

QUARTERLY REPORT ON THE SPANISH
ECONOMY

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BANCO DE **ESPAÑA**
Eurosistema

QUARTERLY REPORT ON THE SPANISH ECONOMY

Economic developments during the quarter have been drastically influenced by the global spread of COVID-19, caused by a coronavirus. At the start of the year, global activity indicators appeared to point to a stabilisation of output growth, with some signs of recovery in the manufacturing sector. Moreover, the signing of the first phase of the US-China trade agreement in mid-January and the ratification by the British Parliament of the EU withdrawal agreement, at the end of that same month, had led to some easing of the uncertainty overshadowing the global outlook throughout 2019. However, the spread from late February of the epidemic that had originally emerged in China to other regions (notably to Europe) has abruptly derailed the global economy in scarcely a month.

Indeed, the disease has given rise to a public health challenge of the first order. This has necessitated the adoption of extraordinary measures restricting people's movements and the closedown of a significant portion of productive activity. The force of these measures, which are needed to contain the pandemic, is severely impacting global growth in the short term. Yet if this strategy proves effective in eradicating contagion, as the experience of the countries that first put it into practice would suggest (and it was these nations that first began to experience the impact of COVID-19), these adverse effects should be predominantly temporary.

On the financial markets, the spread of the pandemic has given rise to strong asset price fluctuations, accompanied by a markedly pronounced increase in volatility. Stock markets in the developed countries fell back by around 30%. This was a reflection of the impact of the crisis on corporate profits and of the increase in risk aversion, against a background of market volatility, which has also spread to the debt markets. There, the risk premia of the euro area peripheral countries increased, although they have reversed in part further to the ECB's latest monetary policy measures, and there was a most pronounced widening of corporate debt spreads.

In Spain, the need to rein back the high rate of increase of contagion led to the declaration of a state of alert on 14 March. Before the epidemic reached Europe, its effects on the Spanish economy appeared to be limited. The grinding to a halt of activity in certain regions of China had some impact on the demand for Spanish exports and on the import of intermediate goods used in the production of final goods, given the Asian giant's high degree of integration into the global value chains. However, the true scale of the problem did not emerge until late February, when the spread of the disease to Italy and other European countries became manifest.

The scale of the impact of the pandemic on economic activity and employment, including that stemming from the necessary containment measures adopted, will be most pronounced in the short run. The declaration of the state of alert in Spain entailed drastic restrictions on people's movements and a practically complete halt to activity in certain services sectors, such as hotels and restaurants and retail trade. Production also came to a standstill in certain manufacturing sectors, such as the car industry, because of the demand freeze and the interruption of supply chains.

Estimating the impact and the duration of this shock to the economy is subject to very high uncertainty. The aggregate consequences on the economy as a whole will depend, among other factors, on the actual degree of the decline in output and consumption during the period the population is confined, and here it is only possible to make rough calculations. Moreover, the second factor of uncertainty relates to the length of time the extraordinary measures will be in force, which in turn depends on how successful they are in containing the disease. Impact and duration will also hinge crucially on the effectiveness of the measures implemented by the economic authorities.

In any event, even with the notable uncertainty over its intensity and duration, the shock should be an essentially temporary one. In this respect, the speed and momentum of the subsequent recovery will depend crucially on the economic policy measures implemented to mitigate the adverse effects on activity of the decisions adopted to contain the virus. The measures that governments worldwide have been applying in recent days are aimed, precisely, at preventing the paralysis in activity at the height of the pandemic from translating into company closures and permanent job losses. This, in turn, calls for the response by the authorities responsible for the various facets of economic policy to be ambitious, nimble and coordinated.

The first line of defence in preventing the economic effects of the epidemic from persisting should be fiscal policy. Here, one of the main courses of action adopted by the various governments, including Spain's, has been geared to softening the impact of the crisis on workers' (including the self-employed) incomes. This has been done by relaxing the criteria applicable for receiving unemployment benefits and by exempting firms from social security contribution payments conditional upon them keeping jobs open. A second course of action is the approval of measures to prevent firms' lack of liquidity from compromising their viability. In this connection, substantial public guarantees have been deployed and applied to credit extended to non-financial corporations and the self-employed, and a moratorium has been approved, under certain conditions, for their tax debts. The aim of these types of measures is to provide access to financing by solvent private agents facing liquidity problems, preventing them from ultimately becoming insolvent, in which case there would be greater and more permanent losses in activity and jobs.

In Europe's case, action by national fiscal authorities requires the resolute backing of supranational economic policies. Indeed, the role that national

governments in the EU can play in contributing to the recovery is crucial. They must avail themselves of the various mechanisms which, in the wake of the crisis, will help keep in place the contractual relationships between employers and employees, the commercial relationships between customers and suppliers, and the credit relationships between lenders and borrowers. Yet these arrangements must be backed by the supranational institutions of the EU and, in particular, of the euro area; if they are not, their effectiveness might be limited in those countries that have least budgetary leeway.

To this end, the ECB has recently announced extraordinary measures aimed at preventing, as in the last crisis, any recurrence of financial rupture among the various euro area economies. On 18 March, the ECB Governing Council announced a new emergency public and private asset purchase programme (PEPP) to combat the pandemic, for an amount of €750 billion over the rest of 2020. The new programme, which may be extended into 2021, envisages the possibility of purchases being made flexibly throughout its duration. This flexibility concerns the distribution of purchases across asset classes (public and privately owned alike) and their timing, along with the possibility of temporary departures from the rules prevailing in terms of the cross-country distribution of public debt purchases, which may moreover also take the form of Greek government bond purchases, unlike in previous programmes. The aim of such flexibility is, indeed, to ensure that the current accommodative stance of monetary policy translates uniformly into easy financial conditions across the different Member States. It may thus benefit euro area households, firms and governments as a whole.

These measures complement those adopted by the ECB Governing Council scarcely a week earlier. At its meeting on 12 March, the ECB Council had already approved various measures. These had included an extension of the asset purchase programme previously in place, for an amount of €120 billion, over the rest of 2020, and various long-term refinancing operations, which are key to the transmission of monetary policy.

Furthermore, the euro area banking supervision authority has relaxed the capital and liquidity requirements applicable to banks. The aim of this decision by the Single Supervisory Mechanism is to ensure that banks can carry on providing euro area households and firms with sufficient volumes of financing.

The scale of the challenge calls for the Community authorities to resolutely contribute too. Admittedly, the European Commission (EC) has mobilised several Community instruments to support the measures adopted by national governments (such as structural funds and various Community budget items) and this has relaxed the arrangements governing fiscal rules and State aid. But more resolute action is needed. The current health crisis overflows national borders and is therefore a challenge common to all euro area countries and to Europe as a whole. Containing

the humanitarian, social and economic costs of this crisis requires coordinated and cooperative action that uses the budgetary and financial tools already in place Europe-wide (including the potential mobilisation of the funds of the European Stability Mechanism, for a potential amount of around €500 billion). But the possibility of adding budgetary risk-sharing (mutualisation) elements, via common debt instruments, or the deployment of pooled economic and social coverage instruments, such as a European unemployment fund, should also be considered.

Given the unusually and highly uncertain circumstances described, this Report does not, unlike as usual, contain medium-term macroeconomic projections for the Spanish economy. Only a short period has elapsed since the state of alert was declared. And this means that indicators that provide for measurement with minimal rigour and accuracy of the scale and duration of the effects of the crisis on activity and employment – which, as indicated, will foreseeably trend very negatively in the short term – are still not available. Moreover, the outlook will be influenced by the effects of the major economic policy measures approved in different areas. In these circumstances, the Banco de España has, like other central banks that usually publish macroeconomic projections around this time (such as the US Federal Reserve and the French central bank), opted to postpone the preparation and publication of its projections. As indicators allowing for some lessening of the current, extraordinary degree of uncertainty become available, the Banco de España will resume publication of its macroeconomic projections, keeping all of its usual public communication channels open in the meantime. In any event, its stepped-up monitoring of the economy's economic and financial position will continue.

THE SPANISH ECONOMY BEFORE THE SPREAD OF THE CORONAVIRUS EPIDEMIC

The spread of the coronavirus health crisis outside Asia, which has ultimately led to the confinement of the population in Spain and in many other European countries, is an unusually virulent shock. It has sharply altered the trajectory of our economy. This box describes the main features of the developments observed prior to this shock.

The analysis of short-term economic developments is usually based on the assessment of various monthly indicators, which are released with a certain time lag with respect to the period to which they refer. Given this lag, the latest data currently available in the indicators of Spanish economic activity refer to January and February; accordingly, they do not capture the latest adverse developments.

Overall, the conjunctural indicators most representative of the behaviour of activity suggest that GDP had followed a similar trajectory in the two opening months of the year to that observed in late 2019. Indeed, the Banco de España's models for short-term GDP forecasting had projected growth of around 0.4% for the current quarter.¹ Along these same lines, the latest Social Security registration figures, which showed a notable improvement in monthly employment creation in February, had suggested - if we ignore the foreseeably much less favourable path in March - quarterly growth in employment similar to that observed in late 2019 (see Chart 1).

The somewhat better than expected behaviour of employment in February, the improvement in confidence in the first two months of the year and the stabilisation around the turn of the year in the year-on-year rate of increase in the outstanding balance of consumer credit, following the slowdown seen since mid-2018 (see Chart 2), suggested that household spending would foreseeably post positive growth in these months, following a zero increase in 2019 Q4. Conversely, new private car registrations held on a clearly negative trend in the first two months of the year, while January retail sales proved somewhat weaker than expected.

As to residential investment, the latest indicators relating to supply, which anticipate trends in activity in the sector in the coming months, such as building permits and construction material production indices, evidenced moderately negative signs for the start of the year. On the

contrary, the data for the demand-related indicators, such as sales and mortgages on residential assets, were somewhat more buoyant. Finally, house prices, on figures to 2019 Q4, also pointed to an easing in residential activity, both in the second-hand property and new dwellings segments. And this especially in those regions where prices had been more expansionary since the start of the recovery.

After turning down heavily in Q4, the business investment outlook had improved somewhat in the opening months of the year. Indeed, to February, some qualitative indicators such as the manufacturing PMI and the European Commission's business climate survey, had shown something of a pick-up in business sentiment (see Chart 3). Moreover, financial conditions for non-financial corporations remained easy.

The scant information available for the start of the year suggested a reduction in the contribution of external demand to GDP growth in Q1, following the significant upward surprise in 2019 Q4, due essentially to the slowdown in goods and services exports. In the case of inbound tourism, the latest information on non-resident spending, which covers only January, showed a continuation of its expansionary trajectory. This was thanks to the increase in average spending per tourist, which offset the slowdown in total inflows prompted by the reduction in the main European outbound-tourist markets (see Chart 4).

Turning to public finances, in February the Spanish Parliament approved a revaluation of pensions and a rise in civil servants' remuneration which, so far, have not been accompanied by additional increases in revenue, against the background of the extension, for the second year running, of the 2018 State Budget. The latest information would suggest that headway had not been made in 2019 in correcting the public finances imbalances, and a budget deficit/GDP ratio similar to that of the previous year was expected to be recorded. That would entail a structural deficit in line with that of 2015, leading to the conclusion that the expansionary phase was not harnessed to build up a budgetary buffer that would have allowed the current health crisis to be tackled from a sounder position. The mildly declining path of the public

1 See A. Arencibia Pareja, A. Gómez Loscos, M. de Luis López and G. Pérez Quirós (2018), *A short-term forecasting model for the Spanish economy: GDP and its demand components*, Documentos Ocasionales 1801, Banco de España; and Álvarez, Cabrero and Urtasun (2014), *A procedure for short-term GDP forecasting*, *Economic Bulletin*, Banco de España, October.

Box 1

THE SPANISH ECONOMY BEFORE THE SPREAD OF THE CORONAVIRUS EPIDEMIC (cont'd)

Chart 1
SOCIAL SECURITY REGISTRATIONS (EXCL. CARERS) (a)

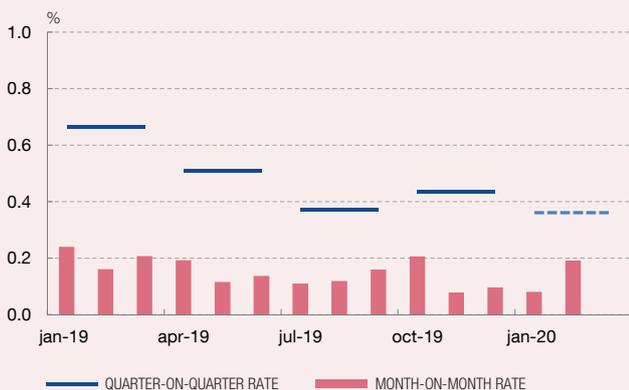


Chart 2
BANK LENDING TO HOUSEHOLDS



Chart 3
BUSINESS CONFIDENCE INDICATORS

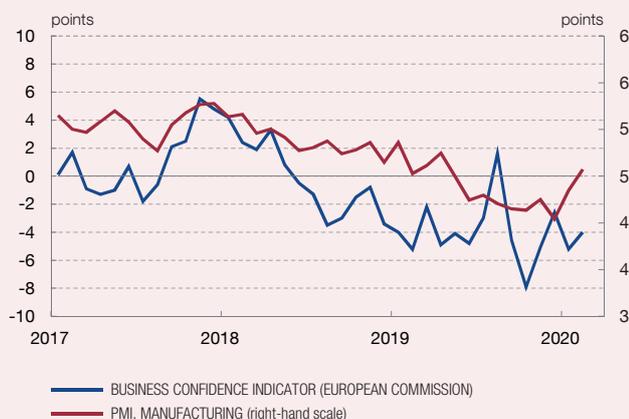


Chart 4
FOREIGN TOURISM INDICATORS

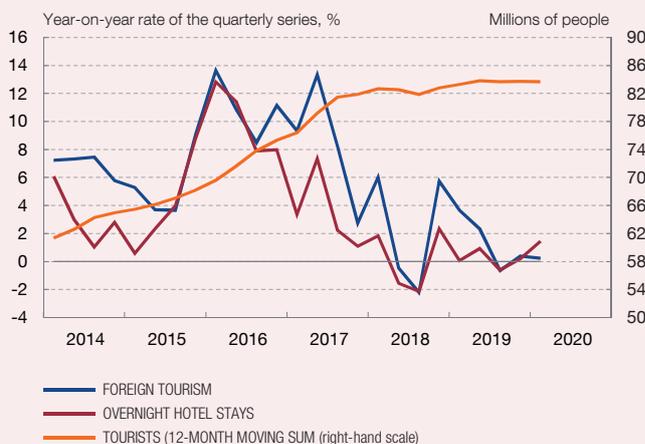
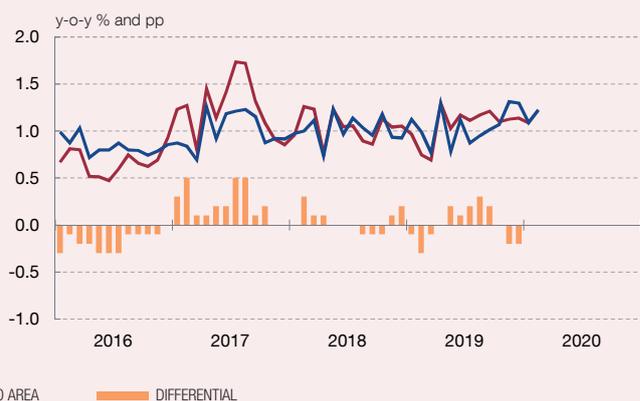


Chart 5
HICP. OVERALL INDEX



Chart 6
HICP. OVERALL INDEX EXCLUDING ENERGY AND FOOD



SOURCES: INE, Ministerio de Trabajo, Migraciones y Seguridad Social, European Commission, Markit Economics and Banco de España.

- a Royal Decree-Law 6/2019 of 1 March 2019 restored the right of non-professional carers of dependents to enter into a special agreement with the Social Security authorities. Under the agreement, the State bears the cost of their Social Security contributions. This legal amendment has increased the number of non-professional carers from 7,300 (as observed in March 2019) to 57,600 (February 2020).
- b Securitised lending not included in this segment.

THE SPANISH ECONOMY BEFORE THE SPREAD OF THE CORONAVIRUS EPIDEMIC (cont'd)

debt/GDP ratio is expected to have continued in 2019, ending the year at 95.5% of GDP.

Inflation, measured by the Harmonised Index of Consumer Prices (HICP), has continued to post very moderate rates in recent months, standing at 0.9% in February (see Chart 5). Influencing these dynamics were, mainly, the year-on-year declines observed in energy prices. Core inflation grew in February by 1.3%, a rate slightly up on that observed over the past two years (see Chart 6). In terms of components, services inflation stood at 1.7%, while non-energy industrial goods prices held at a more moderate year-on-year growth rate (0.6% in February). Inflation in Spain has continued to stand marginally below that recorded in the euro area.

On the costs side, the latest available information on collective bargaining agreements, to February, suggested somewhat more moderate wage increases in 2020 (2%) than in 2019 (2.3%), affecting a higher number of workers (6.2 million). However, these wage rises solely reflect agreements signed in prior years.

