

THE SPANISH ECONOMY IN 2019

2020

BANCO DE **ESPAÑA**  
Eurosistema

Documentos Ocasionales  
N.º 2011

Directorate General Economics, Statistics  
and Research



# THE SPANISH ECONOMY IN 2019

Directorate General Economics, Statistics and Research (\*)

BANCO DE ESPAÑA

(\*) Pana Alves, Pablo Burriel, José A. Cuenca, José Luis Fernández, Coral García, Mario Izquierdo, César Martín, Carmen Martínez Carrascal, Enrique Moral Benito, Carmen Sánchez Carretero and Isabel Sánchez, under the coordination of Ana Gómez Loscos, have all participated in the drafting of this Occasional Paper.

Documentos Ocasionales. N.º 2011

2020

The Occasional Paper Series seeks to disseminate work conducted at the Banco de España, in the performance of its functions, that may be of general interest.

The opinions and analyses in the Occasional Paper Series are the responsibility of the authors and, therefore, do not necessarily coincide with those of the Banco de España or the Eurosystem.

The Banco de España disseminates its main reports and most of its publications via the Internet on its website at: <http://www.bde.es>.

Reproduction for educational and non-commercial purposes is permitted provided that the source is acknowledged.

© BANCO DE ESPAÑA, Madrid, 2020

ISSN: 1696-2230 (on-line edition)

## Abstract

The Spanish economy prolonged its expansionary phase in 2019. However, its growth rate moderated, owing to the loss of momentum of domestic demand, which countered the larger contribution of the external sector. The deceleration of domestic demand reflected flatter private consumption and investment, while the external demand contribution was the result of an easing in imports and some acceleration in exports. In line with these developments, employment creation grew at a slower pace. In any event, the Spanish economy showed greater resilience to the deterioration of the external context than the euro area, and hence retained its positive growth differential. Inflationary pressures remained contained despite the increase in unit labour costs. Against this background, the Spanish economy moved in early 2020 on a progressively decelerating path towards its potential growth rate. This outlook has been completely changed by the global health crisis caused by COVID-19. It has affected with virulence a large number of countries, including Spain, and is severely disrupting economic activity. The duration and intensity of the crisis is currently shrouded in great uncertainty.

**Keywords:** Spanish economy, investment, exports, imports, deficit, prices, employment.

**JEL classification:** A10, E21, E22, E24, H6, E31.

## Resumen

La economía española mantuvo un comportamiento expansivo en 2019, si bien su ritmo de crecimiento fue algo inferior al de 2018. Esta moderación fue resultado del menor dinamismo de la demanda interna, que contrarrestó el repunte de la contribución del sector exterior. La desaceleración de la demanda interna reflejó la evolución del consumo privado y de la inversión, mientras que la aportación de la demanda externa se explica por la ralentización de las importaciones y el avance algo mayor de las exportaciones. En línea con estos desarrollos, la creación de empleo aminoró su expansión. Con todo, la economía española presentó mayor resistencia al deterioro del entorno exterior que el área del euro, de manera que conservó un diferencial de crecimiento positivo. Por su parte, las presiones inflacionistas se mantuvieron contenidas, a pesar del ascenso de los costes laborales unitarios. En este contexto, la economía española presentaba a principios de 2020 una trayectoria de moderación gradual del ritmo de su crecimiento hacia su tasa potencial. Estas perspectivas económicas se han visto completamente alteradas por la crisis sanitaria global provocada por la pandemia del Covid-19, que afecta con virulencia a un número muy amplio de países, incluida España, e implica una disrupción muy severa de la actividad económica, cuya duración e intensidad está rodeada actualmente de una gran incertidumbre.

**Palabras clave:** economía española, consumo, inversión, exportaciones, importaciones, déficit, precios, empleo.

**Códigos JEL:** A10, E21, E22, E24, H6, E31.

## Contents

Abstract 5

Resumen 6

1 Introduction 8

2 Explanatory factors behind the greater dynamism of the Spanish economy compared with the euro area 11

3 The loss of momentum in domestic demand 14

4 The positive external sector contribution 20

5 Developments in public finances 26

6 Costs and prices: prolongation of the low-inflation scenario 29

7 The slowdown in employment 34

Box 1 The greater resilience of the Spanish economy in 2019 compared with the euro area: a sectoral perspective 36

References 39

## 1 Introduction

The Spanish economy underwent a severe shock in early 2020 that has interrupted the upturn dating back to late 2013.<sup>1</sup> It remained highly dynamic in 2019. GDP grew by 2%, 0.4 pp down on 2018. Underpinning this expansionary behaviour were the positive contributions of both domestic demand (which was nonetheless lower than in 2018) and the external sector. Inflationary pressures continued to be modest. Employment carried on increasing, albeit at a lesser pace than in previous years, whereby the unemployment rate fell to 13.8% at the end of 2019.

In 2019 as a whole, the Spanish economy proved more resilient to the increase in uncertainty and the global trade tensions than the euro area. As a result, for the sixth year running it maintained a positive growth differential vis-à-vis the euro area, which grew by 1.2%, 0.7 pp less than in 2018. The slowdown was more marked in the more export-oriented countries with a higher weight of manufacturing industry.

The contribution to GDP growth of domestic demand lessened appreciably in 2019 (by 1.1 pp to 1.5 pp). The evolution of domestic demand reflected the slowdown in private consumption and in residential and business investment alike. The deceleration in private consumption was due to the confluence of various factors. The increase in labour income was underpinned more by wage growth than job creation, a combination which is less conducive to increased household spending on goods and services than vice versa. Also, the increased uncertainty stemming from an international setting progressively subject to more sources of risk, combined with the low starting level of the saving rate, pushed households to assign a bigger volume of their income to saving, adopting a more cautious attitude in their spending decisions. Further, regulatory uncertainty over the car industry bore down negatively on the demand for automobiles. More generally, the progressive exhaustion of the pent-up demand for durables built up during the financial crisis initiated in 2008 also detracted from household spending. The easing in residential investment, after sharp growth in previous years, chiefly reflected a containment in demand. Meantime, business investment was adversely affected by the downturn in the external environment, despite continuing easy financing conditions.

The external sector contributed positively to GDP growth for the first time since 2016. The pace of exports increased, sustained by services exports, which offset the slowdown in goods exports. The growth of imports declined once again. Both developments led to the contribution of net external demand turning positive, to 0.5 pp. Gains in competitiveness contributed positively to the increase in exports, once the effects of the 2017 currency appreciation waned, despite the interruption in the ongoing adjustment of relative unit labour costs (ULCs) vis-à-vis the euro area aggregate. The slowdown in imports was not only influenced by the easing in the domestic demand for consumer durables, in particular cars,

---

<sup>1</sup> The initial intensity of the shock is described in Banco de España (2020a and 2020b).



and in investment in fixed capital; a further contributing factor was the product-by-product pattern of the slowdown in goods exports, which especially affected the sectors with the highest import content, in particular cars.

Turning to the public finances position, the budget deficit and the structural deficit worsened in 2019. The level of the overall general government deficit increased to 2.8% of GDP. This rise is the first since 2009, if financial assistance is excluded from the calculation. The general government public debt ratio continued on its gradually declining path, settling at 95.5% of GDP at the end of 2019.

Price growth was once again very moderate. The increase in the harmonised index of consumer prices (HICP) fell by 0.9 pp to 0.8%. This was the result of the decline in energy prices, which countered the slight rise in core inflation. The fall in inflation was more marked in Spain than in the euro area as a whole, meaning that the inflation differential turned negative.

The rate of increase in employment eased gradually over 2019, ending the year with annual growth of 2%, against 2.7% at end-2018. Sector-wise, the slowdown in employment in 2019 was broad-based, but more marked in agriculture and in construction. In terms of contracts, the employment adjustment was centred on temporary workers. Conversely, permanent employee numbers were notably strong throughout the year, leading to a decline in the ratio of temporary to permanent workers.

The composition of growth during the expansionary phase running to 2019 was more balanced than in previous growth phases. That said, structural challenges affecting the vulnerability of our economy to adverse shocks persisted. After the 2008 financial crisis, there was an adjustment in the construction sector and a concurrent re-gearing of productive activity towards the external sector. Along with the gains in competitiveness built up and private-sector deleveraging, this enabled persistent external surpluses to be run. However, the level of external debt remained high. Moreover, high unemployment rates, the slackness of productivity and high public debt remained major sources of vulnerability to the Spanish economy as a whole, restricting its potential growth capacity.

In the setting described, the growth rate of the Spanish economy was seen in early 2020 to be moving gradually towards its potential rate. The Banco de España projections published in mid-December 2019<sup>2</sup> suggested the maintenance of the expansionary phase, still underpinned by national demand, albeit flatter, in both activity and employment. These projections also assumed a stabilisation of the complex 2018-2019 international environment, entailing a slight pick-up in foreign trade, whose contribution to GDP would tend to be neutral over the course of the projection horizon.

---

<sup>2</sup> See [Banco de España \(2019a\)](#).

The COVID-19 disease that emerged in early 2020 has upended this economic outlook. Its epicentre has been in Europe since late February, affecting Italy and Spain with particular virulence. Beyond the enormous costs caused in terms of human lives, the virus has prompted an unprecedented global crisis that is stretching healthcare systems and most severely disrupting economic activity. Great uncertainty currently surrounds the duration and intensity of this disruption, since they depend on how the pandemic evolves and on the effectiveness of the public policies pursued to mitigate its economic impact. The response of the ECB has been immediate, as has that of other central banks, enabling favourable financial conditions to be sustained economy-wide for financial and non-financial agents, public and private alike. Many countries, including Spain, have adopted extraordinary budgetary measures on a notable scale. They are aimed above all at supplementing the incomes of households whose members have ceased to be employed and at providing liquidity to firms to meet their payment commitments while the economic shutdown endures. The European institutions have also adopted measures geared to mobilising funds to combat the pandemic and its economic and social cost, though the effectiveness of their action would be maximised if mechanisms pooling the EU's financial and fiscal capacity were to be set in place.

The rest of the paper seeks to analyse the key features of the Spanish economy in 2019. The first section assesses the main factors behind Spain's greater resilience in the face of the external environment in 2019 compared with the euro area. Next, there is a description of the economy's growth pattern over the course of 2019. This analysis focuses, in the third section, on the moderation in the dynamism of domestic demand. Then, the following section evaluates the positive contribution of the external sector. The fifth section is devoted to 2019 developments in public finances. Attention in the following section then shifts to inflationary pressures, which remained contained. The seventh section assesses labour market dynamics, characterised by a slowdown in employment.

## 2 Explanatory factors behind the greater dynamism of the Spanish economy compared with the euro area

The Spanish economy continued to expand in 2019 and to grow at a higher rate than that of the euro area as a whole, although it held on the gradually slowing path observed since mid-2017. GDP grew by 2%, 0.4 pp down on 2018 (see Table 1 and Chart 1). Employment also continued to increase, albeit less sharply than in previous years. As a result, the unemployment rate fell to 13.8 % at end-2019, a figure still far higher than that observed in the euro area (7.4%), while apparent labour productivity fell slightly, as in 2018. The loss of buoyancy of prices in Spain was somewhat more marked than in the euro area, meaning that the related inflation differential turned negative (-0.4 pp, on average, for the year as a whole).

The moderation in the momentum of activity, close to that foreseen in the Banco de España December 2018 projections<sup>3</sup>, was much less accentuated than in the euro area.<sup>4</sup> There, the increase in GDP was down 0.7 pp, far above the expectations at the end of the previous year (0.2 pp), to 1.2%. In Spain, the slowdown in activity mirrored the loss of steam in national demand, whose contribution to the increase in GDP was 1.5 pp, 1.1 pp less than in 2018. Set against this, the contribution of net external demand increased by 0.8 pp to 0.5 pp, as a result of the slowdown in imports and somewhat more buoyant exports than in 2018. Conversely, in the euro area, where activity was weighed down more heavily by the downturn in the global environment, the more sluggish GDP reflected, in contrast to the case in Spain, the poorer contribution of the external sector, which turned negative (-0.5 pp). By contrast, the contribution of domestic demand to growth rose slightly (by 0.2 pp to 1.7 pp). The deceleration was across the board, but more marked in more outward-looking economies where the weight of manufacturing industry was greater.

As in 2018, against a background of growing trade tensions, the feedback loop between increasing uncertainty and the slowdown in global activity affected the manufacturing sectors particularly harshly, as these are more dependent on foreign trade. In any event, these shocks weighed down less on industrial activity in Spain than in the euro area, as Box 1 analyses. Thus, in contrast to the euro area, gross value added in manufacturing industry posted positive year-on-year rates of increase in the second half of the year. This comparatively more favourable trajectory was assisted by the lesser relative weight, among the group of Spanish external markets, of those marked to a greater extent by downward surprises (the Asian markets in particular), and by the gains in competitiveness built up in recent years. Also, the impact of these unfavourable global developments on the services sector was less severe in Spain than in other core

<sup>3</sup> The Banco de España December 2018 projections pointed to growth in 2019 being 0.3 pp lower [see Banco de España (2019a)]. Further to the revised Annual National Accounts for the period 1995-2018, published by INE on 16 September 2019, the GDP growth figures in the current expansionary phase were revised downwards (except for 2015). In particular, GDP growth in real terms in 2018 declined by 0.2 pp to 2.4%. This revision has a bearing on the comparison of the projected growth figure for 2019 in that projection exercise (before this revision was released) and the growth figure finally recorded.

<sup>4</sup> See European Central Bank (2018).

Table 1

**MAIN INDICATORS OF THE SPANISH ECONOMY (a)**

	2014	2015	2016	2017	2018	2019
<b>Demand and output (b)</b>						
Gross domestic product	1.4	3.8	3.0	2.9	2.4	2.0
Private consumption	1.7	2.9	2.7	3.0	1.8	1.1
Government consumption	-0.7	2.0	1.0	1.0	1.9	2.3
Gross capital formation	5.8	10.1	1.4	5.6	6.1	2.0
Investment in equipment	5.8	9.9	1.9	8.5	5.6	3.0
Construction investment	3.0	1.5	1.6	5.9	6.6	0.8
Housing	9.9	-3.2	8.9	11.5	7.7	2.9
Other construction	-2.6	5.7	-4.8	0.2	5.3	-1.7
Export of goods and services	4.5	4.3	5.4	5.6	2.2	2.6
Import of goods and services	6.8	5.1	2.6	6.6	3.3	1.2
Contribution of national demand to GDP growth (pp)	1.9	3.9	2.0	3.0	2.6	1.5
Contribution of net external demand to GDP growth (pp)	-0.5	-0.1	1.0	-0.1	-0.3	0.5
<b>Employment, wages, costs and prices (c)</b>						
Total employment	1.0	3.2	2.8	2.8	2.5	2.3
Employment rate (d)	56.8	58.7	60.5	62.1	63.4	64.3
Unemployment rate	24.4	22.1	19.6	17.2	15.3	14.1
Compensation per employee	0.3	0.6	-0.6	0.7	1.0	2.0
Apparent labour productivity	0.4	0.6	0.2	0.0	-0.2	-0.3
Unit labour costs	-0.1	-0.1	-0.8	0.7	1.2	2.3
GDP deflator	-0.2	0.5	0.3	1.4	1.1	1.6
Consumer price index (end of period)	-1.0	0.0	1.6	1.1	1.2	0.8
Consumer price index (annual average)	-0.2	-0.5	-0.2	2.0	1.7	0.7
Consumer price differential (HICP) with the euro area (pp)	-0.6	-0.8	-0.6	0.5	0.0	-0.4
House prices	0.3	3.6	4.7	6.2	6.7	5.1
<b>Net lending (+)/net borrowing (-) and financial balance (e)</b>						
Resident sectors: domestic net lending (+)/net borrowing (-)	2.1	2.7	3.4	2.9	2.4	2.3
General government	-5.9	-5.2	-4.3	-3.0	-2.5	-2.8
General government (excluding aid to financial institutions)	-5.8	-5.1	-4.1	-3.0	-2.5	-2.8
Households and NPISHs	1.0	1.7	1.4	0.0	0.0	1.1
Corporations	7.1	6.2	6.3	5.9	4.9	4.0
Financial institutions	2.4	1.7	1.9	2.2	2.7	2.7
Non-financial corporations	4.7	4.4	4.4	3.8	2.2	1.3
Net international investment position	-95.9	-88.9	-85.5	-85.5	-80.2	-74.0
General government gross debt	100.7	99.3	99.2	98.6	97.6	95.5
<b>Monetary and financial indicators (f)</b>						
ECB minimum bid rate on MROs	0.2	0.1	0.0	0.0	0.0	0.0
Ten-year government bond yield	2.7	1.7	1.4	1.6	1.4	0.7
Synthetic bank lending rate	3.8	2.9	2.7	2.5	2.4	2.3
Madrid Stock Exchange General Index (100 = Dec 1985)	1,066.6	1,080.5	879.2	1,034.5	971.4	922.5
Dollar/euro exchange rate	1.3	1.1	1.1	1.1	1.2	1.1
Nominal effective exchange rate vis-à-vis developed countries (g)	101.8	98.6	99.4	100.5	101.5	100.6
Real effective exchange rate vis-à-vis developed countries (h)	103.7	99.8	98.8	99.5	99.7	99.1
Real effective exchange rate vis-à-vis the euro area (h)	101.1	100.6	98.8	98.6	97.8	98.1
Households: total financing	-3.6	-2.1	-2.0	-1.3	-0.6	0.5
Non-financial corporations: total financing	-3.7	-0.4	-0.4	1.1	1.1	0.6

**SOURCES:** INE, IGAE, AMECO and Banco de España.

**a** Spanish National Accounts data, base year 2015.

**b** Volume indices. Annual rates of change.

**c** Rates of change, except employment and unemployment rates, which are in levels.

**d** Employment rate (16-64 years).

**e** Levels, as percentage of GDP.

**f** Annual average levels for the Madrid Stock Exchange General Index, interest rates and exchange rates, and rates of change for financial liabilities.

