

The role of Spain's financial sector: Taking stock of key metrics

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The effects of **corporate tax** on corporate productivity: Impact at the microlevel

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SEFO

SPANISH AND INTERNATIONAL
ECONOMIC & FINANCIAL OUTLOOK

Letter from the Editors

The July issue of *Spanish and International Economic & Financial Outlook (SEFO)* follows the European Parliamentary elections, which took place at the end of May. With voter participation among the highest in two decades, the results were deemed among the most significant in years. While voters still largely backed pro-EU parties, with the Social Democrats and the People's Party still dominant, these traditional centrist blocks appear to have lost their absolute majorities for the first time since European Parliamentary elections were held back in 1979.

Given current political uncertainty, together with heightened concerns over the regions' economic slowdown, this month's *SEFO* examines the EU's macro outlook and takes stock of its key financial sector metrics. Specifically, on this latter point, we present an alternative analytical approach in efforts to challenge the popular notion that Europe is overbanked. On both the macro and financial sector issues covered in this number, as always, we pay special attention to where Spain fits into the EU narrative.

On the macro level, the European Central Bank has recently cut its growth forecasts, projecting the eurozone will expand by just 1.2% in 2019. Although, to some degree, temporary factors play a role in the region's slowdown, an alternative explanation for such lacklustre performance is the tendency within

Europe to rely on export markets in order to compensate for a chronic weakness of domestic growth factors. Prior to the financial crisis, domestic demand increased by 1.9%, annually. However, since the start of the crisis, this growth record has deteriorated dramatically across even the core eurozone countries. Thus, the eurozone's recovery is largely due to the opportunities in export markets, which have compensated for sluggish domestic demand. This is illustrated by the fact that the bloc's external surplus stood at 400 billion euros, the largest in the world. Significantly, recent trends show domestic demand is not responding in the face of declining exports, nor have rising national savings coincided with increased investment in the eurozone's productive capacity. Unfortunately, European macroeconomic policy has limited tools to address these trends and support an expansion of domestic demand.

As regards the monetary policy toolkit, while negative interest rates serve a purpose for the ECB in the face of the eurozone's slowdown, they have both direct and indirect effects on the region's banks. As of April 2019, the eurozone banking sector had excess reserves of 1.87 trillion euros, which implied costs of 7.5 billion euros a year. Given the unlikelihood of a rate increase, a tiered system for the deposit facility rate could reduce these direct costs. However, the indirect effect of negative interest rates is also problematic,

specifically the influence they have on the yield curve, which is used as the benchmark for customer lending and deposit operations. For instance, 12-month EURIBOR, the main benchmark rate for bank lending, had fallen by over 70 basis points, from 0.60% in 2014 to -0.11% by April 2019. Until now, Spanish banks have withstood the adverse effects of negative rates better than the other major European systems. However, a prolongation of negative interest rates is expected to add further downward pressures on Spanish banks' profitability going forward. More generally, as long as interest rates remain negative, the eurozone banking sector's return on equity will remain low.

Apart from the profitability challenge facing banks operating in a persistent low/negative interest rate environment, growing trade protectionism has triggered a scramble for international technological leadership. The US government's decision to restrict Huawei's operations in the US and their partnership with US firms could have implications not only for Huawei, but also for innovation in general and 5G technology in particular. More broadly, trade tensions are occurring alongside Big Tech's foray into the banking sector, with Facebook's plans to launch Libra, a new cryptocurrency, just the latest development. Looking at these trends, it becomes clear that there are three potential outcomes. First, the 'Super App' model that dominates in China could emerge as a paradigm for global interaction. This would involve considerable concentration of financial and payment services, which could undermine competition. Second, Big Tech could help expand financial inclusion. Third, the combination of trade protectionism and market disruption could result in regulatory and technological fragmentation. While Big Tech's scale could give it an edge over traditional financial institutions, the future interaction between banks and Big Tech will be determined by the latter's ability (and willingness) to diversify into different financial services.

The July *SEFO* also takes a look at the relative importance of banking systems, both in

terms of their relative weight in the economy and in employment creation, as well as in financial intermediation.

Spanish banking services generate 2.7% of the Spanish economy's gross value added and 1.1% of its jobs. Those percentages are below the eurozone averages of 3% and 1.4%, respectively. In the wake of the crisis, the banking sector's contribution to the economy has fallen in both Spain and the eurozone, albeit more intensely in the former. Despite growth in financial disintermediation, the banks remain at the core of the Spanish financial system, accounting for 70% of its GVA and 61% of the employment generated. It is worth highlighting the growing importance of auxiliary activities to financial services, which contributed 12% of the income and 24% of the employment generated by the Spanish financial system in 2017. This can be explained by the growth in fund management, which in the context of low interest rates, has made bank deposits less attractive. Although the Spanish economy continues to rely on bank credit relatively more than the rest of Europe, the intense private sector deleveraging observed has drastically narrowed this difference—measured in terms of credit/GDP, this statistic stands at 101% in Spain *versus* 98% in the eurozone.

Comparative economic literature differentiates between market-oriented and bank-oriented financial systems, with the former generally associated with the US. Moreover, ECB President Mario Draghi has described the European banking system as 'overcrowded'. This tendency towards black-and-white categorisation relies on the comparison of 'stock' metrics, such as the weight of bank assets and the market value of listed securities (stocks and bonds) in GDP. Specifically, the ratio of bank assets to GDP in the US and Europe is 80% and 250%, respectively. However, such analysis can be flawed. For instance, due to the nature of the US mortgage market, these assets are frequently excluded from US banks' balance sheets. It is also worth noting that the US banking sector includes twice as many institutions as those regulated by Europe's Single Supervisory Mechanism. Furthermore,

so-called ‘flow’ metrics challenge the prevailing assumption that Europe is less market-oriented than the US. Over the last decade, European bond and stock markets have channelled around 80 billion euros, net, to the corporate sector a year, whereas the net flows via the US bond and stock markets have been negative by nearly 100 billion euros.

Related to the topic of financing, we analyse the progress and outstanding challenges for Spain’s regional governments’ funding model. The Regional Government Financing Fund, initially introduced as a temporary measure, has allowed regional governments to borrow at lower costs, but has also gone hand in hand with historically high levels of regional government debt in Spain. In many ways, this conundrum is mirrored at the EU level, with the eurozone debate on fiscal and financial reform centred on both ‘risk mitigation’ and ‘risk sharing’. In the case of Spain, there are three possible funding models under consideration. Spain could extend the current financing scheme based on a single issuer of public debt instruments, divide regional debt into tranches, or rely on direct participation by the regional governments in capital markets. However, tapping capital markets would imply risks due to fluctuations in borrowing costs. While compliance with fiscal rules could limit this risk, it could take decades to reduce debt to a level that effectively minimizes it and would require abandoning regional fiscal policy as a counter-cyclical stabilization tool. It is for these reasons that observers have started to discuss the possibility of a redemption fund as an alternative solution.

We round out this *SEFO* by looking at firm-level issues, specifically, the latest figures on business dynamism in Spain, as well as analysing the link between corporate taxation and firm productivity.

Spanish companies face the challenge of improving their competitiveness in an environment which, in the medium- to longer-term, could face rising interest rates. Against this backdrop, it is important to assess the level

of business dynamism to anticipate forward-looking scenarios. Data from Spain’s central corporate database show that, although the rate of business creation now exceeds the rate of closure, it has not fully recovered to pre-crisis levels. Moreover, there has been a shift in the types of companies created in Spain. Prior to the crisis, LLCs were the most common form of corporation, but since 2014, self-employment has made the biggest contribution to new business creation. The reduction in medium-sized companies is also worth noting, with larger and smaller firms showing lower levels of decline. Lastly, data also indicate a gender gap when it comes to self-employment, where the percentage of men as employers with employees in relation to all men in work (6.3%) is twice that of women (3.2%).

Lastly, one of the most comprehensive measures of corporate productivity is total factor productivity (TFP), which quantifies the efficiency with which inputs are used in production. One factor that affects TFP is the corporate tax rate. In fact, data show that a 10-point reduction in the statutory rate of corporate income tax would increase national growth rates between 1% and 2%. A recurring debate among both economists and policymakers relates to the nature of the relationship between business size and productivity. Interestingly, in Spain, large companies with at least 250 employees account for 39.1% of gross value added (GVA). However, while policymakers may be tempted to prioritize an increase in average company size to improve productivity, such initiatives overlook other determinants of this variable. As well, the evidence indicates that productivity shocks lead to increases in company size but that this relationship does not function in reverse. However, data do show that corporate tax rates, through their impact on investment, do undermine productivity for companies of all sizes, with a particularly negative effect on smaller companies due to their lower technological intensity and productivity.

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What's Ahead (Next Month)

Month	Day	Indicator / Event
August	2	Social Security registrants and official unemployment (July)
	8	Industrial production index (June)
	13	CPI (July)
	21	Foreign trade report (June)
	29	Preliminary CPI (August)
	30	Retail trade (July)
	30	Balance of payments monthly (June)
September	3	Social Security registrants and official unemployment (August)
	11	Industrial production index (July)
	10	Non-financial accounts, Central Government (July)
	10	Non-financial accounts, Regional Governments and Social Security (June)
	12	ECB monetary policy meeting
	13	Eurogroup meeting
	13	CPI (August)
	21	Foreign trade report (July)
	26	Balance of payments quarterly (2 nd quarter)
	30	Non-financial accounts, Central Government (August)
	30	Non-financial accounts, Regional Governments and Social Security (July)
	30	Non-financial accounts, General Government (2 nd quarter)
	30	Quarterly National Accounts (2 nd quarter)
	30	Quarterly Non-financial Sector Accounts (2 nd quarter)
	30	Preliminary CPI (September)
30	Balance of payments monthly (July)	

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What Matters



5 **Export-led growth in the euro area: Benefits and costs**

The eurozone's growth model is based on dynamic export markets, compensating for chronically weak domestic demand, leading to an external surplus which has become the largest in the world. The worsening global context and the decreasing return on the eurozone's external surpluses call this model into question.

Raymond Torres



15 **The potential impacts of changes to the ECB's deposit facility**

While an important tool for the ECB, the prolongation of negative interest rates has resulted in considerable costs for the region's banks, as well as compressed their profitability. With interest rates likely to remain negative for the foreseeable future, a tiered deposit facility rate could help minimize these unfavourable effects on the region's banking sector.

Fernando Rojas, Federica Troiano and Rui da Mota Guedes, A.F.I.



23 **The battle for global technological supremacy and the impact on banks**

As trade tensions between the US and China have escalated, Big Tech firms have continued to compete for technological supremacy through their foray into the financial services sector. While it is too early to determine the outcome of Big Tech's market disruption, it is possible that their expansion could impact both the global banking sector and financial stability.

Santiago Carbó Valverde and Francisco Rodríguez Fernández



33 **How banked is Spain in the European context?**

While there exists the perception that Spain is overbanked relative to other EU countries, the banking sector's contribution to the Spanish economy (in terms of gross value added and employment) is lower and has fallen, with the industry's credit to GDP ratio just 3 percentage points above the eurozone average. Interestingly, this has occurred alongside an expansion of auxiliary financial services, which have become more attractive due to the prolongation of historically low interest rates.

Joaquín Maudos



43 **Banking- versus market-oriented financial systems: Questioning the European-US paradigm**

Based on the value of assets and certain stock metrics in each jurisdiction, conventional opinion holds that the EU banking system is 'overcrowded' compared to the more market-oriented system in the US. However, further analysis of each systems' metrics, particularly from a flows perspective, suggests the situation is far more nuanced.

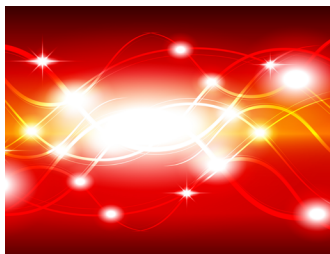
Ángel Berges, Álvaro López and Fernando Rojas, A.F.I.



51 **Regional governments' market access: Takeaways from the European debate**

The current macroeconomic environment represents an opportunity for reforming Spain's system of regional government financing, which until now has relied on the temporary Regional Financing Fund. Interestingly, the eurozone's debate over the incorporation of 'risk mitigation' and 'risk sharing' into its fiscal reforms offers guidance in terms of the direction Spain's own reforms may take.

Mario Alloza, Mar Delgado-Téllez and Javier J. Pérez



61 **Business dynamism in Spain: Recent trends and outlook**

Although business dynamism has recovered in Spain since the crisis, there has been a marked shift in the composition of companies, with self-employment now exceeding LLCs when it comes to new business creation. Closer analysis of these data also reveals some noteworthy trends relating to the disappearance of medium-sized firms and the gendered nature of entrepreneurship in Spain.

Ramon Xifré



71 **The effects of corporate tax on corporate productivity: Impact at the microlevel**

Although empirical evidence reveals a correlation between company size and productivity, the effectiveness of public policies designed to boost productivity by promoting an increase in company size alone is limited. Instead, data indicate that the relationship between size, corporate tax rates and investment is more significant when it comes to enhancing productivity.

Desiderio Romero-Jordán and José Félix Sanz-Sanz

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Export-led growth in the euro area: Benefits and costs

The eurozone's growth model is based on dynamic export markets, compensating for chronically weak domestic demand, leading to an external surplus which has become the largest in the world. The worsening global context and the decreasing return on the eurozone's external surpluses call this model into question.

Raymond Torres

Abstract: The European Central Bank has recently cut its forecasts, projecting the eurozone will expand by just 1.2% in 2019. Although, to some degree, temporary factors play a role in the region's slowdown, an alternative explanation for such lacklustre performance is the tendency within Europe to rely on export markets in order to compensate

for a chronic weakness of domestic growth factors. Prior to the financial crisis, domestic demand increased by 1.9%, annually. However, since the start of the crisis, this growth record has deteriorated dramatically across even the core eurozone countries. Thus, the eurozone's recovery is largely due to the opportunities in export markets, which have compensated for

sluggish domestic demand. This is illustrated by the fact that the bloc's external surplus stood at 400 billion euros, the largest in the world. Significantly, recent trends show domestic demand is not responding in the face of declining exports, nor have rising national savings coincided with increased investment in the eurozone's productive capacity. Unfortunately, European macroeconomic policy has limited tools to address these trends and support an expansion of domestic demand. [1]

Introduction

According to its latest projections released in June, the ECB expects the eurozone economy will grow by a mere 1.2% this year, which represents a significant cut from the previous round of projections published last Autumn (ECB, 2019). While the forecasts suggest the economy will rebound slightly next year, the expansion is still below potential growth rates.

It is often claimed that the advent of this unpredicted slowdown reflects adverse external factors. These include the intensification of protectionism, the abrupt decline in Chinese economic growth, and turbulence in emerging economies. Relatedly, world trade is expected to grow by a disappointing 0.7%, compared to nearly 5% last year. [2] The manufacturing sector, as well as the most export-dependent economies, such as Germany, are disproportionately affected by these dynamics. Uncertainty over Brexit is an additional cloud on the horizon, while other factors such as a global adjustment in the automobile industry also play a role.

Although these external or temporary factors are undoubtedly important, internal constraints could offer an alternative explanation for lacklustre growth. Of particular importance is the tendency within Europe to rely on export markets in order to compensate for domestic weaknesses.

Significantly, unlike external constraints, which fall largely outside the purview of European policymakers, internal growth factors can be tackled by well-designed measures. The purpose of this paper is to describe the export-led growth approach, analyse its associated benefits and costs, and discuss the role of macroeconomic policies in rebalancing the European economy.

Exports as a safety valve for a chronic shortage of domestic growth

The internal engine of eurozone growth has failed to power a broad economic expansion. In the years after the euro's launch, there was relatively strong growth in domestic demand –the sum of domestic consumption and investment. During the period of 2000 to 2007, domestic demand increased on average by a respectable 1.9%, annually.

However, since the start of the crisis, eurozone domestic demand has grown by a modest 0.4%, annually, on average (Exhibit 1). The fastest growing European economies, Poland and Sweden, do not even belong to the single currency. The US –where the crisis originated– outperforms the eurozone by a wide margin. Even Japan does marginally better than the eurozone. The only exception to this general post-crisis pattern is Germany, whose robust growth was preceded by a pre-crisis economic slump. In fact, between 2000 and 2018, domestic demand in Germany rose by less than both the European and US average.

While the post-2007 period covers both the crisis and recovery phases, performance has been below international standards in both sub-periods. Eurozone domestic demand was slightly more impacted by the crisis than the rest of the EU or the US. Furthermore, recovery started later and was weaker than in other regions. Only Japan seems to have

“ Since 2007, eurozone domestic demand increased on average by a modest 0.4%, annually. ”

“ The export-led growth model has pushed the external account from a broadly balanced position on the eve of the crisis to a surplus of nearly 400 billion euros in 2018, the largest in the world. ”

performed as weakly in terms of domestic demand after 2007.

pessimism among the majority of Italians concerning their economic prospects.

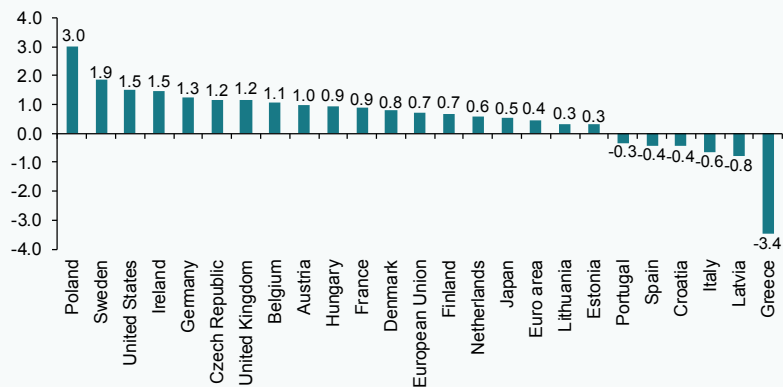
It could be argued that sub-par demand growth is just an outcome of averaging participating countries, with some of them facing difficulty sustaining the single currency. However, it is worth noting that even some of the core eurozone economies do not perform particularly well when compared with their non-eurozone counterparts. For example, while Finland posted similar growth rates to Sweden before adopting the euro, Sweden’s expansion has since proved stronger. Comparisons of France and Spain with the UK, or Germany with the US, result in similar observations. Not to mention Italy, which has become an outlier of its own. This country faces a stagnation of real spending since the euro was created, which may explain today’s

The recovery phase is largely a reflection of the eurozone’s ability to seize the opportunities of growing export markets, as this has proved to be the sole way to compensate for sluggish domestic demand. This has contributed to a growing external net lending position (henceforth external surplus), which has reached historical proportions (Exhibit 2). While on the eve of the financial crisis the external account was broadly balanced, it reached a surplus of nearly 400 billion euros in 2018, or around 3.8% of GDP.

Importantly, the external surplus is the largest in the world, exceeding China’s by 100%. It also represents two thirds of the US deficit, which is one of the motivations behind

Exhibit 1 Domestic demand growth, 2007 to 2018

Average annual growth rate

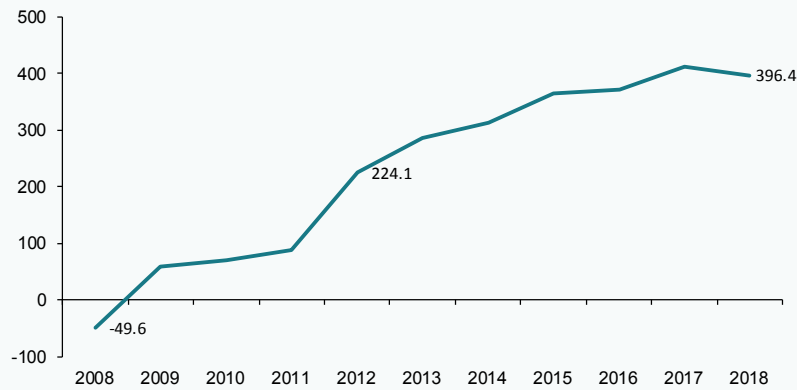


Source: Eurostat and author's own elaboration.

Exhibit 2

External balance of the eurozone with respect to rest of the world

Net lending, in billions of euros



Source: ECB.

the protectionist discourse in that country. It is interesting to note that the eurozone maintains a large surplus *vis-à-vis* the UK and that it is difficult to gauge the extent to which such a large imbalance will be maintained in the event of Brexit.

Costs of relying heavily on external demand

This pattern of export-driven growth is not necessarily a problem. Domestic demand can take the place of exports when the latter falter. Moreover, a strong propensity to save may pave the way towards stronger investment performance in the medium to longer run. As well, European countries may have a strong preference for under-spending and to invest their surplus savings abroad. Such a strategy can prove an effective way of sustaining future living standards.

However, these justifications for the export-driven model are not supported by the facts. First, as already mentioned, recent trends show domestic demand is not responding in the face of declining exports.

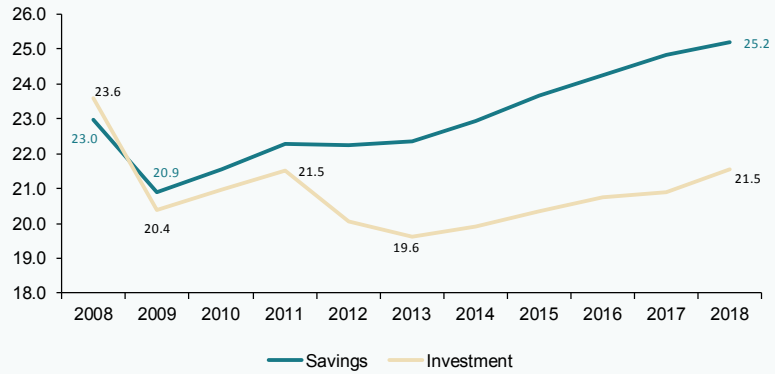
Second, and more fundamentally, subdued domestic demand reflects both a rising propensity to save and limited investment growth in the eurozone (Exhibit 3). National savings (which include both private and public savings) have increased uninterrupted since their trough of 2009. In fact, they have reached over one quarter of national income, an all-time high and an impressive savings effort by international standards. By contrast, investment trended downward until the trough of 2013, before moderately increasing. As a proportion of GDP, eurozone investment has reached 21.5%, well below pre-crisis levels. This is concerning given the dearth of investment

“ As a proportion of GDP, eurozone investment has reached 21.5%, well below pre-crisis levels. ”

Exhibit 3

Eurozone savings and investment

Percentage of GDP



Source: AMECO and author's own elaboration.

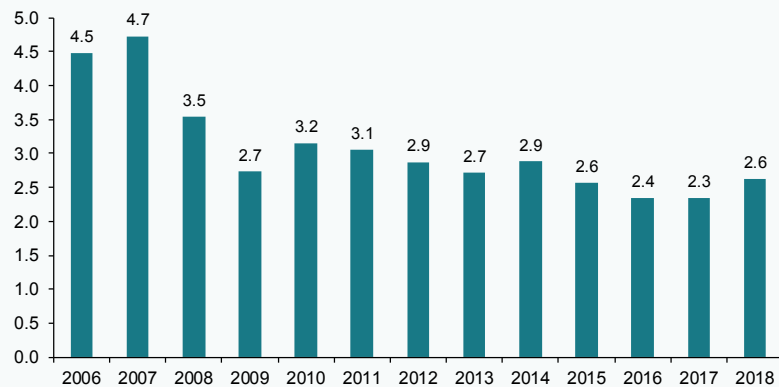
in eurozone countries, including Germany, which has underinvested in its infrastructure. For Europe as a whole, higher investment is necessary for a successful transition to the

green economy and to reap the benefits of the Fourth Industrial Revolution. Thus, the growing external surplus reflects the fact that Europe is less able to mobilize its savings to

Exhibit 4

Estimated rate of return on eurozone external assets

Percentage



Source: ECB and author's own elaboration.

“ Only one third of eurozone external assets are invested in the real economy. The remaining two thirds are portfolio investments and other financial positions whose value and returns are subject to sudden swings in the external environment. ”

invest in its real economy. The result is that it must export its lending capacity to other countries.

Third, it could be argued that the investment opportunities in Europe are less attractive than those arising in other parts of the world. However, there is no clear evidence in support of this assertion. Indeed, the revenues generated from eurozone external assets are declining and may be even lower than the rate of return on equivalent investments in Europe.

Between 2007 and 2018, total assets accumulated abroad by eurozone countries nearly doubled from 12.5 to 26.5 trillion euros. This significant increase can be explained by the accumulation of current account surpluses,

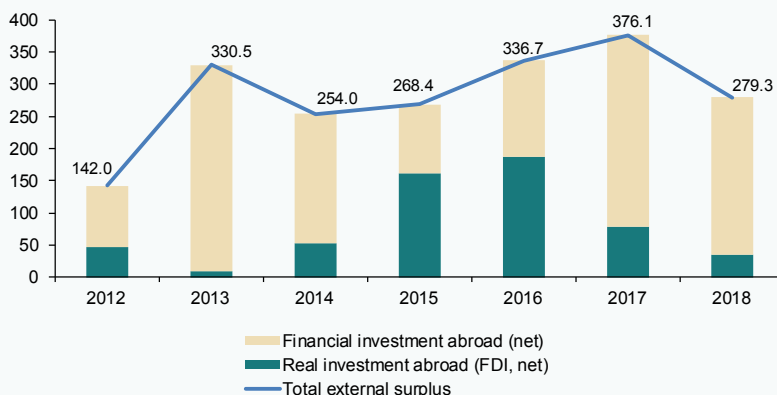
adjusted for any appreciation or depreciation effects arising from exchange rate movements and other valuation factors. During the same period, the income gains arising from assets invested abroad increased by just 16%, from 0.6 to 0.7 trillion euros. In other words, the rate of return on external assets has nearly halved (Exhibit 4).

At 2.6%, the rate of return on external assets is not only relatively low (especially considering the profits that can be made in Europe) but is also subject to significant uncertainty. Indeed, roughly two-thirds of external assets are portfolio investments and other financial positions whose value and returns are subject to sudden swings in the external environment. The remaining one-third is composed of

Exhibit 5

How the eurozone’s external surplus is invested abroad

Financial balance, net flows of FDI and of portfolio & other financial investments abroad, billions of euros



Source: ECB and author's own elaboration.

Table 1

Change in assets held abroad by eurozone countries, 2018

In billions of euros

Total change in assets abroad (=A+B, or 1+2)	161
resulting from:	
1. New investment abroad	271
2. Revaluation of existing assets (minus is a loss)	-110
A. Change in FDI position abroad (=3+4)	-134
resulting from:	
3. New FDI abroad	-261
4. Revaluation of existing assets (plus is a gain)	127
B. Change in financial investment position abroad (=5+6)	295
resulting from:	
5. New financial investment abroad	532
6. Revaluation of existing assets (minus is a loss)	-237

Source: ECB and author's own elaboration.

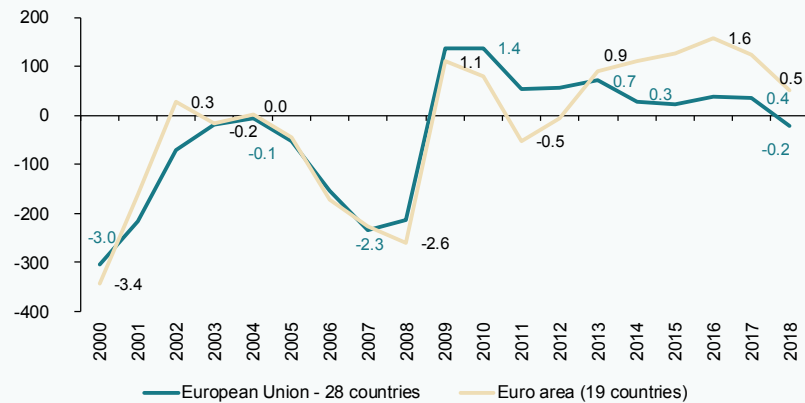
foreign direct investment, which generally offers more stable returns than investments in financial assets. Exhibit 5 shows the pattern

of current account surpluses invested abroad and highlights the prevalence of financial investment over real investment.

Exhibit 6

The financial surplus of eurozone enterprises is exceptionally large. Net lending of non-financial enterprises

Percentage of GDP



Source: ECB and author's own elaboration.

Table 1 provides further details on how external financial investment positions can be subject to significant market losses, especially when compared to foreign direct investment. [3] In 2018, around 237 billion euros were lost due to exchange rate changes or other price shifts. This compares to a gain of 127 billion euros in the case of foreign direct investment.

In short, the net lending position of the eurozone has only partly provided stable, future income gains. [4] Much of the external surplus seems to be motivated by lack of sufficient investment opportunities in Europe, rather than low profitability. Indeed, enterprise profits remain comfortably high and exceed investment spending to the point of generating a sizeable net lending capacity for the enterprise sector as a whole (Exhibit 6). Under normal circumstances, businesses borrow to modernize existing capital or expand. Overall, these data highlight the role of the downward bias in internal demand, which has trended across the eurozone.

Role of macroeconomic policies in rebalancing the economy

An in-depth investigation of the origins of the downward demand bias goes beyond the scope of this paper. However, it is helpful to discuss the key role that macroeconomic policies play in this regard.

In essence, the arrangements that govern participation in the single currency may depress demand by pushing countries towards policies that aggravate the impact of recessions and limit the benefits of expansions. This pro-cyclical pattern tends to dampen long-term performance (Torres, 2018).

To illustrate this point, it is helpful to consider two peculiarities of the eurozone. First, national governments cannot rely directly on their domestic central banks as a lender of last resort. They benefit indirectly through any purchases of government paper in secondary markets by the ECB, but this is subject to certain conditions, which in practice make governments prone to engaging in pro-cyclical fiscal policy.

Secondly, the eurozone lacks an adequate fiscal capacity to supplement individual countries in their limited attempts to offset the effects of the business cycle. If a country is disproportionately affected by an economic shock, it is possible to access crisis-management funds. However, these are subject to strict criteria and implementation delays. Moreover, a stigma is attached to these funds, which in practice makes governments hesitant to use them.

Due to the limitations of fiscal policy, monetary policy has, to some extent, acted as a counter-cyclical device. The ECB has developed a set of heterodox tools—a combination of record low interest rates, purchases of government bonds and support to bank loans—which in the past proved effective in tackling deflationary pressures. There is also evidence that such a heterodox policy has eased financial conditions in Europe, thus supporting the economy (Alcaraz *et al.*, 2019).

This policy, however, is losing effectiveness. [5] First, the ECB strategy may face technical constraints, especially relating to the asset purchase programme. The ECB acquires new government bonds as old ones come to maturity, with a view to keeping the total value of bonds constant. This reinvestment policy will be maintained for a prolonged period. The ECB may even consider increasing its net purchases in the near future. However, the task is increasingly difficult thanks to the downward trend in public deficits across the eurozone, which has reduced the supply of available bonds. Record low borrowing costs are evidence of this shortage of sovereign debt. [6] For instance, the Spanish government is able to sell 10-year bonds at an interest rate below 0.3%, which is the lowest in the history of the country, and in Germany the interest rate has entered negative territory. [7]

Second, in the absence of other drivers of growth, prolonged monetary stimulus may end up reaching the wrong target. In some cases, the measures may serve to support “zombie” enterprises, which only survive thanks to the availability of cheap credit. By contrast, monetary policies may do little to

“ Prolonged monetary stimulus may serve to support ‘zombie’ enterprises which only survive thanks to the availability of cheap credit – it is not the solution to the chronic demand shortage in the eurozone. ”

reallocate resources to frontier enterprises or innovative investments.

Third, monetary policy cannot tackle cross-country divergences, as illustrated by the case of Italy. The Italian economy has stagnated since the launch of the euro, leading to a historic decline in living standards. Moreover, business investment has been hit, thereby compromising long-term prospects. Already, productivity levels are lower than in competing economies. There is a low-growth trap at work, as the bleak economic prospects not only affect investment but also push young, talented Italians to migrate. This aggravates demographic decline, further depressing future prospects. Markets are aware of these dynamics and request a higher premium for their purchases of Italian bonds, putting additional pressure on the Italian economy.

Italy’s ability to move out of this trap is limited. Despite the accommodating stance of the ECB, borrowing rates for Italian businesses and households remain relatively high. But policies that may benefit Italy would not fit with the circumstances of the majority of other eurozone economies, and are therefore highly unlikely. Fiscal policy is also constrained by prevailing rules. Furthermore, its effectiveness is limited by the fact that interest rates exceed the expected rate of return on investment. (Italy is one of the few European economies where the return on government bonds is higher than the economy’s potential rate of growth.)

Unfortunately, few additional instruments remain. Reforms are needed urgently, notably with respect to non-performing loans, which continue to plague banks. However, any reforms will take time to implement and boost economic growth.

Thus, monetary policy alone can neither solve the excess savings problem, which presently characterises the eurozone, nor tackle cross-country divergences.

Conclusion

Europe’s growth model, with its heavy reliance of exports to compensate for the chronic shortage of domestic growth, is being called into question. This is partly due to the global geo-political tensions and the deterioration of the external environment. A less obvious reason is the significant excess savings position of the eurozone. Specifically, there are around 300 billion euros of savings invested in the rest of the world, with increasingly unpredictable returns. Overall, these findings call for a revaluation of the macroeconomic policy stance of the eurozone, along with a strengthening of its architecture.

Notes

- [1] The author is grateful to Romain Charalambos for his very helpful research assistance.
- [2] For a detailed examination of trade policy trends, see Begg (2019).
- [3] This peculiarity was previously highlighted by Darvas and Hüttl (2017).
- [4] An early investigation of this problem can be found in Wajda-Lichy (2015).
- [5] This discussion draws on Torres (2019).
- [6] For a detailed discussion of the supply and demand situation in European bond markets, see Carrión (2019).
- [7] The only exception to this pattern is Italy, but this is a reflection of heightened country-specific risks.

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The potential impacts of changes to the ECB's deposit facility

While an important tool for the ECB, the prolongation of negative interest rates has resulted in considerable costs for the region's banks, as well as compressed their profitability. With interest rates likely to remain negative for the foreseeable future, a tiered deposit facility rate could help minimize these unfavourable effects on the region's banking sector.

Fernando Rojas, Federica Troiano and Rui da Mota Guedes

Abstract: While negative interest rates serve a purpose for the ECB in the face of the eurozone's slowdown, they have both direct and indirect effects on the region's banks. As of April 2019, the eurozone banking sector had excess reserves of 1.87 trillion euros, which implied costs of 7.5 billion euros a year. Given the unlikelihood of a rate increase, a tiered system for the deposit facility rate could reduce these direct costs. However, the indirect effect of negative interest rates is

also problematic, specifically the influence they have on the yield curve, which is used as the benchmark for customer lending and deposit operations. For instance, 12-month EURIBOR, the main benchmark rate for bank lending, had fallen by over 70 basis points, from 0.60% in 2014 to -0.11% by April 2019. Until now, Spanish banks have withstood the adverse effects of negative rates better than the other major European systems. However, a prolongation of negative interest rates is

“ In the case of the Spanish banks, the current volume of excess reserves (almost 110 billion euros) is generating a cost of around 440 million euros, which is below the eurozone average. ”

expected to add further downward pressures on Spanish banks’ profitability going forward. More generally, as long as interest rates remain negative, the eurozone banking sector’s return on equity will remain low.

Direct impact of the negative deposit facility rate (DFR)

The ECB has stated on numerous occasions [1] that negative rates can be a powerful monetary policy tool. Specifically, they reinforce forward guidance for interest rates, accelerate the portfolio rebalancing effect associated with the asset purchase programme (APP) and support the effectiveness of the long-term liquidity injection programmes (TLTROs). With the advent of negative rates, we have witnessed a widespread reduction in market interest rates (e.g. EURIBOR), which benefits the non-financial sector (companies,

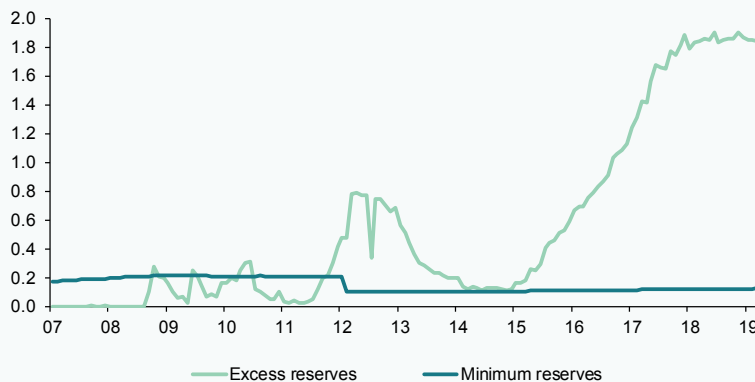
households, governments) by reducing the economy’s cost of capital and stimulating consumption and investment.

However, the monetary authority has also acknowledged the downside risk to prolonged use of negative rates, citing a build-up of adverse effects on intermediation, which overwhelmingly affects the banks, and, by extension, financial stability. [2]

The sharp economic slowdown that began in 2018 as well as an inflation outlook below the ECB’s target has reduced expectations for interest rate increases. However, there is growing debate about the advisability of continuing in this direction, with negative rates acting as a tax on European banks. [3]

Exhibit 1 **Required reserves and excess reserves* at the ECB**

Trillion euros



*Excess reserves in the current account plus the deposit facility.

Source: Macrobond and authors’ own elaboration.

Table 1 **Minimum reserves and excess reserves at the ECB (April 2019)**

€ millions	Eurozone	Spain	Germany	France	Italy
Total reserves	1,998,629	120,006	687,497	483,798	93,351
Excess reserves	1,870,188	109,470	641,326	460,927	85,941
Deposit rate (%)	-0.40	-0.40	-0.40	-0.40	-0.40
Cost	7,481	438	2,565	1,844	344
% of NII*	2.43	0.64	3.63	2.72	1.18
% of PBT*	6.95	1.91	16.41	5.88	3.30

* Data available as of December 2018.

Source: ECB and authors' own elaboration.

In contrast to the current system, which treats all excess reserves in the same manner, a tiered system for the DFR, akin to those in place in Japan, Denmark, Sweden or Switzerland, would imply no cost for the banking system up to a certain threshold of liquidity on deposits at the central bank, with the negative rate continuing to apply above that threshold.

A tiered system would considerably reduce the cost for banks depositing liquidity with the ECB and improve their profitability, which has remained low in recent years.

To quantify the impact of the current deposit remuneration/penalisation policy, note that as of April 2019, the eurozone banking sector had excess reserves of 1.87 trillion euros (the

Table 2 **Current and alternative reserve remuneration scenarios and the impact on banks**

Billion euros

Actual scenario				
	MRO		0%	
	Deposit rate		-0.40%	
	Required reserves		Excess reserves	
	Total	Total	Exempt	Not exempt
	128.4	1,870.2	0.0	1,870.2
Result	0		0	-7.48
Afi scenario (95%)				
	MRO		0%	
	Deposit rate		-0.40%	
	Required reserves		Excess reserves	
	Total	Total	Exempt	Not exempt
	128.4	1,870.2	1,776.7	93.5
Result	0		0	-0.37
Afi scenario (70%)				
	MRO		0%	
	Deposit rate		-0.40%	
	Required reserves		Excess reserves	
	Total	Total	Exempt	Not exempt
	128.4	1,870.2	1,309.1	561.1
Result	0		0	-2.24

Source: ECB and authors' own elaboration.

“ The ECB rates are effectively marginal rates and, in an environment of excess liquidity, it is expected that EONIA, the market rate, would align with the deposit rate. ”

sum of excess reserves in the current account plus the deposit facility). With the current DFR at -0.40%, this implies a cost for the Euro Area banks of 7.5 billion euros a year.