In short, the information available for the first two months of the year pointed to a continuation of the expansionary phase, underpinned by some reduction in external uncertainties. Although there are still no monthly indicators that reflect the fact, the previous trajectory has been dramatically dislocated as from the last week of February, further to the outbreak of the coronavirus epidemic in Europe and, in particular, in Spain. The increase in uncertainty, the confinement at home of the population and the closedown of trade not involving the sale of staple goods is estimated to have translated into a notable reduction in private consumption. The contraction in demand and uncertainty are expected to have brought private investment decisions to a standstill. As regards external trade in goods and services, the impact of the heightening health crisis is estimated to have been particularly severe in the tourism sector, as the sharp recent decline in new hotel bookings and the widespread cancellation of those made earlier suggest. In terms of prices, the fall-off in demand and the strong reduction in oil prices will foreseeably lead to a decline in the inflation rate.

GEOPOLITICAL TENSIONS AND OIL PRICES

This early-release box was published on 4 March

Changes in oil prices are determined by supply and demand-side factors that bear on their dynamics. In recent months, for instance, the weakness in the global demand for oil, largely linked to the slowdown in China brought on by the COVID-19 crisis, has tended to depress oil prices. In addition to the dynamics stemming from cyclical fluctuations of the economy, oil prices are regularly affected by geopolitical events. A case in point are conflicts linked to the Middle East, among others. The frequency of such tensions has tended to increase since May 2018 (when the United States withdrew from the nuclear agreement),¹ with some episodes of particular intensity in late 2019 and early 2020.² Given the significance of the region for global oil production and exports,³ this box analyses the hypothetical impact of new geopolitical conflicts arising in the Middle East on oil prices. It further discusses some factors that tend to mitigate this impact.

The effect a geopolitical event has on oil prices depends on the volume of output affected by the event and its duration, as well as the economic conditions under which it arises. Indeed, the main events of this type in the Middle East since 1973 differ in terms of these dimensions, and they have thus exerted heterogeneous effects on oil prices (see Chart 1).⁴ Despite this heterogeneity, a common characteristic of all these events is that they have been transitory, leading to declines in output, on average, in the four months following the event, which tend to be progressively reversed by the influence of mitigating factors. These include most notably the spare capacity of other global producers, the use of inventories and the strategic reserves of certain countries.

On the basis of these characteristics, Chart 4 shows the reaction of oil prices to two hypothetical geopolitical scenarios, which differ in terms of their intensity.⁵ In the less adverse, “moderate” scenario, disruption to oil

production of the order of 800,000 barrels per day (bpd), i.e. 0.8% of global output, is assumed, equivalent to the combined current exports of Iran (around 300,000 bpd) and of northern Iraq (500,000 bpd) (see Chart 2). In the “adverse” scenario, the shock is considered to affect 4% of global oil output. That would be tantamount to adding to the disruption of the previous scenario another shock equivalent to the events spreading to the rest of Iraq, which is the second-ranked producer and exporter of the Organization of the Petroleum Exporting Countries (OPEC). The exercise does not consider much more extreme events, e.g. a blockade of the Strait of Hormuz,⁶ a strategic channel through which almost 15 million barrels are moved every day (see Chart 3), since there are no precedents for an event of this nature.

The results of the simulations indicate that, following the event, crude oil prices would increase in the first month by a maximum amount of \$38 under the adverse scenario and \$6 under the moderate one. After peaking, prices would fall. Relative to the baseline scenario, the average increase in six months would stand at around \$20 under the adverse scenario and at \$4 under the moderate scenario (see, once more, Chart 4).

However, the results of the simulations should be taken as an upper bound to the rise in crude oil prices in such episodes. In particular, the estimates shown stem from average historical patterns, when there is actually evidence that the sensitivity of oil prices to supply and demand shocks might be lower at present, i.e. the aforementioned mitigating factors might now be acting with greater intensity. Prominent among these factors is OPEC’s high spare capacity (currently estimated at 3.4 million bpd), the notable levels of global inventories and strategic reserves (equivalent to around 92 days of global output for the countries of the Organisation for Economic Co-operation and Development), and the boom, since 2011,

- 1 The Joint Comprehensive Plan of Action was adopted in 2015 with the aim of reducing Iran’s uranium enrichment in exchange for lifting the economic sanctions on the country.
- 2 The oil market has recently been affected by several episodes of particular intensity, including most notably the attack on Saudi oil facilities, which temporarily affected 6% of total output last September, the siege of the US embassy in Baghdad in late 2019 and the US response to these attacks in early 2020.
- 3 Although the significance of the region has diminished owing to the growth of shale oil in the United States, it continues to produce 28.5% of global oil output.
- 4 See J. D. Hamilton (2011), *Historical oil shocks*, National Bureau of Economic Research.
- 5 The calculations are made using a Bayesian structural VAR model. In this model, shocks are identified by means of sign restrictions. This enables a distinction to be drawn between supply-side shocks, global demand, precautionary demand and idiosyncratic demand factors of the oil market. The model is estimated with monthly data using a sample commencing in January 1980.
- 6 A blockade of the Strait of Hormuz might entail a reduction of around 10% in global production, even if the pipelines of Saudi Arabia, the United Arab Emirates and Iraq were to function at maximum capacity.

Box 2

GEOPOLITICAL TENSIONS AND OIL PRICES (cont'd)

Chart 1
MAIN GEOPOLITICAL SHOCKS AND OIL PRICES (a)



Chart 2
EXPORTS BY IRAN AND IRAQ IN 2019

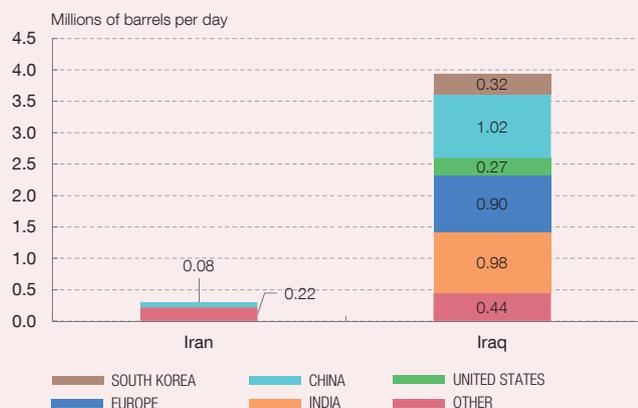


Chart 3
CRUDE OIL EXPORTS THROUGH THE STRAIT OF HORMUZ IN 2019

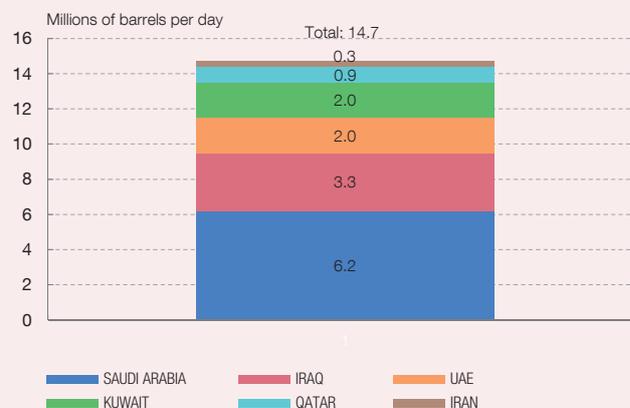


Chart 4
IMPACT OF GEOPOLITICAL SHOCK SIMULATIONS ON OIL PRICES (b)

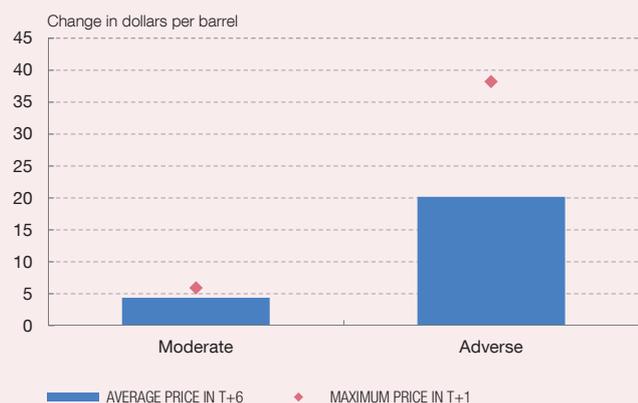


Chart 5
UNITED STATES: WTI PRICE, NUMBER OF OIL RIGS AND PRODUCTION



SOURCES: International Energy Agency, Thomson Reuters and Banco de España.

- a The figure reflects the maximum fall in total oil production during the geopolitical shock indicated by Hamilton (2011), except for the Iranian revolution and the Saudi Arabia oil attack, which were estimated in-house. The duration of the shocks varies significantly, as shown by the width of the events (blue bands).
- b Considering a temporary drop in production of 0.8 million and 4 million barrels per day in the moderate and adverse scenarios, respectively. The shock recedes gradually over 4 months.

GEOPOLITICAL TENSIONS AND OIL PRICES (cont'd)

in shale oil production in the United States, which has converted this country into the leading world producer, ahead of Saudi Arabia and of Russia. In particular, this latter factor has been playing a growing role in oil price trends in the past decade.⁷ Compared with traditional crude oil production, the investment period and time to maturity of shale oil is much shorter, allowing supply to

react swiftly to shocks that tend to raise crude prices. This makes supply fairly elastic in the medium term⁸ and is conducive to price stability. Hence, price increases tend to go hand in hand with the rapid drilling of new wells in less than six months (see Chart 5). Moreover, the productivity of North American producers has increased considerably since late 2015.⁹

7 For further information, see D. Santabárbara (2017), "The oil market: recent developments and outlook", Analytical Article, *Economic Bulletin*, 3/2017, Banco de España.

8 A model developed by the Congressional Budget Office (CBO) to estimate shale oil production in the United States shows that, although supply is inelastic in the short term, it is fairly elastic after two years (M. Lasky (2016), *The Outlook for US Production of Shale Oil*, Congressional Budget Office).

9 As a result, fewer wells are needed to maintain production. Extraction in the first month of operation has doubled since 2007 and the rise in production persists throughout their life cycle. See R. Decker, A. Flaaen, and M. Tito (2016). *Unraveling the Oil Conundrum: Productivity Improvements and Cost Declines in the US Shale Oil Industry*, FEDS Notes, Washington, Board of Governors of the Federal Reserve System, 22 March.

RECENT CHANGES IN THE SWEDISH CENTRAL BANK'S MONETARY POLICY

This early-release box was published on 2 March

In December 2019, Sweden's central bank (Sveriges Riksbank) raised its benchmark interest rate (the repo rate) for the second time in twelve months. It set it at 0%, up from the previous level of -0.25%, with effect from January 2020. Swedish interest rates thus abandoned the negative territory in which Sveriges Riksbank had placed them since February 2015 (see Chart 1). Holding rates negative had been part of the raft of unconventional monetary policy measures set in place by Sweden's monetary authority since 2009. This also included forward guidance on interest rates, bond purchases, currency

swaps and support for lending to businesses, among other things. This box summarises the macroeconomic and financial stability conditioning factors which, according to the Swedish authorities, are behind this monetary policy decision.

Sveriges Riksbank justified its decision to increase the interest rate to 0%, which it had already anticipated in October, essentially on the basis of inflation developments. In Sweden, the inflation rate had stood at around the target of 2% from 2017 until end-2019 (see Chart 2) and

Chart 1
BENCHMARK RATES AND SVERIGES RIKSBANK'S FUTURE PATHS

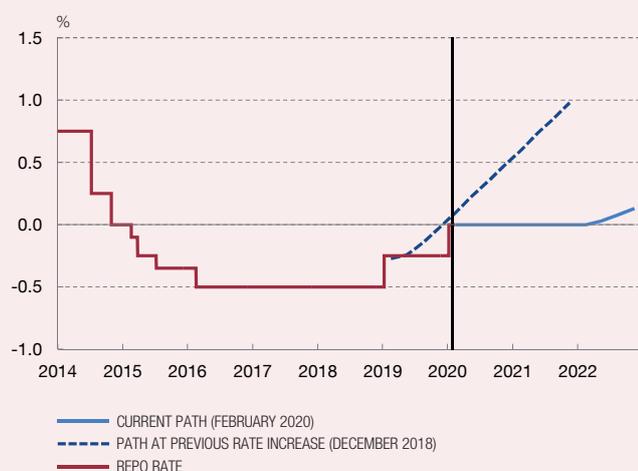


Chart 2
INFLATION AND SVERIGES RIKSBANK'S PROJECTIONS

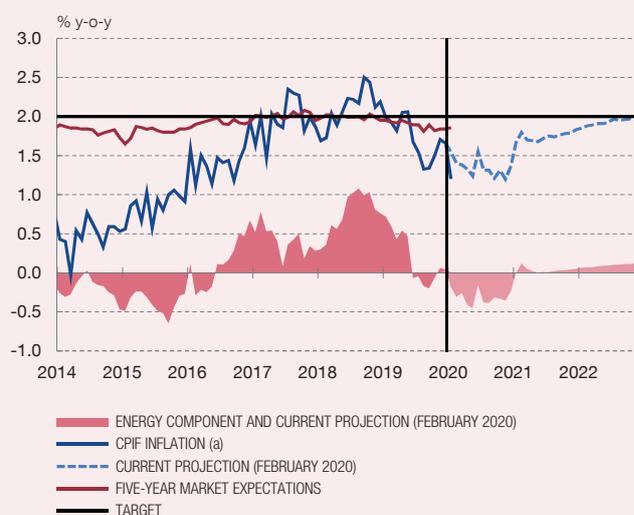


Chart 3
GDP GROWTH AND OUTPUT GAP

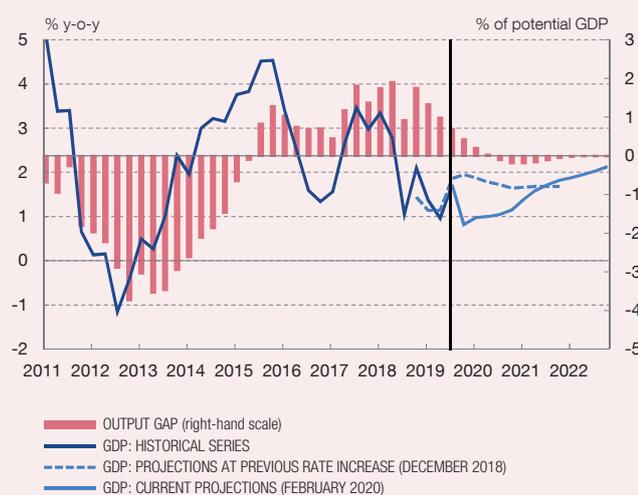
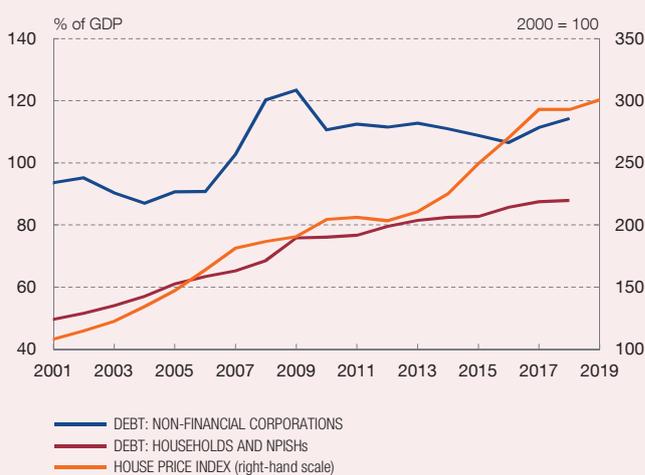


Chart 4
PRIVATE-SECTOR INDEBTEDNESS AND HOUSE PRICES



SOURCES: Sveriges Riksbank, Swedish National Institute of Statistics and Konjunkturinstitutet.

a CPI inflation, which excludes changes in mortgage rates, is Sveriges Riksbank's target variable.

inflation expectations had remained relatively anchored between 1.8% and 2% over the previous year. According to the Swedish central bank's analysis, inflation is estimated to be on a path compatible with the fulfilment of its objective. Admittedly, the Swedish economy slowed in 2019 and the growth outlook was revised downwards (see Chart 3); but Sveriges Riksbank's analysis points to the pace of growth in activity returning to normal following a period of relatively high buoyancy. The decision emerged from Sweden's Monetary Policy Committee after intense debate, as evidenced by the minutes of its December meeting. In particular, the minutes noted the difficulties of accurately gauging the extent to which inflation expectations are firmly anchored around the central bank's target. And this against a background in which Sveriges Riksbank foresees an inflation path slowly converging at the end of the projection horizon on the aforementioned target (see Chart 2).

According to the central bank's projections, published in December with the press release on the monetary policy decision, the policy rate will be held at 0% until 2022 Q2. This contrasts with its previous December 2018 projection, which anticipated a path of further increases over the coming years (see Chart 1).¹ Therefore, for Sveriges Riksbank, the rate rise does not necessarily mean a tightening of the monetary policy stance,² but a return to a more conventional monetary policy without negative interest rates which, among other things, would provide some leeway, if needed.

In addition to the above-mentioned considerations, in its press release Sveriges Riksbank also lists some of the financial stability-related arguments taken into consideration. Particular mention is made of the possibility that economic agents would no longer perceive the negative rates situation as temporary. Among other risks, the Swedish monetary authority considers the hypothetical

adverse consequences for the banking system, the private sector's potential over-indebtedness and a possible excessive increase in risk appetite, which might give rise to distortions in the functioning of financial markets, including the overvaluation of certain assets.

