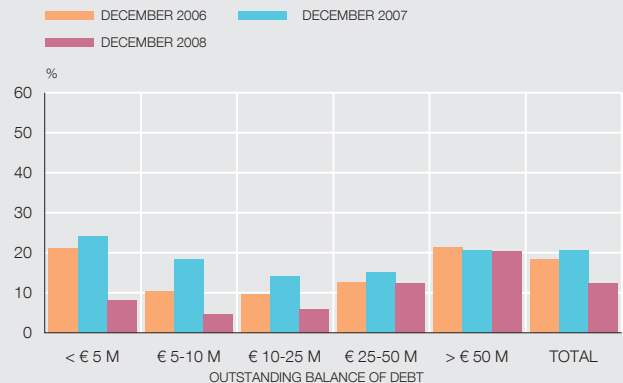
In sum, on the information available – and bearing in mind all the necessary reservations derived from its imperfect nature – it may be concluded that the slowdown in credit to companies seen since mid-2007 was initially and essentially due to the pattern of lending to large corporations. The reason for this would have been the lesser relative dynamism both of the demand for and the supply of funds. However, as the general downturn in the economy became increasingly patent, credit institutions appear to have begun to reduce more markedly new loans to SMEs. According to the BLS, as it seems that this cannot be explained by the behaviour of demand, it may possibly reflect, at least in part, some greater degree of tightness in the requirements made of smaller companies in respect of new loan approvals.

1. The rates of change are calculated controlling for the changes in category arising from the growth of debt.

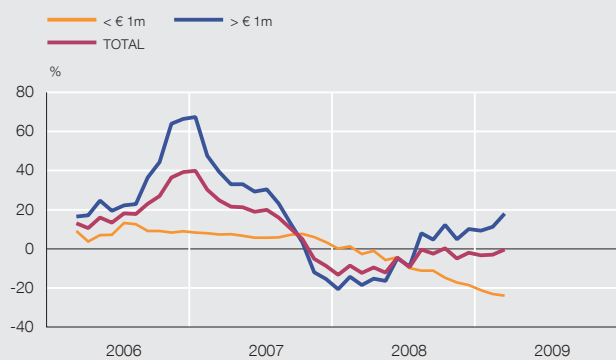
**1 CREDIT TO CONSTRUCTION AND REAL ESTATE DEVELOPMENT COMPANIES (a)**



**2 LENDING TO OTHER SECTORS (a)**



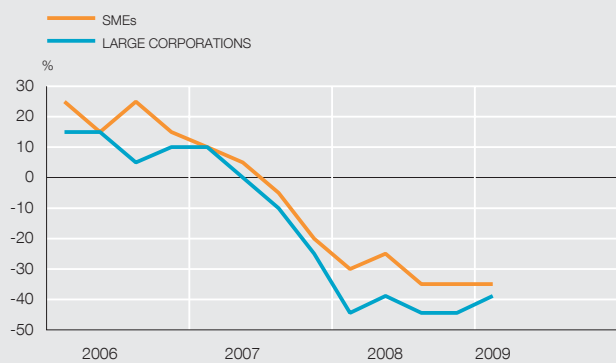
**3 VOLUME OF NEW BUSINESS. Credit to non-financial corporations (NFCs) (b)**



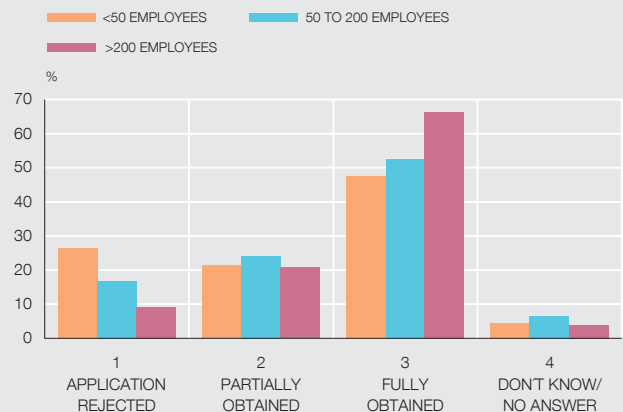
**4 BLS: TIGHTENING OF CREDIT STANDARDS Diffusion index (c)**



**5 BLS: CHANGE IN DEMAND Diffusion index (d)**



**6 RESULTS OF APPLICATIONS FOR FINANCING IN LAST SIX MONTHS (e)**

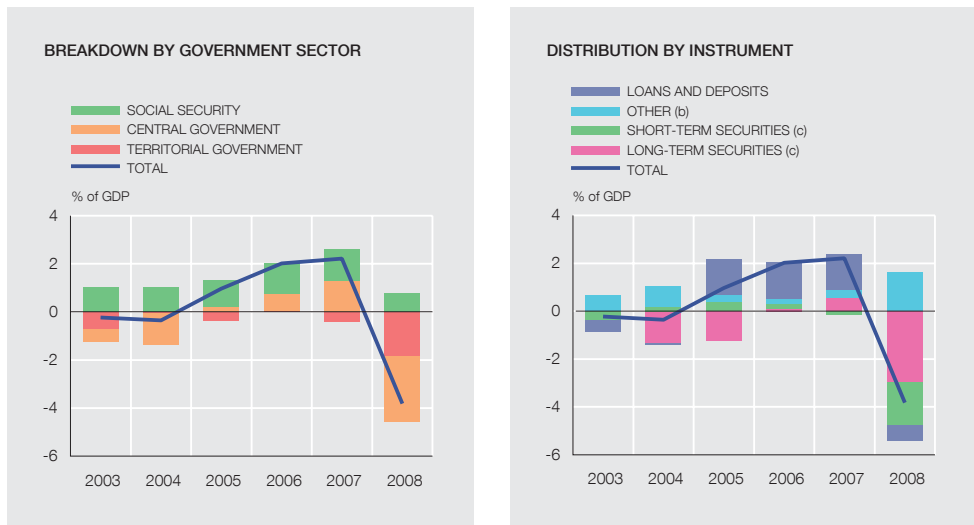


SOURCE: Banco de España.

- a. Year-on-year rate. Credit drawn down.
- b. Year-on-year rates. Three-month moving average.
- c. Percentage of institutions that tighten their new loan approval standards in respect of non-financial corporations less percentage of those that relax such standards, weighted by the intensity of the change in each case.
- d. Percentage of institutions recording increases in the demand by non-financial corporations for loans less percentage of those recording decreases in such demand, weighted by the intensity of the change in each case.
- e. Based on the results of a survey commissioned by the Banco de España and conducted between 18 March and 3 April.

**GENERAL GOVERNMENT NET FINANCIAL TRANSACTIONS (a)**  
**(Changes in and contributions of components)**

CHART 6.4



SOURCE: Banco de España.

- a. A positive (negative) sign denotes an increase (decrease) in assets or a decrease (increase) in liabilities.
- b. Includes unpaid accrued interest on bonds and net investment by the Social Security System in assets issued by other general government sectors.
- c. Includes only liabilities-side transactions.

instrument shows that the funds needed were covered by an increase in securities issuance (both in the short and, in particular, the medium- and long-term segments) and a decline in the outstanding balance of deposits net of lending. This substantial deterioration in the general government budget balance has arisen from the impact of the automatic stabilisers in a recessionary environment, from forgone revenue further to the real estate adjustment and from the discretionary measures adopted to boost the economy.

**2.4 INVESTMENT AND FOREIGN FINANCING OF THE SPANISH ECONOMY**

The Spanish economy's net borrowing was slightly lower than in 2007

The financial sector did not channel sufficient foreign saving to meet the economy's borrowing requirements...

The downturn in general government financial saving largely countered the reduction in the funds required by households and corporations, as a result of which the Spanish economy's net borrowing fell only slightly in relation to 2007, with the debit balance of its net financial transactions standing at 9.1% of GDP (see Table 6.1 and Chart 6.5).

Capital inflows mediated through financial institutions (excluding institutional investors and the Banco de España) fell substantially. Indeed, while credit institutions obtained funds equivalent to 3.3% of GDP (more than 1 pp up on 2007), other financial institutions (excluding institutional investors and the Banco de España), which had been the sector that had obtained most funds from the rest of the world since 2004, channelled net capital outflows valued at 1.8% of GDP (the previous year they raised resources equivalent to 5.8% of GDP). Institutional investors unwound lending positions vis-à-vis the rest of the world, contributing a volume of capital equivalent to 2.3% of GDP in net terms. Companies and general government channelled foreign resources for amounts equivalent to 0.5% and 1.4% of GDP, respectively. As a result of these developments, a portion of the funds needed to finance the current account deficit was covered, as was the case in the previous year, by the reduction in the external credit position of the Banco de España, which declined by 2.7% of GDP (see Chart 6.5).

**FINANCIAL TRANSACTIONS OF THE NATION**  
Cumulative four-quarter data

TABLE 6.1

% of GDP	2005	2006	2007	2008
NET FINANCIAL TRANSACTIONS	-6.5	-8.4	-9.7	-9.1
FINANCIAL TRANSACTIONS (ASSETS)	18.5	17.7	13.9	3.2
Gold and SDRs	0.0	0.0	0.0	0.0
Cash and deposits	2.2	5.2	2.1	-0.3
Of which:				
<i>Interbank (a)</i>	3.1	3.4	4.2	-0.5
Securities other than shares	8.7	-1.2	1.6	1.3
Of which:				
<i>Credit institutions</i>	6.6	-2.1	1.8	1.5
<i>Institutional investors</i>	2.3	0.6	-0.1	-0.4
Shares and other equity	5.1	10.5	8.6	1.9
Of which:				
<i>Non-financial corporations</i>	3.9	8.0	6.3	3.1
<i>Institutional investors</i>	0.9	1.2	-1.0	-1.5
Loans	1.1	2.1	1.2	0.8
FINANCIAL TRANSACTIONS (LIABILITIES)	25.0	26.1	23.6	12.2
Deposits	5.6	0.3	7.3	8.9
Of which:				
<i>Interbank (a)</i>	7.2	0.6	6.7	6.2
Securities other than shares	15.8	21.4	8.1	-2.2
Of which:				
<i>General government</i>	0.2	1.0	-1.3	1.4
<i>Credit institutions</i>	6.3	8.0	3.6	-1.9
<i>Other non-monetary financial institutions</i>	9.3	12.4	5.8	-1.7
Shares and other equity	0.9	0.2	4.5	3.4
Of which:				
<i>Non-financial corporations</i>	1.0	-0.2	4.7	2.5
Loans	2.3	3.5	3.1	2.1
Other, net (b)	-0.9	-0.5	0.1	0.5
MEMORANDUM ITEMS:				
Spanish direct investment abroad	3.7	8.5	9.6	4.8
Foreign direct investment in Spain	2.2	2.5	4.8	4.1

SOURCE: Banco de España.

a. These correspond to credit institutions only, and include repos.

b. Includes, along with other items, the asset-side caption showing insurance technical reserves and the net flow of trade credit.

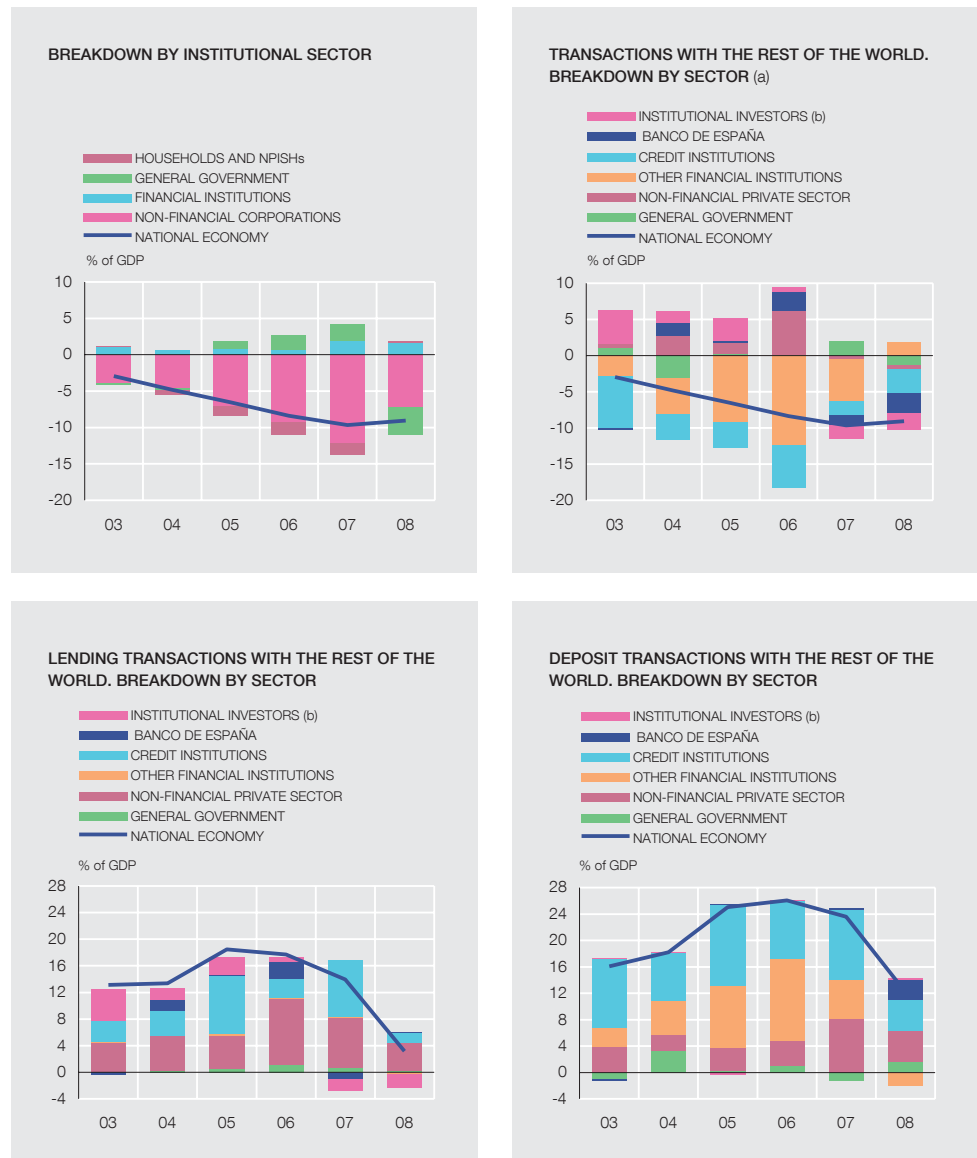
... since the net inflow of funds through fixed-income issues declined

The volume of capital inflows amounted to 12% of GDP, 11 pp down on 2007, evidencing notable changes in their composition. Against a background of significant difficulties in issuing fixed-income securities, the net inflow of funds channelled through securities other than shares issued by domestic financial institutions was negative for an amount close to 4% of GDP, compared with a positive net inflow totalling more than 9% of GDP the previous year (see Table 6.1). In this setting, credit institutions raised financing abroad essentially through the interbank market (including secured transactions), meaning that the funds obtained through this channel in net terms accounted for 6.7% of GDP, compared with 2.5% the previous year. Flows obtained through non-residents' acquisitions of shares and other equity also fell slightly, contributing an amount close to 4% of GDP, in step with the slight decline in foreign direct investment in Spain, which also stood at around 4% of GDP.

Capital outflows also fell by 10 pp to 3% of GDP. As in the previous year, institutional investors unwound positions in net terms in the rest of the world both in fixed income

**NET FINANCIAL TRANSACTIONS (a)**  
(Changes in and contributions of components)

CHART 6.5



SOURCE: Banco de España.

- a. A negative (positive) sign indicates that the rest of the world grants (receives) financing to (from) the counterpart sector.
- b. Insurance companies and collective investment institutions.

and equities. In terms of instruments, the contraction was across the board, but especially significant in the case of shares and other equity (purchases of which fell by 7 pp to 1.9% of GDP). In line with this development, Spanish foreign direct investment fell off to 4.8% of GDP, having accounted for more than 9.6% in 2007.

However, the debit balance of the international investment position scarcely changed

Despite the fact that net capital inflows were positive, the net debit position of the Spanish economy vis-à-vis the rest of the world showed no significant changes, holding at around 80% of GDP, thanks to the favourable effects exerted on it by the changes observed in the prices of financial instruments, which were only partly countered by the adverse impact associated with the changes in the exchange rate.

EUR bn	2005	2006	2007	2008
NET ISSUANCE BY RESIDENTS	184.4	231.6	268.3	148.2
FIXED INCOME	180.2	223.9	222.4	133.3
Monetary financial institutions	78.0	97.2	78.2	-27.3
Other financial intermediaries	95.6	128.5	146.5	107.2
Of which:				
<i>Financial vehicle corporations</i>	53.6	69.7	106.9	93.7
<i>Subsidiaries of monetary financial institutions</i>	27.4	39.4	42.6	24.3
<i>Subsidiaries of non-financial corporations</i>	-2.5	10.9	5.7	1.6
Non-financial corporations	-0.1	1.0	2.0	1.9
Central government	3.9	-4.8	-4.7	50.2
Territorial government	2.8	2.1	0.4	1.4
EQUITIES	4.2	7.8	46.0	14.9
Monetary financial institutions	1.3	3.0	12.0	10.1
Other financial intermediaries	0.0	0.1	3.5	1.4
Non-financial corporations	3.0	4.6	30.5	3.4
PUBLIC OFFERINGS	0.2	2.5	2.1	0.0
MEMORANDUM ITEMS				
Net issuance by foreign subsidiaries	-20.6	-8.5	9.5	12.9
<i>Financial institutions</i>	-15.5	-2.6	8.2	14.3
<i>Non-financial corporations</i>	-5.2	-6.0	1.3	-1.4

SOURCE: Banco de España.

### 3 Spanish financial markets

#### 3.1 PRIMARY MARKETS

##### Net securities issuance declined

In the primary markets for negotiable securities, the net issuance by resident sectors totalled €148 billion, a year-on-year decline of 45% (see Table 6.2) and the first decline in this variable since 2001. Among the reasons behind this strong fall were the relatively unfavourable market setting, given the increase in uncertainty and the rise in issuance costs caused by the climb in risk premia, and lower private-sector net borrowing, stemming from the cuts in expenditure plans.

The net issuance of fixed-income instruments fell by 40% on 2007 to €133 billion. This decline was greater than that in the euro area, meaning that net placements in Spain accounted for 12% of the volume issued in the area as a whole, compared with 22% the previous year.

As can be seen in Table 6.2, issues by financial institutions declined over the year as a whole by more than 64%, against a background of tightening financing conditions on wholesale markets, which was reflected – among other factors – in the considerable increase in credit risk premia. In particular, placements made directly by credit institutions resulted, for the first time since 2000, in net redemptions of €27 billion; conversely, those by other financial intermediaries remained buoyant (€107 billion), though down on previous years. In terms of instruments, asset-backed bonds, as has been habitual in the past four years, accounted for more than 85% of supply, while the weight of uncovered bonds and preference shares fell. However, it should be stressed that the bulk of securitisations was purchased by the originators themselves, so that they might have at hand collateral with which to obtain financing in the Eurosystem. For the second year running, there was a notable increase in transactions conducted by the foreign subsidiaries of financial institutions (€14 billion).

The net issue of fixed-income securities by non-financial corporations, either directly or through subsidiaries, marginally exceeded the figure of €2 billion in 2008, compared with €9 billion a

EUR bn	2005	2006	2007	2008
Public-debt book-entry market (a)	22,220	22,615	22,664	19,944
Spot	2,338	2,903	3,177	2,202
Repos and sell/buy-back agreements	19,572	19,385	19,193	17,477
Forward	310	327	294	265
AIAF fixed-income market	872	900	1,108	2,401
Commercial paper	404	482	555	577
Covered bonds and asset-backed securities	375	329	460	1,740
Other	93	90	93	83
Stock exchange: fixed-income	93	93	90	80
Stock exchange: equities	854	1,156	1,670	1,245
MEFF derivatives markets	584	934	1,451	1,073
Ibex 35	544	883	1,384	989
Stock options	17	23	27	23
Stock futures	23	28	41	61

SOURCES: BME, Federation of European Stock Exchanges and Banco de España.

a. Only includes transactions in State securities.

year earlier. This development primarily reflects the decline in the supply of securities, through both resident and non-resident subsidiaries.

Unlike in recent years, the net supply of securities placed in circulation by general government increased substantially, in line with the rise in the sector's net borrowing. The resulting amount was €52 billion, more than one-third of total net fixed-income placements for 2008. This may be attributed virtually in its entirety to the State, since funds raised by territorial government scarcely exceeded €1 billion. In terms of instruments, there was a significant issuance volume of both medium- and long-term bonds (€32 billion) and of Treasury bills (€19 billion), and there were two changes introduced into Treasury policy: currency-denominated issues, which had not been used since 2005, and six-month bill tenders.

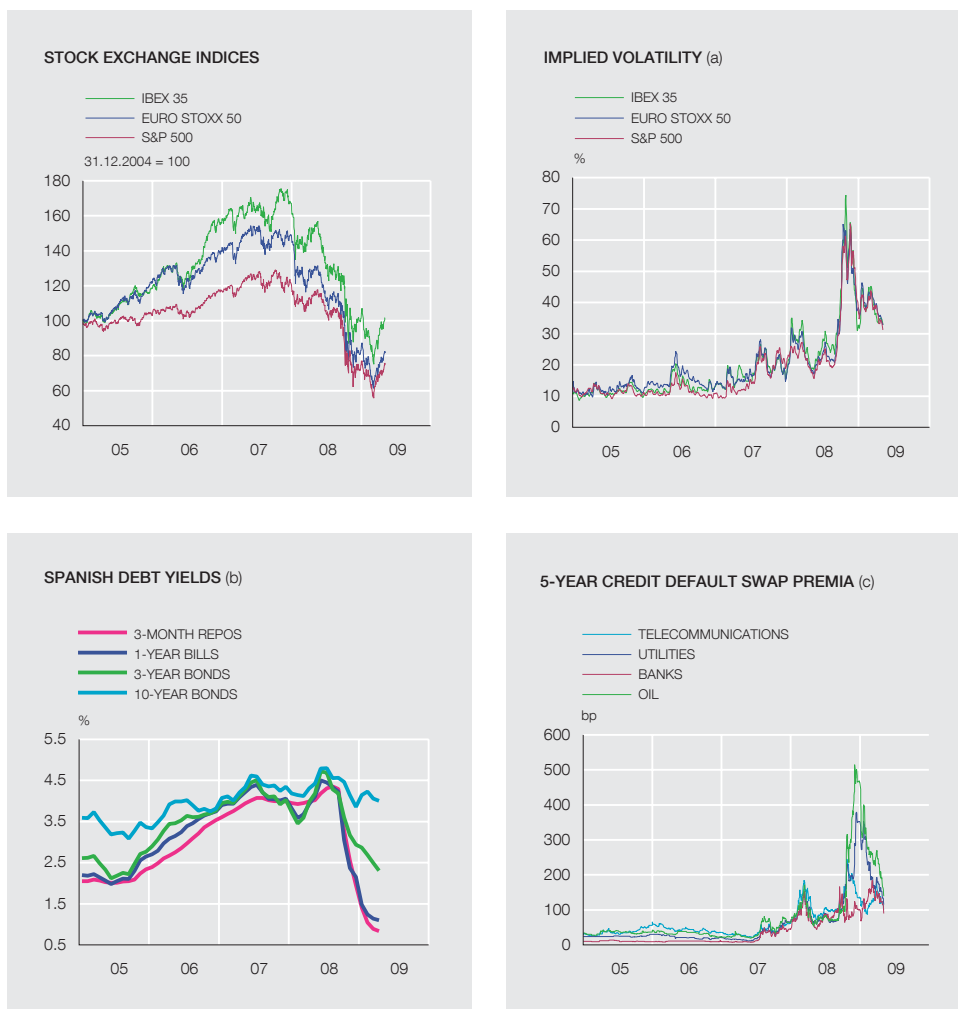
Equity issues amounted to close to €15 billion, marking a considerable decline (68%) on the preceding year. Across the different sectors, and unlike in the past, there was a rise in capital increases by financial institutions, which amounted in net terms to €11 billion. This figure was somewhat lower than in 2007. Meanwhile, capital increases at non-financial corporations fell considerably (89%), although it should be borne in mind that the 2007 figure was influenced by a small number of large-volume one-off operations. In line with this contractionary behaviour, there were no initial public offerings during 2008. Mention should be made of the issuance of equity units by a savings bank, the first operation of this type to be undertaken.

### 3.2 SECONDARY MARKET ACTIVITY

In nominal terms, secondary market activity evidenced great variability across its different segments

Secondary market activity proved very uneven across the different segments (see Table 6.3). Stock exchange share trading totalled €1.2 trillion, a year-on-year fall of over 25%. However, this is essentially due to the decline in share prices, since activity, measured by the number of securities traded or by the number of transactions made, increased by around 8% on 2007. In line with this development, derivatives trading posted a similar decline to the spot market (26%), chiefly as a result of the fall in the evaluation of underlyings. Operations for the year in this segment were, once again, concentrated in IBEX 35-indexed contracts.





SOURCES: Sociedad de Bolsas, Bloomberg, Credit Trade, Datastream and Banco de España.

- a. Five-day moving average.
- b. Monthly averages.
- c. Asset-weighted average premia.

In the public debt market there was a year-on-year decline in turnover of 12%, the outcome of the marked decline (of over 30%) in spot transactions and of the more moderate fall-off in both repo and sell and buy-back transactions, which continue to account for most activity, and in forward transactions.

Conversely, turnover on the AIAF market exceeded €2.4 trillion, entailing year-on-year growth of over 115%, with substantial increases in almost all instruments, especially in uncovered bonds and asset-backed bonds. In terms of transactions, the bulk of the increase in activity was centred on sell and buy-back transactions, including most notably those for which the counterparties were the Treasury (in the context of the management of its liquidity surpluses) and the Banco de España (within the framework of the financing granted by the Eurosystem to credit institutions).

3.3 SECONDARY MARKET PRICES

Share prices fell sharply, and there was a marked increase in volatility

After five years of price rises, there was a sharp fall in share prices accompanied by a marked rise in their implied volatility (see Chart 6.6). Over the year as a whole, the IBEX 35 posted a decline of 39.4%, lower than that of the Eurostoxx 50 of the euro area stock exchanges (44.2%) and similar to that of the US S&P 500 (38.5%). The year was marked by a downtrend

in values, which became sharper in specific episodes. This reflected both investors' greater preference for low-risk assets and the deterioration in listed firms' earnings-growth outlook. Volatility stood at very high levels in late September, following the bankruptcy of Lehman Brothers. This subsequently fell, although it stood at levels higher than the historical average, which highlights the notable uncertainty over the future course of traded prices on the market.

The decline in prices was across the board, albeit with differing intensity. The biggest falls were in the sub-indices of basic materials, industry and construction (51%) and financial services and real estate (49%). The sectors showing the least adverse performance were those of consumer goods (down 26%) and technology and telecommunications (down 29%).

The downtrend on stock exchange indices continued in the opening months of 2009, though a pick-up in prices was seen from mid-March. In early May, therefore, the IBEX 35 stood at a level similar to that at end-2008.

Government debt yields rose to July, falling progressively thereafter to the end of the year...

After rising moderately to July, short-term government debt yields subsequently fell notably, in step with the pronounced cuts in intervention rates. Long-term rates showed a similar profile, rising in the first half of the year and moving on a declining trend from August as a result of investors' greater preference for safe, liquid securities and of the downward revisions in euro area growth and inflation forecasts. Accordingly, the interest rate on ten-year government bonds started at 4.4% in December 2007, peaked at 4.9% in July and thereafter moved on a declining path to end the year at 3.8%. In the second half of the year, yields on German debt declined to a greater extent than those on other euro area sovereign bonds, which meant that the spreads over the German bond increased notably, to 80 bp at the close of the year in the case of the corresponding Spanish bond and to over 120 bp as at mid-February 2009. Nonetheless, spreads subsequently narrowed, to stand at around 70 bp in early May. As detailed in Box 6.2, the widening of sovereign spreads in the euro area is due to the increase in the price of risk, owing to factors linked to liquidity and, in certain cases, to the increase in credit risk. Against this background, Standard & Poor's downgraded the long-term debt issued by Spain, Greece and Portugal in January 2009, and that of Ireland in March.

...while credit risk premia rose strongly throughout the year

Lastly, financial and non-financial corporations' CDS premia increased very sharply as a result of the prevailing greater uncertainty and the deterioration in the macroeconomic outlook. This rise was particularly notable from the end of the summer when, further to the above-mentioned events, intense risk re-pricing took place, taking CDS premia to all-time highs (see Chart 6.6). In line with other developed countries, financial corporations' risk premia have, following the announcement and subsequently approval of the bank system support programmes, held at substantially lower levels than those of non-financial corporations, suggesting that the market's interpretation is that governments have assumed a sizeable portion of the credit risk of the main banks.

Coupled with the course of long-term interest rates, this led to a rise in the cost of financing for firms issuing in the fixed-income markets. However, in 2009 to date CDS premia have fallen, especially those of non-financial companies, although they remain at high levels.

## **4 Spanish financial intermediaries**

### **4.1 CREDIT INSTITUTIONS**

Credit institutions' activity slowed notably

During 2008 the activity of credit institutions slowed notably in response to the diminished dynamism of credit granted to the resident non-financial private sector. By contrast, the rate of change of loans to general government rose significantly, as did the portfolio of fixed-income assets held by institutions. Overall, total assets increased by 6% at the consolidated level, and by 9% at the individual level (see Table 6.4), figures clearly below those in recent years, but still outpacing the growth of nominal GDP.

The yield spread of euro area countries' sovereign debt over German bonds, which traditionally have a lower cost, had moved in recent years in very limited ranges. During the summer of 2007, following the onset of the financial turmoil, the spreads began to widen, albeit very moderately. However, following the worsening of the international financial crisis in mid-September 2008, they increased most markedly (see Panels 1 and 2). In Spain, the spread between the yield on 10-year government bonds and that on the benchmark 10-year German bund widened to a level of around 120 bp, when at the close of 2007 it was scarcely 8 bp. In the other euro area members the trend was the same, although the scale of the change varied from one nation to another (in Ireland and Greece the spread was 260 bp, while in France it was around 60 bp), with the increase in the case of the securities issued by the Spanish Treasury standing at an intermediate position. In the subsequent months there was a widespread decline in these spreads. In early May the Spanish sovereign spread stood at around 70 bp. This box focuses on the analysis of the factors behind the widening of the spreads between December 2007 and February 2009.

In a setting such as the euro area, in which all issues are denominated in the same currency, the explanation for the yield spreads on sovereign debt lies in the compensation the markets demand for the different levels of perceived credit risk and for the differences in the degree of liquidity of the securities.

Credit risk premia can be proxied using the price of CDSs on sovereign debt, which are instruments where one party (that buying protection) receives compensation from the counterparty in the event of default, late payment or other credit events attributable to the issuer of this debt, in exchange for payment of a regular income. In this respect, Panel 3 shows a high positive correlation between the changes in yield spreads and in CDS premia between December 2007 and February 2009, suggesting that the changes in the level of credit risk and in the pricing thereof played a significant role in the setting of prices on bonds issued by the euro area member states during this period. Nonetheless, the points in the panel generally stand above the 45° line, denoting that liquidity-related factors may also have contributed to these developments. In particular, greater activity on the secondary markets for securities issued by the German government may have benefited their relative valuation, in a setting in which investors' preference for more liquid assets had increased.

There are various factors that can explain the increase in credit risk perceived by the markets during the period under analysis. Firstly, the far-reaching deterioration in the growth outlook for the euro area economies in late 2008 tended to reduce these States' tax-raising capacity, while current expenditure increased. Thus, GDP growth for 2009 and 2010 in most euro area members was projected by the European Commission to fall by between 2 pp and 3 pp in cumulative terms in the period from the autumn 2008 forecasting exercise to the January 2009 interim exercise. In two countries the decline was clearly greater than for the rest: Greece (-4.2) and Ireland (-6.5), which are precisely those countries

where sovereign debt spreads most widened between December 2007 and February 2009. In addition, the fiscal measures that the various countries had started to adopt entailed a further increase in public spending and, by extension, a bigger increase in public debt.