The impact varies substantially by national banking system, as illustrated in Table 1. Excess reserves over the minimum requirement range from 86 billion euros in Italy to around 641 billion euros in Germany.

In the case of the Spanish banks, the current volume of excess reserves (almost 110 billion euros) is generating a cost of around 440 million euros, which is below the eurozone average in terms of both the banks' net interest margin (0.64% vs. 2.43%) and profit before tax (1.91% vs. 6.95%).

By way of estimation, we have modelled two scenarios for remuneration of the banks' reserves by the ECB: minimum reserves at the MRO rate (as is currently the case) and

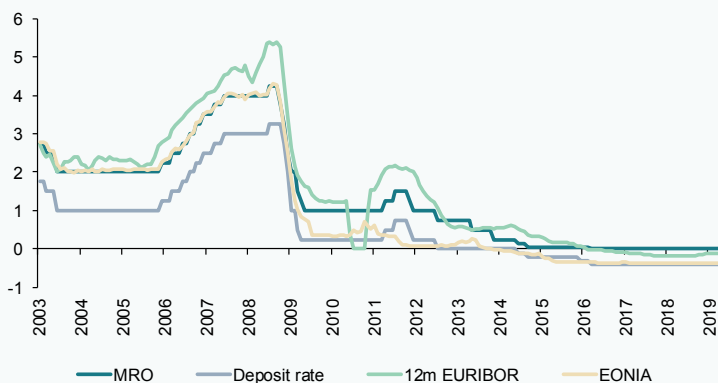
between 70% and 95% of excess reserves at 0% (or the MRO, which is at around zero in the current environment), with the rest at the DFR. Table 2 calculates how such a regime would change the banks' costs, showing that they would go from paying the ECB 7.5 billion euros a year to paying between 2.24 billion euros and just 370 million euros, depending on the scenario (70% or 95%, respectively). We note that although the scenario of remunerating 95% of excess reserves at 0% might appear extreme, that is what the Bank of Japan is doing at present. [4]

Indirect impact of the negative DFR

This direct impact on European banks' costs is not the only problem associated with a negative DFR. A potentially far greater impact relates to the anchoring effect that negative rates exert over the yield curve, used as the benchmark for customer lending and deposit operations.

Exhibit 2 Key benchmark rates

Percentage



Source: Bloomberg and authors' own elaboration.

Exhibit 2 depicts the trend in the main benchmark rates in the eurozone from January 2003 to April 2019. The focus of our analysis begins from June 2014 when the DFR entered negative territory for the first time.

By analysing the longer-term trend from 2003 to 2019, we see that EONIA has converged towards the deposit rate since the onset of the financial crisis in 2009. This is due to the surplus liquidity in the system, which reduced the need for banks to raise liquidity among themselves. This means the banks demand the same (or very nearly the same) remuneration as the ECB for receiving excess deposits. The ECB rates are effectively marginal rates and, in an environment of excess liquidity, it is expected that EONIA, the market rate, would align with the deposit rate. Conversely, in normal times where there is no excess liquidity in the banking system (*e.g.* the period before the crisis), EONIA will track the MRO of the ECB.

Consequently, the decisions made by the ECB to raise or lower the deposit rate will directly affect the market rate. The ECB's policies nudge the entire money market yield curve in the same direction, which impacts the stock of credit, new lending by the banks, and borrowing costs.

As a result, EURIBOR has fallen considerably over the same period. If we consider the 12-month EURIBOR, the main benchmark rate for bank lending, it has fallen by over 70 basis points, from 0.60% in 2014 to -0.11% by April 2019.

The indirect impact is evident in all sectors in the trend observed in lending and deposit rates (retail business), both of which have dropped substantially, with a direct impact on European banks' ability to generate income.

The impact on the banking system's equity prices

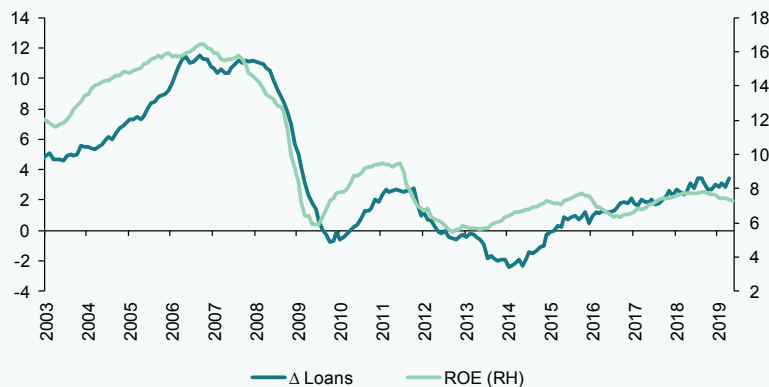
Banking profitability is intrinsically related with the trend in interest rates. As long as rate expectations remain subdued, profits will remain low and monetary policy decisions will have a direct impact on banks' margins.

It is unlikely that the sector will revisit the double-digit ROEs it reported prior to the crisis in the future, as regulatory-driven capital requirements are set to remain consistently above pre-crisis levels.

Because of its depressed returns, the sector is currently trading at a price-to-book, or P/B, ratio of 0.56x compared to a 10-year average

Exhibit 3

Eurozone: Loans to the private sector (% YoY) and 12m fwd ROE in the banking sector (%)



Sources: ECB, Factset and authors' own elaboration.

Exhibit 4 **TIER 1 capital ratios by country**



Source: ECB and authors' own elaboration.

of 0.73x and above 1.5x seen in the pre-crisis period. Similarly, the forward return on equity (ROE) stands at 7.3% (Exhibit 3). In light of their current profitability outlook, there is very little upside for banks' share prices in the medium-term, as interest rates are expected to remain abnormally low into the long-term (Exhibit 6). Note that in February 2018, when

the outlook for rates was brighter, the sector was trading at a P/B multiple of 0.87x, while in June 2016, when rate expectations were extremely depressed, the sector was trading at 0.57x. With the market pricing in a scenario where the 12-month EURIBOR is expected to remain in negative territory for at least three years, it is hard to envisage any significant

Exhibit 5 **12m fwd ROE (%) and 12m fwd P/B multiple for the banking sector and median for the last 10 years**

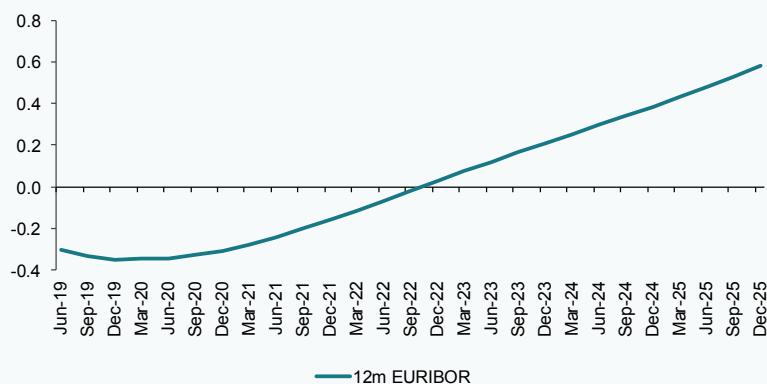


Source: Factset and authors' own elaboration.

“ In light of their current profitability outlook, there is very little upside for banks’ share prices in the medium-term, as interest rates are expected to remain abnormally low into the long-term ”

Exhibit 6 **12-month EURIBOR curve**

Percentage



Source: Bloomberg and authors' own elaboration.

improvement in multiples. For that to happen, expectations for interest rates over the medium-term would have to change, which seems unlikely in the current macroeconomic and geopolitical environment.

Conclusions

The policies pursued by the European Central Bank have had the effect of improving the financing conditions faced by the corporate sector and households substantially in the last five years. In contrast, they have had a direct adverse impact on banks’ profitability, with consequences for their business model. Until now, the Spanish banks have been able to weather the drop in income reasonably well, thanks to strong management of their funding costs. However, if benchmark rates remain at 0%, or even in negative territory, for much longer, their net interest income will continue to deteriorate, with increasingly less

scope for cutting costs. This trend of keeping rates at or below zero could foreshadow the ‘Japanisation’ of the European economy (interest rates in Japan have been at zero for two decades), marked by low economic growth and lending activity. In such a context, the banks will have to rethink their business model in an attempt to generate profits.

The banking sector has undergone a structural change: the current low returns are not cyclical and even though they could recover in the event of rate increases (in the medium/long-term), we do not envisage a return to pre-crisis levels. In this environment of ultra-low rates, banks’ market values are experiencing strong downward pressures. As long as the expectation is that rates will remain ultra-low for a prolonged period of time, banks are likely to continue to trade at a P/B multiple of less than 1x, as their returns (ROE) are expected

to remain depressed at levels below their cost of capital. As this appears to be the ‘new normal’ for the sector, banks must incorporate innovative changes to their existing models to counterbalance some of these negative effects.

Notes

- [1] By way of example, see the *ECB’s Working Paper No. 2289/June 2019*. Is there a zero lower bound? The effects of negative policy rates on banks and firms.
- [2] Refer to the speech made by Luis de Guindos on May 1st, 2019: *Challenges for bank profitability*.
- [3] That debate has intensified following statements by Mario Draghi that the ECB was considering possible measures for mitigating the side effects of negative rates on bank profitability, which could affect their ability to extend credit and their capital adequacy (refer to: <https://www.ecb.europa.eu/press/key/date/2019/html/ecb.sp190327~2b454e4326.en.html>).
- [4] The current percentage of excess reserves subject to a negative interest rate in Japan is 5.3% (<https://www.boj.or.jp/en/statistics/boj/other/cabs/index.htm/>).

Fernando Rojas, Federica Troiano and Rui da Mota Guedes. A.F.I. - Analistas Financieros Internacionales, S. A.



FINTECH DISRUPTION

The battle for global technological supremacy and the impact on banks

As trade tensions between the US and China have escalated, Big Tech firms have continued to compete for technological supremacy through their foray into the financial services sector. While it is too early to determine the outcome of Big Tech's market disruption, it is possible that their expansion could impact both the global banking sector and financial stability.

Santiago Carbó Valverde and Francisco Rodríguez Fernández

Abstract: Growing trade protectionism has triggered a scramble for international technological leadership. The US government's decision to restrict Huawei's operations in the US and their partnership with US firms could have implications not only for Huawei, but also for innovation in general and 5G technology in particular. More broadly, trade

tensions are occurring alongside Big Tech's foray into the banking sector, with Facebook's plans to launch Libra, a new cryptocurrency, just the latest development. Looking at these trends, it becomes clear that there are three potential outcomes. First, the 'Super App' model that dominates in China could emerge as a paradigm for global interaction. This

would involve considerable concentration of financial and payment services, which could undermine competition. Second, Big Tech could help expand financial inclusion. Third, the combination of trade protectionism and market disruption could result in regulatory and technological fragmentation. While Big Tech's scale could give it an edge over traditional financial institutions, the future interaction between banks and Big Tech will be determined by the latter's ability (and willingness) to diversify into different financial services.

Introduction: Protectionism from the standpoint of the financial system

Trade protectionism remains a geostrategic factor of the highest order, with the last two months generating new levels of uncertainty. One manifestation of this is the increasingly important battle for technological supremacy. Another aspect that has not been widely covered but could have a considerable, quantitative impact on the financial sector relates to trade tensions and the recent developments in Big Tech, such as Facebook's decision to launch Libra, a cryptocurrency.

May 15th marked a significant milestone. The US administration took two decisions with respect to China's Huawei. First, it decided to end the sale of the company's products in the US. Second, semi-conductor producers are effectively prohibited from supplying Huawei with products essential to the manufacturing of smartphones. Following the sharp contraction in the stock market, the US government announced on May 21st a temporary three-month suspension of these measures. Nevertheless, the mere announcement and threat of permanent measures has sparked a chain reaction with implications for the US and China, third countries and global stock markets. The

markets are especially concerned that these tensions will escalate. The US Department of National Security has said that it will publish an exhaustive list of companies and products that pose a "threat" to information security in July while the Department of Commerce will produce the corresponding entity and country black lists. Significantly, other countries have expressed similar security concerns. For example, both Japan and Australia have already blocked some of Huawei's operations due to suspicions of espionage. Of particular focus is the fear that these countries could lose control over information as they develop their 5G networks. Note that Huawei is the world-leader in 5G, the next generation of wireless communication technology.

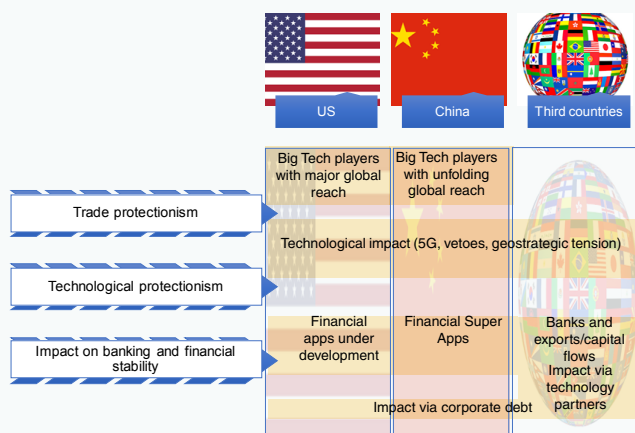
As shown in Exhibit 1, the various ways in which trade protectionism is taking form could have an impact on the banking sector and financial stability. Technology models, which are the focus of the trade dispute between the US and China, are the first source of concern. The US Big Tech firms (Apple, Facebook, Google, Amazon, Microsoft) are characterised by their global presence. Conversely, the global footprint of Chinese tech giants (Tencent and Alibaba) is considerably smaller. That said, their reach in China is substantial, aided by relatively little regulation governing the development and integration of products and services. The second manifestation of trade tensions is the rise of technological protectionism, and the negative effect this could have on innovation. In the case of Huawei, US policy could have ramifications for the expansion of 5G, which in turn restricts the benefits other companies could obtain from the use of that technology.

The different forms of technological expansion across multiple regions have resulted in divergent relationships with the financial

“ The US government's announcement regarding Huawei and the threat of permanent measures has sparked a chain reaction with implications for the US and China, third countries and global stock markets. ”

Exhibit 1

Impact of protectionism on banking and financial stability



Source: Authors' own elaboration.

sector. For example, American Big Tech firms offer apps that handle and transmit information and their financial activities tend to be limited to payment instruments. By comparison, China has seen the consolidation of so-called ‘Super Apps’— apps (e.g. WeChat and Alipay) that enable communication, purchases, money transfers, payments and even credit transactions from mobile devices. As such, they directly compete with the Chinese banking sector. In China, a high percentage of payment flows are already *de facto* controlled by these Super Apps. In the US, Apple’s new credit card and Facebook’s foray into the cryptocurrency sphere and development of a payment system platform foreshadow potential disruption that could prove considerable. That said, numerous financial institutions have pursued collaborations with Big Tech firms via communication systems, international activities and retail payment instruments. In the short-term, protectionism could increase the cost of these

partnerships or, directly prohibit some of them, with potentially negative consequences. If, for example, Huawei is part of a strategic alliance with a bank, the latter may have to assess to what extent permanent protectionist measures could impact its business.

It is important to point out that not all the transmission effects on banking and financial stability result from the impact of the availability and use of technology. Previous trade wars have also taken a toll on debt markets. In some countries, a large part of the corporate debt depends on the health of export flows. For instance, Sweden, Finland and Germany’s export outlooks have weakened as a result of the trade war, thereby reducing the flows of capital within the country. This has had an adverse impact on those sectors where investment flows have been strongest in recent years, such as the property market.

“ China has seen the consolidation of so-called ‘Super Apps’— apps (e.g. WeChat and Alipay) that enable communication, purchases, money transfers, payments and even credit transactions from mobile devices. ”

“ The extension of exceptional monetary conditions reflects concern over the state of the economy in which trade protectionism is playing a prominent role. ”

The central banks are aware of these risks and their possible economic and financial effects. Only 18 months ago, Europe anticipated a gradual rollback of quantitative easing. Now, expectations have shifted in favour of expansionary monetary policy. On June 19th, the Federal Reserve decided to leave its benchmark rates within the range of 2.25%-2.5%. However, its chairman, Jerome Powell, said that “after running close to our symmetric 2 percent objective for most of last year, inflation declined in the first quarter” (...) “the case for a more accommodative policy has strengthened”. And, in reference to protectionism and its potential impact on the economy, he added that “in light of increased uncertainties and muted inflation pressures, we now emphasise that the Committee will closely monitor the implications of incoming information for the economic outlook and will act as appropriate to sustain the expansion, with a strong labour market and inflation near its two percent objective”.

During the European Central Bank’s Forum on Central Banking in Portugal on June 20th, its president, Mario Draghi, recalled that the

ECB is predisposed to adopting new monetary stimuli. Such action could take the form of a rate cut, which would bring the ECB into the uncharted territory of negative rates, and/or the reactivation of the ECB’s debt repurchase programme.

The extension of exceptional monetary conditions reflects concern over the state of the economy in which trade protectionism is playing a prominent role. In the eurozone, the extension of quantitative easing has negative consequences for the banks: with rates so low and the expectation that they may be lowered further still, the scope for boosting margins and profitability is very slim.

Impact of protectionism: Regulation, competition and data law

Given the current context, it is important to consider how an expansion of protectionist measures might negatively impact the financial sector and the role of regulation in preventing or mitigating these effects. Table 1 outlines alternative routes that might be taken, the kinds of regulations that might be needed,

Table 1 **Economic and financial impact of protectionism and regulatory challenges**

	Regulation	Competition	Data law and responsibility
Super Apps route	Banking and non-banking	Concentration	Privacy
Financial inclusion route	Effective inclusion and equality	Banking and non-banking	Risk and control
Fragmentation route	Separate legal coverage	New geographic clusters for competition and platforms	Political disputes and financial stability

Source: Authors’ own elaboration.

“ The role of Big Tech in financial stability is not only a potential risk to financial institutions but also represents an opportunity for reducing economic and financial inequality. ”

the impact on competition and the challenges posed in terms of data law. First, the ‘Super App route’, China’s approach to app development, involves integrated information and financial transaction platforms. That implies the need for banking and non-banking regulations insofar as these apps not only provide communication systems but also instruments with a significant presence in their users’ everyday financial activities. While this model has been primarily limited to China, if other global Big Tech players add new payment and financial services, it could emerge as a global interaction model. This route implies considerable concentration of financial and payment services, which could have implications for the competitiveness of the financial sector. This is due to the limited number of providers and their possible market shares as well as the concentration of a broad number of activities in a single supply system. These developments also pose a significant risk for privacy, as detailed information about demographics, daily conduct and financial data may accumulate in the hands of just a few firms. As such, regulatory action may be required to ensure the proper treatment and protection of customer data.

The second route is that of financial inclusion. The role of Big Tech in financial services is not only a potential risk to financial stability but also represents an opportunity for reducing economic and financial inequality. Indeed, both companies and governments have highlighted the role that certain technological initiatives can play in improving access to financial services. Perhaps the best known initiative is the Pradhan Mantri Jan Dhan

Yojana programme, also referred to as the citizen money management plan or PMJDY for its acronym in Hindi. Through the use of biometric information, the programme is able to identify Indian citizens and open bank accounts for them. Financial inclusion was also one of the arguments used by Facebook when it announced its new digital currency, Libra.

The financial inclusion route implies more intense competition between bank and non-bank providers insofar as the latter proliferate and emerge as the first financial alternative accessible to broad segments of the world’s population. This route is not risk free as the financial implications should not be decoupled from the labour or educational dimensions. Specifically, formal finance will prove scanty effective in the absence of stable and decent work and the knowledge needed to manage financial resources wisely.

Third, there is the fragmentation route to consider. As trade tensions escalate between China and the US, Big Tech collaborations and innovations will become restricted, obliging financial and non-financial service providers to pick sides. This would heighten geographic segmentation and undermine progress in areas such as global data protection and technology system compatibility. Uncertainty regarding regulators’ ability to mitigate these global risks would subsequently rise. The Bank for International Settlements (BIS) recently identified (see BIS, 2019 and Frost *et al.*, 2019) how the dynamics between Big Tech and the world of finance are materialising and their risks in practice:

“ As trade tensions escalate between China and the US, Big Tech collaborations and innovations will become restricted, obliging financial and non-financial service providers to pick sides. ”

“ Libra has also been touted as an opportunity to provide further access to financial services for underbanked populations through the interaction of Facebook and mobile phones. ”

- The Big Tech firms usually enter the financial services via payment systems and then deepen their presence through the provision of credit, insurance, savings and investment products. This can be done independently or in cooperation with the banks.
- Big Tech firms’ transition into credit activities usually takes place in countries with less competitive banking sectors and scant regulatory pressure (e.g. Argentina and China).
- Although it is too soon to measure Big Tech’s impact on the banking industry, the long-term effects of these activities on financial stability could be considerable.

These dynamics have occurred alongside the highly significant announcement of Facebook’s foray into the cryptocurrency sphere with the expected 2020 launch of its own digital currency, Libra. As shown in Exhibit 2, Libra is an integrated technology-financial project

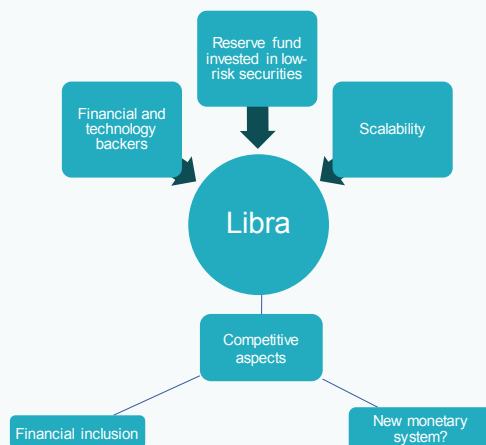
of considerable scale. Through its numerous partnerships, it will provide capital for Calibra, a management company. Calibra will consist of communication, digital payments and credit card companies. While it will make use of the services of collaborative networks in industries such music and transportation, it will not rely on other Big Tech players or banks. These efforts will enable the creation of a major fund that will invest in deposits and low-volatility fixed-income securities as backing for Libra.

It will also be possible to exchange the cryptocurrency for fiat currencies such as the dollar. That said, other cryptocurrencies have attempted to achieve exchange stability but have failed due to the lack of scale and support. The reserve fund generated by Libra will be *de facto* convertible into an alternative money system, although it is too early to determine the extent to which this will succeed.

Libra has also been touted as an opportunity to provide further access to financial services

Exhibit 2

Technological and financial support for Facebook’s Libra



Source: Authors’ own elaboration.

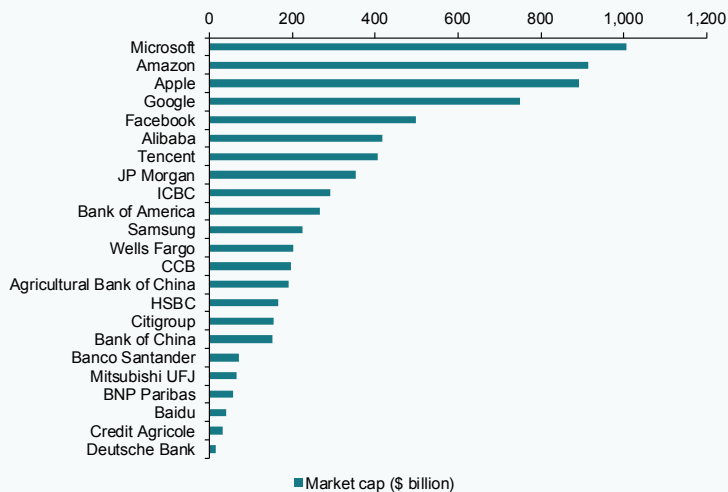
for underbanked populations through the interaction of Facebook and mobile phones. The scale and competitive implications of this new initiative will require enhanced regulatory oversight. While it is too early to determine what form of regulation will emerge, it is likely that the platform will be treated as a hybrid of a payment processor and bank entity.

More than just scale: The interaction between banks and Big Tech

The Big Tech players boast significant scale in comparison with traditional financial institutions. Based on their market capitalization, four major Big Tech firms far exceed the size of the largest financial services firms (Exhibit 3). With the exception of the European financial industry, nearly all of these financial and non-financial companies are located in the US, China or across Asia.

Nevertheless, the future interaction between banks and Big Tech will not be determined on the basis of size but rather Big Tech’s ability (and willingness) to diversify into different financial services. Table 2 outlines the financial services where the global Big Tech firms are already present. They are particularly active, albeit with different levels of intensity, in the payments segment. In the lending arena, the Chinese companies have taken the lead, although Google, Amazon and Facebook have several projects, some standalone, others collaborative, under study or development. Asian Big Tech firms have also expanded into the deposit accounts segment. Here, regulatory factors play an important role. In the US and Europe, these firms’ provision of deposit services would effectively make them banks, thereby resulting in heightened regulatory oversight. In Asia, these firms face far less regulatory scrutiny.

Exhibit 3 **Big Tech firms and major global banks by market cap (June 2019)**



Source: Bloomberg and authors' own elaboration.

“ The future interaction between banks and Big Tech will not be determined on the basis of size but rather Big Tech’s ability (and willingness) to diversify into different financial services. ”

Table 2 **Presence of Big Tech in financial services**

	Google	Amazon	Facebook	Apple	Microsoft	Alibaba	Tencent	Baidu	Samsung
Payments	X	X	X	X	X	X	X	X	X
Loans (direct)						X	X	X	
Loans (collaboration or planned)	X	X	X						
Demand accounts (operational)						X	X	X	
Demand accounts (planned)		X							
Digital currency			X			X	X	X	
Credit cards				X					
Asset management						X	X		
Insurance (direct)							X		
Insurance (collaboration or planned)	X	X		X	X	X	X		

Source: Financial Stability Board (2019) and authors' own elaboration.

Turning to cryptocurrencies, only some Chinese companies have ventured into this realm, making Facebook's entry all the more significant. As for credit cards, Apple stands alone, whereas nearly every company, regardless of their geographic location, is working on insurance-related initiatives.

Although Big Tech's entry into the banking sector has been gradual and conditioned by existing regulation, its mere presence is inspiring broad change across the industry. For example, Vives (2019) points out that the banking industry is heading towards a more customer-centric approach and that it will be up to the regulators to discern (directly or indirectly) three essential aspects: i) which players will dominate the financial sector; ii) what level of protection will be afforded to customers; and, iii) how to strike a balance between innovation and financial stability.

Conclusion

As trade tensions escalate, the competition for global technological leadership is taking shape, which could significantly affect

financial stability and the future of the banking sector. This paper has analysed these interrelationships, drawing the following conclusions:

- Trade protectionism has an important technological layer that affects the world of finance via the markets (stock market instability), debt (corporate instability and investment flows) and banks (technology alliances curtailed by trade vetoes).
- Although digital disruption presents risks in a protectionist context, if excessive fragmentation is avoided, financial inclusion and enhanced competition could improve the wellbeing of millions of people.
- Regulation is the mechanism for directing Big Tech's access to the financial sector. That said, divergent regulatory approaches could impede effective control at the global level.

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How banked is Spain in the European context?

While there exists the perception that Spain is overbanked relative to other EU countries, the banking sector's contribution to the Spanish economy (in terms of gross value added and employment) is lower and has fallen, with the industry's credit to GDP ratio just 3 percentage points above the eurozone average. Interestingly, this has occurred alongside an expansion of auxiliary financial services, which have become more attractive due to the prolongation of historically low interest rates.

Joaquín Maudos

Abstract: Spanish banking services generate 2.7% of the Spanish economy's gross value added and 1.1% of its jobs. Those percentages are below the eurozone averages of 3% and 1.4%, respectively. In the wake of the crisis, the banking sector's contribution to the economy has fallen in both Spain and the eurozone, albeit more intensely in Spain. Despite growth in financial disintermediation,

the banks remain at the core of the Spanish financial system, accounting for 70% of its GVA and 61% of the employment generated. It is worth highlighting the growing importance of auxiliary activities to financial services, which contributed 12% of the income and 24% of the employment generated by the Spanish financial system in 2017. This can be explained by the growth in fund management, which in

“ Spain’s weight in the value added by banks in the eurozone stands at 9.6% compared to its weight in the overall eurozone economy of 10.5%. ”

the context of low interest rates, has made bank deposits less attractive. Although the Spanish economy continues to rely on bank credit relatively more than the rest of Europe, the intense private sector deleveraging observed has drastically narrowed this difference—measured in terms of credit/GDP, this statistic stands at 101% in Spain *versus* 98% in the eurozone. [1]

Introduction

It is a widespread belief that the Spanish economy is highly banked, with data points such as its high corporate dependence on bank financing, the importance of the banking business in the overall financial system and the high number of bank branches often cited as evidence of this supposed fact. However, the use of alternative, more rigorous banking penetration indicators, such as the sector’s weight in terms of value added and job generation, weakens this assumption. Indeed, Spain’s weight in the value added by banks in the eurozone (9.6%) is lower than its weight in the overall eurozone economy (10.5%). The pattern is the same with employment in the banking sector. The weight in European banks’ activities (10%) is lower than in the overall economy (12.5%).

The fact that the banking sector garners a higher weight in the overall financial system in Spain than in other economies does not imply a higher weight in the overall Spanish economy. In fact, the Spanish financial system is characterised not by the significant weight of its banks but banking penetration,

which, based on a proxy measurement of the weight of banks in the economy in terms of value added and job generation, is below the eurozone average. Moreover, although bank loans remain the most important source of financing in Spain, the intensive deleveraging recently observed in the Spanish private sector has reduced the percentage of credit over GDP, which since 2018 has been almost in line with the eurozone average. The density of branch networks has also fallen significantly in recent years and although it remains high by comparison with other EU states, the branches in Spain are smaller. In fact, based on the number of employees and assets per branch, Spain’s branches are among the smallest in the EU. These data explain why the weight of total bank assets in GDP is below the eurozone average.

Further analysis provides insight into the structural shift of the composition of Spain’s financial system, in which the banks have lost significant relative importance in favour of auxiliary financial service activities, such as fund management and financial advisory services. Although the trend in Europe is similar, the shift has been more pronounced in Spain. Additionally, in the early years of the crisis, banks’ role in financial intermediation diminished in both the EU and Spain, alike. However, the loss in Spain has been greater, as the weight of the banks in the economy’s total value added has contracted by 40% since 2009, compared to contractions of 17% and 19% in the eurozone and EU, respectively. The loss of prominence is less pronounced

“ The weight of Spanish banks in the economy’s total value added has contracted by 40% since 2009, compared to contractions of 17% and 19% in the eurozone and EU, respectively. ”

in terms of jobs. Over the same period, the banking industry's share of total employment fell by 21% in Spain, *versus* 13% and 12% in the eurozone and EU, respectively.

These takeaways are based on an analysis of Eurostat data. Eurostat publishes information on the breakdown of value added and employment by sector of activity. One such sector is financial services, under which is the banking sector. That information is complimented by additional data from the ECB's records of banks' balance sheets. These data date back to 1995, thereby facilitating the identification of structural changes as well as the impact of the recent crisis on the weight of the banking sector in the economy. Given the existence of disaggregated information by country, it is possible to conduct a comparative analysis of the Spanish banking sector in the European context.

This paper is comprised of four sections, with the goal of answering the following questions: a) what is the banking sector's contribution to the value added and employment in the economy? b) what size is the banking sector in terms of assets- and credit-to-GDP? c) what is the relative weight of the banking sector in the overall financial system in terms of value added and employment? and, d) are we witnessing disintermediation (and an increase in shadow banking) such that the relative weight referred to in part c is declining over time? And has that trend been affected by the recent crisis?

How significant is financial intermediation in the economy?

Economic activity can be classified under various sectors using the NACE statistical classification of economic activities. Sector 64 includes financial service activities (excluding insurance and pension funds services), which is where banks' activities are included. [2]

As a result, sector 64 is the starting point for approximating the size of the banking sector in the economy.

As shown in Exhibit 1, the weight of banking services in the economy's overall gross value added (GVA) was higher in Spain than the European average until 2009. Since then it has declined, ultimately falling to 2.7% in 2017, compared to 3% and 3.2% in the eurozone and EU, respectively. In 2017, the last year for which the figures are available, the weight of the Spanish banks was low in comparison to most of the main European economies. For instance, the weight of national banks in their home economies stood at 2.8%, 3.5%, 4.3% and 2.4% in France, Italy, the UK and Germany, respectively.

The Spanish economy also looks relatively less banked in terms of the total weight of banking service jobs. In 2017, banking service activities accounted for 1.1% of employment (217,020 jobs) in Spain, compared to 1.4% in the EU and the eurozone. Of the major European economies, Spain is the least banked in terms of the sector's contribution to total employment, with the sector accounting for 1.4% of employment in Italy and 1.5% in Germany, France and the UK.

The trend since 1995 reveals a loss of banking sector weight in terms of employment across Europe, albeit more intensely in Spain since 2010, in tandem with the far-reaching sectoral restructuring and elimination of surplus capacity. Since 1995, the weight of the bank sector in employment has fallen by 40% in Spain (compared to 26% in the eurozone), decreasing from 1.8% to 1.1%. In terms of GVA, the weight in 2017 was 30% lower than in 1995, although this loss of significance primarily occurred after the onset of the financial crisis.

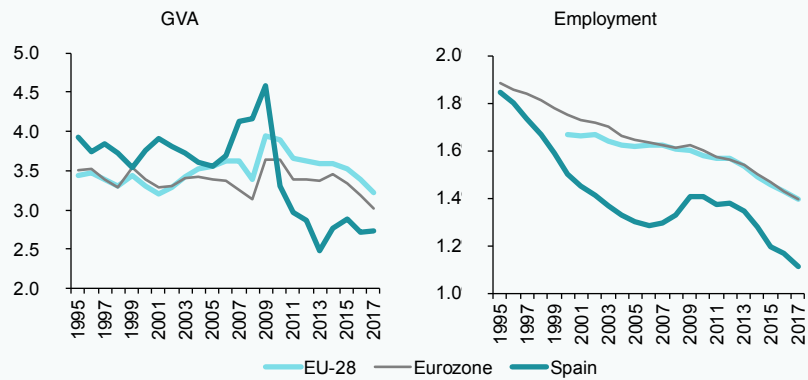
“ In 2017, banking service activities accounted for 1.1% of employment (217,020 jobs) in Spain, compared to 1.4% in the EU and the eurozone. ”

Exhibit 1

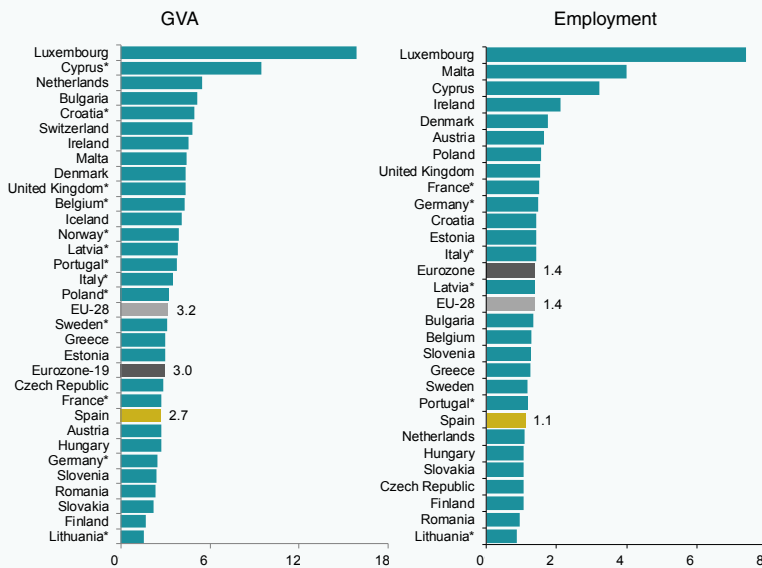
Weight of the banking services sector in the economy

Percentage

a) Trend since 1995



b) Ranking in 2017



*2016
Source: Eurostat.

Considering all of the financial system's (banking, insurance, pensions funds and auxiliary activities) activities, the weight in the overall economy is also lower in Spain than in the eurozone and the EU. Using the 2017 figures, the Spanish financial system accounted for 3.9% of GVA and 1.8% of

overall employment, below the equivalent eurozone readings of 4.5% and 2.5%. Turning to employment, the weight of the Spanish financial system is lower than the major EU economies, although in terms of GVA it was higher in 2017 than in Germany (3.8%) and France (3.5%).

Weight of the banking sector in GDP by assets and credit

It is not possible to judge the extent to which the Spanish economy may be overbanked by solely relying on the weight of bank assets in GDP. Analysis of monetary financial institutions' (MFIs) assets, a proxy valuation for the size of the domestic banking sector, published by the ECB shows that in 2018 that percentage stood at 219% in Spain, which is nearly 50 percentage points below the eurozone average (Exhibit 2). This percentage is a little higher than in Italy (209%) but lower than in Germany (230%) and France (375%). Looking at the trend since 1997 (the first year available), the growth in the Spanish banking sector was higher than the eurozone average, so that the gap went from 55 percentage points below the average that year to a peak of 10 percentage points above the average in 2012. Since then, the intense private sector

deleveraging has widened this gap to 48 percentage points in 2018.

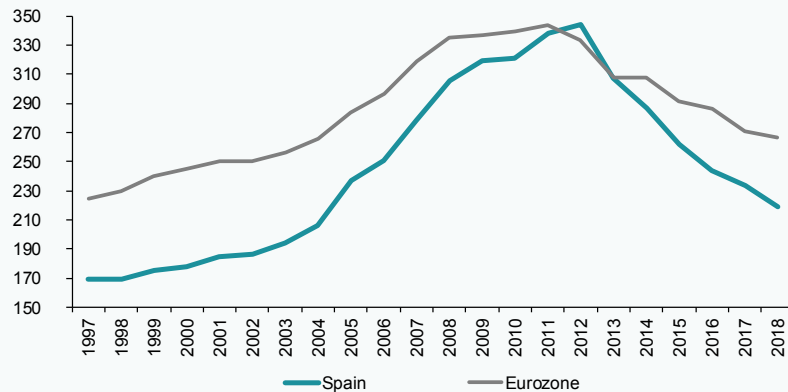
The shift in the weight of Spain's banking sector in GDP has been influenced by the trend in private sector credit, which grew at rates of close to 20% during the boom years until 2007. Significantly, these growth rates exceeded that of GDP expansion. This rapid growth in credit pushed the banking sector's weight in GDP to a peak of 174% in 2010, 58 percentage points above the eurozone average (Exhibit 3). The subsequent collapse in credit drove that ratio down to 101% of GDP in 2018, narrowing the gap with the eurozone average to just 3 percentage points. Thus, although the weight of credit in the Spanish economy is higher than in the main European economies (excluding France), the gap with respect to the eurozone average is very small.

Exhibit 2

Weight of bank assets over GDP, 2018

Percentage

a) Trend in Spain vs. eurozone



“ Due to the strong deleveraging effort in response to the crisis, the ratio of private sector credit to GDP went from 58 percentage points above the eurozone average to almost in line with it. ”

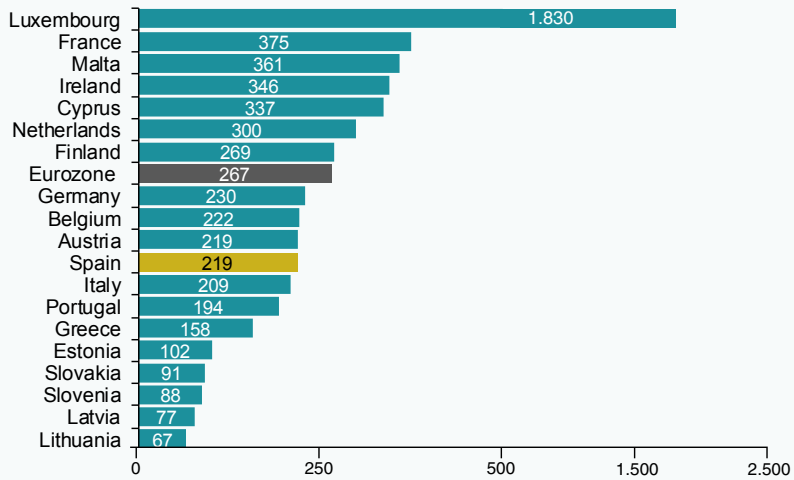
Exhibit 2

Weight of bank assets over GDP, 2018

Percentage

(Continued)

b) Ranking in 2018



Sources: ECB and Eurostat.