As for the first risk, according to Sveriges Riksbank banks have not passed on negative interest rates to household deposits, owing to the perceived temporariness of the measure, and banks' lending capacity and profitability have not been affected significantly to date. However, the Swedish monetary authority does not completely rule out that continuing to apply a negative interest rate policy for a very long period of time could hypothetically prompt a decline in the demand for deposits. And that could in turn produce a shortage of this type of financing at some banks.³ Additionally, according to the monetary authority, squeezing bank margins for a sufficiently protracted period of time could theoretically affect new lending by some banks.

Possible adverse effects of a premature increase in interest rates on financial stability were also pointed out; agents' ability to pay could be hampered against a backdrop of lower growth and high levels of private debt (see Chart 4). Nevertheless, Sveriges Riksbank has stressed that private-sector indebtedness-related risks – largely linked to the real estate market⁴ – must be addressed by macroprudential policy instruments (within the remit since 2014 of the *Finansinspektionen*, which reports to the Ministry of Finance) and by structural reforms.

In conclusion, and based on the foregoing considerations, of different sign, Sveriges Riksbank considers that, in net terms, the negative rates policy has been beneficial for the Swedish economy. It likewise believes any future side-effects can be assumed, though it highlights the need for them to be analysed in greater detail.

1 Note that, unlike ECB/Eurosystem projections, which assume that interest rates will follow the path expected by financial markets, the Riksbank's macroeconomic projections are shaped by its own expected path of policy rates.

2 In the weeks following Sveriges Riksbank's announcement in October, the Swedish krona appreciated against the dollar and the euro after a period of protracted weakness, which could mean that the financial markets perceived a tightening. However, attributing the appreciation solely to monetary policy is difficult since it coincided with a period of upward surprises in economic indicators and greater optimism about world trade, which is highly significant for a small open economy like Sweden's. Since early 2020, the Swedish krona has depreciated again due to global uncertainty and worse-than-expected macroeconomic data.

3 Note that the low use of cash in Sweden could soften the possible difficulties of potential liquidity problems. Worldwide, Sweden is the economy which least uses cash, and its objective is to replace it with electronic means of payment by 2023. Thus, if negative interest rates were applied to household deposits, this would possibly have a more subdued effect on the demand for cash.

4 Since 1994, there has been a robust upward trend in house prices in Sweden which is essentially attributable to structural factors such as supply shortages and high construction costs.

THE REFORM OF THE FISCAL SURVEILLANCE FRAMEWORK IN EUROPE

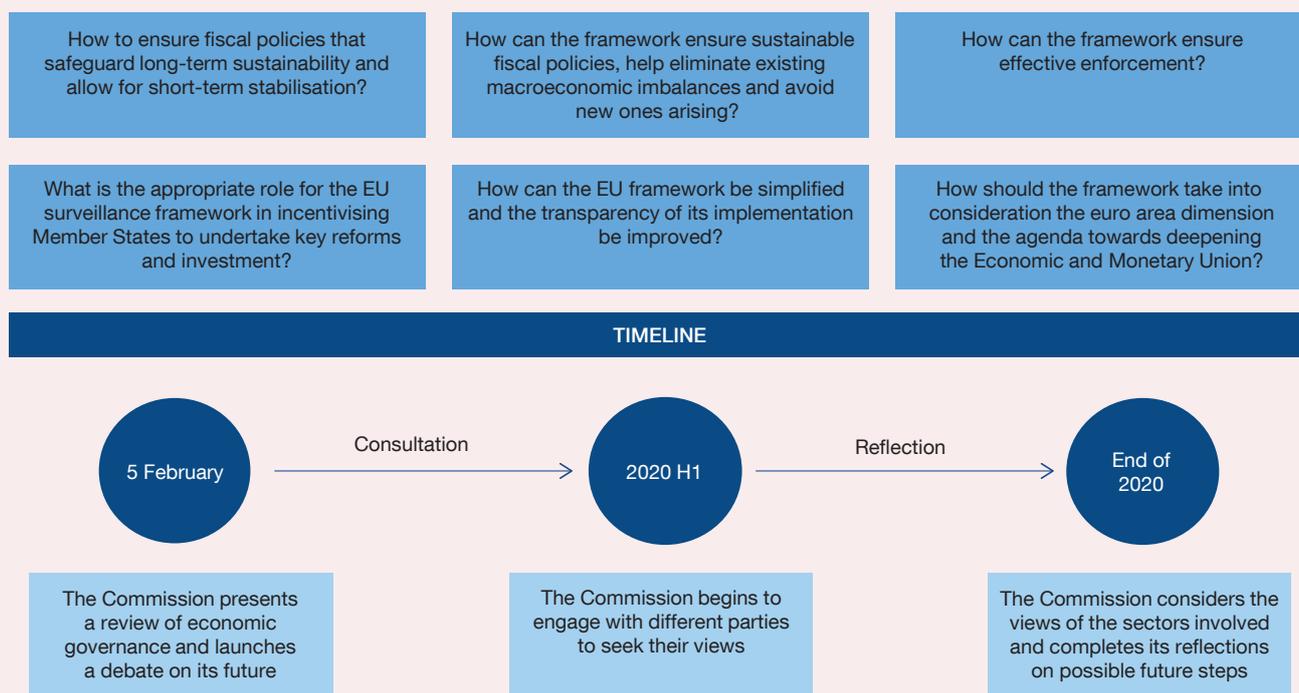
This early-release box was published on 9 March

On 5 February the European Commission announced the start of the review of the economic governance framework for the European Union (EU). It further offered an assessment of the effectiveness of the current surveillance framework.¹ Figure 1 shows the main phases and characteristics of the review. The first phase of the process will involve an extensive public consultation, running to mid-2020, in which all European institutions, the Member States and civil society will participate. The Commission will give itself until end-2020 to assess the opinions received, reflect on the steps to be taken and submit, if appropriate, a formal proposal for reform.

The EU's economic governance framework has undergone numerous changes since its inception, progressively adapting to the new requirements arising during the European construction process. In its initial design, the framework was chiefly geared to preventing the effects of excessive budgetary imbalances on financial stability in a

monetary union. The 2005 reform sought to add some flexibility with a view to being able to address adverse cyclical situations. Following the 2008 economic and financial crisis, the focus moved once more to the risks that high levels of public debt entail for euro area economic and financial stability. Against this background, the latest “six-pack” and “two-pack” legislative reforms were implemented in 2011 and 2013, respectively. These introduced elements to strengthen the sustainability of public finances, to add flexibility to fiscal rules and to improve the Member States’ budgetary processes. In addition, surveillance was extended beyond the fiscal domain to address macroeconomic imbalances from a broader perspective (under the Macroeconomic Imbalances Procedure), and a macroeconomic oversight procedure was set in place for those countries receiving financial assistance. These changes were integrated into the European Semester, the framework conceived to coordinate economic policies at the European level and to

Figure 1
REFORM STAGES AND MAIN AREAS OF DEBATE



SOURCE: European Commission.

1 Community regulations require the European Commission to conduct an economic governance framework review every five years, and to submit a report on the implementation of the existing legislation.

THE REFORM OF THE FISCAL SURVEILLANCE FRAMEWORK IN EUROPE (cont'd)

steer the structural reforms necessary at the national level.

According to the Commission, the essential aim of the review under way is to strengthen the effectiveness of its oversight. It is mindful that the current macroeconomic environment, marked by low potential growth, population ageing and low interest rates, is very different from that of previous reforms. At the same time, the EU has to respond to new challenges, such as digitalisation and climate change (as seen with the European Green Pact).

The consultation addresses various issues: the means of ensuring compliance with accountable fiscal policies, increasing the transparency, flexibility and simplicity of the rules; the review of the macroeconomic imbalances procedure; increased incentives for investment and for structural reform; and enhanced economic policy coordination and the deepening of EMU.

The assessment conducted by the Commission notes both the strengths and weaknesses of the current framework. As regards strengths, the Commission highlights the fact that the latest legislative reforms have reinforced the policy oversight framework, providing for the correction of economic imbalances and, specifically, the reduction of excessive budget deficits. At the same time, the Commission indicates the momentum given to ongoing economic convergence in the EU and greater economic policy coordination. Further, mention is made of the creation of independent fiscal institutions and of enhanced national budgetary processes and medium-term fiscal planning procedures.

However, the Commission also recognises in its assessment certain areas for improvement. Firstly, it notes that the ongoing incremental reform of the fiscal framework has led to greater complexity, with diverse procedures and numerous rules. Admittedly, this design sought to make the framework more flexible and adaptable. But it may also have deterred ownership of the fiscal rules (see Chart 1), while reducing transparency and hampering communication.

Additionally, the Member States' fiscal policies have retained some procyclical bias, as illustrated in Chart 2. The Commission expresses particular concern over the lack of discipline in expansionary phases, during which countries have not sufficiently rebuilt their fiscal buffers. Such behaviour, according to the Commission, is expected to have restricted the capacity of the framework to coordinate national fiscal policies, with appropriate cross-country differentiation, and to attain a suitable fiscal stance for the euro area as a whole.

The Commission also highlights the persistence of high levels of public debt in some countries, which are in turn far from meeting their medium-term fiscal targets (see Chart 3), while their reform-gear momentum appears to have slackened.

Finally, another area for improvement is the quality of public finances. This covers both the composition of public spending and revenue, and their capacity to support growth and social inclusion. In this respect, the Commission stresses that public investment is the spending component that traditionally bears a high proportion of the adjustment in fiscal consolidation processes (see Chart 4), which underscores the importance of protecting this spending component in the design of the fiscal surveillance framework.

The Commission's analysis shares many of the concerns voiced by experts and international institutions. These refer to the need for a comprehensive review of the framework that reduces its complexity, enhances compliance and contributes to the design of countercyclical fiscal policies and to the sustainability of public finances.² In this connection, the review is timely and necessary. Moreover, it should be an integral part of the ongoing deepening and strengthening of EMU. In particular, the proposals envisaged should be completed with other elements that help enhance fiscal policy design and coordination at the European level, such as the introduction of a central fiscal capacity that reinforces the stabilising role of fiscal policy.

2 For an exhaustive review see, inter alia Andrieu, M., J. Bluedorn, L. Eyraud, T. Kinda, P. Koeva Brooks, G. Schwartz and A. Weber (2015) "Reforming Fiscal Governance in the European Union" IMF Staff Discussion Note 15/09, May; Banco de España (2017), Annual Report 2016, Chapter 4, "Fiscal policy in the euro area"; Kamps, C., N. Leiner-Killinger (2019) "Taking stock of the functioning of the EU fiscal rules and options for reform" ECB Occasional Paper, No. 231, August, and European Fiscal Board (2019), "Assessment of EU fiscal rules with a focus on the six and two-pack legislation", August.

THE REFORM OF THE FISCAL SURVEILLANCE FRAMEWORK IN EUROPE (cont'd)

Chart 1
COMPLIANCE WITH DEFICIT AND DEBT RULES (a)

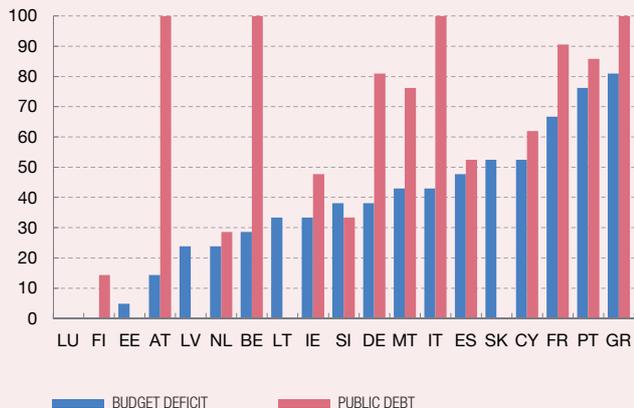


Chart 2
STRUCTURAL BALANCE AND OUTPUT GAP IN EURO AREA COUNTRIES (b)

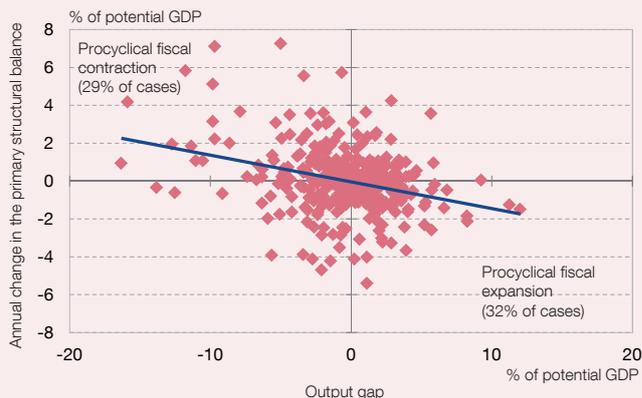


Chart 3
DEBT AND STRUCTURAL BALANCE IN EURO AREA COUNTRIES
2021. Commission forecasts

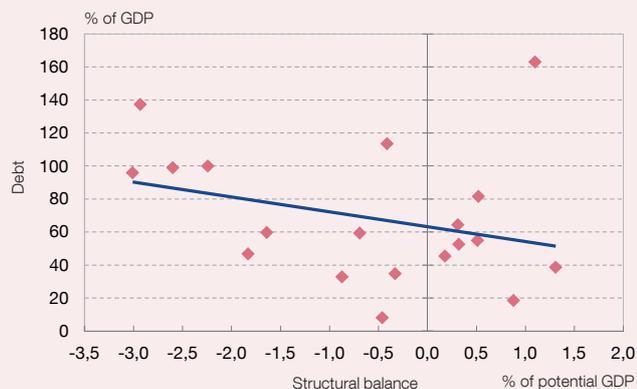
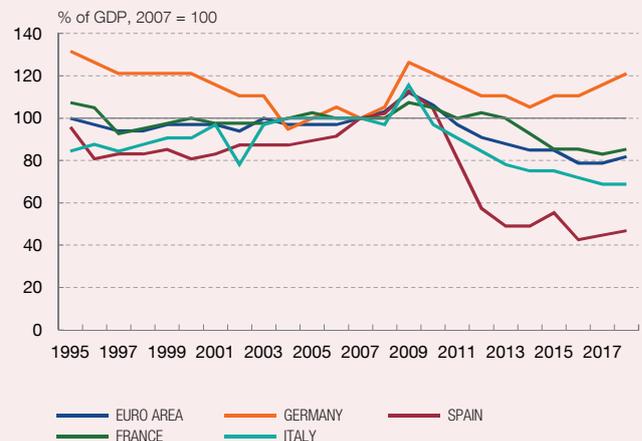


Chart 4
PUBLIC INVESTMENT



SOURCES: European Commission and Eurostat.

- a Percentage (%) of years between 1999 and 2019 in which budget deficits exceeded 3% of GDP and public debt exceeded 60% of GDP.
- b The scatter plot contains values of variables between 1999 and 2018.

IMPACT OF THE APPLICATION OF THE TWO-TIER SYSTEM

This early-release box was published on 11 March

On 12 September 2019, the Governing Council of the European Central Bank (ECB) adopted a comprehensive package of monetary policy measures to ensure the sustained convergence of euro area inflation towards its target.¹ Specifically, in order to support the credit institution-based transmission of monetary policy, the ECB decided to introduce a two-tier system (TTS) for the remuneration of the reserves held by credit institutions in their current accounts at their national central banks. Under this new system, the negative deposit facility rate is not applied to a portion of credit institutions' excess reserve holdings.²

This box describes the main features of the TTS and assesses its impact on the distribution of excess liquidity within the euro area and on money market rates.

The TTS came into effect on 30 October 2019 (start of the seventh reserve maintenance period, MP7). The Governing Council decided that the exempt tier would be equal to six times (multiplier) the minimum reserve requirement and would be remunerated at zero percent. The multiplier is the same for all credit institutions and is set such that short-term money market rates in the euro area are not unduly affected. It may be adjusted over time in line with changing levels of excess liquidity holdings. The second tier (non-exempt) will apply to all the excess reserves held

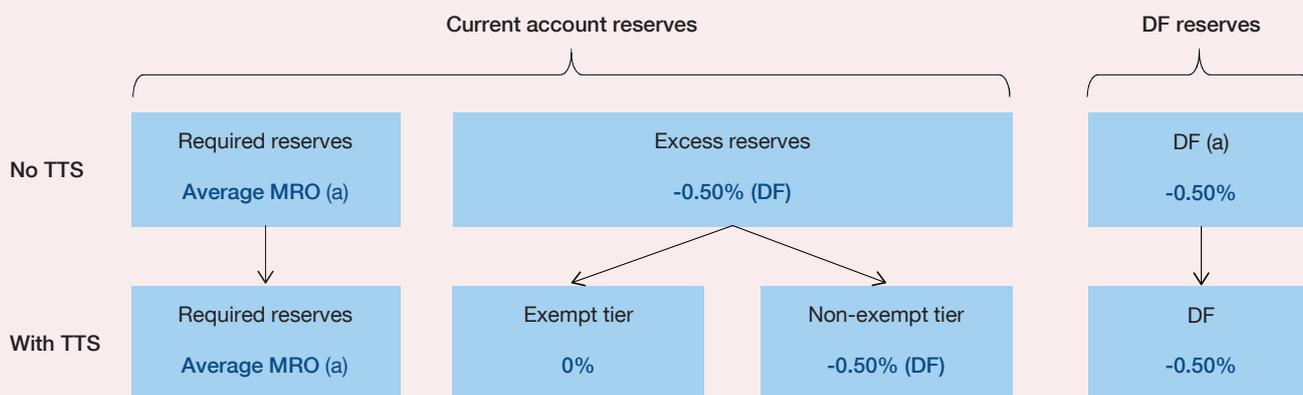
by credit institutions in their current accounts exceeding that threshold and will continue to be remunerated at zero percent or at the deposit facility rate (currently -0.5%), whichever is lower (see Diagram 1).