Against this background, in January 2009 Standard & Poor's downgraded the debt rating of Greece (on 14 January, from A to A-), Spain (on 19 January, from AAA to AA+) and Portugal (on 21 January, from AA- to A+). In addition, Ireland was placed on the credit watch list and subsequently also saw its debt downgraded from AAA to AA+ on 31 March.

In order to study in greater depth the link between the valuation of sovereign benchmarks and credit risk, Panel 4 relates yield spreads, in December 2007 (in red) and February 2009 (in blue), to the deviation of the debt/GDP ratio vis-à-vis Germany forecast by the European Commission around the same dates for 2009 and 2010, respectively.<sup>1</sup> Generally, the changes in the projections of the debt/GDP ratio were seen to be small (compared with the changes in Germany), except in the case of Ireland, which underwent a very marked rise that may help us understand the greater widening of this country's spread at that time. In Spain the ratio also rose more, a development which may have likewise affected the relative valuation of the securities issued in our country during the period under study.

Panel 4 also shows how, as was to be expected, there is a positive relationship between risk levels (proxied by the debt/GDP ratio) and debt yield (in relative terms vis-à-vis Germany). It can further be seen that the slope of the fitted line increased between the two dates examined, suggesting that the widening of the yield spread between December 2007 and February 2009 may have been partly due to an increase in the price of risk or, what amounts to the same, to agents' greater preference for safer assets.

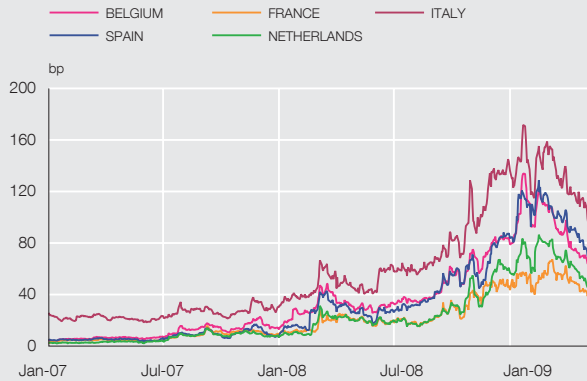
The same panel also shows that in February 2009 the yield spreads of some countries deviated significantly from the fitted line. It should be borne in mind that the debt/GDP ratio approximates only partially the credit risk perceived by the market in some cases. In particular, it does not reflect the member states' exposure to the financial sector, which increased notably following the activation of bank bailouts. In this respect, Panel 5 shows how, following the approval of the first plans, the average risk premium on European sovereign debt in the CDS markets increased significantly in October 2008, drawing close to the level of the iTraxx financial index (which tracks the prices of the main European financial corporations' derivatives). However, the premium fell from March, separating from this index. The changes in this indicator in the second half of 2008 and in the first two months of 2009 suggest that the markets considered that governments were taking on a sizable portion of the credit risk of the main banks. Thus, for instance, the Irish government temporar-

1. The respective European Commission forecasting exercises conducted in spring 2008 and January 2009 have been used.

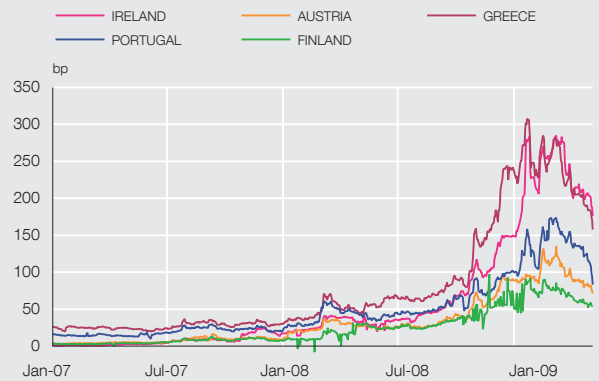
ily guaranteed all the liabilities of the six biggest banks (and subsequently nationalised one of them and recapitalised the rest with public funds). And this, combined with the fact that the weight of the Irish financial sector, in terms of GDP, is higher than in the other

euro area members (see Panel 6)), might explain why the yield spread on Irish sovereign debt stood in February 2009 far above what its level of debt then forecast for 2010 would indicate (see Panel 4).

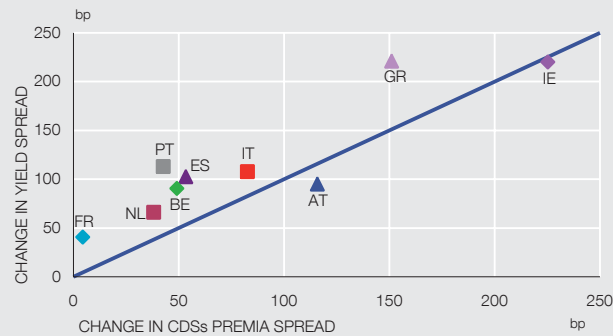
1 10-YEAR SOVEREIGN BOND YIELD SPREAD VIS-À-VIS GERMANY



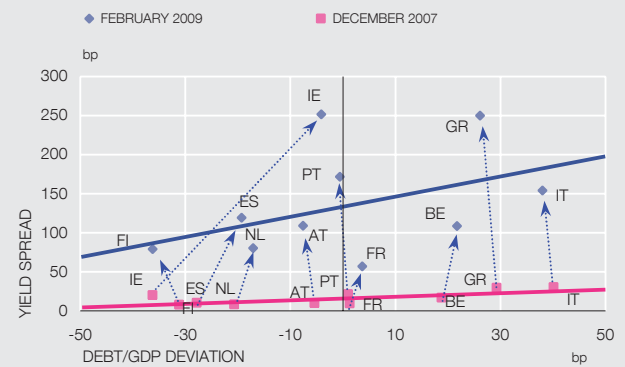
2 10-YEAR SOVEREIGN BOND YIELD SPREAD VIS-À-VIS GERMANY



3 CHANGES IN SOVEREIGN DEBT YIELD SPREADS AND CDS PREMIA BETWEEN DECEMBER 2007 AND FEBRUARY 2009



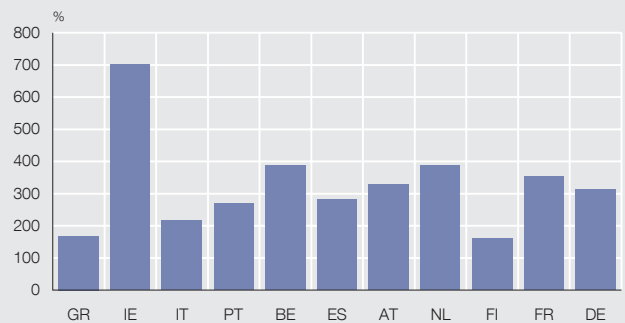
4 SOVEREIGN DEBT YIELD SPREAD AND PUBLIC DEBT/GDP DEVIATION (a)



5 5-YEAR CDS PREMIA



6 CREDIT INSTITUTIONS' ASSETS AS A % OF GDP, 2007



SOURCES: Datastream, European Commission and Banco de España.

a. The data on the debt/GDP ratio deviation for December 2007 and February 2009 are, respectively, the differences in this ratio vis-à-vis Germany, according to the European Commission's spring 2008 and January 2009 forecasting exercises.  
 b. Average of CDS premia on the sovereign debt of countries forming part of the iTraxx financial index with the same weights, except Switzerland.

**CREDIT INSTITUTIONS  
BALANCE SHEET AND INCOME STATEMENT**

TABLE 6.4

	CONSOLIDATED			INDIVIDUAL		
	DEC 2007	DEC 2008	Y-O-Y RATE (%)	DEC 2007	DEC 2008	Y-O-Y RATE (%)
<b>MAIN BALANCE SHEET ITEMS (% of TA)</b>						
Total assets (EUR bn)	3,389.6	3,603.9	6.3	2,892.9	3,142.4	8.6
Credit	67.3	66.8	5.6	64.3	63.2	6.8
<i>Of which: resident private sector in Spain</i>				59.5	57.8	5.6
Debt securities	10.5	10.8	9.0	9.2	10.3	21.1
Other capital instruments and equity interests	4.7	3.0	-33.4	6.3	5.4	-6.9
Other assets	17.4	19.4	18.5	20.2	21.1	13.7
<b>Liabilities</b>						
Banco de España and other central banks	2.8	3.6	39.4	2.9	3.7	41.6
Interbank deposits	14.9	13.1	-6.4	17.7	17.3	6.1
Customer deposits	47.1	48.9	10.4	50.7	51.1	9.4
<i>Of which: households and non-fin.corps. res. in Spain</i>				28.1	28.6	10.5
Marketable securities	19.6	17.9	-3.2	13.2	11.8	-3.1
Other liabilities	12.1	14.5	27.2	12.4	14.1	24.2
Equity	6.3	5.6	-5.0	6.0	5.7	3.2
<b>INCOME STATEMENT (% of ATA)</b>						
(+) Interest income	4.93	5.59	21.33	4.44	4.91	24.42
(-) Interest expenses	3.28	3.84	25.38	3.16	3.67	30.21
Net interest income	1.65	1.75	13.31	1.27	1.25	10.03
(+) Equity yield	0.09	0.09	14.06	0.42	0.40	6.93
(+) Net commissions	0.73	0.67	-1.00	0.53	0.46	-2.75
(+) Profits on financial operations and investees	0.52	0.38	-22.10	0.29	0.19	-23.95
(+) Other operating expenses (net)	0.02	0.02	2.01	0.03	0.03	-0.59
Gross margin	3.01	2.92	3.67	2.54	2.32	2.90
(-) Operating expenses	1.34	1.33	6.47	1.11	1.04	5.39
(-) Write-downs and provisions of financial assets	0.52	0.87	78.38	0.42	0.70	87.53
Operating profit	1.15	0.72	-33.28	1.01	0.59	-34.66
(+) Other income (net)	0.15	0.17	21.60	0.12	0.11	4.89
(-) Taxes	0.26	0.14	-42.20	0.17	0.07	-51.97
After-tax profit	1.04	0.75	-23.24	0.97	0.63	-26.87
Group net profit	1.00	0.70	-24.74			
<b>RATIOS (%)</b>						
Net interbank position/TA (a)	-7.6	-8.4		-6.8	-8.7	
Solvency	10.7	11.3				
Doubtful assets/TA	0.7	2.1		0.6	2.1	
Coverage of doubtful assets	182.8	70.8		209.3	69.5	
Foreign operations/TA	20.8	22.5				
Efficiency (OE/GI)	44.5	45.7		43.6	44.6	
ROE	19.7	12.7		17.7	11.2	

SOURCE: Banco de España

a. Includes net assets with central banks.

Funding difficulties on the markets persisted, offset in part by alternative sources and by the public-sector support measures

Credit institutions did have some success in raising deposits from customers, helped by the attractive remuneration thereon and by savers' search for safer investments. But funding difficulties on the wholesale markets obliged institutions to resort to the interbank market and to the loans granted by the Eurosystem, for an overall amount around 20% higher than that of the previous year. As a result, the net debit position obtained through this channel increased to 8.4% of total assets (from 7.6% at end-2007) and, within this position, the net loan from the Eurosystem accounted on average in December 2008 for 1.8% of total assets, compared with 1.3% twelve months earlier.

In 2009 to date, the reductions in interbank interest rates and the guarantees granted by the government should have provided for some recovery in institutions' funding on the markets, while asset purchases by the Fund for the Acquisition of Financial Assets (FAFA) are also expected to have increased the resources available. Specifically, at the time of this Report going to press, the FAFA had already held four tenders, placing a volume of funds close to €20 billion, while 24 credit institutions had made State-backed issues for a total of €27.4 billion.

The increase in doubtful assets...

Doubtful assets increased significantly and, as a percentage of total credit to other non-resident sectors, rose from 0.9% in December 2007 to 3.4% at the close of last year, with a notable increase being recorded in the dispersion across institutions. The increase was particularly sharp in transactions with construction and real estate companies (see right-hand panel of Chart 6.1). Consequently, the coverage ratio (provisions divided by doubtful assets) fell from 183% to 71%. The cuts in intervention interest rates during the second half of 2008 and early 2009 should contribute to lessening the pace of losses due to asset impairment. However, this effect will no doubt be countered by the adverse impact stemming from the increase in unemployment and by the reduction in the general provisions built up in previous years.

... led to a fall in profits...

As a result of the competition in raising time deposits and of the reduction in sight deposits, the average cost of institutions' liabilities over the course of the year increased to a greater extent than market interest rates (50 bp at the individual level and 57 bp at consolidated level, compared with a 36 bp rise in the three-month interbank interest rate). Nonetheless, the likewise bigger increase in the return on assets meant that net interest income as a proportion of total assets rose by around 10 bp in consolidated statements, and fell by only 2 bp in individual statements (see Table 6.4). This relatively positive result for net interest income was largely countered by the increase in write-downs and provisions, linked to the rise in doubtful assets, and to a lesser extent by the reduction in commissions received for securities services and for the marketing of investment funds, and by the decline in profits on financial transactions, so that institutions' consolidated net profit contracted by 25% on the previous year. Even so, the return on capital held at over 10%.

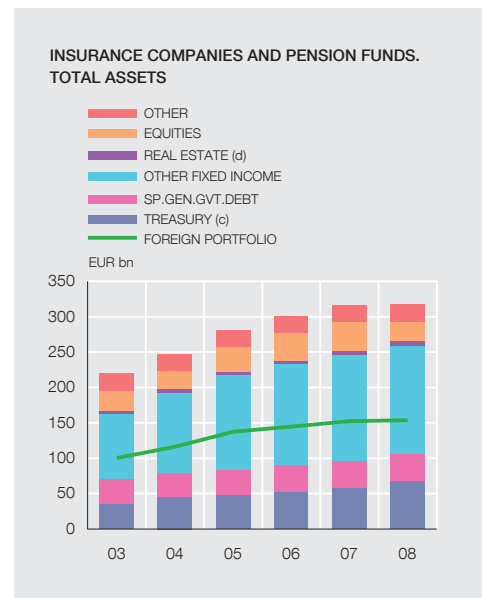
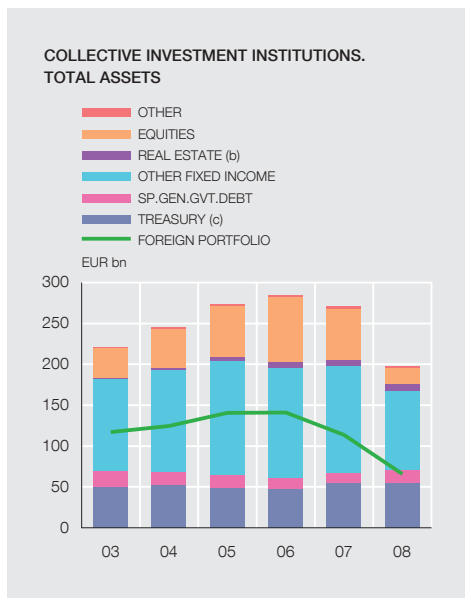
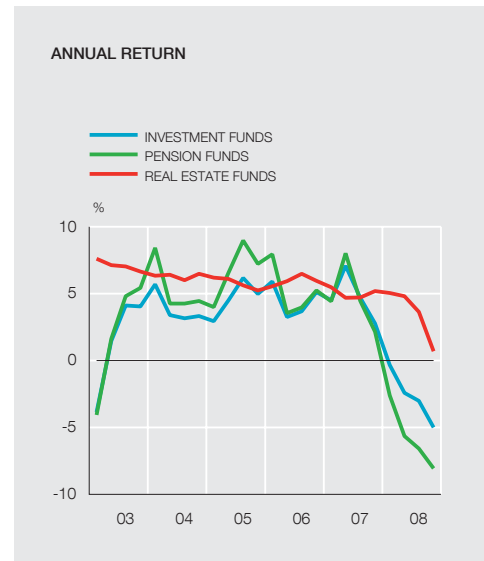
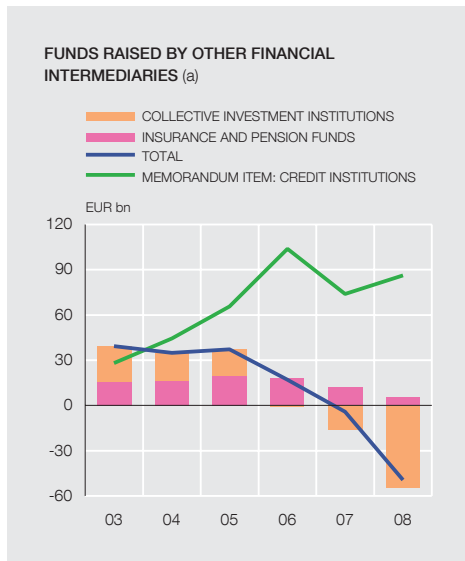
...and the leeway available to absorb further asset impairment has lessened

With the decline in profits and the reduction in the doubtful assets coverage ratio, the leeway available for Spanish credit institutions to absorb further asset impairments has lessened. However, the solvency ratio increased during 2008 to 11.3%, due partly to the introduction of the new capital regulations (stemming from Basel II), but also to more profits being retained, to the lower growth of risk-weighted assets and to the issue of capital for a value close to €10 billion. Compared with other financial systems, the position of Spanish institutions taken as a whole is sounder, though they are not immune either to developments on international markets in general, or to the weakness of the Spanish economy in particular. In this respect, on 28 March the Banco de España assumed control of Caja Castilla-La Mancha (CCM), a small institution, whose assets account for less than 1% of the system's total.

#### 4.2 INSTITUTIONAL INVESTORS

Withdrawal of funds from collective investment companies...

In the collective investment industry, the decline in assets under management seen already the previous year steepened, chiefly as a result of high net redemptions in investment funds (IFs) (see Chart 6.7). Net redemptions were positive in all four quarters of 2008, and were extensive to all types of funds, including money market funds. Although the uncertainty over price developments in securities markets and the capital losses recorded no doubt had an impact on the withdrawal of funds by investors, the widespread nature of such withdrawals suggests that they were also influenced by the competition generated by the campaigns to capture bank deposits with very attractive yields, in a setting in which the coverage guaranteed by the Deposit Guarantee Fund was raised to €100,000 per depositor/investor and institution.



SOURCES: CNMV, Banco de España, Committee of European Insurance and Occupational Pensions Supervisors, Investigación Cooperativa entre Entidades Aseguradoras, Asociación Española de Capital-Riesgo and the Spanish Directorate General of Insurance and Pension Funds.

- a. Shares and other equity in CII and reserves of insurance companies and pension funds. In the case of credit institutions, deposits and repos of households and non-financial corporations.
- b. Properties: latest available data, 2008, Q3.
- c. Includes cash, deposits and repos.
- d. Properties: latest available data, 2008, Q2.

... and diminished activity too at insurance and venture capital companies

Insurance companies and pension funds (PFs) obtained positive but scant net resources. In the life-assurance branch, although premia grew by around 15%, claims (redemptions, mobilisation, maturities and claims payments or agreed income) outpaced them, meaning that the net funds received scarcely increased.

In the venture capital segment, resources raised fell to half the figure obtained the previous year (€2,560 million against €5,131 million) and disinvestment fell by even more, owing to selling difficulties on financial markets. These developments, along with the problems in obtaining borrowed funds (which are greatly used in large-volume transactions), meant that the invest-

ment of these institutions was limited to less than €3 billion (32% down on 2007), with a particularly sharp decline in large-value and leveraged operations.

Yields declined and difficulties arose in certain products whose relative weight is scant

The contraction in new funds raised was accompanied by significant declines in the value of portfolios. Money market funds showed an annual yield of 2.4%, but in other IFs and in PFs the change in value was on the negative side (-5% and -8%, respectively). Further, hedge funds posted significant capital losses (of around 10%) and real estate CIIIs, although they achieved marginally positive profits at the close of 2008 (+0.7%), saw their asset valuations significantly revised in the opening months of 2009, resulting in negative year-on-year yields from January this year. Insurance companies also saw their results diminish in relation to the previous year (-10%), although their profitability and solvency ratios remained high.

In some CIIIs, investor applications to withdraw funds meant that extraordinary measures had to be taken, such as the temporary suspension of redemptions and the winding up of the institutions. However, these situations affected only a small number of institutions (real estate funds and hedge funds) whose assets were relatively negligible in relation to the sectoral total.

Aggregate losses at Spanish CIIIs were moderate, owing to their relatively conservative profile (see Chart 6.7). This conservative approach became more accentuated during 2008, with declines in the relative weight of equities and of foreign assets in Spanish CIIIs' portfolios. Conversely, treasury positions and holdings of Spanish government debt increased.

## **5. The financial position of the non-financial private sector**

### 5.1 HOUSEHOLDS

As indicated, the slowdown in household debt initiated in 2006 intensified in 2008. As a result, its rate of increase stood somewhat below the related rate for household income, meaning that for the first time since the mid-90s, household indebtedness declined slightly, accounting for somewhat less than 130% of household gross disposable income (GDI) (see Chart 6.8).

Household indebtedness fell, although the related interest burden increased

Despite the reduction observed in the household debt ratio, the interest burden on the sector increased to 18% of its GDI, 0.6 pp above the 2007 figure, owing to the increase in interest payments as a result of the higher average cost of liabilities. This did not prevent household saving capacity, once financial expenses were stripped out, from increasing by almost 3 pp, essentially as a result of the notable recovery in gross saving.

Household wealth fell, and in its financial component there was switching towards lower-risk assets

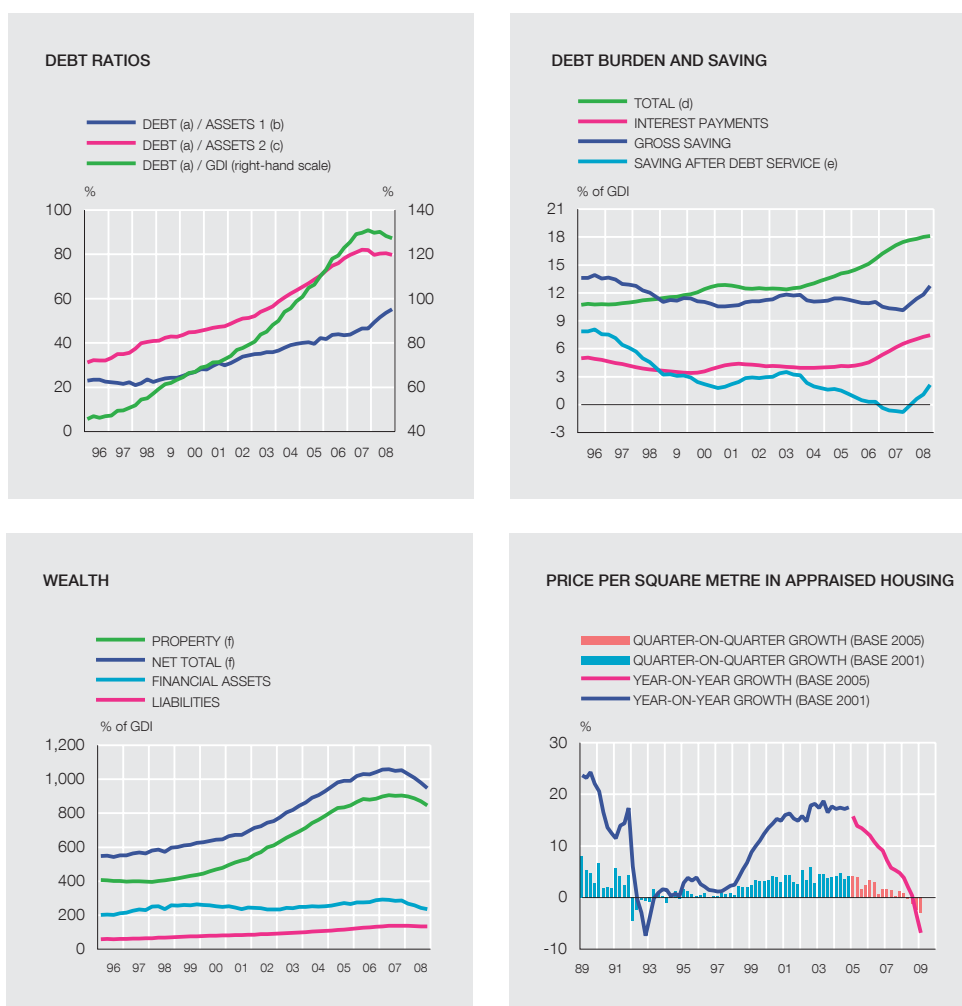
On the estimates available of household net wealth, this variable fell to 950% of the sector's income, around 100 pp below the 2007 figure. This is due to the reduction seen in the real estate and financial components, as a result of the fall in house and stock market prices. According to Spanish Housing Ministry statistics, the year-on-year growth of property stood at -3.2% in December 2008, compared with 4.8% in the same period of 2007. Nonetheless, as explained in Chapters 1 and 2 of this Report, the decline in the unit value of the stock of housing last year was probably greater and might – taking as a reference the INE date or for second-hand houses – stand at around 10%.

As a result of the fall in asset prices and of the switching towards time deposits, the weight of liquid and lower-risk assets increased in the financial component of the household portfolio.

Financial pressure increased in some segments of the sector

The sizable level of indebtedness attained, along with the fall in employment and the decline in the average cost of outstanding debt, has translated into an increase in the degree of financial pressure on households, especially the most indebted ones. The reflection of this has been a rise in the proportion of indebted households whose loans have now been considered as doubtful by banks (from 3.8% in December 2007 to 6.9% one year later), and an increase in





SOURCES: Ministerio de Vivienda, INE and Banco de España.

- Includes bank credit and off-balance sheet securitised credit.
- Assets 1 = Total financial assets less "other".
- Assets 2 = Assets 1 less shares less shares in MMFs.
- Estimated interest payments plus debt repayments.
- Gross saving less estimated debt repayments.
- Calculated on the basis of the estimated changes in the stock of housing, in the average area per house and in the price per square metre.

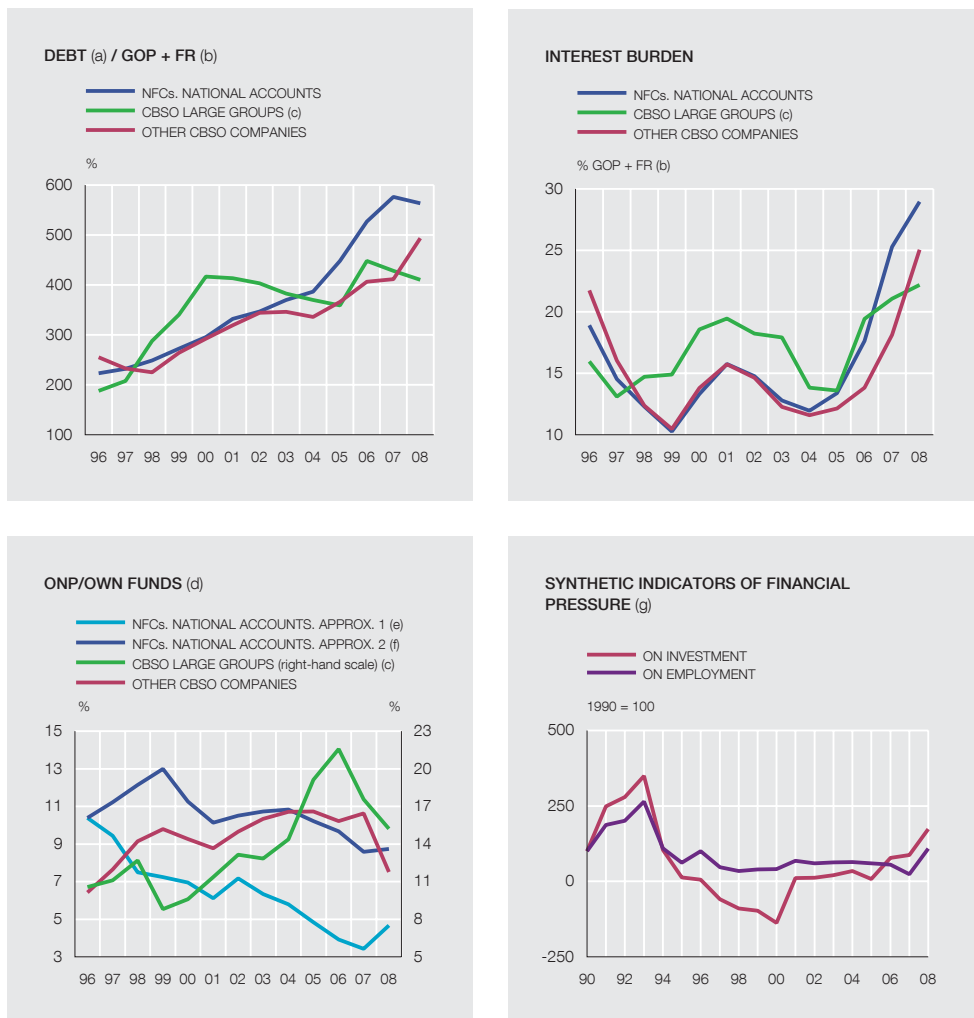
the sector's bad debt ratio, which was more marked for loans for consumption and other purposes than for loans for house purchase (rising to 5.2% in December 2008 for the former, 2.6 pp up on 2007, while the latter increased by almost 1.7 pp to 2.4%) (see Chart 6.1).

## 5.2 NON-FINANCIAL CORPORATIONS

The debt ratio of companies fell slightly, while the interest burden increased

According to the financial accounts of the Spanish economy, the weight of own funds in companies' liabilities fell by almost 8 pp in 2008 to 43%, a development linked essentially to the decline in stock market prices. Conversely, the proportion accounted for by loans granted by resident institutions increased by almost 4pp to over 25%, while that of foreign loans, a funding vehicle normally used by larger corporations, rose by somewhat over 1 pp. There was a slight increase in the relative weight of inter-company loans to 4% of the sector's total balance sheet, thus curtailing the declining trend of the previous years.

External funds raised by non-financial corporations grew at a somewhat lower rate than their income, meaning that the sector's debt ratio in relation to its income fell slightly (see Chart 6.9).



SOURCES: INE and Banco de España.

- a. Interest-bearing borrowed funds.
- b. Gross operating profit plus financial revenue.
- c. Aggregate of all the firms reporting to the CBSO belonging to the groups Endesa, Iberdrola, Repsol and Telefónica. Adjusted for intra-group financing to avoid double counting.
- d. Ordinary net profit (ONP), using National Accounts data = gross operating surplus + interest and dividends received - interest paid - fixed capital consumption.
- e. Own funds valued at market prices.
- f. Own funds calculated on the basis of the 1996 figure and cumulative flows since.
- g. Indicators estimated on the basis of CBSO annual and quarterly survey data. A value of more (less) than 100 indicates higher (lower) financial pressure than in the base year.

Nonetheless, the increase in the average cost of outstanding debt led to a further rise in the debt burden ratio to close to 30%, 3.7 pp above the 2007 figure. The return on capital (measured as the ratio of net ordinary profits to own funds) showed scant changes, since the income estimated by National Accounts continued to evidence notable dynamism, despite the recessionary setting.

Conversely, the gross operating profits of the firms reporting to the Banco de España Central Balance Sheet Data Office's quarterly survey (CBQ) – which, though it refers only to a sample of companies, bases its calculations directly on the companies' income statements – fell by almost 6% in 2008 on a year earlier. Analysis of the activities best represented in the CBQ, which does not include the construction and real estate development sectors, highlights that

the decline was particularly marked in the industrial branch (-24%). As a result, the ordinary return on own funds declined, while the percentage of companies for which this ratio was in negative territory increased. In line with the economic outlook for the coming months, analysts' expectations about listed non-financial corporations' earnings point to a considerable reduction in their growth rate in the short term, which would be in negative figures. Over a longer term, forecasts also point to a reduction – albeit a more moderate one – in the rate of increase of income generated.