Exhibit 3

Weight of loans to non-financial private sector over GDP, 2018

Percentage

a) Trend in Spain vs. eurozone

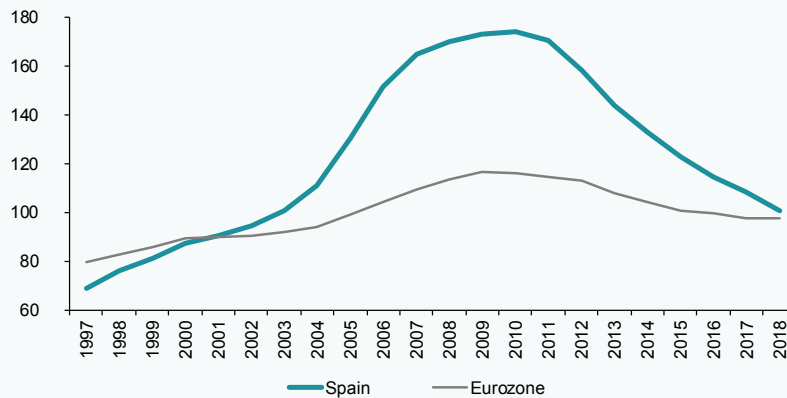


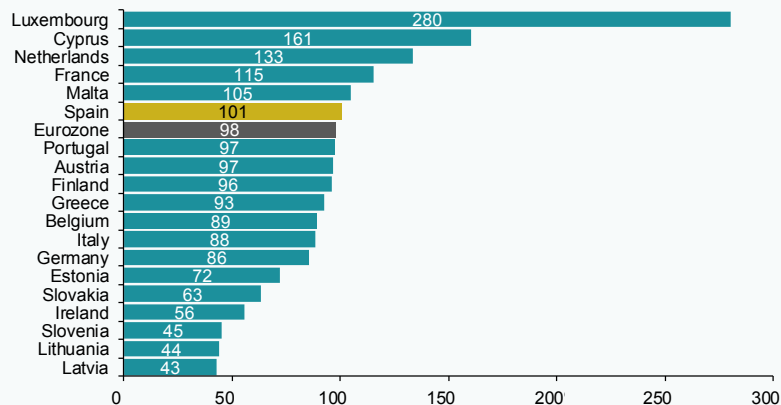
Exhibit 3

Weight of loans to non-financial private sector over GDP, 2018

Percentage

(Continued)

b) Ranking in 2018



Sources: ECB and Eurostat.

**Composition of the financial system:
Weight of the banking sector**

In addition to banking service activities (sector 64), the financial sector includes sector 65 (insurance and pension funds, except for compulsory social security) and sector 66 (activities auxiliary to financial services and insurance). Sector 66 includes fund management activities and activities provided by other firms specialised in credit cards, financial advisory, custody, *etc.*

Although the banking sector's weight in the Spanish economy is small in terms of GVA and employment compared to the eurozone average, its weight in the financial system is greater. Using 2017 figures, the banks (sector 64—financial services) accounted for 70% of the GVA generated by the financial system, 4 percentage points above the eurozone average (Exhibit 4). The insurance companies and pension funds contributed 18% and the remaining auxiliary financial services represented 12%. In comparison with

the major eurozone economies, the Spanish banking sector commands a higher weight in the overall system than in Germany (61%) and Italy (67%), but not in France (76%). Turning to employment, the banking sector is also relatively more significant in Spain than in the eurozone, contributing 5 percentage points more to overall financial system jobs (61% *vs.* 56%). Meanwhile, the insurance and pension sector accounted for 15.3% of jobs in the Spanish financial system and the activities auxiliary to financial services represented the remaining 23.9%.

It is worth highlighting the banks have lost relative importance in the overall financial system in Spain in recent years. In 1995, they accounted for 82% of GVA and 73% of jobs. However, by 2017, those percentages had fallen to 70% and 61%, respectively, clearly evidencing a process of disintermediation in parallel with growth in shadow banking. The banks have also lost weight in the financial system in the rest of the eurozone, albeit less intensely. Specifically, this loss accounts

“ The insurance and pension funds sector’s share of the financial system’s GVA and employment has increased by 8 percentage points and 1 percentage point since 1995, while the auxiliary activities segment’s share has gained 3 percentage points and 11 percentage points. ”

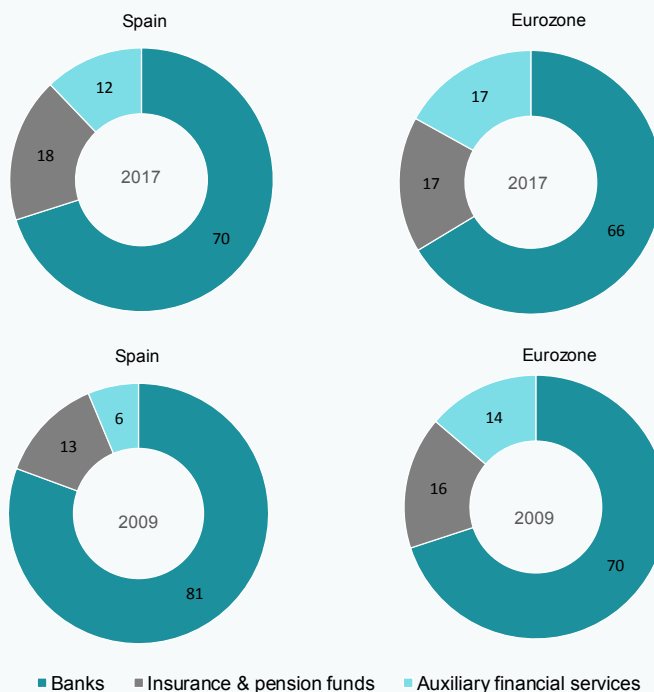
for 5 percentage points in terms of GVA (vs. 12 percentage points in Spain) and 8 percentage points in terms of jobs (12 percentage points in Spain). The insurance and pension funds sector’s share of the financial system’s GVA and employment has increased by 8 percentage points and 1 percentage point, respectively, while the auxiliary activities segment’s share has gained 3 percentage points and 11 percentage points, respectively. The boom in fund management in recent years coincided with prevailing low interest rates, which made

bank deposits less appealing. This partially explains the growth in these activities’ share in the overall financial system.

The most recent snapshot of the financial services sector in terms of the contribution to the economy shows that in 2017 it accounted for income (GVA) of 28.92 billion euros and 217,020 jobs [3] . The insurance and pension funds sector contributed 7.33 billion euros of GVA and 54,500 jobs, while the auxiliary

Exhibit 4 **Composition of the financial system: Breakdown of GVA**

Percentage



Source: Eurostat.

“ In 2017, the Spanish financial system accounted for 41.27 billion euros of value added and 356,800 jobs. ”

financial services accounted for 5.02 billion euros of income and 85,200 jobs. In total, the Spanish financial system accounted for 41.27 billion euros of gross value added and 356,800 jobs.

It is worth highlighting the different trends etched out by the various agents in the Spanish financial system since the onset of the crisis. In the case of the banks, their contributions to GVA and employment in 2017 were 37% and 23% below the peaks of 2009/2008. In 2017, the activities carried out by the banks generated 17.21 billion euros less GVA than in 2009 and 65,800 fewer jobs than in 2008. The insurance and pension funds sector has also seen its share of value added and employment decrease since the crisis, albeit at a slower pace than the banks. However, the share commanded by the auxiliary financial services has increased. In 2017, these services accounted for nearly one-quarter of all employment in the Spanish financial system (23% more than in 2010), which is 9 percentage points more than the insurance and pension funds sector. In terms of GVA, their share has increased by 51% since 2011, but has continued to lag that of the insurance and pension funds sector by 6 percentage points.

Conclusions

- Although the Spanish economy is highly dependent on bank financing (in part due to the high incidence of SMEs), the ratio of private credit to GDP is just 3 percentage points above the eurozone average, thanks to intense deleveraging by enterprises and households in recent years.
- Measuring the importance of the banking sector by the weight of activities performed by the banks (financial intermediation) in the economy shows that Spain is less banked than the eurozone. Specifically, those banking service activities contributed 2.7% of GVA and 1.1% of all employment in the Spanish economy in 2017, compared to 3% and 1.4% in the eurozone, respectively. The weight of the financial system in the overall economy (3.9% of GVA and 1.8% of total employment) is similarly lower in Spain than in the eurozone (4.5% and 2.5%).
- Another indicator that shows the weight of the banking sector in the Spanish economy is below the eurozone average is its contribution to total value added and employment in the overall European banking sector in comparison with the weight of the Spanish economy in the overall European economy. Specifically, in 2017, the Spanish banking sector accounted for 9.6% and 10% of overall European banking GVA and employment, compared to the Spanish economy's shares of European GVA and employment of 10.5% and 12.5%, respectively.
- Following the impact of the recent economic crisis, the weight of banking activities in the economy has declined in terms of both GVA and employment in the eurozone and, more intensely, in Spain. Financial disintermediation has, therefore, taken place.
- The weight of the banks in the overall financial system is higher in Spain than in the eurozone. In 2017, the activities carried out by the banks accounted for 70% of the GVA generated by the Spanish financial system, which is 4 percentage points above the eurozone average. In terms of employment, those activities accounted for 61% of the Spanish financial system total, 5 percentage points above the eurozone average. As a result, the weight of the other activities comprising the financial system (those performed by the insurance companies and pension funds and the other entities that perform auxiliary activities) is relatively lower in Spain.

- As a result of the crisis, the banks' ability to generate jobs and GVA has diminished. The current readings are 37% and 23%, below peaks observed in 2008/2009. The insurance and pension funds sector has also seen its share of value added and employment decrease since the crisis, albeit at a slower pace than the banks. In contrast, the activities auxiliary to financial services have grown in relative importance. In 2017, they accounted for nearly one-quarter of jobs in the Spanish financial system, although their share of GVA was considerably lower (12%). One of the drivers of this growth is the boom in the fund management business (part of the shadow banking system), whose services have become more attractive in the wake of the drop in returns on bank deposits.

Notes

- [1] This paper falls under the scope of research project ECO2017-84828-R under the Spanish Ministry of the Economy, Industry and Competitiveness.
- [2] It also includes the activities performed by other entities such as central banks, financial holding companies, *etc.*, although the banks are by far the most important component.
- [3] That employment figure is higher than reported by the Bank of Spain (192,626), which not only includes jobs created by the credit institutions and specialised credit institutions (EFCs for their acronym in Spanish) but also those generated by other entities that provide financial services.

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Banking-*versus* market-oriented financial systems: Questioning the European-US paradigm

Based on the value of assets and certain stock metrics in each jurisdiction, conventional opinion holds that the EU banking system is 'overcrowded' compared to the more market-oriented system in the US. However, further analysis of each systems' metrics, particularly from a flows perspective, suggests the situation is far more nuanced.

Ángel Berges, Álvaro López and Fernando Rojas

Abstract: Comparative economic literature differentiates between market-oriented and bank-oriented financial systems, with the former generally associated with the US. Moreover, ECB President Mario Draghi has described the European banking system as 'overcrowded'. This tendency towards black-and-white categorisation relies on the

comparison of 'stock' metrics, such as the weight of bank assets and the market value of listed securities (stocks and bonds) in GDP. Specifically, the ratio of bank assets to GDP in the US and Europe is 80% and 250%, respectively. However, such analysis can be flawed. For instance, due to the nature of the US mortgage market, these assets are frequently

“ The European banking system, measured by its volume of assets or their weight in GDP, is nearly three times the size of the US system. ”

excluded from US banks’ balance sheets. It is also worth noting that the US banking sector includes twice as many institutions as those regulated by Europe’s Single Supervisory Mechanism. Furthermore, so-called ‘flow’ metrics challenge the prevailing assumption that Europe is less market-oriented than the US. Over the last decade, European bond and stock markets have channelled around 80 billion euros, net, to the corporate sector a year, whereas the net flows via the US bond and stock markets have been negative by nearly 100 billion euros.

Banking-versus market-oriented financial systems: The traditional paradigm

Economic literature makes a distinction between so-called ‘bank-oriented’ systems in which financial institutions are the predominant source of financing and a ‘market-oriented’ model whereby funds are raised primarily via the securities markets.

In the former, banks are responsible for channelling funds from savers to borrowers, particularly non-financial corporates. By performing this intermediation role, banks constantly ‘monitor’ the borrowers on behalf of the deposit holders, a function which could not be conducted individually by each of those deposit holders or lenders.

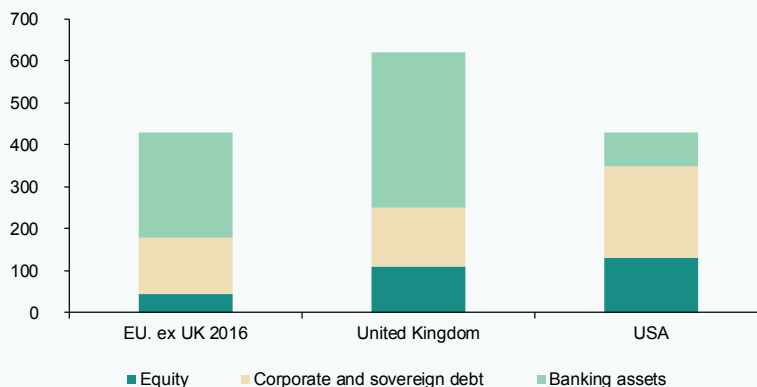
In a market-oriented system, the companies are more inclined to issue securities (shares, bonds, etc.). Savers purchase these securities directly through distribution networks or banks. However, the key difference is the absence of any financial intermediary that alters the nature of the security issued.

Although both forms of financing coexist in all jurisdictions, countries differ in terms of the relative weight of each model. The synthetic proxies often used to determine the system bias include the stock of bank credit outstanding with the private sector

Exhibit 1

Banks’ assets and securities markets in Europe vs. the US, 2016

Percentage of GDP



Source: Demertzis, Merler and Wolf, (2017).

and the market value of the securities –equity (shares) and fixed income (bonds and notes)– issued by private enterprises. In order to facilitate a comparison between countries, these indicators are usually measured against the value of a country’s gross domestic product (GDP).

A comparison using those benchmarks (Exhibit 1) confirms that the US is the most market-oriented system, while the banks dominate the financial systems in Europe. Specifically, the European banking system, measured by its volume of assets or their weight in GDP, is nearly three times the size of the US system. Conversely, the percentage of listed securities’ market values over GDP in the US is much higher. This can be partially attributed to the fact that the US system is more specialised in direct financing via the markets.

Since launching the Capital Markets Union (CMU) four years ago, the European Commission has shined the spotlight on the divergent nature of the two financial systems and considered the advisability of moving closer to the US model. When the Commissioner responsible for the CMU announced its establishment, he stressed that one of the objectives was to ‘unbank’ Europe. This expression is strikingly similar to how the president of the European Central Bank, Mario Draghi, described the Euro Area (EA) banking system as ‘overcrowded’.

Questioning the paradigm (I): Defining a ‘banked’ system

One of the objectives of this paper is to question the conclusion that the European system is overbanked in comparison with the US system. The standard proxy for measuring banking orientation is the weight of bank assets over GDP. According to this measure, it is clear that bank penetration in the US is less than half that of Europe (Table 1, which shows the main aggregate parameters

for both banking systems for 2018). In the US, the Federal Deposit Insurance Corporation (FDIC) aggregates the parameters while in the EA, the parameters are the total aggregate for the ECB/SSM (Single Supervisory Mechanism), including the significant entities subject to direct supervision (118) and the less significant entities (~ 2,000), which are supervised indirectly by the national competent authorities.

With a GDP that is 1.5 times that of the EA, the US clearly has fewer bank assets. This correspond to the substantial difference in the ratio of bank assets to GDP of 80% in the US *versus* 250% in the EA. It is on this basis that observers have concluded the US is less ‘banked’ than the EA.

However, that conclusion is derived from a single parameter, namely bank assets. This parameter is less meaningful in the US context given that the mortgage market is articulated around a securitisation system underpinned by public guarantees (the public agencies popularly known as Fannie Mae and Freddie Mac). This has the effect of removing a large percentage of mortgages from American banks’ balance sheets. Those transferred loans not only reduce the size of the banks’ balance sheets, they also reduce their exposure to credit risk (absorbed entirely by Fannie Mae). As a result, the weighting of those assets for capital adequacy purposes falls, thereby significantly boosting American banks’ solvency.

Given this important distinction, it is clear that the penetration of the banks in the US should not be measured exclusively in terms of balance sheet metrics such as assets or own funds. Instead, business, cost and profit indicators are more appropriate metrics.

In terms of the more traditional banking business, the purest indicator is the net

“ With a GDP that is 1.5 times that of the EA, the US clearly has fewer bank assets. ”

Table 1 **EA and US banking systems: Key metrics compared (2018)**

	Euro area	USA	USA / Euro area (times)
Absolute magnitudes (€ Millions)			
GDP	10,569,944	15,907,119	1.50
Banking Balance Sheet	23,485,176	15,194,515	0.65
Interest Margin	289,591	458,287	1.58
Net Profit	108,103	200,746	1.86
Estimated market value*	795,630	1,724,277	2.17
Number of banks	2,103	5,406	2.57
Relative magnitudes (% GDP)			
Banking Balance Sheet	222.19	95.52	---
Interest Margin	2.74	2.88	---
Net Profit	1.02	1.26	---
Estimated market value*	7.53	10.84	---

* Estimate based on the market value of the listed banks and the weight of their balance sheets in the total banking system's balance sheet.

Sources: FDIC and ECB.

interest margin. This refers to the difference between the revenue earned on loans and paid on deposits. Importantly, it assumes balanced liquidity, as is currently the case in both the US and the EA.

Indeed, the net interest margin generated by the US banking system in 2018 was 1.58 times that generated in the EA. Expressing that margin as a percentage of GDP, the indicator is still slightly higher in the US (2.9%) than in the EA (2.7%), which suggests bank intermediation in the US is accompanied by higher transaction costs than in the EA.

With a much smaller asset base, the margin advantage commanded by US banks widens

towards the bottom of the income statement. Specifically, US banks generate 1.8 times more net profit than their European counterparts.

Lastly, judging by the market values of the banks in the US and EA, the market is clearly signalling its belief that the profit margin differential will persist. Against that backdrop, we have attempted to approximate the value of the overall banking systems in both regions by extrapolating the listed banks' metrics for the systems as a whole. It should be noted that in the EA, the listed banks account for 60% of the financial system's assets, compared to 82% in the US.

The higher relative percentage of listed banks in the US compared to the EU could bias

“ The number of banks covered by the US deposit guarantee scheme (FDIC) is more than twice the number of banks under the purview of the Single Supervisory Mechanism (ECB/SSM) in its dual capacity as direct supervisor of significant entities and indirect supervisor of less significant entities. ”

the comparison. However, we believe it does not substantially change the conclusions. Measured relative to GDP, the market has assigned a value to the US banking system that is almost double that of the EA system.

These valuations undermine the conventional belief that the US economy is far less banked than the European economy, a conviction upheld only by the relative size of the two systems' bank assets and not their net interest margins, net profit or stock market valuations.

Another measurement that questions the 'underbanked' nature of the US system stems from a comparison between the number of banks in each jurisdiction. As already noted, the ECB has described the EA's banking system as 'overcrowded' (see ECB, 2019). However, the number of banks covered by the US deposit guarantee scheme (FDIC) is more than twice the number of banks under the purview of the Single Supervisory Mechanism (ECB/SSM) in its dual capacity as direct supervisor of significant entities and indirect supervisor of less significant entities.

Questioning the paradigm (II): How do corporates raise money in the markets?

Having highlighted the contrasts between the EA and US banking systems, we next analyse certain aspects of their respective capital markets, which further question the

traditional characterisation of US corporate financing as more strongly oriented towards the securities market than in Europe.

It is necessary to begin by providing an overview of 'stock' indicators for capital markets (market caps of stocks and bonds) alongside the net flows those markets have channelled towards corporate financing in the last decade.

If the analysis is performed using stock metrics such as the market value of the fixed-income and equity securities listed on the capital markets, the comparison is overwhelmingly in favour of the US (Table 2), which uses year-end 2018 figures.

In the case of both corporate bonds [1] and shares, the US dominates the EA by a factor between 4 and 5 in absolute terms and by a factor of 3 when the figures are stated as a percentage of GDP.

This striking contrast underpins the belief that the US financial system is far more market-oriented than bank-oriented. The combined market value of US bonds and shares is more than three times the volume of outstanding bank loans, whereas in the EA that ratio between securities and outstanding bank loans is exactly the opposite.

However, the comparison would be incomplete if we were only to look at stock figures

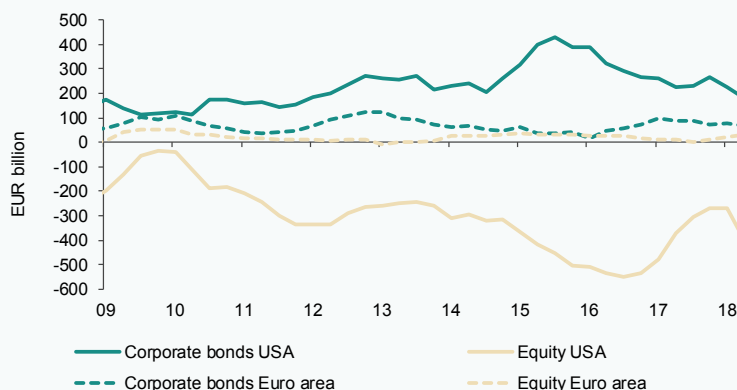
Table 2 **Capital markets in the EA and US: Market value of corporate bonds and shares (2018)**

	Euro area	USA
	Absolute magnitudes (mill. Eur)	
Corporate bonds	1,000,000	4,000,000
Equity	5,300,000	25,000,000
	Relative magnitudes (% GDP)	
Corporate bonds	9	25
Equity	50	150

Sources: Afi, ECB and Fed Flow of funds.

Exhibit 2

Capital markets in the EA and US: Net issuance of corporate bonds and shares (2009-2018)



Sources: ECB, Fed Flow of Funds and authors' own elaboration.

(market value) and not the flow of financing towards productive activities. We therefore estimate the value of net issuance (net of bond redemptions and/or share buybacks) in the two economies during the last decade.

Exhibit 2 summarizes the net issuance flows for both economies, distinguishing between bonds and shares, as this yields a radically different reading in each instance. The figures show that the EA has experienced positive net issuance flows over the entire decade, which has been more pronounced in the bond markets (~60 billion euros per annum on average) than in the equity markets (~20 billion euros per annum on average).

In the US, the bond market has helped the country's corporates raise funding to the tune of around 200 billion euros a year on average,

which is three times the EA figure, thereby maintaining the ratio implied by the stock of outstanding bonds.

The situation is radically different with net equity issues. Net issuance of shares in the US market has been systematically negative every year during the last decade, which mirrors the patterns observed during the prior decade. Specifically, the economy has experienced an average annual negative net issuance of 300 billion euros, meaning that share buybacks exceeded new share issues by that figure.

Aggregating net bond and share issuance in the US and EA, the resulting snapshot clearly questions the conventional notion that corporate financing in the former is far more market-oriented. Specifically, during the last

“ The combined market value of US bonds and stocks is more than three times the volume of outstanding bank loans, whereas in the EA that ratio between securities and outstanding bank loans is exactly the opposite. ”

“ During the last decade, the EA bond and stock markets have channelled around 80 billion euros, net, to the corporate sector a year, whereas the net flows via the US bond and stock markets have been negative by nearly 100 billion euros. ”

decade, the EA bond and stock markets have channelled around 80 billion euros, net, to the corporate sector a year, whereas the net flows via the US bond and stock markets have been negative by nearly 100 billion euros.

The key: ‘Internalisation’ of corporate finance

These data highlight the contradictory nature of one of the most widely accepted conventions in the literature on comparative financial systems. Indeed, the US, often touted as the preeminent example of a market-oriented, and specifically stock-oriented, system, is actually more nuanced than frequently portrayed.

The stock markets provide a valuation function (secondary market) for existing shares, while the listed companies, particularly those with

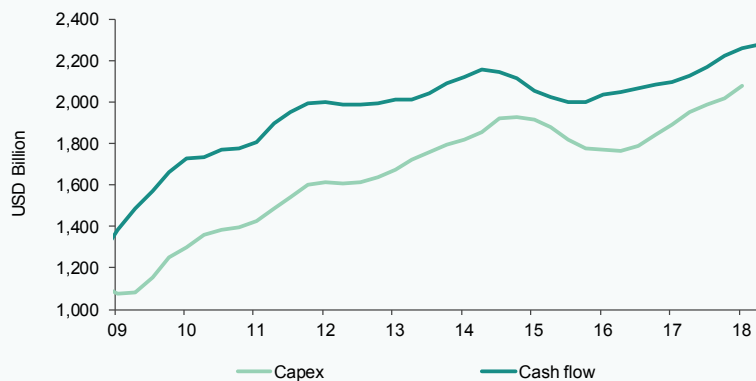
higher levels of profits and liquidity, internalise their financing functions. This allows them to generate liquidity well in excess of their investment requirements, leaving substantial room for share buybacks, which leads to the re-assessment of stock market values.

Throughout the last decade, the net cash flow generated by US companies has exceeded their capital expenditure (Exhibit 3). As such, they have fully self-funded their investments, generating enough surplus cash to buy back their shares and reduce their total outstanding shares. However, this situation is not mirrored in their stock market values, which have increased by far more in percentage terms than shares taken out of circulation.

However, additional analysis of the sector as well as a company breakdown of the practice of full internal self-financing accompanied by

Exhibit 3

Internalisation of financing in the US: Net cash flow vs. capex



Source: Fed Flow of Funds and authors’ own elaboration.

massive share buybacks is also necessary. Both practices are concentrated in certain sectors (especially tech) and particular companies (the so-called FAANGs-Facebook, Amazon, Apple, Netflix and Google), which have shown an impressive ability to generate cash flow, aided by low investment requirements measured by traditional standards. In many instances, these companies' investments have entailed the acquisition of existing firms as a means of outsourcing of R&D. However, this practice impacts the negative net flow of funding from the stock market to the corporate sector as each acquisition implies the disappearance of existing stocks.

Notes

[1] We examine the case of corporate bonds to emphasise the fact that the analysis does not include sovereign bonds or the bonds issued by financial institutions, which in the EA account for a much higher volume than those issued by non-financial corporates.

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Ángel Berges, Álvaro López and Fernando Rojas. A.F.I. - Analistas Financieros Internacionales, S. A.

Regional governments' market access: Takeaways from the European debate

The current macroeconomic environment represents an opportunity for reforming Spain's system of regional government financing, which until now has relied on the temporary Regional Financing Fund. Interestingly, the eurozone's debate over the incorporation of 'risk mitigation' and 'risk sharing' into its fiscal reforms offers guidance in terms of the direction Spain's own reforms may take.

Mario Alloza, Mar Delgado-Téllez and Javier J. Pérez

Abstract: The Regional Government Financing Fund, initially introduced as a temporary measure, has allowed regional governments to borrow at lower costs, but has also gone hand in hand with historically high levels of regional government debt in Spain. In many ways, this conundrum is mirrored at the EU level, with the eurozone debate on fiscal and financial

reform centred on both 'risk mitigation' and 'risk sharing'. In the case of Spain, there are three possible funding models under consideration. Spain could extend the current financing scheme based on a single issuer of public debt instruments, divide regional debt into tranches, or rely on direct participation by the regional governments in capital markets.

“ In 2018, over 60% of regional government debt was concentrated in the so-called Regional Government Financing Fund. ”

However, tapping capital markets would imply risks due to fluctuations in borrowing costs. While compliance with fiscal rules could limit this risk, it could take decades to reduce debt to a level that effectively minimizes it and would require abandoning regional fiscal policy as a counter-cyclical stabilization tool. It is for these reasons that observers have started to discuss the possibility of a redemption fund as an alternative solution. [1]

Introduction

The economic crisis has affected the Spanish public sector’s borrowing in two ways. Firstly, government borrowing has increased considerably, topping 100% of GDP in 2014. Secondly, it has transformed the system by which the regional governments’ financing needs are met.

In 2018, over 60% of regional government debt was concentrated in the so-called Regional Government Financing Fund, [2] a system based on bilateral loans between the state and regional governments. This arrangement allows regional governments to borrow at the lower central government rate.

Originally, the Regional Government Financing Fund was introduced as a temporary measure. However, its prolongation means it is now necessary to consider the optimal design of a stable debt financing framework for the medium-term. This paper draws from the arguments emerging as part of the debate about how to approach fiscal and financial reform in the eurozone.

How do the regional governments currently meet their financing needs?

The total value of Spanish government borrowing, expressed as a percentage of GDP, is very high by historical standards (Exhibit 1). [3] Reducing this debt level over the medium-term is crucial and must be tackled with two priorities in mind. Firstly, compliance with the fiscal rules, which provide credibility to the public sector deleveraging process (Refer to Hernández de Cos, López Rodríguez and Pérez, 2018), and mitigate vulnerability as a result of swings in investor sentiment, is essential. Secondly, in light of the interdependence

Exhibit 1 **Evolution of govt. structural deficit and public debt in Spain**

As a percentage of GDP

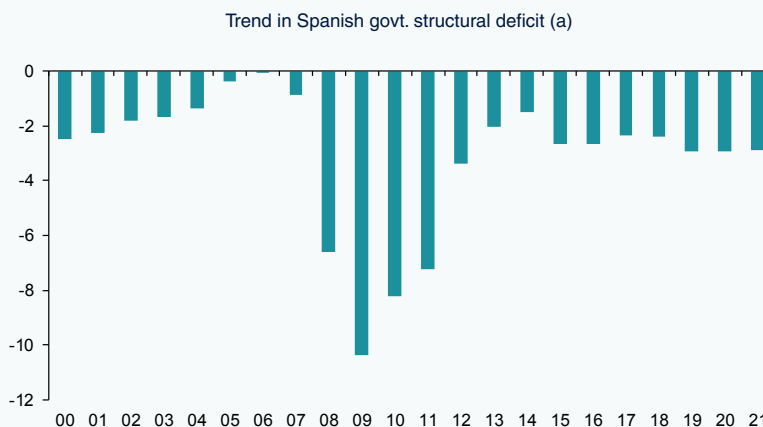
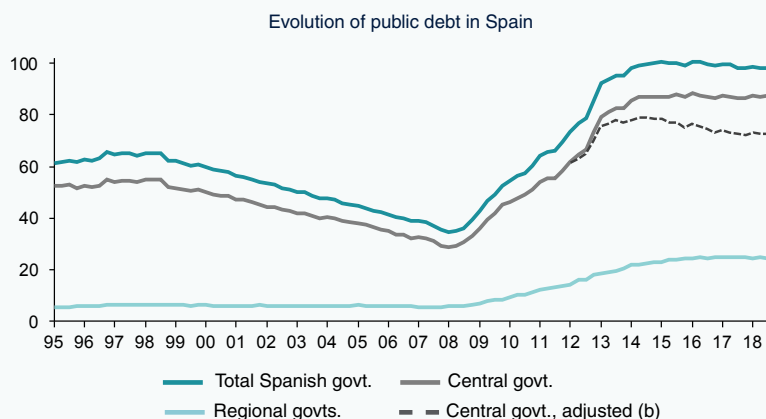


Exhibit 1

Evolution of gov. structural deficit and public debt in Spain

As a percentage of GDP

(Continued)



a. Bank of Spain Quarterly Report on the Spanish Economy, March 2019.

b. Adjusted from the regional gov. debt for the regional gov. financing fund.

Source: Bank of Spain.

between the various levels of government, the deleveraging process needs to be spread across the various subsectors.

This interdependence between the different levels of government highlights the link between the borrowing costs of the central

and regional governments (Exhibit 2). The regional governments that raise funds through capital markets pay a risk premium above that of the sovereign debt issued by the central government. If there is a spillover of regional borrowing risk to the central government, this could drive an increase

Exhibit 2a

Average annual return on debt issued by Spanish central and regional govts.

Yield in percentage

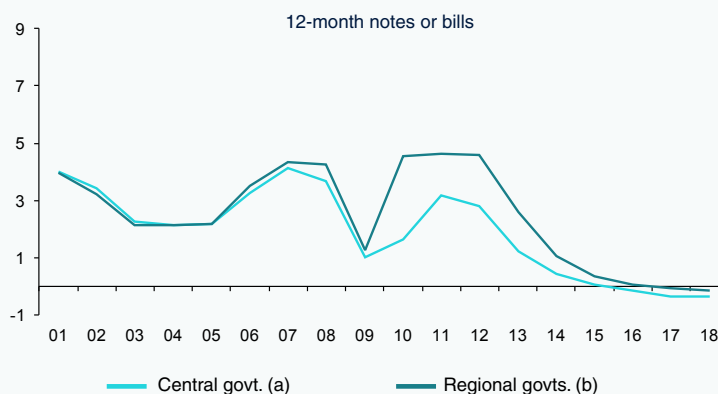
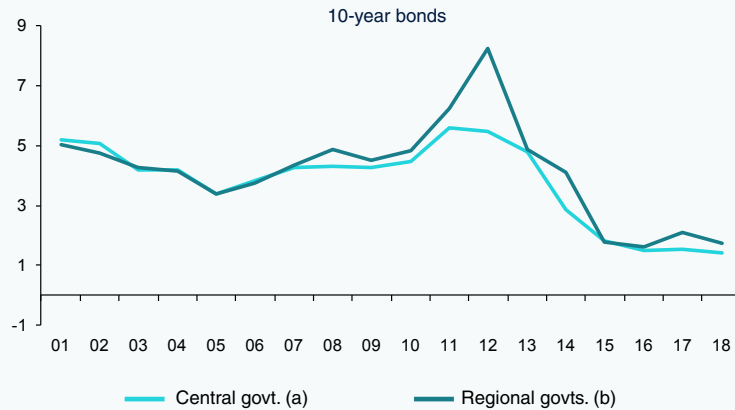


Exhibit 2b

Average annual return on debt issued by Spanish central and regional govts.

Yield in percentage



a. Marginal effective rates on new issues.

b. Weighted average returns on regional govt. issues (prepared by author).

Source: Spanish Treasury, Bank of Spain, CNMV, BME, IVF, regional government bulletins, and authors' own elaboration.

in the overall borrowing costs of the public sector.

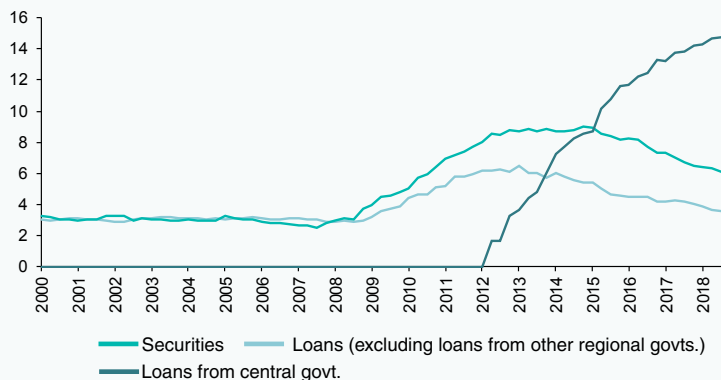
The system's current design for covering regional governments' financing requirements

was shaped by the exceptional liquidity constraints experienced during the recent financial crisis. The fact that the central government acts as the main source of funding for the regional governments (Exhibit 3),

Exhibit 3

Regional govt. securities and loans

As a percentage of GDP



Source: Bank of Spain.

“ The system's current design for covering regional governments' financing requirements was shaped by the exceptional liquidity constraints experienced during the recent financial crisis. ”

imposing in exchange reinforced supervision of the public finances of the regions resorting to that formula, is key to the system's operation. [4]

The result of the current framework is that regional government debt has become high by international comparison. This situation, together with fiscal discipline rules such as those set down in the Stability Act, raises the question as to what a permanent financing system for the regional governments should look like. The new system needs to factor in the initial state of the regional governments' financing, their ability to service their debt going forward and the market's perception of their commitment to fiscal responsibility.

Regional government market access: Takeaways from the European debate

The debate about how to reform the regional governments' financing system is similar to certain aspects of the discussion regarding the eurozone's economic governance. The latter is particularly focused on 'risk mitigation', which refers to the need to reduce debt levels, and 'risk sharing', whereby a permanent mechanism would enable more vulnerable countries to access the markets on similar terms as other members, particularly during times of macroeconomic stress. [5] In this section, we outline some of those aspects in order to articulate the various financing scenarios potentially applicable to Spain's regional governments (Exhibit 4).

Firstly, it is possible to extend the current financing scheme based on a single issuer of public debt instruments (*i.e.*, the central government). This issuer would raise funds, which would then be channelled to the regional governments in the form of loans. The system constitutes a risk-sharing scheme between the participating regional governments and the central government, guaranteeing a flow of financing in the event of idiosyncrasies that could affect individual regions.

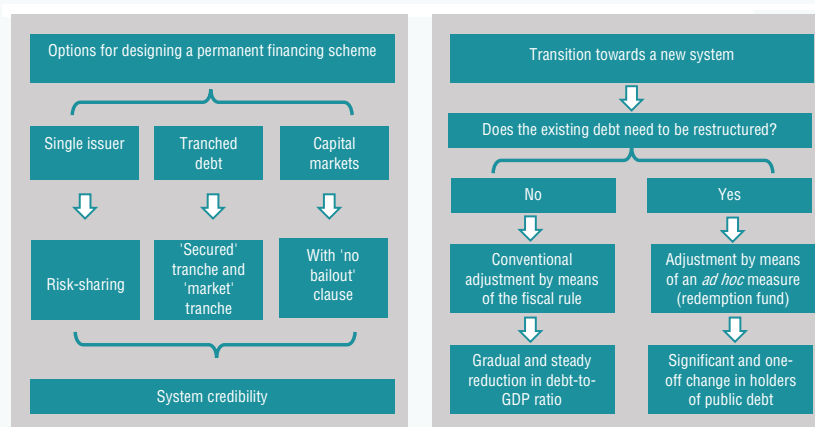
However, the fact that the system can lead to the transmission of regional governments' financial vulnerabilities to the state's borrowing costs means that certain inefficiencies can arise. To correct this problem, regional governments must stringently comply with measures designed to ensure disciplined fiscal conduct. Such measures are reflected in legislation, specifically the National Stability Act, which includes a body of fiscal rules designed to foster budgetary discipline. [6] Importantly, the Stability Act largely embodies European rules on fiscal discipline. Strict compliance with those rules, particularly in the event of intervention by the central government, is essential to the functioning of the system.