The application of TTS generates two types of situations for institutions, since excess reserves are unevenly distributed across the Eurosystem. Some institutions have excess reserves exceeding the exemption threshold and others' excess reserves are below this threshold. The latter institutions have unused exemption allowances and can raise liquidity without increasing its cost.

This uneven distribution of excess reserves prompted institutions to embark on a redistribution process as soon as the TTS came into effect, to benefit as much as possible from the new system. As a result of this process, the unused exemption allowances have now become residual, representing, in relative terms, 5% and 4% of total exemption allowances in MP7 and MP8, respectively.

As was to be expected, credit institutions with unused exemption allowances and with reserve holdings at the deposit facility immediately transferred them to their current accounts to take advantage of the new measure (see Chart 1).

Figure 1
TWO-TIER REMUNERATION SYSTEM



SOURCE: Banco de España.

a DF: Deposit facility; MRO: Main refinancing operations.

1 For more details, see Box 1.2 of the *Financial Stability Report* (Autumn 2019, Banco de España).
 2 Bank reserves are liquid balances held by credit institutions at their central bank. Credit institutions are required to maintain a minimum level of reserves (known as the "minimum reserve requirement") equal to 1% of their eligible liabilities. The amount of reserves held by credit institutions in excess of the reserve requirements are known as "excess reserves".

IMPACT OF THE APPLICATION OF THE TWO-TIER SYSTEM (cont'd)

Also, in the first few days of MP7, credit institutions entered into agreements with one another to transfer liquidity from those with excess reserves exceeding the threshold to those with unused exemption allowances. Based on MP6 data, if the TTS had been applied in that period, the Eurosystem would have had unused exemption allowances totalling €227

billion. As a result of the liquidity transfers, this amount was reduced to €37 billion in MP7 and decreased further to €30 billion in MP8. This reduction in unused exemption allowances was observed in all euro area countries (see Chart 2).

The redistribution of liquidity has mostly taken place within each country. However, liquidity has also been

Chart 1
EUROSYSTEM CURRENT ACCOUNTS AND DF

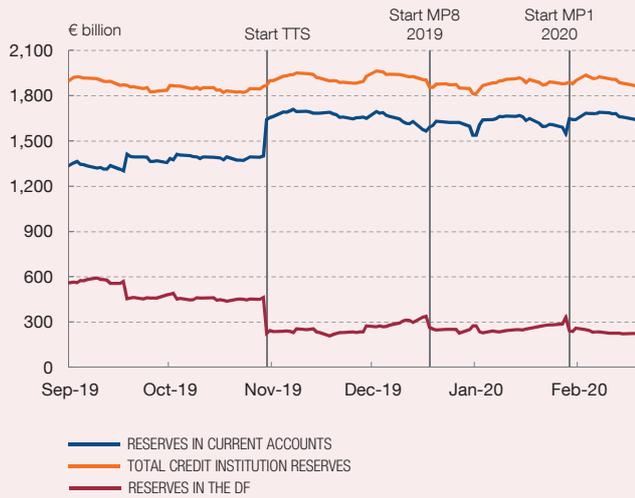


Chart 2
EXEMPT TIER AND UNUSED EXEMPTION ALLOWANCES

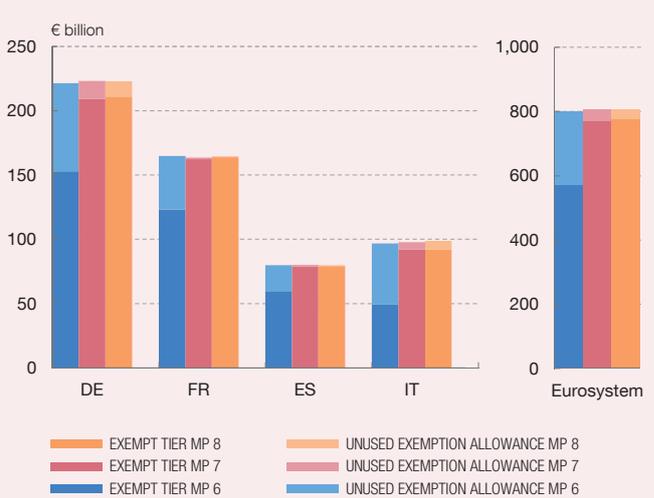


Chart 3
TOTAL EUROSYSTEM TARGET2 BALANCES (a)

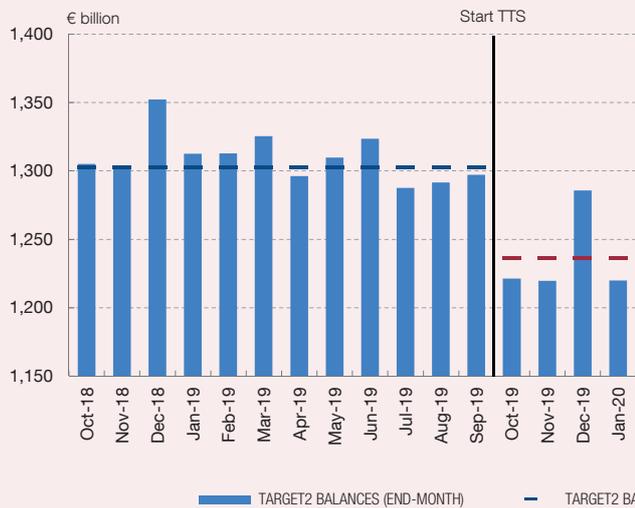
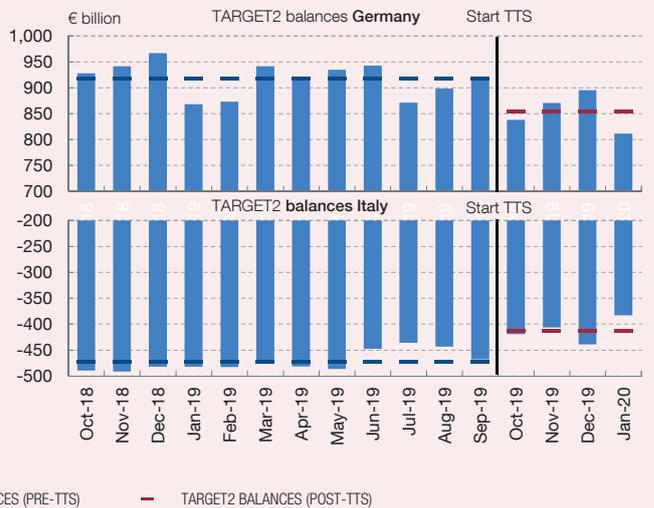


Chart 4
TARGET2 BALANCES IN GERMANY AND ITALY (b)



SOURCES: ECB website (www.ecb.europa.eu/stats/policy_and_exchange_rates/minimum_reserves/html/index.en.html), ECB Statistical Data Warehouse, MMSR and RepoFunds Rate website (www.repofundsrate.com).

- a The aggregate Eurosystem Target2 balance is always zero as, by definition, the sum of Target2 assets is equal to the sum of Target2 liabilities. To illustrate the TTS effect, this chart shows only the sum of the assets balance or liabilities balance. This prevents the balances from offsetting each other.
- b Germany is shown with a positive Target2 balance because its Target2 is on the asset side of the balance sheet. Italy is shown with a negative Target 2 balance because its Target2 is on the liabilities side of the balance sheet.

IMPACT OF THE APPLICATION OF THE TWO-TIER SYSTEM (cont'd)

redistributed among credit institutions across euro area countries. Specifically, based on MP6 data, there were four countries (Italy, Greece, Portugal and Slovakia) whose unused exemption allowances would not have been fully exhausted with domestic liquidity transfers and could therefore be used up with cross-border liquidity transfers. Of the €227 billion of the unused exemption allowances, €188 billion could be accounted for by domestic transactions and €39 billion by cross-border transactions. Although this effect has not significantly reduced the

concentration of excess liquidity in a few countries, it has been sufficient to reduce the Eurosystem's total TARGET2 balances (see Chart 3). This effect is clearly observed in Germany, in the decline of its TARGET2 asset balances which reflects liquidity outflows to other countries, possibly including Italy, where liquidity inflows via TARGET2 are reflected in the decrease of its TARGET2 liability balances (see Chart 4).

The deals reached by institutions have largely taken place in the money markets,³ mostly concentrated in the repo

Chart 5
SHORT-TERM BORROWING VOLUMES OF MMSR BANKS WITH UNUSED EXEMPTION ALLOWANCES

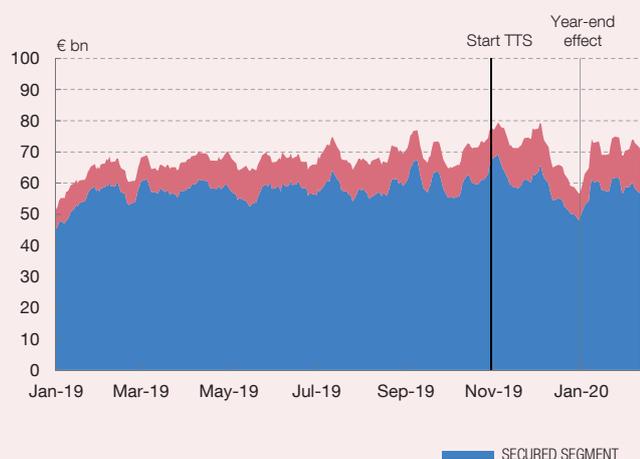
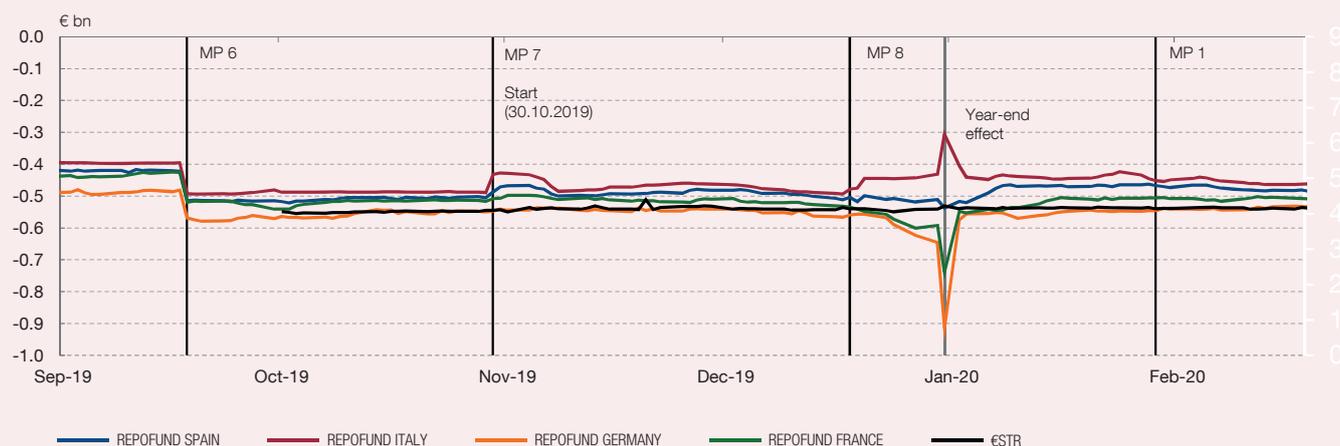


Chart 6
SHORT-TERM LENDING VOLUMES OF MMSR BANKS WITHOUT UNUSED EXEMPTION ALLOWANCES



Chart 7
MONEY MARKET RATES



SOURCES: MMSR, ECB Statistical Data Warehouse and the RepoFunds Rate website (www.repofundrate.com).

3 Institutions could also have redistributed liquidity through asset sales and intragroup distribution.

IMPACT OF THE APPLICATION OF THE TWO-TIER SYSTEM (cont'd)

segment and using central counterparty clearing houses. An increase in the activity of the unsecured segment has also been observed, to some extent revitalising a market that had very low volumes before application of the TTS (see Charts 5 and 6). The heightened activity was due to an increase in financing transactions by institutions with unused allowances.

Following the liquidity redistribution process and the calibration of the multiplier at six times the minimum reserve requirements, the excess reserves that continue to be remunerated at -0.5% amount to €900 billion. This is a sufficiently large amount for interest rates to have been only marginally affected in the first few days of MP7 and to remain aligned with policy rates. In the deposit segment, the €STR (unsecured interbank rate) has barely been affected and remains at levels that are very close to

those before the TTS was applied. Conversely, in the repo segment, a rise in interest rates was observed when the TTS came into effect, particularly in repos with Italian or Spanish collateral (6 bp and 4 bp, respectively), but it was corrected within a few days (see Chart 7). It should be noted that the year-end effect in MP8 makes it difficult to interpret the impact on money markets of applying the TTS during that period.

To conclude, application of the TTS has led to higher interbank activity to redistribute excess liquidity not only at the national level but also among euro area countries. Money market rates have only been marginally affected and remain aligned with policy rates. Since the measure has only recently been implemented, a more thorough assessment would be advisable in subsequent maintenance periods.

THE EFFECT OF THE CHANGE IN THE COMPOSITION OF SPANISH EXPORTS ON OVERALL IMPORTS

This early-release box was published on 19 March

Spanish goods imports have slowed appreciably over the past two years. In particular, on National Accounts figures, the annual growth rate of goods imports has fallen from 4.1% on average in the 2016-27 period to 1% taking the average of the past two years.

The key determinant of the behaviour of goods imports is final demand. Imports usually react more than proportionately to changes in this latter variable. This was particularly the case in the two years spanning 2016-2017, when final demand grew by 3.3%, but not so in 2018-2019, when the related growth rate was 2.2%.

There are various potential factors behind this lower elasticity of imports to final demand. Firstly, it might be due to an across-the-board reduction in the import content of the various components of final demand (i.e. national demand and exports). In turn, it might be attributable to various causes including, for one, an improvement in the Spanish economy's competitiveness vis-à-vis the rest of the world, which would be conducive to the substitution of national production for imported inputs; and, for another, some reversal in the development of global value chains, which appears to have been witnessed internationally since the outbreak of the global financial crisis.¹ Secondly, the greater flatness of Spanish goods imports in the past two years, compared with final demand, might be on account of a composition effect, whereunder those final demand components with a greater (lesser) import content would have posted lower (higher) growth rates.

The OECD Trade in Value Added (TiVA) database provides the foreign value added incorporated into each of the final demand items. The latest available data are for 2015, meaning that it is not possible to assess with this information the role that the first of the aforementioned factors (i.e. a hypothetical proportional reduction in the import content of the various components of final demand) might have played in the slowdown in imports in 2018-2019. It is possible, however, using the import content figures for 2015 from this database, to assess the extent to which the second factor (i.e. composition effect) may have had a bearing on the loss of momentum of imports, a matter which is analysed hereafter.

Chart 1 shows that the foreign value added incorporated into Spanish final demand totalled 23% in 2015; however,

this ratio differed substantially across the main demand captions. Thus, while foreign value added incorporated into gross fixed capital formation was 32%, the figure in the case of final consumption was 19%. As regards exports, their import content (23%) in the goods and services aggregate is in line with that for the whole of final demand. But not only is there marked dispersion regarding the import content among the different final demand components, but also within each component. In particular, Chart 2 shows that, under exports, those relating to the automobile sector (C29), for example, have a much greater import content than those evidenced by food exports (C10-C12).

On the basis of this heterogeneity, an initial assessment can be made of the effect that the changes in the sectoral composition of Spanish exports in the past two years may have had on the behaviour of imports. In this respect, Chart 3 shows that, over the past two years, the exports that have most grown have in fact been those least requiring imported inputs. This same conclusion can be seen in Chart 4, which shows the real growth of Spanish goods exports observed in recent years (blue line) and that which would result from weighting each of the export components by their import content (red line). The fact that the blue line is above the red line in the most recent phase (especially in 2018) suggests, once again, that exports of those products less intensive in imported inputs grew more in this period. This would have resulted in a lesser sensitivity of imports to the aggregate growth of exports.

The results set out in this box should be viewed with caution. While they may be used to rationalise the slowdown in imports observed in the past two years, they are not enough for robust conclusions to be drawn about the future behaviour of imports. In particular, the greater or lesser buoyancy of exports of a specific product in recent years may have been influenced by fluctuations in global demand, which may be reversed in the future. It would also be worth assessing whether the evidence in this box at the disaggregated level for exports is common to the other components of final demand, i.e. consumption (private and government) and the different headings of gross capital formation.

¹ See, for example, ECB (2019), "The effects of tariff hikes in a world of global value chains", Economic Bulletin 8/2019, ECB, Box 1.