The debt/income and debt burden ratios of the firms reporting to the CBQ increased, influenced in part by the unfavourable course of business earnings. The overall trend of profitability, debt and the debt burden translated into an increase in the indicators of financial pressure on investment and employment, which was particularly marked in the industrial sector.

Financial pressure increased in some segments of the sector, especially in the construction and real estate services branches

The deterioration in the economic situation and the increase seen in financing costs over most of the year translated into a rise in the financial pressure on certain segments in the sector. These were particularly notable in construction and in real estate services, where the doubtful assets ratio climbed to 5.7%, more than 5 pp up on 2007 and far above the related rate for the other activities in the sector (1.9%). Along the same lines are the figures on the number of companies going bankrupt and the microeconomic information in the CBQ, which highlights a greater deterioration in companies in a less favourable financial position. Thus, for instance, while the debt burden for the median company increased by 2 pp in 2008, for companies with higher values for this ratio the increase was far greater (specifically, for companies in the 75th percentile the increase was more than 12 pp).



## 1 Introduction

This chapter of the Annual Report, devoted to the management of the Banco de España, is an overall summary of the most notable aspects of the institution's activity in 2008. Some of these aspects will be addressed in greater detail in the monographic reports published annually by various departments of the Bank (Banking Supervision, Balance of Payments, Complaints Service, Central Balance Sheet Data Office, Central Credit Register, Research Activities, Oversight of Payment Systems and Public Debt Market).

## 2 Activities of the Banco de España as a member of the Eurosystem

During 2008 the EU continued with the ratification process of the Lisbon Treaty, which has now been signed by 25 of the 27 Member States, the exceptions being Ireland and the Czech Republic. The Council's aim is for the Treaty to come into force before the end of 2009.

Slovakia adopted the euro on 1 January 2009

At the request of the Slovak authorities, the European Central Bank (ECB) examined whether this Member State fulfilled the conditions necessary to adopt the euro, in a convergence report published on 7 May. On the basis of the convergence reports from the ECB and from the Commission, and upon a proposal of the Commission, the Council decided on 20 June to abrogate the derogations of Slovakia, allowing it to adopt the euro on 1 January 2009.

With Slovakia, the number of Member States which have adopted the euro increased to 16 and the number of members of the ECB's Governing Council to 22. The ECB's Governing Council adopted a Decision on 18 December 2008 suspending the entry into force of the rotation system of its members' voting rights until the number of NCB governors on the Council exceeds 18.

Tenth anniversary of the ECB and the ESCB

1 June 2008 marked the tenth anniversary of the creation of the ECB and the European System of Central Banks (ESCB). The ECB and the national central banks in the euro area celebrated this anniversary with various events.

As in previous years, in 2008 the Banco de España's activity as a Eurosystem member was intense. The Governor participated in the regular meetings of the Governing Council and of the General Council of the ECB at which, among others, decisions on monetary policy were taken, as explained in detail in Chapters 1 and 4 of this Annual Report. Noteworthy this year was the high number of extraordinary meetings of the Governing Council held, via conference call, in 2008 Q4 as a result of the financial crisis.

An extensive group of professionals from the Banco de España participated in the various committees, working groups and other Eurosystem bodies to prepare for and assist in the taking of decisions by the ECB's governing bodies. In this area, the appointment of the Deputy Governor of the Banco de España as chairman of the ECB's International Relations Committee (IRC) is particularly noteworthy.

Together with a consolidated structure of committees and working groups, the task forces, which are created to perform tasks in a very specific area and with a limited time span, provide the system with added flexibility. Accordingly, in response to the financial crisis, two high-level task forces (HLTF) were created, one on collateral and the other on financial crisis management. The Banco de España is represented on these task forces by the corresponding Director General.

The Bank participated in the Eurosystem macroeconomic forecasting exercises, and in the drafting of the report on public finances and of reports on structural issues, such as corporate

finance in the euro area (sent to the European Parliament in 2008) and developments in the housing loans market in the euro area.

As a member of the ESCB, the Banco de España participated on the Banking Supervision Committee (BSC). As part of its task to monitor structural and conjunctural financial system developments, the BSC prepared two reports, one on banking structures and the other on banking sector stability. It also contributed to the ECB's Financial Stability Review and to the Financial Stability Table of the Economic and Financial Committee (FST-EFC). Additionally, a series of more in-depth analyses of special interest was undertaken, including, most notably, papers on the "originate-to-distribute" banking model, developments in the covered bonds market and the review of banking sector practices in relation to liquidity stress testing and contingency plans.

As regards cooperation between central banks and supervisory authorities, the BSC developed, in cooperation with the Committee of European Banking Supervisors (CEBS), a common analytical framework for assessing the systemic implications of a crisis. Lastly, the joint initiative in collaboration with the Statistics Committee and the CEBS to harmonise statistical and prudential reporting requirements for institutions is also noteworthy.

The staggered migration by country to TARGET2 was completed

During 2008 the staggered migration by country to TARGET2, the second generation TARGET payments system, was completed satisfactorily. TARGET remains a key feature for the integration of euro money markets and the development of the single monetary policy. With a single centralised technical platform and a single price structure, TARGET2 offers a broad range of basic services to its participants and a homogeneous set of functions to those systems that use it for settlement. Following the appropriate technical and legal developments by the Banco de España and the corresponding tests, the Spanish banking community satisfactorily migrated to TARGET2 on 18 February (see Section 6.2).

As for the creation of the Single European Payments Area (SEPA), more than a year after it was launched the Banco de España has continued to strive to make a success of this initiative, which is key for the greater integration of retail payment markets in Europe. Thus, the Bank's task within the framework of the Eurosystem and in Spain, centred on the assessment of the transition to the SEPA and on encouraging actions to make the migration easier.

The Eurosystem decided to implement TARGET2-Securities

In July, the Eurosystem decided to set up a new service to settle securities transactions in euro and other European Union currencies in central bank money (TARGET2-Securities), assigning the development and operation of this service to the central banks of Germany, Spain, France and Italy. The preparatory work, which began in 2006, continued throughout 2008, in close collaboration with the market. It was also decided to launch the CCBM2 project, a new system for management of the collateral provided by counterparties in Eurosystem refinancing operations.

In cooperation with the national central banks, the ECB continued to develop, compile and disseminate a wide range of statistics useful for monetary policy implementation in the euro area and for the various functions of the ESCB. In addition, in December, the ECB adopted the Regulation (EC) No 24/2009 concerning statistics on the assets and liabilities of financial vehicle corporations engaged in securitisation transactions (ECB/2008/30), which will make more reliable statistics on these financial intermediaries available from 2010. The recast version of regulations concerning the balance sheet of the monetary financial institutions sector was also adopted through Regulation (EC) No 25/2009 (ECB/2008/32), which includes greater detail on credit and reporting on securitisations undertaken by credit institutions.

The Banco de España produced 885 million euro banknotes

In 2008, the Banco de España was responsible for producing a total of 885 million 50, 20 and 5 euro banknotes, in compliance with Eurosystem banknote production agreements in a joint and decentralised framework. The banknotes were produced according to schedule and met all the quality requirements (see Section 6.3).

The Banco de España collaborated very actively with other Eurosystem members in the preparation of the second series of euro banknotes, which will foreseeably be issued in the near future, and in the custody of the Eurosystem strategic stock. In this respect, the Banco de España played an important role in the organisation of international consignments of banknotes.

As in previous years, the Bank was chosen to perform tests to measure the quality of banknotes in circulation in the euro area countries, in collaboration with the central bank of the Netherlands.

### **3 International activities**

For some years, one of the Bank's key objectives has been to build its international presence and raise its international profile, to project an image of excellence that will facilitate dialogue with other central banks and supervisors, financial regulators and multilateral organisations in this area. The crisis that began in the summer of 2007 and that is affecting the financial stability of all countries, to a greater or lesser degree, requires global solutions, underlining the importance of an appropriate and smooth dialogue.

The work of the international committees was marked by the need to reform the financial systems to improve their functioning and their solvency

In general, the work of the international committees with global reach was highly influenced in 2008 by the specific actions proposed in the Financial Stability Forum's report, approved at the meeting of G7 ministers and central bank governors in April 2008, and, subsequently, by the action plan included in the declaration of the G20 summit held in Washington on 15 November. A commitment arose from this summit to improve cooperation and to work together to identify and implement the reforms necessary to improve the functioning and solvency of the world's financial systems. In the European arena, in addition to these proposals and recommendations, road maps were established by ECOFIN and a work programme was approved by EU Ministers within the Economic and Finance Committee, further conditioning the tasks of the international committees.

Activity in the sphere of the Eurosystem has already been referred to in Section 2 above, so this section focuses particularly on other European and international fora in which the Bank participates. It then goes on to mention bilateral relations, technical cooperation with other central banks, supervisory agencies and bank regulators, and international seminars and conferences organised.

#### **3.1 INTERNATIONAL RELATIONS**

In the European Union, the Banco de España participated, as part of the Spanish delegation, in diverse Community working groups and committees.

As in previous years, the Governor took part, together with his European counterparts and economy and finance ministers, in the informal ECOFIN meetings, the first held in Ljubljana in March and the second in Nice in September, under the Slovenian and French presidencies, respectively. At these meetings, priority EU economic and financial matters were discussed, including most notably issues related to financial stability and supervision.

The Banco de España participated in the work of the EFC and the EPC

The Economic and Financial Committee (EFC), which prepares the meetings of the Council of Economy and Finance Ministers (ECOFIN) in which the Deputy Governor participates, worked in 2008, firstly, on the regular review of the economic and financial situation, examining the

stability and convergence programmes. The work on financial stability and European financial architecture continued, with specific monitoring of the road map drawn up by the ECOFIN in October 2007 in response to the financial crisis (including, inter alia, issues relating to financial transparency, asset valuation, the prudential framework for supervision and rating agencies). Furthermore, national financial support plans were coordinated and followed (including the review of deposit guarantee funds) and a European position was adopted at the G20 summit on international financial architecture. Also within the EFC, the Bank took part in ad hoc working groups on specific subjects, such as the procyclicality of the financial system.

The working agenda of the Economic Policy Committee (EPC) placed particular emphasis on the analysis of the economic instruments available for meeting the targets set for energy and climate change, the methodological aspects of assessing countries' progress in relation to the Lisbon Agenda, the quality of public finances and their long-term sustainability and the integration of these two aspects in the Community fiscal supervision framework. Adopting a conjunctural perspective, the EPC focused on analysing developments in energy and food prices and on national and Community economic policy responses to the economic crisis.

The contributions made by the Bank in European financial supervision committees, particularly the CEBS, are also noteworthy. In 2008, the activity of the CEBS was focused mainly on the following areas:

- Technical advice to the European Commission on own funds, the reduction of the areas open to national discretion in the new solvency regulations, analysis of supervisory powers in Europe, liquidity, large exposures, transparency and the development of common supervisory financial statements.
- Cooperation and convergence in supervisory practices.
- Work related to the financial turmoil, with surveys of its impact on European banks.
- Projects related to the implementation of the review of the Lamfalussy approach.

The Bank was also involved in the work of the Interim Working Committee on Financial Conglomerates, which reports to the CEBS and the CEIOPS (Committee of European Insurance and Occupational Pensions Supervisors) and which, in 2009, changed its name to the Joint Committee on Financial Conglomerates. One particularly noteworthy project, inter alia, in 2008 was the beginning of the review of the Financial Conglomerates Directive. In addition, there has been a growing trend in Europe for analyses to be conducted jointly by the three level 3 committees of European supervisors, that is, the above-mentioned CEIOPS and CEBS, on the one hand, and the CESR (Committee of European Securities Regulators) on the other. Thus, for example, noteworthy among the work undertaken by these 3L3 committees are studies on the delegation of tasks and responsibilities among supervisors and the study on rating agencies, corporate governance and the valuation of illiquid instruments.

A large part of the global international activity of the Banco de España revolves around the Bank for International Settlements (BIS), the main nexus of cooperation between the world's central banks. In addition to regularly attending meetings of governors and the Annual General Meeting, the Bank played an active role on the Committee on the Global Economy, the Committee on the Global Financial System and the Markets Committee, and in the complex structure of working groups arising from such committees.



The Banco de España has played a very active role on the Basel Committee

The Bank also participated actively on the Basel Committee on Banking Supervision (BCBS), directing some of its actions. This Committee piloted the work aimed at strengthening those elements of the new Capital Accord which, in view of the lessons drawn from the current situation, may be improved upon. In particular, proposals were developed to:

- Strengthen the capital requirements of certain complex financial products and instruments included in the trading portfolio.
- Bolster liquidity management standards.
- Improve institutions' risk management, emphasising, for instance, stress testing and the problems involved in valuing certain instruments.
- Enhance the quality of information that institutions supply to the market.
- Improve supervisory cooperation for international banks via the creation of colleges of supervisors.
- Shore up the macro-prudential approach to supervision.

This is also without forgetting the implementation of Basel II and the monitoring of its impact on capital requirements and its possible procyclicality. The work of the International Liaison Group, set up to foster dialogue with supervisors not included in the BCBS, on matters related to the exchange of information and supervisory coordination, should also be mentioned. Particularly noteworthy, among this group's work, are its analyses of risk-based supervision, the importance of adequate accounting provisions and microfinance.

The Bank was also involved in the work of the Joint Forum, which brings together banking, insurance and securities supervisors worldwide. Its agenda was also affected by the financial crisis, which has emphasised the growing degree of interconnection between the activities of the different financial sectors. Accordingly, the Joint Forum focused on preparing reports on issues at the epicentre of the financial crisis, such as risk concentration and customer suitability in the retail sale of financial products and services, together with update of its previous papers on credit risk transfer and analysis of the degree of implementation of the principles for the supervision of financial conglomerates and the main areas in which these principles would benefit from being updated.

The International Monetary Fund (IMF) is another traditional catalyst of the Bank's global activity. As has become customary, the Bank expended considerable effort preparing the briefing notes for the Spanish representatives at this institution on the main matters discussed by the Executive Board. During 2008 the Bank paid particular attention to the reforms required for the Fund to adapt to the challenges posed by the financial crisis. These reforms were given a considerable boost after the G20 summit. Particularly noteworthy among the issues that received most attention in 2008 were: (i) the need to refine supervision of the Fund and, especially, to work in closer collaboration with the Financial Stability Forum and other multi-lateral organisations; (ii) resources and the ability to provide financial assistance to member countries; and (iii) the review of financial instruments. The Bank also participated in discussions on the customary Article IV reports, namely those relating to the countries of most interest to Spain. Finally, opinions and comments were contributed on the main reports published by the Fund, the Report on World Economic Outlook and the Report on Global Financial Stability.

Remaining on the subject of the IMF, the Bank also took part in the meetings of the International Monetary and Financial Committee in the spring and in the autumn, on the occasion of the Annual Meeting. These meetings reviewed the global economic outlook and the key aspects of the institution's policy and governance, all of which require orientation from its members at the highest level.

With regard to the Centre for Latin American Monetary Studies (CEMLA), which serves as the main forum for coordination of Latin American central banks, the Bank has participated actively in the meetings of governors, of the Alternates Committee and of the Audit Committee. In 2008 important matters for the Centre were addressed, such as the approval of internal rules governing the operation of the Reserve Fund and the election of the Director General for the five-year period running from 2009 to 2013. Furthermore, the Bank continued to collaborate with the Centre's training activities, especially with the courses on operational risk, financial instruments and international financial reporting standards, and accounting and valuation of central bank financial instruments, and with the seminar on the application of XBRL. Lastly, the Bank played a leading role in a number of CEMLA's initiatives, for example, the organisation of the VIII Meeting on Central Banking Human Resources Management, the creation of information exchange systems for remittances, human resources and banknotes, and the work of the accounting, banknote and IT technical committees.

Collaboration with American supervisors was stepped up

In 2008, collaboration with the Association of Supervisors of Banks of the Americas (ASBA), to which all the entities in charge of banking supervision in the American continent belong, was also stepped up. The Bank, as an associate member since October 2006, participates actively in the Association's governing bodies, training plans, working groups and other activities. In 2008 a meeting of the Association was held for the first time at the Banco de España, four seminars on subjects of shared interest were organised jointly and the Bank took part in the working groups on good consolidated supervision practices and operational risk and in the group that is to develop an information system on financial markets in the region.

In 2008 the Bank increased its collaboration with the main multilateral development banks (the World Bank, the Asian Development Bank and the Inter-American Development Bank) and, at a bilateral level, with other central banks and bank supervisors, through high-level and technical meetings. The list of central banks and supervisors with which bilateral meetings were held in 2008 includes Brazil, China, India, Japan, Mexico and Russia. In the same vein, senior officials of the BIS, IMF and IDB visited the Banco de España. Also, as in previous years, the Bank was included in the Spanish delegations participating in the periodic meetings of the Paris Club and in OECD and EU working groups on export credit.

The Bank's cooperation with and technical assistance given to other central banks and supervisory and regulatory bodies, be it bilaterally or through joint projects with multilateral organisations, makes a decisive contribution to its external profile. The aim of this cooperation, which has grown continuously over recent years, is to increase the Bank's presence and international prestige through the transfer of knowledge and experience amassed by the Bank and its employees.

Most of the technical cooperation was focused on Latin America

As has become customary, the core of the technical cooperation was the programme of courses and seminars for Latin America, where the Bank is on the way to becoming the benchmark for many central banks and bank supervisors. This cooperation, facilitated by the common language and culture, has stimulated continuous demand for technical cooperation, which rises year by year and takes the form of organising numerous study visits to Madrid, sending Bank experts to missions in situ and attending to almost constant consultations.

As for other geographical areas, such as the Mediterranean and eastern European countries, the Banco de España's cooperation is mainly in conjunction with that of other central banks and supervisory agencies, for participation in joint projects, some of which are coordinated within the Eurosystem and financed by European Union funds. Noteworthy in 2008 was the Bank's Internal Audit Department's involvement in a TACIS III project (Technical Assistance for the Commonwealth of Independent States) in collaboration with the Central Bank of Russia together with another eight central banks in the Eurosystem and the ECB.

Mention should also be made of the Bank's ongoing collaboration with different multilateral organisations to provide technical assistance and, most especially, that channelled through CEMLA, ASBA, the Central American Monetary Council, the IMF, the World Bank and the BIS Financial Stability Institute. Likewise, collaboration with agencies responsible for securities markets, both in Spain and in Latin America, was stepped up.

Lastly, *Billetteria*, the international review on cash management published by the Bank in Spanish and English was presented in 2008 at the main international fora and has become established as an important instrument for communication and collaboration among specialists in this field.

### 3.2 CONFERENCES, MEETINGS AND SEMINARS ORGANISED BY THE BANCO DE ESPAÑA

During 2008, the Banco de España continued its efforts to become an international benchmark in the organisation of high-level meetings and events designed to share and disseminate knowledge and experience in the most topical subjects in its areas of competence. With this purpose, it worked in collaboration with international agencies and intensified bilateral relations with other central banks of the G7 countries, the ESCB, Latin America and Asia. This type of activity contributes to establishing the Bank's prestige abroad and to disseminating its central-banking and financial-regulation know-how.

In December an international conference was organised to commemorate the 50th anniversary of Spain's membership of the IMF and the World Bank

The most significant event in 2008 in this area was the celebration of the 50th anniversary of Spain joining the IMF and the World Bank. For this reason, in December the Banco de España and the Ministry of Economic Affairs and Finance organised a conference entitled "Spain in the International Monetary Fund and the World Bank: fifty years on" to mark the 50th anniversary of Spain's membership of both institutions, attended by senior Spanish officials and senior officials of the IMF and the World Bank, along with academics and representatives of the banking industry and organisations linked to the IMF and the World Bank. The conference provided the opportunity to examine Spain's relationship with both institutions over the last 50 years, to reflect on the changes experienced by them, to analyse the role they have played in the world economy over this period and to look at how future challenges, considering the present setting, may be addressed.

Earlier, in April, a roundtable was held in Madrid on the World economic outlook: beyond financial turmoil. The main issues discussed were the impact of financial turmoil on the real economy and global financial stability, economic policy responses, the outlook for emerging economies, analysis of global imbalances and the role of exchange rates in their adjustment. On the following day, the participants in the roundtable joined the wide-ranging panel of speakers, from universities, central banks, international financial institutions and the financial sector, at the seminar, jointly organised with the Reinventing the Bretton Woods Committee, entitled *Bretton Woods II Under Stress?* The seminar consisted of four sessions, covering: (i) the current financial situation and its implications for Bretton Woods II; (ii) the market outlook; (iii) analysis of the resilience shown by emerging markets and whether this is permanent or transitory; and (iv) sovereign wealth funds and their possible role as a stabilising factor of global imbalances.

Within the framework of the 41st Annual Assembly of the Asian Development Bank, held in Madrid in May, and as part of the country day dedicated to Spain, the Banco de España and the Ministry of Economic Affairs and Finance organised a high-level seminar in which authorities from central banks, multilateral organisations, universities and the financial sector participated. The seminar consisted of two successive sessions, the first on the role of the financial system in the moderation of growth in Asia, and the second on the restructuring of the banking system from the perspective of the Spanish experience.

A roundtable on Latin America at the crossroads: challenges, risks and outlook, whose participants included senior officials from the World Bank and from some governments in the region, along with experts from the Spanish government, the financial sector and the Banco de España, was held at the Bank's headquarters in June.

Lastly, the Bank hosted CEMLA's VIII Meeting on Central Banking Human Resources Management, whose objective was to analyse the role of human resources as a promoter of central banks' effectiveness and social responsibility. Representatives of most Latin American central banks and of Eurosystem central banks and certain international organisations attended the meeting.

#### **4 Economic analysis and research**

In 2008 various departments of the Banco de España carried out analysis and research on the Spanish economy and its international environment, in order to give advice to the Bank's governing bodies in relation to the performance of their functions.

In line with output in recent years, 38 Working Papers and 10 Occasional Papers were published in 2008. Moreover, Banco de España staff published 45 papers in academic journals and specialised books, 35 of which in anonymously refereed journals.<sup>1</sup>

##### **4.1 PRIORITY AREAS OF ANALYSIS**

The research agenda of the Banco de España revolves around five major areas:

- Macroeconomic modelling and forecasting.
- Monetary policy and its transmission mechanisms.
- Financial stability.
- International economy.
- Spanish economy.

During 2008, more emphasis was placed, in all areas, on analysis of the macroeconomic and financial causes and consequences of the international crisis.

The Bank's avenues of research focused on the international financial crisis

As regards macroeconomic modelling and forecasting, the dynamic, stochastic general equilibrium model of the Spanish economy and the rest of the euro area (BEMOD) was estimated and similar smaller scale models were developed which included financial restrictions or certain institutional aspects of the Spanish labour market. The possibility of including financial variables in other short- and medium-term forecasting models, such as the Banco de España's quarterly model and real-time forecasting models of economic activity in the euro area and in Spain, was also investi-

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<sup>1</sup> The Banco de España's *Research Memorandum, 2008*, available at [www.bde.es](http://www.bde.es), provides further information on these publications. It also describes in greater detail the other research activities carried out by the Banco de España during the year.

gated. Furthermore, available macroeconomic models were used to assess the effects on the Spanish economy of lower oil prices and government economic stimulus measures. During the second half of 2008, the third wave of the Survey of Household Finances (EFF) 2008 was prepared and designed; the preliminary results of this survey will be available at the end of 2009.

The avenues of research on monetary policy and its transmission mechanisms continued to focus on analysis of the consequences of financial frictions for monetary policy transmission and the implications of price and wage rigidities and of the sources of oil price shocks for optimal monetary policy design.

Research in the area of financial stability and banking analysis was also mainly orientated at addressing aspects relating to the crisis. Thus, the role of the “originate-to-distribute” banking model was studied, on the basis of analysis of the determining factors of securitisation in Spain, the characteristics of the main relationships observed in the Spanish interbank market were described, the existence of the credit channel in Spain was explored and the use of stress tests in supervision was discussed. Also, research into the relationship between competition and financial stability was extended and the role played by banks in the development of firms’ financial situation was analysed.

Research on the international economy was also influenced by the financial instability. In addition to the traditional lines of work, amidst new concerns about the global economy, other areas arose such as:

- Capital flows to emerging economies, including the role of remittances, financial vulnerabilities and the impact of commodity prices in Latin America, the financial and banking implications of capital flows in Asia and the impact of these flows for the transition to EMU in new EU Member States.
- A historical perspective of global financial turbulence, analysing structured finance and the consequences for emerging economies. There was also a paper on the exposure and external interdependence of the Spanish economy.
- Global imbalances and financial stability, in particular how they are linked to the globalisation process (possible scenarios for adjustment of imbalances, implications of the build-up of reserves and sovereign wealth funds on global stability, foreign investment, etc.).
- Foreign trade, also addressing more institutional and macroeconomic aspects.
- Breakdown of nominal interest rates in the euro area and in the United States into their three basic components: real risk-free rates, risk premium and inflation expectations.
- Analysis of the impact of various indicators of financial pressure (indebtedness, debt burden and profitability) on the investment decisions of non-financial corporations in the euro area.
- Decisive factors in national and cross-border bank acquisitions in the EU.
- International financial architecture: reform of the IMF and its implications for Spain, IMF financing facilities and their possible simplification, IMF policies and sovereign debt restructuring processes.

Finally, as regards avenues of research on the Spanish economy, a broad set of topics relating to its structural characteristics were considered, such as the situation and quality of public finances, regional governments' fiscal behaviour, the consequences of demographic changes (with special emphasis on migratory flows), productivity developments and the quality of the labour factor, the degree of competition and the functioning of the factor and product markets (in particular, the housing and labour markets), business financing and households' financial situation, and the impact of regulatory and institutional changes.<sup>2</sup> Decisions regarding the location of Spanish firms' direct investment abroad were analysed and progress was made with exploring the determinants of business investment and foreign trade.

#### 4.2 RELATIONS WITH ACADEMIA

The Banco de España's connections with academia and the economic analysis and research units at other central banks and international institutions were maintained through the four traditional channels. First, the analysis and research produced by the Banco de España was presented and discussed at national and international seminars, congresses and academic conferences and published through the profession's usual channels. Second, the Banco de España holds a number of regular seminars, in which members of the Spanish and international academic community participate, including a weekly economic research seminar. It also organises national and international conferences, sometimes in collaboration with other organisations. In 2008, the Banco de España participated, in conjunction with other institutions, in the organisation of three international conferences: the 41st Annual Assembly of the Asian Development Bank; the European Summer Symposium in International Macroeconomics (ESSIM), held in Roda de Bará (Tarragona); and the international conference held to mark the 50th anniversary of Spain's membership of the International Monetary Fund and the World Bank (see Section 3.2).

Third, the Banco de España continues to contribute to the research networks organised within the Eurosystem for analysis of the euro area economy, such as, in 2007 and 2008, the Wage Dynamics Network and the Euro Area Business Cycle Network (organising a course given by Larry Christiano) and, in Latin America, within CEMLA. Since 2008, the Bank has also participated as a partner in a consortium of European universities and institutions aimed at developing the EFIGE (European Firms in the Global Economy) project, as part of the European Commission's 7th Framework Programme (FP7). The purpose of this project is to understand the interaction between globalisation and the European economy for EU firms. The regular visitor and external adviser programmes also continued; these promote projects that may be considered strategic in different areas of analysis and research.

Lastly, during 2008 the Banco de España launched its programme *Excelencia en Educación e Investigación en Economía Monetaria, Financiera y Bancaria* (Excellence in Teaching and Research in Monetary, Financial and Banking Economics) which spans several years and envisages subsidies for hiring lecturers and for research projects in a number of fields – macroeconomics, monetary policy, finance and the financial system, financial regulation and supervision, and international economics – in Spanish universities and research centres.

#### 4.3 DISSEMINATION AND COMMUNICATION

As mentioned above, the three main channels for the dissemination and communication of the Banco de España's research findings are the Working Paper and Occasional Paper series and the monthly Economic Bulletin which, along with regular articles on the economic situation, includes summaries of research conducted or under way. All these activities are included in the

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<sup>2</sup> In relation to the financial situation of Spanish households, in 2007 the preliminary results of the Survey of Household Finances were published [see "Survey of household finances (EFF) 2005: methods, results and changes between 2002 and 2005", *Economic Bulletin*, January 2008, Banco de España].

Economic Research Portal, a section on the Bank's website, whose content was extended and enlarged in the year.

The Bank's Library commenced the computerisation of 60,000 bibliographical references

In order to continue to facilitate public access to the Banco de España's bibliographical resources, the Library implemented a plan to improve its services and the way in which these resources are kept. One of the first measures to be adopted under this plan is to incorporate, in a computerised file that may be accessed via the Internet, approximately 60,000 works that were previously catalogued only on index cards. This project was conducted, with external backing, throughout 2008 and is expected to be completed in 2009 Q4. In addition, an electronic edition was created of all the material on which Pedro Martínez Méndez was working prior to his death, relating to "The Labour Market from 1914 to 1925" and "The Treasury and the Banco de España: 1900-1936". As a result, a CD-ROM entitled "Pedro Martínez Méndez. Unpublished works" was published and was presented to the public on 20 May 2008.

## **5 Banking supervision and regulation**

### **5.1 SUPERVISORY ACTIVITY**

In total, 505 institutions are supervised by the Banco de España

As at 31 December 2008, a total of 505 diverse institutions were subject to Banco de España supervision, of which 362 were credit institutions (see Table 7.1). The Bank is also responsible for supervising the activity of foreign credit institutions whose parent is a Spanish credit institution, within the confines of its role as supervisor on a consolidated basis.

The Banco de España's ongoing supervision process relative to these institutions was affected in 2008 by the crisis that began in summer 2007. In consequence, the Bank's actions in the year were largely aimed at carefully assessing the situation of Spanish banks in this new scenario, and specific analyses of sector risks and of factors of fragility at institutions were stepped up considerably. The Bank also continued to conduct ordinary ongoing supervision, consisting of permanent monitoring backed up by a programme of on-site inspections. In terms of actual supervision, a total of 166 inspection visits were made in 2008, of which 48 were under way as at 31 December, as shown in the breakdown in Table 7.2.

The downward pattern of the data in Table 7.2 reflects, in addition to the above comments, the changes being introduced by the Banco de España in its ongoing supervision of institutions, aiming to achieve greater and more efficient supervision. The traditional on-site inspections, which are the only activities recorded in the above-mentioned table, have been increasingly accompanied by close, ongoing monitoring, prompted by the increase in the amount and quality of the periodic and management information reported by institutions. Moreover, use of the form of supervision known as "ongoing on-site monitoring" has become more widespread. This entails the permanent presence of inspection personnel in the institutions, combining analysis and checks; originally used in the two big Spanish banking groups, this form of monitoring has recently been extended to include other institutions, on the basis of their size or complexity.

Ongoing monitoring, whether or not conducted on-site, now consumes a considerable portion of the supervisory resources available; these activities are not reflected in the inspection visits statistics.

In 2008, the Banco de España's activities, within its supervisory functions, were strengthened in two areas.

First, relative to implementation of the Capital Accord, commonly known as Basel II. With the publication of Circular 3/2008 on determination and control of minimum own funds, in 2008 the Banco de España completed the process of adapting banking regulations on solvency to the regulatory framework stemming from the new Capital Accord. For this pur-

	31.12.2008
CREDIT INSTITUTIONS	362
Banks	66
Savings banks	46
Credit cooperatives	85
Branches of foreign credit institutions	89
Specialised credit institutions	75
Official credit institutions	1
OTHER	143
Mutual guarantee and reguarantee companies	25
Currency-exchange and money-transfer bureaux	62
Appraisal companies	56
TOTAL	505

## INSPECTION VISITS IN 2008

TABLE 7.2

	INSPECTION VISITS					
	Completed			Ongoing at 31 December		
	2006	2007	2008	2006	2007	2008
CREDIT INSTITUTIONS	69	125	98	80	44	37
Banks	36	63	52	37	12	20
Savings banks	11	17	19	21	18	10
Credit cooperatives	10	18	8	12	4	0
Branches of foreign credit institutions	1	6	7	2	1	1
<i>Of which: EU</i>	1	6	2	2	1	1
Specialised credit institutions	11	21	12	8	9	6
OTHER	12	22	20	16	11	11
Mutual guarantee and reguarantee companies	3	5	1	5	1	0
Currency-exchange and money-transfer bureaux	7	9	11	5	3	3
Appraisal companies	2	8	8	6	7	8
TOTAL	81	147	118	96	55	48

pose, it assigned the necessary human and technical resources to the process of supervisory validation of the advanced internal models for measuring risk, including the necessary collaboration with foreign supervisory authorities. It also published a guide setting out the criteria to be applied by credit institutions in their internal capital adequacy assessment processes and conducted a general pilot programme to assess the suitability of these processes.