A second option for covering the regional governments' financing needs would involve the division of regional debt into tranches. The issuance of debt below a threshold that is compatible with fiscal discipline targets [7] could be channelled by the central government. This entails the sharing of both risks and

“ The fact that the system can lead to the transmission of regional governments' financial vulnerabilities to the state's borrowing costs means that certain inefficiencies can arise. ”

Exhibit 4

Regional government market access: Takeaways from the European debate



Source: Authors' own elaboration.

benefits. [8] The issuance of debt above that threshold would occur in the securities markets in the form of subordinated debt. [9]

Subordinated debt offers less advantageous terms for investors than other securities. For example, the purchaser has lower seniority relative to other security holders in the event of restructuring. [10] These types of issuances imply an increase in the marginal cost of financing, thereby incentivizing the maintenance of fiscal discipline at the regional level. For those tranches over the stipulated threshold, it will be necessary to include a contract that allows the buyers to correctly assess the associated risk. This document would include the precise terms on which a potential restructuring process would be carried out (refer to Bénassy-Quéré *et al.*, 2018).

A third route entails the direct participation by the regional governments in the capital markets. In this scenario, risk would not be shared between the central and regional governments. Although the viability of this system depends on the size and frequency of the issues (in relation to the costs associated with the process), fund-raising in the public debt market would give the regional governments greater autonomy over their financing decisions. Moreover, for those fiscally responsible regional governments, it could provide access to cheaper financing.

It is important to highlight that the regional governments' access to the capital markets would depend on strict compliance with two aspects of the Stability Act. Firstly, given that the markets do not always function efficiently, it is essential to guarantee compliance with

“ Given that the markets do not always function efficiently, it is important to guarantee compliance with fiscal rules so as to prevent the accumulation of chronic fiscal imbalances at the regional level. ”

fiscal rules so as to prevent the accumulation of chronic fiscal imbalances at the regional level. Secondly, a credible 'no bailout' agreement with the central government is necessary to encourage fiscal discipline. Strict observance of such a clause would require the existence of additional procedures that would boost the credibility of those responsible for enforcing it. For example, the inclusion of automatic debt restructuring mechanisms as a prerequisite for accessing central government assistance would increase the credibility of the no bailout clause. It would also boost the disciplinary pressure exercised by the capital markets through the different risk premiums assigned to the various governments.

Participation in the capital markets would imply risks due to the fluctuations in borrowing costs. Markets can suddenly change how they rate the risk premium of sovereign debt. Exposure to this risk factor would be higher for the more indebted governments, notwithstanding potentially solid economic fundamentals. For that reason, some economists have warned of the risk of basing this type of system on the imposition of 'market discipline' in highly indebted economies (refer to Tabellini, 2018).

Compliance with fiscal rules could limit this risk. They facilitate the running of primary surpluses, which is compatible with gradual deleveraging under the scope of a medium-term stabilisation plan. However, it could take decades to bring the ratio of debt-to-GDP to a level that minimises risk inherent in capital markets. Furthermore, it would imply renouncing regional fiscal policy as a counter-cyclical stabilisation tool.

It is for these reasons that *ad hoc* options designed to reduce an economy's indebtedness have emerged. [11] Those proposals tend to be articulated around two common aspects:

(i) creation of a redemption fund (*e.g.*, an interregional fund) that would enable the buyback and removal from the market of the portion of a government's debt that lies above an acceptable threshold (*e.g.*, the debt in excess of 13% of GDP), while financing itself with its own issuance; and, (ii) in order to ensure functionality, participants in this mechanism would commit to financing the redemption fund. [12]

The viability of such a process would rely on the credibility generated by the participants *vis-à-vis* compliance with the fiscal playbook. The governments involved in the debt redemption fund may be tempted to flout fiscal discipline by issuing debt above the specific threshold. That possibility could lead buyers of the debt issued by the redemption fund to demand a higher risk premium as compensation for transaction viability issues and potential intervention at the central government level. It would therefore be necessary to reinforce the mechanism with binding aspects designed to eliminate the existence of moral hazard and time inconsistency, such as safeguards that would allow the reversal of debt redemption transactions or the introduction of an automatic debt restructuring mechanism designed to induce fiscal discipline on the part of its participants.

Conclusions

The current system for covering the regional governments' debt financing requirements was designed as a temporary mechanism and shaped by specific conditions that no longer exist. Against this backdrop, the debate over eurozone fiscal and financial reform can serve as a source of ideas for the creation of a new, permanent system in Spain. The current macroeconomic environment, characterised by low interest rates and economic growth, represents an opportunity for reforming the system. [13]

“ It could take decades to bring the ratio of debt-to-GDP to a level that minimises risk inherent in capital markets. ”

Notes

- [1] The views expressed in this paper are those of the authors and do not necessarily reflect those of the Bank of Spain or the Eurosystem.
- [2] The Regional Government Financing Fund, implemented on January 1st, 2015, includes the Fund for Financing Supplier Payments and the Regional Liquidity Fund. Refer to Delgado-Téllez *et al.* (2015).
- [3] Spain's Organic Law on Budget Stability and Financial Sustainability (the Stability Act) stipulates a debt ceiling of 60% of GDP. That target is divided up between the different levels of government, assigning a limit of 44% of GDP to the central government and one of 13% to the regional governments. Refer to Hernández de Cos and Pérez (2013) for a detailed review of the legislation.
- [4] The use of the regional government funds, coupled with the persistence of ultra-low rates and the high incidence of loans as a percentage of total regional government borrowings, has enabled them to reduce their average borrowing costs substantially. Refer to Jiménez and López (2017) for more detailed analysis.
- [5] The overlap between the debate about regional financing and relations between the European Union member states is evident, for example, in the similarity between the wording of the 'no bailout' clause of the Stability Act (article 8) and that included in the European Union Treaty with respect to relations between member states (article 125 of the consolidated version of the Treaty on the Functioning of the European Union).
- [6] Specifically, the Stability Act imposes a public deficit ceiling, a spending control rule and explicit public debt targets. In addition, the Stability Act comes with detailed mechanisms for central government control and monitoring of subcentral financing, as well as preventive and corrective mechanisms that are triggered in the event of imbalances. For further details, refer to Hernández de Cos and Pérez (2013).
- [7] The Stability Act imposes a borrowing limit on the regional governments of 13% of GDP.
- [8] Such a mechanism could be implemented either by using the existing regional financing framework (the regional liquidity fund) or via the joint issuance of securities by the regional and central governments (Delgado-Téllez *et al.*, 2016).

- [9] Refer to Delpla and von Weizsäcker (2010) for a proposal for the introduction of seniority into the public debt market in order to foster explicit differentiation between different levels of debt security risk depending on the issuer's indebtedness. In their original proposal, which relates to eurozone state financing, the authors divide debt issuance into two groups of securities: 'blue bonds', jointly and severally guaranteed by member states that keep their sovereign debt at under 60% of GDP. Above that threshold, the states would have to finance themselves by issuing 'red bonds' (exclusively national), with junior ranking in the event of debt restructuring processes. Brunnermeier *et al.* (2011) offer another alternative for the creation of tranches based on sovereign bond backed securities.
- [10] Other forms of introducing different levels of seniority are based on the issuance of GDP-linked bonds. Refer to Benford *et al.* (2018) for a detailed discussion.
- [11] Refer to Pâris and Wyplosz (2014) and Cioffi *et al.* (2019). The way in which the redemption mechanism works is based on the argument that the massive increase in borrowing sustained in the last decade is attributable exclusively to developments related with the economic crisis, *i.e.*, a perception of debt as a legacy from previous economic conditions.
- [12] There are a number of proposals that vary in terms of the scale and time horizon for implementing the redemption, how it should be funded (VAT, wealth tax, seigniorage funds) and the mechanisms devised to create credibility. For more details, refer to Corsetti *et al.* (2016) and the authors referenced therein.
- [13] Cantalapiedra and Jiménez (2017) warn of the risks implied by leaving the regional government funds intact for too long to the extent that the administrations that are financing themselves exclusively using the current mechanism could find themselves faced with significant costs when they return to the capital markets.

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Business dynamism in Spain: Recent trends and outlook

Although business dynamism has recovered in Spain since the crisis, there has been a marked shift in the composition of companies, with self-employment now exceeding LLCs when it comes to new business creation. Closer analysis of these data also reveals some noteworthy trends relating to the disappearance of medium-sized firms and the gendered nature of entrepreneurship in Spain.

Ramon Xifré

Abstract: Spanish companies face the challenge of improving their competitiveness in an environment which, in the medium- to longer-term, could face rising interest rates. Against this backdrop, it is important to assess the level of business dynamism to anticipate forward-looking scenarios. Data from Spain's central corporate database show that, although the rate of business creation now exceeds the rate of closure, it has not fully recovered to pre-crisis levels. Moreover, there has been

a shift in the types of companies created in Spain. Prior to the crisis, LLCs were the most common form of corporation, but since 2014, self-employment has made the biggest contribution to new business creation. The reduction in medium-sized companies is also worth noting, with larger and smaller firms showing lower levels of decline. Lastly, data also indicate a gender gap when it comes to self-employment, where the percentage of men as employers with employees in relation

to all men in work (6.3%) is twice that of women (3.2%). [1]

Introduction

Business dynamism is currently negative in a number of advanced economies. In its most basic expression, business dynamism is the rate of creation of new companies relative to the total universe of companies. [2]

The purpose of this paper is to explore the recent trend in business dynamism in Spain by analysing the main indicators published by Spain’s statistics office, the *INE*. To do so, we rely on the *INE*’s central companies database (*DIRCE*), and the active population survey (*EPA*).

Analysis of *DIRCE* enables us to verify whether the trends identified in an earlier study documenting a reduction in the number of public limited companies (PLCs) and growth in the number of self-employed individuals have continued (Xifré, 2016). Analysis of the *EPA* provides information about the gender mix in activities related with

entrepreneurship, in line with recent studies looking at female entrepreneurship in Spain (Montero and Camacho, 2018).

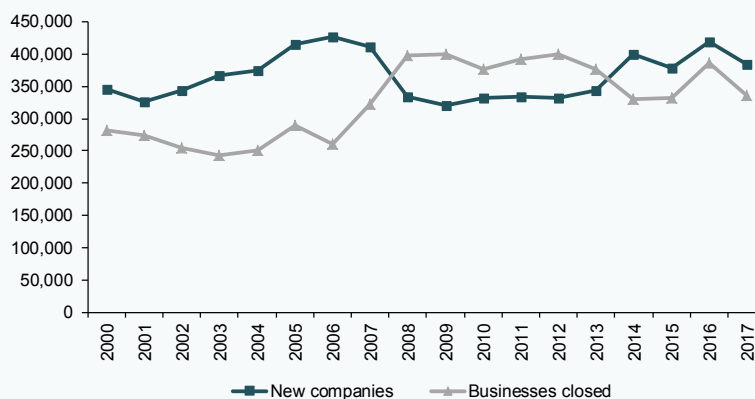
Analysis of *DIRCE* data

Firstly, it is important to note that the data gleaned from *DIRCE* pertain to the number of companies in existence as of January 1st of every year. Exhibit 1 shows the trend in new companies and closures between 2000 and 2017, the last year for which these figures are available. It reveals three distinct periods for the creation and dismantling of Spanish businesses over the past 18 years.

During the first period, which runs from 2000 until 2007, the number of new companies easily surpassed the number of firms closed, indicating significant business dynamism. Between 2008 and 2013, the trend inverts, with the number of closures outpacing the number of businesses opened, implying a net contraction of the corporate landscape. The third period begins in 2014 and has seen the number of new companies top the number of enterprises closed, albeit

Exhibit 1

New businesses and businesses closed

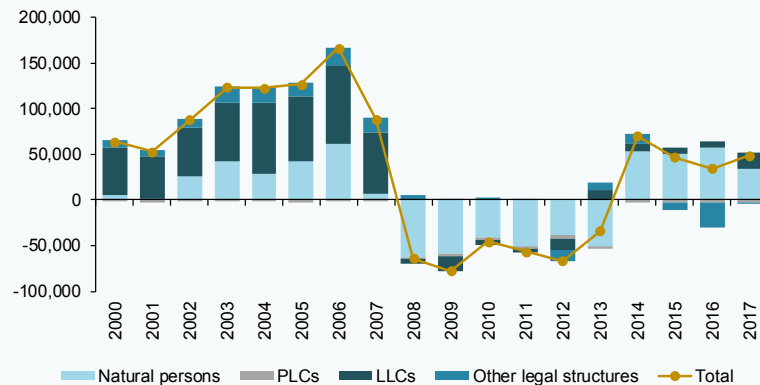


Source: *DIRCE* (*INE*).

“ From 2000 until 2007, the number of new companies easily surpassed the number of firms closed, indicating significant business dynamism. ”

Exhibit 2

Net new businesses by legal form



Source: DIRCE (INE).

by a significantly narrower margin than during the first period.

Exhibit 2 breaks down the net figures (new companies less companies closed) by legal structure, distinguishing between four categories: public limited companies (PLCs); limited liability companies (LLCs); natural persons/self-employed; and, other legal structures (cooperatives, independent bodies, partnerships, *etc.*). This breakdown reveals a significant shift in the pattern of net additions to the corporate landscape. Whereas during the period prior to the crisis, LLCs were the most common form of incorporation, since 2014, it is natural persons who have made the biggest contribution to new business creation, after having suffered the biggest number of net losses between 2008 and 2013.

Exhibits 3a and 3b relate the flow of companies with the stock of companies to depict the trend in the rate of business creation (new companies over total companies) and the rate

of business destruction (companies closed over total companies) between 1999 and 2017 for the three main categories of companies: PLCs, LLCs and natural persons.

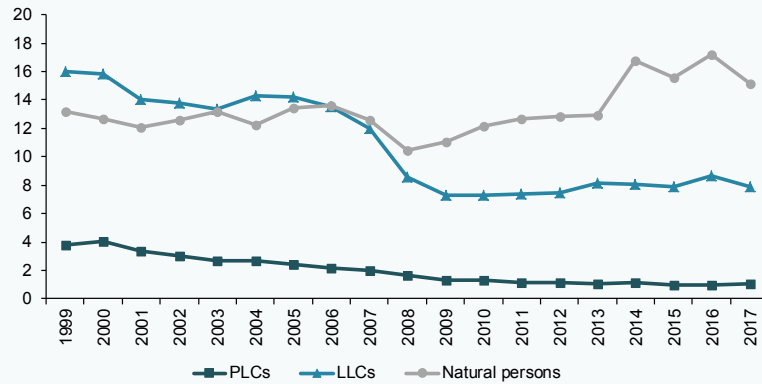
As illustrated in Exhibit 3a, the pace of PLC creation has collapsed, with this type of enterprise experiencing a consistent decline since 2000. As a result, the pace of business creation in 2017 (1%) was not much more than one-quarter of that observed in 1999 (3.8%). In the case of the LLCs, the pace of business creation has decreased by roughly half during the period from 16% to 8%, having fallen abruptly in 2007 and 2009 to levels from which it has failed to recover. These trends in new business creation are consistent with the evidence we have for other countries (Akcigit and Ates, 2019). In contrast, the creation of self-employment, having hovered at around 13% between 1999 and 2013, has since climbed steadily, reaching 15% in 2017.

Looking at company mortality, Exhibit 3b reveals somewhat more erratic patterns

“ The creation of self-employment, having hovered at around 13% between 1999 and 2013, has since climbed steadily, reaching 15% in 2017. ”

Exhibit 3a Pace of new business creation by legal form*

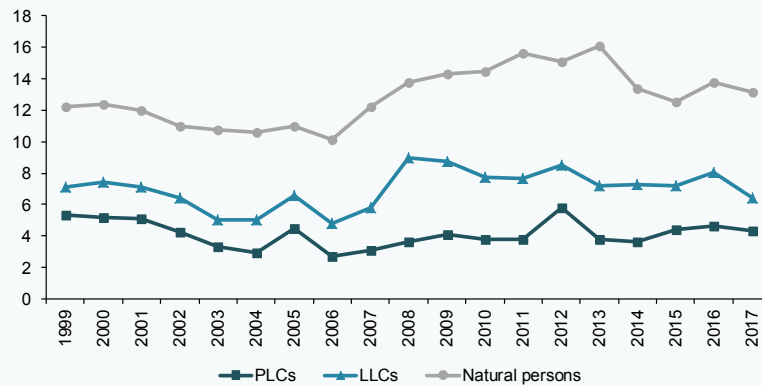
Percentage



* The rate of creation is calculated as new companies over the total universe of companies.

Exhibit 3b Pace of business destruction by legal form*

Percentage



* The rate of destruction is calculated as companies closed over the total universe of companies.

Source: DIRCE (INE).

but with smaller differences between the beginning and end of the series. The pace of PLC destruction has fluctuated around 4. LLCs rate of closure has oscillated between 6% and 8% while that of the self-employed trended slightly lower during the first period (from 12% to 10% between 1999 and 2006) before going on to spike at 16% in the midst of the crisis and eventually flattening out at around 13%.

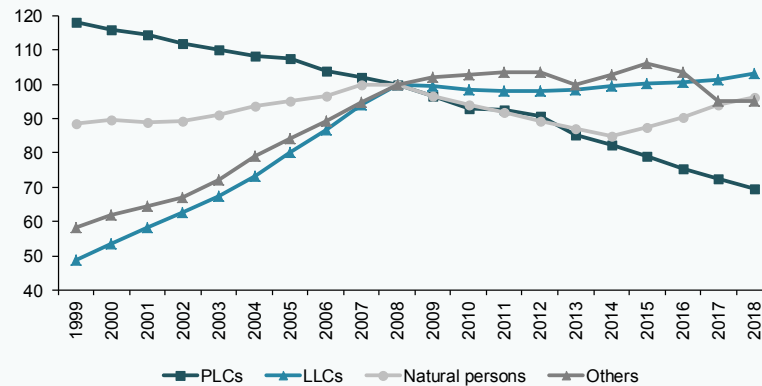
These trends are presented in Exhibit 4, which depicts the number of companies by

legal structure rebased to the number in existence in 2008. It shows that the number of PLCs has fallen consistently since 1999. By 2018, this type of firm (at close to 79,000) had fallen by 30% compared to 2008. That year also marked the end of the era of growth in the universe of LLCs, which had doubled in number since 1999, having been fairly steady at around 1,150,000 entities. The number of natural persons has oscillated less significantly during the last 19 years, staying within a range of between 1,650,000 and 1,750,000 entities.

Exhibit 4

Number of companies by legal structure

Index: 2008 = 100



Source: DIRCE (INE).

Lastly, the trend in the other types of legal structures follows a pattern that is similar to that etched out by the limited liability companies.

Table 1 summarises the data provided thus far. The composition of Spain's business landscape over the past 19 years has been marked by a significant drop in the

percentage of public limited companies and considerable growth in the penetration of limited liability companies. The growth in the latter has meant that the presence of self-employed individuals (despite having increased in absolute terms) has decreased in percentage terms from 65% to 54% of the total number of firms. As a result, the ratio of self-employed individuals to PLCs has virtually

Table 1

Composition of Spain's business landscape: Key figures

	1999		2008		2018	
	No.	%	No.	%	No.	%
<i>Breakdown by legal structure</i>						
Public limited companies	133,410	5.3	113,130	3.3	78,866	2.4
Limited liability companies	559,483	22.2	1,145,398	33.5	1,181,391	35.4
Natural persons	1,647,699	65.4	1,857,931	54.3	1,786,037	53.5
Other types	178,209	7.1	305,780	8.9	291,352	8.7
<i>Ratio of natural to legal persons</i>						
Natural persons / PLCs	12.4		16.4		22.6	
Natural persons / LLCs	2.9		1.6		1.5	

Source: DIRCE (INE).

doubled in the last 19 years. Whereas in 1999 Spain had 12.4 self-employed individuals for every PLC, in 2018 this figure rose to 22.6. This development may help explain the sharp reduction in investment (fixed assets) observed since 2008 in the Bank of Spain's figures, according to recent analysis by Rosell (2018). It is possible that the levelling off in corporate investment since 2008 is attributable to, in addition to growth in the level of utilisation of previously idle capital, a reduction in conventional corporate structures (staff) and their replacement by

self-employed individuals who are, for legal purposes, not part of the company.

These changes in the mix of the different types of companies in the business landscape have been accompanied by changes within the universes of public limited and limited liability companies. Exhibits 5a and 5b depict the number of PLCs and LLCs, respectively, in 2018 in relation to those recorded in 2008, broken down into seven employee size categories. With respect to the figures presented in Table 1, the numbers in

Exhibit 5a Number of PLCs in 2018 in relation to 2008, by number of employees

Index: 2008 = 100

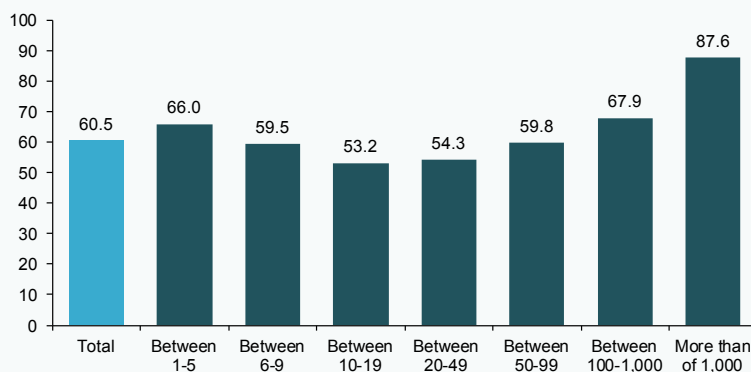
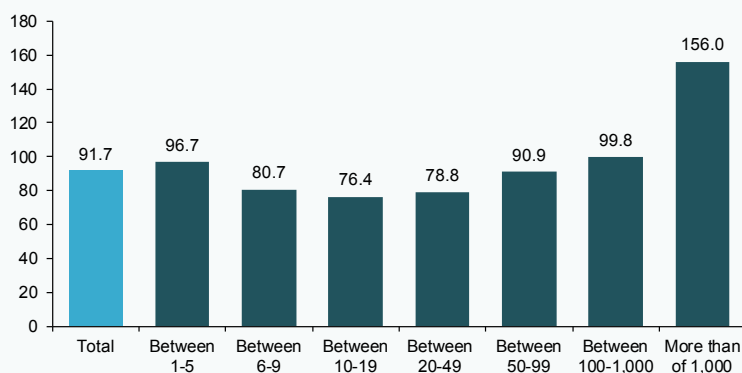


Exhibit 5b Number of LLCs in 2018 in relation to 2008, by number of employees

Index: 2008 = 100



Source: DIRCE (INE).

“ The number of LLCs with over 1,000 employees increased by more than 50% between 2008 and 2018, compared to an overall reduction of nearly 10% for all companies during the same period. ”

Exhibits 5a and 5b correspond exclusively to the companies with employees, *i.e.*, entities without any employees have been excluded.

The exhibits clearly show polarisation in both company categories at either extreme. They reveal that the reduction in the number of companies has not been even across the various size segments. For both types of companies, the reduction has been more pronounced in the intermediate size categories (those with between 10 and 19 employees and those with between 20 and 49) and considerably less intense among the larger companies (those with between 100 and 1,000 employees and those with over 1,000) and the smallest firms (between 1 and 5 employees). The figures suggest a hollowing out of the medium-sized categories in terms of number of employees. It is worth highlighting that the number of LLCs with over 1,000 employees increased by more

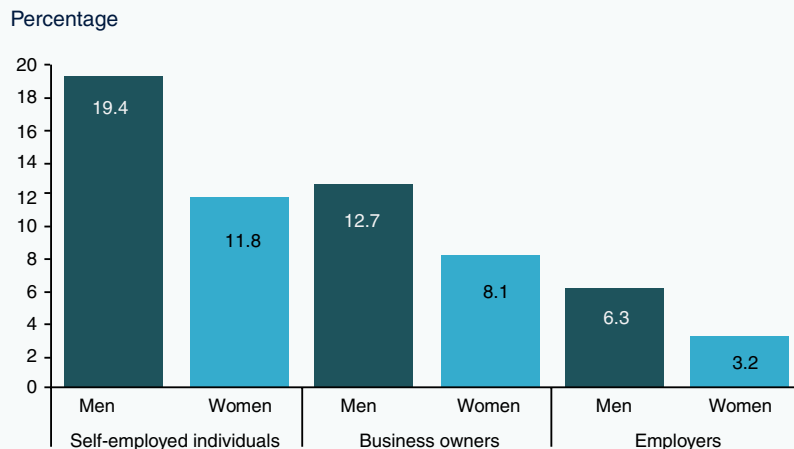
than 50% between 2008 and 2018, compared to an overall reduction of nearly 10% for all companies of the this category during the same period. Although company size is correlated with productivity, it has yet to be established that the former automatically benefits the latter. Instead, there is a universe of factors that determine company size and productivity, such as human endowment and professionalisation of the business’s management (Huerta and Salas, 2014). From that perspective, the relatively greater loss of medium-sized enterprises relative to small-sized enterprises could be a worrying sign.

Analysis of the EPA

An analysis of the results of the INE’s active population survey (*EPA*) provides additional information about the business landscape broken down by gender. This allows us to document differences in the rates of participation in entrepreneurial activities by gender.

Exhibit 6

Self-employed by work situation as a percentage of all job holders, by gender (1Q 2019)



Source: DIRCE (INE).

“ Whereas over 19% of employed men work for themselves, that figure is below 12% among women. ”

Exhibit 6 shows the percentage of three categories of self-employed individuals. The three categories are: 1. the total number of self-employed, which in turn encompasses the other two measures: 2. business owners without employees and 3. employers with employees. They are represented as a percentage of total job holders,

distinguishing between men and women, for the first quarter of 2019. In each of the three categories, male participation is higher than female participation. Whereas over 19% of employed men work for themselves, that figure is below 12% among women. Similarly, nearly 13% of men in work qualify as ‘business owners without employees’, compared to

Exhibit 7a **Female self-employed by work situation**

Percentage of all women in work

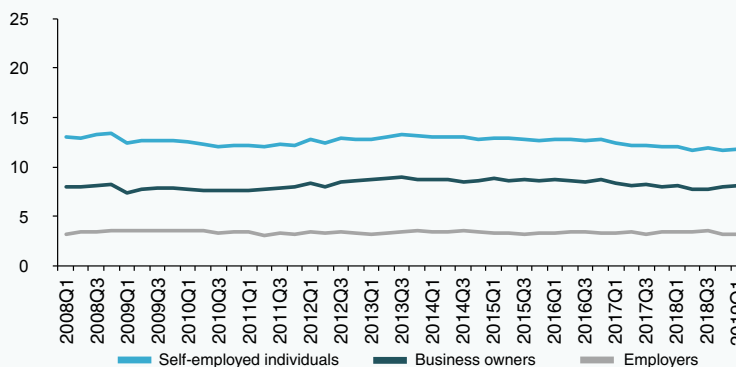
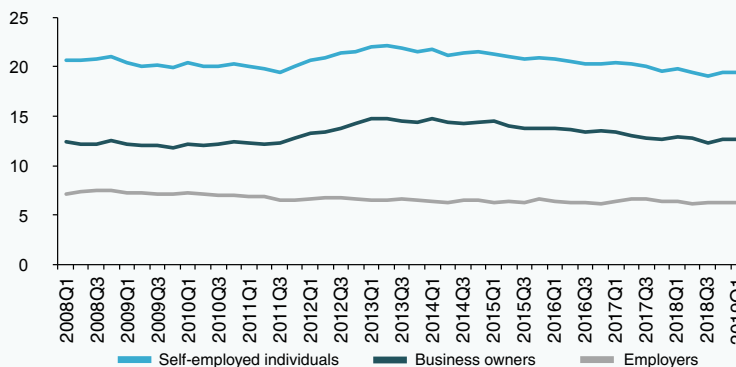


Exhibit 7b **Male self-employed by work situation**

Percentage of all men in work



Source: EPA (INE).

just above 8% of women. Lastly, 6.3% of male job holders qualify as ‘employers with employees’, compared to 3.2% of women in work.

Exhibits 7a and 7b depict these three magnitudes for both genders between 2008 and 2019. The exhibits show that the gaps between male and female participation shown in Exhibit 6 have been relatively steady over the last 11 years.

The interpretation of these gaps and the underlying factors is complex. It may be attributable to specific obstacles or barriers that impede women from pursuing entrepreneurial activities or a reduced preference on the part of women for these kinds of activities. A detailed analysis of the matter lies beyond the scope of this paper. What we can say is that the study and characterisation of female entrepreneurship is garnering growing attention (refer to Montero and Camacho (2018) and the references cited therein).

Conclusion

Spain’s companies face the challenge of improving their competitiveness in an environment which, in the medium- to longer-term, may face rising interest rates, (Rosell, 2018) as well as multiple other challenges (Huerta and Moral, 2018). Against that backdrop, it is important to understand the recent trend in the business landscape so as to anticipate forward-looking scenarios.

Firstly, this paper shows that net business creation has become positive since 2014, after the long period of stagnation during the crisis (2008-2013). The pace of new business creation is, however, proving slower than before the crisis. Not only has the intensity of business creation slowed, its composition has changed: the legal structure generating the highest number of net additions to the

labour market is self-employment, whereas before the crisis, limited liability companies were the main growth driver.

The paper also shows how the number of public limited companies has fallen consistently between 2000 and 2018 (the last year for which the figures are available). As a result, the ratio of self-employed individuals to public limited companies has doubled during the period. This trend suggests an on-going reorganisation of the legal-employment conditions in which economic activity is being conducted. Conventional business arrangements (staff) are losing significance as self-employed individuals who engage with them are growing in importance. This substitution phenomenon may help explain the reduction in investment (fixed assets) by Spain’s businesses, as gleaned from an analysis of the Bank of Spain’s repository of corporate balance sheets (Rosell, 2018). It is necessary to analyse the causes and consequences of this phenomenon in detail.

As for size, the number of medium-sized enterprises (with between 10 and 49 employees) fell sharply between 2008 and 2018. Larger enterprises, but also those with fewer than five employees, have disappeared at a relatively lower rate. It is worth highlighting that the number of limited liability companies with more than 1,000 companies increased by 50% between 2008 and 2018.

Lastly, this paper analyses indicators of entrepreneurial activity from a gender perspective. We document the existence of a gap between male and female participation in self-employed work. In the specific instance of employers with employees, the percentage of men in this situation in relation to all men in work (6.3%) is twice that of women (3.2%).

These results show that Spain’s companies need to overcome certain challenges to

“ Conventional business arrangements (staff) are losing significance as self-employed individuals are growing in importance. ”

improve their competitiveness. First of all, it will be necessary to find a balance between employees on the payroll and outsourcing to self-employed individuals. Secondly, it is important that Spain's business landscape does not lose any more medium-sized enterprises. Lastly, it would be advisable to take measures to promote gender equality and remove barriers to entrepreneurship faced by women.

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Notes

[1] There are other ways of measuring business dynamism, such as the percentage of economic activity generated by firms in existence for less than five years or the productivity gaps between leader and follower companies (Akcigit and Ates, 2019).

[2] The author would like to thank Emilio Huerta for his input.

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The effects of corporate tax on corporate productivity: Impact at the micro-level

Although empirical evidence reveals a correlation between company size and productivity, the effectiveness of public policies designed to boost productivity by promoting an increase in company size alone is limited. Instead, data indicate that the relationship between size, corporate tax rates and investment is more significant when it comes to enhancing productivity.

Desiderio Romero-Jordán and José Félix Sanz-Sanz

Abstract: One of the most comprehensive measures of corporate productivity is total factor productivity (TFP), which quantifies the efficiency with which inputs are used in production. One factor that affects TFP is the corporate tax rate. In fact, data show that a 10-point reduction in the statutory rate of corporate income tax would increase national growth

rates between 1% and 2%. A recurring debate among both economists and policymakers relates to the nature of the relationship between business size and productivity. Interestingly, in Spain, large companies with at least 250 employees account for 39.1% of gross value added (GVA). However, while policymakers may be tempted to prioritize an increase in

average company size to improve productivity, such initiatives overlook other determinants of this variable. As well, the evidence indicates that productivity shocks lead to increases in company size but that this relationship does not function in reverse. However, data do show that corporate tax rates, through their impact on investment, do undermine productivity for companies of all sizes, with a particularly negative effect on smaller companies due to their lower technological intensity and productivity.

Corporate tax and productivity: What to measure and how to measure it

Corporate productivity is a measure of efficiency that relates output, such as the quantity of products (Q) or value added (GVA), with the amount of labour (L) and capital (K) used. Depending on how the numerator is defined, partial (or single factor) or multifactor productivity measures (OECD, 2001) are the basis for analysis. Labour productivity is one of the most widely used partial measures on account of its simplicity. For example, it features in international publications such as the OECD’s *Entrepreneurship at a Glance*. Alternatively, one of the most comprehensive measures is total factor productivity (TFP), also known as the ‘residual’ or the index of ‘technical progress’ (Nadiri, 1970). The TFP concept is commonly expressed using the Cobb-Douglas function:

$$Q = AK^\alpha L^\beta \quad [1]$$

where A is a non-observable variable (residual), which Solow identified as total factor productivity. Solving for A, we get:

$$TFP = A = \frac{Q}{K^\alpha L^\beta} \quad [2]$$

This ratio relates the output obtained to the inputs used to generate it. As a result, we

can use TFP to quantify the efficiency with which inputs are being used in production. That efficiency, which is not directly observable, depends on factors such as business management, business owners’ skills, the institutional environment and the technology used in productive activity. Bloom *et al.* (2019) have determined that business management accounts for over 20% of changes in productivity, which is similar or even higher to the weight attributable to investment in R&D, information and communication technology, and human capital.

By definition, increases in TFP indicate more efficient use of the related inputs. There are two reasons why it is essential to assess the trend in and determinants of TFP over time when designing economic policy. Firstly, the differences observed between countries in growth and income per capita are largely attributable to different levels of productivity (Easterly and Levine, 2000). Secondly, it is important to understand which factors affect productivity growth (*e.g.*, innovation, institutional framework, taxation) in order to correctly design economic policy instruments (Syverson, 2011).

One factor that affects national productivity, and economic growth by extension, is the corporate tax rate (Romer and Romer, 2007). For example, Lee and Gordon (2005) have found, using aggregate data, that a 10 point reduction in the statutory rate of corporate income tax would increase national growth rates between 1% and 2%. Similarly, Djankov *et al.* (2010) have shown that a 10% increase in the effective rate of corporate tax would reduce the ratio of investment-to-GDP by two points. However, this macroeconomic model presents considerable limitations. Importantly, the statutory rate does not

“ Business management accounts for over 20% of changes in productivity, which is similar or even higher to the weight attributable to investment in R&D, information and communication technology, and human capital. ”

consider the overall effect of corporate taxation. In fact, it obviates other aspects of the tax that are as or even more important than the statutory rate in terms of: (i) the overall sum of taxes paid; and, (ii) investment decision-making. Notable among those aspects are the various depreciation methods permitted. These include the economic depreciation of assets and the existence of tax relief on investments. The microeconomic approach, based on individual firm data, makes it possible to fine-tune the analysis by factoring in the comprehensive effect of corporate taxation on productivity. [1]

Given the limitations associated with the statutory rate, the best tools for measuring the impact of tax on productivity are the so-called forward-looking measures. These measures enable analysis of the impact of taxation on investment project returns over the life of the assets. Specifically, this refers to the time from when they are commissioned until they are decommissioned. Assets reach their end of life either because they have become technically obsolete or have fully depreciated. The universe of forward-looking tools includes the user cost of capital (Hall and Jorgenson, 1967), the marginal effective rate (King and Fullerton, 1984) and the effective average rate (Devereux and Griffith, 1998). The expression and interpretation of each of these three measures is provided in the accompanying Appendix.

Corporate tax, size and productivity: Is there any connection?

The nature of the relationship between business size and productivity is a recurring debate in both academic literature and the political sphere. Table 1 provides a comparison of average company sizes for a selection of European Union states, alongside Japan and the US. Table 2 shows the contribution to value added by size category in their respective countries. The figures show that over 99% of all companies are SMEs (under 250 employees). Within the SME category, the predominant size is that of micro enterprises (under 10 employees), albeit garnering far higher weights in the southern EU states (close to 95%) than in the US (78.8%), Germany (81.9%), Japan (86.2%), Austria (87.0%) or

the UK (90.1%). [2] A hallmark of the latter countries is the greater weight commanded by SMEs with between 10 and 49 employees. For instance, this category accounts for 15.2% of SMEs in Germany versus 4.7% in Spain. The GVA generated by the SMEs in their respective countries is clearly below the share they command in terms of number of enterprises. In Spain, SMEs account for 99.8% of all companies but their contribution to GVA is 60.7%. Large companies account for fewer than 1% of the total but their contribution to GVA ranges from 32.0% in Portugal to 52.2% in the UK. In Spain it is 39.1%. Productivity is a key factor in explaining the discrepancies observed between the weight of the various company size categories and their contribution to GVA. It is important to note, however, that: (i) the intensity of those differences varies considerably between countries (OECD, 2014, 2018); and, (ii) they are more pronounced in the manufacturing sector than in the services sector.

The available evidence shows that size counts in terms of productivity (OECD, 2014). This empirical consensus could lead us to infer that policymakers should prioritize an increase in average company size in order to increase their economies' productivity. However, there are several important caveats to examine. Firstly, increasing company size alone, via fiscal policy for example, does not alter key aspects of productivity growth such as corporate culture, innovation or international expansion (Huergo and Jaumandreu, 2004; Huerta and Salas, 2017). Secondly, the evidence indicates that productivity shocks lead to increases in company size but that this relationship does not function in reverse. At least in the short term, a shock in company size shaped by a specific public policy may not lead to productivity gain (Moral-Benito, 2018). In sum, we must be cautious regarding the implementation of public policies designed to increase company size as the sole path to achieving productivity gains.

There are two channels through which corporate tax has an impact on the differences in productivity observed by size. Namely, (i) the availability and cost of the financing needed to pursue investment projects; and,

“ Corporate tax introduces a wedge between the gross and net profitability of investment projects, which affects investment decisions and risk appetite, while impacting the amount of financial resources available from internally generated funds. ”

(ii) the incentive to assume investment projects due to the impact on returns. Corporate tax drives a wedge between the gross and after-tax returns on investment projects. For example, it can influence the decision to build a new factory to cater to growth in demand. The size of that wedge has an impact on the incentive or disincentive to invest and assume risks (Federici and Parisi, 2015). Similarly, the wedge and its size also affect the amount of financial resources available from internally generated funds. This channel is key for companies that face financial constraints and whose ability to fund investments is related to their net profit (refer to Whited, 1992, among other authors), resulting in markedly pro-cyclical investment

planning (Jiménez, Moral-Benito and Vegas, 2018). It is particularly problematic for the smallest-sized companies which have a higher probability of facing financial constraints (Oliveira and Fortunato, 2006; Aghion, Fally and Scarpetta, 2007; Wehinger, 2013).

The financial constraints problem is one of the arguments in favour of taxation thresholds in the design of corporate tax rates. Thresholds are special regimes in which smaller-sized companies (based on metrics such as revenue, employees and assets) benefit from lower statutory rates than their larger counterparts. There is some experience with thresholds in EU countries such as Belgium, the Netherlands, Luxembourg, the UK, Spain,

Table 1 **Breakdown of the universe of companies by size: Selection of European Union countries (plus Japan and the US)**

Country	SMEs					Large >250 employees
	1-9 employees	10-19 employees	20-49 employees	50-249 employees	Total SMEs	
	Micro	Small	Medium			
Germany	81.88	10.14	5.04	2.46	99.52	0.48
Austria	86.96	7.24	3.81	1.65	99.66	0.34
Denmark	88.77	5.63	3.59	1.71	99.68	0.30
Spain	94.58	3.1	1.63	0.57	99.88	0.12
France	95.07	2.58	1.56	0.65	99.86	0.14
Netherlands	95.54	2.2	1.37	0.75	99.86	0.14
Italy	94.78	3.31	1.29	0.53	99.91	0.09
Portugal	95.23	2.63	1.42	0.63	99.9	0.1
United Kingdom	90.08	5.5	2.81	1.32	99.67	0.29
Sweden	94.52	2.86	1.69	0.78	99.86	0.15
United States	78.82	1.43	6.95	3.18	99.38	0.62
Japan	86.19	6.87	4.34	2.24	99.63	0.37

Source: OECD (2018).