THE EFFECT OF THE CHANGE IN THE COMPOSITION OF SPANISH EXPORTS ON OVERALL IMPORTS (cont'd)

Chart 1
FINAL DEMAND IMPORT CONTENT. 2015 (TIVA)

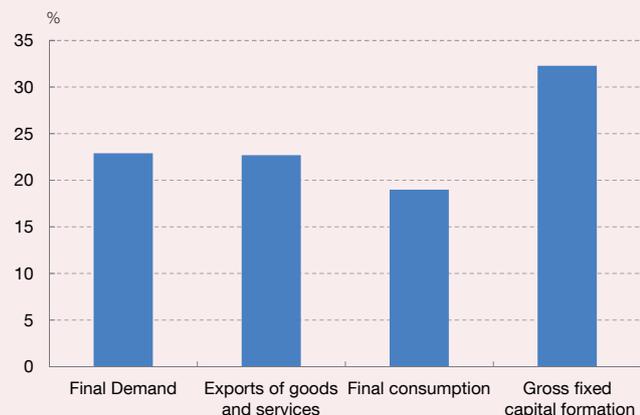


Chart 2
IMPORT CONTENT OF GOODS EXPORTS BY BRANCH IN 2016 (a)

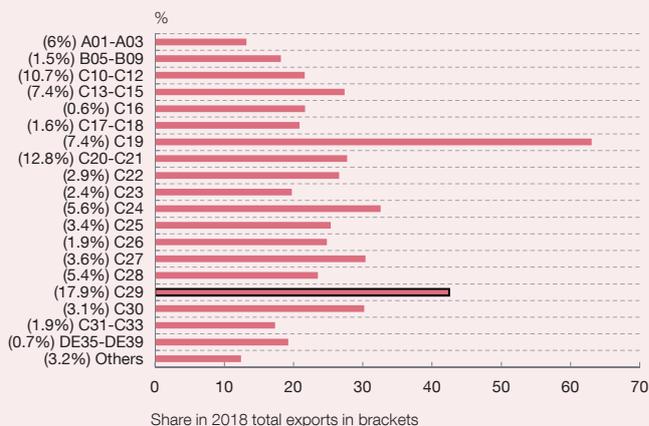


Chart 3
EXPORTS BY SECTOR AND IMPORT CONTENT

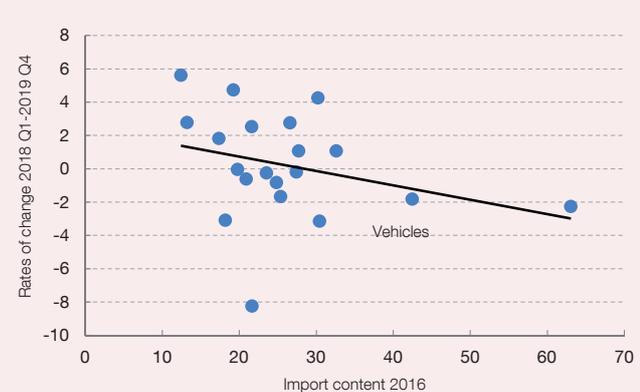
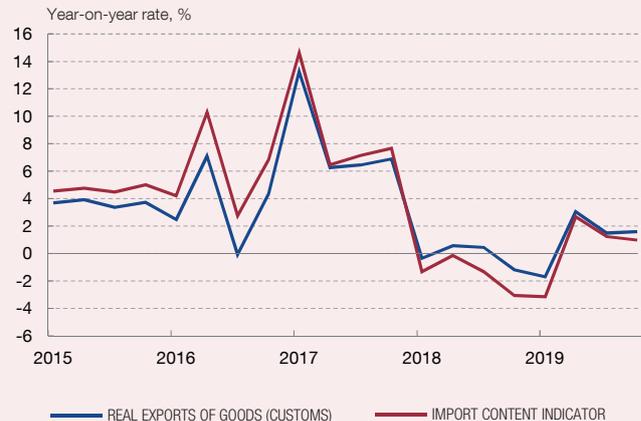


Chart 4
IMPORT CONTENT INDICATOR OF REAL EXPORTS OF GOODS



SOURCES: OECD, Customs Department and Ministerio de Asuntos Económicos y Transformación Digital.

a A01-03: agriculture; B05-B09: mining; C10-12: food products; C13-15: textiles; C16: wood; C17-C18: paper; C19: refined petroleum products; C20- C21: pharmaceutical products; C22: plastics; C23: non-metallic mineral products; C24: basic metals; C25: metal products; C26: electronic products; C27: electrical equipment; C28: other machinery; C29: automobile sector; C30: other transport equipment; C31-C33: other manufacturing; DE35-DE39: electricity; Other.

REGULATORY UNCERTAINTY AND ITS IMPACT ON CAR SALES

This early-release box was published on 24 February

Between the beginning of 2016 and mid-2018, private car registrations in Spain grew year-on-year by an average of around 5%. Thereafter, registrations began to perform notably less favourably, falling more than 11% in 2019. Chart 1 shows that this decline has been sharper than that in the consumption of other durables. This suggests two things: first, a common factor in decisions to purchase these goods (cars and other durables) could have been behind the recent slowdown. This factor would be, for example, the petering out of demand pent up during the crisis or rising global macroeconomic uncertainty. Second, the car industry has likely also been affected by some type of idiosyncratic shock.¹

This box aims to analyse the extent to which developments in registrations in Spain have been influenced by one such idiosyncratic factor. Specifically, by the uncertainty surrounding the entry into force of a European protocol, the World Harmonised Light Vehicle Test Procedure (WLTP) in September 2018, and of other traffic restrictions in big cities.²

To do so, an indicator was constructed that measures regulatory uncertainty in the car industry using articles containing a series of key words published in the national press. Textual analysis is a well-established methodology in the literature for gleaning information on phenomena, such as uncertainty or expectations, that are hard to quantify.³ Specifically, articles published in seven Spanish newspapers⁴ were processed for this analysis. An index was built based on the frequency of the articles containing the words “diesel and petrol”, “electric cars”, “traffic restrictions”, “Madrid Central” or “WLTP”. Chart 2 tracks developments in this index since 2016. It points to a notable increase in uncertainty in the car industry in mid-2018, when the WLTP was about to enter into force. Since then, this uncertainty has held at relatively high levels.

Furthermore, it has also reacted to the entry into force of various forms of traffic restrictions in Madrid, Barcelona and other big cities.

The slowdown in new car registrations in Spain from mid-2018 has coincided with the increase in uncertainty shown in Chart 2. This rising uncertainty could therefore explain the slowdown. To confirm such a link, new registrations lost in Spain since July 2018 are estimated. The loss of new registrations is proxied by the difference between the July 2018 forecast and actual registrations (see Chart 3).⁵ If we combine the measure of this slowdown in new registrations with the uncertainty index in the car industry, we can see that the two variables are closely linked from 2018 Q3 (see Chart 4).

This uncertainty in the car industry may prove to be short-lived and recede once agents have fully taken the legislative changes on board. If this is the case, new car registrations can be expected to gather pace again in the future. According to the latest survey indicators from the European Commission, consumers’ intention to buy a new car has not shifted, even in the case of younger drivers, whose preferences are more shaped by the latest technological, social and legislative developments.

However, other factors could contribute to the continuing weakness in car sales. On the one hand, there is no established technological paradigm to replace the combustion engine which, after a century of use, is showing signs of coming to an end. On the other, regulatory changes and technological developments could lead to price rises, which would naturally have an impact on demand for cars. For example, in terms of manufacturing costs, the need to incorporate technologies that reduce emissions so as to comply with the new standards is a source of upward pressure on new car prices.

1 It is also possible that rising global and domestic uncertainty has had a stronger impact on car sales than on sales of other durables, owing to the importance of car purchases, given their amount, in household consumption decisions

2 For further information on the implementation of the WLTP, see Box 4, “Impact of the new emissions regulation on the automobile market”, Quarterly Report on the Spanish Economy, *Economic Bulletin*, 4/2018, Banco de España.

3 See, inter alia, S. Baker, N. Bloom, and S. Davis, “Measuring Economic Policy Uncertainty”, *The Quarterly Journal of Economics*, Vol. 131, No 4, November 2016, pp. 1593–1636, and C. Ghirelli, J. Pérez and A. Urtasun (2019), “Measuring economic and economic policy uncertainty and their macroeconomic effects: the case of Spain”, *Empirical Economics*, September.

4 The four general newspapers (*El País*, *La Vanguardia*, *ABC* and *El Mundo*) and the three business newspapers (*El Economista*, *Cinco Días* and *Expansión*) with the highest circulation were used.

5 The estimates are made through a univariate model used by the Banco de España for analysing this variable. This model showed a successful statistical adjustment before the introduction of the new legislation. July 2018 has been selected as the start date for the projection exercise because new registrations in August were already heavily distorted by the entry into force of the WLTP legislation in September. Specifically, in August car dealers moved to clear their car stocks that would not meet the new standards. They offered heavy discounts and resorted to self-registration for final sale at a later date. This led to a bounce in August, tailing off in September, as shown in Chart 3.

REGULATORY UNCERTAINTY AND ITS IMPACT ON CAR SALES (cont'd)

Chart 1
DURABLE CONSUMPTION AND NEW PRIVATE CAR REGISTRATIONS
Year-on-year rates of adjusted series



Chart 2
REGULATORY UNCERTAINTY (a)



Chart 3
NEW PRIVATE CAR REGISTRATIONS
Actual data and July 2018 forecasts

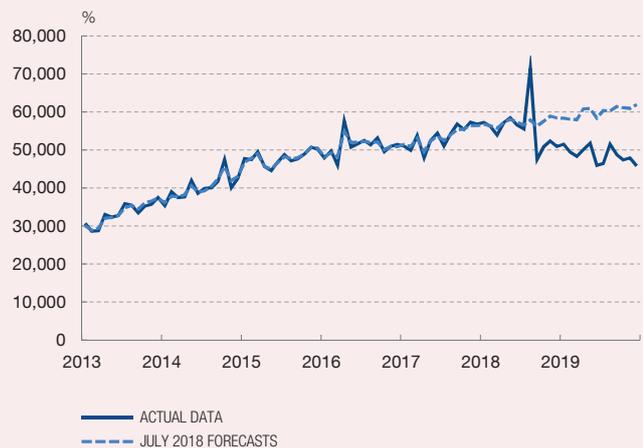


Chart 4
REGULATORY UNCERTAINTY AND LOSS OF NEW PRIVATE CAR REGISTRATIONS (b)



SOURCES: ANFAC, INE, Factiva Dow Jones and Banco de España.

- a Barcelona LEZ refers to the approval of the Low Emissions Zones in Barcelona, in force since 1 January 2020, and Madrid 360 to the unveiling of the Madrid Municipal Council's latest air quality and climate change plan.
- b Uncertainty is depicted in terms of the six-month moving average. The loss of new car registrations is the difference between actual registrations and those forecast in July 2018.

2 INTERNATIONAL FINANCIAL MARKETS

The coronavirus health crisis has completely dominated developments in the international financial markets in recent weeks, giving rise to very strong movements in financial asset prices

The propagation of the pandemic has caused a sharp fall in the stock market indices (see Chart 1). The positive market stance which characterised the previous quarter, with historical highs in the stock market indices of the US (S&P 500, Dow Jones and Nasdaq) and Europe (Stoxx Europe 600) continued at the beginning of the year. This trend was interrupted by the uncertainty regarding the COVID-19 health alert, which had two distinct episodes. The first one started around 23 January, the date when the Chinese city of Wuhan, the centre of the outbreak, was quarantined, and had a relatively limited impact on global markets. The second one, associated with the expansion of the virus to other geographical areas (particularly after outbreaks appeared in Italy, South Korea and Iran) started on 21 February, triggering a fall in global stock indices not seen since 2008. Since then until the cut-off date of this report, the S&P 500 had declined by 30.9% and the Euro Stoxx 50 had dropped 32.9%. These falls reflect both the market's concern about the effect of the health crisis on the profits of listed companies and the increase in investors' risk aversion, factors which the decisiveness of economic policies had barely started to contain around mid-March. This high uncertainty has also been reflected in the volatility of equity markets, which have reached values close to their all-time highs both in the United States and in Europe.

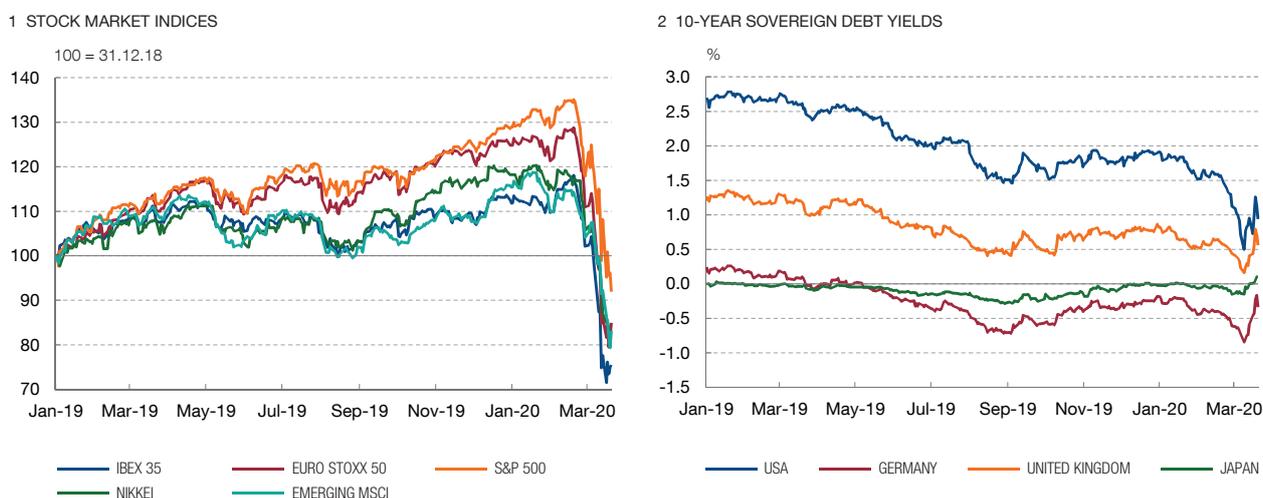
The decline in stock market indices has affected all economic sectors, especially the banking, energy and tourism sectors. The sharp falls in banks' share prices reflect the market's concern about the future changes in the quality of bank assets, against a backdrop of a strongly worsening short-term macroeconomic outlook. In the case of energy and tourism, the sharp drop in the stock prices of listed companies includes the comparatively higher effects which the health crisis would have on their volume of activity and expected future earnings.

The health crisis has also had a strong impact on sovereign debt markets, prompting sharp falls in the long-term yields of the higher-rated bonds (see Chart 1). These decreases can be explained both by the search for safe assets and by the downward revision of interest rate expectations. US and German sovereign 10-year bond yields posted record lows over the quarter, to stand at below 0.5% and -0.8%, respectively. However, in the last few days these movements have reversed, particularly in the case of the German 10-year bond yield, to a level above that of 21 February, prior to the worsening of the geographical spreading of the disease. This

Chart 1

STOCK MARKET INDICES SLIDE AND SOVEREIGN DEBT YIELDS DECLINE AGAINST A BACKDROP OF HIGH RISK AVERSION

Financial markets in 2020 Q1 have been marked by the increase in risk aversion and the downturn in the macroeconomic outlook as a result of the coronavirus health crisis. The reflection of this has been a heavy decline in the main stock market indices and, initially, declines in long-term sovereign debt yields meeting high credit standards, the performance of which has also been influenced by higher expectations of interest rate reductions. More recently, long-term sovereign debt yields have risen, perhaps in response to the sale of this type of asset by investors with liquidity requirements and/or to the expected strong increase in issues on this market to fund public spending programmes so as to offset the adverse effects of the health crisis.



SOURCE: Refinitiv Datastream.

increase in the yield on German debt, also seen in the case of US debt, might reflect the need for investors to raise funds, which would explain the sale of highly liquid assets such as sovereign debt. Also noteworthy is the increase in the sovereign risk premia in the euro area, particularly in Italy and Greece, which was partially reversed following the announcement by the ECB of a new asset purchase programme on 18 March 2020.

High-risk corporate debt yield spreads have rebounded strongly and the dollar has depreciated against the euro and the yen. US and European high-yield corporate credit spreads posted increases of 592 bp and 582 bp, respectively, in the quarter to date. This increase reflects both investors’ risk aversion and the perceived worsening of issuer credit quality resulting from the adverse effects of the coronavirus on activity. In the case of the US market, the strong falls in oil prices in the last few weeks appear to be leading to significant downward revisions of the perceived credit quality in firms that are more exposed to oil extraction activities. Also, the depreciation of the dollar against the euro and the yen could be responsive to the narrowing interest rate spreads between these economies. However, this trend has reversed in the last few days, probably, at least in part, owing to the global demand for dollars, in a setting where the US dollar is playing its usual role as a safe-haven currency during episodes of high uncertainty, such as the current one. The high demand for funding in dollars was reflected in the increase in the cost of acquiring dollars through

currency swaps, which led to a coordinated action by the main central banks to increase currency exchange transactions between them and to expand them to more countries.

3 EXTERNAL ENVIRONMENT OF THE SPANISH ECONOMY

3.1 External environment of the euro area

The global economic situation has been driven by the spread of the coronavirus epidemic.

In the last quarter, the global spread of the COVID-19 coronavirus drastically influenced the international economic environment. The pandemic's negative impact on international activity and trade is expected to be substantial, although the magnitude is still subject to a high degree of uncertainty. Consequently, analysts' growth forecasts for this year have begun to undergo substantial downward revisions, with an unusually high dispersion (see Charts 2.1 and 2.2). Many countries are expected to enter a recession in the short-term, but most professional forecasters expect the impact of COVID-19 to be transitory, and their forecasts therefore factor in an improvement in growth in the second half of the year and, in some cases, also in the level of GDP in 2021. However, the uncertainty surrounding the duration and global spread of the pandemic implies that these forecasts are also subject to great uncertainty.