Second, relative to international supervisory cooperation. In 2008, fluid collaboration with European, Latin American and North American supervisory bodies intensified, through the supervisory colleges. In this respect, the meetings organised by the Banco de España relating to the two big Spanish banking groups, and the Bank's attendance, as the host country supervisor, at several meetings of colleges of foreign banking groups, are particularly noteworthy.

In 2008, no particular precautionary measures were required in relation to the supervised institutions.



## 5.2 IMPOSING OF SANCTIONS

In 2008, 14 cases were opened against supervised institutions and 33 against their directors

In 2008, the Bank opened 14 sanctioning proceedings against institutions or individuals subject to Banco de España supervision, and 33 against their directors or managers, to be conducted jointly with the aforesaid proceedings. Of this total, three cases were opened against appraisal companies and six against currency-exchange and money-transfer bureaux. Proceedings were also opened against one institution and one individual for pursuit of activities reserved to credit institutions, and against one institution for pursuing currency-exchange and money-transfer bureaux activities without the necessary authorisation. A case was also opened against one individual and one legal person for acquisition of significant holdings in the capital of a credit institution without the necessary advance notice to the Banco de España.

In addition, three proceedings were opened for failure to comply with the ECB's minimum reserve requirements.

These data are similar to those of previous years, both in terms of the number of cases and the types of supervised institutions and individuals subject to these proceedings.

In 2008, nine cases against supervised institutions and 42 cases against their directors were resolved, with the imposition of 157 sanctions

In 2008, nine cases against supervised institutions were resolved and 42 cases against members of their boards of directors or management. These resolutions involved imposition of: 12 sanctions on institutions and 26 on directors, relating to very serious infringements; 26 sanctions on institutions and 87 on directors, relating to serious infringements; and six sanctions on institutions for minor infringements, there being no provision in Spanish law for sanctions on directors in the event of minor infringements.

By type of institution, the sanctions were imposed on a bank, an appraisal company and seven currency-exchange and money-transfer bureaux.

Also in 2008, a case brought against a company and its director for pursuit of activities reserved to credit institutions was resolved, with imposition of the corresponding sanction.

In addition, proceedings were brought to withdraw the authorisation granted to three currency-exchange bureaux, on account of their having relinquished such authorisation. Strictly speaking, such cases do not involve exercise of the Banco de España's sanctioning power, but they do represent a form of control over supervised institutions, insofar as they enable entities which, for the reasons established by law, are liable to have their authorisation withdrawn, to be prevented from forming part of the system.

Sanctions were imposed on a bank for failure to comply with accounting regulations ...

As regards the nature of the infringements sanctioned in the year, in the proceedings brought against a bank and its directors, sanctions were imposed for a serious infringement, relating to failure to comply with accounting regulations and with rules on preparation of balance sheets and income and other financial statements that must necessarily be reported to the competent administrative authority.

... and on an appraisal company and seven currency-exchange and money-transfer bureaux

In the case of proceedings brought against supervised institutions other than credit institutions, the case against an appraisal company and its directors is noteworthy. Sanctions were imposed for a very serious infringement, relating to failure to comply with the requirements for authorisation, consisting in having the organisational resources and internal control measures necessary to conduct appraisal activities. The company was also sanctioned for serious infringements, consisting, respectively, in issuing appraisal certificates and reports whose contents were inconsistent with the data and evidence obtained in the appraisal activity or which departed, without expressly indicating as such, from the procedures, checks and instructions

envisaged in the applicable regulations, and in failing to report the necessary data to the Banco de España. A third serious infringement was also identified, relating to failure to comply with the sectoral regulations that require that appraisal companies must hold civil liability insurance cover, an infringement for which the company had been sanctioned in the two previous years.

In the case of the currency-exchange and money-transfer bureaux, the infringements analysed in the proceedings opened may be grouped under three main headings: (i) failure to comply with the regulations governing the activity and organisation thereof, resulting in five very serious, eight serious and four minor infringements; (ii) failure to comply with the regulations on appropriate capitalisation, recording thereof and reporting to the Banco de España of accounting and activity data, resulting in five very serious, eight serious and two minor infringements; and (iii) failure to comply with the regulations on relations with customers and with the public in general, resulting in five serious and one minor infringement.

Most of the sanctions imposed, within the range available, were in the form of fines. However, in some cases it was decided to opt for sanctions involving public or private reprimand, or disqualification from serving as a director, and, in the case of three foreign-currency bureaux, it was even deemed necessary to revoke the authorisation granted.

### 5.3 REGULATORY CHANGES

The transposition of Community regulations on solvency and provision of financial services was completed

As regards the organisational and disciplinary rules applicable to credit institutions and other financial intermediaries subject to Banco de España supervision, 2008 may be divided into two distinct parts. The first half of the year saw completion of the transposition into the Spanish legal framework of the Community regulations on solvency (basically by means of the implementing regulations of Law 36/2007, of 16 November 2007), and on provision of financial services (the Markets in Financial Instruments Directive (MiFID), whose incorporation into the Spanish legal framework prompted Law 47/2007, of 19 November 2007, which amended the Spanish Securities Market Law). In the second half of the year, and especially in the last quarter, regulatory activity focused, almost exclusively, on the design and implementation, within the framework of the concerted European action plan of the euro area countries, of a series of regulatory measures aimed at preserving the stability of the European financial system in general, and of the Spanish financial system in particular.

Regarding the first of these two periods, the following regulations are especially noteworthy:

- Royal Decree 216/2008, of 15 February 2008, on financial institutions' own funds. This legislation implements Law 36/2007, of 16 November 2007, specifying the basic principles on which the new solvency regime for financial institutions deriving from the Basel II Accord is based.
- Banco de España Circular 3/2008, of 22 May 2008, on determination and control of minimum own funds. This Circular culminates development of the new legislation on own funds and supervision of credit institutions on a consolidated basis, setting out all the technical specifications whose complexity and level of detail are inappropriate for inclusion in higher-ranking provisions.
- Banco de España Circular 5/2008, of 31 October 2008, on minimum own funds and other obligatory reporting of mutual guarantee companies, which culminates the development of the new solvency regime for MGCs.

- Royal Decree 217/2008, of 15 February 2008, on the legal regime of investment firms and other investment services entities. For the purposes of this section, this Royal Decree develops several rules on internal organisation and rules of conduct applicable to all institutions providing investment services, including, in particular, credit institutions.

Notable among the main regulatory changes seen in the final stretch of the year in connection with the stability of the financial system are:

- Royal Decree Law 6/2008, of 10 October 2008, creating the Fund for the Acquisition of Financial Assets, with an initial allocation of funds of €30 billion, extendable to €50 billion.
- Royal Decree Law 7/2008, of 13 October 2008, on urgent economic and financial measures in relation to the concerted European action plan of the euro area countries, which authorised State guarantees of new lending transactions made by credit institutions resident in Spain.
- Royal Decree 1642/2008, of 10 October 2008, which set at €100,000 the guaranteed amounts under credit institutions' deposit guarantee funds and investor compensation schemes.

Circular 6/2008 updated the accounting framework of institutions

Banco de España Circular 6/2008, of 26 November 2008, updated the credit institutions' accounting framework by amending Circular 4/2004, of 22 December 2004, on public and confidential financial reporting rules and formats, to adapt it to the changes made both in Spanish mercantile legislation and in international financial reporting standards (IFRS).

Also in the year, Royal Decree 322/2008, of 29 February 2008, implementing Article 21 of Law 44/2002, of 22 November 2002, on financial system reform measures, set out the legal framework for electronic money institutions (ELMIs), a new type of credit institution.

Lastly, a notable development in the EU regulatory framework was the Directive 2008/48/EC of the European Parliament and of the Council, of 23 April 2008, on credit agreements for consumers. This Directive regulates these agreements at the Community level, aiming to contribute to the development of an efficient internal market and to achieve appropriate consumer protection mechanisms; it must be transposed into the Spanish legal framework before 12 May 2010.

#### 5.4 FINANCIAL AND PRUDENTIAL INFORMATION

##### 5.4.1 Analysis of the impact (cost-benefit) of financial regulation

Together with the consultation document on the new general chart of accounts, the Banco de España published a qualitative analysis of the impact of the measures proposed, in line with the commitment to make this practice more widespread in the design of regulatory measures. This analysis means that regulatory intervention may be based on market failures and includes cost and benefit considerations in policy preparation, from the initial design stages.

In this respect, the Banco de España collaborated actively with the CEBS in the pilot programme, headed by the European Commission, for introduction of this approach in European financial regulation, specifically in the review of the regime for large exposures. Given the success of this trial, the Commission decided to extend this approach to other regulatory initiatives, such as, for example, possible harmonisation of the areas open to national discretion, in the Capital Directive, an initiative in which the Bank also played an important part.

#### 5.4.2 Financial reporting and XBRL

As a consequence of its supervisory and statistical functions, the Banco de España receives financial information from the institutions it supervises. The following paragraphs contain a summary of the main initiatives taken in 2008 affecting the information received or the way in which it is handled.

Publication of Circular 6/2008, of 22 December 2008, on public and confidential financial reporting rules and formats, signified a change in much of the accounting information that must be submitted by credit institutions, including the public financial statements. This entailed the need for a change in the language used (XBRL taxonomy: eXtensible Business Reporting Language) in these financial statements for exchange of information.

Approval of Circular 3/2008, of 22 May 2008, on determination and control of credit institutions' own funds signified the entry into force of the new statements required for control of credit institutions' own funds. To facilitate receipt of this information, development in XBRL of the Spanish extension of the COREP (COmmon REPorting) taxonomy was completed. The information corresponding to June 2008 was received and processed for the first time in XBRL.

As a result of the publication of Circulars 3/2008 and 6/2008, electronic signatures became obligatory in certain statements, replacing autograph signatures. The process is based on inscription in the Register of Senior Officers of the authorisation for electronic signature, by means of a legal person certificate issued by the National Mint.

Also with a view to greater automation, Circular 6/2008 established that all documentation that was previously requested on paper (such as financial statements and actuarial studies) must be sent electronically. For this purpose, an IT project was begun, aiming to permit receipt by electronic means of all this information as from that corresponding to December 2008.

Likewise, as a result of publication of Circular 5/2008, of 31 October 2008, on minimum own funds and other obligatory information for mutual guarantee companies, the statements for control that these requirements are met must also be received in XBRL, for which purpose a taxonomy had to be developed for them. The first information sent by this means is that corresponding to December 2008.

#### 5.5 CENTRAL CREDIT REGISTER

The Banco de España manages the Central Credit Register (CCR), which contains individualised information on the credit exposure of reporting institutions (basically credit institutions) to their customers. This information is used by the institutions for granting and monitoring exposure, and by the Banco de España, in conjunction with the data from credit institutions' accounting and own funds statements, for prudential supervision, maintaining the confidentiality of the individual data.

During 2008, growth in the number of exposures declared to the CCR slowed considerably, going from 33.5 million at end-2007 to 33.9 million at end-2008 (up 1.18%), while the total amount of these exposures rose slightly, from €3.6 trillion at December 2007 to €3.7 trillion at December 2008 (up 2.7%), and the total number of different borrowers remained virtually unchanged on December 2007 at 17.6 million.

Growth in the number of registered exposures decelerated notably

The CCR issued a total of 302.9 million automatic reports, in comparison with 291.2 million in 2007 (an increase of just 3.8%), while, for the first time, there was a marked decrease in the number of requests for reports for new lending transactions, from 6.9 million in 2007 to 6.1

million in 2008 (a drop of 11.8%). In turn, requests for reports by borrowers rose from 117,000 in 2007 to 132,900 in 2008 (up 13.9%).

As regards the quarterly exchange of information with the central credit registers managed by six other central banks of EU Member States (Germany, Austria, Belgium, France, Italy and Portugal), to September 2008 the CCR received information on exposures of 3,905 Spanish legal persons (an increase of 14.28% on the same period a year earlier) recorded in the other central credit registers, amounting to €238,435 million (up 7.18%). In turn, the CCR sent to these registers information on 1,844 legal persons resident in the other six countries (up 5.86%), relating to exposures amounting to €63,074 million (down 11.61%). During 2009, improvements in the frequency of these exchanges, and in their processing and scope, will be addressed.

The CCR started work on granting the public access to their data via the Internet

Lastly, it should be highlighted that in 2008 the work began to grant borrowers access to their CCR reports via the Internet, to adapt to the provisions of Law 11/2007, of 22 June 2007, on electronic access to public services.

## **6 Operational functions**

### **6.1 MANAGEMENT OF THE BANCO DE ESPAÑA'S ASSETS**

In the euro area, the implementation of monetary policy is carried out in a coordinated fashion by the European Central Bank and the national central banks; the former takes the monetary policy decisions, while the latter perform the liquidity providing/absorbing operations and deal with aspects relating to the provision of collateral with the credit institutions within their purview. In 2008, the Eurosystem, in collaboration with the Federal Reserve Bank of New York and the Swiss National Bank, also made liquidity injections in US dollars and Swiss francs.

The ECB made changes in its tender procedure to meet credit institutions' demand for financing as market liquidity dried up

Monetary policy operations in the Eurosystem as a whole grew in 2008, and especially in 2008 Q4. As market liquidity virtually dried up, credit institutions had to apply to central banks for the financing they needed, and they did so in very large amounts. Against this backdrop, the European Central Bank made changes in its tender procedure for liquidity injections in the Eurosystem, adopting a fixed-rate tender procedure with full allotment. Thus, Spain's share rose from €25,094 million in 2007 to €49,153 million in 2008. At the same time, the flow of funds between the Spanish banking system and institutions situated in other euro area countries changed direction: while in 2007, Spanish institutions received, on average, funds totalling €18,835 million, in 2008 they repaid funds totalling €18,621 million, signifying a complete turnaround in this flow of financing in 2008.

The Banco de España's portfolio of euro-denominated fixed-income bonds recorded an average balance of €77,905 million in 2008, marginally higher than in 2007, while holdings of foreign currency denominated assets stood on average at €7,960 million, somewhat less than in 2007, due to the exchange rate effect. As at 31 December 2008, manageable assets in euro, foreign currency and gold totalled €94,314 million.

Throughout 2008 the Banco de España continued to manage a portion of the ECB's foreign reserves, managing, on average, a portfolio of \$5,050 million.

### **6.2 MANAGEMENT OF PAYMENT SYSTEMS**

As regards the Spanish large-value payment system, the main landmark in 2008 was the transformation of the Banco de España Settlement Service (SLBE) into TARGET2-Banco de España, the Spanish component of TARGET2. After much work, both by the Banco de España and the Spanish banking community, on the necessary technical and legal adaptations and the corresponding trials, migration of the Spanish system to TARGET2, the European real-time gross settlement system in euro, was successfully completed on 18 February 2008.

TARGET2-Banco de España has worked fully satisfactorily

TARGET2-Banco de España has worked fully satisfactorily, with no major incidents. In 2008 the system processed more than 11 million transactions (down 8% on 2007), with a value of more than €93 trillion (down 4% on 2007). These decreases are due, on the one hand, to changes in the way in which certain transactions for ancillary systems are settled, and, on the other, to new functionalities available in TARGET2 that permit rationalisation of back-office tasks and more efficient liquidity management by credit institutions.

With regard to retail payments, the Banco de España is developing the oversight of the National Electronic Clearing System (SNCE), which is managed by Iberpay, a private company owned by the system participants. In 2008, the SNCE processed 1,510 million transactions, representing a rate of growth of 5%, similar to that seen in previous years, with a total value of almost €2 trillion, a slight decrease (1.7%) on 2007.

After several years of design and preparation, in 2008 the Single Euro Payments Area (SEPA) was effectively launched, allowing consumers, firms and other economic agents to make electronic payments in euro to any beneficiary in the European Union, subject to the same basic conditions and with the same rights and obligations, using one single bank account and a single set of payment instruments.

During 2008 the Banco de España continued to collaborate with and support the Spanish banking community in the necessary developments for successful transition to the SEPA in Spain. Thus, the Bank has offered to act as the representative and settlement agent, of all those institutions that have requested these services, in what is to date the only pan-European retail payment clearing house, thus enabling these institutions to access transactions in – and receive transactions from – any part of the euro area. Moreover, through its participation in the groups created to this effect, the Bank has contributed to the preparation of the Spanish banking community's Action Plan for SEPA which sets out a schedule for the steps to be taken to encourage the migration of Spanish payment instruments.

In this respect, the Banco de España will continue to work with all interested parties in those areas in which issues have still to be resolved, encouraging competition and giving top priority to ensuring that the SEPA meets the needs and expectations of users, without entailing any deterioration in existing levels of service.

### 6.3 BANKNOTE MANAGEMENT

The Banco de España takes all the necessary measures to comply with its functions in this respect, controlling banknote circulation, ensuring that a safe and flexible supply of banknotes is available to meet demand and monitoring and controlling the integrity, quality and authenticity of euro notes. The Bank also assumes its share of production of the euro banknotes needed in the Eurosystem to meet the new demand for notes and to replace those that are damaged and withdrawn from circulation.

As a result of the Eurosystem agreements for banknote production, in 2008 the Banco de España was responsible for producing a total of 885 million 50, 20 and 5 euro banknotes.

The upward trend seen in recent years in the distribution and withdrawal of banknotes continued

Over the year, the Bank delivered 2,567 million banknotes to credit institutions, 11.6% more than in 2007; in turn, 2,774 million banknotes were withdrawn from circulation, an annual increase of 10.7%. It is important to note, in this respect, the large numbers of notes entering Spain from other euro area countries, basically as a result of tourism; this is one of the reasons behind the fact that the number of 10 and 20 euro notes received by the Banco de España exceeds the number of 10 and 20 euro notes it puts into circulation, resulting in what is known as "negative net issuance".

The Bank is working on developing agreements with the private sector that will ease and improve the system of custody and distribution of cash throughout Spain, endeavouring to ensure that operating efficiency and cost management targets may be met without impairing the quality and authenticity of the banknotes in circulation.

The number of banknotes processed, that is, counted, authenticated and checked, at the Banco de España amounted to 2,593 million, a minor increase on the previous year; of this total, around 40% were declared to be unfit to be returned to circulation. Damaged banknotes were destroyed and replaced by others (new or used banknotes) that complied with the strict quality standards set by the Eurosystem, to assure the legitimacy and quality of the notes in circulation. The Bank continues to invest in state-of-the-art technology for automatic banknote processing, counting, checking and control.

Regarding the Eurosystem's Framework for euro banknote recycling, 2008 saw the completion of the process whereby credit institutions signed up to the General Clauses applicable to the Banco de España ordinary cash service, which were published in the Official State Gazette (BOE) at end-2006. The Technical Applications for Cash, which develop these Clauses, were updated to include new statistical data on banknotes that credit institutions and other professional cash handlers have to send to the Banco de España. Also under the terms of the Framework, approval was granted for private banknote processing and recycling facilities to be opened, in Spain's four main cities (Madrid, Barcelona, Seville and Valencia).

To comply with the task entrusted to it by the Treasury, in 2008 the Banco de España put coins worth 1,165 million into circulation and withdrew from circulation coins worth 266 million.

#### 6.4 IMPLEMENTATION OF THE TRANSACTIONS OF THE FUND FOR THE ACQUISITION OF FINANCIAL ASSETS (FAFA)

The Banco de España was charged with implementing the FAFA created by the government

The measures adopted by the Spanish government within the framework of the lines of action established by the Economic and Financial Affairs Council (ECOFIN) of the European Union, aimed at encouraging financial institutions to lend to households and firms, included the creation, in October 2008, of a Fund for the Acquisition of Financial Assets (FAFA), assigned to the Ministry of Economy and Finance and with an initial allocation of funds of €30 billion, extendable to €50 billion.

In accordance with the regulations for creation of the Fund, the Banco de España is responsible for implementing the transactions, acting as agent and custodian bank for the Fund. To perform this task with the urgency required, the Treasury Special Schemes Support Service was created in the Bank, within the Directorate General Operations, Markets and Payment Systems.

The Service's work has three successive phases. First, organisation of auctions among credit institutions interested in obtaining financing; these institutions may submit competitive bids (in which case financing is awarded to those offering the highest interest rates) and non-competitive bids (in which case priority is given to those that have made the most contribution to increasing lending to households and non-financial corporations). Second, settlement of the transactions for acquisition of the financial instruments that become part of the Fund's assets. And third, administration and monitoring of the Fund's portfolio created following the successive acquisition of assets.

Two auctions were held in 2008, the first involving repo transactions and the second purchase of held-to-maturity securities. The corresponding asset purchases were settled and the two portfolios created.

## 7 Statistics

### 7.1 THE STATISTICAL FUNCTION OF THE BANCO DE ESPAÑA

The statistical function of the Banco de España is established in its Law of Autonomy and in the National Statistics Plan<sup>3</sup>. The Law of Autonomy provides<sup>4</sup> that the Banco de España shall compile and publish statistics relating to its functions and that it shall assist the ECB in the compilation of the statistical information needed for the fulfilment of the ESCB's functions. Since the creation of the Economic and Monetary Union, the tasks in connection with the ECB/ESCB have progressively increased the demand for resources dedicated to this function.

The main statistics compiled and disseminated by the Banco de España under the Law of Autonomy relate to financial institutions and markets and to interest rates, although the underlying information for some of the statistics included in these areas is drawn from other supervisory agencies (the Spanish National Securities Market Commission (CNMV) and the Spanish Directorate General of Insurance and Pension Funds (DGSFP)). The statistics compiled and disseminated under the current PEN are the Balance of Payments and the International Investment Position, the Financial Accounts of the Spanish Economy, the Survey of Household Finances, and Public Debt, according to the Excessive Deficit Protocol (EDP). A significant part of these statistics broadly coincides with the requirements of the ESCB, being compiled using the information that all resident units are obliged to provide by law.

In addition, the Banco de España, through its Central Balance Sheet Data Office, collects, compiles and disseminates information on the balance sheet position and the results of non-financial corporations, based on questionnaires completed voluntarily by the reporting firms and on the annual accounts filed by non-financial corporations at the Mercantile Registries.

All these statistics are published in the Boletín Estadístico, in monographic publications and on the Banco de España's website.

Apart from compiling and disseminating the above-mentioned statistics, the Bank also uses statistics produced by other Spanish agencies and supervisors (INE, IGAE, ministries, CNMV, DGSFP, etc.) and by international organisations as a source for another area of statistical work that it makes available to its own analysts and to the general public. Moreover, Banco de España representatives take an active part in international statistical fora (within the ESCB, the European Commission through Eurostat, the European Committee of Central Balance Sheet Data Offices, the IMF, BIS, OECD, etc.). The Bank also maintains databases that permit analysis of the evolution of the variables for which data are collected.

### 7.2 MAIN CHANGES INTRODUCED IN 2008

During 2008 the statistics for which the Banco de España is responsible were updated, in accordance with generally accepted quality levels, and the data were released on pre-announced dates, in accordance with the calendar published on the Banco de España's website. Each of these updates incorporates the methodological improvements and changes reported in each of the publications.

The most notable elements of this work are mentioned below.

#### 7.2.1 Monetary and financial statistics

In the area of the monetary and financial statistics relating to the functions envisaged in the Law of Autonomy, the following stand out in 2008:

- Banco de España Circular 6/2008, of 26 November 2008, which amended the information to be sent by credit institutions, prompting the start of adaptation of the process of statistical compilation.

<sup>3</sup> The National Statistics Plan is established every four years (the current Plan is for 2005-2008) by means of a royal decree, pursuant to Law 12/1989 on the Public Statistical Function. <sup>4</sup> Article 7.5.f).



- As regards the sending of information to the ECB, work was conducted on the compilation of statistics on mutual funds that have to be sent to the ECB as from February 2009, with data as from December 2008. In addition, the information that must be sent, as from 2010, by monetary financial institutions (MFIs) on credit and their securitisation transactions, and by securitisation SPEs on their own accounts, was extended, for which purpose the corresponding amendments were made in the ECB regulations.
- Work continued on the implementation of the Centralised Securities Data Base (CSDB), which was used for the first time to compile the mutual fund statistics.
- Against the backdrop of financial turmoil, work was conducted to help analyse and reflect in the EU's statistical manuals the government aid granted to financial institutions, to ensure uniform recording of these transactions in the general government deficit and general government debt, and these transactions were recorded in the Spanish general government statistics.

#### 7.2.2 Balance of Payments and International Investment Position statistics

The main changes made during 2008 are as follows:

- Work continued on adapting the information system currently used to compile the Balance of Payments to the changes that affected it in 2008 and to those that will affect it as from 2009: mainly the raising of the reporting threshold for cross-border transactions to €50,000 from 1 January 2008; the entry into operation of TARGET2 and of other systems for interconnecting euro area settlement systems; and the launch of the Single Euro Payments Area (SEPA).
- The dissemination of the monthly Balance of Payments data was brought forward by 15 days; moreover, these data will now be revised quarterly rather than annually as before. This new dissemination and revision calendar enhances the degree of consistency between the Balance of Payments data, on the one hand, and the Financial Accounts and National Accounts data, on the other.
- The Direct Investment data drawn from the Investment Register kept by the Directorate General for Trade and Investment of the Ministry of Industry, Trade and Tourism were incorporated into the International Investment Position.

The dissemination of Balance of Payments data was brought forward by 15 days

#### 7.2.3 Balance sheet position and results of non-financial corporations according to the Central Balance Sheet Data Office

Most of the work carried out in 2008 was connected with the adaptation of the data-collection systems to the new general chart of accounts approved in 2007, with the additional aim of alleviating the reporting burden. Specifically, in collaboration with the Spanish Accounting and Audit Institute (ICAC), the Directorate General for Registrars and Notaries Public and the Spanish Mercantile and Property Registrars' Association, the work on creation of the standard formats for filing accounts adapted to the new general chart of accounts was completed. These formats, which were published in the Official State Gazette (BOE) of 28 January 2009, include an electronic version in XBRL, whose taxonomy was also developed in 2008. Also in this connection, the Bank worked in close collaboration with the Mercantile Registries on preparation of the data-collection system to permit electronic filing in said Registries.

The questionnaires sent by the firms reporting to the annual database (which in 2008 again totalled more than 9,000 non-financial corporations) and to the quarterly database (more than 1,000 firms) were also adapted to the new general chart of accounts. In both cases, the new questionnaires include fewer additional details on the official filing formats used by the report-

ing firms. Meanwhile, collaboration with the Spanish Mercantile Registries, pursuant to an agreement with the Spanish Registrars' Association, allowed data to continue to be included on more than 500,000 firms.

At the international level, within the framework of the European Committee of Central Balance Sheet Data Offices, the Spanish Central Balance Sheet Data Office chaired the group that maintains the ERICA database of consolidated accounts of European groups, monitors the Europe-wide process for alleviation of the reporting burden and studies the quarterly databases kept by the European central balance sheet data offices.

### 7.3 OTHER WORK RELATING TO THE COLLECTION, MANAGEMENT AND DISSEMINATION OF STATISTICAL INFORMATION

In 2008 work was undertaken to improve the infrastructure for collecting, exchanging and accessing the Banco de España's statistical information. Part of this work has already been implicitly or explicitly referred to above. This section covers the work with a special interest, specifically:

- New electronic forms for collection of information on cross-border transactions directly from firms and individuals were installed on the Banco de España's website. Others will be added until all the existing hard-copy forms are covered.
- The infrastructure was prepared for installation on the Banco de España's website of a search system to make it easier to access the Bank's statistical information.

## 8 Claims Service

The number of complaints received rose by 30%, telephone enquiries by 76% and on-line enquiries by 145%

The key feature of the year for the Claims Service was the significant growth in activity. In its work of attending to the users of products and services offered by financial institutions subject to Banco de España supervision, it recorded an increase of almost 30% in the number of complaints lodged by the public. The increase in enquiries made by users of financial services was even more noticeable, as the number of telephone enquiries rose by 76% and the number of on-line enquiries by 145%.

Since April, the Virtual Office of the Claims Service enables complaints and enquiries to be handled on-line

On 18 April 2008 the Virtual Office of the Claims Service came into operation, enabling the general public to make enquiries and lodge complaints without having to go in person to a branch of the Banco de España. This new form of access to the Service has been very well received, and is used more and more by the public, who may also track their complaints through the system.

Work continued on improving the presentation and content of the information provided, via the Annual Report of the Claims Service and the quarterly reports, identifying the issues that give rise to most complaints or doubts and presenting the principles of best practice drawn up by the Claims Service and which should govern institutions' relations with their customers. For the first time, the 2008 Annual Report of the Claims Service included a comparative study of the different alternative dispute resolution systems in operation in Europe.

The Service's external profile was raised in 2008, with an increased presence and increasingly active participation in international meetings on issues relating to the protection of financial consumers. Notable at the European level was its participation on the Steering Committee of FIN-NET, the European network for settling cross-border financial disputes out of court, of which Spain is a founder member. In October 2008, Madrid hosted one of the annual plenary meetings of FIN-NET members. The Claims Service also took part in "INFO 2008", the Annual Conference of the International Network of Financial Services Ombudsman Schemes, held at end-September 2008 in New York, and in a Seminar on the Legal Aspects of Central Banking, organised by the Banque de France in early December.

Technical cooperation was also stepped up, especially in the area of Latin America, notably with the organisation of the 2nd Course on Protection of the Financial Customer, held at the Banco de España's headquarters in June 2008, in which representatives of consumer protection supervisors and agencies of numerous South American countries participated.

## **9 External communication**

As a government agency, the Banco de España shares the obligation of accountability vis-à-vis the general public, although in the case of the Bank a balance must be found between this obligation and the discretion required of it in its financial system supervisory duties. The communication policy of the Banco de España has a twofold objective: to explain the functions and activities of the institution and to contribute to the confidence of citizens in the financial system. External communication is necessary for the Banco de España to fulfil its functions under the Law of Autonomy and as a member of the ESCB.

### **9.1 MEDIA RELATIONS**

The Banco de España's relationship with the media focuses on enhancing knowledge of the institution's activities among information professionals, since these are a key link in the mechanism for transmitting messages to the public. Hence in 2008 information sessions were organised to explain the workings of ECB funding to institutions, the behaviour of bad debts and the new features introduced by the solvency circular, within the journalist training programme commenced in 2004. Moreover, in order to publicise the work of the various departments of the Bank, informative meetings were organised to present the results of the government debt reports (in April) and of the Central Balance Sheet Data Office surveys (in November).

In addition to these regular meetings, mention should be made of the attention paid by the media in 2008 to other events such as the conference held in April to commemorate the XX Anniversary of the CEMFI, the presentation of the Financial Education Project undertaken jointly by the Banco de España and the National Securities Market Commission (in May) and the international conference entitled "Spain in the International Monetary Fund and the World Bank: 50 years on", organised jointly in December by the Banco de España and the Ministry of Economic Affairs and Finance.

Also given wide media coverage was the award of the Bernácer prize (in May) and the King Juan Carlos economics prize (in December), as well as the presentation of the first FEDEA report on immigration (in October).

The complicated state of the international financial system prompted greater media interest in information relating to the Banco de España's activities, with the consequent significantly higher demand for interviews by the media. Overall, representatives of the Bank gave around 30 interviews (50% more than in the previous year). A considerable number of the interviews in 2008 were given within the Bank's branch network-based communication plan, the purpose of which is to acquaint local and regional media with the Banco de España's activities. Under this plan, and continuing along the same lines followed in 2007, the report of the Claims Service was presented simultaneously in Madrid and at the A Coruña, Barcelona, Bilbao, Seville and Valencia branches.