Table 2

**Breakdown of value added by size category (% of total)
Selection of European Union countries**

Country	SMEs					Large >250 employees
	1-9 employees	10-19 employees	20-49 employees	50-249 employees	Total SMEs	
	Micro	Small	Medium			
Germany	15.61	8.42	10.64	20.28	54.95	45.06
Austria	19.70	8.48	12.11	21.31	61.6	38.40
Denmark	19.72	7.41	11.73	21.55	60.41	39.60
Spain	24.04	8.23	10.95	17.66	60.68	39.12
France	22.97	6.98	10.03	15.46	55.44	44.56
Netherlands	21.17	6.73	11.04	23.69	62.63	37.37
Italy	27.81	10.42	11.17	17.90	67.3	32.70
Portugal	24.14	9.11	12.62	22.12	67.99	32.01
United Kingdom	19.30	6.12	7.69	14.69	47.8	52.20
Sweden	21.76	7.62	11.43	19.72	60.53	39.47

Source: OECD (2018).

Latvia and Lithuania (European Commission, 2012). From a theoretical perspective, thresholds are a mechanism for protecting smaller companies *vis-à-vis* larger companies. They are used to foster smaller firms’ survival in the short-term and their growth in the long-term. However, the evidence suggests that these thresholds discourage companies from pursuing further growth. One explanation is that the threshold could force companies to stay below a certain size so as to avoid having to pay a higher tax rate (Guner, Ventura and Xu, 2018; Tsuruta, 2018). In other words, far from protecting the small companies, thresholds may prove self-defeating in both the medium- and long-run. Faced with this evidence, some countries, including Spain, have opted to eliminate taxation thresholds and apply a flat rate of corporate income tax to all companies. Since 2016, the general

rate of tax has been 25% and the reduced rates that used to be applied to smaller-sized companies (revenue of < €10 million) have been eliminated. [3]

Income tax, total factor productivity and company size: What does the microeconomic evidence tell us?

At the macroeconomic level, there is evidence of a negative correlation between taxes and productivity. The aggregate data do not, however, permit detailed analysis of whether company size or longevity are relevant to the correlation or whether corporate income tax has a more adverse effect on the TFP of companies that are moving towards or away from the technological frontier. The firm-level approach, which explicitly factors in business heterogeneity, can be used to draw conclusions

“ Corporate tax thresholds are envisioned as a mechanism for SME’s short-term survival and long-term growth; however, they can generate disincentives that may ultimately prove self-defeating. ”

for the optimal design of corporate tax in aspects such as tax breaks or reduced rates. The evidence at the microeconomic level is, however, very slim. As far as we are aware, there are papers by Schweltnus and Arnold (2008), Arnold *et al.* (2011) and Gemmel *et al.* (2018) for the OECD countries. In addition, we have the recent work of Romero-Jordán, Sanz-Labrador and Sanz-Sanz (2019), which examines the Spanish case.

Results based on firm-level data for the OECD

Schweltnus and Arnold (2008) analyse the role of corporate tax in productivity and investment for a sample of companies from OECD countries between 1996 and 2004. The data are taken from the Amadeus database but exclude the Eastern European companies. The results show that corporate tax has an adverse effect on all companies, irrespective of their size or longevity, the only exception being the smallest companies and start-ups, on account of their low profitability. Beyond size, taxation penalises those companies closest to the technological barrier more intensely, even in low-margin sectors. The results show the negative impact of corporate tax on investment that undermines TFP. In the long term, the elasticity of investment to the user cost of capital is -0.7. In a later study, Arnold *et al.* (2011) use a sample of companies from 13 OECD countries between 1981 and 2001. In that study, the authors also find a negative correlation between the effective rate defined by Devereux-Griffith and TFP, suggesting that lower returns on investments have negative effects on productivity. The authors maintain that this connection arises by discouraging corporate investment. Specifically, the results show that an increase in the user cost of capital affects investment decisions, with a relatively greater impact at the more profitable companies, irrespective of their

size. Their simulation shows that a five point reduction in the statutory rate would reduce the user cost of capital by 2.8%. Gemmel *et al.* (2018) use a sample of companies from 11 OECD countries between 1995 and 2005. Their findings demonstrate that corporate tax slows productivity growth. Furthermore, the study illustrates how tax affects investment decision-making differently at large and small companies. The reason is that smaller companies are financially more constrained and therefore more sensitive to statutory tax rates, affecting both the timing of their planned investments and the types of assets they invest in.

Evidence in Spain

In Spain, there is a body of recent literature analysing total factor productivity from different perspectives (Fu and Moral-Benito, 2018; Jiménez, Moral-Benito and Vegas, 2018; Moral-Benito, 2018). However, as far as we know, Romero-Jordán, Sanz-Labrador and Sanz-Sanz (2019) is the only paper to analyse the impact of corporate tax on productivity, taking a microeconomic approach. Their work uses firm level data taken from the Survey About Business Strategies (ESEE for its acronym in Spanish) between 1990 and 2010. Following the methodology of Gemmel *et al.* (2018), the empirical study is divided into two steps. In the first step, the authors estimate TFP for each of the companies in the sample. In step two, they study the impact of corporate tax on growth in TFP. The paper factors in company size, distinguishing the pattern at the smallest companies (fewer than 20 employees) from the rest. It considers differences in technological intensity using the National Statistics Office's classification of the various industrial sectors in Spain.

Table 3 shows the average growth in TFP for each of the 20 sectors analysed, alongside

“ Corporate tax has a negative effect on the growth of TFP which is more intense in the case of companies that operate in more profitable sectors, regardless of size; however, the negative impact is more intense for smaller firms due to their lower levels of technological intensity and productivity. ”

the percentage of small companies in each of those sectors. The results reveal considerable dispersion in the readings for these two variables. The average incidence of small companies ranges between 6.6% and 40.4%, while growth in TFP ranges between 0.16% and 1.79%. On average, the sectors

that make less intensive use of technology are composed of a higher proportion of small companies while the sectors with a large population of small companies present lower growth in TFP. The correlation between these three variables —technological intensity, incidence of small companies

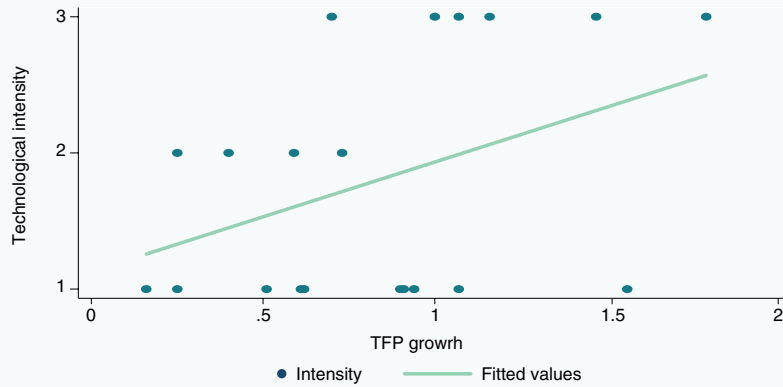
Table 3 **Growth in total factor productivity (TFP) by sector**

Sector	Technological intensity	% of companies with <20 employees	Average TFP growth (%)
Timber manufacturers	Low	40.4	0.91
Other manufacturers	Low	36.8	0.90
Leather goods	Low	35.9	1.56
Printing	Low	33.9	0.25
Textiles	Low	33.9	0.51
Furniture	Low	32.7	0.16
Tobacco	Low	25.7	0.94
Food	Low	19.3	0.62
Beverages	Low	18.3	0.61
Paper industry	Low	17.4	1.07
Average for low-technology sectors		29.43	0.75
Basic metals	Medium	30.1	0.73
Plastics	Medium	22.6	0.4
Non-metallic minerals	Medium	22.4	0.25
Metals, other than machinery and equipment	Medium	22.0	0.59
Average for medium-technology sectors		24.27	0.49
Electrical machinery and apparatus	High	19.1	1.16
Computing, electronic and optical	High	16.2	0.7
Chemicals and pharmaceuticals	High	13.0	1.79
Other transport equipment	Medium-high	10.8	1.0
Farm machinery	Medium-high	8.8	1.47
Transport equipment	Medium-high	6.6	1.07
Average for medium-high and high technology sectors		12.41	1.19

Source: Romero-Jordán, Sanz-Labrador and Sanz-Sanz (2019).

Exhibit 1

TFP growth and technological intensity



Source: Romero-Jordán, Sanz-Labrador and Sanz-Sanz (2019).

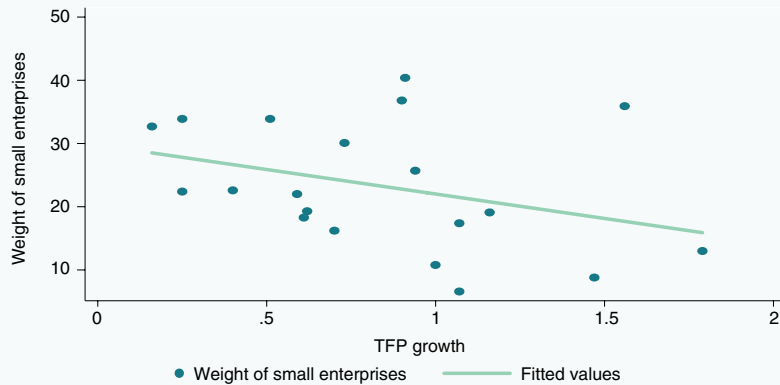
and growth in TFP— is easier to see in Exhibits 1 and 2. For example, in the timber manufacturing sector, which has a low level of technological intensity, the penetration of small companies is 40.4%, compared to 13.0% in the chemicals and pharmaceuticals sector, which is considered high tech. In parallel, the timber manufacturing sector presents average growth in TFP of 0.91%,

compared to 1.79% in the chemicals and pharmaceuticals sector.

Having estimated the TFP growth rates, Romero-Jordán, Sanz-Labrador and Sanz-Sanz (2019) go on to analyse the impact of corporate tax on that variable by using both the user cost of capital and the effective rates outlined in the Appendix. The results show that corporate

Exhibit 2

TFP growth and the weight of small enterprises



Source: Romero-Jordán, Sanz-Labrador and Sanz-Sanz (2019).

tax has a negative impact on growth in TFP regardless of whether the user cost or effective tax rates are included in the regression analyses. The impact is, however, higher in the case of the companies operating in the more profitable sectors, confirming that corporate tax penalises growth in those companies' TFP, regardless of size. However, the results also show that the constrictive impact of tax on TFP growth is more intense in relative terms for the smaller companies due to their lower technological intensity and productivity. Therefore, corporate tax can perpetuate these gaps with respect to the leading companies in productivity terms. The authors conclude that corporate tax has adverse effects on companies' investment decisions (extensive margin) and on the scale of their investments (intensive margin).

Conclusion

The scant evidence available at the microeconomic level shows that corporate tax penalises growth in productivity. That effect is more intense for smaller companies as a result of the financial constraints they face, which condition the timing of their investments and the types of assets they invest in. Taxation impedes companies from catching up with their sector leaders in terms of productivity (those closest to the technological frontier), irrespective of their size. The adverse effect of corporate tax on investment is key factor.

Notes

- [1] The increase in the number and quality of firm-level data repositories in the last decade has provided an impetus for analysing the relationship between tax and productivity from a microeconomic perspective.
- [2] A range of factors explain the higher weight of micro enterprises, including differences in business cultures, the existence of financial constraints and the institutional framework (OECD, 2014; Huerta and Salas, 2018).
- [3] With the odd exception, such as start-ups.

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Appendix

The user cost of capital is defined as follows:

$$\rho = \frac{1-A}{1-t}(d+\delta-\pi) - \delta \quad [A1]$$

where A is the tax saving via tax deductions; t is the statutory rate of tax; d is the discount rate; π is inflation; and δ represents the rate of economic depreciation. The user cost of capital corresponds to the shadow price of the capital services used by the company. In other words, it expresses the value for the investor of using capital goods in the productive process (Sanz, Romero and Barruso, 2011). An alternative interpretation often given to the user cost corresponds to the pre-tax financial return demanded on the assets used in the productive process so that an investment in those assets is profitable.

The King-Fullerton effective marginal rate is defined as follows:

$$METR = \frac{\rho - s}{\rho} \quad [A2]$$

where s is the net rate of return required by the investor supplying the funds for the project. In this manner, the numerator measures the total taxation borne for every euro invested. The effective marginal rate therefore measures the percentage tax burden borne for every euro invested in a given asset.

The Devereux-Griffith average effective rate is defined as follows:

$$AETR = \frac{R^* - R}{R^*} \quad [A3]$$

where R^* is the net present value of the economic rent before tax earned by the investment and R is its equivalent after tax. $METR$ and $AETR$ are two apparently very similar measures. The essential difference between the two is that the $METR$ is used to discriminate between projects that are financially viable and those that are not. In contrast, the effective average rate identifies, for a given pre-tax financial return, the magnitude of the economic rent generated (Sanz, Romero and Barruso, 2011).

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Recent key developments in the area of Spanish financial regulation

Prepared by the Regulation and Research Department of the Spanish Confederation of Savings Banks (CECA)

Royal Decree developing the Law regulating mortgage credit agreements (Royal Decree 309/2019, published in the *Official State Journal* on April 29th, 2019)

This Royal Decree transposes Directive 2014/17/EC on credit agreements for consumers relating to residential immovable property and Directive 2017/2399/EC on the ranking of unsecured debt instruments within the insolvency hierarchy. The Royal Decree took effect on June 16th, 2019, with the exception of certain provisions, which became active the day after the Decree's publication.

The most noteworthy aspects enacted by this Royal Decree include:

- **Advisory services.** Advisory services shall constitute a separate activity from the granting and intermediation of mortgage credit. When the creditor, credit intermediary or their appointed representatives do not provide advisory services, they must state so expressly and clearly in the pre-contractual information. Additionally, if an advisor receives remuneration or any kind of benefit from a lender or third parties, it must state so in the advisory agreement. This requirement is irrespective of whether such remuneration is related to the provision of advisory services. If a lender only offers a borrower products it has manufactured itself, the lender no longer falls within the category of the provision of advisory services.
- **Independent advisory services.** In addition to the requirements stipulated in Spanish Law 5/2019, those individuals who provide independent advisory services must consider a sufficiently large number of loan agreements available in the market and present the potential borrower with at least three binding offers from credit providers, alongside advice regarding the related legal and financial terms. Moreover, they may not receive remuneration for such services from one or more lenders or any third party with a vested interest in the transaction.
- **Lender registry.** The Royal Decree establishes the requirements for inscription in the corresponding registry and for verification of compliance by the competent authority.
- **Information that must be provided to the borrower throughout the term of the contract.** That information must clearly and faithfully reflect the terms of the agreement and cannot single out any potential benefit, be excessively optimistic or hide intrinsic risks. As well, it must be consistent with the contents and essential terms of the agreement without omitting or distorting any relevant information. Specifically, the following information should be provided:
 - Each time interest or fees are settled, the lenders must provide the borrowers with a document outlining details such as the nominal interest rate, the applicable fees and commissions and any other expenses charged.
 - During the month of January, the lender must send the borrower a statement with information about the fees and charges accrued and the interest rates applied and collected during the prior year.

- Any modification of the agreed interest rate must be notified with at least 15 days notice.
 - If a mortgage holder passes away, the individuals taking over the mortgage credit agreement or its guarantors should receive information regarding their new status.
- *Telematic channels for submitting documentation* by the lender, credit intermediary or appointed representative to the notary public include the following stipulations:
- Telematic channels must fulfil a series of principles such as ensuring connection with the notaries; providing the notary with the ability to certify the date of upload into the application of the documents signed by the lender; and the ability to access and download the documentation at any time.
 - The platforms used by the lender, credit intermediary, their appointed representatives and the notaries must have authentication mechanisms that ensure exclusive use, identification of the user and privacy protection.
 - The Royal Decree establishes the terms underpinning the procedure for circulating documentation between the lender, the mortgage credit intermediary or their designated representatives and the notary public.
 - The submission of the uncertified or authorised electronic copy of the deed requested by the borrower or lender from the notary must follow the stipulated requirements and procedures.
- Other noteworthy provisions:
- The lenders, credit intermediaries, their appointed representatives and all of their consolidated groups must provide the Bank of Spain with the statements and information deemed necessary for it to fulfil its supervisory duties.
 - Mortgage lenders must implement the internal policies and procedures needed to ensure that the credit products subject to Spanish Law 5/2019 are designed and marketed so as to avoid conflicts of interest.
 - Additional provision one of Royal Decree 84/2015, implementing Law 10/2014 on the regulation, supervision and solvency of credit institutions, with respect to the prior approval of additional tier 1 and tier 2 capital instruments has been repealed.
 - Royal Decree 1012/2015, implementing Law 11/2015 on the recovery and resolution of credit institutions, has been amended to introduce a new provision regarding the regime applicable in the event of bankruptcy proceedings. Debt instruments will not be deemed to contain embedded derivatives simply by virtue of being measured against variable interest rates derived from widely used benchmark rates.
- Order developing the Law regulating mortgage credit agreements (Ministerial Order ECE/482/2019, published in the *Official State Journal* on April 29th, 2019)**
- This Ministerial Order partially transposes the Mortgage Credit Directive –Directive 2014/17/EU– into Spanish law. To that end, it amends Order EHA/1718/2010 on the regulation and control of the advertising of bank services and products so as to: (i) extend the banking advertising rules to include mortgage credit lenders and intermediaries; and, (ii) incorporate the standard information to be included in the representative example for mortgage credit advertisements.
- It also amends Order EHA/2899/2011 on transparency to address the following matters:
- Adjustments to the pre-contractual information sheet.

- The contents of the standardised clause disclosure sheet (FiAE for its acronym in Spanish), which the lender, credit intermediary or their appointed representative must provide the borrower or potential borrower and any natural persons guaranteeing the loan at least 10 calendar days prior to the execution of the loan.
- In the case of variable rate credits, the borrower or potential borrower and any natural persons guaranteeing the loan must be provided with a separate document making specific reference to the instalments payable by the borrower in different interest rate scenarios and the scope for hedging that exposure. These scenarios should factor in whether or not official reference rates are used.
- The reference index or interest rate used to calculate the financial loss in the event of early repayment is IRS rates plus a spread. The spread shall be set at the difference existing at the time of the transaction between the transaction interest rate and the IRS for the terms that are closest, as of that date, to the next scheduled interest rate reset date or until the date of maturity.
- In the case of foreign currency loans, borrowers should receive additional information together with the statement pertaining to the interest or fees applied for their services. That information may be provided, at the choice of the borrower, in the currency in which he/she primarily receives income or holds assets from which the credit is to be repaid.
- The possibility of tying the mortgage credit to the opening or maintenance of a payment or savings account by the borrower, his/her spouse or a relative removed from the borrower by a kinship of up to the second degree of consanguinity or affinity. This is permissible so long as the only purpose of the account is to accumulate capital to repay the credit and/or interest payments, to pool the resources needed to obtain the credit or to offer the lender enhanced security against non-performance.
- The minimum level of knowledge and competency necessary for staff who provide mortgage credit services, with the most notable requirements including:
 - Required training may be provided by the lender, credit intermediary or appointed representative itself or through agreements with educational entities, companies or universities. The courses can be taken in person or remotely.
 - Certification will be performed by certification entities or firms authorised by the Bank of Spain. Under no circumstances can the training and certification activities be provided by the same entity or firm.
 - The Order stipulates the subjects about which staff must have knowledge/skills.
 - Certification of knowledge and competency in the subjects contemplated shall require the completion of training of at least 50 hours (65 hours in the case of staff providing advisory services). At least 10 hours of continuous training must be completed annually (15 hours in the case of staff providing advisory services).
 - Certain knowledge requirements can be deemed met when the professional in question has a master's degree in legal science, economics or business studies or has completed the courses needed to provide investment advice for MiFID II purposes.
 - Professional experience in areas related with mortgage credit for at least five years may account for a maximum of 20% of the training hours required.
 - It is up to the board of directors to set and apply the internal policies and procedures applicable to staff knowledge and competency. In addition, related to the compliance, equivalent unit or, in the absence thereof, the board of directors or the natural person lender or mortgage credit intermediary shall be

responsible for overseeing application of the procedures.

- Those individuals who perform support tasks but are not involved in the process of marketing or granting mortgage credit (specifically loan administration and accounting, human resources, IT and telecommunications staff) are exempt from the knowledge and competence requirements.
- The Order contemplates the possibility of allowing staff who market, manufacture, offer, grant or advice but are not certified with the required level of knowledge and competence to provide their services under supervision until June 16th, 2020.
- A new chapter has been added for reverse mortgages in order to update the regulation following approval of Law 5/2019.

The Order took effect on June 16th, until which date it was obligatory to submit the personalised information sheet. However, the provisions regarding the standardised clause disclosure sheet, staff knowledge and competency requirements will not take effect until three months after its publication.

Spanish economic forecasts panel: July 2019*

Funcas Economic Trends and Statistics Department

The consensus forecast for GDP growth in 2019 has been raised by 0.1pp to 2.3%

The analysts' average forecast for GDP growth in Spain in 2019 has increased by 0.1pp since the last report to 2.3%. The consensus forecast for second-quarter GDP growth is 0.6%, down 0.1pp from 1Q19. Generally speaking, the industrial activity indicators are pointing to a slowdown in the second quarter, with the weak June PMI reading standing out. The services indicators, while slightly stronger, also foreshadow a slowdown in growth in the second quarter, particularly those related with tourism. Growth during each of the last two quarters of the year is estimated at 0.5% (Table 2).

As for the breakdown of that growth, there have been a few changes including a small increase in the forecast for investment in machinery and equipment, as well as a slight decrease in forecast investment in construction. The analysts have also lowered their forecasts for growth in both imports and exports. Domestic demand is expected to contribute 2.3pp, with net trade having a neutral impact (as opposed to eroding growth by 0.1pp as per the last set of estimates).

No change in forecasts for 2020

The consensus forecast for GDP growth in 2020 is unchanged at 1.9%, underpinned by quarterly growth of 0.5% in the first half of the year, slowing in the third and fourth quarters (Table 2).

The slower growth in 2020 is attributed to a weaker contribution by domestic demand, via both consumption and investment, and by net trade, which is expected to detract from growth by 0.1pp (compared to a neutral impact estimated for 2019).

Lower inflation forecasts

Inflation fell sharply in June, to 0.4%, from rates of over 1% between January and April, shaped by the decline in energy prices and, to a lesser degree, unprocessed food.

The consensus forecasts for average inflation in 2019 and 2020 have been cut by 0.2pp to 1.1% and 1.3%, respectively. As for core inflation, the forecasts are unchanged at 1% this year and 1.2% in 2020. The year-on-year rates forecast for December 2019 and 2020 stand at 1.4% and 1.3%, respectively.

Dynamic job market to push unemployment down to 12.7% by 2020

According to the Social Security contributor numbers, the pace of job creation lost some steam in May and June, albeit masked somewhat by the growth in non-professional caretakers, derived from the dependent care act. This loss of momentum meant that employment increased by a little less in the second quarter than in the first. Nevertheless, employment reached a series high, though this figure includes the new public officials since 2011.

According to the consensus forecasts, employment will increase by 2.2% in 2019 (up 0.2pp from the last survey) and by 1.7% in 2020 (unchanged). The forecasts for growth in GDP, job creation and wage compensation yield implied forecasts for growth in productivity and unit labour costs (ULC): the implied growth in productivity is 0.1% in 2019 (down 0.1pp from last set of forecasts) and 0.2% in 2020. They also imply growth in ULCs of 1.7% both this year and next.

The average annual unemployment rate is expected to continue to decline to 13.7% in 2019 and 12.7% in 2020.

External surplus continues to shrink

Until April, Spain presented a current account deficit of 5.9 billion euros, compared to a deficit of 3.2 billion euros in the same period of 2018. This is due to a narrower trade surplus and a wider income deficit.

The balance of payments deficit presented in the first few months of the year is highly seasonal. In fact, the analysts are forecasting a surplus for the

year as a whole equivalent to 0.6% of GDP, down 0.1pp from the last set of forecasts. The forecast for 2020 has also been cut by 0.1pp to 0.5%.

Fiscal deficit targets expected to be missed

The fiscal deficit, excluding local authorities, amounted to 7.32 billion euros in the first four months of 2019, compared to 6.38 billion euros in the same period of 2018. This deterioration is the result of faster growth in spending relative to revenue at both the regional and central government levels. In contrast, the Social Security increased its surplus compared to the same period of 2018, thanks largely to sharp growth in contributions, which more than offset the increase in expenditure.

The forecasts for the public deficit are unchanged from the last report: 2.3% in 2019 and 1.9% in 2020. Those numbers imply missing the government's targets by 0.3pp and 0.8pp, respectively.

A marked external slowdown coupled with heightened global uncertainty

The main indicators point to a slowdown in activity, particularly in the manufacturing industry. Indeed, the global manufacturing PMI index has been falling sharply and, in the case of Europe, currently implies a contraction in manufacturing activity. The services sector is holding up better, with its PMI index pointing to ongoing growth, albeit slowing from prior quarters, both globally and in Europe. These developments are framed by intensified global uncertainty, as reflected in the main indices.

This trend reflects the slump in international trade, which according to the projections published this month by the European Commission, will register growth of 1.6% in 2019, down from a forecast of 3% in the Spring and nearly 5% in 2018. Trade is suffering from the geopolitical tensions between the US and China and exacerbated by the advent of fresh trade conflicts, such as that affecting trade between Japan and South Korea. Overall, the Commission is forecasting global growth of 3.4% this year, compared to 3.8% in 2018. The eurozone is expected to register growth of 1.2%, down 0.7pp from 2018.

The analysts' prognoses embody the deterioration in the external context. The majority believe that the

external environment is unfavourable, particularly in the EU. That sentiment is even more entrenched than it was at the time of the last survey. Moreover, not a single analyst is expecting any improvement in the coming months, globally or in Europe. That unanimity contrasts with the last assessment, when the analysts were less pessimistic.

Less consensus about the expansionary nature of monetary policy

The ECB has begun to react to the downturn in Europe's economic prospects and the subdued trend in prices, which is anchoring inflation expectations well below the targeted 2%. The central bank has expressed its willingness to reduce benchmark rates, a development which would further penalise remuneration of banks' surplus liquidity. It has also indicated that it will proceed with new long-term refinancing operations (TLTRO-III) as the current round matures. Lastly, and most notably, the ECB has alluded to the possibility of renewing its repurchasing of government bonds (APP programme).

The markets have begun to price in the shift in monetary policy. The 12-month EURIBOR rate has dipped from the readings anticipated in the last report, staying solidly in negative territory. The yield on 10-year Spanish government bonds has plummeted to record lows. At present, they stand close to 0.4%, which is less than half the level they were trading at in the first quarter.

Nearly all the analysts believe that monetary policy is expansionary (unchanged). They also expect these conditions to persist throughout the coming quarters. The yield on the 10-year bond is barely expected to move in the near future and is forecast at 0.92% at the end of 2020, down from the last forecast of 1.69%. The 12-month EURIBOR is expected to remain in negative territory for the projection period in contrast to the May assessment when analysts predicted rates would move into positive territory by the end of this year. Similarly, very few analysts are expecting the ECB to increase its benchmark rates (on main refinancing operations). However, the number of analysts who believe that the prevailing accommodative monetary policy meets the present needs of the Spanish economy has fallen (from 13 to 11), with the number who believe monetary policy should be neutral increasing (from 5 to 8).

The euro is expected to appreciate slightly against the dollar

The euro has been fluctuating since May without mapping out a clear trend. However, the analysts believe that the US Federal Reserve’s easing of monetary policy, which could be more pronounced than in Europe, will translate into a slight appreciation of the euro against the dollar in the quarters to come. They are forecasting an exchange

rate of 1.16 USD per Euro at the end of the projection period, up USD0.03 from the last Panel.

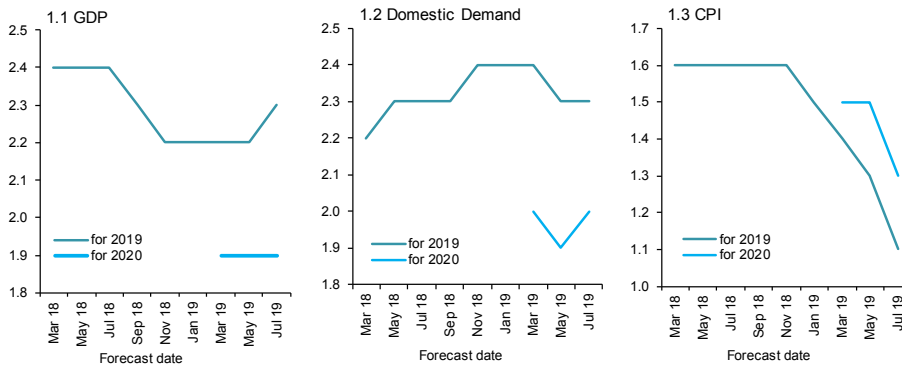
Fiscal policy remains expansionary

There is little change in the analysts’ assessment of fiscal policy. A wide majority continues to believe that fiscal policy is expansionary when it should be neutral or restrictive.

Exhibit 1

Change in forecasts (Consensus values)

(Annual rates in %)



Source: Funcas Panel of Forecasts.

* The Spanish Economic Forecasts Panel is a survey run by Funcas which consults the 19 research departments listed in Table 1. The survey, which dates back to 1999, is published bi-monthly in the months of January, March, May, July, September and November. The responses to the survey are used to produce a “consensus” forecast, which is calculated as the arithmetic mean of the 19 individual contributions. The forecasts of the Spanish Government, the Bank of Spain, and the main international organisations are also included for comparison, but do not form part of the consensus forecast.

Spanish economic forecasts panel: July 2019*

Funcas Economic Trends and Statistics Department

Table 1

Economic Forecasts for Spain – July 2019

Average year-on-year change, as a percentage, unless otherwise stated

	GDP		Household consumption		Public consumption		Gross fixed capital formation		GFCF machinery and capital goods		GFCF construction		Domestic demand	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Analistas Financieros Internacionales (AFI)	2.4	2.1	2.1	1.9	2.0	2.0	4.3	3.6	5.0	3.5	4.8	4.2	2.5	2.2
Axesor	2.5	2.0	1.5	1.8	1.9	1.2	4.5	3.6	3.8	3.1	4.5	4.2	2.3	2.1
BBVA Research	2.3	1.9	1.8	1.7	1.8	1.7	3.1	3.4	3.9	3.0	3.1	3.5	2.1	2.1
Bankia	2.2	1.8	2.0	1.5	2.1	1.8	4.4	3.6	5.3	4.0	4.0	3.4	2.6	2.0
CaixaBank Research	2.3	1.9	1.8	1.7	1.7	1.5	3.5	2.9	4.9	3.0	3.2	2.9	2.1	1.9
Cámara de Comercio de España	2.2	1.9	1.9	1.7	2.2	1.8	4.5	4.6	4.3	4.4	4.8	4.8	2.2	1.7
Cemex	2.3	2.0	1.8	1.8	1.7	1.7	4.3	4.1	4.4	4.0	4.9	4.7	2.3	2.2
Centro de Estudios Economía de Madrid (CEEM-URJC)	2.3	1.9	1.8	1.6	2.0	1.5	4.4	3.7	4.5	3.3	4.8	4.1	2.4	2.0
Centro de Predicción Económica (CEPREDE-UAM)	2.4	2.0	1.9	1.9	1.8	1.7	4.4	4.7	6.2	5.9	4.1	4.5	2.3	2.3
CEOE	2.1	1.8	1.9	1.9	1.9	1.8	3.9	3.0	3.7	3.2	4.4	2.9	2.3	2.0
Equipo Económico (Ee)	2.4	2.1	2.0	1.8	2.2	2.0	4.1	3.5	4.0	3.4	4.3	3.5	2.2	2.0
Funcas	2.2	2.0	1.9	1.7	1.7	0.9	4.9	3.9	4.0	3.9	5.6	4.0	2.5	2.1
Instituto Complutense de Análisis Económico (ICAE-UCM)	2.2	1.9	2.0	1.9	2.0	1.5	4.0	3.2	3.8	3.0	4.2	3.4	2.3	1.9
Instituto de Estudios Económicos (IEE)	2.3	1.8	1.7	1.5	1.9	1.6	4.2	3.9	4.0	3.6	4.4	4.1	2.2	2.0
Intermoney	2.2	1.9	1.7	1.6	1.3	1.3	3.6	2.7	3.5	2.3	3.8	3.1	2.1	1.8
Repsol	2.2	1.9	1.7	1.7	1.7	1.9	3.7	3.3	4.1	3.4	4.4	3.8	1.9	2.0
Santander	2.3	1.9	1.7	1.8	1.7	1.3	4.2	2.7	7.0	3.1	2.8	2.4	2.2	1.9
Solchaga Recio & asociados	2.4	1.9	1.7	1.5	1.9	1.6	4.1	3.4	4.0	3.3	4.7	4.1	2.3	2.0
Universidad Loyola Andalucía	2.4	2.0	1.8	1.7	2.1	1.6	3.8	3.3	4.8	3.2	3.7	3.3	2.3	2.0
CONSENSUS (AVERAGE)	2.3	1.9	1.8	1.7	1.9	1.6	4.1	3.5	4.5	3.5	4.2	3.7	2.3	2.0
Maximum	2.5	2.1	2.1	1.9	2.2	2.0	4.9	4.7	7.0	5.9	5.6	4.8	2.6	2.3
Minimum	2.1	1.8	1.5	1.5	1.3	0.9	3.1	2.7	3.5	2.3	2.8	2.4	1.9	1.7
Change on 2 months earlier ¹	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	-0.2	0.3	0.0	0.1
- Rise ²	8	4	2	2	1	5	5	6	7	6	3	5	5	4
- Drop ²	0	1	2	1	6	2	4	1	3	2	6	2	4	1
Change on 6 months earlier ¹	0.1	--	-0.2	--	-0.1	--	-0.1	--	-0.1	--	-0.1	--	-0.1	--
Memorandum items:														
Government (April 2019)	2.2	1.9	1.9	1.6	1.9	1.5	4.0	3.5	--	--	--	--	--	--
Bank of Spain (June 2018)	2.4	1.9	1.8	1.7	1.7	1.3	4.1	3.9	3.7	3.5	4.6	4.3	--	--
EC (July 2019)	2.3	1.9	--	--	--	--	--	--	--	--	--	--	--	--
IMF (April 2019)	2.1	1.9	2.0	1.7	1.7	0.8	2.9	2.7	--	--	--	--	2.2	1.7
OECD (May 2018)	2.2	1.9	1.7	1.6	1.9	1.6	3.8	3.9	--	--	--	--	2.2	2.1

¹ Difference in percentage points between the current month's average and that of two months earlier (or six months earlier).

² Number of panellists revising their forecast upwards (or downwards) since two months earlier.

Table 1 (Continued)

Economic Forecasts for Spain – July 2019

Average year-on-year change, as a percentage, unless otherwise stated

	Exports of goods & services		Imports of goods & services		CPI (annual av.)		Core CPI (annual av.)		Labour costs ³		Jobs ⁴		Unempl. (% labour force)		C/A bal. of payments (% of GDP) ⁵		Gen. gov. bal. (% of GDP) ⁶	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Analistas Financieros Internacionales (AFI)	2.7	2.8	3.2	3.4	0.8	1.0	0.8	1.1	1.4	1.5	2.4	2.1	13.8	12.6	0.5	0.5	-2.3	-1.8
Axesor	2.5	2.8	2.4	2.9	1.5	1.3	1.1	1.0	2.0	1.8	2.9	1.7	13.4	12.8	0.9	0.8	-2.6	-2.0
BBVA Research	1.7	3.5	0.8	4.1	0.8	1.3	--	--	2.6	2.5	2.2	1.6	13.7	12.7	0.7	0.4	-2.2	-1.9
Bankia	1.8	1.9	2.9	2.7	1.2	1.5	1.0	1.5	1.9	1.7	2.0	1.5	13.4	12.1	0.7	0.7	--	--
CaixaBank Research	1.5	3.7	0.8	3.9	1.1	1.5	0.9	1.3	1.8	2.7	2.4	1.9	13.4	11.8	0.6	0.6	-2.3	-1.5
Cámara de Comercio de España	1.5	2.9	2.0	2.9	0.8	1.4	0.7	1.1	--	--	2.2	1.7	13.8	12.9	0.8	0.8	-2.4	-1.8
Cemex	1.7	1.5	1.7	2.2	1.0	1.2	1.0	1.1	--	--	2.0	1.7	13.9	12.7	0.5	0.3	-2.5	-2.0
Centro de Estudios Economía de Madrid (CEEM-URJC)	1.6	2.5	2.0	2.9	1.2	1.4	0.9	1.3	--	--	1.9	1.7	13.9	12.8	0.8	0.6	-2.5	-2.1
Centro de Predicción Económica (CEPREDE-UAM)	0.7	3.4	0.4	4.6	0.9	1.3	--	--	1.5	1.6	2.3	1.7	13.8	13.0	0.9	0.6	-2.1	-1.7
CEOE	1.3	1.5	2.2	2.4	1.0	1.2	0.8	1.1	1.8	1.7	2.0	1.8	13.8	12.4	0.8	0.6	-2.2	-1.8
Equipo Económico (Ee)	2.4	2.6	2.1	2.7	1.2	1.5	1.1	1.3	1.8	1.7	2.1	1.7	13.8	12.6	0.8	0.7	-2.5	-2.3
Funcas	2.0	2.3	2.8	2.7	0.8	1.1	1.0	1.2	2.1	1.4	2.2	1.7	13.7	12.4	0.6	0.5	-2.2	-2.0
Instituto Complutense de Análisis Económico (ICAE-UCM)	2.7	2.5	3.2	3.0	1.5	1.4	1.2	1.3	--	--	1.9	1.5	13.8	12.8	0.7	0.7	-2.2	-1.9
Instituto de Estudios Económicos (IEE)	1.4	2.1	1.2	3.2	1.1	1.3	1.2	1.5	1.9	2.2	2.0	1.6	14.0	13.1	0.5	0.4	-2.3	-1.8
Intermoney	1.5	2.8	1.2	2.5	1.0	1.2	0.9	1.1	--	--	2.3	1.8	13.6	12.8	0.2	0.1	-2.3	--
Repsol	0.4	1.6	-0.6	2.2	1.1	1.3	0.9	1.1	1.6	1.5	2.3	1.9	13.8	12.4	0.6	0.3	-2.2	-1.8
Santander	0.8	2.1	0.5	2.2	1.1	1.5	0.9	1.2	1.7	2.0	2.6	1.9	13.9	13.0	0.5	0.4	--	--
Solchaga Recio & asociados	1.5	2.9	1.1	3.2	1.2	1.4	1.1	1.3	--	--	2.2	1.7	14.0	13.2	0.6	0.4	-2.3	-1.9
Universidad Loyola Andalucía	1.2	2.2	0.9	2.0	1.1	1.3	1.0	1.1	--	--	2.0	1.7	13.7	12.6	0.6	0.4	-2.3	-1.8
CONSENSUS (AVERAGE)	1.6	2.5	1.6	2.9	1.1	1.3	1.0	1.2	1.8	1.9	2.2	1.7	13.7	12.7	0.6	0.5	-2.3	-1.9
Maximum	2.7	3.7	3.2	4.6	1.5	1.5	1.2	1.5	2.6	2.7	2.9	2.1	14.0	13.2	0.9	0.8	-2.1	-1.5
Minimum	0.4	1.5	-0.6	2.2	0.8	1.0	0.7	1.0	1.4	1.4	1.9	1.5	13.4	11.8	0.2	0.1	-2.6	-2.3
Change on 2 months earlier ¹	-0.1	-0.1	-0.3	0.0	-0.2	-0.2	0.0	0.0	0.0	0.1	0.2	0.0	-0.1	0.0	-0.1	-0.1	0.0	0.0
- Rise ²	6	1	6	2	3	2	4	2	3	2	10	7	0	1	4	3	4	3
- Drop ²	5	3	6	5	10	10	6	6	2	0	0	2	8	8	4	5	2	1
Change on 6 months earlier ¹	-1.0	--	-1.8	--	-0.4	--	-0.2	--	0.1	--	0.3	--	-0.1	--	-0.3	--	-0.1	--
Memorandum items:																		
Government (April 2019)	2.7	2.8	3.1	2.9	--	--	--	--	2.1	2.2	2.1	1.8	13.8	12.3	0.7	0.7	-2.0	-1.1
Bank of Spain (June 2018)	1.6	3.2	1.4	3.8	1.1 ⁽⁷⁾	1.3 ⁽⁷⁾	1.2 ⁽⁸⁾	1.5 ⁽⁸⁾	--	--	2.0	1.6	13.9	13.0	1.0 ⁽⁹⁾	0.9 ⁽⁹⁾	-2.4	-1.8
EC (July 2019)	--	--	--	--	0.9 ⁽⁷⁾	1.2 ⁽⁷⁾	--	--	--	--	--	--	--	--	--	--	--	--
IMF (April 2019)	2.5	3.5	2.7	3.2	1.2	1.6	--	--	--	--	1.6	0.6	14.2	14.1	0.8	0.8	-2.3	-2.3
OECD (May 2018)	0.8	3.7	0.6	4.3	1.0 ⁽⁷⁾	1.6 ⁽⁷⁾	1.0 ⁽⁸⁾	1.5 ⁽⁸⁾	1.8	2.0	2.3	1.6	13.8	12.7	0.8	0.7	-2.0	-1.4

¹ Difference in percentage points between the current month's average and that of two months earlier (or six months earlier).² Number of panellists revising their forecast upwards (or downwards) since two months earlier.³ Average earnings per full-time equivalent job.⁴ In National Accounts terms: full-time equivalent jobs.⁵ Current account balance, according to Bank of Spain estimates.⁶ Excluding financial entities bail-out expenditures.⁷ Harmonized Index of Consumer Prices (HIPC).⁸ HIPC excluding energy and food.⁹ Net lending position vis-à-vis rest of world.