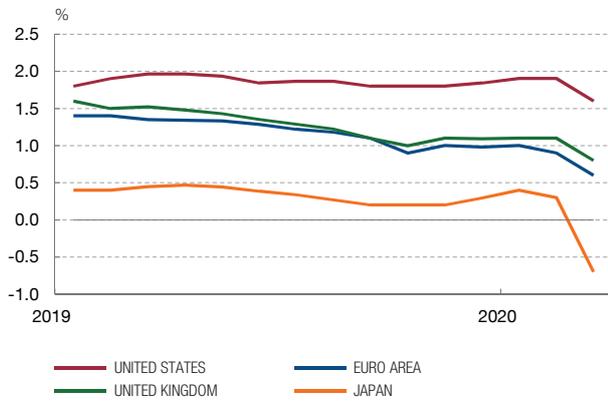
With the exception of China, the most common activity indicators do not yet reflect the impact of the spread of COVID-19. In China, the manufacturing PMI plummeted to 35.7 points in February (compared with 50 points posted in January), with sharp declines in most of its components. The first two months of the year as a whole witnessed a slump, in year-on-year terms, in industrial output (-13.5%), retail sales (-20.5%) and investment (-24.5%). Activity in most service sectors, with the exception of the financial sector, deteriorated, particularly the hotels and restaurants and transport sectors, which have been hard hit by the restrictions on people's movements imposed by the Chinese government. In contrast, the PMIs of the rest of the world do not yet reflect any notable effects linked to coronavirus (see Chart 2.3), as the surveys were conducted before the epidemic spread outside Asia. However, more recent evidence on economic activity anticipates a significant worsening of the economic environment across all geographical areas, particularly in countries which have suffered the most severe outbreaks of the virus and have been forced to implement drastic measures to contain the epidemic. For similar reasons, the decline in economic activity is more pronounced in sectors such as tourism and transport. In general, according to high-frequency data, the financial vulnerability of emerging economies has increased, with the depreciation of their currencies, higher sovereign risk levels and plummeting portfolio capital flows, and is far more marked than in previous episodes of financial stress in these markets, including the global financial crisis (see Chart 2.4).

Chart 2

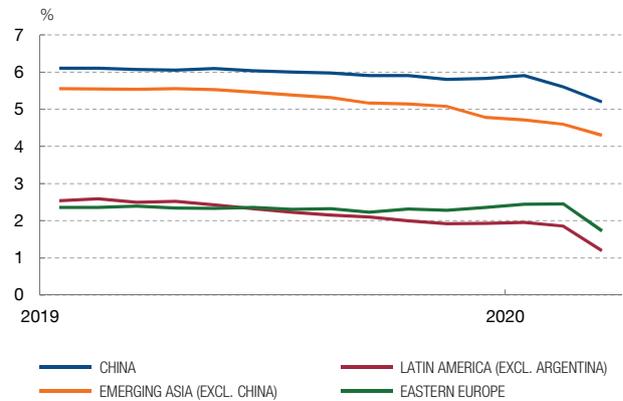
THE IMPACT OF CORONAVIRUS ON INTERNATIONAL ECONOMIC ACTIVITY

The spread of the coronavirus COVID-19 epidemic has lowered the level of activity and commodities prices, leading to a downturn in growth forecasts. At the same time, it has tightened financial market conditions.

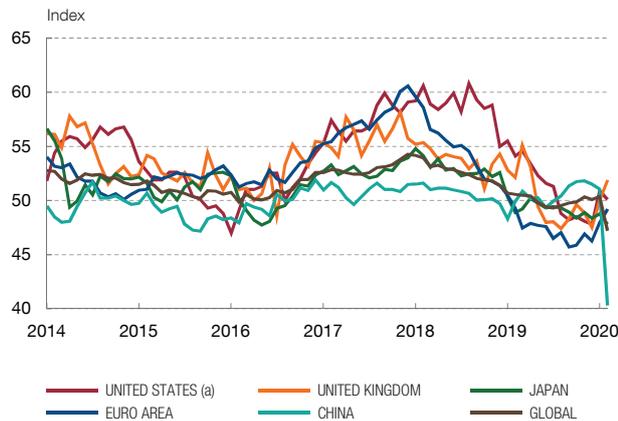
1 GDP GROWTH FORECASTS FOR 2020: ADVANCED ECONOMIES



2 GDP GROWTH FORECASTS FOR 2020: EMERGING MARKET ECONOMIES



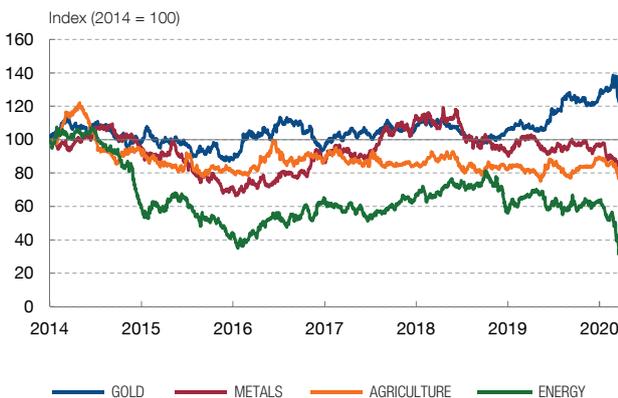
3 MANUFACTURING PMI



4 FINANCIAL CONDITIONS



5 COMMODITIES PRICES



6 OIL PRICES



SOURCES: Consensus Forecast, Thomson Reuters, IHS Markit, JP Morgan and Bloomberg.

a The ISM index has been used for the United States.



The spread of the epidemic has triggered a slump in commodity prices, particularly in oil prices. As a result, the growth forecasts of commodity exporters have been significantly affected. The lower expected global demand for commodities led to a pronounced drop in oil prices, although metal and food prices also declined (see Chart 2.5). In March, the price per barrel of Brent plunged by 50%, from 55 to 27 US dollars (see Chart 2.6), owing to the fall-off in demand caused by the pandemic and to the failure of the OPEC and Russia to reach an agreement to limit the global oil supply at their meeting on 5 and 6 March. In this setting, Saudi Arabia decided to increase its oil supply, thus lowering the price of this commodity. The price of gold, which had posted increases owing to its use as a safe-haven asset, has decreased by more than 10% in the last few days, as a result of sales by investors in need of liquidity in an environment of heightened uncertainty in financial markets.

A contraction in international trade seems inevitable, owing to the disruption of global supply chains. Global trade in goods fell by 0.4% in 2019 with respect to 2018. Moreover, the new export orders component of the manufacturing PMIs dropped below the threshold of 50 for all main world economies in February, even before the full effects of the pandemic could be felt. At the beginning of the year, some positive international trade developments contributed to improving the outlook, such as the approval by the US Senate of the new United States-Mexico-Canada Agreement (USMCA), and the alliance formed by the European Union and a group of 16 countries, including China and Brazil, to settle trade disputes through an appeals and arbitration system at the WTO. However, the positive impact of these developments was overshadowed by the grinding to a halt of trade caused by the spread of the COVID-19 epidemic. In China, which is a leading indicator for other geographical areas, since the spread of the virus there leads that of the rest of the world by two months, exports fell by 17% in January-February, compared to the same period in 2019. In addition, China's high degree of integration in global supply chains and its role in shaping global commodity demand, are expected to amplify the slump in trade to other geographical areas.

3.2 The euro area

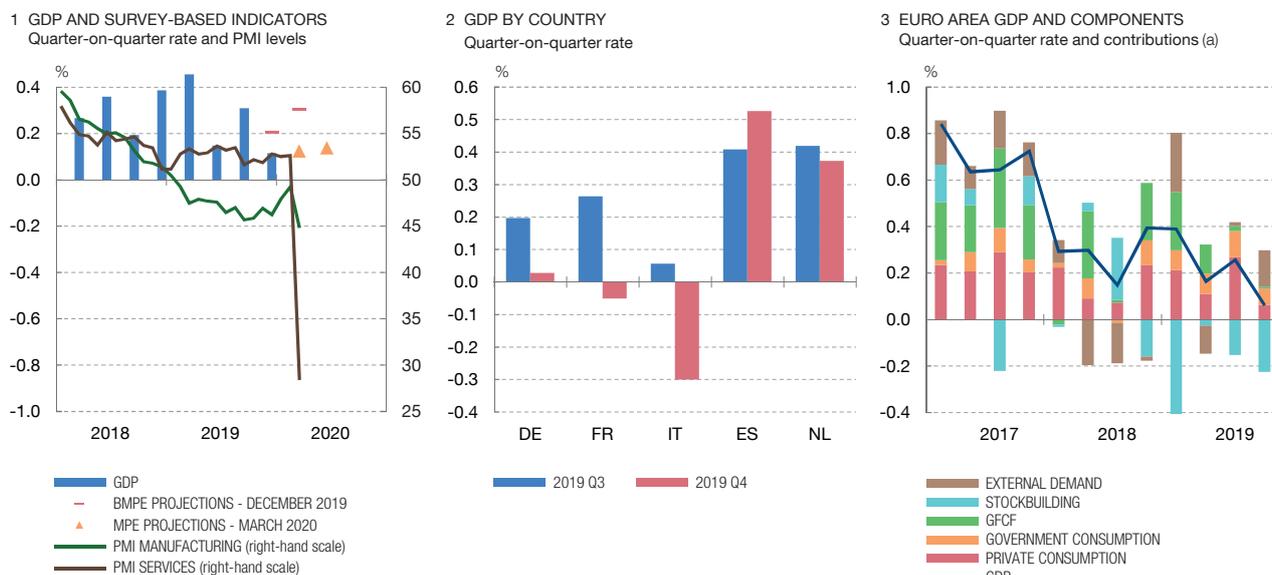
Economic growth in the euro area was already weak before the health crisis spread

Economic activity in the euro area was surprisingly weak at end-2019. In 2019 Q4, GDP growth slowed to 0.1% in quarter-on-quarter terms and was below expectations (see Chart 3.1). Such a low rate is attributable to GDP growth of practically zero in Germany and activity contracting in France and Italy (see Chart 3.2). In the euro area as a whole, the slowdown observed was the result of a lower contribution by domestic demand, while the external sector's contribution improved with respect to prior quarters. In turn, the negative contribution to GDP growth by changes in inventories increased (see Chart 3.3).

Chart 3

THE SITUATION OF ECONOMIC SLUGGISHNESS CONTINUES IN THE EURO AREA

Euro area GDP growth remained very weak in Q4, with declines in France and in Italy. The increase in GDP was essentially underpinned by external demand. The latest information indicates that the decline in activity as a result of the health crisis will be most pronounced.



SOURCES: Eurostat, Markit Economics and ECB.

a Excluding Ireland, owing to the major fluctuations shown by some of its GDP components as a result of the effect of multinationals.



The mainly qualitative information concerning the first quarter is from before the epidemic's expansion to the euro area. Overall, this information was consistent with a slight improvement in outlook. Specifically, industrial production had performed more positively in January, while the indicators relating to activity in the services sector signalled that its growth rate was holding steady. Consumer confidence and employment expectations, in both services and construction, had improved up to February and the unemployment rate held at 7.4 % in January, its lowest rate since 2008. However, in February the opinions on export order books evidenced the effects of the health crisis in China. Furthermore, corporate lending has recently slowed even further.

The pandemic has significantly worsened short-term activity prospects

In the short term, the euro area's economic outlook has deteriorated abruptly and sharply on account of the COVID-19 epidemic spreading through Europe. The confinement measures, required to stop the transmission of the virus are adversely impacting the economy on both the supply side, given the disruption to (global and local) production chains, and, especially, the demand side, because of the resulting significant fall-off in household and business expenditure, against a backdrop of uncertainty reaching levels unheard of in decades. The effects of all

Table 1

EURO AREA GDP AND HICP GROWTH FORECASTS (a)

	2020		2021		2022	
	GDP	HICP	GDP	HICP	GDP	HICP
European Central Bank (March 2020)	0.8 (-0.3)	1.1 (0.0)	1.3 (-0.1)	1.4 (0.0)	1.4 (0.0)	1.6 (0.0)
European Commission (February 2020)	1.2 (0.0)	1.3 (+0.1)	1.2 (0.0)	1.4 (+0.1)		
OECD (March 2020)	0.8 (-0.3)		1.2 (0.0)			
International Monetary Fund (January 2020)	1.3 (-0.1)		1.4 (0.0)			
<i>Consensus Forecast</i> (March 2020)	0.6 (-0.3)	1.1 (-0.1)	1.3 (+0.1)	1.4 (0.0)		

SOURCE: ECB, European Commission, *Consensus Forecast*, IMF and OECD.

a The figures in brackets are the change with respect to the previous forecast, which relates to December 2019 for the ECB, November for the EC and the OECD, October for the IMF and February 2020 for *Consensus*.

these developments are particularly pronounced in the case of certain sectors, such as those related to tourism, transport and leisure. Even so, while it is currently clear that the euro area economy is facing a very profound shock, there remains a very high level of uncertainty regarding the magnitude of the pandemic's economic impact and how long such impact will last. Specifically, it is hard to forecast how quickly the measures implemented by the health authorities will successfully contain the epidemic. This also depends on exogenous factors, such as the probable decrease in viral transmission once summer arrives.

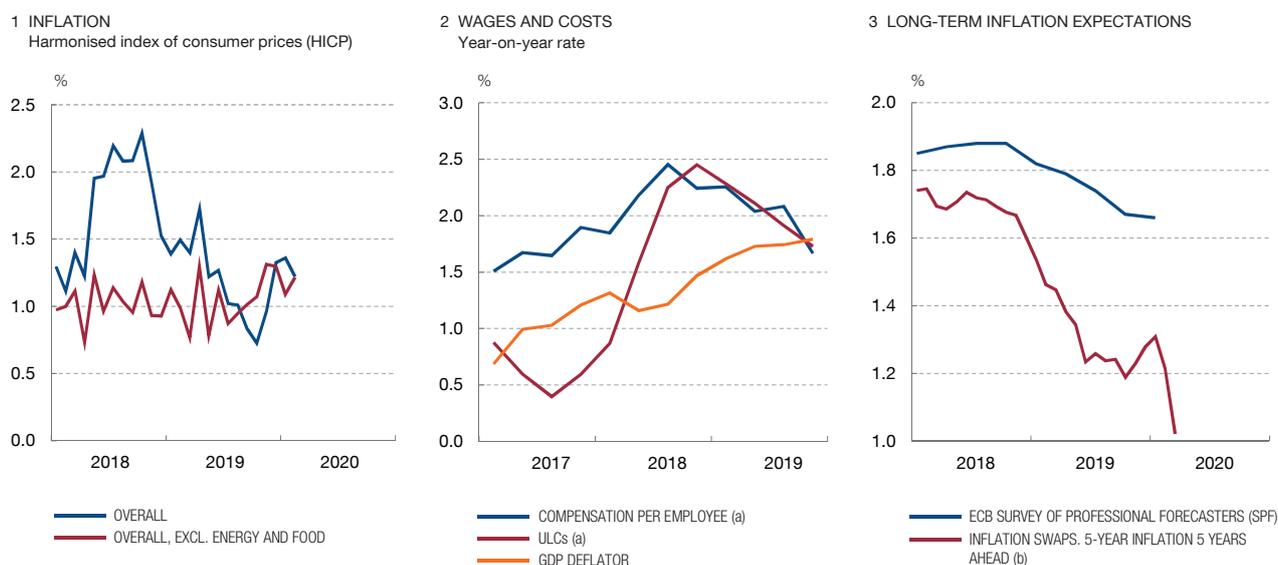
Against this exceptionally uncertain backdrop, euro-area growth prospects, both those of private analysts and official bodies, are undergoing abrupt and pronounced downward revisions, above all for 2020. The pace at which events are unfolding means that larger downward revisions are being made as the days go by. For example, the downward revision to projected GDP growth for 2020 of 0.3 percentage points (to 0.8%) in the ECB's most recent projection exercise, concluded at the end of February, is very modest in light of March's worrying events (see Table 1). In this connection, private analysts' and public institutions' forecasts available at the date of this report point, in many cases, to steep drops in GDP this year. In any case, on the assumption that the epidemic is controlled beyond the short term, the highly expansionary monetary and fiscal policies, detailed in Section 5, should enable a sustained recovery in GDP growth from the second half of the year. This would also be supported by the end of the confinement measures in the rest of the world bolstering external demand.

This scenario is surrounded by downside risks. In particular, it is possible that the health policy measures required to mitigate the epidemic need to be prolonged for an extended period, with the consequent adverse impact on activity. Furthermore, even if the epidemic can be controlled swiftly, it is possible that a shock of this magnitude, albeit temporary, will cause some long-lasting damage to the business sector, agents' confidence and employment.

Chart 4

THE LEVEL OF EURO AREA INFLATION REMAINS LOW

Inflation declined in February to 1.2% (inflation excluding energy and fresh food was also 1.2%), interrupting the rising path of the previous months. There is no discernible pass-through of higher labour costs to prices. The downtrend in long-term inflation expectations has steepened.



SOURCES: Bloomberg, Eurostat and ECB.

- a In 2019 this variable includes the conversion in France of the tax credit for competitiveness and employment (CICE) into a permanent social contributions rebate.
- b Monthly average of daily data.



The inflation outlook is being shaped by the impact of recent developments on activity and on oil prices

Inflation in the euro area remains low. During Q1, euro area inflation was influenced by energy prices, whose decline reduced the year-on-year rate of change in the harmonised index of consumer prices (HICP) to 1.2% in February, according to the flash data. Core inflation, which strips out energy and food prices, likewise stood at 1.2% in February, somewhat below the figure observed at end-2019 (see Chart 4.1), owing chiefly to lower services inflation. Several factors indicate that inflationary pressures will remain subdued in the immediate future: first, unit labour costs are easing; second, the marked decline in oil prices appears to be curbing production costs (see Chart 4.2).