**g** 100 = 1999 Q1.

**h** 100 = 1999 Q1. Measured with unit labour costs.

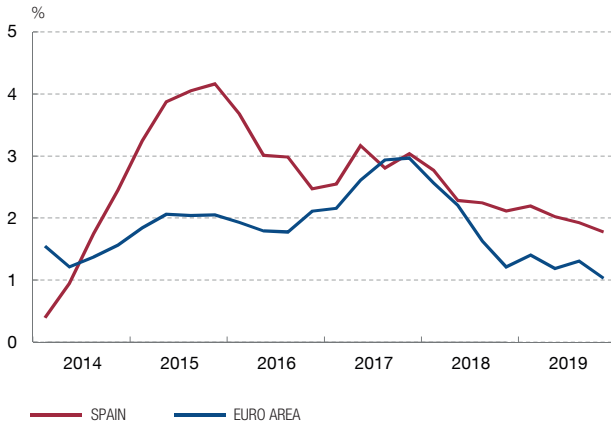
Chart 1

**THE PACE OF GROWTH IN THE SPANISH ECONOMY CONTINUED TO BE NOTABLE, THOUGH MORE MODEST THAN A YEAR EARLIER**

The expansionary behaviour of the Spanish economy continued, although it held on the gradually slowing path observed since mid-2017. The loss of momentum in activity was more modest than in the euro area, thanks to the greater resilience of the economy in the face of external shocks. Thus, in contrast to developments in the euro area, the contribution of external demand to growth has risen, turning positive. By contrast, the contribution of domestic demand to GDP growth fell. While job creation was less intense than in previous years, it enabled the unemployment rate to continue declining.

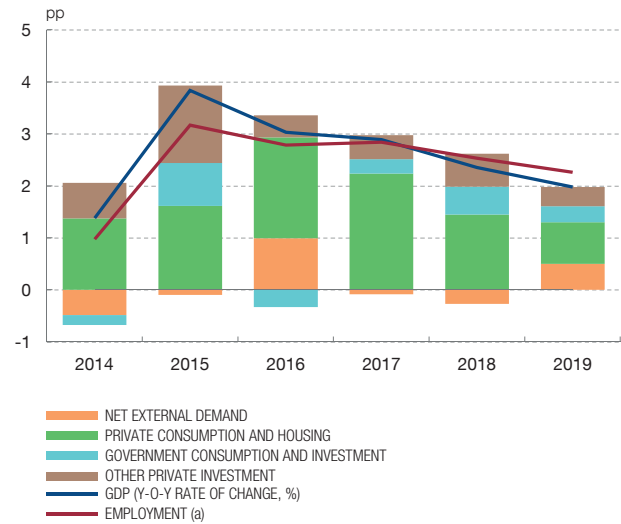
1 GDP: SPAIN AND THE EURO AREA

Year-on-year rate of change in real terms



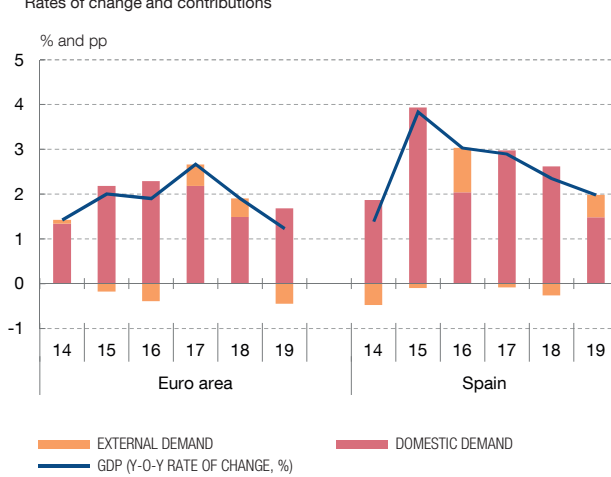
2 GDP, NATIONAL DEMAND COMPONENTS AND EXTERNAL DEMAND

Year-on-year rates of change and contributions to growth



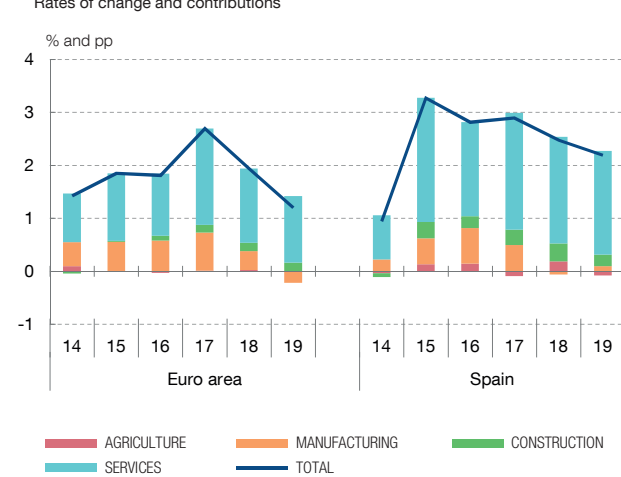
3 GDP GROWTH AND CONTRIBUTIONS OF DOMESTIC AND EXTERNAL DEMAND. SPAIN AND THE EURO AREA

Rates of change and contributions



4 REAL ADDED VALUE. ANNUAL GROWTH AND CONTRIBUTIONS OF THE DIFFERENT SECTORS OF ACTIVITY. SPAIN AND THE EURO AREA

Rates of change and contributions



SOURCES: INE and Banco de España.

a Employment according to the QNA. Full-time equivalent jobs.

euro area countries. That partly reflects the lower weight of sales by this sector of activity intended for manufacturing industry.<sup>5</sup>

5 For an analysis of the recent slowdown in activity from a sectoral perspective and the comparison with the euro area, see Banco de España (2019b).

### 3 The loss of momentum in domestic demand

The growth of the Spanish economy continued to be largely underpinned by domestic demand, which contributed 1.5 pp to the increase in GDP. Its contribution to growth was, in any event, lower than that in 2018 (2.6 pp), as a result of the lesser robustness of all its components (with the exception of government consumption, which grew somewhat more than in the previous year).

The main determinants of private consumption trended positively in 2019. Nominal household income growth remained high (3.9%), driven by job creation (which has, however, progressively eased) and by the acceleration in wages. Given that inflation, measured by the rate of change of the private consumption deflator, was slightly lower than the previous year, this robustness of nominal income fed through to real income, which was 0.4 pp up on 2018 (2.6%). Financial conditions remained conducive to spending; in line with the more accommodative monetary policy stance, the cost of new loans fell further (see Chart 2.1). However, lending standards tightened (somewhat more sharply so in the case of consumer loans than in other segments), owing essentially to banks' perception of a less favourable macroeconomic outlook and of its subsequent impact on borrowers' solvency. In any event, the improvements during the current expansionary phase in households' financial position continued into 2019, with further declines in debt ratios relative to GDP (these stood below those of the euro area for the first time since the early 2000s) and increases in the sector's wealth.

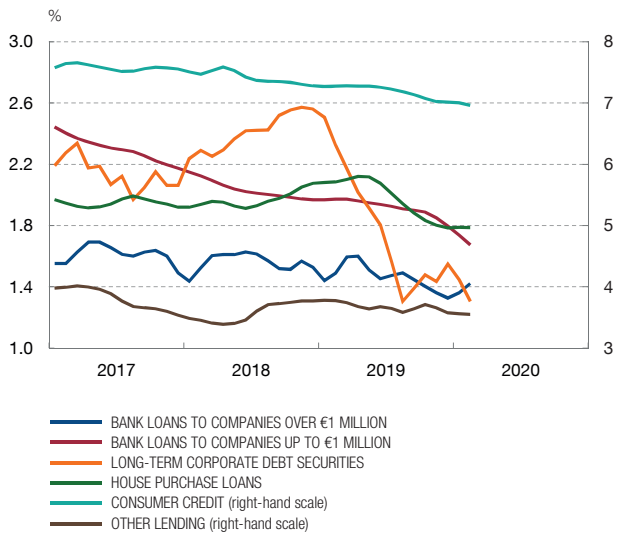
Despite the favourable trend of the main determinants of private consumption, this variable continued on the slowing path on which it had embarked in mid-2017 (see Chart 3.1). Its rate of increase stood at 1.1%, 0.7 pp down on 2018, as a result of the confluence of various factors. First, the increase in household income rested more on the recovery in real wages and less on job creation than in previous years (see Chart 3.2). This composition of income growth is estimated to be somewhat less propitious to increased consumption, given that the marginal propensity to spend is higher when the increase in income arises from job creation than when it is in response to higher wages. Also, the increase in uncertainty stemming from an international context progressively shrouded in greater sources of risk, combined with the low starting point the saving rate evidenced, drove households to adopt a more cautious attitude in their spending decisions and to assign a greater volume of their income to saving. Further, the marked buoyancy of household durables purchases between 2014 and 2018, when they rose on average at a rate close to 9%, enabled the pent-up demand for these types of goods built up during the crisis to be progressively absorbed. Accordingly, the significance of this factor as a driving force of household spending has gradually diminished. This, in turn, has been conducive to the weakness consumer loan applications have shown in recent quarters and, as a result, new lending business in this segment has slowed. Finally, the unfavourable course of the car industry following the entry into force, in September

Chart 2

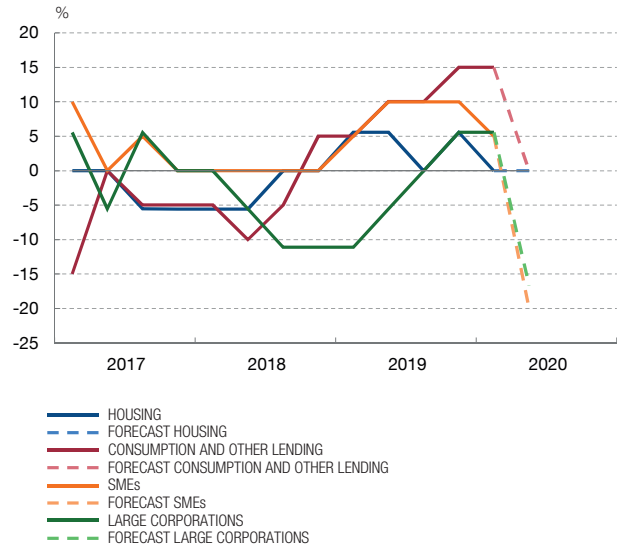
**FINANCING COSTS FELL IN 2019, BUT THE SUPPLY OF BANK CREDIT TIGHTENED MODERATELY**

The cost of private-sector financing is holding at very low levels, with further declines in interest rates since last summer. However, lending standards have generally tightened over the course of 2019. New lending business has performed weakly in 2019 (in the case of lending for house purchase, this is partly linked to the entry into force of the new Real Estate Credit Law), although it has risen in the final stretch of the year.

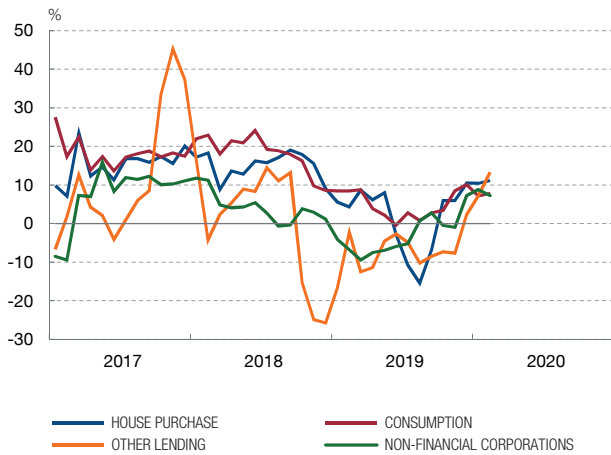
1 FINANCING COSTS (a)



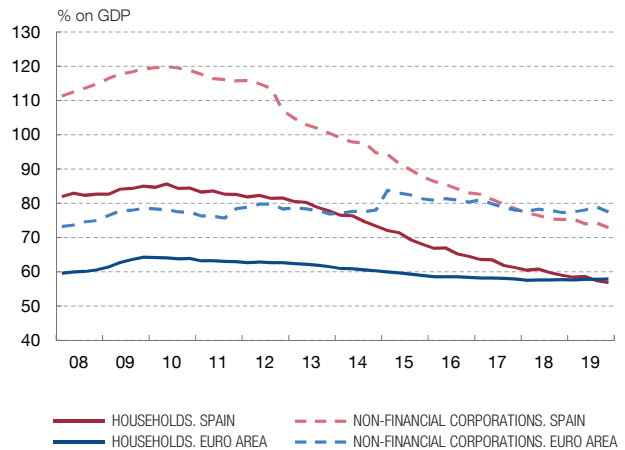
2 BLS: CHANGE IN LENDING STANDARDS



3 NEW LOANS  
Year-on-year change (c)



4 DEBT OF NON-FINANCIAL PRIVATE SECTOR



SOURCES: Banco de España, ECB and Thomson Reuters.