Table 2

Quarterly Forecasts – July 2019

	19-I Q	19-II Q	19-III Q	19-IV Q	20-I Q	20-II Q	20-III T Q	20-IV Q
GDP ¹	0.7	0.6	0.5	0.5	0.5	0.5	0.4	0.4
Euribor 1 yr ²	-0.11	-0.19	-0.19	-0.18	-0.17	-0.13	-0.07	-0.06
Government bond yield 10 yr ²	1.13	0.50	0.47	0.54	0.66	0.74	0.84	0.92
ECB main refinancing operations interest rate ²	0.00	0.00	-0.01	-0.02	-0.01	0.01	0.02	0.06
Dollar / Euro exchange rate ²	1.13	1.13	1.13	1.15	1.14	1.15	1.15	1.16

Forecasts in yellow.

¹ Qr-on-qr growth rates.

² End of period.

Table 3

CPI Forecasts – July 2019

Monthly change (%)				Year-on-year change (%)	
Jul-19	Aug-19	Sep-19	Oct-19	Dec-19	Dec-20
-0.4	0.2	0.3	0.7	1.4	1.3

Table 4

Opinions – July 2019

Number of responses

	Currently			Trend for next six months		
	Favourable	Neutral	Unfavourable	Improving	Unchanged	Worsening
International context: EU	0	5	14	0	19	0
International context: Non-EU	1	7	11	0	16	3
	Is being			Should be		
	Restrictive	Neutral	Expansionary	Restrictive	Neutral	Expansionary
Fiscal policy assessment ¹	0	2	17	6	12	1
Monetary policy assessment ¹	0	2	17	0	8	11

¹ In relation to the current state of the Spanish economy.

Key Facts

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Economic Indicators

Table 1

National accounts: GDP and main expenditure components SWDA* (ESA 2010, Base 2010)

Forecasts in yellow

	GDP	Private consumption	Public consumption	Gross fixed capital formation				Equipment & others products	Exports	Imports	Domestic demand (a)	Net exports (a)	
				Total	Construction								
					Total	Housing	Other constructions						
Chain-linked volumes, annual percentage changes													
2012	-2.9	-3.5	-4.7	-8.6	-12.3	-10.3	-13.9	-3.5	1.1	-6.4	-5.1	2.2	
2013	-1.7	-3.1	-2.1	-3.4	-8.6	-10.2	-7.3	2.8	4.3	-0.5	-3.2	1.5	
2014	1.4	1.5	-0.3	4.7	4.2	11.3	-1.1	5.2	4.3	6.6	1.9	-0.5	
2015	3.6	3.0	2.0	6.7	3.6	-0.9	7.4	9.9	4.2	5.4	3.9	-0.3	
2016	3.2	2.9	1.0	2.9	1.1	7.0	-3.7	4.7	5.2	2.9	2.4	0.8	
2017	3.0	2.5	1.9	4.8	4.6	9.0	0.6	5.0	5.2	5.6	2.9	0.1	
2018	2.6	2.3	2.1	5.3	6.2	6.9	5.5	4.3	2.3	3.5	2.9	-0.3	
2019	2.2	1.9	1.7	4.8	5.6	8.0	3.1	4.0	2.0	2.8	2.4	-0.2	
2020	2.0	1.7	0.9	3.9	4.0	5.4	2.3	3.9	2.4	2.7	2.1	-0.1	
2021	1.8	1.4	0.8	3.1	3.0	4.2	1.5	3.1	2.9	2.6	1.7	0.1	
2018	I	2.9	3.0	2.2	3.9	5.8	9.8	1.9	2.1	3.8	4.8	3.1	-0.2
	II	2.6	2.3	2.0	7.5	7.0	7.1	6.8	8.0	2.6	5.1	3.3	-0.7
	III	2.5	1.9	2.2	5.3	5.7	6.4	5.1	4.8	1.7	2.3	2.7	-0.2
	IV	2.3	1.9	2.2	4.4	6.3	4.6	8.1	2.5	1.0	1.7	2.5	-0.2
2019	I	2.4	1.5	2.0	4.7	4.3	3.4	5.1	5.1	0.0	-0.5	2.2	0.2
	II	2.3	2.0	2.0	3.4	4.9	6.8	2.8	1.9	1.1	1.0	2.3	0.0
	III	2.2	2.0	1.4	5.1	7.0	10.2	3.5	3.1	3.3	4.4	2.5	-0.3
	IV	2.1	2.1	1.4	6.2	6.3	11.5	1.0	6.1	3.7	6.2	2.8	-0.7
2020	I	1.9	2.1	1.2	5.2	5.9	8.4	3.2	4.5	4.3	6.5	2.6	-0.6
	II	1.9	1.8	1.0	4.3	4.5	6.7	2.1	4.1	2.3	3.3	2.2	-0.3
	III	2.0	1.6	0.8	3.2	2.7	3.3	2.0	3.7	1.7	1.3	1.8	0.2
	IV	2.0	1.4	0.7	3.0	2.8	3.5	2.0	3.2	1.2	0.1	1.6	0.4
Chain-linked volumes, quarter-on-quarter percentage changes, at annual rate													
2018	I	2.5	3.5	2.6	4.9	9.1	12.6	5.3	0.7	4.0	7.4	3.4	-0.9
	II	2.4	0.3	1.3	13.5	8.8	1.6	17.0	18.6	0.5	3.2	3.2	-0.8
	III	2.2	2.4	3.4	0.7	2.2	5.1	-0.7	-0.7	-3.2	-3.4	2.2	0.0
	IV	2.2	1.7	1.5	-0.9	5.3	-0.6	11.8	-6.9	3.0	-0.1	1.2	1.1
2019	I	2.7	1.5	1.7	5.9	0.9	7.8	-5.9	11.4	0.0	-1.3	2.2	0.5
	II	2.1	2.4	1.6	8.1	11.3	15.4	7.0	4.9	4.9	9.5	3.4	-1.3
	III	1.9	2.4	0.9	7.4	10.7	19.3	2.0	4.1	5.3	10.0	3.2	-1.3
	IV	1.6	2.2	1.2	3.4	2.7	4.1	1.2	4.1	4.9	7.0	2.2	-0.6
2020	I	2.2	1.4	1.1	2.0	-0.6	-3.6	2.8	4.9	2.0	0.0	1.4	0.7
	II	2.0	1.3	0.6	4.5	5.5	8.2	2.4	3.4	-2.8	-3.2	1.9	0.1
	III	2.1	1.6	0.4	2.9	3.4	4.9	1.6	2.4	2.8	1.6	1.6	0.5
	IV	1.7	1.2	0.8	2.6	3.2	4.9	1.2	2.0	2.8	2.0	1.4	0.3
Current prices (EUR billions)													
Percentage of GDP at current prices													
2012	1,040	58.8	19.7	19.8	10.9	4.9	6.0	8.9	30.7	29.2	98.5	1.5	
2013	1,026	58.3	19.7	18.8	9.7	4.1	5.6	9.0	32.2	29.0	96.7	3.3	
2014	1,038	58.6	19.5	19.3	9.9	4.5	5.4	9.4	32.7	30.3	97.6	2.4	
2015	1,081	57.9	19.3	19.9	10.0	4.4	5.5	9.9	32.9	30.6	97.7	2.3	
2016	1,119	57.5	18.9	19.9	9.9	4.8	5.1	10.1	33.1	30.0	96.8	3.2	
2017	1,166	57.5	18.5	20.5	10.3	5.2	5.0	10.2	34.3	31.4	97.1	2.9	
2018	1,208	57.7	18.4	21.2	10.8	5.6	5.2	10.4	34.3	32.3	98.0	2.0	
2019	1,248	57.4	18.4	21.9	11.3	6.1	5.2	10.6	34.0	32.5	98.4	1.6	
2020	1,286	57.4	18.2	22.3	11.5	6.4	5.1	10.8	34.2	32.8	98.6	1.4	
2021	1,323	57.2	18.0	22.6	11.6	6.6	5.0	11.0	34.5	33.1	98.5	1.5	

* Seasonally and Working Day Adjusted.

(a) Contribution to GDP growth.

Source: INE and Funcas (Forecasts).

Chart 1.1 - GDP

Percentage change

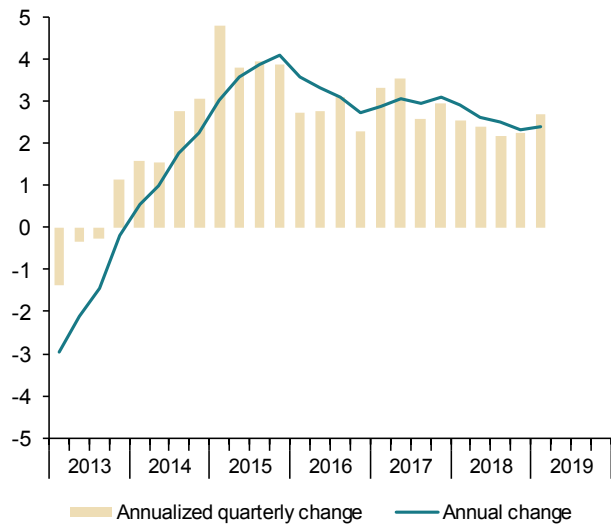


Chart 1.2 - Contribution to GDP annual growth

Percentage points

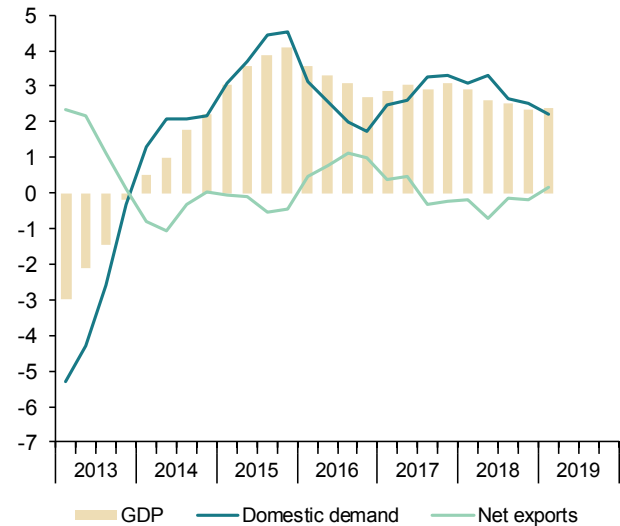


Chart 1.3 - Final consumption

Annual percentage change

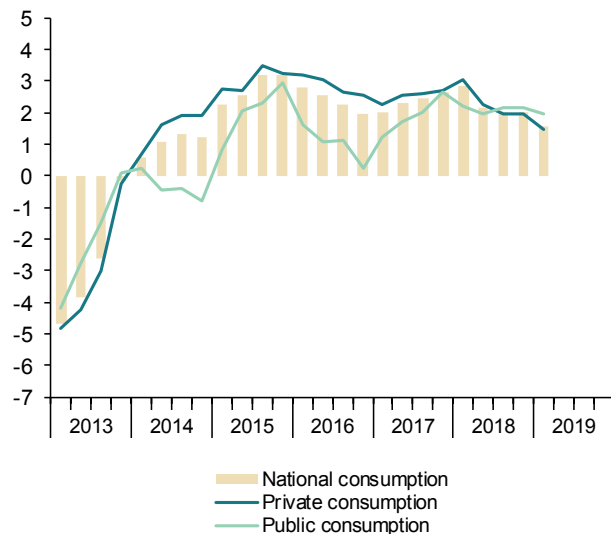


Chart 1.4 - Gross fixed capital formation

Annual percentage change

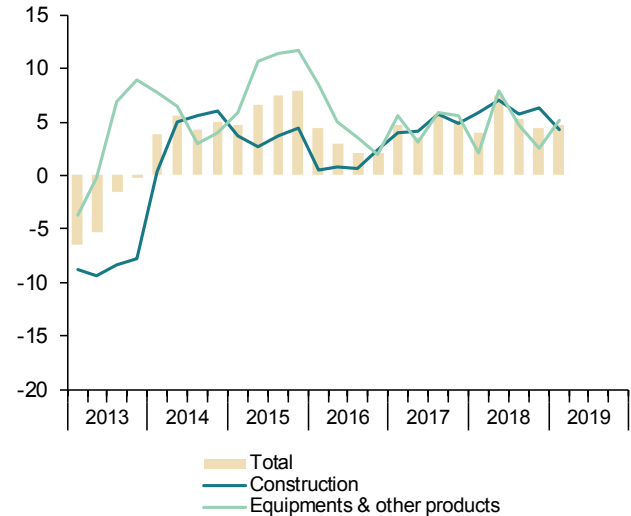


Table 2

National accounts: Gross value added by economic activity SWDA* (ESA 2010, Base 2010)

		Gross value added at basic prices								
		Industry				Services				
		Total	Agriculture, forestry and fishing	Total	Manufacturing	Construction	Total	Public administration, health, education	Other services	Taxes less subsidies on products
Chain-linked volumes, annual percentage changes										
2012		-2.8	-9.7	-4.9	-5.2	-8.8	-1.5	-1.8	-1.4	-4.0
2013		-1.5	13.6	-3.9	-0.2	-10.5	-0.6	0.1	-0.8	-4.3
2014		1.1	-1.2	2.0	3.0	-2.0	1.3	-0.8	2.0	4.0
2015		3.1	3.6	2.9	4.2	4.7	3.0	1.0	3.7	9.2
2016		3.0	8.2	5.6	4.7	3.5	2.1	1.3	2.4	4.8
2017		2.9	-0.9	4.4	4.4	6.2	2.5	1.7	2.7	3.3
2018		2.7	2.6	1.1	1.4	7.6	2.7	2.2	2.8	1.4
2017	II	2.9	-2.5	4.2	3.7	6.5	2.6	1.8	2.8	4.2
	III	2.9	-0.8	4.0	4.6	6.0	2.5	1.6	2.9	3.1
	IV	3.1	0.4	4.9	5.4	6.8	2.5	2.2	2.6	2.7
2018	I	2.9	2.8	2.6	2.8	7.5	2.6	2.1	2.7	3.0
	II	2.8	4.8	2.0	2.5	7.5	2.5	2.0	2.6	1.0
	III	2.7	-0.5	1.1	1.0	8.1	2.7	2.4	2.8	0.9
	IV	2.5	3.6	-1.3	-0.5	7.2	3.0	2.5	3.1	0.9
2019	I	2.7	0.0	0.1	1.2	6.6	3.1	2.7	3.2	-0.5
Chain-linked volumes, quarter-on-quarter percentage changes, at annual rate										
2017	II	3.2	-2.7	3.4	3.1	8.1	3.0	2.6	3.1	6.8
	III	2.7	6.1	2.5	4.5	5.4	2.4	1.5	2.7	1.1
	IV	3.1	1.8	5.7	4.9	7.9	2.1	2.5	2.0	1.7
2018	I	2.5	6.1	-1.2	-1.3	8.5	2.8	1.7	3.1	2.6
	II	2.8	5.1	1.2	2.1	8.4	2.6	2.2	2.7	-1.2
	III	2.3	-13.8	-1.1	-1.7	7.7	3.4	3.0	3.5	0.7
	IV	2.3	19.5	-4.1	-1.3	4.1	3.1	3.2	3.1	1.4
2019	I	3.3	-7.8	4.7	5.9	6.3	3.1	2.3	3.4	-2.7
		Current prices EUR billions)	Percentage of value added at basic prices							
2012		954	2.5	17.4	13.2	6.7	73.5	18.5	54.9	9.0
2013		936	2.8	17.5	13.4	5.8	74.0	19.0	55.0	9.6
2014		944	2.7	17.6	13.7	5.6	74.1	18.8	55.4	9.9
2015		981	2.9	17.6	13.7	5.7	73.9	18.6	55.3	10.2
2016		1,015	3.0	17.6	13.8	5.9	73.6	18.4	55.1	10.2
2017		1,057	3.0	18.0	14.2	6.1	72.9	18.0	54.9	10.3
2018		1,093	2.9	17.7	14.0	6.5	72.9	18.0	54.9	10.5

* Seasonally and Working Day Adjusted.

Source: INE.

Chart 2.1 - GVA by sectors

Annual percentage change

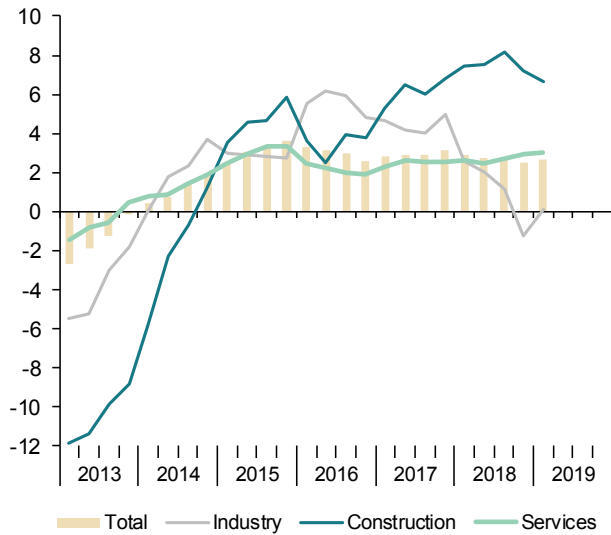


Chart 2.2 - GVA, Industry

Annual percentage change

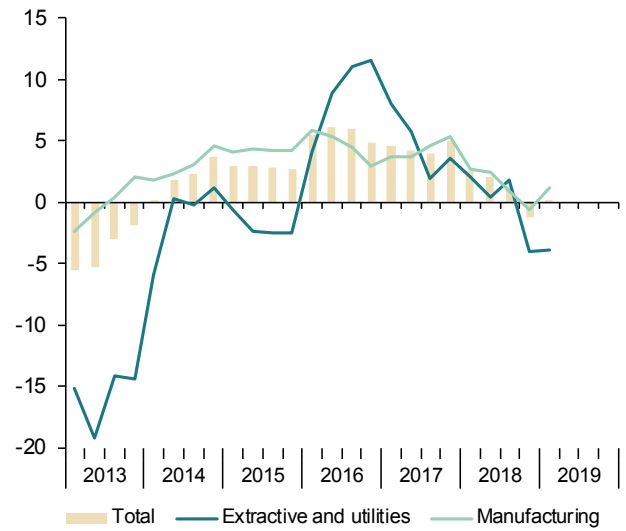


Chart 2.3 - GVA, services

Annual percentage change

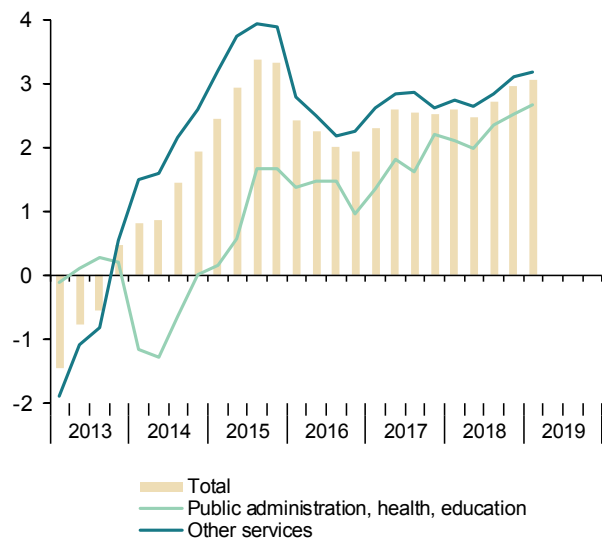


Chart 2.4 - GVA, structure by sectors

Percentage of value added at basic prices

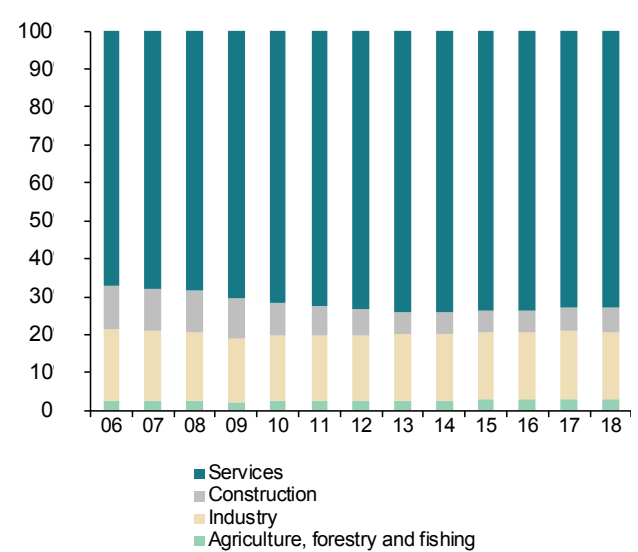


Table 3

National accounts: Productivity and labour costs (ESA 2010, Base 2010)

Forecasts in yellow

	Total economy						Manufacturing Industry						
	GDP, constant prices	Employment (jobs, full time equivalent)	Employment productivity	Compensation per job	Nominal unit labour cost	Real unit labour cost (a)	Gross value added, constant prices	Employment (jobs, full time equivalent)	Employment productivity	Compensation per job	Nominal unit labour cost	Real unit labour cost (a)	
	1	2	3=1/2	4	5=4/3	6	7	8	9=7/8	10	11=10/9	12	
Indexes, 2010 = 100, SVDA													
2012	96.1	92.6	103.8	100.3	96.6	96.5	93.6	89.1	105.0	103.9	99.0	96.6	
2013	94.5	89.4	105.7	101.6	96.2	95.7	93.4	84.9	110.0	105.6	96.0	93.7	
2014	95.8	90.3	106.0	101.7	95.9	95.7	96.1	83.8	114.7	106.2	92.6	90.2	
2015	99.3	93.3	106.4	102.6	96.5	95.7	100.2	86.4	116.0	105.9	91.3	89.4	
2016	102.4	96.2	106.5	102.1	95.8	94.8	104.8	90.0	116.5	106.4	91.4	89.8	
2017	105.5	98.9	106.6	102.4	96.0	93.9	109.4	93.5	117.1	107.3	91.7	88.0	
2018	108.2	101.4	106.7	103.2	96.8	93.7	110.9	94.5	117.5	107.9	91.9	87.7	
2019	110.6	103.7	106.7	105.4	98.8	94.7	--	--	--	--	--	--	
2020	112.8	105.4	107.0	106.9	99.9	94.7	--	--	--	--	--	--	
2021	114.8	107.0	107.3	108.4	101.0	94.7	--	--	--	--	--	--	
2017	II	105.2	98.7	106.6	102.2	95.9	93.8	108.8	93.1	116.9	107.2	91.7	88.1
	III	105.8	99.3	106.5	102.3	96.1	93.8	110.0	93.9	117.2	107.3	91.5	87.6
	IV	106.6	99.8	106.8	102.6	96.1	93.2	111.3	94.7	117.6	107.6	91.5	87.4
2018	I	107.3	100.4	106.9	102.8	96.2	93.7	111.0	95.0	116.8	107.5	92.0	88.2
	II	107.9	101.1	106.7	103.0	96.5	93.4	111.5	94.9	117.6	107.8	91.7	87.4
	III	108.5	101.8	106.6	103.4	97.0	93.8	111.1	94.2	117.9	108.2	91.8	87.6
2019	IV	109.1	102.4	106.5	103.7	97.4	93.7	110.7	93.8	118.1	108.2	91.7	87.8
	I	109.8	103.2	106.4	104.5	98.2	94.8	112.3	94.9	118.3	108.3	91.5	88.5
Annual percentage changes													
2012	-2.9	-4.8	2.0	-0.6	-2.5	-2.6	-5.2	-7.4	2.3	1.7	-0.6	-1.0	
2013	-1.7	-3.4	1.8	1.4	-0.4	-0.7	-0.2	-4.8	4.8	1.6	-3.1	-3.0	
2014	1.4	1.0	0.3	0.1	-0.2	0.0	3.0	-1.3	4.3	0.6	-3.5	-3.8	
2015	3.6	3.3	0.3	0.8	0.5	0.0	4.2	3.1	1.1	-0.2	-1.3	-0.9	
2016	3.2	3.0	0.1	-0.5	-0.6	-0.9	4.7	4.2	0.4	0.5	0.1	0.5	
2017	3.0	2.9	0.1	0.3	0.2	-1.0	4.4	3.8	0.5	0.8	0.3	-2.0	
2018	2.6	2.5	0.1	0.8	0.8	-0.2	1.4	1.1	0.3	0.6	0.3	-0.3	
2019	2.2	2.2	0.0	2.1	2.1	1.1	--	--	--	--	--	--	
2020	2.0	1.7	0.3	1.4	1.1	0.0	--	--	--	--	--	--	
2021	1.8	1.5	0.3	1.4	1.1	0.0	--	--	--	--	--	--	
2017	II	3.1	2.9	0.1	0.0	-0.1	-1.4	3.7	4.0	-0.3	0.8	1.1	-2.3
	III	2.9	2.9	0.0	0.4	0.4	-0.8	4.6	3.7	0.8	0.6	-0.2	-2.4
	IV	3.1	2.9	0.2	0.5	0.3	-1.5	5.4	3.6	1.7	1.0	-0.7	-2.5
2018	I	2.9	2.6	0.3	0.5	0.2	-1.0	2.8	3.0	-0.2	0.3	0.6	-0.7
	II	2.6	2.5	0.1	0.8	0.6	-0.4	2.5	1.9	0.6	0.6	0.0	-0.9
	III	2.5	2.4	0.1	1.1	1.0	0.0	1.0	0.4	0.6	0.9	0.3	0.0
2019	IV	2.3	2.6	-0.3	1.1	1.3	0.6	-0.5	-0.9	0.4	0.6	0.2	0.4
	I	2.4	2.8	-0.4	1.6	2.1	1.2	1.2	-0.1	1.3	0.8	-0.5	0.3

(a) Nominal ULC deflated by GDP/GVA deflator.

Source: INE and Funcas (Forecasts).

Chart 3.1 - Nominal ULC, total economy

Index, 2000=100

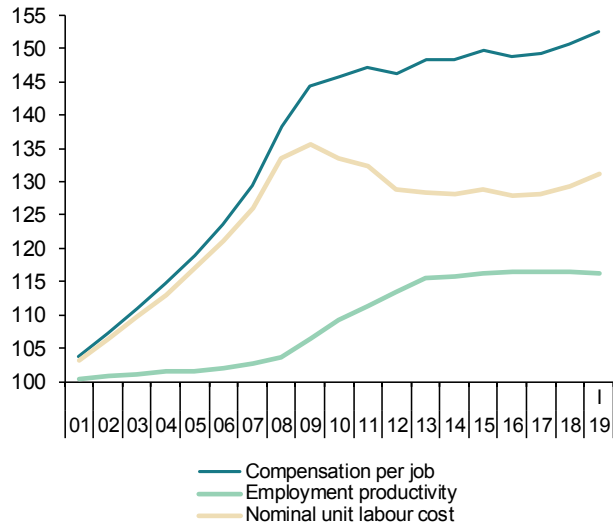
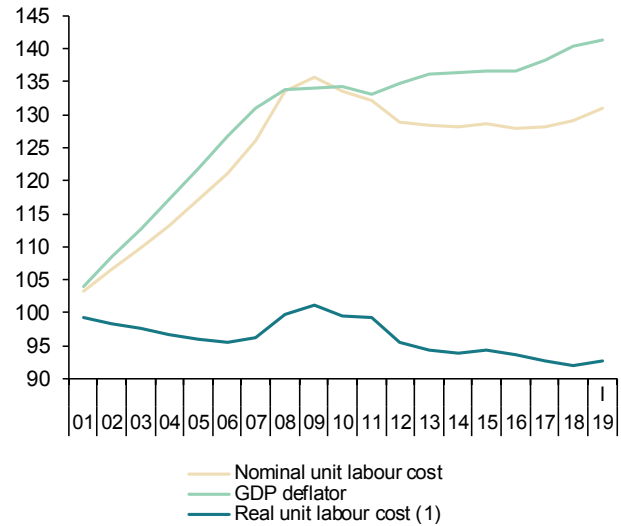


Chart 3.2 - Real ULC, total economy

Index, 2000=100



(1) Nominal ULC deflated by GDP deflator.

Chart 3.3 - Nominal ULC, manufacturing industry

Index, 2000=100

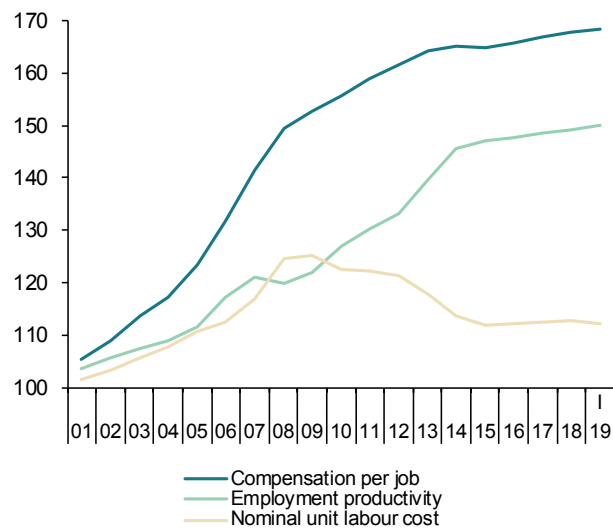
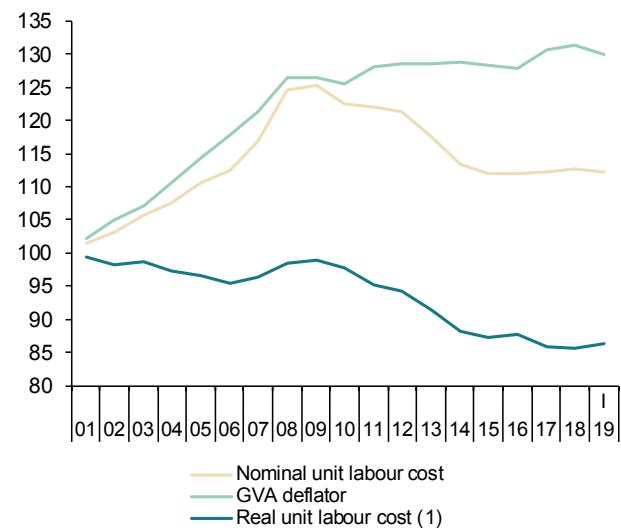


Chart 3.4 - Real ULC, manufacturing industry

Index, 2000=100



(1) Nominal ULC deflated by GDP deflator.

Table 4

National accounts: National income, distribution and disposition (ESA 2010, Base 2010)

Forecasts in yellow

	Gross domestic product	Compensation of employees	Gross operating surplus	Gross national disposable income	Final national consumption	Gross national saving (a)	Gross capital formation	Compensation of employees	Gross operating surplus	Saving rate	Investment rate	Current account balance	Net lending or borrowing	
	EUR Billions, 4-quarter cumulated transactions							Percentage of GDP						
2012	1,039.8	498.8	446.7	1,019.9	816.6	203.3	207.9	48.0	43.0	19.5	20.0	-0.4	0.1	
2013	1,025.7	485.3	440.4	1,007.3	800.4	206.9	191.9	47.3	42.9	20.2	18.7	1.5	2.1	
2014	1,037.8	491.6	441.8	1,023.0	810.7	212.2	201.9	47.4	42.6	20.4	19.5	1.0	1.5	
2015	1,081.2	514.6	453.5	1,067.4	834.9	232.4	221.0	47.6	41.9	21.5	20.4	1.1	1.7	
2016	1,118.7	528.6	475.2	1,107.6	854.8	252.7	228.6	47.2	42.5	22.6	20.4	2.2	2.4	
2017	1,166.3	547.3	499.0	1,154.7	886.2	268.6	246.1	46.9	42.8	23.0	21.1	1.9	2.2	
2018	1,208.2	569.7	511.8	1,196.0	919.7	276.3	264.9	47.1	42.4	22.9	21.9	0.9	1.5	
2019	1,248.2	595.9	520.0	1,235.7	946.2	289.5	282.3	47.7	41.7	23.2	22.6	0.6	0.9	
2020	1,286.5	615.7	533.4	1,274.9	972.2	302.7	295.7	47.9	41.5	23.5	23.0	0.5	0.8	
2021	1,321.8	634.9	545.3	1,309.7	995.9	313.9	308.3	48.0	41.3	23.7	23.3	0.4	0.7	
2017	II	1,140.7	537.2	485.8	1,129.7	870.3	259.4	235.7	47.1	42.6	22.7	20.7	2.1	2.2
	III	1,152.3	542.1	491.6	1,140.3	878.0	262.3	240.8	47.0	42.7	22.8	20.9	1.9	2.1
	IV	1,166.3	547.3	499.0	1,154.7	886.2	268.6	246.1	46.9	42.8	23.0	21.1	1.9	2.2
2018	I	1,178.0	552.3	504.1	1,164.5	894.4	270.1	248.9	46.9	42.8	22.9	21.1	1.8	2.1
	II	1,188.5	557.7	507.5	1,175.7	902.4	273.4	255.0	46.9	42.7	23.0	21.5	1.5	1.9
	III	1,199.0	563.6	510.1	1,185.9	911.2	274.8	259.7	47.0	42.5	22.9	21.7	1.3	1.6
	IV	1,208.2	569.7	511.8	1,196.0	919.7	276.3	264.9	47.1	42.4	22.9	21.9	0.9	1.5
2019	I	1,218.0	576.7	512.8	1,203.1	926.5	276.6	269.0	47.3	42.1	22.7	22.1	0.6	1.2
		Annual percentage changes							Difference from one year ago					
2012		-2.9	-6.1	-0.6	-1.7	-2.6	2.1	-11.3	-1.6	1.0	0.9	-1.9	2.9	3.0
2013		-1.4	-2.7	-1.4	-1.2	-2.0	1.8	-7.7	-0.7	0.0	0.6	-1.3	1.9	2.0
2014		1.2	1.3	0.3	1.6	1.3	2.6	5.2	0.1	-0.4	0.3	0.7	-0.5	-0.6
2015		4.2	4.7	2.6	4.3	3.0	9.5	9.5	0.2	-0.6	1.0	1.0	0.1	0.2
2016		3.5	2.7	4.8	3.8	2.4	8.7	3.5	-0.3	0.5	1.1	0.0	1.1	0.7
2017		4.3	3.5	5.0	4.3	3.7	6.3	7.7	-0.3	0.3	0.4	0.7	-0.2	-0.2
2018		3.6	4.1	2.6	3.6	3.8	2.9	7.6	0.2	-0.4	-0.2	0.8	-1.0	-0.7
2019		3.3	4.6	1.6	3.3	2.9	4.8	6.6	0.6	-0.7	0.3	0.7	-0.3	-0.6
2020		3.1	3.3	2.6	3.2	2.7	4.6	4.7	0.2	-0.2	0.3	0.4	-0.1	-0.1
2021		2.8	3.1	2.2	2.7	2.4	3.7	4.2	0.1	-0.2	0.2	0.3	-0.1	-0.1
2017	II	3.7	2.9	4.6	3.8	3.1	6.3	4.0	-0.4	0.4	0.6	0.1	0.5	0.1
	III	3.9	3.1	4.6	3.8	3.4	5.3	5.8	-0.3	0.3	0.3	0.4	-0.1	-0.3
	IV	4.3	3.5	5.0	4.3	3.7	6.3	7.7	-0.3	0.3	0.4	0.7	-0.2	-0.2
2018	I	4.4	3.6	5.2	4.0	3.7	4.9	7.2	-0.3	0.3	0.1	0.5	-0.4	-0.2
	II	4.2	3.8	4.5	4.1	3.7	5.4	8.2	-0.2	0.1	0.3	0.8	-0.5	-0.3
	III	4.0	4.0	3.8	4.0	3.8	4.8	7.9	0.0	-0.1	0.2	0.8	-0.6	-0.5
	IV	3.6	4.1	2.6	3.6	3.8	2.9	7.6	0.2	-0.4	-0.2	0.8	-1.0	-0.7
2019	I	3.4	4.4	1.7	3.3	3.6	2.4	8.1	0.5	-0.7	-0.2	1.0	-1.2	-0.9

(a) Including change in net equity in pension funds reserves.

Source: INE and Funcas (Forecasts).