Nevertheless, as in previous years, the main channel for communicating the Bank's viewpoint regarding the economic situation and the financial system was its regular publications, such as the Annual Report and the Economic Bulletin, and the public speeches made by its management. In addition to the Governor's regular appearances before Parliament (in June, to present the Annual Report, and in October, before the Parliamentary and Senate Budget Committees), the members of the Bank's governing bodies participated in 30 national and international fora in 2008.

9.2 INSTITUTIONAL  
COMMUNICATION PROGRAMME  
9.2.1 Information to the public

Visits to the Bank's website were up 25% on the previous year

The Banco de España's commitment to providing reliable information to various target groups and to the general public makes its website a very important channel of direct communication because of its efficiency and cost. The access statistics showed nearly 2.4 million visitors in 2008, up 25% on the previous year. The number of pages viewed by users exceeded 22 million, up 34% with respect to the previous year. This figure includes accesses to the Bank Customer's Portal, which amounted to nearly 2.5 million in the same period.

In line with the conclusions drawn from the study conducted in 2007 to ascertain the expectations and demands of the various target groups using this channel, the Banco de España began to revamp its website to include major improvements in technology, design, architecture, ease of use and accessibility. The aim is to enable users to consult the information in it in a way more suited to their needs.

Separately from this overall reform, as part of the process of ongoing expansion and improvement of page content and architecture of the Banco de España website, 84 improvement projects were conducted last year and progress was made in the translation of certain institutional contents into English and into the co-official languages of the autonomous regions, to enable users to navigate in the Catalan, Galician, Valencian and Basque languages.

The Statistical Information Service responded to around 10,200 telephone and e-mail requests from the public in 2008. The most commonly requested information related to interest rates and exchange rates. Also, 6,361 inquiries were handled through the Bank Customer's Portal and 29,557 by the Claims Service (25,389 through the call centre, which was reinforced in 2008, and 4,168 via electronic channels) in regard to diverse aspects of the public's dealings with banks.

In line with the Banco de España's wish to make itself better known to different social groups, the Bank distributed 117,500 brochures and 4,000 units of assorted informative materials, as well as 12,000 units of informative and educational products of the Eurosystem and of the European Commission. These items were distributed by post and at suitable times such as during visits to the Madrid headquarters and the branch network by professionals, students, senior citizens and others, and at conferences held by the Bank.

Furthermore, members of the public downloaded from the website 5,500 copies of the Banco de España informative brochures mentioned above and 4,200 Eurosystem products, the latter including 640 downloads of an educational video produced by the Eurosystem.

The Bank, in line with its commitment to communicate with the public in the co-official languages, has a policy of multilingual presentation of the materials which, since they are addressed to the residents of regions with co-official languages, require translation.

9.2.2 Educational initiatives

The Bank, jointly with the CNMV, set in motion the Financial Education Plan

The Financial Education Plan is a joint project of the National Securities Market Commission (CNMV) and the Banco de España within the framework of the integral financial education policy promoted by the government, the aim of which is to improve the level of knowledge of current and future users of financial services.

The Plan targets all population segments and will progressively cover all financial products and services. This Plan, the scope and characteristics of which are in line with the principles and recommendations of the OECD and the European Commission, aims to enlist the support of the competent governmental bodies and the various social and institutional agents.

It is a multi-year project which will last until 2012 and has various major objectives, the first of which is to launch a website concerned with financial education, which will be followed by other actions, such as the preparation of materials, their possible inclusion in the school curriculum and specific actions targeted at certain population segments.

The services contract for the website has been awarded and is in the production phase, with the contents now having been finalised. Also, the finishing touches are being put to diverse campaigns targeted at young people, immigrants and senior citizens, based on the production of specific materials for each segment, which will be distributed via the channels considered most effective in each case.

During the second year of its life, the Virtual Classroom (an educational portal for young people designed to foster knowledge of the Banco de España and spread awareness of its mission to guarantee the stability of prices, payments and the financial system) became established as a learning tool for the educational community. This is clear from the fact that 360,000 portal pages were consulted by 93,700 visitors in 2008, up 20% on 2007.

The Competition for Schools organised by the Banco de España for upper-level secondary and middle-level vocational training students is an educational instrument which fosters the entrepreneurial spirit of students and has aroused growing interest among schools. The 2nd Competition for Schools, held in the 2007-2008 academic year, merited the participation of 1,799 students from 228 schools, compared with 1,600 students from 193 teams in the first competition.

The 2nd Competition for Schools (dedicated to the 10th anniversary of the European Central Bank, the European System of Central Banks and the Eurosystem), in which 228 teams from public and private schools throughout Spain took part, was divided into a first general qualifying round and a second round consisting of a written contribution based on the theme "The Banco de España and the Eurosystem: 10 years of stability". The winner was the David Buján Secondary School located in Cambre (A Coruña). The prize of eight laptop computers was awarded on the school's premises by the director of the Banco de España branch in A Coruña. Subsequently, the students in the team were presented with certificates by the Governor, who acted as the president of the panel of judges, in a ceremony held at the Banco de España's headquarters in Madrid.

The Banco de España publishes the winning essays, issuing a bilingual edition when the school submits the contribution both in Spanish and in the relevant co-official language.

The 3rd Competition for Schools, currently under way, will be dedicated to the 10th anniversary of the euro. 214 teams registered, made up of 1,716 students from all the Spanish autonomous regions.

In 2008 the Bank began to develop an educational game targeted at upper primary school students and their teachers, which will be presented in a section of the website in June. Teachers wishing to use it in their classes can ask to have material sent to them for use in the 2009-2010 academic year.

The aim of the project is to introduce the Banco de España and the Eurosystem to students through the currency-issuance function, teaching them the features of banknotes in a game similar to Trivial Pursuits. The teams playing the game are faced with questions and problems the solution to which is generally numerical and requires a transaction in which banknotes change hands.

In addition, as indicated in Section 4.2, the Bank initiated in 2008 a programme of educational excellence, the purpose of which is to finance teacher hiring and economic research projects.

9.2.3 Institutional relations with the European Central Bank

In 2008, the Banco de España carried out communication activities as a member of the European System of Central Banks (ESCB). In addition to helping to define and implement the Eurosystem's communication strategy through its participation in the Eurosystem and ESCB Communications Committee and to publishing ECB press releases and communications on its website, the Communication Department carried out various initiatives under the Eurosystem communication plan, notably including the preparation of interactive educational materials and of a finance competition for upper secondary school students.

The Banco de España held a number of events to commemorate the 10th anniversary of the ECB and the ESCB. They began on 1 June 2008 and extended into the early weeks of 2009 to link up with the celebration of the 10th anniversary of the creation of the euro.

**10 Internal organisation and administration**

10.1 HUMAN RESOURCES AND ORGANISATION

The Bank's total staff numbers  
2,730

As at 31 December 2008, the Banco de España employed a total of 2,730 staff, with scarcely no change with respect to a year earlier (the monthly average number of serving personnel was 2,727).

The proportion of females continued its upward trend of the last few years. This was so both at overall level, where females accounted for 37% of total staff, and among management posts, where they represented 36.3%. It is particularly significant that females account for 45% of staff aged below 45 years, so the future outlook for gender balance in the Bank's staff is highly positive.

Internal mobility was another notable feature of human resources management. In absolute terms, there were 322 movements, representing 12% of average permanent staff, up 77% on 2007. These figures include both transfers between departments and changes of duties and responsibilities.

In order to boost the level of skills of professionals being incorporated into working life, in 2008 it was decided to commence training programmes designed for grant-holders and specialised work experience contract holders at the Bank.

In the area of in-house training, the work of previous years was continued and, moreover, the Bank's educational capabilities were expanded through the inclusion of new training courses with such titles as "Enhanced team management" and "Advanced course on derivatives". Moreover, greater efforts were made in the training of employees attending to the general public at branches. Training courses were attended by approximately 28% more employees in 2008 than in the previous year and, notably, also by 29 members of other national central banks. The number of hours of training given increased by 2.3% to 43.5 hours per employee.

The collective labour agreement signed in 2008 represented a milestone in labour relations, since an agreement covering three years (2008, 2009 and 2010) was reached in advance. This will ensure the stability necessary for the Bank to carry out its functions in the current economic situation. The main points include further advances in the reconciliation of personal and professional life through additional new measures such as more flexible working hours and the extension of paid leave for the parents of children aged below 12.

Furthermore, work continued on projects aimed at making it easier for employees to carry out human resources management processes via the Intranet. These processes were made more efficient through the simplification of procedures.

## 10.2 ADMINISTRATION AND PROPERTIES

During 2008 the Bank continued its ambitious programme to renovate facilities and adapt buildings, both at central headquarters and at branches and recreation centres, which has been under way for the last few years.

At the Cibeles complex work began on the restoration and cleaning of the inner façades of the old building, which, along with the third and final phase of restoration of the zinc roofing under way during the year, will complete in 2009 the refurbishing work undertaken to regenerate the “skin” of this valuable building.

In the interior of the buildings of this complex, the renovation, updating and extension of the security facilities was completed and work commenced on the first stage of implementation of the Electrical Integration Master Plan, an ambitious multiyear programme to update and improve all the electrical facilities of the complex, enhancing the security, reliability and quality of the power supply.

Also, the new integral maintenance contract for the facilities of the Cibeles complex came into force at the beginning of the year. This was the solution adopted by the Bank to reorganise and rationalise the numerous partial contracts existing up till then and, as a result, improve efficiency and reduce costs.

Work was carried out at the Alcalá 522 complex to improve the fire prevention capability by creating sectors isolated from fire and smoke. The finishing touches were put to the refurbishing work on the outdoor facilities and large brick façades of the complex.

As to the branches, work is under way to improve the fire prevention systems, the renovation of the general facilities has been commenced in accordance with the priorities of a multiyear programme based on the technical audit conducted in previous years, and the maintenance contracts have been restructured, rationalised and their efficiency improved. As an aid in this work, reference was made to the specific technical conditions of each building. Further, 2008 saw the completion of the project to build garages for armoured cars in all the branches where it was materially possible.

## 10.3 CORPORATE DOCUMENT MANAGEMENT

The enactment in 2007 of Law 11/2007 on electronic access to public services, which recognises the right of citizens to use electronic media to deal with public authorities and obliges government agencies to take steps to ensure their services are available electronically by 31 December 2009, provided the decisive thrust for the electronic administration and document management system initiatives of the Banco de España.

In January 2008 the project entitled “Functional extension of Banco de España corporate document management” was started up. Its aim is “to conduct a study to define the solutions required for applying electronic administration at the Banco de España and to implement document management in the processes by which the Bank deals with the public. This project constitutes the general framework within which the Bank will adapt to Law 11/2007 through the integration of electronic administration processes and services in corporate document management systems. An implementation plan setting out various projects and lines of action was prepared and a list of 76 administrative procedures directly affected by the application of Law 11/2007 was drawn up.

## 10.4 INFORMATION SYSTEMS AND PROCESSES

2008 was marked by considerable activity, as evidenced by the number of projects (86) and by the 2,174 requests for work received and the 2,096 resolved by the various units of the Information Systems and Processes Department.

Work progressed apace on the main IT projects of the Eurosystem

Particularly notable were the projects relating to Europe and the Eurosystem, among which were the following:

- The inclusion of the Spanish financial system in the “SEPA for citizens” in January meant that the Bank’s entire transfers system had to be adapted to the new file formats, transactions and requirements.
- The inclusion of the Bank in TARGET2 called for major changes in the Bank’s settlement system.

In 2008 major efforts were made to increase the Bank’s part in the main IT projects currently under way in the Eurosystem and to establish the Bank as a supplier of IT services to the other central banks. As a result of this effort, the Bank is now going to participate actively in the development and construction of two projects:

- TARGET2-Securities: The Banco de España was assigned the design and development of the lifecycle management module, LCMM (of the securities settlement service to central securities depositories and to their participants), and it was designated a member of the IT Security Committee.
- CCBM2 (collateral management by central banks): The Bank is responsible for developing the repo modules and the tests to be performed on the new system for the provision of collateralised credit by Eurosystem central banks.

Similarly, work was undertaken with a view to achieving in 2009 a notable role in major Eurosystem projects such as:

- MOP (Market Operations Platform), currently in the preliminary analysis phase.
- ESI (Eurosystem Single Interface), a platform to establish access from the financial system to the services provided by the Eurosystem, the preparation phase of which is being coordinated by the Banco de España together with the European Central Bank.
- IAM (Identity and Access Management), access security services for internal and external users of the Eurosystem, divided into four subprojects. The Bank participates actively in two subprojects aimed at defining functional requirements and the architecture document.

The programmes for reorganising user application systems were given a strong boost in 2008. Given their complexity, they cannot be dealt with in a single year:

- The reorganisation of the Central Balance Sheet Data Office (new technology platform for the processing of information on the Spanish non-financial sector, in which the website communication channel and the analytical systems for conducting studies are strengthened) was finalised in 2008. Nevertheless, the systems put into operation will have to be monitored and fine-tuned in 2009.
- The implementation of the Strategic Plan for the Directorate General Banking Supervision (field applications for on-site use in credit institutions, and full development of the Integrated Supervisory Activity Management System, denoted by the



Spanish acronym SIGAS, which serves as a common framework for the work of the whole Directorate General) and the optimisation of the processes of the Directorate General Banking Regulation, based on the process optimisation plan prepared in 2005 (creation of three new applications and the modification of others, similarly strengthening the collection of information from the public and the management of administrative procedures via the website), progressed notably in 2008, although the large number of projects involved means that their development and implementation will have to continue in the coming years.

- The adaptation of the IT systems to the new regulatory provisions (Basel II and accounting regulations), where work continued on the progressive implementation of the XBRL standard, was concluded.

The capacity of the Bank's two central computers was increased in accordance with the plans established in this respect. This was necessary to meet the demand for processing power from the new software developments (implementation of TARGET2, migration of a new database technology, new accounting, etc).

The growing complexity of communications networks requires constant change in the related infrastructure. In 2008 the work carried out on connectivity with external networks was as follows:

- Interconnection with the existing network between the central banks of Germany, France and Italy. This enabled full integration of the local hardware assigned to the TARGET2-Securities project with that of the other three national central banks involved.
- Creation of two new communication channels for access to the corporate applications from other networks: the Banco de España's new private network for access to institutions and the connection with the administrative Intranet of the Ministry for Public Administration.
- Direct connectivity to the Internet of the Alcalá 48 building, so that it acts as a back-up in the event of contingencies at the Alcalá 522 building. This project also aimed at allowing Internet users to access functions of Banco de España corporate applications by robust, secure mechanisms with the electronic signature function.

Work also continued in 2008 on improvements to the new application development and implementation infrastructure. This work is making it possible to use new technologies and graphic environments and is enabling integration and sharing of processes between the different platforms used by the Banco de España and by the Eurosystem as a whole.

In 2008 approximately 50% of the banks work posts migrated to Office 2007 and, within the hardware renewal plan, 1,115 computers, monitors and printers were replaced.

The user helpdesk, which year after year continues attending to an ever-increasing number of calls and incidents with a high level of user satisfaction, was supplemented by a specialised assistance service with continuous operating hours.

In regard to business continuity, Internal Circular 5/2008 was approved and the 2008 test plan was executed. On the total of 20 days of testing, 121 processes were tested and resumption

of activity was observed in 118 of them. The Bank participated in the drafting of a common framework for Eurosystem business continuity, expected to be approved soon, and in the national business continuity plan of the financial sector, approved in November.

#### 10.5 CONTROL, BUDGET AND ACCOUNTING

##### Implementation of the operational risk management system was completed

In 2008 the rules formally establishing the operational risk management system were approved and the process of implementation was completed. Hence this system is now operating and covers all areas and functions of the Bank.

Given the numerous changes in the accounting criteria of the Bank since it joined the European System of Central Banks, Internal Circular 9/2008 was approved to establish the new accounting system of the Bank and define its objectives, the characteristics of the accounting information, basic accounting policies, recognition criteria, valuation rules and the new chart of accounts. As regards the new information system which will manage the accounting system, its development has practically been completed and it will foreseeably be implemented in March 2009.

During the year the cost accounting system was refined to improve the cost allocation criteria and thus determine more accurately the cost of the various functions carried out by the Bank. All this was done within the framework of the common cost methodology used in the Eurosystem.

As regards the Bank's international presence, its influence in the areas of NCB accounting and operational risk was strengthened through the organisation of courses and seminars in these fields. Also, the Bank was active in the implementation of operational risk methodology in the Eurosystem and co-chaired, along with the Federal Reserve Bank of Philadelphia, the International Working Group on Operational Risk, of which more than 30 central banks throughout the world are now members.

#### 10.6 CENTRAL PROCUREMENT SERVICES

Internal circular 3/2007 on public procurement rules of the Banco de España, and other supplementary internal rules, came into force on 1 January 2008.

The new rules are in line with the practices of Eurosystem central banks and ensure that procurement procedures comply with the principles of competition, equal treatment, non-discrimination, mutual recognition, proportionality, transparency and public dissemination.

In 2008 the Central Procurement Services started the centralised processing of tenders, establishing procedures to call for expressions of interest and to amend and extend contracts. In conjunction with the Legal Department, new schedules of specific requirements were developed for the procurement of construction work, goods and services. Also, active cooperation was provided to other departments of the Bank to enable the new rules to be implemented efficiently and effectively.

The procedures for procurement of construction work, goods and services were made public in the Official Journal of the European Union, in the national press and on the Banco de España website. The procurement section recently included in the Bank's website deals with the contractor profile and includes Internal Circular 3/2007 and the sub-sections "Procurements put out to tender", "Contracts awarded" and "Other information of interest". The schedule of special requirements and technical specifications of the procurement projects are available for consultation and downloading in pdf format. There is an electronic mailbox to which enquiries may be sent and which has received a large number of queries during the year.

During the year the Central Procurement Services participated in the activities of the Eurosystem Procurement Coordination Office, assisting in the preparation of the first set of accepted

good practices in procurement. The Eurosystem Procurement Coordination Office developed a joint procurement plan for 2009 and four working groups were formed to consider future joint procurement. The Banco de España is participating in a joint procurement project and in the four working groups.

#### 10.7 INTERNAL AUDIT

According to the Statute approved by Internal Circular 4/2007 of 20 July 2007, the aim of internal auditing is to evaluate the efficacy, sufficiency and suitability of all the systems and procedures established for the management and control of risks.

The internal audit function is performed by the Internal Audit Department, which reports directly to the Governor. In addition, the Internal Audit Department must afford the Audit Committee of the Governing Council all such assistance as it may request and provide it with any information it may need.

The Internal Audit Department and its audit staff shall adhere to the principles of objectivity, impartiality, confidentiality and absence of conflict of interests, and act in keeping with the principles, standards and procedures laid down in the Internal Audit Manual approved by Ordinance 7/2008 of 15 February 2007.

The Internal Audit Department's audit activity is specified in an Annual Plan approved by the Governor and reported to the Executive Commission. In accordance with the 2008 plan, the Internal Audit Department carried out the following main audits: annual accounts of the Banco de España; the report envisaged in Law 44/2002 on financial system reform measures; security of automated information systems; counting of the strategic reserves deposited by the ECB; ancillary deposit system; Central Credit Register of the Banco de España; maintenance and construction; General Archive of the Banco de España; library of the Banco de España; second series of euro-denominated banknotes; centralised securities database; management of foreign reserves of the European Central Bank; maintenance and operations of information technology systems infrastructure; operations of TARGET2 and of the Tenerife, Las Palmas, Badajoz, Ceuta, Seville, Murcia and Palma branches. Also, it monitored the recommendations of the specific audits of the Banco de España and of those common to the ESCB.

ANNUAL ACCOUNTS OF THE BANCO DE ESPAÑA  
2008

## 1 Introduction

The annual accounts of the Banco de España (“the Bank”) comprise the balance sheet, the profit and loss account and the notes on the accounts, as established by Article 29.1 of its internal rules, approved by a Resolution of the Governing Council of 28 March 2000 (Official State Gazette (BOE) of 6 April 2000). Pursuant to the provisions of that article, the accounts have been prepared in accordance with the accounting guidelines and instructions of the European Central Bank (ECB)<sup>1</sup> established under Article 26.4 of the Statute of the European System of Central Banks (ESCB) relating to harmonisation of Eurosystem accounting principles and practices. In the cases not regulated by Eurosystem accounting legislation, the Banco de España applies its internal policies based on generally accepted accounting principles adapted to the special characteristics of the operations and functions of a central bank.

In accordance with the provisions of Articles 29 and 32 of its internal rules, the Bank’s annual accounts have been audited by the Internal Audit Department and analysed and examined by the Audit Committee appointed for the purpose by the Bank’s Governing Council. The accounts have also been audited by independent external auditors, as stipulated by Article 29 of the Bank’s internal rules and Article 27 of the Statute of the ESCB.

Under the provisions of Article 4.2 of Law 13/1994 of 1 June 1994 of Autonomy of the Banco de España, it is for the government, upon proposal by the Minister of Economy and Finance, to approve the Bank’s balance sheet and accounts for the year, which will be sent to Parliament (Cortes Generales) for informational purposes. The Governing Council of the Bank, under the provisions of Article 21.g) of the aforementioned Law, is responsible for formulating the Bank’s annual accounts.

Unless otherwise indicated, the figures are expressed in millions of euro. Those relating to 2007 are presented solely for comparison with 2008. For this purpose, it should be noted that the 2007 information relating to the Banco de España’s held-to-maturity securities portfolio and to some unallocated items has been reorganised, as described in the related notes on the annual accounts. Due to rounding, on occasions the totals included in the balance sheet, profit and loss account and notes on the annual accounts may not equal the sum of the individual figures.

This document presents the accounts for the year 2008. Section 2 includes the balance sheet and profit and loss account at 31.12.08. Section 3 contains the notes on the accounts, with the accounting policies that have served as a framework for their formulation and explanatory notes on the most important aspects of the balance sheet and profit and loss account. Section 4, in compliance with Article 4.2 of the Law of Autonomy, details the contributions made to the Deposit Guarantee Funds and the loans and transactions agreed on other than an arm’s-length basis or which in any other way entail a loss of profit or losses for the Bank, giving estimates of those amounts.

Finally, Annexes 1 and 2 include the reports of the external auditors and of the Bank’s Audit Committee on the annual accounts presented in the preceding sections.

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1. Guideline of the European Central Bank of 10 November 2006 on the legal framework for accounting and financial reporting in the ESCB (ECB/2006/16), as amended.

## 2 Balance sheet and profit and loss account

BALANCE SHEET OF THE BANCO DE ESPAÑA AS AT 31 DECEMBER 2008

EUR m

	NOTE NUMBER	2008	2007
<b>ASSETS</b>			
<b>1 Gold and gold receivables</b>	<b>1</b>	<b>5,627.29</b>	<b>5,144.72</b>
<b>2 Claims on non-euro area residents denominated in foreign currency</b>		<b>8,378.73</b>	<b>7,498.45</b>
2.1 Receivables from the IFM	2	867.67	589.64
2.2 Balances with banks and security investments, external loans and other external assets	3	7,511.06	6,908.81
<b>3 Claims on euro area residents denominated in foreign currency</b>	<b>4</b>	<b>8,940.60</b>	<b>2,579.16</b>
<b>4 Claims on non-euro area residents denominated in euro</b>		<b>2,929.01</b>	<b>4,973.86</b>
4.1 Balances with banks, securities investments and loans	5	2,929.01	4,973.86
4.2 Claims arising from the credit facility under ERM II		—	—
<b>5 Lending to euro area credit institutions related to monetary policy operations denominated in euro</b>	<b>6</b>	<b>92,576.70</b>	<b>71,373.51</b>
5.1 Main refinancing operations		22,168.90	57,247.89
5.2 Longer-term refinancing operations		70,284.55	14,123.44
5.3 Fine-tuning reverse operations		—	—
5.4 Structural reverse operations		—	—
5.5 Marginal lending facility		63.00	—
5.6 Credits related to margin calls		60.25	2.18
<b>6 Other claims on euro area credit institutions denominated in euro</b>	<b>7</b>	<b>2.15</b>	<b>1.91</b>
<b>7 Securities of euro area residents denominated in euro</b>	<b>8</b>	<b>75,903.94</b>	<b>69,696.51</b>
<b>8 General government debt denominated in euro</b>	<b>9</b>	<b>5,248.92</b>	<b>5,832.38</b>
<b>9 Intra-Eurosystem claims</b>	<b>10</b>	<b>4,786.88</b>	<b>4,786.88</b>
9.1 Participating interest in ECB		437.71	437.71
9.2 Claims equivalent to the transfer of foreign reserves		4,349.18	4,349.18
9.3 Net claims related to the allocation of euro banknotes within the Eurosystem		—	—
9.4 Other claims within the Eurosystem (net)		—	—
<b>10 Items in course of settlement</b>		<b>0.77</b>	<b>0.85</b>
<b>11 Other assets</b>		<b>4,592.75</b>	<b>3,340.39</b>
11.1 Tangible and intangible fixed assets	11	235.85	229.93
11.2 Other financial assets	12	49.57	51.39
11.3 Off-balance sheet instruments revaluation differences	13	620.86	103.38
11.4 Accruals and prepaid expenses	14	2,430.26	1,795.09
11.5 Sundry	15	1,256.21	1,160.59
<b>TOTAL ASSETS</b>		<b>208,987.73</b>	<b>175,228.63</b>

	NOTE NUMBER	2008	2007
<b>LIABILITIES</b>			
<b>1 Banknotes in circulation</b>	<b>16</b>	<b>76,018.16</b>	<b>67,612.95</b>
<b>2 Liabilities to euro area credit institutions related to monetary policy operations denominated in euro</b>	<b>17</b>	<b>54,314.92</b>	<b>52,320.79</b>
2.1 Current accounts (covering the minimum reserve system)		24,136.03	38,327.45
2.2 Deposit facility		30,106.40	215.00
2.3 Fixed-term deposits		—	13,775.00
2.4 Fine-tuning reverse operations		—	—
2.5 Deposits related to margin calls		72.49	3.34
<b>3 Other liabilities to euro area credit institutions denominated in euro</b>		<b>—</b>	<b>—</b>
<b>4 Debt certificates issued</b>		<b>—</b>	<b>—</b>
<b>5 Liabilities to other euro area residents denominated in euro</b>		<b>20,544.59</b>	<b>20,355.60</b>
5.1 General government	18	18,770.52	18,030.35
5.2 Other liabilities	19	1,774.07	2,325.25
<b>6 Liabilities to non-euro area residents denominated in euro</b>	<b>20</b>	<b>172.27</b>	<b>157.98</b>
<b>7 Liabilities to euro area residents denominated in foreign currency</b>		<b>1.47</b>	<b>1.24</b>
<b>8 Liabilities to non-euro area residents denominated in foreign currency</b>		<b>71.85</b>	<b>117.03</b>
8.1 Deposits, balances and other liabilities	21	71.85	117.03
8.2 Liabilities arising from the credit facility under ERM II		—	—
<b>9 Counterpart of special drawing rights allocated by the IMF</b>	<b>22</b>	<b>330.12</b>	<b>320.92</b>
<b>10 Intra-Eurosystem liabilities</b>	<b>23</b>	<b>42,046.77</b>	<b>21,141.50</b>
10.1 Net liabilities related to the allocation of euro banknotes within the Eurosystem		7,125.42	17,903.61
10.2 Other liabilities within the Eurosystem (net)		34,921.35	3,237.89
<b>11 Items in course of settlement</b>	<b>24</b>	<b>246.64</b>	<b>239.89</b>
<b>12 Other liabilities</b>		<b>491.58</b>	<b>578.85</b>
12.1 Off-balance-sheet instruments revaluation differences	25	—	—
12.2 Accruals and income collected in advance	26	220.16	293.32
12.3 Sundry	27	271.42	285.53
<b>13 Provisions</b>	<b>28</b>	<b>4,847.66</b>	<b>4,005.81</b>
<b>14 Revaluation accounts</b>	<b>29</b>	<b>5,811.51</b>	<b>4,371.09</b>
<b>15 Capital and reserves</b>		<b>2,000.00</b>	<b>2,000.00</b>
15.1 Capital	30	1,000.00	1,000.00
15.2 Reserves	31	1,000.00	1,000.00
<b>16 Profit for the year</b>	<b>32</b>	<b>2,090.19</b>	<b>2,004.98</b>
<b>TOTAL LIABILITIES</b>		<b>208,987.73</b>	<b>175,228.63</b>

	NOTE NUMBER	2008	2007
1 Interest income	1	6,207.26	5,060.38
2 Interest expense	2	2,873.86	2,177.94
<b>3 Net interest income (1 – 2)</b>		<b>3,333.41</b>	<b>2,882.43</b>
4 Realised gains/losses arising from financial operations	3	108.62	1,745.19
5 Write-downs on financial assets and positions	4	16.13	529.44
6 Transfer to/from provisions for foreign exchange rate and price risks	5	319.99	1,688.56
<b>7 Net result of financial operations, write-downs and risk provisions (4 – 5 – 6)</b>		<b>-227.50</b>	<b>-472.81</b>
8 Fees and commissions income		23.33	19.09
9 Fees and commissions expense		11.04	7.27
<b>10 Net income from fees and commissions (8 – 9)</b>	<b>6</b>	<b>12.29</b>	<b>11.82</b>
11 Income from equity shares and participating interests	7	144.71	9.68
12 Net result of pooling of monetary income	8	-684.56	37.25
13 Other income and losses	9	-4.35	-22.95
<b>14 TOTAL NET INCOME (3 + 7 + 10 + 11 + 12 + 13)</b>		<b>2,573.99</b>	<b>2,445.42</b>
15 Staff costs	10	223.63	211.10
16 Administrative expenses	11	132.80	113.98
17 Depreciation of tangible and intangible fixed assets	12	23.35	20.12
18 Banknote production services	13	65.08	70.95
19 Other expenses		2.28	2.35
<b>20 TOTAL OPERATING EXPENSES (15 + 16 + 17 + 18 + 19)</b>		<b>447.15</b>	<b>418.49</b>
21 Transfers and additions to other funds and provisions	14	36.65	21.95
<b>22 PROFIT FOR THE YEAR (14 – 20 – 21)</b>	<b>15</b>	<b>2,090.19</b>	<b>2,004.98</b>

Countersigned by  
The Governor,



MIGUEL FERNÁNDEZ ORDÓÑEZ

The Comptroller,



ANTONIO ROSAS



### 3 Notes on the accounts

#### 3.1 Accounting policies

##### 1 BASIC PRINCIPLES

The following accounting principles have been applied in formulating the annual accounts: economic reality and transparency, going concern, prudence, recognition of post-balance-sheet events, materiality, the accruals principle, and consistency and comparability.

##### 2 BASIS OF ACCOUNTING

The accounts have been prepared on a historical cost basis, modified as necessary to include market valuation of trading-book securities, gold and the foreign currency position. Futures shall be valued daily at market price and significant participating interests at underlying book value.

Transactions in assets and liabilities are generally recorded on the settlement date, except that forward transactions in foreign currencies are booked at the spot settlement date. If a period-end falls between the trade date and the spot settlement date, both spot and forward transactions are recognised at the trade date.

The specific valuation criteria applied to the various assets and liabilities were the following:

##### Gold

Gold is recorded at acquisition cost,<sup>2</sup> which is determined by the cash amount paid in the transaction including any related expense.

The cost of sales is obtained by applying the daily net average cost method. In the event that the cash to be paid or received is specified in a currency other than the euro, it is translated into euro at the mid-market exchange rate two business days before the settlement date.

On the last day of each month, gold stocks are valued at the market price in euro per troy ounce of fine gold. Unrealised gains or losses (except for unrealised losses at year-end) are reflected in an adjustment account and credited or debited, respectively, to a revaluation or expense account.

Unrealised losses existing at the end of the year are taken to the profit and loss account and the average book value is modified. Such losses are considered irreversible in subsequent revaluations.