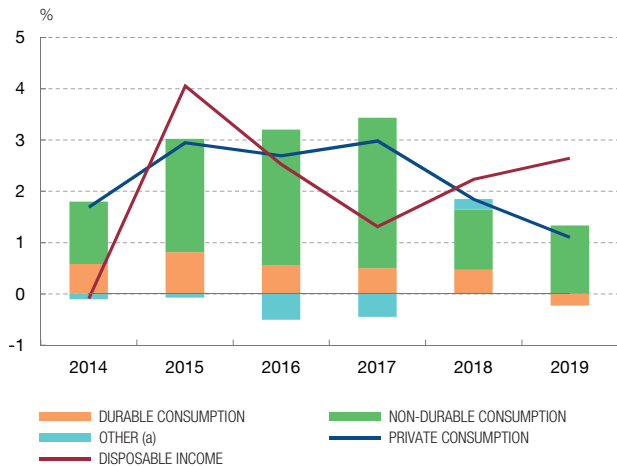
- a The interest rates on bank loans are NDER (narrowly defined effective rate) and are seasonally and irregular component-adjusted, i.e. they are trend-cycle interest rates.
- b Bank Lending Survey. Indicator = percentage of banks that have tightened their credit standards considerably  $\times 1$  + percentage of banks that have tightened their credit standards somewhat  $\times 1/2$  - percentage of banks that have eased their credit standards somewhat  $\times 1/2$  - percentage of banks that have eased their credit standards considerably  $\times 1$ .
- c Three-month cumulative flow.

Chart 3

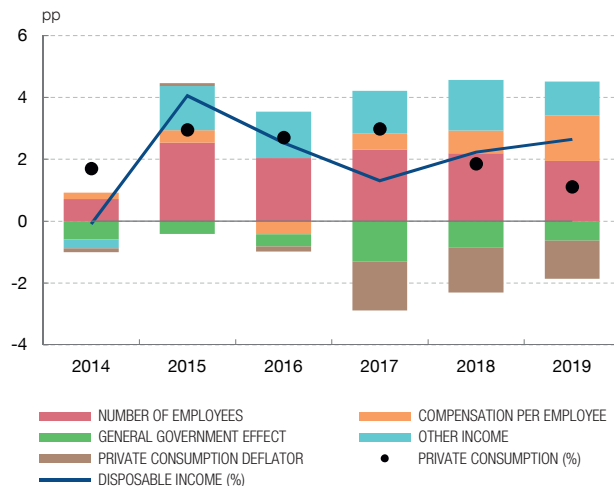
**CONSUMPTION WAS SOMEWHAT FLATTER AND THE HOUSEHOLD SAVING RATE ROSE**

Household income grew at a slightly higher rate in 2019 on a year earlier, since bigger wage increases offset the lesser contribution of job creation to income growth. The increase in consumption eased as a result of the significant slowdown in spending on durable goods, and it was more contained than that in income, which enabled the household saving rate to rise.

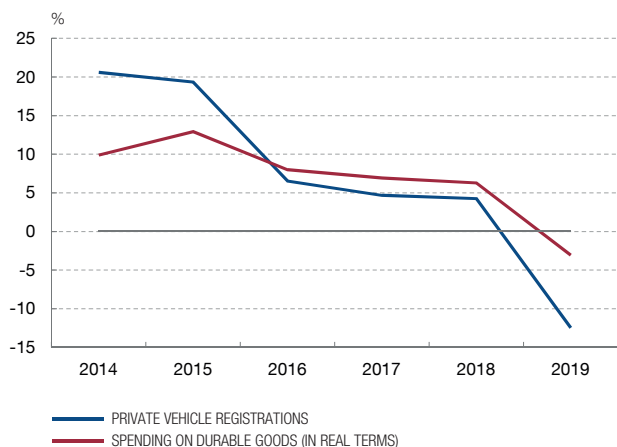
1 PRIVATE CONSUMPTION AND DISPOSABLE INCOME  
Annual percentage changes in real terms



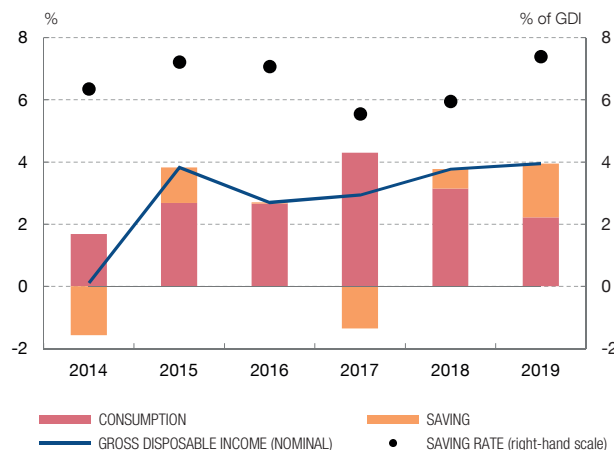
2 PRIVATE CONSUMPTION AND DISPOSABLE INCOME  
Contribution to annual percentage change in real terms



3 GROWTH RATE OF PRIVATE VEHICLE REGISTRATIONS AND OF HOUSEHOLD SPENDING ON DURABLE GOODS



4 BREAKDOWN OF THE CHANGE IN GROSS DISPOSABLE INCOME FOR CONSUMPTION AND SAVING



SOURCES: INE and Banco de España.

a NPISHs' and foreign residents' consumption less that of non-residents in national territory.

2018, of new regulations governing the measurement of polluting emissions<sup>6</sup> also contributed to the notable adjustment in household durables expenditure, which shrank by 3%, after growing by 6.8% in 2018 (see Chart 3.3). The slowdown in consumption mirrored

6 See Banco de España (2020c), which illustrates the impact on car sales that the uncertainty stemming from various factors may have had: first, that related to the consequences of the entry into force of the new regulations for the measurement of polluting emissions; second, that resulting from the introduction of regulatory restrictions on the circulation of combustion-engine vehicles in inner cities; and, lastly, that associated with the potential of cars based on other energy sources. All these factors may have contributed to the delay in some households' motor vehicle purchasing decisions.



the significant easing in this expenditure item whereas, on the contrary, the increase in spending earmarked for non-durable goods purchases rose slightly.<sup>7</sup>

The lesser momentum of household consumption, combined with the continuing increase in household income, provided for the replenishment of the sector's saving rate, which in early 2018 reached record-low levels. The rate rose to 7.4% of gross disposable income, 1.4 pp up on 2018. This recovery is estimated to have been boosted by the aforementioned easing in consumption and by the continuing high growth rate of nominal income. That helped households increase the proportion of their income earmarked for saving, without this detracting from their current spending levels. Despite this increase, the level of the household saving rate remains low; indeed, it remains below its average historical level (marginally above 8%<sup>8</sup>) and that of the euro area (13%).

Residential investment slowed notably throughout 2019, after growing at very high rates in the initial years of the recovery. The loss of dynamism is largely in response to the lesser momentum of demand, following the strong increase in recent years. However, this development might also have been influenced by agents' adaptation to the entry into force of the new Real Estate Credit Law (reflected in a contraction in new lending volumes for house purchase during the summer) and, to a lesser extent, by a slight tightening of lending standards.<sup>9</sup> Moreover, the supply of housing (and, in particular, the number of construction permits for new residential projects) also slowed, standing far off its pre-crisis maximum volume. As a result of these developments, the increase in property investment stood at 2.9%, almost 5 pp less than in 2018. Housing transactions slowed across the board (albeit unevenly so) in the different regions, posting year-on-year declines in practically all of them at end-year. The loss of momentum was particularly acute in the second-hand housing segment, with a reduction of 4% after increasing by 11% in 2018. Further, developments in the real estate market during the recovery have varied notably from region to region, in response to the uneven population growth in different geographical areas.<sup>10</sup>

Against this background of flatter residential investment, the rise in house prices eased. The slowdown occurred in most regions, in both the new and second-hand housing segments. In cumulative terms, prices have grown by around 30% from the start of 2014 to 2019 Q4 (26% in real terms and 31% in nominal terms). In any event, they are still 30% below their 2007 Q3 peak in real terms (and 17% in nominal terms).

The rise in saving and flatter investment in housing resulted in households showing net lending capacity. In net terms, this amounted to 1.1% of GDP, after having held at around zero in the previous two years.

---

<sup>7</sup> In 2018, by contrast, the slowdown in consumption fell to a greater extent on this expenditure item (and, in particular, on services).

<sup>8</sup> In the period from 1999 to 2019.

<sup>9</sup> See Menéndez Pujadas (2020).

<sup>10</sup> See Blanco (coord.) (forthcoming).

Turning to non-financial corporations, while lending standards tightened, financing costs via both loans and, more significantly, debt securities fell further. This may have led to a greater preference for bond issuance as opposed to bank lending at the larger corporations. As a result, the outstanding balance of loans obtained from resident institutions fell once more, albeit less sharply than in the previous year (0.7%). Countering this, the rate of increase of financing raised via fixed income climbed notably (see Chart 4.3). Consequently, the volume of firms' debt increased slightly, at a similar rate to that posted the previous year. Despite this modest increase, the rise in GDP enabled the corporate sector's debt ratio to hold on the declining path of the previous years, placing it at 73% of GDP at end-2019, 4.6 pp below the average euro area level.

The slowdown in economic activity is estimated to have been in tandem with less favourable business profits both in the case of SMEs and, to a lesser extent, of large corporations. This is evident in the ECB survey on the access to finance of SMEs (SAFE) and in the CBSO quarterly survey (see Chart 4.3). Along these lines, the National Accounts figures reveal that non-financial corporations' gross operating surplus grew, as in 2018, at a lower rate than in the previous three years. Activity and profits were further seen to have trended unevenly across the different sectors: manufacturing performed less favourably than services (given the greater dependence of the former on exports, which were more affected by the bouts of trade tensions internationally).

Likewise, the business outlook was adversely affected by the slowdown in activity and in export markets. A further factor was the growing uncertainty over global growth prospects, which was reversed partly in the final stretch of the year. In this respect, the results drawn from a quantitative model suggest that the rise in uncertainty might have had a significant contractionary effect on investment in 2019, greater than that exerted on other GDP components.<sup>11</sup> The lesser momentum of final demand and, in particular, of export markets is also expected to have been conducive to firms showing greater prudence when investing, against the backdrop of progressively worsening business confidence indicators, especially in manufacturing.

In this setting, the dynamism of non-financial corporations' gross capital formation eased (see Chart 4.4). The growth of investment in equipment and in intangible assets dipped by 1.3 pp to 2.7%. Although investment compensated for fixed capital consumption, capacity utilisation edged up as a result of the increase in demand. The increase in non-financial corporations' gross fixed capital formation was more marked than that in their gross saving. This meant that the sector's lending capacity fell relative to the previous year, although it remains positive (i.e. overall, non-financial corporations were once again lenders to the other sectors).

The household and business spending trends described continued into early 2020. However, they were abruptly interrupted in the second half of March, when the COVID-19

---

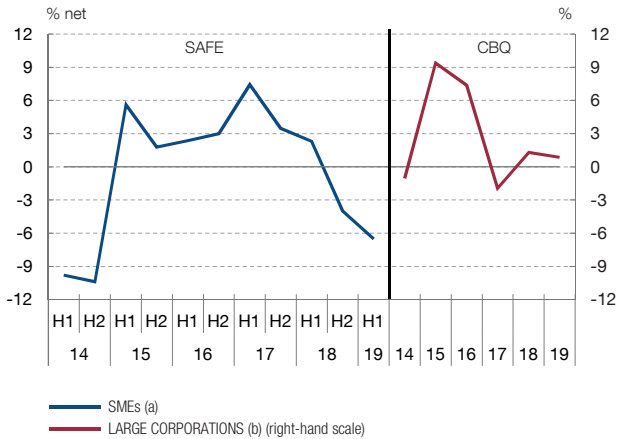
<sup>11</sup> See Ghirelli, Gil, Pérez and Urtasun (2019).

Chart 4

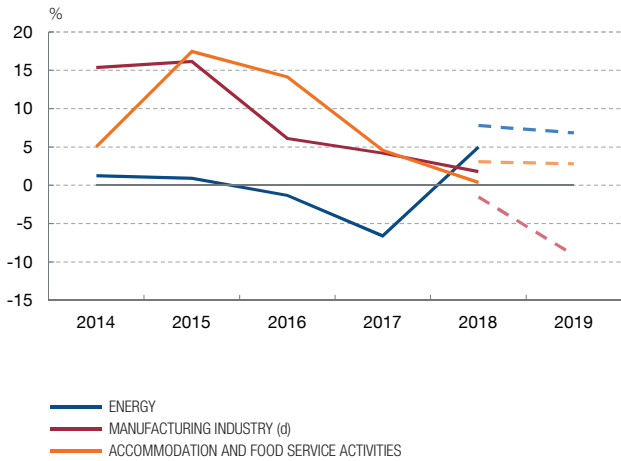
**UNCERTAINTY AND THE SLOWDOWN IN DOMESTIC AND, ABOVE ALL, INTERNATIONAL ECONOMIC ACTIVITY WEIGHED DOWN ON FIRMS' PROFIT-GENERATING CAPACITY AND INVESTMENT**

Business investment was adversely affected by the high uncertainty prevailing, and also by the slowdown in national final demand and in export markets. This setting of diminished robustness in activity is estimated to have hampered firms' income generation, and to have restricted the demand for credit despite the fact financing conditions remained favourable.

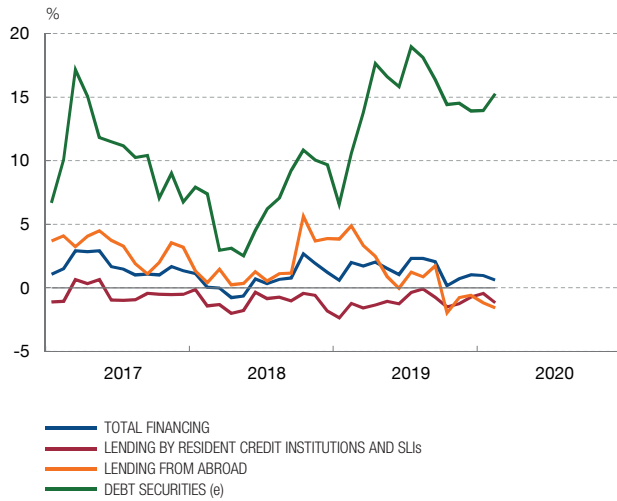
1 PROFITS OF LARGE CORPORATIONS AND SMEs



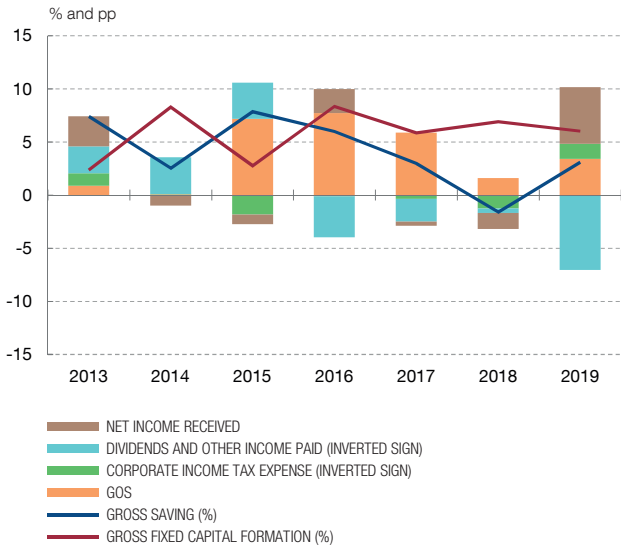
2 GROSS OPERATING PROFIT OF NON-FINANCIAL CORPORATIONS. RATE OF CHANGE (c)



3 NON-FINANCIAL CORPORATIONS' FINANCING Year-on-year change



4 CORPORATE SAVING AND GROSS FIXED CAPITAL FORMATION (f) Growth and contributions



SOURCES: INE, Banco de España, ECB and Economic Policy Uncertainty Index.