Chart 4.1 - National income, consumption and saving

EUR Billions, 4-quarter cumulated

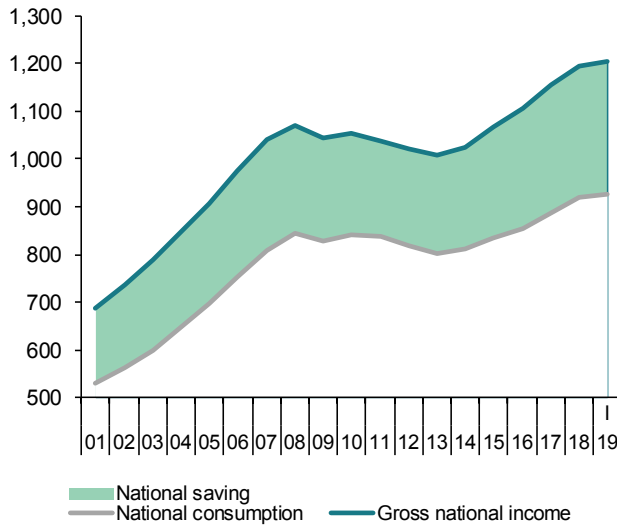


Chart 4.2 - National income, consumption and saving rate

Annual percentage change and percentage of GDP, 4-quarter moving averages

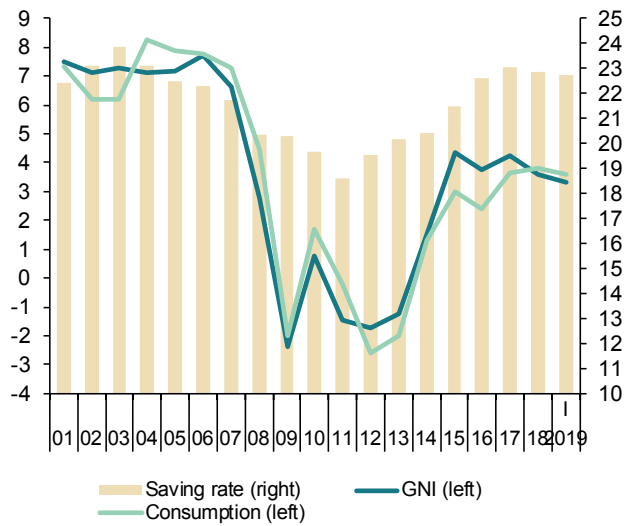


Chart 4.3 - Components of National Income

Percentage of GDP, 4-quarter moving averages

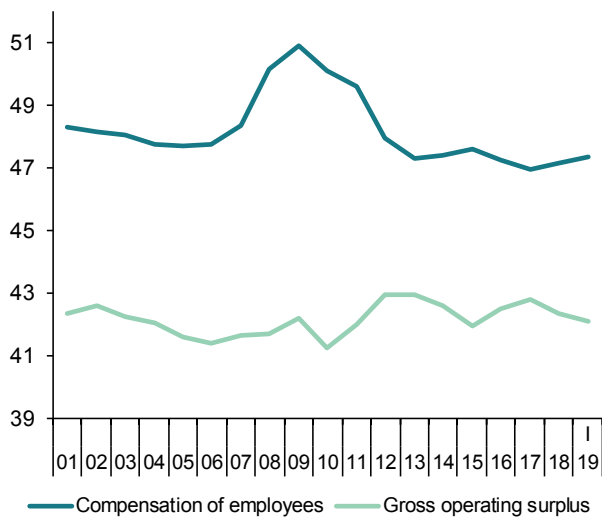


Chart 4.4 - Saving, Investment and Current Account Balance

Percentage of GDP, 4-quarter moving averages

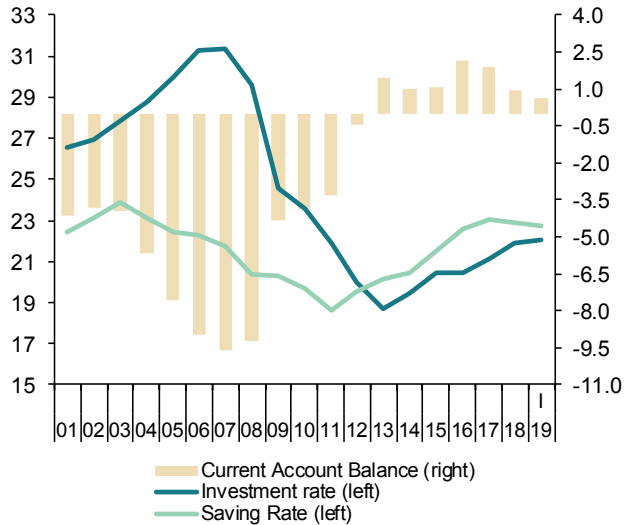


Table 5

National accounts: Household and non-financial corporations accounts (ESA 2010, Base 2010)
 Forecasts in yellow

	Households							Non-financial corporations						
	Gross disposable income (GDI)	Final consumption expenditure	Gross saving	Gross capital formation	Saving rate	Gross capital formation	Net lending or borrowing	Gross operating surplus	Gross saving	Gross capital formation	Saving rate	Gross capital formation	Net lending or borrowing	
	EUR Billions, 4-quarter cumulated operations				Percentage of GDP			EUR Billions, 4-quarter cumulated operations			Percentage of GDP			
2012	670.6	611.3	57.2	38.8	8.5	3.7	2.2	234.6	144.8	136.5	13.9	13.1	1.4	
2013	664.4	598.5	63.9	25.7	9.6	2.5	4.0	235.0	160.5	136.2	15.7	13.3	2.9	
2014	671.8	608.7	62.1	27.0	9.2	2.6	3.4	236.9	158.8	148.5	15.3	14.3	1.8	
2015	687.0	626.0	59.6	33.2	8.7	3.1	2.4	246.2	175.9	154.1	16.3	14.3	2.8	
2016	699.7	643.6	54.7	34.4	7.8	3.1	1.7	260.6	195.1	167.2	17.4	14.9	3.0	
2017	711.2	670.5	39.2	42.4	5.5	3.6	-0.4	278.0	210.4	177.2	18.0	15.2	3.3	
2018	733.8	697.1	35.6	49.2	4.9	4.1	-1.2	283.6	212.3	189.1	17.6	15.7	2.5	
2019	755.7	716.9	37.7	54.7	5.0	4.4	-1.5	290.4	220.2	199.8	17.6	16.0	2.0	
2020	779.1	738.0	40.0	59.1	5.1	4.6	-1.6	299.4	224.9	208.5	17.5	16.2	1.7	
2021	799.3	757.3	40.9	63.1	5.1	4.8	-1.8	308.0	229.9	216.6	17.4	16.4	1.4	
2017	II	705.4	658.1	46.1	38.0	6.5	3.3	0.6	268.9	201.1	172.7	17.6	15.1	3.0
	III	707.3	663.9	42.2	40.1	6.0	3.5	0.0	272.4	202.9	174.3	17.6	15.1	2.9
	IV	711.2	670.5	39.2	42.4	5.5	3.6	-0.4	278.0	210.4	177.2	18.0	15.2	3.3
2018	I	716.3	677.0	37.8	42.9	5.3	3.6	-0.6	280.6	211.6	179.6	18.0	15.3	3.2
	II	720.9	683.4	36.1	45.1	5.0	3.8	-0.9	282.3	214.0	181.8	18.0	15.3	3.2
	III	727.1	690.4	35.3	46.5	4.9	3.9	-1.1	282.8	213.0	187.0	17.8	15.6	2.7
	IV	733.8	697.1	35.6	49.2	4.9	4.1	-1.2	283.6	212.3	189.1	17.6	15.7	2.5
2019	I	739.5	701.8	36.8	51.3	5.0	4.2	-1.3	281.7	211.0	189.7	17.4	15.6	2.3
	Annual percentage changes				Difference from one year ago			Annual percentage changes			Difference from one year ago			
2012		-3.4	-1.2	-23.4	-25.6	-2.2	-1.1	-0.3	0.8	0.0	3.9	0.4	0.9	-0.7
2013		-0.9	-2.1	11.7	-33.9	1.1	-1.2	1.8	0.1	10.9	-0.2	1.7	0.2	1.4
2014		1.1	1.7	-2.9	5.1	-0.4	0.1	-0.6	0.8	-1.1	9.0	-0.3	1.0	-1.1
2015		2.3	2.8	-3.9	23.1	-0.6	0.5	-1.0	3.9	10.8	3.8	1.0	-0.1	1.0
2016		1.8	2.8	-8.3	3.5	-0.9	0.0	-0.6	5.9	10.9	8.5	1.2	0.7	0.2
2017		1.6	4.2	-28.3	23.1	-2.3	0.6	-2.1	6.7	7.8	6.0	0.6	0.2	0.3
2018		3.2	4.0	-9.2	16.1	-0.7	0.4	-0.8	2.0	0.9	6.7	-0.5	0.5	-0.8
2019		3.0	2.8	5.8	11.2	0.1	0.3	-0.2	2.4	3.7	5.7	0.1	0.4	-0.5
2020		3.1	2.9	6.2	8.0	0.1	0.2	-0.1	3.1	2.1	4.4	-0.2	0.2	-0.4
2021		2.6	2.6	2.1	6.8	0.0	0.2	-0.2	2.9	2.2	3.9	-0.1	0.2	-0.3
2017	II	1.6	3.8	-21.5	12.2	-1.9	0.3	-1.6	6.2	7.1	8.1	0.6	0.6	-0.3
	III	1.7	4.1	-25.3	18.0	-2.2	0.4	-1.9	5.8	4.6	6.0	0.2	0.3	-0.3
	IV	1.6	4.2	-28.3	23.1	-2.3	0.6	-2.1	6.7	7.8	6.0	0.6	0.2	0.3
2018	I	2.2	4.0	-22.3	16.7	-1.7	0.4	-1.5	6.3	5.7	6.1	0.3	0.3	-0.1
	II	2.2	3.8	-21.7	18.7	-1.5	0.5	-1.5	5.0	6.4	5.2	0.4	0.2	0.3
	III	2.8	4.0	-16.4	16.0	-1.1	0.4	-1.1	3.8	5.0	7.3	0.2	0.5	-0.2
	IV	3.2	4.0	-9.2	16.1	-0.7	0.4	-0.8	2.0	0.9	6.7	-0.5	0.5	-0.8
2019	I	3.2	3.7	-2.9	19.7	-0.3	0.6	-0.7	0.4	-0.3	5.6	-0.6	0.3	-0.9

Source: INE and Funcas (Forecasts).

Chart 5.1 - Households: Net lending or borrowing

Percentage of GDP, 4-quarter moving averages

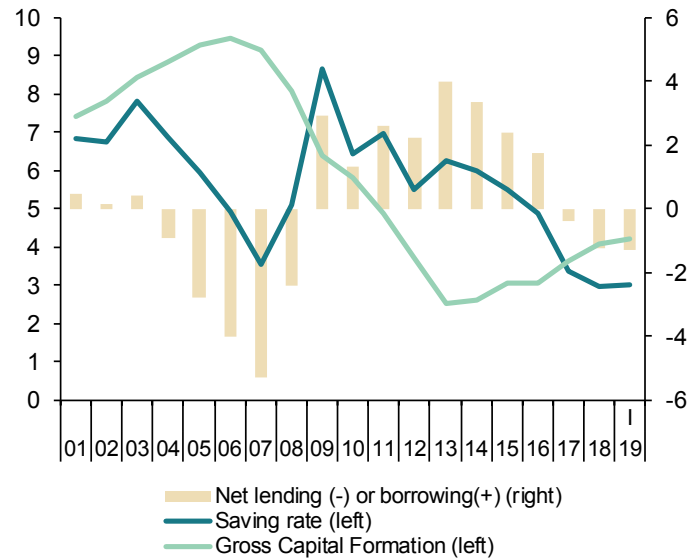


Chart 5.2 - Non-financial corporations: Net lending or borrowing

Percentage of GDP, 4-quarter moving averages

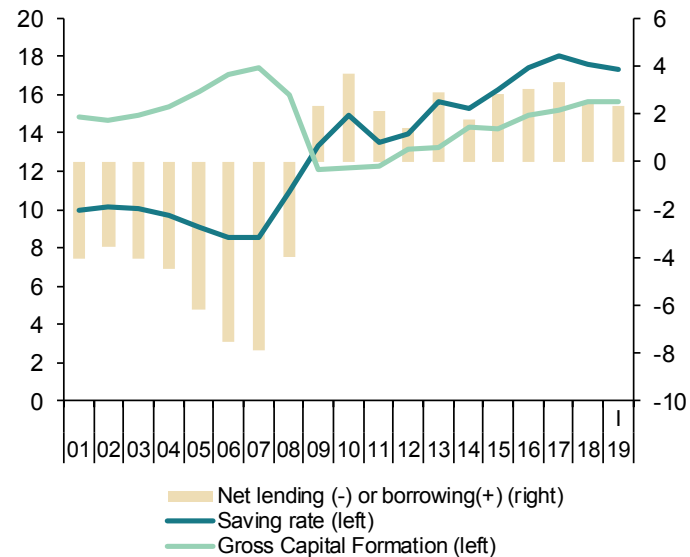


Table 6

National accounts: Public revenue, expenditure and deficit (ESA 2010, Base 2010)

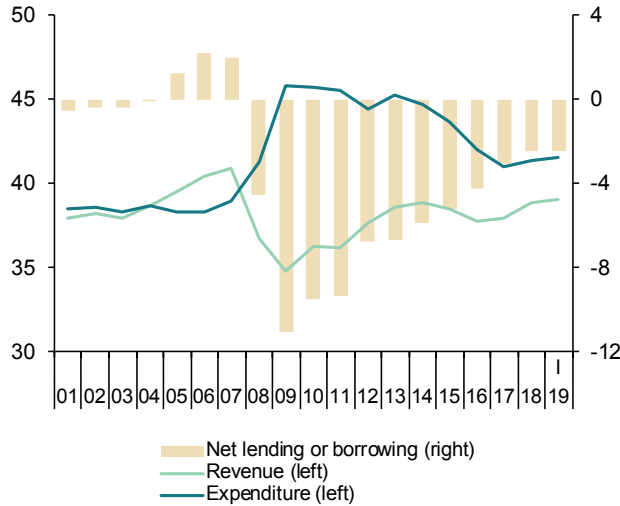
Forecasts in yellow

	Gross value added	Taxes on production and imports receivable	Taxes on income and wealth receivable	Social contributions receivable	Compensation of employees	Interests and other capital incomes payable (net)	Social benefits payable	Subsidies and net current transfers payable	Gross disposable income	Final consumption expenditure	Gross saving	Net capital expenditure	Net lending(+)/ net borrowing(-)	Net lending(+)/ net borrowing (-) excluding financial entities bail-out expenditures	
	1	2	3	4	5	6	7	8	9=1+2+3+4-5-6-7-8	10	11=9-10	12	13=11-12	14	
EUR Billions, 4-quarter cumulated operations															
2012	142.2	108.2	106.4	131.9	113.9	20.3	168.6	18.6	167.2	205.3	-38.1	70.8	-108.8	-70.6	
2013	143.0	114.6	105.2	128.2	114.7	24.1	170.8	20.6	160.8	201.9	-41.1	30.6	-71.7	-68.4	
2014	143.4	119.2	105.6	130.1	115.2	25.7	171.1	20.6	165.7	202.0	-36.3	25.6	-61.9	-60.6	
2015	147.5	127.0	109.2	132.3	119.4	24.4	170.6	21.3	180.3	208.9	-28.6	28.4	-57.0	-56.5	
2016	149.6	129.0	110.9	136.0	121.5	23.1	174.1	20.5	186.4	211.2	-24.8	25.2	-50.0	-47.6	
2017	151.7	134.7	118.6	143.1	123.0	22.6	177.7	19.8	204.9	215.7	-10.7	25.2	-35.9	-35.4	
2018	155.9	141.4	129.0	150.1	127.0	22.2	185.1	21.2	221.0	222.6	-1.7	28.3	-30.0	-29.9	
2019	162.6	147.5	130.9	162.9	133.4	21.9	193.5	21.8	233.3	229.4	4.0	30.5	-26.9	-26.9	
2020	165.8	153.0	136.5	166.0	136.2	21.5	200.9	22.2	240.5	234.3	6.2	32.0	-26.4	-26.4	
2021	168.7	157.3	140.6	173.5	138.7	21.1	209.2	22.8	248.2	238.6	9.6	32.5	-23.0	-23.0	
2017	II	150.0	132.7	115.1	139.5	121.6	22.8	175.5	20.0	197.3	212.9	-15.6	25.0	-40.6	-39.7
	III	150.8	134.0	118.7	141.2	122.3	22.6	176.3	20.0	203.6	214.1	-10.5	24.9	-35.3	-34.8
	IV	151.7	134.7	118.6	143.1	123.0	22.6	177.7	19.8	204.9	215.7	-10.7	25.2	-35.9	-35.4
2018	I	152.3	136.6	120.7	144.5	123.5	22.2	178.9	20.5	208.9	216.8	-7.9	26.8	-34.7	-34.3
	II	153.2	138.7	122.5	146.5	124.3	21.6	180.3	20.2	214.4	218.2	-3.8	28.3	-32.1	-32.0
	III	154.6	139.9	125.2	148.3	125.6	21.6	183.0	20.2	217.5	220.3	-2.9	28.6	-31.4	-31.3
	IV	155.9	141.4	129.0	150.1	127.0	22.2	185.1	21.2	221.0	222.6	-1.7	28.3	-30.0	-29.9
2019	I	157.2	142.8	128.5	153.8	128.5	21.3	187.8	21.8	223.0	224.6	-1.5	28.0	-29.6	-29.7
Percentage of GDP, 4-quarter cumulated operations															
2012	13.7	10.4	10.2	12.7	11.0	2.0	16.2	1.8	16.1	19.7	-3.7	6.8	-10.5	-6.8	
2013	13.9	11.2	10.3	12.5	11.2	2.3	16.6	2.0	15.7	19.7	-4.0	3.0	-7.0	-6.7	
2014	13.8	11.5	10.2	12.5	11.1	2.5	16.5	2.0	16.0	19.5	-3.5	2.5	-6.0	-5.8	
2015	13.6	11.7	10.1	12.2	11.0	2.3	15.8	2.0	16.7	19.3	-2.6	2.6	-5.3	-5.2	
2016	13.4	11.5	9.9	12.2	10.9	2.1	15.6	1.8	16.7	18.9	-2.2	2.3	-4.5	-4.3	
2017	13.0	11.6	10.2	12.3	10.5	1.9	15.2	1.7	17.6	18.5	-0.9	2.2	-3.1	-3.0	
2018	12.9	11.7	10.7	12.4	10.5	1.8	15.3	1.8	18.3	18.4	-0.1	2.3	-2.5	-2.5	
2019	13.0	11.8	10.5	13.0	10.7	1.8	15.5	1.7	18.7	18.4	0.3	2.4	-2.2	-2.2	
2020	12.9	11.9	10.6	12.9	10.6	1.7	15.6	1.7	18.7	18.2	0.5	2.5	-2.0	-2.0	
2021	12.7	11.9	10.6	13.1	10.5	1.6	15.8	1.7	18.8	18.0	0.7	2.5	-1.7	-1.7	
2017	II	13.1	11.6	10.1	12.2	10.7	2.0	15.4	1.8	17.3	18.6	-1.4	2.2	-3.6	-3.5
	III	13.1	11.6	10.3	12.3	10.6	2.0	15.3	1.7	17.7	18.6	-0.9	2.2	-3.1	-3.0
	IV	13.0	11.6	10.2	12.3	10.5	1.9	15.2	1.7	17.6	18.5	-0.9	2.2	-3.1	-3.0
2018	I	12.9	11.6	10.3	12.3	10.5	1.9	15.2	1.7	17.8	18.4	-0.7	2.3	-2.9	-2.9
	II	12.9	11.7	10.3	12.3	10.5	1.8	15.2	1.7	18.1	18.4	-0.3	2.4	-2.7	-2.7
	III	12.9	11.7	10.5	12.4	10.5	1.8	15.3	1.7	18.2	18.4	-0.2	2.4	-2.6	-2.6
	IV	12.9	11.7	10.7	12.4	10.5	1.8	15.3	1.8	18.3	18.4	-0.1	2.3	-2.5	-2.5
2019	I	12.9	11.7	10.6	12.6	10.6	1.8	15.4	1.8	18.3	18.5	-0.1	2.3	-2.4	-2.4

Source: INE and Funcas (Forecasts).

Chart 6.1 - Public sector: Revenue, expenditure and deficit (a)

Percentage of GDP, 4-quarter moving averages



(a) Excluding financial entities bail-out expenditures

Chart 6.2 - Public sector: Main revenues

Percentage of GDP, 4-quarter moving averages

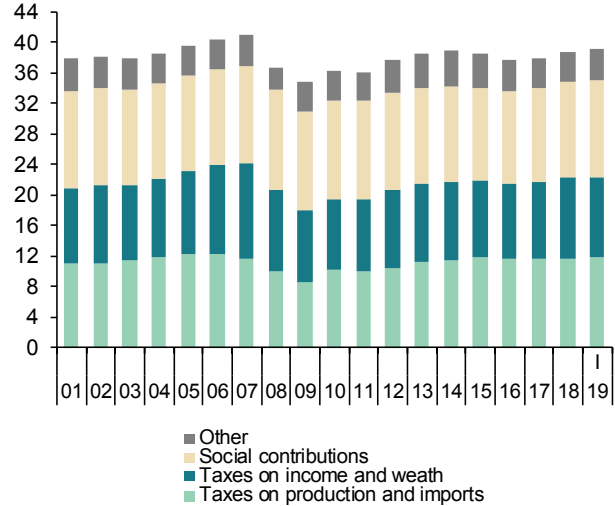


Chart 6.3.- Public sector: Main expenditures

Percentage of GDP, 4-quarter moving averages

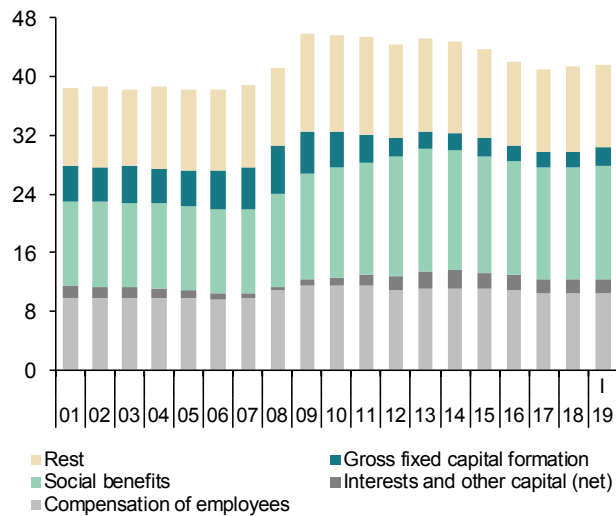
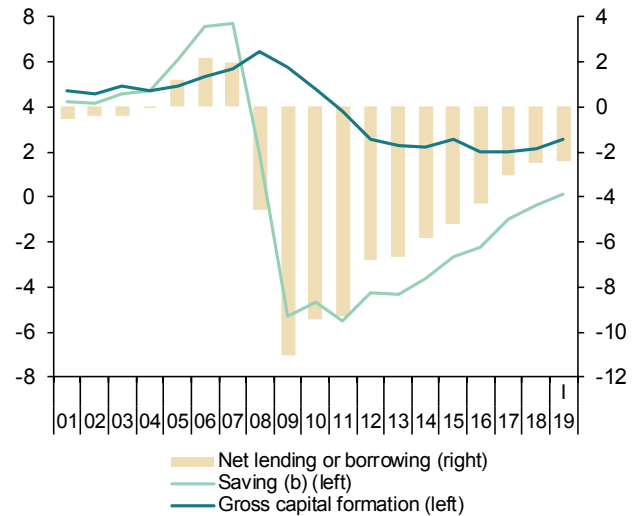


Chart 6.4 - Public sector: Saving, investment and deficit (a)

Percentage of GDP, 4-quarter moving averages



(a) Excluding financial entities bail-out expenditures
(b) Including net capital transfers

Table 7

Public sector balances, by level of Government

Forecasts in yellow

	Net lending (+)/ net borrowing (-) (a)					Debt					
	Central Government	Regional Governments	Local Governments	Social Security	TOTAL Government	Central Government	Regional Governments	Local Governments	Social Security	Total Government (consolidated)	
	EUR Billions, 4-quarter cumulated operations					EUR Billions, end of period					
2012	-44.3	-19.4	3.3	-10.2	-70.6	761.9	189.2	44.0	17.2	891.5	
2013	-46.4	-16.2	5.7	-11.5	-68.4	850.2	210.5	42.1	17.2	979.0	
2014	-36.8	-18.5	5.5	-10.8	-60.6	902.5	237.9	38.3	17.2	1,041.6	
2015	-29.3	-18.7	4.6	-13.0	-56.5	940.4	263.3	35.2	17.2	1,073.9	
2016	-27.2	-9.6	7.0	-17.7	-47.6	969.6	277.0	32.2	17.2	1,107.2	
2017	-21.5	-4.2	7.1	-16.8	-35.4	1,010.8	288.1	29.1	27.4	1,144.4	
2018	-16.3	-2.8	6.3	-17.1	-29.9	1,047.3	293.1	25.8	41.2	1,173.1	
2019	--	--	--	--	-26.9	--	--	--	--	1,198.6	
2020	--	--	--	--	-26.4	--	--	--	--	1,223.4	
2021	--	--	--	--	-23.0	--	--	--	--	1,245.2	
2017	II	-19.2	-10.7	7.4	-17.1	-39.7	994.9	285.9	32.4	17.2	1,135.1
	III	-17.0	-6.9	7.3	-18.1	-34.8	998.8	284.4	30.5	23.2	1,133.4
	IV	-21.5	-4.2	7.1	-16.8	-35.4	1,010.8	288.1	29.1	27.4	1,144.4
2018	I	-21.8	-3.2	7.0	-16.4	-34.3	1,028.6	289.7	29.0	27.4	1,161.7
	II	-18.6	-2.8	6.1	-16.7	-32.0	1,034.7	293.3	29.4	34.9	1,165.8
	III	-18.3	-2.6	5.8	-16.2	-31.3	1,048.5	292.4	28.0	34.9	1,177.5
	IV	-16.3	-2.8	6.3	-17.1	-29.9	1,047.3	293.1	25.8	41.2	1,173.1
2019	I	-18.6	-2.8	5.9	-14.2	-29.7	1,069.8	296.7	26.0	43.1	1,200.3
		Percentage of GDP, 4-quarter cumulated operations					Percentage of GDP				
2012		-4.3	-1.9	0.3	-1.0	-6.8	73.3	18.2	4.2	1.7	85.7
2013		-4.5	-1.6	0.6	-1.1	-6.7	82.9	20.5	4.1	1.7	95.5
2014		-3.5	-1.8	0.5	-1.0	-5.8	87.0	22.9	3.7	1.7	100.4
2015		-2.7	-1.7	0.4	-1.2	-5.2	87.0	24.4	3.3	1.6	99.3
2016		-2.4	-0.9	0.6	-1.6	-4.3	86.7	24.8	2.9	1.5	99.0
2017		-1.8	-0.4	0.6	-1.4	-3.0	86.7	24.7	2.5	2.3	98.1
2018		-1.3	-0.2	0.5	-1.4	-2.5	86.7	24.3	2.1	3.4	97.1
2019		--	--	--	--	-2.2	--	--	--	--	96.0
2020		--	--	--	--	-2.0	--	--	--	--	95.1
2021		--	--	--	--	-1.7	--	--	--	--	94.1
2017	II	-1.7	-0.9	0.6	-1.5	-3.5	87.2	25.0	2.8	1.5	99.4
	III	-1.5	-0.6	0.6	-1.6	-3.0	86.7	24.7	2.7	2.0	98.4
	IV	-1.8	-0.4	0.6	-1.4	-3.0	86.7	24.7	2.5	2.3	98.1
2018	I	-1.9	-0.3	0.6	-1.4	-2.9	87.4	24.6	2.5	2.3	98.7
	II	-1.6	-0.2	0.5	-1.4	-2.7	87.2	24.7	2.5	2.9	98.2
	III	-1.5	-0.2	0.5	-1.4	-2.6	87.6	24.4	2.3	2.9	98.3
	IV	-1.3	-0.2	0.5	-1.4	-2.5	86.7	24.3	2.1	3.4	97.1
2019	I	-1.5	-0.2	0.5	-1.2	-2.4	88.0	24.4	2.1	3.5	98.7

(a) Excluding financial entities bail-out expenditures.

Sources: National Statistics Institute, Bank of Spain (Financial Accounts of the Spanish Economy), and Funcas (Forecasts).

Chart 7.1 - Government deficit

Percent of GDP, 4-quarter cumulated operations

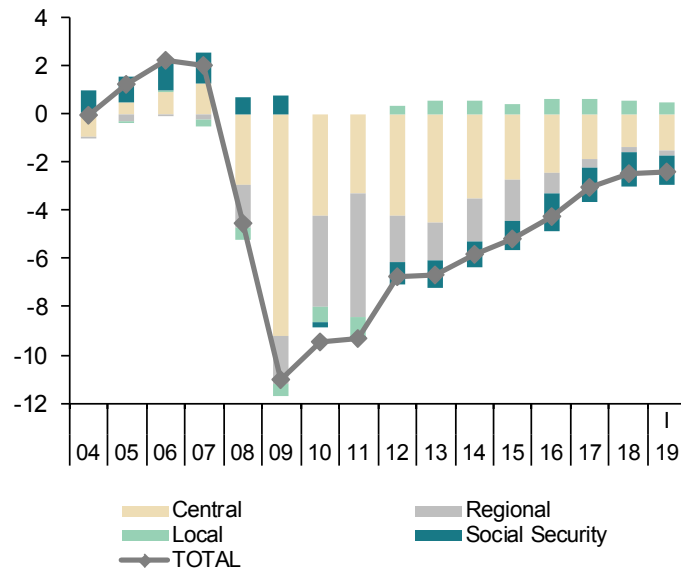


Chart 7.2 - Government debt

Percent of GDP

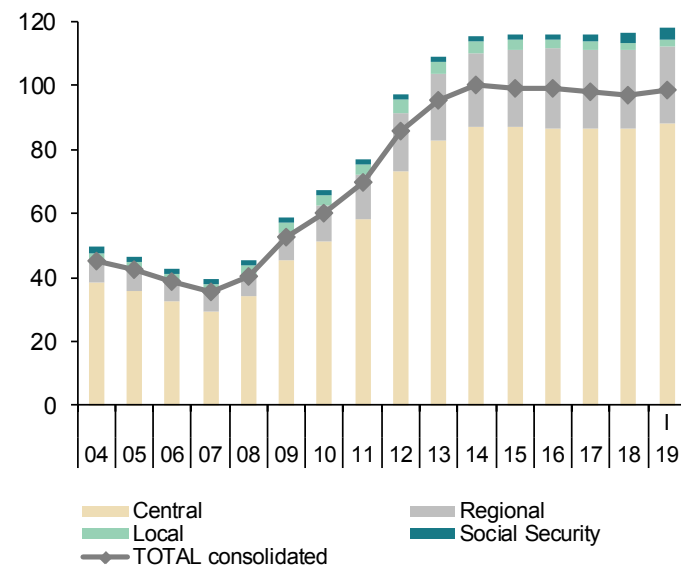


Table 8

General activity and industrial sector indicators (a)

	General activity indicators				Industrial sector indicators					
	Economic Sentiment Index	Composite PMI index	Social Security Affiliates (f)	Electricity consumption (temperature adjusted)	Industrial production index	Social Security Affiliates in industry	Manufacturing PMI index	Industrial confidence index	Manufacturing Turnover index deflated	Industrial orders
	Index	Index	Thousands	1,000 GWH	2015=100	Thousands	Index	Balance of responses	2015=100 (smoothed)	Balance of responses
2012	86.3	43.1	16,335.3	255.7	97.1	2,113.9	43.8	-17.6	96.7	-37.1
2013	90.6	48.3	15,855.2	250.2	95.5	2,021.6	48.5	-14.0	94.2	-30.7
2014	100.7	55.1	16,111.1	249.8	96.8	2,022.8	53.2	-7.1	96.1	-16.3
2015	107.6	56.7	16,641.8	254.0	100.0	2,067.3	53.6	-0.3	100.0	-5.4
2016	105.6	54.9	17,157.5	254.1	101.8	2,124.7	53.1	-2.3	102.7	-5.4
2017	108.3	56.2	17,789.6	258.7	105.0	2,191.0	54.8	1.0	107.0	2.2
2018	108.0	54.6	18,364.5	259.4	105.3	2,250.9	53.3	-0.1	108.6	-0.2
2019 (b)	105.0	53.4	18,735.0	128.3	107.8	2,271.7	50.5	-4.2	108.1	-4.3
2017 III	108.6	56.1	17,870.3	64.3	104.9	2,200.2	53.5	-0.1	107.5	0.8
IV	110.0	55.2	18,020.1	65.5	107.8	2,217.7	55.9	4.3	108.6	4.8
2018 I	109.6	56.6	18,156.2	65.4	106.2	2,234.7	55.3	2.8	109.0	1.2
II	109.4	55.4	18,292.9	64.8	105.3	2,245.7	53.8	1.2	109.1	2.9
III	106.7	52.7	18,427.5	65.2	105.4	2,257.5	52.4	-2.6	109.1	-2.4
IV	106.4	53.7	18,582.1	64.2	104.8	2,266.5	51.8	-1.9	109.0	-2.4
2019 I	105.2	54.5	18,705.5	63.8	106.1	2,273.9	51.1	-3.8	109.1	-5.9
II (b)	104.8	52.4	18,811.6	63.2	107.0	2,279.1	49.9	-4.6	109.3	-2.7
2019 Apr	104.1	52.9	18,782.8	21.1	106.8	2,278.7	51.8	-4.9	109.3	-2.1
May	105.4	52.1	18,812.9	21.0	107.2	2,279.1	50.1	-4.1	--	-5.1
Jun	104.8	52.1	18,839.2	21.0	--	2,279.3	47.9	-4.8	--	-1.0
Percentage changes (c)										
2012	--	--	-3.7	-2.1	-6.7	-5.3	--	--	-4.9	--
2013	--	--	-2.9	-2.2	-1.6	-4.4	--	--	-2.6	--
2014	--	--	1.6	-0.1	1.3	0.1	--	--	2.0	--
2015	--	--	3.3	1.7	3.4	2.2	--	--	4.1	--
2016	--	--	3.1	0.0	1.8	2.8	--	--	2.7	--
2017	--	--	3.7	1.8	3.2	3.1	--	--	4.3	--
2018	--	--	3.2	0.3	0.3	2.7	--	--	1.5	--
2019 (d)	--	--	3.0	-2.4	0.7	1.6	--	--	1.3	--
2017 III	--	--	3.3	-3.0	2.6	3.2	--	--	5.0	--
IV	--	--	3.4	7.7	11.2	3.2	--	--	3.9	--
2018 I	--	--	3.1	-0.9	-5.8	3.1	--	--	1.6	--
II	--	--	3.0	-3.3	-3.2	2.0	--	--	0.4	--
III	--	--	3.0	2.5	0.6	2.1	--	--	-0.3	--
IV	--	--	3.4	-6.1	-2.3	1.6	--	--	-0.4	--
2019 I	--	--	2.7	-2.2	4.9	1.3	--	--	0.5	--
II (e)	--	--	2.3	-3.8	3.5	0.9	--	--	0.6	--
2019 Apr	--	--	0.2	1.0	1.8	0.1	--	--	0.1	--
May	--	--	0.2	-0.8	0.3	0.0	--	--	--	--
Jun	--	--	0.1	-0.9	--	0.0	--	--	--	--

(a) Seasonally adjusted, except for annual data. (b) Period with available data. (c) Annualized percent change from the previous quarter for quarterly data, non-annualized percent change from the previous month for monthly data, unless otherwise indicated. (d) Growth of available period over the same period of the previous year. (e) Annualized growth of the average of available months over the monthly average of the previous quarter. (f) Excluding domestic service workers and non-professional caregivers.

Sources: European Commission, Markit Economics Ltd., M. of Labour, M. of Industry, National Statistics Institute, REE and Funcas.

Chart 8.1 - General activity indicators (I)

Annualized percent change from previous period

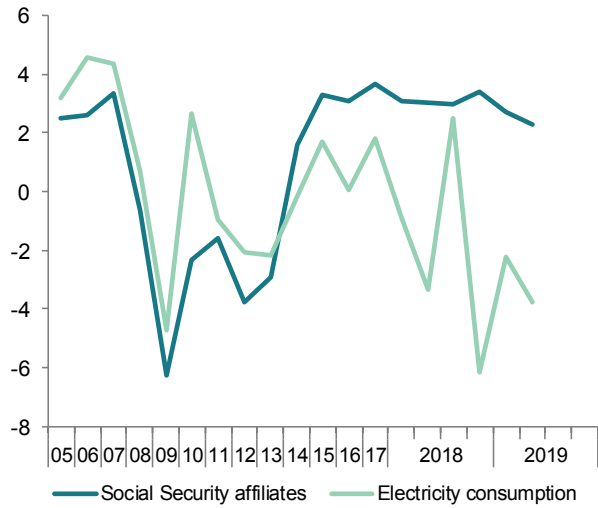


Chart 8.2.- General activity indicators (II)

Index

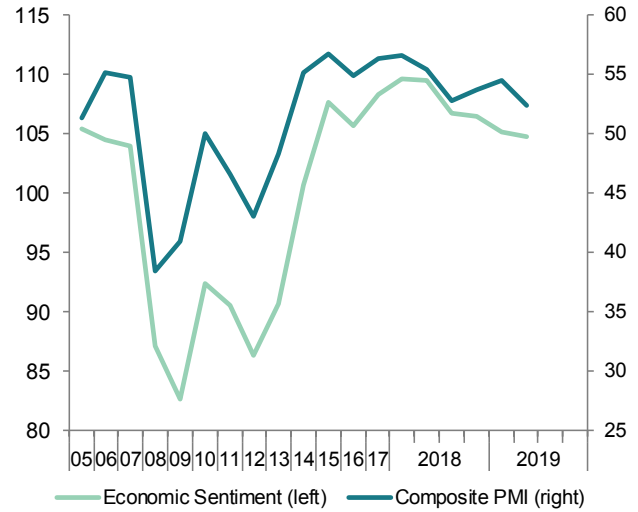


Chart 8.3 - Industrial sector indicators (I)

Annualized percent change from previous period

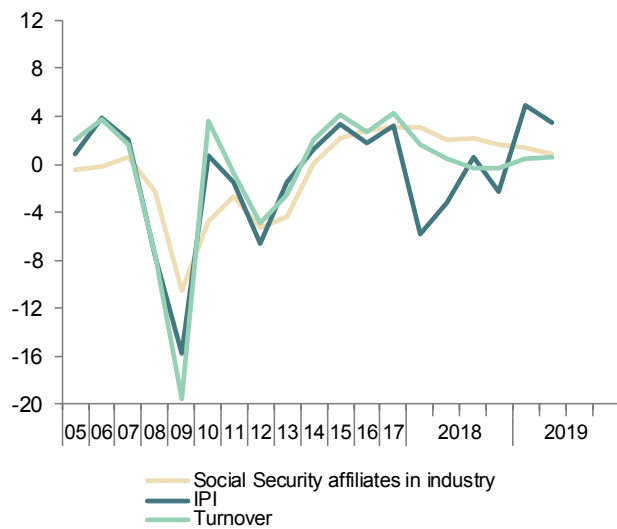


Chart 8.4 - Industrial sector indicators (II)

Index



Table 9

Construction and services sector indicators (a)

	Construction indicators					Service sector indicators						
	Social Security Affiliates in construction	Industrial production index construction materials	Construction confidence index	Official tenders (f)	Housing permits (f)	Social Security Affiliates in services (g)	Turnover index (nominal)	Services PMI index	Hotel overnight stays	Passenger air transport	Services confidence index	
	Thousands	2015=100 (smoothed)	Balance of responses	EUR Billions (smoothed)	Million m ²	Thousands	2015=100 (smoothed)	Index	Million (smoothed)	Million (smoothed)	Balance of responses	
2012	1,135.5	101.2	-54.9	7.4	8.5	11,907.2	94.8	43.1	280.7	193.2	-21.5	
2013	996.8	93.6	-55.6	9.2	6.8	11,727.9	92.9	48.3	286.0	186.5	-15.3	
2014	980.3	92.8	-41.4	13.1	6.9	11,995.5	95.3	55.2	295.3	194.9	9.9	
2015	1,026.7	100.0	-25.3	9.4	9.9	12,432.3	100.0	57.3	308.2	206.6	19.4	
2016	1,053.9	102.6	-39.6	9.2	12.7	12,851.6	104.2	55.0	331.2	229.4	17.8	
2017	1,118.8	111.5	-26.9	12.7	15.9	13,338.2	111.0	56.4	340.6	248.4	22.5	
2018	1,194.1	114.2	-4.6	16.6	19.8	13,781.3	117.5	54.8	340.1	262.9	21.7	
2019 (b)	1,249.2	126.0	-4.2	8.6	7.1	14,052.5	116.2	54.2	112.5	106.3	15.2	
2017	III	1,126.2	111.9	-23.5	3.4	3,7	13,402.2	111.8	56.8	85.5	62.7	25.2
	IV	1,149.1	112.8	-15.7	3.8	4.0	13,515.6	113.6	54.6	85.4	63.7	22.3
2018	I	1,164.2	112.9	-4.3	3.8	4.7	13,625.7	115.4	56.8	85.3	64.7	23.5
	II	1,182.3	113.5	-4.1	3.9	5.2	13,726.1	117.1	55.8	85.4	65.5	23.5
	III	1,206.1	115.6	-8.3	4.4	4.9	13,828.0	118.6	52.6	85.7	66.4	21.6
	IV	1,224.7	118.8	-1.6	5.0	5.0	13,943.6	119.9	54.0	86.2	67.6	18.0
2019	I	1,244.0	122.8	-0.6	5.2	5.2	14,041.4	121.4	55.3	86.6	68.6	15.5
	II	1,252.0	125.7	-7.8	3.4	1.8	14,139.2	122.5	53.1	57.8	46.0	14.8
2019	Apr	1,250.9	125.2	-7.5	1.7	1.8	14,110.9	122.5	53.1	28.9	23.0	15.2
	May	1,251.7	126.2	-22.8	1.7	--	14,140.0	--	52.8	28.9	23.0	17.6
	Jun	1,253.6	--	6.9	--	--	14,166.7	--	53.6	--	--	11.5
Percentage changes (c)												
2012	-17.0	-28.2	--	-45.5	-39.9	-2.2	-6.1	--	-2.1	-5.0	--	
2013	-12.2	-7.5	--	23.2	-20.3	-1.5	-2.0	--	1.9	-3.5	--	
2014	-1.7	-0.9	--	42.6	2.2	2.3	2.6	--	3.2	4.6	--	
2015	4.7	7.8	--	-28.2	42.6	3.6	4.9	--	4.4	6.0	--	
2016	2.6	2.6	--	-1.6	29.0	3.4	4.2	--	7.4	11.0	--	
2017	6.2	8.6	--	37.1	24.8	3.8	6.6	--	2.8	8.3	--	
2018	6.7	2.4	--	31.2	24.5	3.3	5.8	--	-0.1	5.8	--	
2019 (d)	6.5	11.6	--	60.1	16.0	3.0	5.6	--	1.4	5.7	--	
2017	III	5.9	4.3	--	49.6	28.9	3.6	5.7	--	-0.1	7.4	--
	IV	8.4	3.4	--	69.5	24.8	3.4	6.6	--	-0.7	6.7	--
2018	I	5.4	0.4	--	59.5	18.9	3.3	6.5	--	-0.4	5.9	--
	II	6.4	2.3	--	35.2	23.5	3.0	5.8	--	0.3	5.1	--
	III	8.3	7.3	--	28.1	32.7	3.0	5.2	--	1.4	5.7	--
	IV	6.3	11.7	--	31.8	23.3	3.4	4.7	--	2.7	7.5	--
2019	I	6.5	14.2	--	37.1	11.0	2.8	5.1	--	1.6	5.8	--
	II (e)	2.6	9.6	--	35.8	32.8	2.8	3.6	--	0.4	2.4	--
2019	Apr	0.1	0.9	--	381.4	32.8	0.3	0.5	--	0.0	0.2	--
	May	0.1	0.8	--	142.1	--	0.2	--	--	0.0	0.2	--
	Jun	0.2	--	--	--	--	0.2	--	--	--	--	--

(a) Seasonally adjusted, except for annual data and (f). (b) Period with available data. (c) Annualized percent change from the previous quarter for quarterly data, non-annualized percent change from the previous month for monthly data, unless otherwise indicated. (d) Growth of available period over the same period of the previous year. (e) Annualized growth of the average of available months over the monthly average of the previous quarter. (f) Percent changes are over the same period of the previous year. (g) Excluding domestic service workers and non-professional caregivers.