The March ECB projection exercise maintains the low inflation outlook for the next three years (see Table 1). Inflation is expected to gradually recover somewhat in the medium term, underpinned by less economic slack, which would support a slightly more expansionary performance from labour costs and unit profits. In any event, the ramifications of the disease's spread in the euro area, which occurred after the ECB's projection exercise was completed, underscore the downside risks to these projections, amid a scenario in which the deflationary consequences of

lower demand are likely to prevail over the counteracting effects associated with supply disruptions. This is the reading that may be inferred from long-term inflation expectations, which in the most recent period followed a steep downward path and marked an all-time low (see Chart 4.3).

Financing conditions in the economy had remained accommodating before the crisis hit, but there are signs of tightness that economic policies are seeking to address

The crisis will foreseeably drive up perceived risk in general and produce less favourable financing conditions for the private sector. Prior to the epidemic spreading to Europe, interest rates on new corporate and household loans stood close to record lows, as evidenced by the latest data relating to January. Similarly, the cost of corporate financing on the fixed-income markets had followed a declining trend early in the quarter. However, this was cut short in late February when credit risk premiums climbed in response to the spreading of the health crisis.

The health crisis could also have adverse effects on credit supply, which the various economic authorities are attempting to contain. The information provided in the Bank Lending Survey (BLS) precedes the epidemic's arrival in the euro area. Specifically, this data source shows that credit standards for approving loans to corporations and households held stable in 2019 Q4, with the exception of the slight tightening in consumer credit and other lending to households. In addition, at that time institutions envisaged no significant changes in the credit supply to corporations during 2020 Q1, although for household lending they anticipated some tightening in loans extended for house purchases and a slight loosening in consumer credit and other lending. However, growing uncertainty over the health crisis, greater risk perception among borrowers and rising risk premia on bank funding markets could ultimately have a negative bearing on credit supply, particularly if these factors persist over time.

Financing to the non-financial private sector sustained robust growth in the months prior to the crisis. The year-on-year growth rate in loans to non-financial corporations stood at 3.2% in January, down 0.6 pp on the figure for October. Conversely, in that same time period the growth in financing through the issuance of fixed-income securities was up by half a percentage point to 5.7%. Lending to households gained further traction through to January, expanding 3.7% year-on-year in that month, driven by greater buoyancy in loans extended for house purchases and consumer credit.

The euro area economic authorities have responded with expansionary policies to counter the adverse effects of the pandemic

There has been a swift response in terms of the ECB's monetary policy and national fiscal policies to the scale of the challenge. As regards monetary

stimulus measures, at its regular meeting on 12 March, the ECB Governing Council approved a package of measures, which was bolstered by another more forceful package on 18 March at an extraordinary meeting, in light of how the situation had deteriorated in the interim. The response in terms of fiscal policy has been broad-based across countries, albeit with different degrees of intensity. Governments in Germany, France, Italy, Spain, Ireland and Portugal, among others, have announced a broad raft of measures, which have also been strengthened by supra-national measures, led by the European Commission. Section 5 of this Report sets out the contents of the different initiatives launched.

4 THE SPANISH ECONOMY

The momentum of Spanish economic activity in January and February was similar to that recorded at end-2019

In 2019 Q4, Spanish GDP continued to grow at a relatively high rate, clearly outpacing GDP growth in the euro area. Indeed, quarter-on-quarter GDP growth increased by 0.1 pp to 0.5% during that period. This growth in GDP was underpinned by an improved contribution of the external sector, thanks to both the recovery in exports of goods and tourism, and the decline in imports. In contrast, the contribution of domestic demand to quarter-on-quarter GDP growth was negative, owing to the slowdown in spending on private consumption and the decline in gross fixed capital formation.

This favourable pattern held during the first two months of the year. The available indicators as at January and February suggest that activity during that period showed a similar performance to that seen at end-2019, as detailed in Box 1.

However, the spread of the coronavirus health crisis to the euro area, including Spain, in late February has drastically changed this dynamic

The monthly indicators available at the cut-off date of this report do not yet include the impact of the COVID-19 crisis as they refer to January and February. However, there is little doubt as to the severity of the shock, which has radically changed the real and financial dynamics of the Spanish economy since early March.

International travel flows were one of the first areas where the consequences of the geographical spread of the pandemic on the Spanish economy became clear. While the focal point of the disease remained limited to China, the direct impact on the Spanish economy was seemingly modest. Although conclusive evidence is not available, it appears that companies were generally still able to replace their Chinese suppliers, restricted by the confinement measures in place since late January, with suppliers from other geographical areas. However, since late February, the international spread of the disease has had a detrimental impact on arrivals of international travellers.

The quick rise in the number of people infected in European countries has required drastic action to slow down the spread of infection, with far-reaching consequences in several sectors. These measures have included imposing severe restrictions on people's movements and, in many cases, among them Spain,

confining people to their homes. The state of alert in Spain, in force since 15 March, necessary to contain the pressure of the epidemic on the healthcare system, has resulted in a complete suspension of activity in the retail trade (with some exceptions, primarily food), hotels and catering (except for home deliveries) and the entertainment sector.

On the demand side, this has had a very marked impact on household spending on consumer goods, on top of the virtual disappearance of inbound tourism.

There are as yet no monthly economic indicators quantifying these effects, although some may be proxied indirectly. Thus, for example, an indicator based on Internet searches related to expenditure on consumer goods and services shows a sharp decline since the days running up to the declaration of the state of alert (see Chart 5.1).¹ As regards tourism flows, having begun to fall in early March, flights to or from a Spanish airport have quickly declined since the middle of the month (see Chart 5.2).

On the supply side, interruptions in both national and international supply chains and the sharp decrease in demand have led to the closure of some industries.

There is still insufficient information for an assessment of the negative impact on employment, but it will most likely be very significant. The information available suggests that companies are making intensive use of temporary redundancy schemes involving suspension of contracts and/or short-time working. The majority of these job losses will be recovered if, as is to be expected, the shock proves to be temporary.

The worsening of the economic outlook and the heightened uncertainty have had a very severe impact on the financial markets.

Between 21 February and the cut-off date of this report, the IBEX-35 fell by around 35%, somewhat more than the fall recorded by the euro area EURO STOXX 50 index. Stock price declines, which have been widespread across sectors, have been particularly pronounced in the case of shares of banks and of transportation and tourism companies. In addition, between 21 February and 18 March, when the ECB Governing Council announced its latest measures to combat the crisis, Spanish 10-year bond yields rose by 101 bp to 1.2%. In view of the performance of the German bond, this entailed a widening of Spain's sovereign risk premium to 146 bp. Corporate credit risk premia, which had remained low up to end-February, also rose very significantly up to 18 March, driving up the average issuance cost in this market segment. All these developments contributed to a tightening of financial conditions, which was an obstacle to overcoming the crisis. This prompted the decisive measures taken by the ECB on 18 March (see section 5), which have given rise to a partial reversal of the developments described. Thus, between the announcement of the measures and the cut-off date

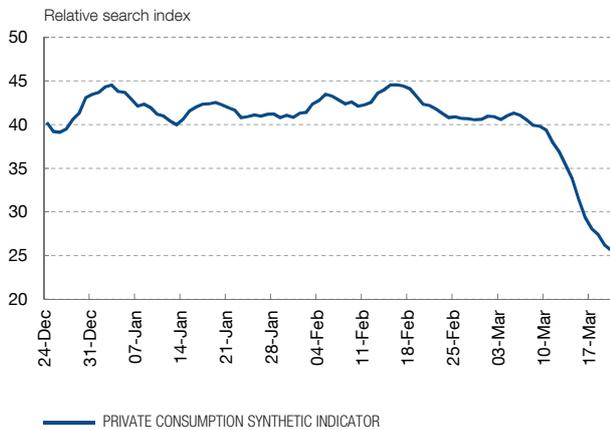
¹ The indicator is constructed on the basis of a set of search terms representing the different categories of consumption expenditure, which are subsequently aggregated on the basis of their respective share of the total.

Chart 5

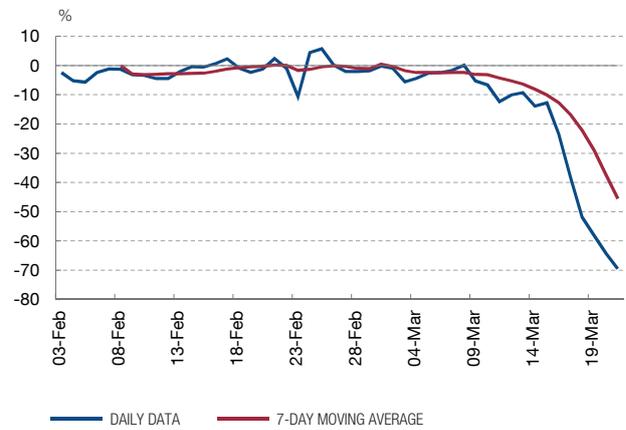
THE CORONAVIRUS CRISIS HAS ABRUPTLY ALTERED THE COURSE OF ECONOMIC ACTIVITY IN SPAIN

Since end-February, the spread of the coronavirus health crisis outside Asia, and its arrival in Europe, has drastically altered the dynamics of economic activity in Spain. The monthly indicators available at the cut-off date for this report, which refer to January and February, do not yet capture the impact of this crisis. However, certain partial high-frequency indicators are already suggesting most pronounced impacts on household spending and tourism flows, among other items.

1 PRIVATE CONSUMPTION SYNTHETIC INDICATOR



2 AIR TRAFFIC IN SPANISH AIRPORTS (YEAR-ON-YEAR RATE)



SOURCES: Google Trends, European Organisation for the Safety of Air Navigation and Banco de España.



of this report, the Spanish 10-year bond yield fell by 46 bp and the risk premium narrowed by 35 bp.

Macroeconomic forecasting is difficult in these conditions, owing to the lack of statistical data permitting quantification of the effects that are already being observed and the high degree of uncertainty going forward

The Spanish economic outlook for the short term is highly uncertain. One of the pillars of this uncertainty relates to the degree of severity of the decrease in economic activity. As mentioned earlier, no monthly indicators are yet available to assess the intensity of the shock, although there are few doubts regarding its magnitude. The experience of confinement in China, where the first monthly data are available, suggests that the effects on activity were even greater than anticipated.

A second pillar of uncertainty relates to the duration of the health crisis. The state of alert, initially two weeks, was extended for a further two weeks a few days before the cut-off date of this report, and at this stage the need for further extension, aimed at halting the spread of the epidemic, cannot be ruled out. In any event, given the incubation period of the disease, the effects of confinement on the numbers of persons infected should begin to be clear a few days after the cut-off date of this report. Once again, the experience of China suggests that the measures adopted should become fully effective in coming weeks.

A third factor whose quantitative influence, a priori, is uncertain is the relatively broad package of measures agreed in the last few days by the various economic authorities. As described in detail in section 5 below, the tax, employment, monetary and supervisory authorities have announced a set of measures which, taken together, entail the largest mobilisation of public funds in the face of a crisis in recent history. At the cut-off date of this report, certain essential aspects of many of these measures are still pending determination, while other measures are beginning to be implemented. In addition, in accordance with the latest messages from the principal Spanish and European economic authorities, new measures to limit the social and economic impact of the pandemic cannot be ruled out. The depth of the economic downturn in the short term and its persistence in coming months will largely depend on the degree of success of this unprecedented set of measures.

5 THE ECONOMIC POLICY RESPONSE TO THE HEALTH EMERGENCY CRISIS AT GLOBAL LEVEL

The rapid deterioration in global activity as a result of the pandemic has led to a broad-based monetary and fiscal economic policy response

Monetary authorities have generally implemented more accommodative policies (see Tables 2 and 3). As the epidemic took hold, the People's Bank of China cut official interest rates and announced a raft of measures to encourage lending to private agents, especially in the most affected regions and sectors, and to reduce its cost. In the advanced countries, the US Federal Reserve unexpectedly reduced its federal funds target rate, by 50 bp on 3 March and again by 100 bp on 15 March, to a range of 0%-0.25%. It also announced a reduction in the discount rate, offers of one and three-month liquidity in the repo market, the re-establishment of swap lines with other central banks and an expansion in its asset purchases. The Bank of England also cut its key policy rate by 50 bp, to 0.25%, at an unscheduled meeting on 11 March, and launched a new credit line for SMEs. Other advanced countries have also lowered their policy interest rates, including Canada, Norway and Australia, while Japan announced an increase in its asset purchases. In addition, in the United Kingdom and in Norway, at the same time as the rate cuts, reductions were also announced in the counter-cyclical capital buffers banks are required to hold within the prudential regulation framework. Finally, there have also been policy interest rate reductions and other monetary policy measures in various emerging economies such as Brazil, Chile, Peru and Turkey.

In the euro area, the Governing Council of the ECB adopted two successive sets of important expansionary measures, on 12 and 18 March. The package approved at the regular meeting of the Governing Council of 12 March is based on three measures: additional longer-term refinancing operations (LTROs), the application of more favourable terms to TLTRO-III operations, and additional net asset purchases of €120 billion until the end of the year. The objectives of these measures are to provide sufficient liquidity to the financial system, to ensure its flow to households and businesses, to support bank lending (primarily to those segments most affected by the consequences of the health crisis, such as SMEs), and to avoid a tightening of the economy's financing conditions. At the same time, the ECB announced a number of measures to temporarily ease banks' capital and liquidity requirements. For example, supervised institutions will be permitted to operate with a level of capital below that established by the Pillar 2 prudential standard, the capital conservation buffer and the liquidity coverage ratio. Finally, the Governing Council, at its meeting of 12 March, decided to keep the interest rate on its main refinancing operations and the marginal lending facility and deposit facility rates at their current levels.

Table 2

MONETARY POLICY MEASURES IN SYSTEMIC COUNTRIES

Country	Cut in benchmark interest rate in bp (to % level)	Asset purchases	Credit support	Liquidity measures on domestic markets	Swap facilities
Euro area		+ €120 billion over rest of 2020 + €750 billion over rest of 2020 (includes commercial paper and self-imposed limits may be relaxed)	longer-term refinancing operations until next round of TLTRO-III in June (average deposit facility rate) Improved TLTRO-III terms Jun 2020 - Jun 2021 Banks permitted to operate below required capital level		Coordinated with other central banks
United States	-150 bp (0%-0.25%)	Purchases of Treasury bonds for \$500 billion and of mortgage-backed assets for \$200 billion Reinvestment of the principal of the agency debt	Reduces discount window cost (to 0.25%). Allows use of liquidity and capital buffers to support credit Reduces reserve requirement to 0% as from 26 March. Might release around \$208 billion	Weekly repos at 1 and 3 months (\$500 billion) Commercial paper financing facility (CPFF) Primary dealer credit facility (PDCF) Money Market Mutual Fund Liquidity Facility (MMLF)	Coordinated with other central banks
Japan		Maximum annual purchases of ETFs and J-REITs doubled to YEN 12 billion and YEN 180 billion, respectively YEN 784 billion increase in volume of government bond purchases	New lending facility (0% interest, maturing at up to one year, and corporate debt as collateral) Higher limit for commercial paper and corporate bonds on balance sheet for a total of YEN 2 trillion (YEN 3.2 and YEN 4.2 trillion, respectively)	Repos for YEN 500 billion	Coordinated with other central banks
United Kingdom	-65 bp (0.1%)	GBP 200 billion increase in asset purchases: up to GBP 635 billion in sovereign and corporate bonds	Financing facility for SMEs, over 12 months, at a rate close to benchmark rate (+ Pounds Sterling 100 billion). State guarantees on loans to companies affected (unlimited in principle, first phase for amount of Pounds Sterling 330 billion)		Coordinated with other central banks
China	MLF (1 year): -10 bp (3.15%) Reverse repos: -10 bp (2.45%; 2.55 %) Preferential loans: 1 year: -10 bp (4.05%); 5 years: -5 bp (4.75%)		Refinancing facility of CNY 300 billion to companies affected by the epidemic. Refinancing/rediscounting facility of CNY 500 billion for SMEs	Segmented cuts in reserve ratio (equivalent to -35 bp on the aggregate, currently 10%). Liquidity provision: reverse repos for value of \$174 billion and \$71 billion	

SOURCE: Banco de España.