Sales of gold against foreign currency under repurchase agreements are recorded as off-balance-sheet items, with no effect on the balance sheet. The foreign currency received by way of consideration is recorded on the assets side, with the obligation to repay it being recorded simultaneously on the liabilities side. Possible differences arising between gold delivered spot and that received forward are recorded as if there had been an independent outright sale or purchase at the time of maturity of the transaction.

##### Foreign currencies

Spot purchases or sales of foreign currencies are recorded at the settlement date, affecting the foreign currency position from that date. Gains and losses on the spot sale of foreign currencies are similarly considered to be realised from the settlement date. Meanwhile, foreign exchange forward purchase and sale transactions shall be recognised in off-balance-sheet accounts at the spot date of the transaction, affecting the foreign currency position as at that date. The gain or loss on the

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2. As at 31/12/1998 its acquisition cost was adjusted to the market price then prevailing and the unrealised gains were credited to revaluation accounts. These gains are subsequently credited to profit and loss when the asset is sold or, alternatively, they are used to offset unrealised losses.

transaction shall also be considered to be realised on that date. If a period-end falls between the trade date and the spot settlement date, the transactions have to be recognised at the trade date.

Purchases are recorded at acquisition cost in euro. Purchases and sales of foreign currencies against euro are valued at the exchange rate agreed in the transaction. When foreign currencies are bought and sold against other foreign currencies, the euro valuation is at the mid-market exchange rate of the currency sold on the trade date. Transactions in a foreign currency that do not modify the overall position therein have no effect on the book value of such position.

The cost in euro of foreign currency sold is calculated using the daily net average cost method.

Accrued interest denominated in foreign currency is recorded on a daily basis using the mid-market rate on each day. If the rate on the relevant day is not available, the latest mid-market rate available shall be applied. Accrued interest receivable or payable denominated in foreign currency shall form part of the foreign currency position.

Foreign currencies are revalued monthly to market price. This revaluation is performed without netting unrealised gains against unrealised losses on the various currencies. Unrealised gains and losses (with the exception of unrealised losses at year-end) are reflected in adjustment accounts and credited or debited, respectively, to revaluation and expense accounts.

Unrealised losses existing at the end of the year are taken to the profit and loss account for the year, in which case they affect the average cost of the currency in question. Such losses are considered irreversible in subsequent revaluations.

#### Foreign banknotes

The criteria applied are the same as those indicated in the preceding section for foreign currencies.

#### Special drawing rights (SDRs)

SDRs and the net position in the International Monetary Fund (IMF) are valued at the year-end SDR market exchange rate by the same methods used for other currencies.

#### Securities

The Banco de España holds two separate securities portfolios: a trading portfolio and a held-to-maturity portfolio.

In both cases, the securities are recorded initially at acquisition cost, which is determined by the cash amount paid, less any accrued gross coupon.

The cost of securities sold or redeemed is determined by the average book value of the security in question. The securities in the held-to-maturity portfolio may not be sold except in exceptional circumstances and with the authorisation of the Operations Committee.

Trading portfolio securities are revalued monthly to market price. This revaluation is carried out without any netting of unrealised gains and losses on different security codes. Unrealised gains and losses (with the exception of unrealised losses at year-end) are reflected in adjustment accounts and credited or debited, respectively, to revaluation and expense accounts. Unrealised losses existing at the end of the year are taken to the profit and loss account. Their amount is credited directly to the securities account, and the average book value – and therefore the internal rate of return – of the security code concerned is modified. These unrealised losses are considered irreversible.

Securities within the held-to-maturity portfolio are not subject to any periodic valuation, except for recognition, where applicable, of loss of value due to impairment of the issuer.

Any premiums, discounts and coupons that have accrued but are not due are recorded in accruals accounts, using the internal rate of return of each security code for their calculation. These accruals are recorded daily.

The above references to acquisition cost and market prices shall, in relation to securities denominated in foreign currency, be understood to refer to the currency concerned, these amounts being translated into euro, as stipulated in the "Foreign currencies" section.

Repurchase agreements involving securities

Reverse repurchase agreements involving securities are recorded on the assets side of the balance sheet as collateralised outward loans for the amount of the loan. Securities acquired under reverse repurchase agreements are not revalued or included in the securities portfolio.

Repurchase agreements involving securities are recorded on the liabilities side of the balance sheet as an inward deposit collateralised by securities, the balancing entry of which is the cash received. Securities sold under this type of agreement remain on the Bank's balance sheet and are treated as if they had remained part of the portfolio from which they were sold. Repurchase agreements involving securities denominated in foreign currencies have no effect on the average cost of the currency position.

In direct loans of securities, repurchase and reverse repurchase agreements conducted simultaneously are accounted for separately, each being recorded according to the valuation rules set forth in the preceding two paragraphs.

Automated security loans (contracts empowering a depository of securities to lend them to a third party in overnight transactions, subject to certain contractual limitations) are not recorded in the balance sheet. The only item accounted for is the income, which is recorded in the profit and loss account. Transactions outstanding at year-end are recorded off-balance sheet.

Doubtful debtors

Where there is any reasonable doubt about the recovery of an asset, it is recorded in a separate account and the relevant provision set aside.

Loans to financial institutions and balances with EU central banks

These are valued at their nominal amount.

Loans to the State

In accordance with the Guideline of the European Central Bank of 10 November 2006 on the legal framework for accounting and financial reporting in the European System of Central Banks (ECB/2006/16), they are valued at nominal amount (see Notes 9 and 28 to the balance sheet and Note 5 to the profit and loss account).

Shares and participating interests

Shares and participating interests in national and/or international institutions, including the participating interest in the European Central Bank (ECB), are valued at cost. The participating interest in Bolsas y Mercados Españoles, Sociedad Holding de Mercados y Sistemas Financieros S.A. is valued at its underlying book value.

Tangible and intangible fixed assets

Fixed assets are generally valued initially at cost, defined as the amount of the monetary disbursements made or committed to, including any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the intended manner, such as transport, installation, professional fees for legal services, non-refundable taxes and the fair value of other consideration given.

Trade discounts and those for defects in assets received are recorded as a reduction in the cost of the related assets. Cash discounts and those for late delivery are recorded in the profit and loss account under other income or, where appropriate, as a reduction in expenses, and do not affect the acquisition cost of the asset purchased.

Fixed assets are deemed not to include those assets which, although meeting the conditions to be classed as such (i.e. they are non-financial assets owned by the Bank that are intended be used for a period exceeding 12 months and contribute directly or indirectly to fulfilling its objectives and/or to the probable generation of income in the future and, in addition, their cost can be reliably assessed), do not generally exceed the amount of €600 (€6,000 in the case of buildings, structures and plant in buildings), although there may be exceptions.

Only extensions, replacements, rehabilitations and improvements that exceed €6,000 are capitalised, provided also that the elements replaced can be removed from the balance sheet or that they are fully depreciated.

Computer applications developed specifically for the Banco de España the cost of which does not exceed €300,000 are recorded directly as expenses and are not eligible for subsequent capitalisation.

After initial recognition, fixed assets are valued at acquisition cost less accumulated depreciation or amortisation and any impairment losses.

The acquisition cost of a fixed asset, net of its residual value, is depreciated or amortised systematically during its useful life on a straight-line monthly basis from the month following that in which it was recognised in the accounts. Generally, all depreciable/amortisable fixed assets are estimated to have a residual value of zero unless there is a deep, liquid market for assets similar to the one whose residual value may be received. Land, the art collection, artistic heritage and fixed assets under construction are not depreciated.

The depreciation/amortisation rates and estimated useful lives applied to the various fixed assets in 2008 were as follows:

	Depreciation /Amortisation Rate (%)	Useful life (years)
Buildings and structures	2	50
Renovation work	4	25
Plant in buildings	10	10
Security-related plant in buildings	20	5
Furniture and fittings	10	10
Office machines for the handling of banknotes and coins	10	10
Other office machines	20	5
Computer equipment	25	4
Transport equipment. Cars and motor bikes	25	4
Transport equipment. Trucks and buses	10	10
Libraries	10	10
Other tangible fixed assets	20	5
Computer applications	20	5
Industrial property	—	Number of years of exclusive use

An asset is impaired when its book value exceeds the recoverable value. In this case, and only if the amounts are significant, an impairment loss is recognised by simultaneously reducing the item's book value and modifying its depreciable/amortisable base.

#### Banknotes in circulation

The ECB and the national central banks (NCBs), which together comprise the Eurosystem, have issued euro banknotes since 1 January 2002.<sup>3</sup> The total value of euro banknotes in circulation is recorded by allocating to each Eurosystem NCB, on the last working day of each month, an amount based on the banknote allocation key.<sup>4</sup>

The ECB has been allocated a share of 8% of the total value of euro banknotes in circulation, whereas the remaining 92% has been allocated to the NCBs and divided amongst them according to their weightings in the capital key of the ECB. The share of banknotes allocated to each NCB is disclosed under the balance sheet liability item "Banknotes in circulation".

The difference between the value of the euro banknotes allocated to each NCB in accordance with the banknote allocation key and the value of the euro banknotes that it actually puts into circulation also gives rise to remunerated intra-Eurosystem balances. These claims or liabilities, which incur interest,<sup>5</sup> are disclosed under the item "Intra-Eurosystem. — Net claims/liabilities related to the allocation of euro banknotes within the Eurosystem" (see "Intra-Eurosystem balances" in this section on accounting policies).

From 2002 until 2007, the intra-Eurosystem balances arising from the allocation of euro banknotes were adjusted in order to avoid significant changes in the relative income positions of the NCBs that initially formed part of the Eurosystem as compared with previous years. The adjustments are effected by taking into account the differences between the average value of banknotes in circulation of each NCB in the specified reference period<sup>6</sup> and the average value of banknotes that would have been allocated to them during that period under the ECB's capital key. The adjustments were progressively reduced in annual stages until the end of 2007. However, this mechanism has also been applied in the case of new Member States adopting the euro so as to calculate the offset amount corresponding to each of them under the aforementioned calculation method. This amount is gradually reduced over a six-year period, being held unchanged during each financial year.

The interest income and expense on intra-Eurosystem balances relating to banknote allocation is cleared through the accounts of the ECB and is disclosed under "Net interest income" in the profit and loss account.

In accordance with the ECB Decision of 17 November 2005 (ECB/2005/11) on the distribution of the income of the ECB on euro banknotes in circulation to the national central banks (NCBs) of the participating Member States, this income arising from the 8% share of euro banknotes allocated to the ECB belongs to the NCBs and shall be distributed to them annually. This Decision stipulates however that the ECB's Governing Council may decide before the end of the financial year to transfer part or all of this income to an ECB provision for foreign exchange rate, interest rate and gold price risks. The ECB Governing Council may also decide before the end of the financial year not to distribute part or all of this income if it expects that the ECB will

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<sup>3</sup>. Decision of the European Central Bank of 6 December 2001 on the issue of euro banknotes (ECB/2001/15), OJ L 337, 20.12.2001, as amended. <sup>4</sup>. The banknote allocation key is that which results from applying 92% to the Eurosystem subscribed capital key. <sup>5</sup>. Decision of the European Central Bank of 6 December 2001 on the allocation of monetary income of the national central banks of participating Member States from the financial year 2002 to 2007, inclusive (ECB/2001/16), OJ L 337, 20.12.2001, as amended. <sup>6</sup>. The reference period taken has a duration of 24 months and it begins 30 months prior to the euro cash changeover date.

incur a loss or that its net profit for that year may be less than the amount of seigniorage income on its euro banknotes in circulation. Finally, the distribution of this income may be reduced in accordance with any decision by the ECB's Governing Council in respect of expenses incurred by the ECB in connection with the issue and handling of euro banknotes.

#### Intra-Eurosystem balances

Intra-Eurosystem balances arise from the Banco de España's participating interest in the ECB, claims equivalent to the reserves transferred to the ECB and the net balance resulting from the transfers issued and received by TARGET2<sup>7</sup> among the national central banks of the ESCB, including the ECB. They also arise from the balances vis-à-vis the ECB resulting from allocation of euro banknotes within the Eurosystem, from the outcome of the contribution and allocation of monetary income and from the positions vis-à-vis the ECB owing to the deferral of sundry receipts and payments.

In the case of TARGET2 operations, the resulting balance is included as an asset or liability, as appropriate, under the item "Other claims/liabilities within the Eurosystem (net)". Intra-ESCB balances arising from the allocation of euro banknotes within the Eurosystem are included, depending on their net amount, as an asset or liability under "Net claim/liability related to the allocation of euro banknotes within the Eurosystem" (see "Banknotes in circulation" in this section on accounting policies).

#### Recognition of income and expenses

Income and expenses are recognised in the period in which they accrue.

Realised gains and realised and unrealised losses are taken to the profit and loss account. To calculate the acquisition cost of items sold, the average cost method is used for securities and the daily net average cost method is used for foreign currencies and gold. In the case of unrealised losses on any item at year-end, its average cost is reduced to the end-of-year market price and/or exchange rate.

Unrealised gains are not recognised as income, but are transferred to a revaluation account.

Unrealised losses are taken to the profit and loss account if they exceed previous revaluation gains recorded in the corresponding revaluation account, and are not reversed in subsequent years against new unrealised gains. Unrealised losses in any one security or currency or in gold are not netted against unrealised gains in other securities or currencies.

Premiums or discounts on purchased securities are calculated and shown as reductions of or additions to interest income and accrued over the remaining life of the securities concerned, together with the accrued coupons, according to the internal rate of return method.

#### Pension Scheme

The Pension Scheme for Bank employees is of the defined-contribution type. The Pension Fund is external and closed-end. Contributions made by the Banco de España on behalf of the employees who, having joined the Bank after 1/2/1986, are eligible to and do participate in the Scheme, are established at 7.5% of the so-called "regulating salary", consisting of the salary items determined in the Scheme Rules. The amounts contributed by the Bank are recognised as a current expense in the year to which they relate.

#### Off-balance-sheet positions<sup>8</sup>

Foreign exchange forward currency positions, which comprise transactions and forward legs of foreign exchange swaps, are included in the net foreign currency positions in order to calculate foreign exchange gains and losses.

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7. Trans-European Automated Real-time Gross settlement Express Transfer system. 8. The net position under foreign exchange forward transactions and swaps, and the foreign-exchange gains and losses generated by such position are shown in the balance sheet in item 11.3 on the assets side or item 12.1 on the liabilities side, depending on their sign.

As a general rule, profits and losses arising from off-balance-sheet positions are recognised and treated in a similar manner to those arising from on-balance-sheet assets and liabilities. Specifically, in application of the economic approach, the gains and losses on positions in interest rate futures are considered to be realised at the time when they are settled net each day. In the case of futures denominated in foreign currency, such settlements shall affect the foreign currency position on the day on which they take place.

**Post-balance-sheet events** Assets and liabilities are adjusted to reflect events that occur between the annual balance sheet date and the date on which the Governing Council formulates the financial statements if such events materially affect the asset-liability position.

**Other matters** In view of the nature of the Banco de España, it is considered that the publication of a statement of cash flows would not provide any significant additional information to the users of the financial statements.

### 3.2 Notes on the balance sheet

#### 1 GOLD AND GOLD RECEIVABLES

The Banco de España's gold holdings amount to €5,627.29 million, consisting of 9.054 million troy ounces<sup>9</sup> of fine gold valued at €621.54 per ounce. The value of these holdings is €482.57 million more than in 2007, as a result of the rise in the market price (at end-2007 the price per ounce was €568.24).

#### 2 CLAIMS ON NON-EURO AREA RESIDENTS DENOMINATED IN FOREIGN CURRENCY.— RECEIVABLES FROM THE IMF

This item has three components:

- a) The position in the International Monetary Fund (IMF) in the reserve tranche. This is the euro equivalent of the SDRs relating to the foreign currencies assigned to the IMF due to Spain's initial quota and successive increases in it and due to the net financing granted to the IMF.
- b) Special drawing rights (allocations). These represent the euro equivalent of the successive allocations of this currency by the IMF. The changes in allocations are mainly due to loan agreement transactions with third countries and to interest receipts or payments resulting from positions vis-à-vis the IMF.
- c) Other claims on the IMF. These reflect the amount that the Banco de España has provided to the IMF as a contribution to the Poverty Reduction and Growth Facility. This fund is used to finance low-interest loans to the poorest countries. The Banco de España has undertaken to contribute a maximum of SDR 425 million to this fund.

The breakdown in 2007 and 2008 is as follows:

EUR m				
Type of asset	2008	2007	Change	
Reserve tranche position	466.58	217.00	249.58	
Special drawing rights (allocation)	160.10	250.74	-90.64	
Other claims on the IMF	240.99	121.91	119.09	
<b>TOTAL</b>	<b>867.67</b>	<b>589.64</b>	<b>278.03</b>	

<sup>9</sup> One troy ounce is equal to 31.1035 grams.

The overall amount of claims on the IMF increased by €278.03 million with respect to the balance at end-2007.

The increase in the reserve tranche position account (€249.58 million) is basically due to the Banco de España's net contributions to the IMF for loans to third countries (Turkey, Pakistan, Latvia and Ukraine). Of this increase, €236.57 million related to the net increase in amounts denominated in foreign currencies and the remaining €13.01 million to the change in market foreign exchange rates between the two years. Spain's IMF quota was not changed in 2008, remaining at SDR3,048.90 million.

The decrease of 90.64 million in the special drawings rights (allocation) account was due to the fall in the amounts denominated in foreign currency (€95.10 million), offset partly (€4.46 million) by the change in market foreign exchange rates between the two years.

The increase in the "Other claims on the IMF" account (€119.09 million) is due to the Banco de España's contributions to the IMF's PRGF III programme. Of this increase, €112.37 million related to the net increase in amounts denominated in foreign currencies and the remaining €6.72 million to the change in market foreign exchange rates between the two years.

SDRs are valued at the year-end market rate, calculated by the ECB for all the Eurosystem national central banks, of €1= SDR 0.905141. The SDR is defined in terms of a basket of currencies. Its value is determined as the weighted sum of the exchange rates of four major currencies: the US dollar, the euro, the yen and the pound sterling. The interest rate, which is updated weekly, remained between 0.82% and 3.50% during the year.

3 CLAIMS ON NON-EURO AREA RESIDENTS DENOMINATED IN FOREIGN CURRENCY.—  
BALANCES WITH BANKS AND SECURITY INVESTMENTS,  
EXTERNAL LOANS AND OTHER EXTERNAL ASSETS

This item includes current accounts, deposits, debt security investments in the trading and held-to-maturity portfolios and other claims on non-euro area residents denominated in foreign currency. The held-to-maturity portfolio consists of fixed-income securities with fixed maturity which the Banco de España intends to hold to maturity.

In accordance with the ECB Guideline of 11 December 2008 (ECB/2008/21), the Banco de España included in this item as at 31 December 2008 its held-to-maturity portfolio of securities representing claims on non-euro area residents in foreign currency, which until that date had been classified in asset item 11.2 "Other financial assets". The 2007 figures have been adjusted to reflect the reclassification of this portfolio.

The total amount as at 31 December 2008 was €7,511.06 million, with the following breakdown:

EUR m				
Type of asset	2008	2007	Change	
Deposits	95.69	492.29	-396.60	
Security investments	7,413.75	6,416.22	997.53	
Trading portfolio	3,374.09	2,667.19	706.91	
Held-to-maturity portfolio	4,039.65	3,749.03	290.63	
Other	1.62	0.31	1.31	
<b>TOTAL</b>	<b>7,511.06</b>	<b>6,908.81</b>	<b>602.25</b>	

As at 31 December 2008, 99.94% of these assets were denominated in US dollars. The equivalent value in euro of this US dollar amount was transferred to the balance sheet at the year-end market exchange rate (€1= USD 1.3917).



The increase in the balance of this item (€602.25 million) was due to the net effect of the factors listed in the following table:

EUR m		
	Reason for change	Amount
Net investment		79.09
Changes in market exchange rates as at 31 December		409.85
Changes in securities market prices as at 31 December		92.38
Accrued interest receivable		20.72
Other		0.21
<b>TOTAL</b>		<b>602.25</b>

4 CLAIMS ON EURO AREA RESIDENTS DENOMINATED IN FOREIGN CURRENCY

This balance sheet item may include current accounts, balances with banks and security investments. As at 31 December 2008, US dollar denominated deposits at monetary financial institutions equivalent to €718.55 million were held. The year-end balance also includes a claim arising from reverse operations with Eurosystem counterparties amounting to €8,222.03 million in connection with the US dollar Term Auction Facility. Under this program, US dollars were provided by the Federal Reserve to the ECB by means of a temporary reciprocal currency arrangement (swap line) with the aim of offering short-term US dollar funding to Eurosystem counterparties. The ECB simultaneously entered into back-to-back swap transactions with NCBs that have adopted the euro, which used the resulting funds to conduct dollar liquidity-providing operations with the Eurosystem counterparties in the form of repos and received euro-denominated securities from them as collateral. These back-to-back swap transactions between the ECB and the Eurosystem NCBs give rise to intra-Eurosystem balances reported under "Other liabilities within the Eurosystem (net)".

5 CLAIMS ON NON-EURO AREA RESIDENTS DENOMINATED IN EURO.—BALANCES WITH BANKS, SECURITY INVESTMENTS AND LOANS

Included here is the balance of current accounts at correspondents and trading and held-to-maturity portfolio securities denominated in euro. The held-to-maturity portfolio consists of fixed-income securities with fixed maturity which the Banco de España intends to hold to maturity.

In accordance with ECB Guideline of 11 December 2008 (ECB/2008/21), the Banco de España included under this heading as at 31 December 2008 its held-to-maturity portfolio of securities representing claims on non-euro area residents in euro, which until that date had been classified in asset item 11.2 "Other financial assets". The 2007 figures have been adjusted to reflect the reclassification of this portfolio. The breakdown is as follows:

EUR m				
Type of asset	2008	2007	Change	
Balances with banks	0.22	0.56	-0.34	
Security investments	2,928.78	4,973.30	-2,044.52	
Trading portfolio	110.41	593.73	-483.32	
Held-to-maturity portfolio	2,818.37	4,379.57	-1,561.20	
<b>TOTAL</b>	<b>2,929.01</b>	<b>4,973.86</b>	<b>-2,044.86</b>	

Of the total of this heading (€2,929.01 million), substantially all (€2,818.37 million) relates to fixed-income securities included in the held-to-maturity portfolio, which, however, decreased by €1,561.20 million with respect to the balance as at 31.12.2007. The securities included in

6 LENDING TO EURO AREA  
CREDIT INSTITUTIONS RELATED  
TO MONETARY POLICY  
OPERATIONS DENOMINATED IN  
EURO

the trading portfolio are securities issued in euro by international agencies (European Investment Bank) and their balance decreased in 2008 by €483.32 with respect to the previous year.

This item includes the amount of the euro-denominated lending to euro area credit institutions through which monetary policy is implemented. The breakdown by type of transaction is as follows:

EUR m			
Type of operation	2008	2007	Change
Main refinancing operations	22,168.90	57,247.89	-35,078.98
Longer-term refinancing operations	70,284.55	14,123.44	56,161.11
Fine-tuning reverse operations	—	—	—
Structural reverse operations	—	—	—
Marginal lending facility	63,00	—	63,00
Credits related to margin calls	60.25	2.18	58.07
<b>TOTAL</b>	<b>92,576.70</b>	<b>71,373.51</b>	<b>21,203.20</b>

Throughout the whole of 2008, against a background of money market tensions in the euro area, the ECB conducted liquidity-providing operations of various maturities to meet the additional liquidity demands and hold short-term interest rates near to the minimum bid rate on main refinancing operations.

The balance of this item as at 31 December 2008 exceeds that of 2007 by 29.71%. The average daily balance of the financing granted during the year increased by 119.50% (€56,946.04 million in 2008, against €25,943.00 million in 2007).

36.52% of the annual average balance of daily financing was extended through “Main refinancing operations” and another 63.23% was granted under “Longer-term refinancing operations”, which represents a very significant increase with respect to the previous year. Only 0.25% of this balance was financed through other instruments.

a. Main refinancing operations

These operations play a pivotal role in achieving the aims of steering interest rate, managing market liquidity and signalling the monetary policy stance. They are executed through liquidity-providing reverse transactions with a weekly frequency and a maturity of one week, normally by means of standard tenders. Nevertheless, from October 2008, the operations are conducted at fixed rate with allotment of the total amount bid.

The balance of this item as at 31.12.2008 was €22,168.90 million. This was €35,078.98 million less than that at 31.12.2007. The average amount of financing granted via these operations, however, increased from €18,267.70 million in 2007 to €20,794.04 million in 2008, for the reasons stated above.

b. Longer-term refinancing operations

These operations aim to provide counterparties with additional longer-term refinancing. They are executed through liquidity-providing reverse transactions with a monthly frequency and a maturity of three months, normally by means of standard tenders. However, to improve liquidity provision in the Eurosystem in 2008, these regular main longer-term refinancing operations were accompanied by other supplementary longer-term refinancing operations with maturities of three and six months, as well as by financing operations with special maturities equal to the

reserve maintenance period. From October 2008 these operations are also being conducted at fixed rate with allocation of the whole amount bid.

The balance of this item of €70,284.55 million as at 31 December 2008 was €56,161.11 million higher than in the previous year. Similarly, its average balance rose from €7,643.75 million to €36,009.21. This increase was for the reasons explained above.

c. Fine-tuning reverse operations

The purpose of these operations is to smooth the effects on interest rates caused by unexpected market fluctuations. Owing to their nature, their frequency is not standardised.

Their balance at end-2008 was zero, as it was at the previous year-end, although eight fine-tuning reverse operations took place in the Eurosystem during the year. Financing was obtained by Spanish credit institutions in all of them. The average balance of these operations in 2008 was €64.47 million (€27.50 million in 2007)

d. Structural reverse operations

These are reverse open-market transactions through standard tenders to enable the Eurosystem to adjust its structural liquidity position vis-à-vis the financial sector.

The end-2008 balance was zero, as it was at the previous year-end. No structural reverse operations took place during the year.

e. Marginal lending facility

Counterparties may use the marginal lending facility to obtain overnight liquidity from national central banks at a pre-specified interest rate against eligible assets. This interest rate is penalised with respect to the intervention rate set in the weekly tenders or in main refinancing operations.

The balance at the end of 2008 was €63.00 million. There were many of these operations during the year for the aforementioned reasons and, as a result, the average balance increased significantly from €0.16 million in 2007 to €67.50 million in 2008.

f. Credits related to margin calls

Under Eurosystem rules for monetary policy management, all operations providing liquidity to the banking system must be backed by adequate underlying assets accepted by the system as eligible for use as collateral. If, after daily valuation, the market value of the assets used as loan collateral has fallen below the lower trigger point set for each security, the counterparty must provide additional assets or cash (see Note 17). If the market value of the underlying assets, following their revaluation, exceeds the amount of the financing obtained from the national central bank plus the variation margin, the counterparty may withdraw an amount of underlying assets equal to that excess (or receive this difference as a cash payment in its account).

In the national central banks that make margin calls by debiting or crediting the accounts of credit institutions, as is the case for the Banco de España, these debits or credits are the balancing entries of the asset-side or liability-side accounts reflecting the changes in these margins. These balance sheet accounts are remunerated at the interest rate applied in main refinancing operations.

As at 31.12.2008 this item had a balance of €60.25 million, up €58.07 million with respect to the previous year.

7 OTHER CLAIMS ON EURO AREA CREDIT INSTITUTIONS DENOMINATED IN EURO

This item includes claims on credit institutions unrelated to monetary policy operations. Its balance of €2.15 million as at 31.12.2008, which includes the amount of the correspondent accounts in euro with euro area credit institutions, is €0.24 million higher than in 2007.

8 SECURITIES OF EURO AREA  
RESIDENTS DENOMINATED IN  
EURO

This item includes that part of the Bank's trading and held-to-maturity portfolio which consists of euro-denominated fixed-income securities issued by euro area residents. The held-to-maturity portfolio consists of securities with fixed or determinable payments and a fixed maturity which the Banco de España intends to hold until maturity. In accordance with ECB Guideline of 11 December 2008 (ECB/2008/21), the Banco de España included in this item as at 31 December 2008 its held-to-maturity portfolio of euro-denominated securities issued by euro area residents, which until that date had been classified in asset item 11.2 "Other financial assets". The 2007 figures have been adjusted to enable comparison with 2008. The breakdown of this item is as follows:

EUR m			
Security investments	2008	2007	Change
Trading portfolio	42,293.25	29,341.38	12,951.87
Held-to-maturity portfolio	33,610.69	40,355.14	-6,744.45
<b>TOTAL</b>	<b>75,903.94</b>	<b>69,696.51</b>	<b>6,207.42</b>

The balance of this item as at 31 December 2008 was €75,903.94 million, of which 55.72% relate to trading portfolio securities and the remainder (44.28%) to held-to-maturity securities.

Overall, these securities increased by €6,207.42 million in 2008. It was, however, trading securities which underwent an increase, of €12,951.87 million, whereas held-to-maturity securities decreased by €6,744.45 million.

Specifically, the changes were for the reasons reflected in the following table:

EUR m			
Reason for change	Trading portfolio	Held-to maturity portfolio	Total
Net purchase of securities	12,136.12	-6,779.18	5,356.93
Unrealised gains at year-end (a)	811.57	—	811.57
Unrealised losses at year-end (a)	-15.88	—	-15.88
Accrued implicit interest	20.06	34.74	54.80
<b>TOTAL</b>	<b>12,951.87</b>	<b>-6,744.45</b>	<b>6,207.42</b>

a. As stated in Section 3.1 "Accounting policies", the held-to-maturity portfolio is not valued periodically.

It should be noted that all purchases of debt issued by general government are in the secondary market, none being direct subscriptions of security issues.

9 GENERAL GOVERNMENT  
DEBT DENOMINATED IN EURO

This item includes loans which, by virtue of their respective laws of creation, were granted to the State prior to the entry into force of Law 21/1993 of 29 of December 1993 on the State budget for 1994. Initially they were to be repaid at their nominal amount on a straight-line basis over twenty-five years by means of yearly payments as from 1999, inclusive, in accordance with transitional provision seven of the aforementioned law. However, on 26 March 2007 an agreement was entered into with the central government, represented by the Director General of the Treasury and Financial Policy by delegation of the Minister of Economy and Finance, to bring forward the repayment schedule of these loans, such that they mature in full by 2015 at

the latest and the Treasury can request early repayment of all or part of them. Loans repaid early are paid by the Treasury at the cash amount of their market value at the time.

Under that agreement, in 2008 two instalments of the Law 3/1983 loan (that of the reporting year and the last outstanding instalment of the original repayment schedule) and the instalments of the other two loans corresponding to the reporting year were paid.

The outstanding nominal balance as at 31 December 2008 of the loans granted to the State amounted to €5,248.92 million, broken down as follows:

EUR m			
	2008	2007	Change
Treasury. Law 3/1983 special account	1,366.76	1,562.01	-195.25
Treasury. Law 4/1990 special account	3,473.99	3,821.39	-347.40
Treasury. Credits arising from subscription for participating interests, contributions and quotas in international agencies	408.17	448.99	-40.82
<b>TOTAL</b>	<b>5,248.92</b>	<b>5,832.38</b>	<b>-583.47</b>

The change was solely due to yearly repayments on the above-mentioned loans, as set out above. The amounts are shown in the above table.

#### 10 INTRA-EUROSISTEM BALANCES

This heading includes the amounts of the following items:

EUR m			
Type of asset	2008	2007	Change
Participating interest in the ECB	437.71	437.71	—
Claims equivalent to the transfer of foreign reserve assets to the ECB	4,349.18	4,349.18	—
Net claims related to the allocation of euro banknotes within the Eurosystem	—	—	—
Other claims within the Eurosystem (net)	—	—	—
<b>TOTAL</b>	<b>4,786.88</b>	<b>4,786.88</b>	<b>—</b>

##### a. Participating interest in the ECB

As at 31 December 2008 this item totalled €437.71 million. This total amount is divided into two components: participating interest in capital and participating interest in equity excluding capital. Regarding the first of these components, the capital subscribed and paid by the Banco de España amounted to €434.92 million, which is equal to a share of 7.5498% in such capital. This percentage is that corresponding to the Banco de España in accordance with the capital key established using European Commission data on the basis of Spain's population and GDP relative to those of the total ESCB countries. The second component (participating interest in ECB equity excluding capital) amounted at that date to €2.79 million, which is the amount of the cost paid due to the adjustments to the ECB capital key.