- a Percentage of firms indicating an increase in profits less that of firms indicating a decline.
- b Rates of change in gross operating profit, as a percentage, relative to the same firms the previous year. Average of the related quarters.
- c Rates of change in gross operating profit, as a percentage, of the Integrated Central Balance Sheet Data Office Survey (CBI) firms available. The discontinued series tracks this variable for the sample of firms reporting to the CBSO Quarterly Survey (at the cut-off date for this report, CBI information for 2019 was still not available).
- d Excluding the refining sector.
- e Including issues by resident subsidiaries.
- f Corporate saving and its components are expressed in current prices, and gross fixed capital formation in constant prices.

health emergency made it necessary, as in many other countries, to introduce measures restricting activity and movements.

#### 4 The positive external sector contribution

The external sector made a positive contribution to GDP growth for the first time since 2016. Exports maintained a moderate pace while that of imports lessened, leading the contribution of net external demand to turn positive, up to 0.5 pp. The rate of increase of exports rose moderately in 2019, despite the sluggishness of global trade, accentuated by the heightened global uncertainty caused by protectionist tensions and Brexit. Goods and services exports increased by 2.6% (0.4 pp up on 2018). The gains in competitiveness contributed positively to the rise in exports, once the effects of the 2017 euro appreciation faded. Export markets slowed once more (by 1.5 pp to 1.9%), although this downturn was less pronounced than that of global trade, since the deceleration was concentrated in the non-euro area countries, while the rate of increase of imports in this area rose (see Chart 5.1).

The gains in competitiveness proved conducive to export growth in 2019, unlike in the previous two years, when they resulted in an appreciable negative contribution. In this respect, the change of sign of the contribution of price-competitiveness to exports reflected the depreciation of the nominal effective exchange rate (NEER) in Spain, although it only partly reversed the cumulative appreciation in 2017. The contribution to competitiveness of relative prices and costs in 2019 was uneven (see Charts 5.2 and 5.3). Relative producer and export prices vis-à-vis our competitors, including euro area members, fell. Conversely, the ongoing adjustment of economy-wide relative ULCs was interrupted, which gave rise to a modest loss in competitiveness based on this indicator in relation to the euro area and diminished the gains against the rest of the world. Relative labour costs do not only influence competitiveness through their manufacturing component (these continued to adjust relative to the euro area), since services are increasingly tradable internationally and account for a significant proportion of the value added of goods exports.<sup>12</sup>

Export growth during the latest expansionary phase, between 2014 and 2019, was somewhat sharper than export determinants would infer. On Banco de España estimates, the contribution of export markets eased gradually during the period, against a background of slowing global trade, while the sign of the contribution of competitiveness fluctuated depending on the behaviour of the exchange rate. The increase in exports was assisted by the greater internationalisation of firms (reflected in the higher number of stable exporters), the greater geographical diversification of goods exports and the increasingly tradable nature of services. That said, there was still notable room for improvement in this growth capacity; the export structure could be more geared towards high-technological-content goods (which provide more value added and are less sensitive to cost-based competition) and towards the more dynamic emerging markets (particularly in Asia) in the long run.

---

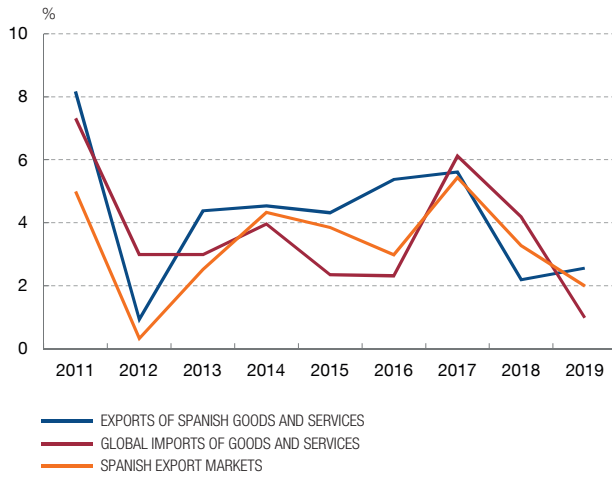
<sup>12</sup> In Spain, on the latest available information from the OECD's Trade in Value Added (TIVA) database for 2016, domestic services incorporated into the value added of manufacturing exports climbed to 23% of the total (2 pp more than in 2005). When compared with Spain's peers, this percentage can be seen to exceed that observed in Germany and the United Kingdom, but to be below that for Italy and France.

Chart 5

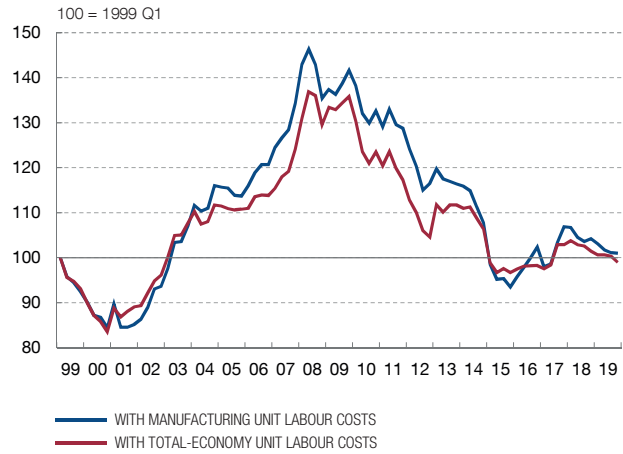
**EXPORTS CONTINUED GROWING MODERATELY**

Exports increased moderately in 2019, at a somewhat higher rate than a year earlier. This was despite sluggish world trade, exacerbated by high uncertainty globally.

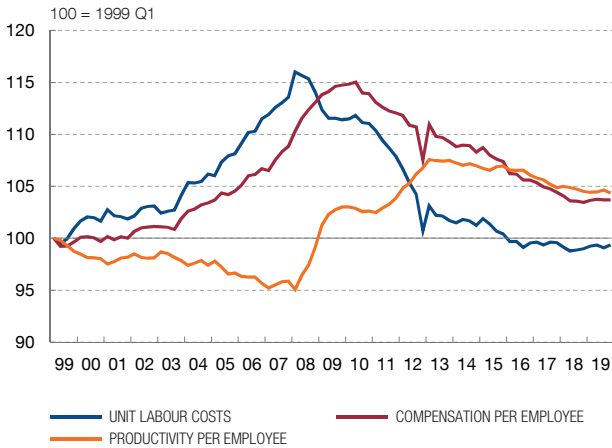
1 EXPORTS  
Rates of change in real terms



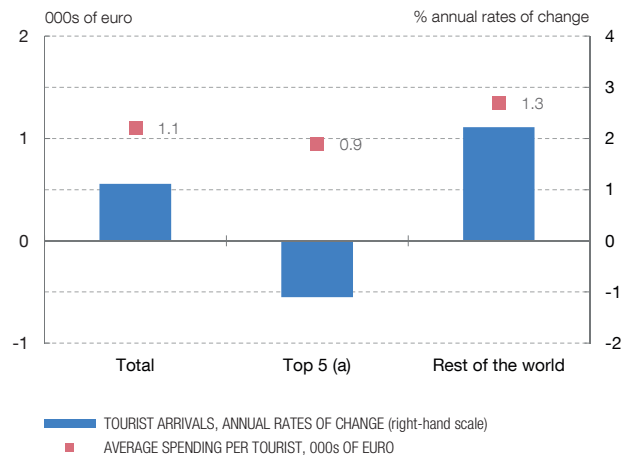
2 REAL EFFECTIVE EXCHANGE RATE AGAINST INDUSTRIALISED NON-EURO COUNTRIES



3 RELATIVE TOTAL-ECONOMY UNIT LABOUR COSTS. SPAIN/EURO AREA  
Relative level



4 FOREIGN TOURISM BY SOURCE MARKET (2019)



SOURCES: ECB and INE.

a United Kingdom, Germany, France, Nordic countries and Italy.

The trend of real exports in 2019 was heterogeneous in terms of components, and was underpinned by services. The rate of increase of services exports quickened to 6% (3.7 pp up on 2018). Of particular note was the rise in non-tourism revenues, which offset the slowdown in goods exports (by 1.1 pp to 1%).

The weakness of car and intermediate goods sales dampened goods exports. In 2019 the slight increase in exports was underpinned by those targeted on the EU, particularly capital and consumer goods, while non-Community exports continued to be

slack, as in the previous year. The rise in goods exports was curbed by the modest increase in car sales in 2019 as a whole (concentrated in the second half of the year), following the considerable contraction over the previous two years. The structural transformation the car industry is undergoing internationally and the unfavourable course of international trade adversely affected, in turn, intermediate goods exports.

The 3.1% increase in tourist revenues (1.4 pp up on 2018) was underpinned by the rise in tourist spending, since inflows grew modestly by 1.1%. This rate is similar to that in 2018 and, as in that year, it was lower than the increase in global flows (see Chart 5.4). Arrivals from the main EU markets fell in 2019, affected by the recovery in Mediterranean competitor destinations and uncertainty over the soundness of EU economic developments.<sup>13</sup> That said, 2019 saw a new record-high level of 83.7 million foreign tourist arrivals. Tourist revenue was assisted by several changes in the profile of foreign tourism, entailing higher at-destination spending: the growing weight of business or professional travel, of hotel stays and of non-EA tourists.

The growth rate of non-tourist services exports quickened appreciably in 2019 to 8.1% (5.3 pp up on 2018), the highest rate since 2006. The rise in non-tourist exports was boosted by business services, transport services, charges for the use of intellectual property, and telecommunications, IT and information. The increase in non-tourist services exports was widespread in terms of geographical areas, and was underpinned by those targeted on the EU.

Spain's export share in global trade performed more favourably than in the previous two years. In 2019, on the information available, the share in real terms of Spanish goods and services in global trade evidenced an incipient recovery, resuming the gradually rising path observed since 2014, during the last growth phase, and interrupted in the previous two years. Unlike in the early years of that expansionary phase, the 2019 gain in share is estimated to have been concentrated in services, non-tourist services in particular, since goods exports, as in the 2017-2018 period, continued to grow at a lesser pace than that in global flows. By geographical area, the increase in the 2019 share was concentrated in the non-euro area countries, after the considerable decline in the previous year (partly as a result of the adverse impact of the exchange rate appreciation). Conversely, the relative weight of Spanish exports in the euro area diminished. The cumulative gain in share between 2014 and 2019 was somewhat more pronounced outside the euro area, against a background of increases in the geographical diversification of foreign trade.

Imports slowed in 2019, influenced by the weakness of goods purchases from the rest of the world. Specifically, imports increased by 1.2% (2.1 pp less than in 2018), weighed down by the sluggishness of goods imports, which fell by 0.1% compared with a 1.9% increase the previous year. Services imports held on a buoyant course, albeit with some easing in their growth rate (7.3%, 2.5 pp down on 2018). During the growth phase,

---

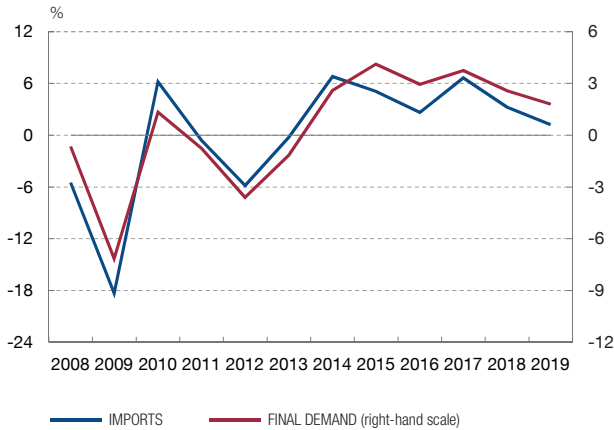
<sup>13</sup> In the United Kingdom's case, moreover, the collapse of the tourist operator Thomas Cook would have exerted influence in the closing months of 2019, especially on island destinations.

Chart 6

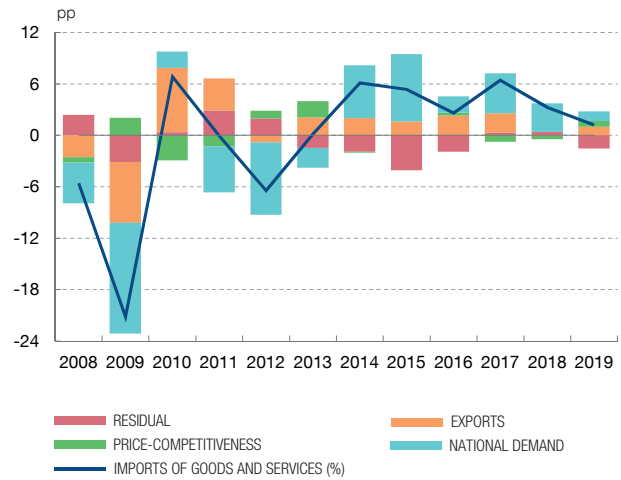
**IMPORTS CONTINUED ON THEIR SLOWING COURSE**

Imports slowed once again in 2019, weighed down by the slight decline in goods purchases from the rest of the world, which were influenced by the sluggishness of both domestic and external demand for cars and the slowdown in investment in equipment.

1 IMPORTS AND FINAL DEMAND  
Rates of change



2 TOTAL IMPORTS: GROWTH AND CONTRIBUTIONS (a)



SOURCES: INE and Banco de España.

a Based on the imports equation of the Banco de España satellite model for the foreign sector.

the response of imports to increases in final demand stood slightly below the historical relationship (see Chart 6.1), a feature shared with global trade and which might partly reflect some shrinkage of global value chains. In Spain, as in the main euro area economies, there was at the onset of the crisis an appreciable decline in the import content incorporated into the value added of the various components of final demand, according to the OECD's TIVA data<sup>14</sup>, available up to 2015. Subsequently, the recovery in import penetration has been more gradual in Spain, in a setting of more acute and prolonged recession and signs of substitution of domestic for imported inputs by Spanish firms during the crisis.<sup>15</sup> Indeed, in Spain, the foreign value incorporated into consumption and into exports had not recouped its pre-crisis level during the early years of the current growth phase, unlike it had in the main euro area economies. In the same respect, the sluggishness of domestic demand for cars, largely met by imports, has run in tandem with the product-by-product pattern of the slowdown in goods exports. This deceleration has particularly affected the sectors with a greater import content, especially automobiles, whose weight in Spanish exports to the rest of the world is, moreover, high (11% in 2018).<sup>16</sup> Adding to this, investment in fixed capital, a final demand component, along with goods exports, with a higher import content, significantly eased in 2019. These developments might explain why in 2019 the increase in imports was below its determinants (see Chart 6.2).

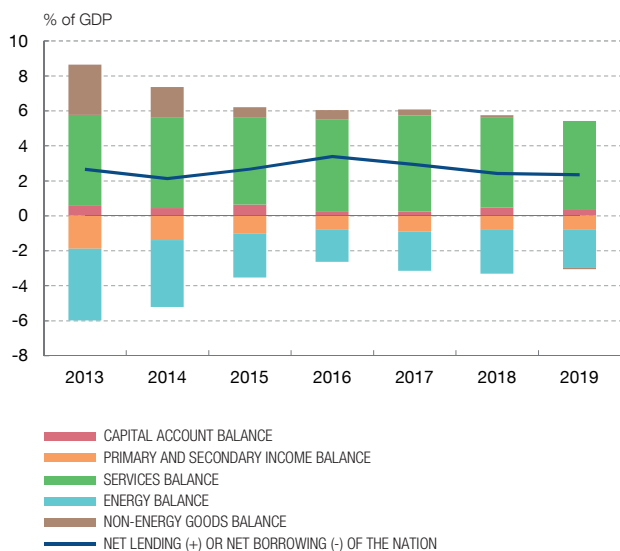
14 See footnote 1.  
15 See Banco de España (2016).  
16 See Banco de España (2020d).