Table 3

MONETARY POLICY MEASURES IN OTHER COUNTRIES

Country	Cut in benchmark interest rate in bp (to % level)	Asset purchases	Credit support	Liquidity measures on domestic markets	Swap facilities
Brazil	-50 bp (3.75%)	Sovereign bond repos in US dollars (10% discount)			Swap facility with the Federal Reserve
Mexico				Exchange of longer-dated government bonds for shorter-dated ones (MXN 41 billion allocated)	Swap facility with the Federal Reserve
Chile	-75 bp (1%)	Bank bond purchase programme for \$4 billion	Financing facility conditional upon increase in placements (FCIC) In force for 6 months, 4-year term, initial amount: 3% of trade and consumer credit portfolio	Corporate bonds will be included as eligible collateral for all current liquidity operations in peso, including the FCIC	
Colombia				\$6.5 billion increase in liquidity tenders. Extension of repo terms	
Peru	-100 bp (1.25%)			Overnight repos for an average of PEN 1.4 billion per day, 6-month repos for 1.4 billion and 1-year repos for 1.5 billion	
Turkey	-100 bp (9.75%)		Additional bank liquidity facility for credit to the business sector Extension of maximum maturities for rediscounting of loans to exporting and services firms generating foreign exchange revenue	Increase in terms of repos and in liquidity limits for primary dealers in open market operations	
Canada	-100 bp (0.75%)				Swap facility with the Federal Reserve
Australia	-50 bp (0.25%)		Forward financing facility for companies (additional incentives for SMEs) for, at least, AUD 90 billion	1-month and 3-month repos, indefinitely	Swap facility with the Federal Reserve
South Korea	50 bp (0.75%)	State bond purchases for \$1.2 billion Funds will be set up to stabilise the bond market and the stock exchange (details next week)	50 bp cut in loan facility to 0.25% to support SMEs and companies affected. Also, loans with a preferential interest rate will be expanded to KRW 2.5 trillion (0.1% of GDP)	Increase in eligible collateral in open market operations and in life of operations	Swap facility with the Federal Reserve.
Sweden		Purchases of government, municipal and mortgage-backed bonds for SEK 300 billion in 2020	Forward financing facility for SEK 500 billion to ensure flow of credit to companies		Swap facility with the Federal Reserve
Denmark	+15 bp (-0.60%)			1-week and 3-month loan facilities	Swap facility with the Federal Reserve and the ECB

SOURCE: Banco de España.

The ECB's latest extraordinary measures include a special €750 billion asset purchase programme. The extraordinary measures adopted by the Governing Council on 18 March to alleviate the effects of the coronavirus crisis include a new asset purchase programme (the Pandemic Emergency Purchase Programme, PEPP) of private and public-sector securities with a very large overall envelope, of €750 billion. The programme will continue until the end of the year, or later if necessary. For the purchases of public sector securities, the benchmark allocation across jurisdictions will continue to be the capital key of the national central banks, although a flexible approach will be taken, allowing temporary deviations from this guideline. Also, for the purposes of this programme, a waiver of the eligibility requirements for securities issued by the Greek government will be granted for purchases under the PEPP. As regards purchases of private-sector securities, the ECB has also announced an extension to the range of eligible assets to include commercial paper issued by non-financial corporations of sufficient credit quality.

National authorities are responding to the crisis with fiscal packages, using a broad range of instruments

In accordance with the global nature of the shock, the fiscal policy response is broad-based across countries (see Tables 4 and 5). Also, the packages approved tend to share some common elements. First, many of them include increases in health spending, in order to combat the pandemic in the countries affected. Second, in most cases the measures approved include action to support the income and expenditure of those households and businesses most affected by the pandemic, temporarily, while the effects last. For example, among the countries outside the euro area, subsidies to businesses have been designed to cover the costs arising from employee sick leave, in the United States and in the United Kingdom, and the costs arising from employees taking childcare leave, in Japan and South Korea. Meanwhile, China has brought forward unemployment benefits, by means of a single initial payment. Also, some countries (including China, South Korea and Vietnam) have announced tax and social-contribution payment moratoriums for the businesses in affected industries and regions. The cost of the fiscal measures announced to date varies significantly across countries, generally being within the range of 0.5%-1% of GDP.

In the euro area countries, given the absence of a far-reaching fiscal reaction at European level, the various governments have implemented emergency plans adapted to the needs and possibilities of each country. In Italy, the European country that has so far recorded the largest number of people affected, the government has announced a number of measures with an estimated total cost of €25 billion. The successive decrees approved by the Italian authorities include numerous measures, in different areas, to support businesses and households, as well as a boost to the health care and civil protection budgets. The measures for

Table 4

FISCAL POLICY MEASURES IN EUROPEAN COUNTRIES

Country	Support for health care system (as % of GDP)	Deferral or suspension of taxes	Support for households	Subsidisation of labour costs, unemployment and support for businesses	Liquidity provision to firms through credit lines	Aggregate demand	Announced budget impact (as % of GDP) (a)
Spain	0.3	6-month moratorium for tax debts of SMEs and the self-employed, up to a maximum of €30,000 per tax	Moratorium on mortgage payments for low-income workers and self-employed. Benefits for self-employed who cease trading	Exemption from payment for layoffs or short-time working schemes	State guarantees of €100 billion for non-financial corporations' loans and additional guarantee facility of €2 billion for exporters		1.4
Italy	0.15	Deferral of most taxes until 31 May for firms and the self-employed	Guarantees for moratoria on mortgages, leave for care responsibilities, subsidy of €600 for the self-employed and fund for low-income workers	Unemployment subsidy for firms affected, extension to sectors not covered and suspension of social security contributions	Guarantees, moratoria on loan repayments, reinforcement of guarantee fund for SMEs and credit to cover commercial rents (up to €350 billion)		1.4
Germany		Temporary deferral of taxes for firms	Increase in subsidies for the long-term unemployed and vulnerable households. Assistance for tenants and households unable to pay utility bills	Easing of conditions on which firms are allowed to reduce working hours (Kurzarbeit). Cover of social security payments and bills	"Unlimited" liquidity through KfW, €400 billion in guarantees of firms' debt securities, €100 billion for recapitalisation of firms	Investment programme, €12 billion in 2021-2024 (< 0.1% of GDP), €55 billion in reserve	3.5
France		Temporary deferral of taxes for firms		Reinforcement of partial unemployment system	State guarantees for loans to SMEs		1.85
Portugal		Temporary deferral of taxes for firms	Conciliation measures: 66% of wages for leave owing to childcare responsibilities	Suspension of firms' social security contributions. Temporary unemployment benefit (2/3 of salary)	Liquidity through State guarantees and a €3 billion credit line		1.1
Austria		Temporary deferral of taxes for firms		Direct assistance to sectors such as tourism and shorter working hours	Credit guarantees and bridge loans	€15 billion in direct emergency assistance	3,7
Denmark		Temporary deferral of taxes for firms		Assistance for payment of wages owing to business closure. Subsidies for SMEs for rental expenses and electricity bills	State guarantees and a €30 billion credit line		1.8
United Kingdom	0.2	Tax rebate or suppression of CIT for one year and subsidies for firms not liable for CIT		Extension of sick pay to include , quarantine to be met by the government in full for up to 14 days £25,000 for retailers, healthcare firms and leisure industry and £10,000 for small businesses	State guarantees to firms and access to credit for £330 billion	Overall fiscal stimulus package of £18 billion	2.2
Turkey		Temporary deferral of taxes and insurance premiums	Improved mortgage conditions	Subsidies for shorter working hours	Increase in Credit Guarantee Fund. Deferral of interest payments	Increase in minimum retirement pension	2.3

SOURCE: Banco de España, drawing on national sources.

a Only includes numbers announced by governments. In general, these figures do not include the increased expenditure on unemployment insurance.

Table 5

FISCAL POLICY MEASURES IN NON-EUROPEAN COUNTRIES

Country	Support for health care system (as % of GDP)	Deferral or suspension of taxes	Support for households	Subsidisation of labour costs, unemployment and support for businesses	Liquidity provision to firms through credit lines	Aggregate demand	Announced budget impact (as % of GDP) (a)
United States	0.5	3 months' deferral of personal income tax (up to \$1 million) and corporate income tax (up to \$10 million)	Students exempt from paying interest on federal loans Food stamps for children and Medicaid coverage	Remunerated sick leave for workers in quarantine Tax relief to SMEs for sick employees Provision for unemployment benefit increased			1.19
China	0.11	Exemption from VAT		Exemption for Social Security contributions and social housing pool. Reduction in commercial premises rentals	Refinancing and extension of credit to SMEs and companies affected	General fiscal stimulus package (1.16% of GDP)	1.27
Japan	< 0.1	Extension for filing and payment of income tax	Subsidisation of child care	Subsidies for workers who have to take leave	Loan via government entities		No impact (coming from other funds < 0.1% of GDP)
South Korea	0.2	9 months' deferral for corporate income, value added and personal income tax 1 year's deferral for customs and wealth tax Rebate for landlords who reduce rent	Subsidisation of child care	Subsidisation of firms to cover sick employees and of SMEs to cover illness, and payment of wages and rentals	Loans to exporters Guarantees to SMEs. Also, extension of due dates for payment of debt and interest		2.85
Australia	< 0.1			100% payment of taxes that the firm withholds from staff (maximum of AUD 100 million and minimum of AUD 20 million if no withholding made)	Programme comprising guarantees of 50% of the loan for AUD 20 billion)	\$750 payment to low-income Social Security taxpayers Double-up of job seeker payment (AUD 550 fortnightly)	4.5
Canada	< 0.1	Deferral for tax payments.	Transfers to low-income individuals	Subsidisation of sick leave for those not meeting requirements (e.g. the self-employed)	Credit lines to companies adversely affected (CAD 10 billion)		3.2

SOURCE: Banco de España, drawing on national sources.

a Solely includes numbers announced by governments. Generally, these figures do not include higher spending on unemployment insurance.

businesses include notably tax reductions and deferrals (such as the suspension of social contribution and VAT payments to 31 May for businesses with a turnover of up to €2 million and for all businesses in the hardest-hit sectors) and liquidity support, in particular the moratorium introduced for loan payments, applicable to all SMEs affected by the pandemic, which can request the suspension or extension of loans granted up to 31 January 2020.² The moratorium covers payment of the principal of the loan, under certain circumstances, and the possibility of extending the loan maturity. Other notable measures affecting businesses are the creation of an assistance fund of €750 million for businesses affected by production stoppages, the introduction of a public guarantee mechanism for the banking system to enable lending to medium-sized and large businesses affected by the crisis to be expanded (the government will cover 80% of loans, in order to release funding of €10 billion), and the provision of guarantees for loans of up to €5 billion, through the expansion of a Central Guarantee Fund. As for the measures to support households and the self-employed, the following are notable: (1) suspension for up to 18 months of mortgage payments on first homes (with a budget allocation of €500 million) (2) the creation of a “last resort” fund to support low income workers (€200 million); (3) suspension of redundancy procedures initiated since 23 February; (4) work-life balance measures: 15 days of care leave (on 50% of wage) or, alternatively, “babysitter vouchers” worth €600 (€1000 for health workers). These measures have been assigned financing of €1.2 billion; (5) €600 of compensation for self-employed workers.

The German government has launched a wide range of measures to mitigate the economic effects of coronavirus. The measures are grouped into five types of action. First, measures have been taken to protect household incomes, such as an increase in assistance to basic income recipients, greater protection for tenants unable to pay their rent, and assistance to low-income households to pay for basic supplies. Second, the conditions for firms to be eligible for the short-time allowance (*Kurzarbeitsgeld*) will be eased in early April. To fund this measure, the government can initially use the reserves of the Federal Employment Agency (€26 billion, 0.7% of GDP). Third, a set of measures have been adopted at federal and state level to improve firms’ liquidity: tax payment deferrals have been facilitated; the amount of tax prepayments has been reduced in cases where a significant reduction in revenues is foreseen; and €50 billion (1.4% of GDP) has been allocated to direct assistance (in the form of one-off payments) to small firms and self-employed persons who were not in difficulty before the impact of coronavirus to cover recurrent expenses. Fourth, in order to cover firms’ liquidity needs derived from a decrease in activity or disruptions to supply chains, a mechanism has been established to provide liquidity to firms through the system of state-owned development banks, in co-operation with the private banking sector, in the form of loans with favourable

² The moratorium is based on an agreement between the Italian Banking Association (ABI) and employers’ associations, and 93% of Italian banks are participants.

conditions (such as reduced interest rates), new credit facilities for firms expressly affected by coronavirus, and an expansion of public guarantees. The federal government will cover all of the new risks incurred, which could involve a volume of guarantees of up to €822 billion (23% of GDP). In addition, the government is setting up an economic stability fund for large firms in order to facilitate their market access, which may issue guarantees for debt securities of up to €400 billion and make recapitalisations of up to €100 billion. Lastly, the German federal government will increase the amount of its investment programme by €12.4 billion for 2021-2024 (this figure, however, represents on average less than 0.1% of GDP in each year). To finance the measures with an impact on this year's budget, and the impact arising from the operation of automatic stabilisers (in particular, the reduction in public revenues and the increase in unemployment payments), the government has applied to take on €156 billion (4.5% of GDP) of new debt.

Finally, of the three largest countries in the euro area, on 16 March, the French government set out a raft of economic measures to mitigate the economic effects of the health crisis. The French authorities estimate that the aid will cost €45 billion (1.7% of GDP). The partial unemployment arrangements have been shored up to cover the cost of temporary lay-offs triggered by business closures. €8.5 billion will be earmarked to pay two monthly salaries of employees who are laid off temporarily due to the coronavirus. Likewise, a Solidarity Fund comprising €2 billion has been set up to help SMEs with an annual turnover of less than €1 million a year that, on account of the crisis, no longer have any income or whose income falls by at least 70% in annual terms in March. Also, an estimated €32 billion of tax and social security payments will be deferred. In exceptional cases, the decision may be taken to refund direct taxes following an individual study. As for liquidity measures for firms through the provision of State guarantees, a programme of public guarantees for bank loans to businesses has been introduced through Bpifrance, the public investment bank (amounting to €300 billion, 11% of GDP). Other measures that have been adopted or announced include: support from the State and the Banque de France for renegotiating private debt repayments; the possibility, if needed, of bailing out publicly-owned firms, such as Air France, through recapitalisations or even nationalisation; or modifying government contracts to include coronavirus in *force majeure* so that penalties cannot be triggered for delays in this connection.

Spain has acted on several fronts like other countries. The volume of public funds mobilised is estimated to reach 8.8% of GDP. Of this total volume, 0.5% of GDP represents a direct increase in spending, whereas the remainder is earmarked for providing guarantees and credit facilities to businesses.

The first area of action is the increase in the budget allocation to address higher health expenditure arising from the epidemic. Specifically, the central government has earmarked €3.8 billion for this purpose, both at the level of the regional governments, which are the main healthcare providers, through an advance

payment of €2.8 billion in the regional government financing system, and at the level of the Ministry of Health based on an extraordinary loan totalling €1 billion. Furthermore, €30 million were allocated to financing research into the virus.

Social protection was the second area of priority budget action. Specifically, regional and local governments will spend €600 million on providing services to vulnerable individuals. Additionally, two measures have been implemented with no direct impact on the government budget that likewise are intended to alleviate the impact of the crisis on weaker households. These measures include the obligation for utility companies to continue to supply water, gas and telecommunications if customers are unable to pay and a mortgage repayment holiday for households whose income decreases as a result of the crisis. Lastly, the government approved that individuals who are unable to work because they are infected by the coronavirus or under quarantine are considered to be on sick leave (whereby the State pays benefits from day one).

A third area of action concerns the measures intending to prevent this very sharp but transitory shock from causing persistent effects on activity and employment, once the health emergency is over. In this respect, a crucial objective is to try to avoid firms from being forced to cease trading or permanently cutting their staff where, in the absence of a pandemic, they would be viable in the medium term. Specifically, the government has promoted, through waiving employer social security contributions (100% in the case of SMEs and 75% for other businesses), lay-off schemes involving temporary suspension of contracts and shorter working days provided that employers ensure that jobs are maintained for the next six months. Additionally, the right of employees who are affected to draw unemployment benefit has been guaranteed even if they have not fulfilled the minimum contribution period required; the latter will not count for the calculation of future benefits. Drawing the discontinuation of activity benefit is made easier for the self-employed, provided that their turnover has dropped by at least 75%. The aim of all of the foregoing is that the situation of workers who are laid off temporarily or whose working hours are reduced, does not become permanent. This contributes to supporting households' long-term income expectations and, therefore, sustains aggregate demand and makes it easier for economic activity to be restored once the health crisis is over.

In addition, important measures were approved to counter the possibility that the limited liquidity of non-financial corporations might damage their viability. First, the government implemented guarantee facilities and public guarantees totalling €100 billion which are applicable to loans extended to non-financial corporations. Second, a moratorium was approved for the tax liabilities (up to a ceiling of €30,000 per type of tax) of firms with a turnover of less than €6 million during six months, although interest and surcharges are not applicable only during the first three months. Third, in order to meet the needs of the sectors which have

been hit hardest by the crisis, an ICO credit line has been set up for SMEs in the areas of tourism, transport and hotels and restaurants (amounting to €400 million) and an additional guarantee facility for export companies and SMEs was put in place (amounting to €2 billion).

At supranational level, several EU instruments have been mobilised to support the measures adopted by national governments. The European Commission (EC) announced the use of an EU budget item, amounting to €8 billion, to cover health costs and to provide support for SMEs experiencing difficulties as a result of the effects of the pandemic. In addition to the foregoing, it also proposed the mobilisation of a further €29 billion in structural funds. Furthermore, the EC announced an easing of restrictions on State aid to make it easier for national authorities to grant tax credits and subsidies to the companies affected. Lastly, Member States will be allowed to use the flexibility clauses in the face of exceptional circumstances contained in the Stability and Growth Pact, which will enable them to temporarily deviate from the deficit path agreed with the Commission.

Overall, the combination of the discretionary fiscal policy measures implemented by the Member States of the euro area and the Europe-wide actions represent approximately 1% of euro area GDP. All these actions complement the functioning of the automatic stabilisers (such as unemployment insurance), which in the case of the euro area are very powerful. Public measures to support the liquidity of private agents are calculated to amount to approximately 10% of euro area GDP.

20.3.2020.