Pursuant to Article 28 of the ESCB Statute, the ESCB national central banks are the sole subscribers to the capital of the ECB. Subscriptions depend on the participating interests fixed in accordance with Article 29 of the ESCB Statute, which must be adjusted every five years or

whenever new Member States join the European Union and their NCBs thus join the ESCB. A noteworthy post-balance-sheet event was the second five-yearly change in the capital keys on 1 January 2009. Based on the Council Decision of 15 July 2003 on the statistical data to be used for the determination of the key for subscription of the capital of the European Central Bank, the capital key of the Banco de España was increased from 7.5498% to 8.3040%.

b. Claims equivalent to the transfer of foreign reserve assets to the ECB

These represent ECB's debt to the Banco de España arising from the transfer of foreign reserve assets to the ECB. The claims equivalent to the transferred reserves are denominated in euro at a value fixed from the time of their transfer. They are remunerated at the latest available marginal rate for the Eurosystem's main refinancing operations, reduced by 15% to reflect a zero return on the gold component. Their end-2008 balance amounted to €4,349.18 million, the same as in the previous year. A noteworthy post-balance-sheet event was that, due to the increase in the Banco de España's share of the ECB capital key on 1 January 2009, an additional contribution of foreign reserve assets was made to the ECB for the equivalent of €434.47 million, as a result of which the balance this year rose to €4,783.65 million.

c. Net claims related to the allocation of euro banknotes within the Eurosystem

In accordance with Eurosystem rules, since the accounts making up this item have a net credit balance, this information is presented on the liabilities side of the balance sheet.

d. Other claims within the Eurosystem (net)

In accordance with Eurosystem rules, since the accounts making up this item have a net credit balance, this information is presented on the liabilities side of the balance sheet.

11 TANGIBLE AND INTANGIBLE FIXED ASSETS

The balance of this item amounted to €235.85 million at end-2008, of which €531.91 million related to cost and €296.07 to accumulated depreciation.

The breakdown of this item into its components, together with their accumulated depreciation, is as follows:

EUR m	2008	2007	Change
<b>TANGIBLE FIXED ASSETS</b>	449.21	429.56	19.65
Land and unbuilt plots	5.35	5.35	0.00
Buildings, structures and renovation work	103.11	99.28	3.83
Plant in buildings	146.91	137.70	9.21
Furniture and fittings	34.98	33.24	1.74
Office machines other than computer equipment	43.54	43.10	0.44
Computer equipment	54.77	51.20	3.56
Transport equipment	8.54	9.06	-0.51
Libraries	9.78	9.23	0.55
Other tangible fixed assets	3.74	3.26	0.48
Art collection and artistic heritage	38.49	38.14	0.35
<b>INTANGIBLE FIXED ASSETS</b>	47.51	40.18	7.32
Computer applications	47.45	40.13	7.32
Industrial property	0.06	0.06	0.00
<b>FIXED ASSETS IN PROGRESS</b>	35.19	35.62	-0.42
Buildings, plant in buildings and other structures under construction	28.81	30.91	-2.11
Computer applications under development	5.50	4.31	1.19
Other fixed assets in progress	0.89	0.40	0.50
<b>TOTAL</b>	531.91	505.36	26.55

EUR m

Accumulated depreciation or amortisation	2008	2007	Change
<b>TANGIBLE FIXED ASSETS</b>	-263.30	-247.11	-16.20
Buildings, structures and renovation work	-30.60	-28.24	-2.37
Plant in buildings	-114.71	-109.87	-4.84
Furniture and fittings	-21.62	-20.24	-1.38
Office machines other than computer equipment	-37.72	-36.30	-1.42
Computer equipment	-42.75	-37.80	-4.95
Transport equipment	-5.68	-5.28	-0.40
Libraries	-7.09	-6.59	-0.50
Other tangible fixed assets	-3.13	-2.79	-0.34
<b>INTANGIBLE FIXED ASSETS</b>	-32.76	-28.32	-4.44
Computer applications	-32.71	-28.27	-4.44
Industrial property	-0.05	-0.05	—
<b>TOTAL</b>	<b>-296.07</b>	<b>-275.43</b>	<b>-20.64</b>

The increase in fixed assets in 2008 basically arose from investment in fire detection and fire-extinction facilities in Madrid buildings and in the refurbishment of those buildings.<sup>10</sup> Also noteworthy was the increase in investments in computer hardware and in the development of certain software.

## 12 OTHER FINANCIAL ASSETS

On 31 December 2008 the Banco de España reclassified its held-to-maturity portfolio securities from this heading to the items which, up to then, had been used for trading securities, i.e. A.2 "Claims on non-euro area residents denominated in foreign currency", A.3 "Claims on euro area residents denominated in foreign currency", A.4 "Claims on non-euro area residents denominated in euro" and A.7 "Securities of euro area residents denominated in euro", depending on the residence of the issuer and on the currency of denomination. This reclassification was carried out on a harmonised basis in the Eurosystem, in accordance with the ECB Guideline of 11 December 2008 (ECB/2008/21).

This item includes €49.57 million of financial investments relating basically to the Banco de España's participating interests in the Bank for International Settlements and Bolsas y Mercados Españoles, Sociedad Holding de Mercados y Sistemas Financieros, S.A. The decrease of €1.82 million in these financial assets was due to the decrease in the underlying book value of the shares of the latter.

## 13 OFF-BALANCE-SHEET INSTRUMENTS REVALUATION DIFFERENCES

This item includes the amount of the net debtor position arising from foreign-exchange forward and swap transactions valued at the exchange rates prevailing at the end of the year. When the position is a creditor one, it is recorded under the same heading in liability item 12.1. Its balance of €620.86 million as at end-2008 is the net value of the swap transactions outstanding at that date. This includes the outstanding swaps with the ECB under the US dollar Term Auction Facility programme with the Federal Reserve. It also includes the outstanding swaps at year-end with the ECB and with the financial institutions arising under the cooperation agreement to provide liquidity in Swiss francs. Under this agreement, the National Bank of Switzerland provided Swiss francs to the ECB by means of swaps against euro. The ECB simultaneously entered into back-to-back swap transactions with Eurosystem NCBs which

<sup>10</sup> The refurbishment of buildings is accounted for as an addition to fixed assets if it meets the criteria set out in Section 3.1 "Accounting policies" in regard to tangible and intangible fixed assets.

used the resulting funds to conduct Swiss franc liquidity-providing operations with the Eurosystem counterparties in the form of swaps. These back-to-back swap transactions between the ECB and the Eurosystem NCBs resulted in intra-Eurosystem balances reported under “Other liabilities within the Eurosystem (net)”.

#### 14 ACCRUALS AND PREPAID EXPENSES

The main components of this item, the balance of which amounts to €2,430.26 million, are as follows:

EUR m	2008	2007	Change
ACCRUED INTEREST ARISING FROM SECURITIES ACQUISITIONS AND ACCRUED COUPON INTEREST RECEIVABLE	1,680.49	1,455.54	224.94
Trading portfolio	873.40	486.21	387.19
<i>Denominated in foreign currency</i>	16.81	22.86	-6.05
<i>Denominated in euro</i>	856.59	463.35	393.24
Held-to-maturity portfolio	807.08	969.33	-162.25
<i>Denominated in foreign currency</i>	35.49	33.12	2.37
<i>Denominated in euro</i>	771.59	936.21	-164.62
OTHER ACCRUED INTEREST RECEIVABLE	743.57	323.00	420.57
On forward foreign exchange transactions	—	—	—
On swaps	—	—	—
On deposits and other assets denominated in foreign currency	12.38	28.12	-15.74
On claims equivalent to the transfer of foreign reserves to the ECB	151.70	147.34	4.35
On other intra-Eurosystem claims arising from TARGET transactions	—	1.19	-1.19
On exceptional liquidity-providing operations	18.25	1.80	16.45
On loans collateralised by securities	544.62	101.69	442.94
Other	16.63	42.86	-26.23
ACCRUED COMMISSIONS RECEIVABLE AND PREPAID EXPENSES	1.81	12.28	-10.47
ACCRUED DIVIDENDS RECEIVABLE	4.40	4.26	0.13
TOTAL	2,430.26	1,795.09	635.18

As can be seen from the foregoing table, the most significant accounts are accrued interest arising from securities acquisitions and accrued coupon interest receivable denominated in euro arising from the trading portfolio (€856.59 million) and from the held-to-maturity portfolio (€771.59 million). There was also a significant increase in the accrued interest receivable on loans collateralised by securities, due to the larger volume of transactions outstanding at year-end.

#### 15 OTHER ASSETS. SUNDRY

The most significant components of this item, which totals €1,256.21 million, are the transfer to the Treasury on 29 December 2008 of €1,053.82 million, equivalent to 70% of 80% of the Bank's distributable profits earned to 30 September 2008 (see Note 15 on the profit and loss account), which was €72.61 million higher than in the previous year, and the home loans and repayable advances granted to Bank employees, the balance of which, at €189.10 million, was up by €22.04 million.



## 16 BANKNOTES IN CIRCULATION

The balance of banknotes in circulation (€76,018.16 million) represents the Banco de España's share in the total euro banknotes in circulation (see "Banknotes in circulation" in Section 3.1 – Accounting policies) according to the Eurosystem euro banknote allocation key (9.9660%<sup>11</sup> of the total issue by all the central banks) after deducting those corresponding to the ECB (8% of the total). This balance was €8,405.20 million higher than in the previous year because of the greater volume of euro banknotes in circulation in the Eurosystem.

17 LIABILITIES TO EURO AREA  
CREDIT INSTITUTIONS RELATED

The overall balance of the different types of deposit held by credit institutions with the Banco de España amounted to €54,314.92 million at end-2008, €1,994.14 million more than in the previous year. This higher balance was due to the increase in the deposit facility, offset in part by the decrease in the balances of the "Current accounts (covering the minimum reserve system)" and "Fixed-term deposits" items.

The breakdown is as follows:

EUR m				
Type of liability	2008	2007	Change	
Current accounts (covering the minimum reserve system)	24,136.03	38,327.45	-14,191.41	
Deposit facility	30,106.40	215.00	29,891.40	
Fixed-term deposits	—	13,775.00	-13,775.00	
Fine-tuning reverse operations	—	—	—	
Deposits related to margin calls	72.49	3.34	69.15	
<b>TOTAL</b>	<b>54,314.92</b>	<b>52,320.79</b>	<b>1,994.14</b>	

The first component, which includes the different types of current accounts held by credit institutions at the Banco de España, in which they maintain the minimum reserves required for monetary policy implementation purposes, underwent a decrease of €14,191.41 million. However, if the average balance of these accounts is analysed, there was an increase from €20,355.55 million in 2007 to €24,009.94 million in 2008.

The item "Deposit facility", which includes overnight deposits remunerated at a fixed interest rate, increased significantly from €215.00 million in 2007 to €30,106.40 million in 2008. An increase was also seen in the average balance of these deposits over the year (which rose from €28.87 million to €6,777.25 million). The greater use of this facility by institutions was due to the tensions in the money market in 2008.

As regards fixed-term deposits, there was no balance as at 31 December 2008, while that at end-2007 was €13,775.00 million. These deposits are related to the ECB's decision to conduct liquidity absorbing operations to hold short-term money market interest rates at a level near the minimum bid rate on Eurosystem main refinancing operations. They are thus fine-tuning operations that take the form of deposits. Spanish institutions participated in these liquidity withdrawals in the seventeen operations conducted by the Eurosystem in 2008.

Also included in this item are the deposits placed by credit institutions in relation to fine-tuning reverse operations and deposits related to margin calls. As at 31.12.2008, institutions' balances of deposits related to margin calls amounted to €72.49 million (€3.34 million in 2007).

<sup>11</sup> Following the five-yearly revision of the Eurosystem national central banks' share of the ECB capital key and the accession of Slovakia to the Eurosystem on 1 January 2009, the banknote allocation key is 10.9465%.

18 LIABILITIES TO OTHER EURO  
AREA RESIDENTS DENOMINATED  
IN EURO.—GENERAL  
GOVERNMENT

This item includes the deposits held by general government with the Banco de España. The outstanding balance at year-end was €18,770.52 million, which breaks down as follows:

EUR m	2008	2007	Change
Central government (State)	7,086.58	4,193.50	2,893.08
<i>Treasury current account</i>	4,501.72	164.79	
<i>Other central government agencies and similar bodies</i>	2,584.86	4,028.71	
Territorial government	1,880.97	653.36	1,227.61
<i>Regional (autonomous) governments, administrative agencies and similar bodies</i>	1,875.53	648.41	
<i>Local government</i>	5.44	4.95	
Social security funds	9,802.98	13,183.49	-3,380.52
<i>Social Security System</i>	8,939.17	11,215.36	
<i>Other</i>	863.81	1,968.14	
<b>TOTAL</b>	<b>18,770.52</b>	<b>18,030.35</b>	<b>740.17</b>

The increase in the balance of this item (€740.17 million) was basically due to the rise in balances held by the Treasury, regional (autonomous) governments, other government agencies and similar bodies, while the balance of Social Security funds declined.

19 LIABILITIES TO OTHER EURO  
AREA RESIDENTS DENOMINATED  
IN EURO.—OTHER LIABILITIES

Included here are the current accounts of financial institutions other than credit institutions, such as the Deposit Guarantee Funds, other financial intermediaries associated with securities markets settlement, other intermediaries in the debt book-entry market, etc., as well as the current accounts of non-administrative public and autonomous agencies of the State, the current accounts of employees and pensioners and other accounts of legal entities classified in "Other resident non-financial sectors".

The balance at end-2008 was €1,774.07 million, and its decrease of €551.18 million with respect to end-2007 was basically due to the decrease in the balances of the current accounts of State agencies (€552.55 million).

20 LIABILITIES TO NON-EURO  
AREA RESIDENTS DENOMINATED  
IN EURO

This item includes basically the euro-denominated accounts held by international organisations, non-Eurosystem monetary authorities and central banks to which reserve management services are provided. Its balance of €172.27 million was €14.30 million higher than in the previous year.

21 LIABILITIES TO NON-EURO  
AREA RESIDENTS DENOMINATED  
IN FOREIGN CURRENCY.—  
DEPOSITS, BALANCES AND  
OTHER LIABILITIES

This item basically includes the foreign-currency balances of non-euro area central banks and collateralised inward deposits recorded in respect of reverse transactions conducted under repurchase agreements. The year-end balance of the first of these components amounted to €71.85 million (€37.89 million more than at end-2007), while collateralised inward deposits recorded in respect of reverse transactions conducted under repurchase agreements had a balance of zero (€83.07 million at 31.12.2007). Overall, the total balance of this item decreased by €45.18 million.

22 COUNTERPART OF SPECIAL  
DRAWING RIGHTS ALLOCATED BY  
THE IMF

This item of €330.12 million shows the amount of the special drawing rights allocated to Spain by the IMF in proportion to its quota. The total amount of this item increased by €9.20 million with respect to the previous year, due to the variation in the exchange rate.

23 INTRA-EUROSISTEM  
LIABILITIES

This item, which as at 31 December 2008 had a balance of €42,046.77 million, comprises the following:

a. Net liabilities related to the  
allocation of euro banknotes  
within the Eurosystem

This account, the balance of which amounted to €7,125.42 million at end-2008, consists of the claims and liabilities of the Banco de España vis-à-vis the Eurosystem in relation to the allocation of euro banknotes within the Eurosystem (see “Banknotes in circulation” and “Intra-Eurosystem balances” in the section on accounting policies).

Its decrease relative to 2007 (€10,778.19 million) was due to the decrease in banknotes put into circulation by the Banco de España in 2008 (down from €85,516.56 million at 31.12.07 to €83,143.58 million at end-2008 (-2.8%) as compared with the increase in the Eurosystem as a whole (12.7%), which gave rise to the aforementioned decrease in these accounts.

b. Other liabilities within the  
Eurosystem (net)

The balance of €34,921.35 million as at 31 December 2008 represents the sum of three components: 1) the position of the Banco de España vis-à-vis the ECB in respect of the transfers issued and received through TARGET2 by the ESCB national central banks, including the ECB, plus the balances held with Eurosystem central banks through correspondent accounts; 2) the position vis-à-vis the ECB in respect of the pooling and allocation of monetary income within the Eurosystem pending settlement (see “Net result of pooling of monetary income” in Note 8 on the profit and loss account); and 3) the Banco de España’s position vis-à-vis the ECB in respect of any amounts receivable or refundable, basically in respect of the seigniorage income relating to euro banknotes issued by the ECB.

Regarding the first component, the year-end net transfers via TARGET2 had a credit balance of €34,988.89 million, while the correspondent accounts showed a debit balance of €0.15 million. The remuneration of the Banco de España’s debit position vis-à-vis the ECB is calculated daily at the marginal interest rate on Eurosystem main refinancing operations.

The second component, i.e. the position vis-à-vis the ECB in respect of the pooling and annual allocation of monetary income among the Eurosystem national central banks, had a credit balance of €63.22 million at end-2008.

Finally, in regard to the position vis-à-vis the ECB relating to the distribution of income arising from the seigniorage of euro banknotes issued on its behalf by the NCBs, following approval of the Decision of the European Central Bank of 17 November 2005 on the distribution of the income of the European Central Bank on euro banknotes in circulation to the national central banks of the participating Member States (ECB/2005/11), the income on euro banknotes in circulation earned in each financial year is distributed by the ECB on the second working day of the following year, although the ECB Governing Council may decide before the end of the financial year not to distribute all or part of this income (see “Banknotes in circulation” in Section 3.1.2). This year the ECB Governing Council decided to retain part of the 2008 banknote seigniorage income in order to increase the provision for foreign exchange rate, interest rate and gold price risks set up in 2005. The rest was allocated among the Eurosystem central banks according to their respective keys, the Banco de España being allocated €130.60 million.

24 ITEMS IN COURSE OF  
SETTLEMENT

Included here are various accounts which as at 31.12.2008 were in the course of settlement, such as transfer instructions pending execution and transfers sent to deposit institutions yet to be reimbursed. In 2008 various accounts previously recorded under “Other liabilities. Sundry” were included in this item since, in view of their nature, it was considered more appropriate to classify them here. The amount relating to 2007 which was reclassified was €30.14 million.

Of the total balance of this item (€246.64 million) at year-end, €214.87 million correspond to transfers ordered by credit institutions pending payment at year-end, and €30.90 million relate to transfers received on 31 December 2008 by the Sistema Nacional de Compensación Electrónica (National Electronic Clearing System) that have been settled and are pending payment.

The increase of €6.75 million in this item with respect to the previous year is due to the rise in the balance of the aforementioned accounts (the first by €29.90 million and the second by €7.07 million), partly offset by the lower year-end balance of other liability transactions pending payment.

25 OFF-BALANCE-SHEET  
INSTRUMENTS REVALUATION  
DIFFERENCES

This item includes the amount of the net creditor position arising from foreign-exchange forward and swap transactions valued at the exchange rates prevailing at the end of the year. When the position is a debtor one, as in 2008, it is recorded under the same heading in asset item 11.3 (see Note 13 on the balance sheet).

26 LIABILITY ACCRUAL  
ACCOUNTS AND INCOME  
COLLECTED IN ADVANCE

This item includes interest accrued but not yet paid, expenses accrued but not yet paid and deferred income.

As at 31 December 2008, its balance amounted to €220.16 million, the main component being interest accrued but not yet paid (€211.85 million). The decrease in 2008 (€74.42 million) mainly resulted from the lower interest incurred on intra-Eurosystem accounts relating to the adjustment of banknotes in circulation, interest incurred on minimum reserves and interest incurred on Social Security accounts, partly offset by the increase in interest incurred on intra-Eurosystem accounts relating to TARGET2 transactions and on swaps arranged within the framework of exceptional liquidity-providing transactions in foreign currencies.

27 OTHER LIABILITIES. SUNDRY

This includes other liabilities not classifiable above.

As at 31 December 2008 the balance of this item amounted to €271.42 million and its main component was the “Banco de España employee social welfare scheme (Mutualidad de empleados).—Contributions payable” (€161.78 million). The most significant change was the decrease of €38.11 million in this debt to the employee social welfare scheme.

28 PROVISIONS

With the exception of country-risk provisions, which are presented in the balance sheet as reductions of the value of the assets concerned, provisions are recorded under this item, with the following breakdown:

EUR m	2008	2007	Change
For exchange rate and interest rate risks	3,103.92	2,421.95	681.97
For early repayment of special loans	967.75	1,393.21	-425.45
For counterparty risks in Eurosystem monetary policy operations	621.35	—	621.35
For exchange of withdrawn peseta banknotes	37.13	61.83	-24.71
For early and regular retirement	39.05	50.31	-11.25
For death and retirement assistance	70.26	68.88	1.38
For sundry liabilities and charges	8.21	9.65	-1.44
<b>TOTAL</b>	<b>4,847.66</b>	<b>4,005.81</b>	<b>841.85</b>

The most important provision is that "For exchange rate and interest rate risks". It was created by a resolution of the Executive Commission of 26 January 1999 to cover exchange rate risks affecting the external reserves of the Banco de España. Subsequently, on 14 April 2004 the Executive Commission resolved to extend the purpose of this provision to include the coverage of interest rate risk. The balance of this provision as at 31 December 2008 amounted to €3,103.92 million, which was €681.97 more than in 2007 (see Note 5 on the profit and loss account).

The balance of this provision is revised annually based on the Banco de España's valuation of its exposure to the aforementioned risks by value-at-risk methodology. This review takes into account, in addition to that valuation, a number of factors, including the estimated profit for the coming year, the envisaged behaviour of risk assets and any others deemed to be worthy of consideration under the circumstances.

The agreement in 2007 with the Spanish State government whereby the Treasury can ask to repay a portion or all of these loans early, paying a cash amount equal to their market value instead of their nominal amount, led the Banco de España to set up in that year a provision for losses due to early repayment of special loans, so as to cover the possible losses that may arise from early repayment of these loans (recorded in asset item 8; see Note 9). The balance of this provision was set at the difference between the nominal amount and the current market value of the loans. As at 31.12.2008, its balance amounted to €967.75 million.

In accordance with the general accounting principle of prudence, the ECB Governing Council considered it appropriate to establish a buffer totalling €5,736.00 million against counterparty risks in monetary policy operations. In accordance to Article 32.4 of the ESCB/ECB Statute, this buffer will be funded among all the national central banks of participating Member States in proportion to their subscribed capital key shares in the ECB prevailing in 2008. As a result, a provision for €621.35 million equivalent to 10.8324% of the total provision was created.

Finally, there were decreases in the provision recorded for exchange of peseta banknotes withdrawn from circulation (€24.71 million) and in the provision for payments to early and regular retirees (€11.25 million), as a result of the use of these provisions for their intended purpose.

## 29 REVALUATION ACCOUNTS

This item includes the revaluations arising from unrealised gains on financial assets and liabilities. The breakdown is as follows:

EUR m				
Type of account	2008	2007	Change	
GOLD	4,776.85	4,294.28	482.58	
FOREIGN CURRENCY	44.94	0.02	44.91	
SECURITIES	969.98	55.24	914.74	
Issued in foreign currency by non-euro area residents	143.85	43.61	100.24	
Issued in euro by non-euro area residents	2.93	—	2.93	
Issued in euro by euro area residents	823.20	11.62	811.57	
OTHER	19.74	21.56	-1.82	
TOTAL	5,811.51	4,371.09	1,440.41	

The revaluation accounts increased by €1,440.41 million in 2008. The main change was in securities revaluation accounts (€914.74 million), specifically in euro-denominated securities issued by euro-area residents, which increased by €811.57 million as a result of the change in the price of trading portfolio securities due to interest rate movements. Unrealised gains on gold increased by €482.58 million as a result of the rise in its market price. The unrealised gains on foreign currencies increased by €44.91 million, basically due to the appreciation of the US dollar against the euro.

### 30 CAPITAL

As at 31 December 2008 the capital of the Banco de España amounted to €1,000 million, with no change in the year. Of this amount, €1.37 million were constituted pursuant to Decree-Law 18/1962 of 7 June 1962 and €998.63 million as a capital increase carried out in 2006. This capital increase resulted from the approval by the Council of Ministers on 28 July 2006 of the proposal submitted by the Governing Council of the Banco de España in application of Law 192/1964 that a portion of the 2005 profits, which were retained as permitted by the resolution of the Council of Ministers of 29 July 2005 and by Royal Decree 1198/2005 on the regime governing the payment of Banco de España profits into the Treasury, be used to increase capital at the Bank within the limits authorised by the thirty-eighth additional provision of Law 30/2005 of 29 December 2005 on the State budget for 2006, i.e. until the capital of the Banco de España reaches the figure of €1,000 million.

### 31 RESERVES

As at 31 December 2008 the reserves of the Banco de España amounted to €1,000 million, with no change in the year. Included in this item is, first, the amount of capital, reserves and profits that arose in 1973 when the now-defunct Spanish Foreign Currency Institute was included in the Banco de España (€3.17 million) and, second, the portion of 2005 and 2006 profit taken to reserves, authorised by the Council of Ministers on 28 July 2006 (€496.83 million) and 29 June 2007 (€500 million), respectively, in application of the legal provisions cited in the previous note.

### 32 PROFIT FOR THE YEAR

The net profit for 2008, after deducting the transfer to the Beneficent Social Fund (€21.11 million), amounted to €2,090.19 million, up 4.25% on 2007. Of this amount, €1,053.82 million was paid to the Treasury on 29 December 2008, in accordance with Royal Decree 2059/2008 of 12 December 2008.

During the year, the following amounts were also paid to the Treasury out of 2007 profits:

- a) On 03.03.08, €823.28 million, which, together with the payment in November 2007, amounted to 90% of the €2,004.98 million of distributable profit for that year.
- b) On 13.08.08, once the balance sheet and profit and loss account for the year 2007 had been approved by the Council of Ministers, €200.50 million, representing the rest of the distributable profit for that year.

The details of the various components of the profit for 2008 and the reasons for the changes in them with respect to 2007 are given in Section 3.3 below on the profit and loss account.

## **3.3 Notes on the profit and loss account**

### 1 INTEREST INCOME

This item includes income from interest accrued on the main assets of the Banco de España. The breakdown in 2008 and 2007 is as follows:

EUR m and %

	Interest income			Average investment in 2008	Average yield in 2008
	2008	2007	Change		
<b>FOREIGN CURRENCY</b>	447.24	445.55	1.69	14,352.23	3.1
Securities	278.83	323.73	-44.90	6,557.19	4.2
Deposits and other assets	168.41	121.83	46.59	7,795.03	2.1
<b>EURO</b>	5,760.02	4,614.82	1,145.20	137,902.22	4.1
Securities	3,071.12	2,626.17	444.95	76,464.03	4.0
Monetary policy operations	2,529.06	1,076.76	1,452.30	56,946.04	4.4
Intra-Eurosystem accounts	157.60	910.00	-752.40	4,492.15	3.5
<i>Claims equivalent to the transfer of foreign reserves to the ECB</i>	<i>151.70</i>	<i>147.34</i>	<i>4.35</i>	<i>4,349.18</i>	<i>3.4</i>
<i>Other claims within the Eurosystem (net)</i>	<i>5.91</i>	<i>762.66</i>	<i>-756.75</i>	<i>142.98</i>	<i>4.1</i>
Other assets	2.24	1.89	0.35	—	—
<b>TOTAL</b>	6,207.26	5,060.38	1,146.89	152,254.45	4.0

Interest income increased by €1,146.89 million in 2008 with respect to 2007. This increase was a result of rises of €1,145.20 million in the return on euro-denominated investments and of €1.69 million in income from foreign-currency investments.

Of the €447.24 million of interest on foreign-currency investments, €278.83 million arose from investments in fixed-income securities denominated in US dollars and €168.41 million from deposits and other assets. The interest earned on this portfolio denominated in US dollars decreased by €44.90 million, while that earned on deposits and other assets rose by €46.59 million. The average return on foreign-currency investments was 3.1%, compared with 4.8% in 2007.

Euro-denominated interest income (€5,760.02 million) arose basically from the securities portfolios (€3,071.12 million, an increase of 444.95 million), monetary policy operations (€2,529.06 million, up €1,452.30 million) and intra-Eurosystem balances (€157.60 million, down €752.40 million). The changes in the balances of the latter two headings were due, first, to the greater funding requirements of the banking system, and, second, to the fact that external funding had to be largely replaced by monetary policy loans, in both cases as a result of the financial turmoil in the interbank money market. The overall effect of these changes was an increase of €1,145.20 million in euro-denominated interest income, due to the increase in average investments (€137,902.22 million in 2008, against €118,105.76 million in 2007) and in average return, which was up from 3.9% in 2007 to 4.1% in 2008.

## 2 INTEREST EXPENSE

This item includes interest expenditure on the liabilities listed below, as follows:

	Interest expense			Average financing in 2008	Average cost in 2008
	2008	2007	Change		
FOREIGN CURRENCY	81.57	82.04	-0.46	3,907.08	2.1
Swap, forward and other transactions	71.49	62.95	8.54	3,534.59	2.0
Other liabilities	10.08	19.09	-9.01	372.49	2.7
EURO	2,792.28	2,095.91	696.37	71,555.45	3.8
Remuneration of minimum reserves	975.33	811.55	163.78	24,009.96	4.0
Deposit facility	192.70	0.80	191.90	6,777.25	2.8
Fixed-term deposits	40.40	32.26	8.13	989.08	4.0
General government deposits	606.46	497.14	109.32	16,231.66	3.7
Intra-Eurosystem liabilities-Net liabilities related to allocation of euro banknotes within the Eurosystem	510.19	724.41	-214.22	12,232.78	4.1
Other liabilities within the Eurosystem (net)	457.24	22.78	434.46	11,314.72	4.0
Other liabilities denominated in euro	9.96	6.96	3.00	—	—
TOTAL	2,873.86	2,177.94	695.91	75,462.54	3.7

Interest expenses increased by €695.91 million in 2008, with a rise of €696.37 million in those relating to euro-denominated liabilities and a fall of €0.46 million in those relating to liabilities denominated in foreign currencies.

The interest expenses denominated in euro (€2,792.28 million) included most notably €975.33 million relating to the remuneration of minimum reserves, €606.46 million of remuneration of general government deposits, €510.19 million of remuneration of intra-Eurosystem balances related to the allocation of euro banknotes, and €457.24 million of remuneration of other intra-Eurosystem balances (TARGET2).

Of the increase of €696.37 million in interest expenses denominated in euro, €434.46 million relate to the remuneration of other intra-Eurosystem balances, since during most of 2008 the Banco de España had a credit position vis-à-vis the ESCB (basically because the banking system was replaced by the sources of funding referred to in the previous section), €191.90 million relate to the higher remuneration of the deposit facility, €163.78 million relate to the higher remuneration of minimum reserves and €109.32 million relate to the remuneration of general government deposits, offset by a smaller interest burden (€214.22 million) from banknote adjustment, as a result of the decline in the banknotes put into circulation by the Banco de España.

Basically, the increase in interest expenses for funding denominated in euro was due to the higher average balance to be remunerated (up from €53,133.12 million in 2007 to €71,555.45 million in 2008), partly offset by the slight fall in average cost (down from 3.9% in 2007 to 3.8% in 2008).

Of the interest expenses denominated in foreign currencies (€81.57 million), €71.49 million relate to swap, forward and other transactions and €10.08 million to other liabilities, the increase in the former (€8.54 million) being practically offset by decline in the latter (€9.01 million).