Chart 7

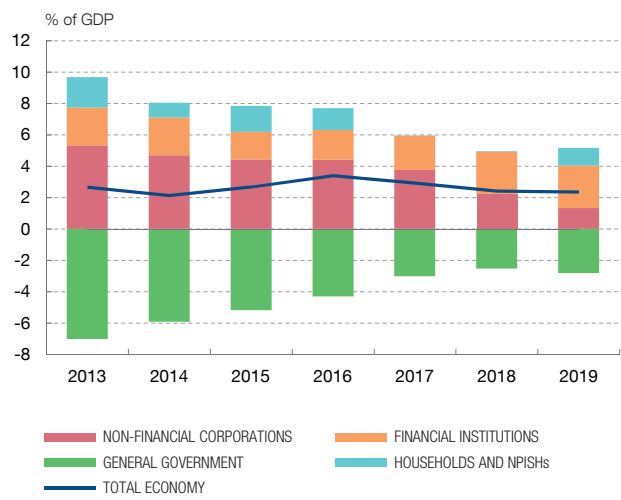
**THE EXTERNAL SURPLUS CONTINUED GRADUALLY TO EASE**

Lending capacity fell slightly in 2019, despite the fall in oil prices. It was influenced by the decline in capital transfers, the stability of tourist revenues as a percentage of GDP and the worsening non-energy goods balance.

1 NET LENDING (+) OR NET BORROWING (-) OF THE NATION



2 NET LENDING (+) OR NET BORROWING (-) BY SECTOR



SOURCES: INE and Banco de España.

At the cut-off date for this paper, the March foreign trade data are not yet available, this month being the first in which these flows have been affected by COVID-19. In any event, the interruption of global value chains and the heavy decline in activity and in demand both in Spain and in most of its trading partners have necessarily resulted in significant declines in foreign trade in goods and services. These have been particularly notable in the case of tourist flows, as evidenced in the case of Spanish exports by the March hotel tourism survey.

The external surplus fell slightly in 2019 for the third year running, despite the reduction in oil prices. The economy's lending capacity stood at 2.3% of GDP, 0.1 pp less than in 2018. This decline is on account of the reduction in the surplus on capital account, in turn the outcome of the fall-off in capital transfers from the EU. This development checked the slight increase in the goods and services surplus. Essentially, that reflected the improvement in the energy balance, which offset the stagnation in tourism revenue as a percentage of GDP and the increase in net non-energy goods imports (see Chart 7). Reflecting the more intense export gearing of the Spanish productive system<sup>17</sup>, in the expansionary phase from 2014 to 2019 external surpluses coexisted over a prolonged period alongside the accumulation of positive output gaps and favourable growth differentials for Spain relative to its trading partners. This marked an unprecedented milestone in Spanish contemporary economic history.

17 See Banco de España (2019c) and Banco de España (2018a).

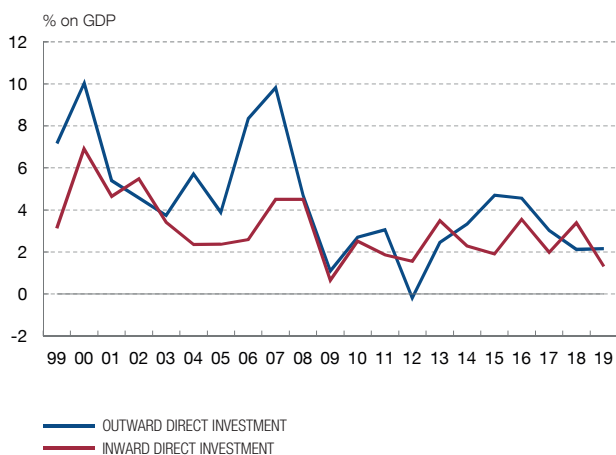


Chart 8

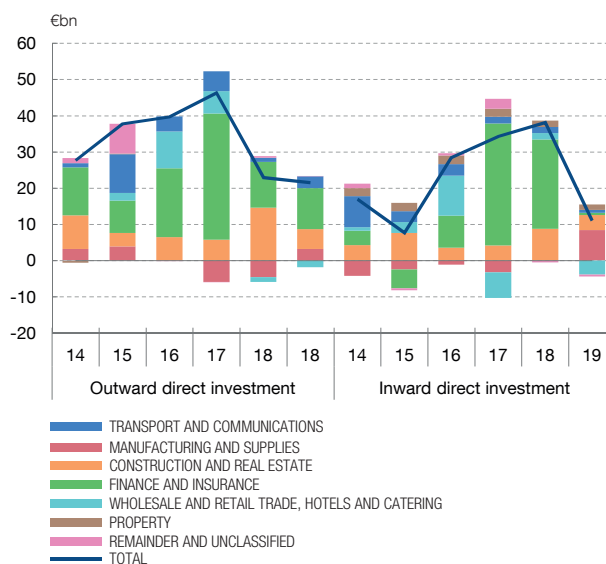
**FOREIGN DIRECT INVESTMENT CAPITAL INFLOWS EASED IN 2019**

Foreign direct investment flows into Spain in 2019 accounted for 1.3% of GDP, down on previous years, whereas outward direct investment held at the same levels as last year (2.2% of GDP). The main sectors targeted by the direct investment from the rest of the world into Spain were manufacturing industry and supplies, construction and real estate activities, and property, while outward direct investment by national agents to the rest of the world was essentially from finance and insurance, construction and real estate activities, and transport and communications.

1 FOREIGN DIRECT INVESTMENT FLOWS



2 FOREIGN DIRECT INVESTMENT FLOWS BY ECONOMIC ACTIVITY ACCORDING TO DIRECTIONAL PRINCIPLE



SOURCE: Banco de España.

According to Balance of Payments information, capital inflows into Spain in the form of direct investment fell in 2019 to 1.3% of GDP, the lowest figure since 2009 (see Chart 8). This is part of a general pattern in Europe of declining foreign direct investment flows. At the same time, a contraction was also seen in these flows specifically in investment earmarked for financial and insurance activities, which in previous years had been the main destination sectors.<sup>18</sup> Spanish direct investment in the rest of the world in 2019 stood at 2.2% of GDP, a similar level to that of the previous year and down on that observed during the preceding years. These flows were essentially from financial and insurance activities, construction and real estate activities, and the transport and communications sector. Indeed, these sectors also concentrated this type of investment in previous years.

<sup>18</sup> For a detailed explanation of the methodological aspects of the directional principle, on which these records are based, see Banco de España (2018b).

## 5 Developments in public finances

The year 2019 saw the level of the budget deficit worsen for the first time since 2009. Specifically, the overall general government deficit increased in 2019 to 2.8% of GDP, its first increase since 2009, if financial aid is excluded<sup>19</sup> (see Chart 9.1). This worsening was due to the increase in expenditure outpacing that in revenue, mainly as a result of the measures adopted in 2019 Q1. The measures prompted an acceleration in primary public spending growth (net of atypical effects<sup>20</sup>) to 5%, the highest rate since 2009, and far above the nominal growth of the economy. The biggest increases were in social benefits (which grew by 6.3% owing to the increase in household allowances and unemployment benefits, and to the CPI-based revaluation of pensions) and in compensation per employee (which rose by 5.3%, owing to the wage rise agreed with the trade unions for public-sector workers<sup>21</sup>). Under revenue, the most dynamic component was social security contributions, while the weight of direct and indirect taxes in terms of GDP declined.

The increase in the structural deficit reflects the expansionary nature of fiscal policy in 2019. On Banco de España estimates, the structural deficit is expected to have worsened in 2019 by 1 pp of GDP to a level of around 3% of GDP. Accordingly, the modest improvements built up in the most recent period (see Chart 9.1) will have been offset in 2019, returning to a similar level to that estimated for 2015-2016. That is indicative of the fact that the reduction observed in the budget deficit during the last upturn was essentially due to the effect of the economic cycle and to the reduction in the interest burden, in a setting in which the average cost of public debt stood in 2019 at 2.4%, its record-low level.

The general government debt ratio continued on a gradually declining path in 2019 to 95.5% of GDP, far above the reference value of 60% in the current framework of European fiscal rules and the Organic Law of Budgetary Stability and Financial Sustainability (see Chart 9.2). The 2.1 pp reduction in the debt ratio in the current year was due to the buoyancy of nominal GDP and to the presence of a high negative stock-flow adjustment (largely due to the decline in the balance of the Treasury's account at the Banco de España<sup>22</sup>), since both elements more than offset the effect of the deficit.

Against this background, after a decade of being subject to the “corrective arm” of the Stability and Growth Pact (SGP), in June 2019 Spain was moved under the “preventive arm”, which still demands a sizeable fiscal effort. The European Commission's requirement

<sup>19</sup> In 2011 and 2012, public aid for an amount of 4% of GDP was granted to Spanish financial institutions, prompting increases in the deficit in both years.

<sup>20</sup> In 2018 there were expenses in respect of deferred tax assets (€1,073 million) and of the State's financial liability for the bankrupt motorway concessionaires (€1,800 million) that did not recur in 2019.

<sup>21</sup> This acceleration was also affected by the delayed impact of certain measures adopted in 2018 (mainly relating to the personal income tax reform).

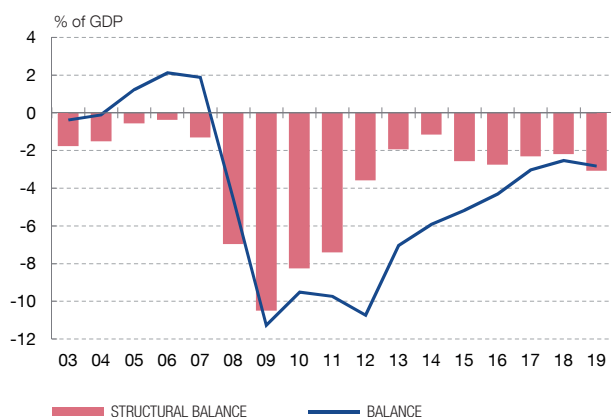
<sup>22</sup> Net acquisition of assets by general government amounted to 0.3% of GDP in 2019, compared with an average of 1.3% in the four previous years.

## Chart 9

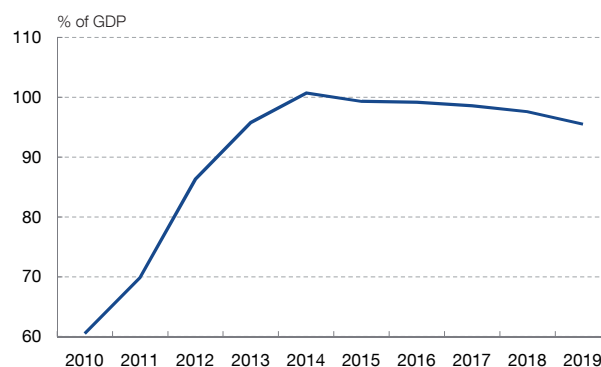
### PUBLIC FINANCES

The budget deficit and the structural deficit worsened in 2019, while the public debt ratio continues on its gradually declining path, still holding far above the 60% reference value.

1 OVERALL AND STRUCTURAL GENERAL GOVERNMENT BALANCE



2 PUBLIC DEBT



3 GENERAL GOVERNMENT REVENUE AND SPENDING

Percentages of GDP	2018	2019	2019 - 2018
General government revenue	39.2	39.1	-0.1
Indirect taxes	11.7	11.4	-0.3
Direct taxes	10.6	10.4	-0.2
Social security contributions	12.4	12.9	0.5
Other revenue	4.5	4.4	-0.1
General government spending	41.7	41.9	0.2
Compensation	10.6	10.8	0.1
Other final consumption expenditure	7.7	7.8	0.0
Social benefits	15.4	15.8	0.4
Actual interest paid	2.4	2.3	-0.2
Gross capital formation	2.1	2.0	-0.1
Other	3.4	3.2	-0.1
General government balance	-2.5	-2.8	-0.3
General government debt	97.6	95.5	-2.1

SOURCES: IGAE, MINHAP and Banco de España.

of Spain was that it should reduce its structural budget deficit by 0.65 pp of GDP in 2019<sup>23</sup> and that its annual general government expenditure growth should be lower than 0.9%. The end-2019 data show that there was a failure to meet both requirements. However, following the onset of the COVID-19 health crisis, the EC has decided temporarily to freeze

<sup>23</sup> See the European Commission's opinion on Spain's 2019 Budget Plan, published on 21 November 2018. The adjustment requirements under the SGP's preventive arm are based on three rules. First, a reduction in the structural budget deficit of 0.5 pp of annual GDP, or more if the cyclical position is positive, until attaining its medium-term objective of structural equilibrium. Second, the public debt/GDP ratio shall decline annually by one-twentieth of the difference between the level each year and the 60% benchmark, insofar as it remains above this level. Finally, the annual rate of increase of general government expenditure shall be equal to or below the economy's medium-term potential growth.

the framework of rules constituting the SGP and not to require compliance until the economy recovers from the effects of the pandemic. As a result of the health crisis, the budget deficit will undergo a most significant increase in 2020, owing both to the discretionary measures adopted and to the operation of the automatic stabilisers.

## 6 Costs and prices: prolongation of the low-inflation scenario

In 2019 there was a step-up in the rise in labour costs witnessed in the two previous years to 2% in the year as a whole, up from 1% a year earlier, marking the biggest increase since 2010. In the private sector this rise was somewhat more moderate, posting an increase of 1.6%, 0.5 pp above the rate observed in 2018 (see Chart 10.1).

In real terms, stripping out the inflation effect, wages posted an increase of 1.3% in 2019 (0.9% in the market economy), after the declines observed in the three previous years. As a result, real wages are estimated currently to stand at a similar level to that at the onset of the recovery. The individualised information from the Spanish MCVL (Social Security administrative labour records) to 2018 shows that this stabilisation in real wages is partly reflecting a restraining influence on average labour costs of composition effects; as a result, in constant terms, real wages have grown slightly since the start of the recovery (see Chart 10.2). These negative composition effects are essentially due to the creation of new jobs associated with lower-than-average wages in the economy, whereas other factors such as the composition of employment by age or level of skills would contribute positively to the growth of economy-wide average wages (i.e. the groups with higher wage levels, those whose members have a university education or are older, are estimated to have gained weight in the economy).

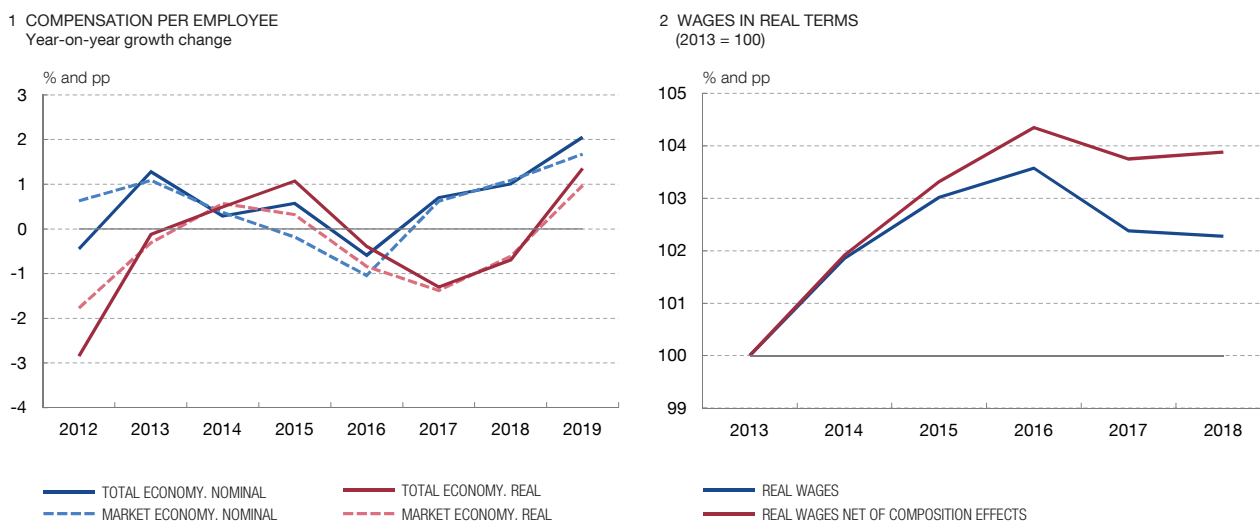
In terms of sectors, higher wages were fairly generalised, except in construction. Wage rises were particularly high in the non-market services sectors (3.3%, compared with 0.9% in 2018), a reflection essentially of the wage increase approved for public-sector employees. In the private sector, the rise in wages rested on several factors. Firstly, wage increases under collective bargaining agreements grew to 2.3% in 2019, following the figure of 1.7% in 2018 further to the employment and collective bargaining agreement (AENC by its Spanish abbreviation) that the social agents adopted in July that year. Specifically, the increase under revised agreements, entered into in previous years, rose to 2.1% (1.6% in 2018) and newly signed agreements rose more sharply, to an average increase of 3% (2% in 2018). In both cases, these increases were in line with AENC wage recommendations, which set an increase of 2% per annum, plus an additional variable component of up to 1%. Also, this wage rise is in step with the progressive cyclical improvement in the labour market, which has enabled the sizeable difference opened up during the crisis between the actual unemployment rate and the structural or equilibrium unemployment rate to be eliminated.