3 REALISED GAINS/LOSSES  
ARISING FROM FINANCIAL  
OPERATIONS

This item includes the profits and losses arising from dealing in financial assets. In 2008 the net gains in this connection amounted to €108.62 million, arising from the following sources:

EUR m	2008	2007	Change
FOREIGN CURRENCY	73.97	1,749.64	-1,675.67
Sale of gold	0.04	1,748.21	-1,748.16
Sale of foreign currency (exchange gains)	-0.91	-2.84	1.93
Sale of securities (price losses)	78.29	3.11	75.19
Other gains/losses	-3.45	1.16	-4.61
EURO	34.65	-4.45	39.10
Sale of securities (price losses)	34.65	-4.45	39.10
TOTAL	108.62	1,745.19	-1,636.57

The largest change with respect to the previous year was due to the sale of gold in 2007, as a result of which the gains in this connection decreased by €1,748.16 million in 2008. Most noteworthy among the other changes was the higher price gains on securities denominated in US dollars, which rose by €75.19 million, and on the sale of securities issued by euro-area residents in euro (€39.10 million).

4 UNREALISED LOSSES ON  
FINANCIAL ASSETS AND  
POSITIONS

This item includes the loss arising in the currency position derived from the exchange rate depreciation, as well as that arising from depreciation of securities prices, for that portion that cannot be offset by unrealised gains from previous years. The breakdown in 2008 and 2007 is as follows:

EUR m	2008	2007	Change
FOREIGN CURRENCY	0.25	430.29	-430.04
Foreign currency (exchange rate losses)	0.19	429.78	-429.59
Securities (price losses)	0.06	0.51	-0.44
EURO	15.88	99.15	-83.27
Securities (price losses)	15.88	99.15	-83.27
TOTAL	16.13	529.44	-513.31

Unrealised losses in 2008 amounted to €16.13 million, substantially all of which related to investments in securities of euro-area residents denominated in euro (€15.88 million). Unrealised losses decreased by €513.31 million with respect to 2007, basically due to lower unrealised exchange rate losses on foreign currency (€429.59 million), specifically because of the absence of unrealised losses on US dollars (€413.92 million) and SDR (€15.75 million). For their part, unrealised losses on euro-denominated securities decreased by €83.27 million, basically those relating to securities issued by euro-area residents (€81.33 million).

5 TRANSFERS TO/FROM  
PROVISIONS FOR FOREIGN  
EXCHANGE RATE AND PRICE  
RISKS

This includes, first, the transfer of €16.13 million from the provision for foreign exchange rate and price risks to cover the losses recorded at end-2008 and, second, the transfer of €698.11 million to this provision to cover the estimated foreign exchange rate and price risks associated with the financial positions subject to such risks, in accordance

with the Executive Commission resolution of 12 February 2009. These movements represented a net increase of €681.97 million in transfers to/from provisions with respect to 2007.

Further, this item also includes the transfer to/from the provision for losses arising from early repayment of special loans, which showed a positive change of €2,050.55 million. This was because in 2007 transfers of €1,688.56 to this provision were recorded, whereas in 2008 there were recoveries of €361.98 million as a result of the adjustment derived from changes in the market value of these assets.

#### 6 NET INCOME FROM FEES AND COMMISSIONS

This basically includes income and expenses arising from fees and commissions for banking services and the like (transfers, handling of cheques, custody and administration of securities, settlement service for securities transactions, etc.). It may be broken down as follows:

EUR m	Income			Expenses		
	2008	2007	Change	2008	2007	Change
	Foreign operations	0.09	0.12	-0.04	3.02	3.42
Domestic operations	23.24	18.96	4.28	8.02	3.85	4.17
<b>TOTAL</b>	<b>23.33</b>	<b>19.09</b>	<b>4.24</b>	<b>11.04</b>	<b>7.27</b>	<b>3.77</b>

Net fee and commission income in 2008 (12.29 million) was only €0.47 million more than in 2007, due to the increase in fees received for securities transactions (€2.58 million) and to the start-up of the single shared platform (TARGET2), which earned net income of €2.19 million, partly offset by the drop in fees collected from institutions belonging to the Banco de España Settlement System (€4.06 million).

#### 7 INCOME FROM EQUITY SHARES AND PARTICIPATING INTERESTS

This item includes the participating interest of the Banco de España in the profit of the ECB and the dividends on other shares and participating interests.

In 2008 the ECB Governing Council decided to retain part of the banknote seigniorage income in order to increase the provision for foreign exchange rate, interest rate and gold price risks. The rest was allocated among the Eurosystem central banks according to their respective keys, the Banco de España being allocated €130.60 million. Also included are €11.47 million of dividends from the investment in Bolsas y Mercados Españoles, Sociedad Holding de Mercados y Sistemas Financieros, SA (BME) and €2.64 million from the investment in international organisations (Bank for International Payments). The amount recorded in 2008 was €135.03 million higher than in 2007, basically because the ECB did not distribute banknote seigniorage income in 2007.

#### 8 NET RESULT OF POOLING OF MONETARY INCOME

The amount of each Eurosystem NCB's monetary income is determined by calculating the annual income generated by the earmarkable assets held against the liability base. The liability base consists of the following items: banknotes in circulation; liabilities to credit institutions related to monetary policy operations denominated in euro; net intra-Eurosystem liabilities resulting from TARGET2 transactions whenever they have a credit balance; and net intra-Eurosystem liabilities related to the allocation of euro banknotes within the Eurosystem. Any interest paid on liabilities included within the liability base is to be deducted from the monetary income to be pooled. The earmarkable assets include the

following items: lending to euro area credit institutions related to monetary policy operations; intra-Eurosystem claims equivalent to the transfer of foreign reserve assets to the ECB; net intra-Eurosystem claims resulting from TARGET2 transactions, whenever they have a debit balance; net intra-Eurosystem claims related to the allocation of euro banknotes in the Eurosystem; and a limited amount of each NCB's gold holdings, in proportion to its capital key. Gold is considered to generate no income. If the value of a NCB's earmarkable assets exceeds or is less than the value of its liability base, the difference will be offset by applying to it the most recent marginal interest rate on main refinancing operations.

The monetary income pooled by the Eurosystem is to be allocated among NCBs according to the ECB subscribed capital key. The difference between the monetary income pooled by the Banco de España in 2008, amounting to €3,044.72 million, and that reallocated to it, amounting to €2,981.73 million, is equivalent to a net contribution of €62.99 million. To this net contribution should be added €0.23 million for the Banco de España's share of the losses on Eurosystem monetary policy operations. Compared with 2007, there was a negative net change of €100.47 million in these results.

In accordance with the principle of prudence, the ECB Governing Council considered it appropriate to set up a provision of €5,736.00 million for counterparty risk in monetary policy operations. Pursuant to Article 32.4 of the ESCB/ECB Statute, this provision must be financed with a charge to all Eurosystem banks in proportion to their share of the subscribed capital of the ECB according to the capital keys in force in 2008. As a result of this, the Banco de España set aside a provision of €621.35 million, equivalent to 10.8324% of the total provision recorded.

#### 9 OTHER INCOME AND LOSSES

This includes the income and losses that cannot be included in other items, along with other diverse income of an exceptional nature. It may be broken down as follows:

EUR m	2008	2007	Change
Extraordinary profit	16.76	2.18	14.58
Employee social welfare scheme	-21.99	-25.76	3.78
Sundry	0.88	0.63	0.25
<b>TOTAL</b>	<b>-4.35</b>	<b>-22.95</b>	<b>18.60</b>

As can be seen, this item shows a net loss which is €18.60 million smaller than in 2007, basically due to the extraordinary gains arising from the adjustment to the allocation of expenses under the IMF *Special Contingency Account (SCA)-1* for Liberia (€11.26 million) and to the cancellation of provisions for housing loan repayments and for furniture and building fire self-insurance in accordance with the Executive Commission resolution of 30.12.2008, amounting to €4.65 million.

#### 10 STAFF COSTS

This item includes the headings "Wages and salaries", "Contributions to pension scheme" and "Other staff welfare expenses".

The breakdown of changes by component is as follows:

EUR m and %

	2008	2007	Change	(%)
Gross staff costs	224.32	211.72	12.60	6.0
<i>Wages and salaries</i>	<i>169.77</i>	<i>161.30</i>	<i>8.48</i>	<i>5.3</i>
<i>Social Security</i>	<i>31.38</i>	<i>30.59</i>	<i>0.79</i>	<i>2.6</i>
<i>Staff welfare expenses</i>	<i>17.64</i>	<i>14.71</i>	<i>2.93</i>	<i>19.9</i>
<i>Contributions to pension scheme</i>	<i>5.53</i>	<i>5.12</i>	<i>0.41</i>	<i>8.0</i>
Reversal of staff costs due to capitalisation of computer applications	-0.69	-0.62	-0.06	10.3
<b>TOTAL</b>	<b>223.63</b>	<b>211.10</b>	<b>12.53</b>	<b>5.9</b>

This balance increased from €211.10 in 2007 to €223.63 million in 2008, a rise of €12.53 million (5.9%), as a result of: a) economic improvements included in the Collective Agreement for 2008, estimated at €5.95 million (2.82%); b) higher expenses derived from the financial crisis and from the extraordinary processing of banknotes, which was achieved by stepping up secondments, temporary hires and overtime, for an amount of €1.36 million (0.64%); c) an increase in Social Security contributions and supplementary medical care fees (€1.4 million or 0.66%); d) increase in death and retirement assistance (€1.46 million or 0.69%); and e) a number of factors of varying nature (wage increases for years of service, wage drift due to promotions, tax prepayments on account of compensation in kind, changes in staff structure, etc.)

The following table sets out the changes in permanent and temporary staff, in terms of average number of employees:

	2008	2007	Change	(%)
<b>AVERAGE NUMBER OF EMPLOYEES</b>	<b>2,727.2</b>	<b>2,718.6</b>	<b>8.6</b>	<b>0.3</b>
<b>1 Permanent staff</b>	<b>2,588.1</b>	<b>2,605.3</b>	<b>-17.2</b>	<b>-0.7</b>
<i>Managerial staff</i>	<i>1,464.1</i>	<i>1,447.9</i>	<i>16.3</i>	<i>1.1</i>
<i>Administrative staff</i>	<i>910.6</i>	<i>928.3</i>	<i>-17.8</i>	<i>-1.9</i>
<i>Other</i>	<i>213.4</i>	<i>229.2</i>	<i>-15.8</i>	<i>-6.9</i>
<b>2 Temporary staff</b>	<b>139.1</b>	<b>113.3</b>	<b>25.8</b>	<b>22.8</b>
<i>Managerial staff</i>	<i>75.5</i>	<i>63.1</i>	<i>12.4</i>	<i>19.7</i>
<i>Administrative staff</i>	<i>52.7</i>	<i>43.8</i>	<i>8.9</i>	<i>20.4</i>
<i>Other</i>	<i>10.9</i>	<i>6.4</i>	<i>4.5</i>	<i>70.1</i>

As at 31 December 2008, the Bank's total staff numbered 2,731 employees, eleven more than at the same date of the previous year, as a result of the increase in the number of temporary hires for the aforementioned reasons. Most noteworthy as regards staff composition by gender was the increase of 27 in the number of women, which, together with the decrease of 16 in the number of men, meant that women now account for 37% of the Bank's total staff.

#### 11 ADMINISTRATIVE EXPENSES

This item includes expenses arising from the purchase of current assets and of diverse services received during the year, as follows:

EUR m and %

	2008	2007	Change	%
Gross administrative expenses	135.90	116.15	19.75	17.0
<i>Rental and maintenance</i>	<i>34.75</i>	<i>31.81</i>	<i>2.94</i>	<i>9.3</i>
<i>Materials and supplies</i>	<i>10.80</i>	<i>10.25</i>	<i>0.55</i>	<i>5.4</i>
<i>External services</i>	<i>74.05</i>	<i>59.90</i>	<i>14.15</i>	<i>23.6</i>
<i>Training, promotion and selection</i>	<i>3.36</i>	<i>2.86</i>	<i>0.50</i>	<i>17.5</i>
<i>Sundry operating expenses</i>	<i>12.94</i>	<i>11.33</i>	<i>1.61</i>	<i>14.2</i>
Reversal of administrative expenses due to capitalisation of computer applications	-3.10	-2.17	-0.93	43.1
<b>TOTAL</b>	<b>132.80</b>	<b>113.98</b>	<b>18.82</b>	<b>16.5</b>

The structure of this item was changed in 2008, and the 2007 data were reclassified accordingly.

The above table shows that in 2008 the most significant administrative expenses were external services (€74.05 million), mainly IT services (€50.53 million) and rental and maintenance (€34.75 million), composed mainly of property rental and maintenance (€16.98 million) and hardware and software rental and maintenance (€13.13 million).

The net increase in goods and services expenses in 2008 (€18.82 million) resulted from the updating of the prices of contracts currently in force and from the higher expenditure in certain areas, most notably in external services (€14.15 million) relating to both information technology (€5.99 million) and to the development and operation of the TARGET2 platform (€4.09 million).

“Sundry operating expenses” include €132,014.74 (including VAT) relating to the fees of the external auditors Deloitte, S.L. for the 2008 audits of the Bank’s annual accounts and of certain aspects of the Bank’s management of European Central Bank reserves. In 2008 no services were received from or amounts paid to other firms in the group.

## 12 DEPRECIATION OF FIXED ASSETS

Included here is the expense of the estimated depreciation of the Bank’s fixed assets, which breaks down as follows:

EUR m and %

	2008	2007	Change	%
Depreciation of buildings, structures and renovation work	2.21	1.67	0.53	31.8
Depreciation of plant in buildings	5.63	4.10	1.53	37.3
Depreciation of furniture and fittings	1.75	1.54	0.21	13.5
Depreciation of office machines other than computer equipment	1.44	1.41	0.03	2.3
Depreciation of computer equipment	6.23	6.18	0.04	0.7
Depreciation of transport equipment	0.92	1.05	-0.14	-12.9
Depreciation of libraries	0.50	0.48	0.02	4.4
Depreciation of other tangible fixed assets	0.29	0.26	0.03	10.5
Amortisation of intangible fixed assets	4.40	3.42	0.97	28.5
<b>TOTAL</b>	<b>23.35</b>	<b>20.12</b>	<b>3.24</b>	<b>16.1</b>

## 13 BANKNOTE PRODUCTION SERVICES

This amount (€65.08 million) corresponds to payments made by the Banco de España to purchase banknotes from the National Mint. The decrease with respect to 2007 (€5.87 million)

was due to the lower unit price of the banknotes purchased, partly offset by the higher volume of those purchased by the Bank in the year.

14 TRANSFERS AND ADDITIONS  
TO OTHER FUNDS AND  
PROVISIONS

The net balance of transfers and applications to other funds and provisions in 2008 amounted to €36.65 million, compared with €21.95 million in 2007. This change (€14.71 million) resulted, firstly, from the transfer in 2008 to the provision for death and retirement assistance stipulated in Article 190 of the Banco de España Conditions of Employment amounting to €12.53 million, as a consequence of the change in the calculation and accounting procedures, as compared with the reversal of €1.10 million from the provision in 2007 and, secondly, the larger transfer to the Beneficiary-Social Fund (€21.11 million in 2008 against €20.25 million in 2007).

The Banco de España, because of the nature of its activity, is not an institution with a high environmental risk. In 2008 it was not considered necessary to record any provision for environmental liabilities and charges.

15 PROFIT FOR THE YEAR

Pursuant to Article 1.1.b) of Royal Decree 2059/2008 of 12 December 2008, the Banco de España must pay into the Treasury, on the first working day of March 2009, 90% of the profits earned and recorded up to 31 December of the previous year, less the amount paid on 29 December of the previous year, in accordance with the single transitional provision of the aforementioned royal decree.

Given the financial crisis currently besetting the markets, at the close of the September accounts it was considered that the final result for the year might be affected by certain factors. This made it advisable to apply the provisions of Article 1.1.a) of the aforementioned royal decree whereby the "payment agreement must take into account the foreseeable performance of profits until the end of the year". Specifically, it was decided to apply very prudent criteria in setting the amount to be paid, allowing for the possibility that the result at the end of the year might be negatively affected, among other causes, by the high financial market volatility, which might lead to significant valuation losses (many of the markets in which prices are determined are not liquid, which could affect the valuation of certain securities) due to the possible need to participate in establishing a provision for counterparty risk in Eurosystem monetary policy operations, and by the fact that the Banco de España's decision to increase its holdings of US dollars may have heightened exchange risk with respect to the calculation made when the provision for this risk was recorded last year.

Specifically, to determine the amount of profit to be retained, various factors were considered, including VaR derived from financial risk, the possible effects of credit risk and the illiquidity of some markets, both for the proprietary portfolio and for the monetary policy collateral provided by the Banco de España and by the Eurosystem as a whole. However, given the difficulties encountered in gauging possible market behaviour and the illiquidity of certain assets, it was considered advisable to establish a simple system for determining the amount to be retained as a safeguard against the possible negative performance of the Banco de España. Consequently, the advance payment of 70% of profits to the Treasury was calculated on the basis of 80% of the profits recorded as at 30 September 2008 and, accordingly, the amount to be paid in on 29 December was €1,053.82.

Once the year had ended, and taking into account that the provisional profits amounted to €2,090.19 million and that 90% of the profits was €1,881.17 million, a payment of €827.35 million was made to the Treasury on 2 March 2009.

In application of Royal Decree 2059/2008, the payments to the Treasury of 2008 profit are as follows:

EUR m

1 Total profit for 2008	2,090.19
2 Payments to the Treasury	
On 29.12.2008. 70% of 80% of profit as at 30.09.2008	1,053.82
On 2.3.2009. Difference between the above amount and 90% of profit as at 31.12.2008	827.35
3 Profit payable to the Treasury	
At date of approval of the 2008 accounts	209.02

### 3.4 Changes in capital, reserves, provisions and revaluation accounts

The following table shows the changes in the reporting year, which, in addition to the accounting profit, include the net gains not recognised as income in the profit and loss account, the variation in the coverage of exchange and interest rate risks and the effect on the balance sheet of the appropriation of profit for the year.

EUR m

	Capital	Reserves	Revaluation accounts	Undistributed profit	Provisions	Total
<b>A) 2008 OPENING BALANCE</b>	1,000.00	1,000.00	4,371.09	1,023.77	4,005.81	11,400.67
<b>1. UNRECOGNISED NET GAINS IN PROFIT AND LOSS</b>			1,440.41			1,440.41
In gold			482.58			482.58
In foreign currency			44.91			44.91
In securities			914.74			914.74
Other			-1.82			-1.82
2. 2008 PROFIT				2,090.19		2,090.19
3. CHANGE IN PROVISIONS					841.85	841.85
4. APPROPRIATION OF PROFIT				-2,077.59		-2,077.59
Payment to the Treasury of 2007 profit				-1,023.78		-1,023.78
Payment to the Treasury of 2008 profit				-1,053.82		-1,053.82
<b>B) CHANGES IN THE YEAR. B = 1+2+3+4</b>	—	—	1,440.41	12.60	841.85	2,294.86
<b>C) 2008 CLOSING BALANCE. C = A + B</b>	1,000.00	1,000.00	5,811.51	1,036.37	4,847.66	13,695.54

The changes reflected in this table have been explained above in the notes on the balance sheet and profit and loss account that refer to provisions (Note 28 on the balance sheet), revaluation accounts (Note 29 on the balance sheet), capital (Note 30 on the balance sheet), reserves (Note 31 on the balance sheet) and profit for the year (Note 32 on the balance sheet and Note 15 on the profit and loss account).

## 4 Specific information required by Article 4.2 of the Law of Autonomy of the Banco de España of 1 June 1994

### 4.1 Contributions made by the Bank to the Deposit Guarantee Funds

The contribution of the Banco de España to the Deposit Guarantee Funds is regulated by Article 3 of Royal Decree 18/1982, according to the wording established by additional provision seven of Royal Legislative Decree 12/1995 of 28 December 1995 and Royal Decree 2606/1996 of 20 December 1996, which implemented the legal regime for such funds.

The aforementioned Royal Decree established that the Deposit Guarantee Funds may only exceptionally “be supplemented by contributions from the Banco de España, the amount of which shall be fixed by Law”. In 2008 the Banco de España made no contributions whatsoever to these Funds.

### 4.2 Loss of profit

The table below shows the loans outstanding in 2008 with interest rates below the reference rates used, in order to estimate the loss of profit for the year pursuant to the provisions of Article 4.2 of Law 13/1994 of 1 June 1994 of Autonomy of the Banco de España.

EUR m and %				
Type of credit/loan	Estimated average balance in 2008	Interest rate received	Reference interest rate	Estimated loss of profit
Net State debt	4,164.03	—	4.04	168.07
Housing loans and repayable advances to employees	178.24	1.07	4.04	5.31
<i>Housing loans</i>	<i>133.03</i>	<i>1.33</i>	<i>4.04</i>	<i>3.62</i>
<i>Repayable advances</i>	<i>35.89</i>	<i>—</i>	<i>4.04</i>	<i>1.45</i>
<i>Employee loans</i>	<i>9.32</i>	<i>1.50</i>	<i>4.04</i>	<i>0.24</i>
<b>TOTAL</b>	<b>4,342.27</b>	<b>1.07</b>	<b>4.04</b>	<b>173.37</b>

Included under “Net State debt” is the average balance during the year, on a daily basis, of the special loans granted to the State before 1994 less the deposits held by the Treasury with the Banco de España, when there is a net balance in favour of the latter.

The reference rate used to estimate the loss of profit in all the loans is the daily average of the marginal interest rate on main refinancing operations conducted during the year.

### 4.3 Other transactions

On 26 March 2007 an agreement was entered into with the State government to bring forward the repayment schedule of the loans granted to the State prior to the entry into force of Law 21/1993 of 29 December 1993 on the State Budget for 1994 (Law 3/1983 loan, Law 4/1990 loan and credits arising from subscription for participating interests, contributions and quotas in international agencies), such that they all reach final maturity by 2015 at the latest and the Treasury can request early repayment of part or all of these facilities, paying on the due date the effective market price instead of the nominal amount. Under this agreement, in 2008 payment was received of two instalments of the first of the aforementioned facilities (that for the reporting year and the last outstanding instalment of the original repayment schedule), along with the reporting year instalments of the other two facilities, the repayment date of all of them being brought forward from 31 December to 30 April. In accordance with the foregoing, on 30 April 2008 the Treasury paid to the Banco de España the amount of €519,997,110.10, the effective market price of the debt repaid on that date.



## ANNEXES

### 1 Report of the external auditors



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*Translation of a report originally issued in Spanish based on our work performed in accordance with International Standards on Auditing. In the event of a discrepancy, the Spanish-language version prevails.*

To the Governor of the Banco de España:

We have audited the financial statements of the Banco de España which, in accordance with Article 29.1 of its Internal Rules, comprise the balance sheet at 31 December 2008 and the related income statement and notes to the financial statements for the year then ended.

#### Responsibility for the financial statements

The Executive Commission of the Banco de España is responsible for organising the Bank and appointing its directors general. Under the Internal Rules of the Banco de España, the Directorate General Services is responsible for preparing the financial statements in accordance with the internal accounting rules and principles of the Banco de España, which are indicated in Note 3.1 to the accompanying financial statements and are based on the accounting regulations established for the member central banks of the European System of Central Banks. This responsibility, which is exercised through the Control, Budget and Accounting Department, includes the supervision of operations and, therefore, the design, implementation and maintenance of the relevant internal controls required for the preparation and adequate presentation of financial statements that are free from material misstatement due either to fraud or error; the selection and application of appropriate accounting rules; and the performance of the estimates considered to be reasonable in the circumstances. Pursuant to Article 21.g) of Law 13/1994, of 1 June, on the Autonomy of the Banco de España, these financial statements are prepared by the Governing Council of the Banco de España.

#### Responsibility of the auditor

Our responsibility is to express an opinion on the financial statements taken as a whole based on our audit work performed in accordance with International Standards on Auditing, which require that we comply with certain ethical requirements and that we plan and perform the audit to obtain reasonable assurance that the financial statements are free from material misstatements or irregularities.

An audit entails the performance of procedures designed to obtain evidence supporting the amounts and disclosures contained in the financial statements. The procedures selected depend on the auditor's judgment, which includes the assessment of the risks of the occurrence of material misstatement or irregularities in the financial statements due either to fraud or error. In assessing these risks, the auditor considers the internal control system applicable to the preparation and adequate presentation of the financial statements by the entity, in order to design audit procedures that are appropriate in view of the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control system. An audit also includes the evaluation of the adequacy of the accounting policies used and of the reasonableness of the accounting estimates made by the entity, as well as an assessment of the overall presentation of the financial statements. We consider that the evidence we have obtained is sufficient and adequate to provide a basis on which to express our audit opinion.

#### Comparative information

For comparison purposes, the accompanying financial statements present, in addition to the 2008 figures for each item in the balance sheet and income statement, the figures for 2007. Our opinion refers only to the 2008 financial statements. On 3 June 2008, we issued our auditors' report on the 2007 financial statements in which we expressed an unqualified opinion.

### Opinion

In our opinion, the accompanying financial statements for 2008 present fairly, in all material respects, the net worth and financial position of the Banco de España at 31 December 2008 and the results of its operations in the year then ended, and contain the required information, sufficient for their proper interpretation and comprehension, in conformity with the internal accounting rules and principles of the Banco de España, which are indicated in Note 3.1 to the accompanying financial statements and are based on the accounting regulations established for the member central banks of the European System of Central Banks.

DELOITTE, S.L.



Miguel Ángel Bailón Martín

25 May 2009

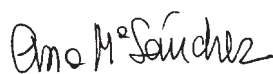
## 2 Report of the Audit Committee

We, the undersigned, Ángel Luis López Roa, Jesús Leguina Villa and Ana María Sánchez Trujillo, are members of the Governing Council of the Banco de España and of the Audit Committee appointed by the Governing Council. In accordance with Article 29 of the Internal Rules of the Banco de España, we were given the task of reviewing the accounts of the Institution for the year 2008.

As required by the aforementioned precept, the Audit Committee has analysed the operations of the Banco de España. This examination basically involved: 1) studying the annual accounts of the Banco de España for the year 2008, prepared by the Directorate General Services of the Banco de España; 2) studying the audit of the balance sheet and profit and loss account of the Banco de España for 2008, conducted by the Internal Audit Department; 3) studying the documentation requested by the members of this Committee from the independent external auditors; 4) interviewing the persons responsible for the independent external audit, for the Internal Audit Department and for the Control, Budget and Accounting Department; and 5) making proposals for the modification, correction or clarification of various matters, all of which have been satisfactorily incorporated in the annual accounts by the Control, Budget and Accounting Department.

The basic conclusion of our report is that from the analysis carried out of the examination and accounting procedures, of the accounting records and of the internal controls in place, it can be inferred that the annual accounts for the year 2008 give a true and fair view of the net worth and financial position of the Banco de España.

Madrid, 7 May 2009.



ANA MARÍA SÁNCHEZ TRUJILLO



ÁNGEL LUIS LÓPEZ ROA



JESÚS LEGUINA VILLA



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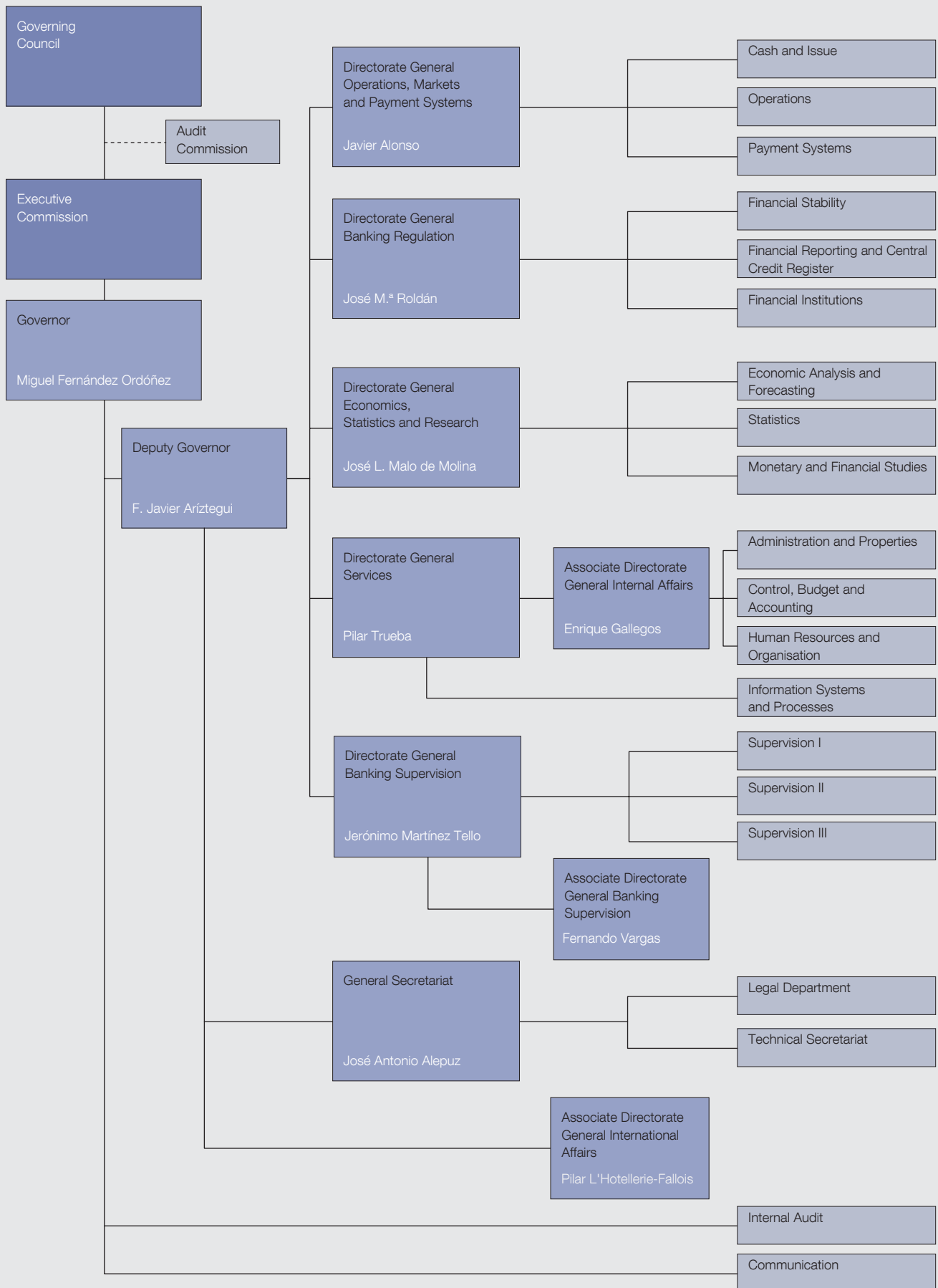


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COMPOSITION OF THE GOVERNING BODIES  
OF THE BANCO DE ESPAÑA

**ORGANISATION CHART**



## Governing Council

GOVERNOR	Miguel Fernández Ordóñez
DEPUTY GOVERNOR	F. Javier Aríztegui
COUNCIL MEMBERS	Jesús Leguina Ángel Luis López Roa Guillem López José María Marín Vicente Salas Ana M.ª Sánchez Trujillo
DIRECTOR GENERAL OF THE TREASURY AND FINANCIAL POLICY	Soledad Núñez
VICE-PRESIDENT OF THE NATIONAL SECURITIES MARKET COMMISSION	Fernando Restoy
DIRECTORS GENERAL OF THE BANK (Without a right to vote)	José Luis Malo de Molina Jerónimo Martínez Tello José María Roldán Pilar Trueba Javier Alonso
SECRETARY (Without a right to vote)	José Antonio Alepuz
REPRESENTATIVE OF THE BANK'S PERSONNEL (Without a right to vote)	M.ª Luisa Teijeiro

## Executive Commission

GOVERNOR	Miguel Fernández Ordóñez
DEPUTY GOVERNOR	F. Javier Aríztegui
COUNCIL MEMBERS	Ángel Luis López Roa Vicente Salas
DIRECTORS GENERAL (Without a right to vote)	José Luis Malo de Molina Jerónimo Martínez Tello José María Roldán Pilar Trueba Javier Alonso
SECRETARY (Without a right to vote)	José Antonio Alepuz

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