Labour costs increased in 2019 as a result of the 22.3% rise in the national minimum wage and the 7% increase in the Social Security maximum contribution bases. Conversely, average compensation continued to fall in 2019 owing to large-scale negative wage drift. Specifically, QNA estimates show strong wage drift of over 1pp in 2019, once the effects on average labour costs of the rise in the national minimum wage and the increase in the maximum contribution bases are stripped out. That would be on account of the aforementioned negative composition effects.

Chart 10

## LABOUR COSTS

Compensation per employee rose in 2019 to a rate close to 2%, above the figures observed throughout the recovery phase. In real terms, having stripped out the inflation effect, wages also grew in 2019 following the slight declines seen in the three previous years. Composition effects, arising essentially from the lower wages for new jobs created, partly account for this stability in real wages during the recovery period.



SOURCES: INE, Continuous Survey of Working Life and Banco de España.

The bigger wage increases recorded in 2019 led to an acceleration in ULCs, against a backdrop of small declines in productivity. Specifically, ULCs increased by 1.7% in the market economy (2.3% economy-wide) in 2019, up on 1% in 2018, extending the rising path initiated in 2017.

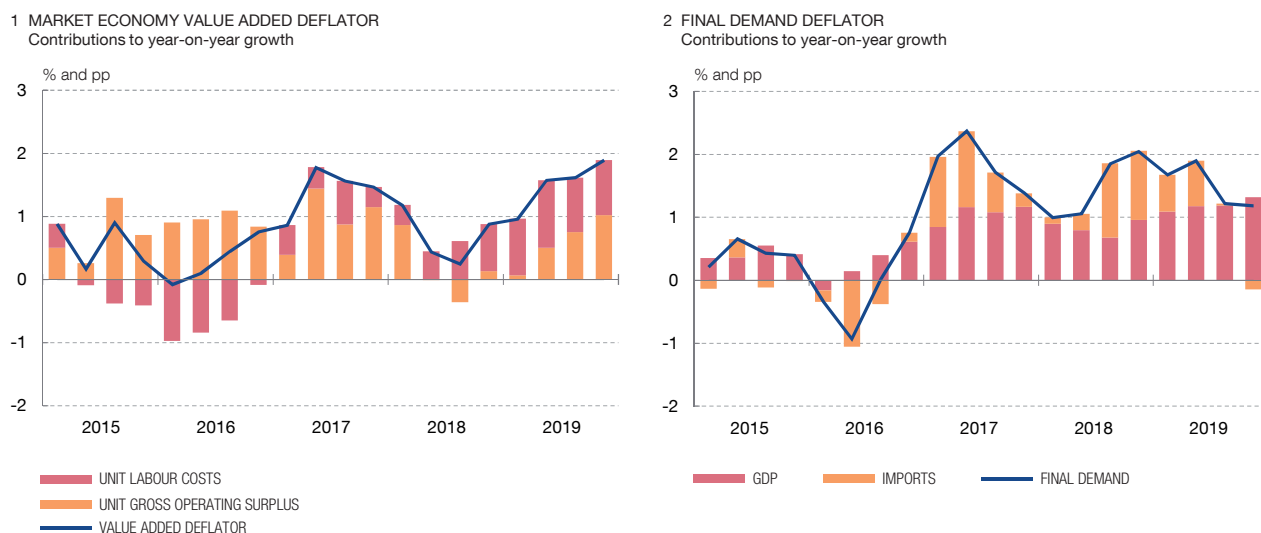
Despite these higher labour costs, domestic prices continued to grow at moderate rates. The market economy value added deflator, which is a measure of domestic inflationary pressures, was up 1.5% in 2019, a somewhat bigger increase than that of the previous year. However, for the second year running, the increase was lower than that in ULCs. As a result, business mark-ups are estimated to have contracted slightly. The growth rate of the imports deflator eased to 1.2%, assisted by the fall in oil and other commodities prices on international markets. Reflecting the opposite movements in domestic and external inflationary pressures, the final demand deflator increased by 1.5% in 2019, unchanged on the previous year (see Chart 11).

The growth of consumer prices, measured by the rate of change in the HICP, fell to 0.8% on average in 2019, from 1.7% the previous year (see Chart 12). This reduction mainly reflected the negative contribution of energy prices and, to a lesser extent, the lower contribution of food prices. Conversely, the contribution of core inflation, measured by the HICP excluding energy and food prices, held virtually stable, with annual average growth of 1.1% in 2019 (1% in 2018).

Chart 11

## DOMESTIC AND EXTERNAL PRICES

The market economy value added deflator posted a higher growth rate than the previous year and moved on a rising path over the course of the year, owing to the increase in the unit surplus and the quickening in ULCs. The growth of the final demand deflator held stable for the year on average as a result of the acceleration in domestic prices and the moderation of external prices (measured, respectively, by the GDP and imports deflators).



SOURCES: INE and Banco de España.

A forceful determinant of the trajectory of overall inflation last year was energy prices, as in previous years. After moving on a rising path in the first four months of the year, inflation fell to October, picking up subsequently to a rate of 0.8% in December 2019. This course was in line with the behaviour of the energy component. Adding to the fall in oil prices, which began in May, was the lower cost of electricity, which continued until the end of the year.

Core inflation increased by 0.1 pp in annual average terms to 1.1%, as a result of the 0.2 pp acceleration in non-energy industrial goods. The modest increase in this component (0.3% in 2019) was once again below the growth of the domestic production prices of these goods. The services component increased by 1.5%, 0.1 pp down on a year earlier, in contrast to the acceleration in ULCs.

In recent years core inflation has moved on a substantially more moderate trajectory than it did before the global financial crisis. As Chart 12 shows, there are three types of factors behind this moderation<sup>24</sup>: some reduction in agents' inflation expectations, and lower external pressures (linked to commodities prices and to the exchange rate) and domestic pressures (primarily, from domestic production prices and from agricultural prices). Indeed, the indicators proxying these latter two variables were at record-low levels in 2019.

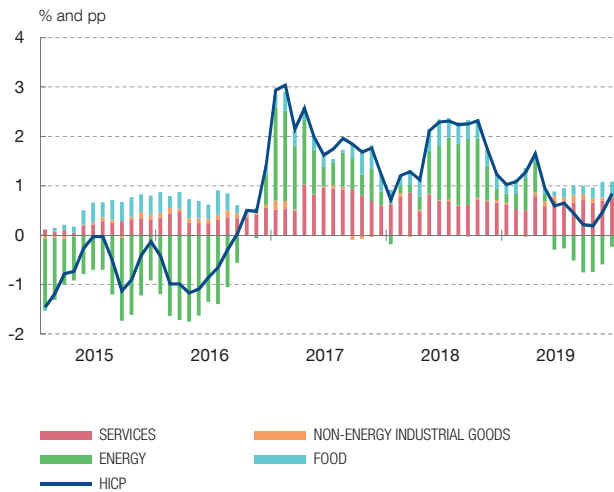
<sup>24</sup> For a description of these indicators, see Álvarez and Sánchez (2018).

Chart 12

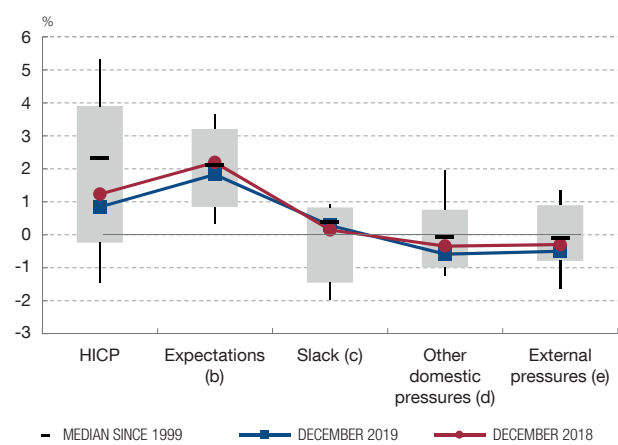
**CONSUMER PRICES OSCILLATED STRONGLY, WHILE CORE INFLATION HELD AT LOW LEVELS**

The annual average rate of the HICP (0.8%) was the result of a variable trajectory, much influenced by changes in energy prices. Behind the easing in inflation was some reduction in inflation expectations and lower external and domestic pressures. Core inflation held at a moderate growth rate similar to that of the euro area. However, the annual average inflation differential stood at -0.4 pp, reflecting the greater presence in Spain of items with negative year-on-year rates.

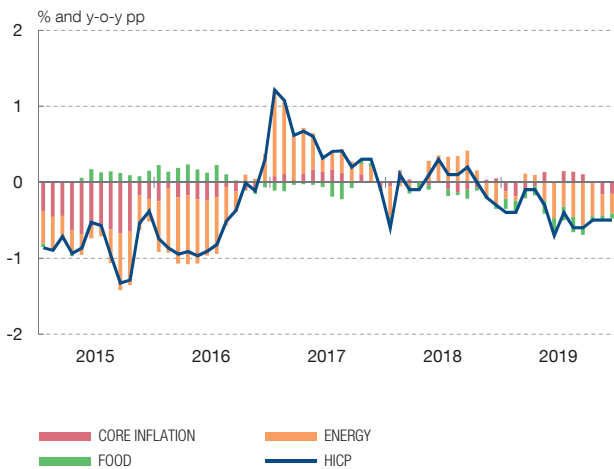
1 HICP. CONTRIBUTIONS TO YEAR-ON-YEAR RATE



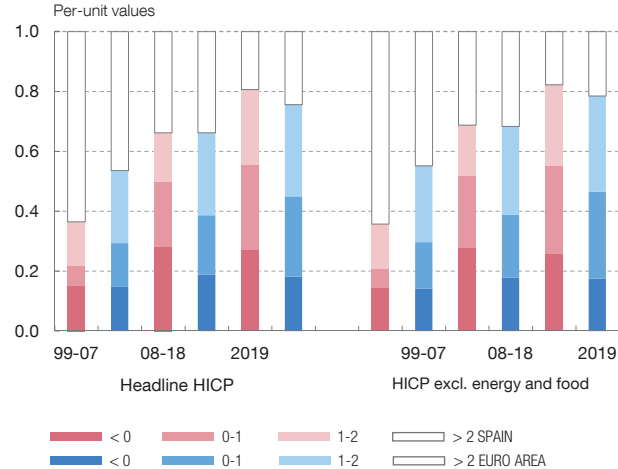
2 INFLATION PRESSURE INDICATORS (a)



3 CONTRIBUTIONS TO SPANISH-EURO AREA INFLATION DIFFERENTIAL



4 PROPORTION OF ITEMS WITH YEAR-ON-YEAR RATES BY INTERVAL



SOURCES: European Commission, INE and Banco de España.

- a See Álvarez and Sánchez (2018) for a description of the composite indicators of inflationary pressures.
- b Inflation expectations of professional forecasters, firms, consumers and inflation swaps.
- c Includes output gap, capacity utilisation, unemployment rate, quarter-on-quarter change in the unemployment rate, recession gap and quarter-on-quarter change in GDP and in private consumption.
- d Includes labour costs, business mark-ups and domestic output prices.
- e Imported goods prices: final products, intermediate goods and commodities.

The inflation differential between Spain and the euro area, measured by the HICP, averaged -0.4 pp in 2019, following the zero differential the previous year. Spain's lower overall inflation is in response, first, to the greater presence of goods and services with negative year-on-year changes, as has habitually been the case since the start of the



crisis; and, further, to a lower number of items with inflation of over 2%. Among the main components, energy prices grew on average less in Spain than in the euro area, influenced by cheaper electricity and gas in our country. Also, food prices rose more moderately in Spain, owing essentially to the behaviour of certain items, such as oil and tobacco. However, core inflation behaved similarly in both areas, with an annual average differential of 0.1 pp, albeit with some variability over the course of the year. The positive differential in Q2 and Q3 was in both non-energy industrial goods and in services. In core inflation there was also a greater presence of items with negative changes in Spain.

## 7 The slowdown in employment

The rate of increase in employment eased progressively over the course of 2019. It ended the year posting year-on-year growth of 2% (compared with 2.7% at end-2018), exceeding the slowdown observed in GDP (see Chart 13). This moderation was similar in terms of employment per the Spanish Labour Force Survey (EPA). According to the information on registrations, the slowdown in employment in 2019 was across the board in terms of sectors. It was however more marked in agriculture, resulting in a year-on-year decline of 2.7% in December 2019, and in construction, where the increase dipped from 6.5% year-on-year at end-2018 to 2.4% a year later. The information from the EPA shows a similar path, with greater declines in employment in these two sectors. By type of contract, the adjustment in employment was centred on temporary employees, whose numbers declined by 0.5% at end-2019 compared with the 3.9% increase a year earlier. Conversely, numbers of permanent employees showed notable strength throughout the year, with year-on-year growth of 3.4% at end-2019, which enabled the ratio of temporary to permanent employees to fall to 26.1%. This was above the low reached at the end of the crisis but far off the record-the high levels recorded in the previous expansionary cycle. By level of educational attainment, employees with elementary studies declined by 3% in 2019 Q4, while the increases in those with intermediate (2.3%) and higher (3%) studies held unchanged.

This slowdown in employment over the course of 2019 might be due to different factors, including the 22.3% increase in the national minimum wage approved at the start of the year. In this respect, Lacuesta et al. (2019) showed a small but significant effect on the probability of those affected by the rise in the national minimum wage in 2017 keeping their jobs which, if transferred to the much higher 2019 rise, would have led to an overall negative impact on the aggregate course of employment. The individualised information from the MCVL is not yet available for 2019; accordingly, it is not possible to estimate the potential effect of this rise on the probability of job loss on the basis of the definition of a control group that enables the effects of the national minimum wage to be isolated from other types of shocks affecting this probability. In this situation, the disaggregated information available in the Social Security records on registrations only allows analysis of the extent to which the slowdown in employment was greater (if indeed it was) in those groups where the incidence of the national minimum wage increase is greater. This analysis shows a bigger slowdown in employment among the under-30s, especially those aged 16-19, and a worse employment performance in the regions and provinces with a greater presence of groups on which the national minimum wage has a greater influence. These correlations tend to be statistically significant when more disaggregated information is used, at provincial level and with groups within a five-year age bracket, or in terms of provinces and activity divisions. However, as earlier mentioned, only the analysis of the individual data of the workers affected will enable the effect of factors other than the national minimum wage rise that might also explain these developments to be stripped out.

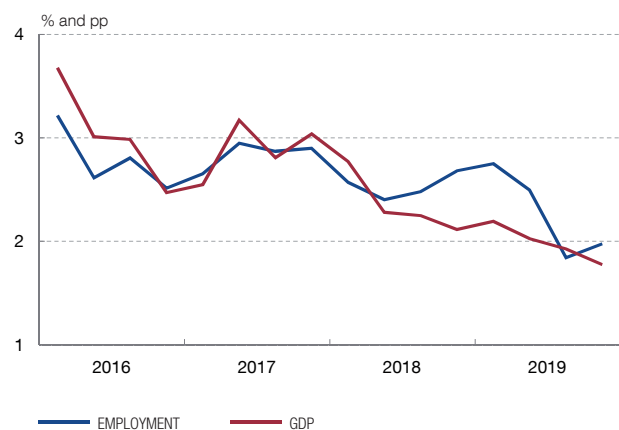
The lower growth of employment in 2019 led to a decline in the unemployment rate below that observed in the previous years: at end-2019 it stood at 13.8%, 0.8 pp down on a

Chart 13

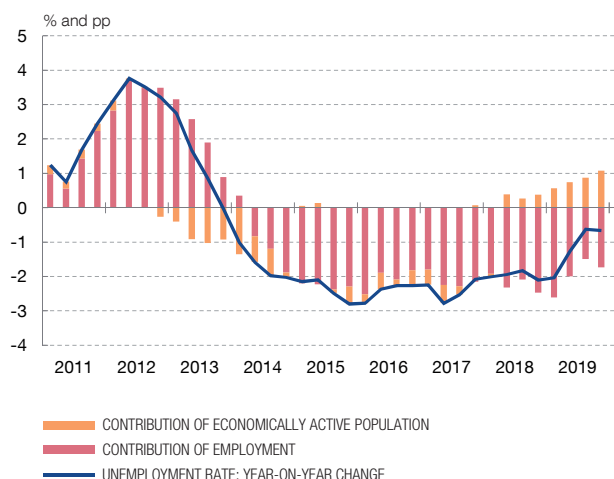
**EMPLOYMENT AND UNEMPLOYMENT**

Employment slowed over the course of 2019 to a year-on-year rate of 2% at the end of the year, compared with 2.7% a year earlier. This easing in the growth of employment prompted a smaller decline in the unemployment rate. This rate stood at 13.8% in 2019 Q4, 0.6 pp below the end-2018 rate, when throughout the recovery period the annual decline had exceeded 2 pp per annum.

1 GDP AND EMPLOYMENT  
Year-on-year growth rate (%)



2 UNEMPLOYMENT RATE: YEAR-ON-YEAR CHANGE (%)  
Employment and labour force contribution



SOURCE: INE.

year earlier, when the average year-on-year decline since 2014 had exceeded 2 pp. By age, unemployment continues to particularly affect younger workers (with a rate of 23.8% among the under-30s), and by educational level, it bears down on the lesser-skilled (27.2%). The fall in unemployment since the end of the crisis has not prevented a situation whereby 43.5% of the unemployed have been seeking a job for over a year, with the risk this entails for their employability. Also contributing to the smaller decline in the unemployment rate in 2019 was the rise in the labour force, the growth of which was 1.3% at end-2019, its highest rate since early 2009. This increase was due to the dynamism of the foreign labour force (7.4%), while Spanish nationals evidenced the slackness of the previous years. As has recently been the case, the participation rate held stable, in a setting in which the declines observed among the young and progressive population ageing offset the increase in the participation of more elderly workers.

Broadly, between January and mid-March 2020 the favourable trend of the labour market continued. But the daily data on Social Security registrations show a most acute impact of the shutdown in productive activities associated with the state of alert decreed to combat COVID-19. Specifically, from 13-31 March, registrations fell by 890,635. Moreover, several million employees have availed themselves of temporary layoff or furlough arrangements and, in the case of the self-employed, of the benefits for cessation of activity.

**THE GREATER RESILIENCE OF THE SPANISH ECONOMY IN 2019 COMPARED WITH THE EURO AREA: A SECTORAL PERSPECTIVE**

In 2019 the Spanish economy once again grew at a higher rate than that of the euro area (EA) as a whole. Even though both economies slowed, Spain's did so with less intensity. Specifically, Spanish GDP increased by 2%, 0.4 pp down on the previous year, while the actual rate in the EA was 1.2%, compared with 1.9% in 2018. From a sectoral perspective, the lesser loss of momentum in the Spanish economy is due to the better performance of manufacturing industry<sup>1</sup>, whose value added quickened by 1.1 pp to a growth rate of 0.7%; that is in contrast to the sluggishness of EA manufacturing, which shrank by 1.1% (see Chart 1). Conversely, the modest slowdown in the services sector in Spain was similar in scale to that of its European partners. The aim of this box is to explore the factors behind the greater resilience of the Spanish manufacturing sector (and, by extension, of the economy as a whole) relative to the EA over the course of 2019.

The unevenness of activity across the different sectors of the economy may be due to many factors, one of which is the behaviour of external demand. Since manufacturing products tend to be more geared to export than services, the former generally react to a greater extent to the fluctuations in demand from the rest of the world.<sup>2</sup> Specifically, a notable reduction in global trade was discernible in 2019, meaning that, a priori, this factor might have played a significant role in explaining the comparatively more unfavourable behaviour of the manufacturing sector.

With the aim of investigating the contribution of the degree of external exposure to explaining the sluggishness of EA manufacturing activity (and, ultimately, its better performance in Spain's case), the percentage of each manufacturing sector's value added sold outside the domestic market has been calculated for each country (what is known as "export orientation").<sup>3</sup> This indicator is, therefore, a measure of the exposure of each of these sectors to an external shock. In aggregate terms, the export orientation of Spanish manufactures stands at 55%, 11 pp below the EA as a whole.

The differences are even more significant if the measure is constructed drawing a distinction between whether the destination of the exports is the other EA countries or, alternatively, the rest of the world. In particular, the export orientation of Spanish manufacturing to non-EA countries stands at 33%, far below the figure for Germany (52%), France (40%) and Italy (42%) (see Chart 2). Conversely, Spanish manufacturing has an intra-EA orientation of 22%, 2-3 pp higher than that observed in Germany, France and Italy. Against the backdrop of weak international trade throughout 2019, markedly so in the non-EA countries (see Chart 3), the lesser exposure of the Spanish manufacturing sector to this geographical aggregate marks a differentiating factor that might explain its greater resilience in relative terms compared to the other EA countries.

Chart 1  
GVA. AVERAGE ANNUAL GROWTH AND CONTRIBUTIONS

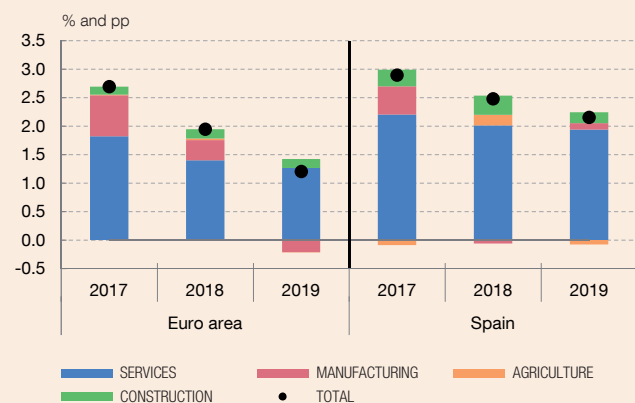
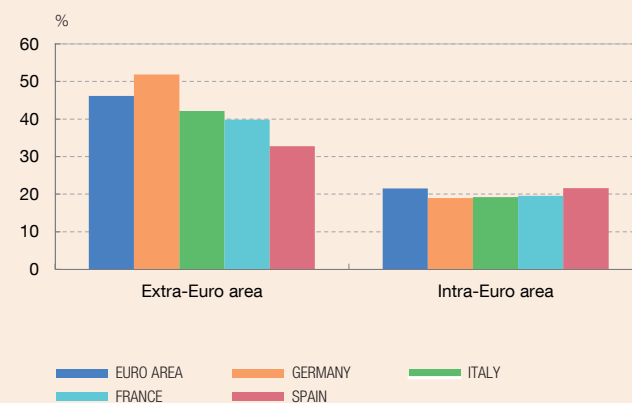


Chart 2  
MANUFACTURING EXPORT ORIENTATION



SOURCES: Eurostat, OECD and CPB.

1 Generally, the manufacturing performance in Spain is better than that of most EA countries, and not only better than the aggregate, which is much influenced by Germany.  
 2 Spain exports 55% of its manufacturing production, compared to 15% in services. These figures rise, in the case of the EA, to 65% and 20%, respectively.  
 3 The analysis uses data from the WIOD (world input-output tables), which offer detailed information on uses and destinations for a broad set of countries and sectors. This information enables measures of international exposure, such as export orientation, to be calculated without incurring in the double counting inherent in measures based on export/production ratios (i.e. counting as exports products that have been imported previously from other countries as inputs and which, therefore, are not part of the domestic value added that is exported).

Box 1

**THE GREATER RESILIENCE OF THE SPANISH ECONOMY IN 2019 COMPARED WITH THE EURO AREA: A SECTORAL PERSPECTIVE (cont'd)**

A more granular analysis of export orientation shows that Spain's lower extra-EA exposure is across the board in terms of geographical destination and of manufacturing sector (see Charts 4 and 5). By way of example, the exposure to extra-EA markets of sub-sectors such as the car industry (C29) and the manufacture of electronic products (C26) is 40% and 34% in Spain, compared with 55% and 60% in the EA as a whole. From the standpoint of a greater geographical disaggregation, Spanish manufacturing's export orientation to China (1.9%) and the United States (3.8%) accounts for approximately half that observed for the EA. These differences suggest that the geographical specialisation of Spanish exports might indeed have placed its manufacturing industry in a

position of less vulnerability in the face of the international trade downturn in 2019.

It is in fact possible to verify that the heterogeneity of the sector- and destination-based extra-EA export orientation of the various EA countries is an explanatory factor of the differences observed in the extent of the slowdown in manufacturing activity in 2019. Indeed, if – for the different combinations of (EA) country of origin and sector – regard is had to extra-EA export orientation and developments in activity, proxied by the change in the growth rate of the Industrial Production Index (IPI) between 2018 and 2019<sup>4</sup>, a negative relationship can be observed between both variables

Chart 3  
REAL IMPORTS. YEAR-ON-YEAR GROWTH

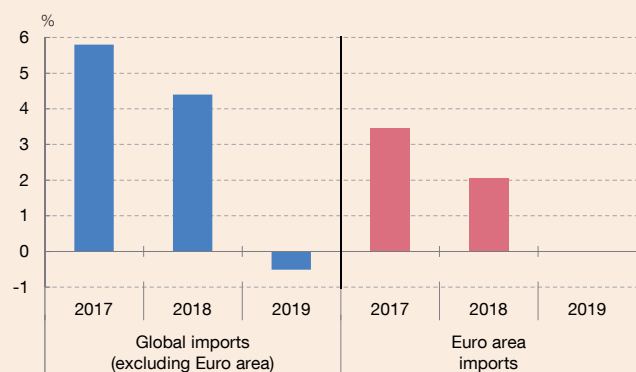


Chart 4  
MANUFACTURING EXPORT ORIENTATION BY DESTINATION

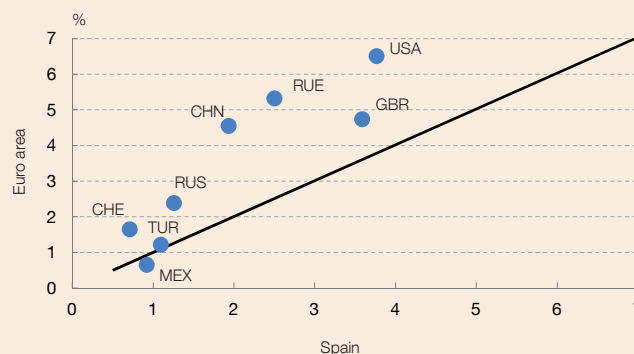


Chart 5  
EXTRA EURO-AREA EXPORT ORIENTATION (a)

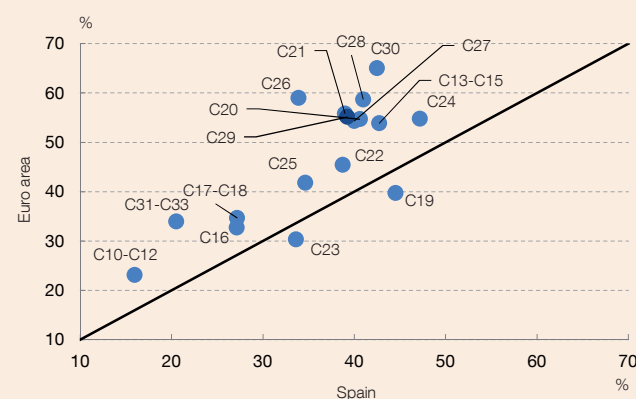
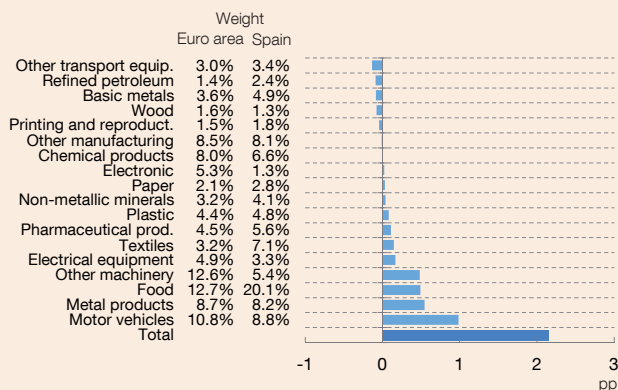


Chart 6  
CONTRIBUTIONS TO THE CHANGE IN THE AVERAGE GROWTH OF THE IPI. SPAIN-EURO AREA DIFFERENCES. 2019



SOURCES: Eurostat, OECD and CPB.

a C10-12: food; C13-15: textiles; C16: wood; C17: paper; C18: printing and reproduction; C19: refined petroleum; C20-21: chemical products; C22: plastic; C23: non-metallic minerals; C24: basic metals; C25: metal products; C26: electronic; C27: electrical equipment; C28: other machinery; C29: motor vehicles; C30: other transport equipment; C31-33: other manufacturing.

4 This analysis has used the IPI, instead of the information on value added from the National Accounts, because it provides for a greater sectoral disaggregation, enabling the relationship between export orientation and the recent performance of the different manufacturing sectors to be identified.

## THE GREATER RESILIENCE OF THE SPANISH ECONOMY IN 2019 COMPARED WITH THE EURO AREA: A SECTORAL PERSPECTIVE (cont'd)

(see Chart 7). A simple linear regression model actually confirms that this association is not only statistically significant but is, moreover, economically relevant, since the slowdown in the IPI of a sector would have been 0.15 pp greater for each additional percentage point of output exported to the intra-EA market (see Table 1). Moreover, according to the results obtained, a greater exposure to the intra-EA market, which performed better in relative terms, would help explain a more favourable manufacturing sector performance in 2019.

By way of illustration, the counterfactual growth of the IPI observed in Spain in 2019, had each of its manufacturing sectors shown the same export orientation as their counterparts in the EA as a whole, would have been 0.8%, instead of the actual figure of 0.9%. Specifically, the Spanish manufacturing sector that most benefited from the fact of posting its own extra-EA export orientation instead of that corresponding to the EA would have been the car sector. In particular, if the Spanish car sector were to post its whole-EA export orientation (22% intra-EA, and 55% extra-EA), the decline in the output of the sector observed in 2019 would not have been 0.1% but rather 6.8%, a rate very close to that recorded in the EA as a whole (8.6%).

In aggregate terms, the slowdown in the Spanish IPI between 2018 and 2019 (0.5 pp) was far lower than that observed in the EA as a whole (3 pp). The contribution of the car industry to that difference is very high (see Chart 6)<sup>5</sup>, which is in turn closely related to the heterogeneity in the behaviour of the different export markets. Specifically, Spanish car production was assisted by its greater relative exposure to the intra-EA and UK markets, whose performance was comparatively better, while the decline in the Chinese market had a very small influence in relative terms, given the small size of Spanish car sales to this country. Lastly, on figures from ANFAC (the Spanish Association of Automobile and Truck Manufacturers)<sup>6</sup>, cars manufactured in Spain gained share in 2019 in countries such as Germany, the United Kingdom and Italy, as a result of the specialisation of Spanish production in lower-horsepower models, the demand for which increased in relative terms.

In conclusion, an explanation of the greater resilience of the Spanish economy compared with that of the EA in 2019 would be the lesser exposure of its manufacturing sector to the weakness of extra-EA markets and its greater dependence on intra-EA markets.

Chart 7  
IPI AND EXTRA EURO-AREA EXPORT ORIENTATION



Table 1  
IPI REGRESSIONS AND EXTRA EURO-AREA EXPORT ORIENTATION (a)

	(1)	(2)	(3)	(4)	(5)
Intra-EA orientation	...	0.16*	0.24**	0.08	0.20***
		(0.08)	(0.09)	(0.06)	(0.07)
Extra-EA orientation	...	-0.15***	-0.15***	-0.16***	-0.15***
		(0.02)	(0.02)	(0.02)	(0.02)
Total orientation	-0.08***	...	...	...	...
	(0.01)	...	...	...	...
Observations	206	206	206	206	206
R <sup>2</sup>	0.17	0.32	0.41	0.71	0.77
Country effect	No	No	Yes	No	Yes
Sector effect	No	No	No	Yes	Yes

SOURCES: Eurostat and OECD.

a The table shows the estimated coefficients of a multiple linear regression model in which the dependent variable is the change in the growth rate of the IPI between 2018 and 2019 for each country and manufacturing sub-sector. The independent variables are the total, intra-euro area and extra-euro area export orientation (see main text). Finally, the country effect and sector effect rows refer to the inclusion or not in the model of a set of fixed country and sector effects that provide for control on the basis of non-observable heterogeneity in both dimensions. \*, \*\*, \*\*\* statistically significant at 10%, 5% and 1%, respectively.

5 The lesser slowdown in Spain's IPI is mainly due to the greater resilience of the car sector and, to a lesser extent, of metallic products, machinery and food. If Germany is excluded from the EA aggregate, these products continue to explain most of the differences between the Spanish IPI and that of the EA.

6 See <https://anfac.com/>.

## References

- Álvarez, L. J., and I. Sánchez (2018). "Composite indicators of inflationary pressures", Analytical Articles, *Economic Bulletin*, 4/2018, Banco de España.
- Banco de España (2016). "Current account adjustment", Chapter 3, *Annual Report 2015*.
- (2018a). "Recent developments and outlook for the Spanish economy's rest of the world account", Box 5, *Economic Bulletin*, 4/2018.
  - (2018b). "The balance of payments and international investment position of Spain in 2017", Analytical Articles, *Economic Bulletin*, 2/2018.
  - (2019a). "Macroeconomic projections for the Spanish economy (2019-2022): the Banco de España's contribution to the Eurosystem's December 2019 joint forecasting exercise", *Economic Bulletin*, 4/2019.
  - (2019b). "The recent slowdown in activity from a sectoral perspective", Box 8 of the "Quarterly report on the Spanish economy", *Economic Bulletin*, 4/2019.
  - (2019c). "The Spanish economy and the more uncertain global environment. Recent developments, outlook and challenges", Chapter 1, *Annual Report 2018*.
  - (2020a). *Reference macroeconomic scenarios for the Spanish economy after COVID-19*, Analytical Articles.
  - (2020b). "Quarterly report on the Spanish economy", *Economic Bulletin*, 1/2020
  - (2020c). "Regulatory uncertainty and its impact on car sales", Box 7 of the "Quarterly report on the Spanish economy", *Economic Bulletin*, 1/2020.
  - (2020d). "The effect of the change in the composition of Spanish exports on overall imports", Box 7 of the "Quarterly report on the Spanish economy", *Economic Bulletin*, 1/2020.
- Blanco, R. (coord.) (forthcoming). *The housing market in Spain between 2014 and 2019*, Documentos Ocasionales, Banco de España.
- European Central Bank (2018). *Eurosystem staff macroeconomic projections for the euro area. December 2018*.
- Ghirelli, C., M. Gil, J. Pérez and A. Urtasun (2019). *Measuring economic and economic policy uncertainty, and their macroeconomic effects: the case of Spain*, Documentos de Trabajo, no. 1905, Banco de España.
- Hernández de Cos, P., D. López-Rodríguez and J. J. Pérez (2018). *The challenges of public deleveraging*, Documentos Ocasionales, no. 1803, Banco de España.
- Lacuesta, A., M. Izquierdo and S. Puente (2019). *An analysis of the impact of the rise in the national minimum wage in 2017 on the probability of job loss*, Occasional Papers, no. 1902, Banco de España
- Menéndez Pujadas, A. (2020). "January 2020 Bank Lending Survey in Spain", Analytical Articles, *Economic Bulletin*, 1/2020.

## BANCO DE ESPAÑA PUBLICATIONS

### OCCASIONAL PAPERS

- 1602 LUIS MOLINA, ESTHER LÓPEZ y ENRIQUE ALBEROLA: El posicionamiento exterior de la economía española.
- 1603 PILAR CUADRADO and ENRIQUE MORAL-BENITO: Potential growth of the Spanish economy. (There is a Spanish version of this edition with the same number).
- 1604 HENRIQUE S. BASSO and JAMES COSTAIN: Macprudential theory: advances and challenges.
- 1605 PABLO HERNÁNDEZ DE COS, AITOR LACUESTA and ENRIQUE MORAL-BENITO: An exploration of real-time revisions of output gap estimates across European countries.
- 1606 PABLO HERNÁNDEZ DE COS, SAMUEL HURTADO, FRANCISCO MARTÍ and JAVIER J. PÉREZ: Public finances and inflation: the case of Spain.
- 1607 JAVIER J. PÉREZ, MARIE AOURIRI, MARÍA M. CAMPOS, DMITRIJ CELOV, DOMENICO DEPALO, EVANGELIA PAPAPETROU, JURGA PESLIKAITĖ, ROBERTO RAMOS and MARTA RODRÍGUEZ-VIVES: The fiscal and macroeconomic effects of government wages and employment reform.
- 1608 JUAN CARLOS BERGANZA, PEDRO DEL RÍO and FRUCTUOSO BORRALLO: Determinants and implications of low global inflation rates.
- 1701 PABLO HERNÁNDEZ DE COS, JUAN FRANCISCO JIMENO and ROBERTO RAMOS: The Spanish public pension system: current situation, challenges and reform alternatives. (There is a Spanish version of this edition with the same number).
- 1702 EDUARDO BANDRÉS, MARÍA DOLORES GADEA-RIVAS and ANA GÓMEZ-LOSCOS: Regional business cycles across Europe.
- 1703 LUIS J. ÁLVAREZ and ISABEL SÁNCHEZ: A suite of inflation forecasting models.
- 1704 MARIO IZQUIERDO, JUAN FRANCISCO JIMENO, THEODORA KOSMA, ANA LAMO, STEPHEN MILLARD, TAIRI RÕÕM and ELIANA VIVIANO: Labour market adjustment in Europe during the crisis: microeconomic evidence from the Wage Dynamics Network survey.
- 1705 ÁNGEL LUIS GÓMEZ and M.<sup>a</sup> DEL CARMEN SÁNCHEZ: Indicadores para el seguimiento y previsión de la inversión en construcción.
- 1706 DANILO LEIVA-LEON: Monitoring the Spanish Economy through the Lenses of Structural Bayesian VARs.
- 1707 OLYMPIA BOVER, JOSÉ MARÍA CASADO, ESTEBAN GARCÍA-MIRALLES, JOSÉ MARÍA LABEAGA and ROBERTO RAMOS: Microsimulation tools for the evaluation of fiscal policy reforms at the Banco de España.
- 1708 VICENTE SALAS, LUCIO SAN JUAN and JAVIER VALLÉS: The financial and real performance of non-financial corporations in the euro area: 1999-2015.
- 1709 ANA ARENCIBIA PAREJA, SAMUEL HURTADO, MERCEDES DE LUIS LÓPEZ and EVA ORTEGA: New version of the Quarterly Model of Banco de España (MTBE).
- 1801 ANA ARENCIBIA PAREJA, ANA GÓMEZ LOSCOS, MERCEDES DE LUIS LÓPEZ and GABRIEL PÉREZ QUIRÓS: A short-term forecasting model for the Spanish economy: GDP and its demand components.
- 1802 MIGUEL ALMUNIA, DAVID LÓPEZ-RODRÍGUEZ and ENRIQUE MORAL-BENITO: Evaluating the macro-representativeness of a firm-level database: an application for the Spanish economy.
- 1803 PABLO HERNÁNDEZ DE COS, DAVID LÓPEZ RODRÍGUEZ and JAVIER J. PÉREZ: The challenges of public deleveraging. (There is a Spanish version of this edition with the same number).
- 1804 OLYMPIA BOVER, LAURA CRESPO, CARLOS GENTO and ISMAEL MORENO: The Spanish Survey of Household Finances (EFF): description and methods of the 2014 wave.
- 1805 ENRIQUE MORAL-BENITO: The microeconomic origins of the Spanish boom.
- 1806 BRINDUSA ANGHIEL, HENRIQUE BASSO, OLYMPIA BOVER, JOSÉ MARÍA CASADO, LAURA HOSPIDO, MARIO IZQUIERDO, IVAN A. KATARYNIUK, AITOR LACUESTA, JOSÉ MANUEL MONTERO and ELENA VOZMEDIANO: Income, consumption and wealth inequality in Spain. (There is a Spanish version of this edition with the same number).
- 1807 MAR DELGADO-TÉLLEZ and JAVIER J. PÉREZ: Institutional and economic determinants of regional public debt in Spain.
- 1808 CHENXU FU and ENRIQUE MORAL-BENITO: The evolution of Spanish total factor productivity since the Global Financial Crisis.
- 1809 CONCHA ARTOLA, ALEJANDRO FIORITO, MARÍA GIL, JAVIER J. PÉREZ, ALBERTO URTASUN and DIEGO VILA: Monitoring the Spanish economy from a regional perspective: main elements of analysis.
- 1810 DAVID LÓPEZ-RODRÍGUEZ and CRISTINA GARCÍA CIRIA: Estructura impositiva de España en el contexto de la Unión Europea.
- 1811 JORGE MARTÍNEZ: Previsión de la carga de intereses de las Administraciones Públicas.
- 1901 CARLOS CONESA: Bitcoin: a solution for payment systems or a solution in search of a problem? (There is a Spanish version of this edition with the same number).



- 1902 AITOR LACUESTA, MARIO IZQUIERDO and SERGIO PUENTE: An analysis of the impact of the rise in the national minimum wage in 2017 on the probability of job loss. (There is a Spanish version of this edition with the same number).
- 1903 EDUARDO GUTIÉRREZ CHACÓN and CÉSAR MARTÍN MACHUCA: Exporting Spanish firms. Stylized facts and trends.
- 1904 MARÍA GIL, DANILO LEIVA-LEON, JAVIER J. PÉREZ and ALBERTO URTASUN: An application of dynamic factor models to nowcast regional economic activity in Spain.
- 1905 JUAN LUIS VEGA (COORD.): Brexit: current situation and outlook.
- 1906 JORGE E. GALÁN: Measuring credit-to-GDP gaps. The Hodrick- Prescott filter revisited.
- 1907 VÍCTOR GONZÁLEZ-DÍEZ and ENRIQUE MORAL-BENITO: The process of structural change in the Spanish economy from a historical standpoint. (There is a Spanish version of this edition with the same number).
- 1908 PANA ALVES, DANIEL DEJUÁN and LAURENT MAURIN: Can survey-based information help assess investment gaps in the EU?
- 1909 OLYMPIA BOVER, LAURA HOSPIDO and ERNESTO VILLANUEVA: The Survey of Financial Competences (ECF): description and methods of the 2016 wave.
- 1910 LUIS JULIÁN ÁLVAREZ: El índice de precios de consumo: usos y posibles vías de mejora.
- 1911 ANTOINE BERTHOU, ÁNGEL ESTRADA, SOPHIE HAINCOURT, ALEXANDER KADOW, MORITZ A. ROTH and MARIE-ELISABETH DE LA SERVE: Assessing the macroeconomic impact of Brexit through trade and migration channels.
- 1912 RODOLFO CAMPOS and JACOPO TIMINI: An estimation of the effects of Brexit on trade and migration.
- 1913 ANA DE ALMEIDA, TERESA SASTRE, DUNCAN VAN LIMBERGEN and MARCO HOEBERICHTS: A tentative exploration of the effects of Brexit on foreign direct investment vis-à-vis the United Kingdom.
- 1914 MARÍA DOLORES GADEA-RIVAS, ANA GÓMEZ-LOSCOS and EDUARDO BANDRÉS: Ciclos económicos y *clusters* regionales en Europa.
- 1915 MARIO ALLOZA and PABLO BURRIEL: La mejora de la situación de las finanzas públicas de las Corporaciones Locales en la última década.
- 1916 ANDRÉS ALONSO and JOSÉ MANUEL MARQUÉS: Financial innovation for a sustainable economy. (There is a Spanish version of this edition with the same number).
- 2001 ÁNGEL ESTRADA, LUIS GUIROLA, IVÁN KATARYNIUK and JAIME MARTÍNEZ-MARTÍN: The use of BVARs in the analysis of emerging economies.
- 2002 DAVID LÓPEZ-RODRÍGUEZ and M.ª DE LOS LLANOS MATEA: Public intervention in the rental housing market: a review of international experience. (There is a Spanish version of this edition with the same number).
- 2003 OMAR RACHEDI: Structural transformation in the Spanish economy.
- 2004 MIGUEL GARCÍA-POSADA, ÁLVARO MENÉNDEZ and MARISTELA MULINO: Determinants of investment in tangible and intangible fixed assets.
- 2005 JUAN AYUSO and CARLOS CONESA: Una introducción al debate actual sobre la moneda digital de banco central (CBDC).
- 2006 PILAR CUADRADO, ENRIQUE MORAL-BENITO and IRUNE SOLERA: A sectoral anatomy of the spanish productivity puzzle.
- 2007 SONSOLES GALLEGO, PILAR L'HOTELLERIE-FALLOIS and XAVIER SERRA: La efectividad de los programas del FMI en la última década.
- 2008 RUBÉN ORTUÑO, JOSÉ M. SÁNCHEZ, DIEGO ÁLVAREZ, MIGUEL LÓPEZ and FERNANDO LEÓN: Neurometrics applied to banknote and security features design.
- 2009 PABLO BURRIEL, PANAGIOTIS CHRONIS, MAXIMILIAN FREIER, SEBASTIAN HAUPTMEIER, LUKAS REISS, DAN STEGARESCU and STEFAN VAN PARYS: A fiscal capacity for the euro area: lessons from existing fiscal-federal systems.
- 2010 MIGUEL ÁNGEL LÓPEZ and M.ª DE LOS LLANOS MATEA: El sistema de tasación hipotecaria en España. Una comparación internacional.
- 2011 DIRECTORATE GENERAL ECONOMICS, STATISTICS AND RESEARCH: The Spanish economy in 2019.