Sources: European Commission, Markit Economics Ltd., M. of Labour, M. of Public Works, National Statistics Institute, AENA, OFICEMEN, SEOPAN and Funcas.

Chart 9.1 - Construction indicators (I)

Annualized percentage changes from previous period and index

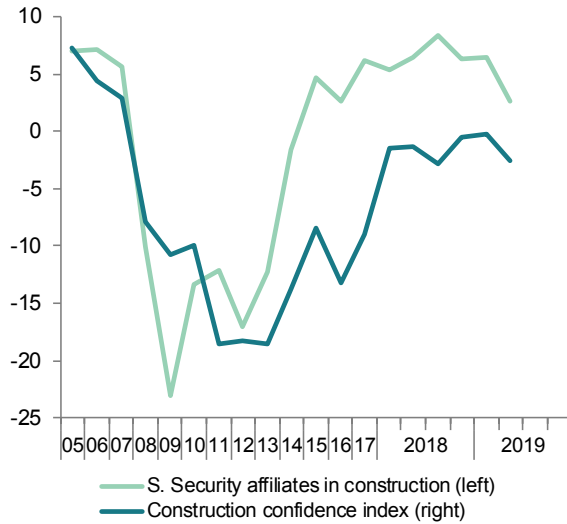


Chart 9.2 - Construction indicators (II)

Annualized percentage changes from previous period

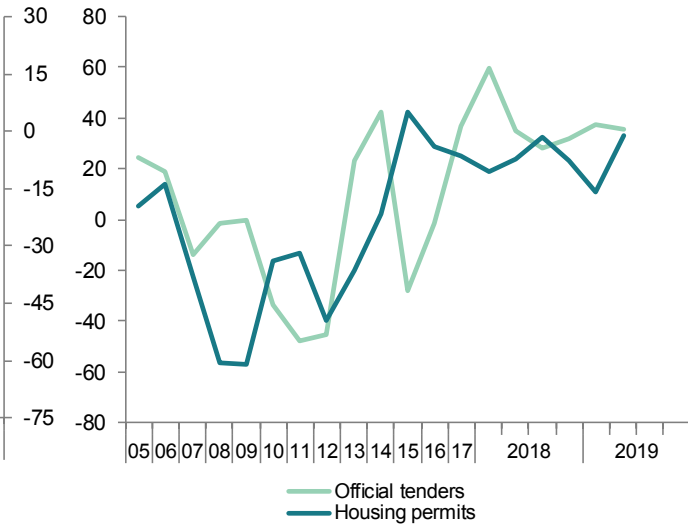


Chart 9.3 - Services indicators (I)

Annualized percentage change from previous period

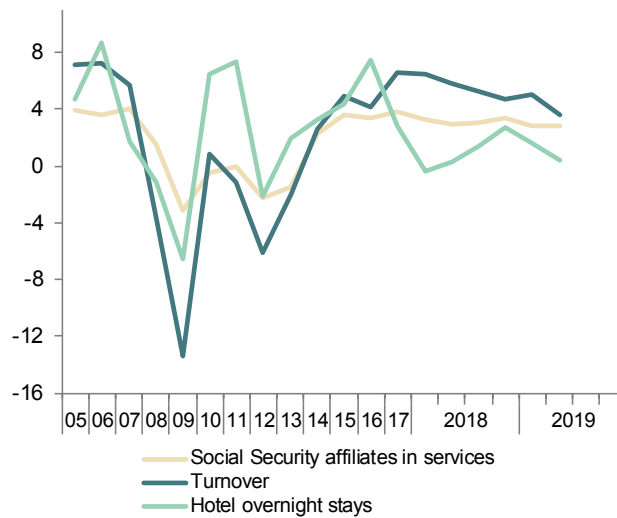


Chart 9.4 - Services indicators (II)

Index

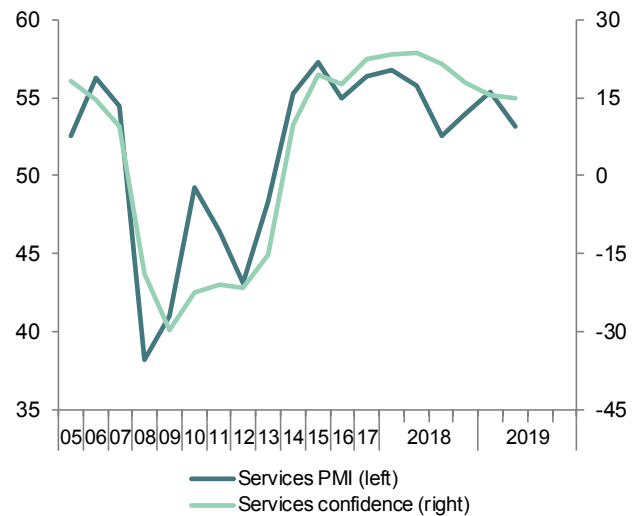


Table 10

Consumption and investment indicators (a)

	Consumption indicators					Investment in equipment indicators		
	Retail sales deflated	Car registrations	Consumer confidence index	Hotel overnight stays by residents in Spain	Industrial orders for consumer goods	Cargo vehicles registrations	Industrial orders for investment goods	Imports of capital goods (volume)
	2015=100 (smoothed)	Thousands (smoothed)	Balance of responses	Million (smoothed)	Balance of responses	Thousands (smoothed)	Balance of responses	2005=100 (smoothed)
2012	98.8	710.6	-33.7	102.1	-24.2	107.7	-38.6	60.6
2013	95.0	742.3	-28.1	100.6	-21.8	107.6	-33.5	68.9
2014	96.0	890.1	-14.5	104.7	-9.1	137.5	-16.5	81.6
2015	100.0	1,094.0	-4.7	110.3	-3.1	180.3	0.2	93.3
2016	103.9	1,230.1	-6.3	114.2	-1.4	191.3	-0.2	97.2
2017	104.7	1,341.6	-3.4	115.8	2.2	207.6	4.9	103.3
2018	105.4	1,424.0	-4.2	116.5	-5.8	230.0	12.4	105.4
2019 (b)	102.5	612.6	-4.4	40.3	-2.3	95.6	13.7	102.1
2017	III 105.1	340.3	-1.4	28.9	4.5	53.0	-2.0	103.1
	IV 105.2	352.0	-2.5	29.0	-2.8	54.9	12.4	102.7
2018	I 105.3	358.5	-3.9	29.0	-0.4	56.6	13.8	104.1
	II 105.3	361.9	-3.0	29.1	-5.1	57.8	15.7	106.3
	III 105.5	358.3	-3.7	29.2	-10.9	58.2	11.3	107.0
	IV 106.0	345.7	-6.2	29.5	-6.7	57.4	8.8	105.7
2019	I 106.7	338.8	-4.8	29.7	-3.0	56.5	10.9	104.6
	II (b) 107.3	224.9	-4.0	19.9	-1.7	37.0	16.4	103.9
2019	Apr 107.2	112.5	-6.1	9.9	-4.0	18.6	12.8	103.9
	May 107.4	112.4	-3.7	10.0	-0.6	18.4	18.0	--
	Jun --	--	-2.1	--	-0.4	--	18.4	--
Percentage changes (c)								
2012	-7.4	-12.1	--	-8.4	--	-24.2	--	-10.9
2013	-3.8	4.5	--	-1.4	--	-0.1	--	13.7
2014	1.1	19.9	--	4.1	--	27.8	--	18.4
2015	4.2	22.9	--	5.3	--	31.1	--	14.4
2016	3.9	12.4	--	3.6	--	6.1	--	4.1
2017	0.8	9.1	--	1.4	--	8.5	--	6.4
2018	0.7	6.1	--	0.5	--	10.8	--	2.0
2019 (d)	1.6	-3.9	--	3.1	--	-0.7	--	2.2
2017	III 1.0	14.8	--	0.6	--	15.1	--	-3.2
	IV 0.3	14.4	--	1.1	--	15.5	--	-1.5
2018	I 0.4	7.7	--	0.2	--	12.5	--	5.5
	II 0.2	3.8	--	0.2	--	9.1	--	8.7
	III 0.7	-3.8	--	2.0	--	2.4	--	2.8
	IV 1.9	-13.4	--	4.2	--	-5.0	--	-4.8
2019	I 2.6	-7.7	--	3.2	--	-6.0	--	-4.3
	II (e) 2.3	-1.8	--	1.8	--	-6.8	--	-2.5
2019	Mar 0.2	-0.2	--	0.2	--	-0.7	--	-0.3
	Apr 0.2	-0.1	--	0.2	--	-0.7	--	-0.3
	May 0.2	-0.1	--	0.2	--	-0.8	--	--

(a) Seasonally adjusted, except for annual data. (b) Period with available data. (c) Annualized percent change from the previous quarter for quarterly data, non-annualized percent change from the previous month for monthly data, unless otherwise indicated. (d) Growth of available period over the same period of the previous year. (e) Annualized growth of the average of available months over the monthly average of the previous quarter.

Sources: European Commission, M. of Economy, M. of Industry, National Statistics Institute, DGT, ANFAC and Funcas.

Chart 10.1 - Consumption indicators

Percent change from previous period and balance of responses

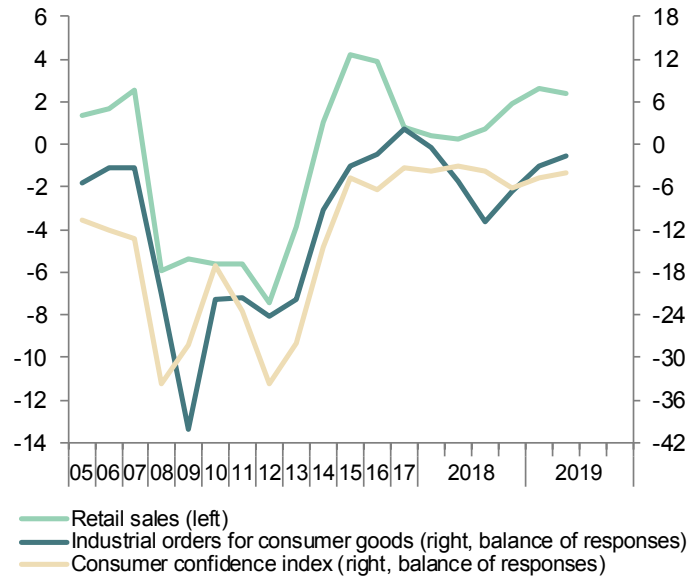


Chart 10.2 - Investment indicators

Percent change from previous period and balance of responses

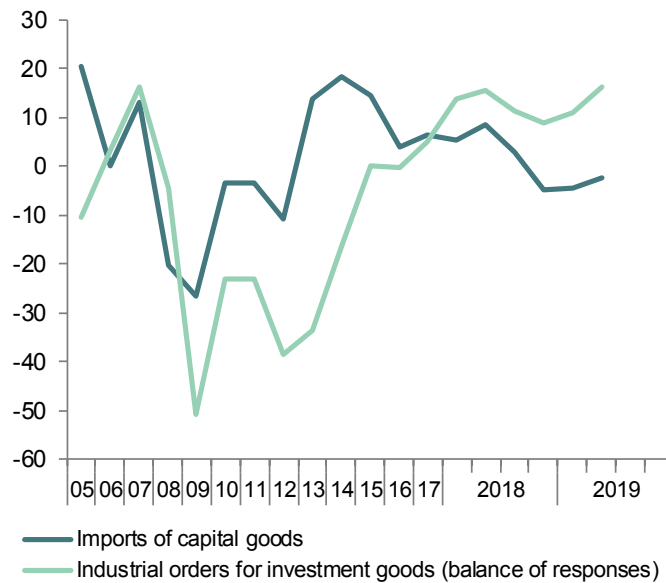


Table 11a

Labour market (I)

Forecasts in yellow

	Population aged 16 or more	Labour force		Employment		Unemployment		Participation rate aged 16 or more (a)	Employment rate aged 16 or more (b)	Unemployment rate (c)				
		Original	Seasonally adjusted	Original	Seasonally adjusted	Original	Seasonally adjusted			Total	Aged 16-24	Spanish	Foreign	
		I	2=4+6	3=5+7	4	5	6			7	Seasonally adjusted			
										Percentage				
										10=7/3	11	12	13	
										Million				
2012	38.8	23.4	--	17.6	--	5.8	--	60.4	45.4	24.8	52.9	23.0	35.9	
2013	38.6	23.2	--	17.1	--	6.1	--	60.0	44.4	26.1	55.5	24.4	37.0	
2014	38.5	23.0	--	17.3	--	5.6	--	59.6	45.0	24.4	53.2	23.0	34.5	
2015	38.5	22.9	--	17.9	--	5.1	--	59.5	46.4	22.1	48.3	20.9	30.5	
2016	38.5	22.8	--	18.3	--	4.5	--	59.2	47.6	19.6	44.4	18.7	26.6	
2017	38.7	22.7	--	18.8	--	3.9	--	58.8	48.7	17.2	38.6	16.3	23.8	
2018	38.9	22.8	--	19.3	--	3.5	--	58.6	49.7	15.3	34.4	14.3	21.9	
2019	39.3	22.9	--	19.8	--	3.1	--	58.3	50.3	13.7	--	--	--	
2020	39.5	22.9	--	20.1	--	2.8	--	58.0	50.8	12.4	--	--	--	
2021	39.8	23.0	--	20.4	--	2.6	--	57.9	51.2	11.5	--	--	--	
2017	II	38.6	22.7	22.7	18.8	18.7	3.9	4.0	58.8	48.3	17.2	39.5	16.4	23.6
	III	38.7	22.8	22.7	19.0	18.8	3.7	3.9	58.8	48.6	16.4	36.0	15.5	22.7
	IV	38.7	22.8	22.8	19.0	18.9	3.8	3.9	58.8	48.8	16.5	37.5	15.6	23.6
2018	I	38.8	22.7	22.7	18.9	19.0	3.8	3.8	58.7	49.0	16.7	36.3	15.7	24.3
	II	38.8	22.8	22.8	19.3	19.2	3.5	3.6	58.7	49.4	15.3	34.7	14.3	21.9
	III	38.9	22.9	22.8	19.5	19.3	3.3	3.5	58.6	49.6	14.6	33.0	13.7	20.6
2018	IV	39.0	22.9	22.8	19.6	19.5	3.3	3.4	58.6	49.8	14.4	33.5	13.5	20.8
	I	39.1	22.8	22.9	19.5	19.6	3.4	3.3	58.5	50.1	14.7	35.0	13.8	20.9
Percentage changes (d)								Difference from one year ago						
2012	-0.5	0.0	--	-4.3	--	15.9	--	0.4	-2.3	3.4	6.7	3.5	3.3	
2013	-0.5	-1.1	--	-2.8	--	4.1	--	-0.4	-1.1	1.3	2.6	1.5	1.1	
2014	-0.3	-1.0	--	1.2	--	-7.3	--	-0.4	0.7	-1.7	-2.3	-1.4	-2.5	
2015	0.0	-0.1	--	3.0	--	-9.9	--	-0.1	1.4	-2.4	-4.9	-2.1	-4.0	
2016	0.1	-0.4	--	2.7	--	-11.4	--	-0.3	1.2	-2.4	-3.9	-2.2	-3.8	
2017	0.3	-0.4	--	2.6	--	-12.6	--	-0.4	1.1	-2.4	-5.9	-2.4	-2.8	
2018	0.6	0.3	--	2.7	--	-11.2	--	-0.2	1.0	-2.0	-4.2	-2.0	-1.9	
2019	1.0	0.4	--	2.2	--	-9.8	--	-0.3	0.6	-1.5	--	--	--	
2020	0.7	0.2	--	1.7	--	-9.5	--	-0.3	0.5	-1.3	--	--	--	
2021	0.7	0.4	--	1.5	--	-6.9	--	-0.1	0.4	-0.9	--	--	--	
2017	II	0.3	-0.6	-0.8	2.8	2.7	-14.4	-14.2	-0.6	1.1	-2.8	-7.0	-2.7	-3.7
	III	0.3	-0.3	-0.4	2.8	2.8	-13.6	-13.3	-0.4	1.2	-2.5	-6.0	-2.6	-2.1
	IV	0.3	0.1	0.0	2.6	2.7	-11.1	-11.2	-0.2	1.1	-2.1	-5.5	-2.3	-1.1
2018	I	0.4	-0.1	-0.1	2.4	2.4	-10.8	-11.2	-0.3	1.0	-2.0	-5.3	-2.1	-1.2
	II	0.5	0.5	0.4	2.8	2.8	-10.8	-10.7	-0.1	1.1	-1.9	-4.8	-2.0	-1.7
	III	0.6	0.3	0.3	2.5	2.5	-10.9	-10.6	-0.2	0.9	-1.8	-3.0	-1.8	-2.1
2018	IV	0.8	0.5	0.4	3.0	3.0	-12.3	-12.3	-0.2	1.1	-2.1	-3.9	-2.0	-2.8
	I	0.9	0.7	0.7	3.2	3.2	-11.6	-12.1	-0.1	1.1	-2.0	-1.4	-1.9	-3.4

(a) Labour force aged 16 or more over population aged 16 or more. (b) Employed aged 16 or more over population aged 16 or more. (c) Unemployed in each group over labour force in that group. (d) Annual percentage changes for original data; annualized quarterly percentage changes for S.A. data.

Source: INE (Labour Force Survey) and Funcas.

Chart 11a.1 - Labour force, Employment and unemployment, S.A.

Annual / annualized quarterly growth rates and percentage of active population

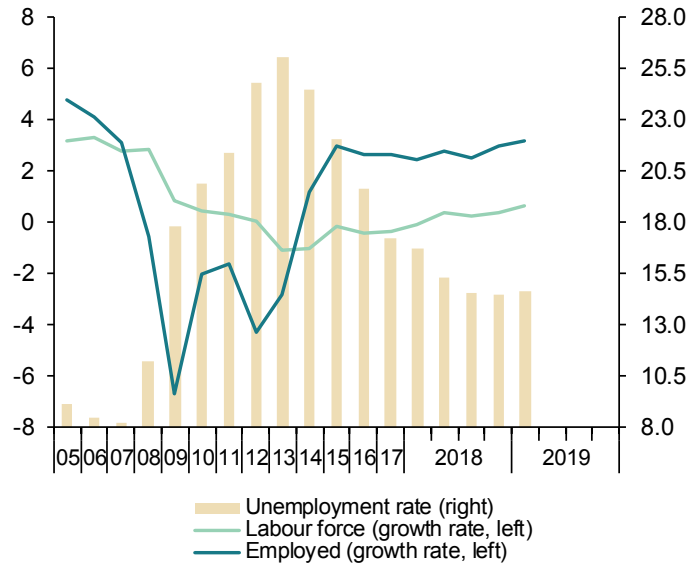


Chart 11a.2 - Unemployment rates, S.A.

Percentage

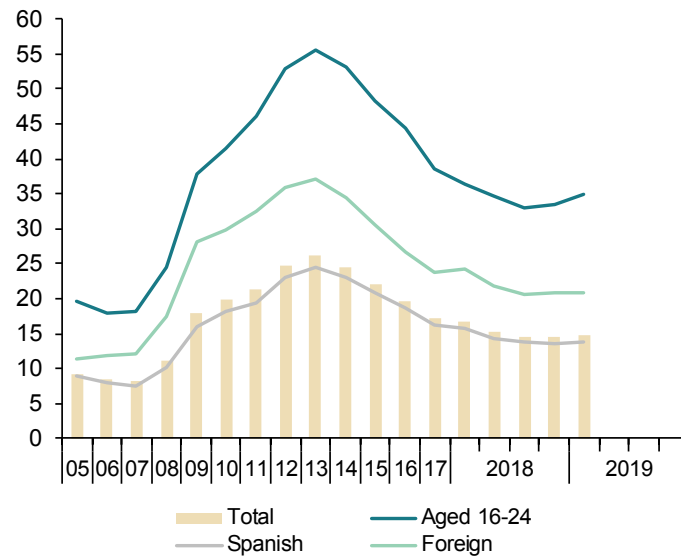


Table 11b

Labour market (II)

	Employed by sector				Employed by professional situation				Employed by duration of the working-day				
	Agriculture	Industry	Construction	Services	Employees			Self employed	Full-time	Part-time	Part-time employment rate (b)		
					Total	By type of contract							
						Tempo- rary	Indefinite					Temporary employment rate (a)	
I	2	3	4	5=6+7	6	7	8=6/5	9	10	11	12		
Million (original data)													
2012	0.74	2.48	1.16	13.24	14.57	3.41	11.16	23.4	3.06	15.08	2.55	14.49	
2013	0.74	2.36	1.03	13.02	14.07	3.26	10.81	23.1	3.07	14.43	2.71	15.80	
2014	0.74	2.38	0.99	13.23	14.29	3.43	10.86	24.0	3.06	14.59	2.76	15.91	
2015	0.74	2.48	1.07	13.57	14.77	3.71	11.06	25.1	3.09	15.05	2.81	15.74	
2016	0.77	2.52	1.07	13.97	15.23	3.97	11.26	26.1	3.11	15.55	2.79	15.21	
2017	0.82	2.65	1.13	14.23	15.72	4.19	11.52	26.7	3.11	16.01	2.82	14.97	
2018	0.81	2.71	1.22	14.59	16.23	4.35	11.88	26.8	3.09	16.56	2.76	14.31	
2019 (c)	0.84	2.71	1.28	14.64	16.36	4.23	12.12	25.9	3.11	16.57	2.90	14.90	
2017	II	0.83	2.64	1.13	14.21	15.69	4.21	11.48	26.8	3.12	15.94	2.87	15.26
	III	0.78	2.67	1.15	14.45	15.91	4.36	11.55	27.4	3.14	16.32	2.73	14.31
	IV	0.82	2.71	1.14	14.32	15.92	4.25	11.67	26.7	3.08	16.19	2.81	14.77
2018	I	0.83	2.68	1.15	14.21	15.79	4.12	11.67	26.1	3.08	16.06	2.81	14.91
	II	0.82	2.72	1.22	14.58	16.26	4.36	11.90	26.8	3.09	16.71	2.64	13.63
	III	0.77	2.73	1.24	14.79	16.43	4.51	11.93	27.4	3.09	16.81	2.71	13.90
	IV	0.83	2.71	1.28	14.75	16.45	4.42	12.03	26.9	3.11	16.67	2.89	14.80
2019	I	0.84	2.71	1.28	14.64	16.36	4.23	12.12	25.9	3.11	16.57	2.90	14.90
Annual percentage changes									Difference from one year ago	Annual percentage changes			Difference from one year ago
2012	-1.6	-4.6	-17.3	-3.0	-5.3	-11.8	-3.1	-1.7	1.1	-5.3	2.3	0.9	
2013	-0.9	-5.2	-11.4	-1.7	-3.5	-4.6	-3.1	-0.3	0.4	-4.3	6.0	1.3	
2014	-0.1	1.0	-3.5	1.7	1.5	5.3	0.4	0.9	-0.4	1.1	1.9	0.1	
2015	0.1	4.3	8.1	2.6	3.4	8.3	1.9	1.1	1.1	3.2	1.9	-0.2	
2016	5.1	1.6	0.0	2.9	3.1	6.8	1.8	0.9	0.7	3.3	-0.8	-0.5	
2017	5.8	5.0	5.1	1.9	3.2	5.6	2.3	0.6	-0.1	2.9	1.0	-0.2	
2018	-0.8	2.3	8.3	2.5	3.3	3.8	3.1	0.1	-0.5	3.5	-1.9	-0.7	
2019 (d)	0.7	1.2	11.2	3.0	3.6	2.7	3.9	-0.2	1.0	3.2	3.1	0.0	
2017	II	9.5	5.6	5.2	1.7	3.3	7.7	1.8	1.1	0.3	2.9	2.5	-0.1
	III	4.5	5.5	4.3	2.1	3.3	4.9	2.7	0.4	0.6	3.1	1.1	-0.2
	IV	0.5	5.1	6.0	2.1	3.5	4.4	3.2	0.2	-1.5	3.3	-1.0	-0.5
2018	I	-1.6	4.1	6.5	2.0	2.9	4.4	2.4	0.4	-0.5	3.2	-2.1	-0.7
	II	-1.2	3.3	7.2	2.6	3.6	3.6	3.6	0.0	-1.2	4.8	-8.1	-1.6
	III	-1.1	2.1	7.4	2.4	3.3	3.5	3.2	0.1	-1.5	3.0	-0.4	-0.4
	IV	0.6	-0.1	11.9	3.0	3.3	3.9	3.1	0.2	1.1	2.9	3.2	0.0
2019	I	0.7	1.2	11.2	3.0	3.6	2.7	3.9	-0.2	1.0	3.2	3.1	0.0

(a) Percentage of employees with temporary contract over total employees. (b) Percentage of part-time employed over total employed. (c) Period with available data. (d) Growth of available period over the same period of the previous year.

Source: INE (Labour Force Survey).

Chart 11b 1.- Employment by sector

Annual percentage changes

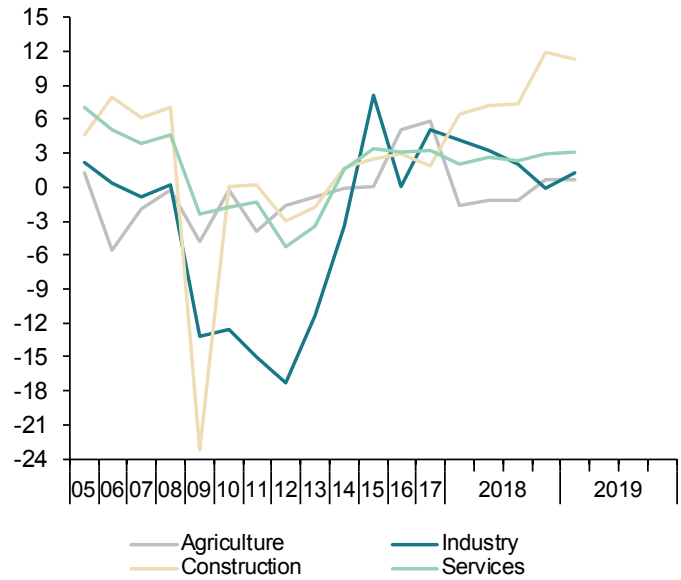


Chart 11b.2 - Employment by type of contract

Annual percentage changes and percentage over total employees

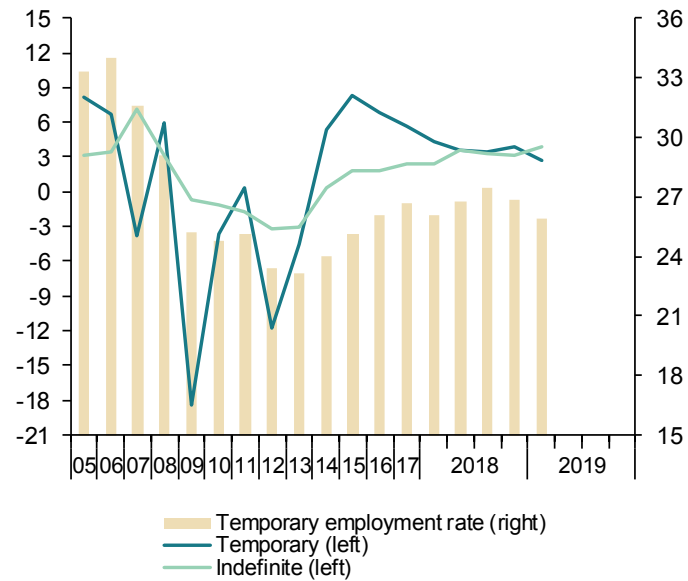


Table 12

Index of Consumer Prices

Forecasts in yellow

	Total	Total excluding food and energy	Excluding unprocessed food and energy				Unprocessed food	Energy	Food	
			Total	Non-energy industrial goods	Services	Processed food				
% of total in 2018	100.00	66.27	80.76	25.15	41.12	14.49	7.29	11.95	21.78	
Indexes, 2016 = 100										
2013	100.9	98.7	98.5	99.6	98.1	97.9	97.3	121.3	97.7	
2014	100.7	98.7	98.6	99.2	98.3	98.2	96.0	120.3	97.6	
2015	100.2	99.2	99.2	99.5	98.9	99.2	97.7	109.4	98.7	
2016	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
2017	102.0	101.1	101.1	100.2	101.6	100.7	102.6	108.0	101.3	
2018	103.7	102.1	102.0	100.2	103.1	101.7	105.8	114.7	103.1	
2019	104.5	103.1	103.0	100.4	104.6	102.6	108.0	113.8	104.3	
2020	105.7	104.3	104.2	100.7	106.4	103.6	110.4	113.9	105.8	
Annual percentage changes										
2013	1.4	1.1	1.4	0.6	1.4	3.1	3.6	0.0	3.2	
2014	-0.2	0.0	0.0	-0.4	0.1	0.4	-1.2	-0.8	-0.1	
2015	-0.5	0.5	0.6	0.3	0.7	0.9	1.8	-9.0	1.2	
2016	-0.2	0.8	0.8	0.5	1.1	0.8	2.3	-8.6	1.3	
2017	2.0	1.1	1.1	0.2	1.6	0.7	2.6	8.0	1.3	
2018	1.7	0.9	0.9	0.0	1.5	1.0	3.1	6.1	1.8	
2019	0.8	1.0	1.0	0.2	1.5	0.9	2.1	-0.8	1.2	
2020	1.1	1.2	1.2	0.3	1.7	1.1	2.2	0.1	1.4	
2019	Jan	1.0	0.9	0.8	0.1	1.4	0.4	2.3	1.5	1.0
	Feb	1.1	0.7	0.7	0.1	1.1	0.4	3.4	2.6	1.4
	Mar	1.3	0.7	0.7	0.2	1.1	0.4	2.0	5.6	0.9
	Apr	1.5	1.1	0.9	0.2	1.7	0.3	1.8	5.4	0.8
	May	0.8	0.8	0.7	0.2	1.2	0.3	1.0	1.3	0.6
	Jun	0.4	1.0	0.9	0.2	1.4	0.4	0.6	-2.6	0.5
	Jul	0.6	1.0	1.0	0.3	1.5	0.7	1.8	-2.7	1.1
	Aug	0.5	1.1	1.1	0.3	1.6	0.9	2.1	-3.9	1.3
	Sep	0.4	1.1	1.1	0.3	1.7	1.2	2.6	-5.4	1.7
	Oct	0.3	1.1	1.1	0.3	1.6	1.3	2.3	-6.1	1.6
	Nov	0.7	1.1	1.2	0.2	1.6	1.8	2.5	-3.7	2.0
	Dec	1.3	1.1	1.3	0.2	1.6	2.1	2.8	0.3	2.3
2020	Jan	1.3	1.1	1.3	0.2	1.7	2.1	3.6	0.3	2.6
	Feb	1.1	1.1	1.3	0.2	1.7	1.9	3.1	-1.6	2.3
	Mar	1.0	1.2	1.3	0.3	1.8	1.7	3.4	-1.9	2.3
	Apr	0.9	1.2	1.3	0.3	1.8	1.5	3.2	-2.9	2.1
	May	0.9	1.3	1.3	0.3	1.9	1.4	3.0	-2.8	1.9
	Jun	1.3	1.3	1.3	0.3	1.8	1.2	2.3	1.1	1.6
	Jul	1.2	1.2	1.2	0.4	1.8	0.9	1.6	1.2	1.2
	Aug	1.2	1.2	1.1	0.4	1.7	0.7	1.4	1.6	0.9
	Sep	1.2	1.2	1.0	0.4	1.6	0.5	1.4	1.8	0.8
	Oct	1.2	1.2	1.0	0.4	1.6	0.4	1.6	1.7	0.8
	Nov	1.1	1.2	1.0	0.4	1.7	0.3	1.2	1.7	0.6
	Dec	1.1	1.2	1.0	0.4	1.6	0.2	0.8	1.7	0.4

Source: INE and Funcas (Forecasts).

Chart 12.1 - Inflation Rate (I)

Annual percentage changes

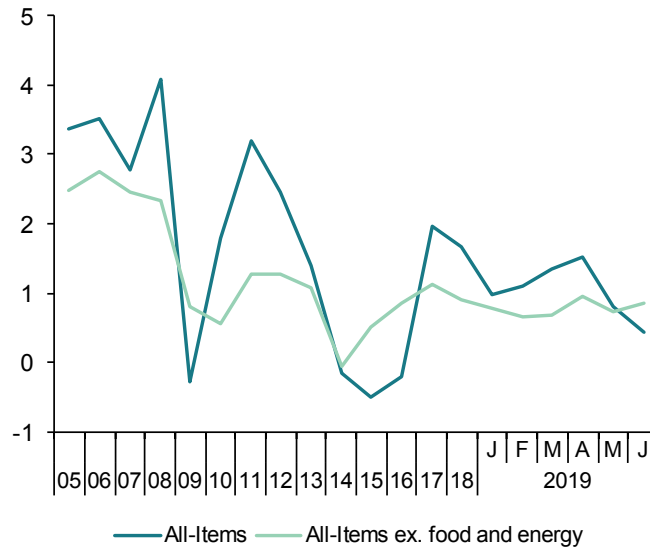


Chart 12.2 - Inflation rate (II)

Annual percentage changes

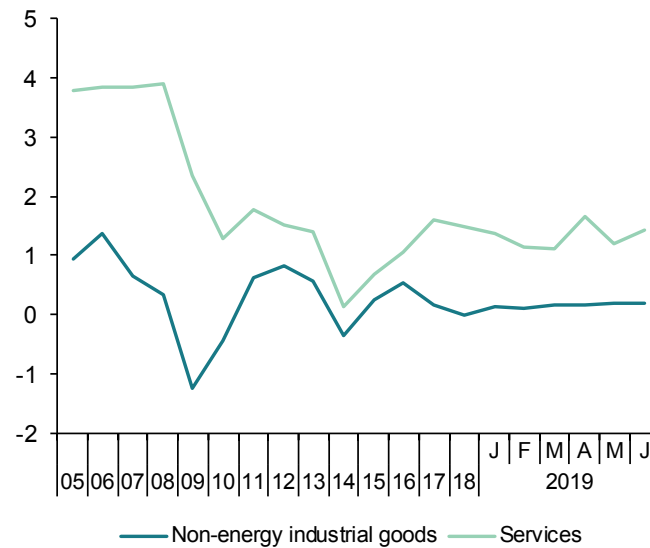


Table 13

Other prices and costs indicators

	GDP deflator (a)	Industrial producer prices		Housing prices		Urban land prices (M. Public Works)	Labour Costs Survey				Wage increase agreed in collective bargaining	
		Total	Excluding energy	Housing Price Index (INE)	m ² average price (M. Public Works)		Total labour costs per worker	Wage costs per worker	Other cost per worker	Total labour costs per hour worked		
		2010=100	2015=100	2007=100			2000=100					
2012	100.1	102.9	99.8	72.0	77.2	65.4	143.6	141.1	151.3	154.7	--	
2013	100.5	103.5	100.5	64.3	72.7	55.1	143.8	141.1	152.2	155.2	--	
2014	100.3	102.1	99.7	64.5	71.0	52.6	143.3	140.9	150.7	155.5	--	
2015	100.8	100.0	100.0	66.8	71.7	54.9	144.2	142.5	149.6	156.5	--	
2016	101.1	96.9	99.6	70.0	73.1	57.8	143.6	142.1	148.3	156.2	--	
2017	102.3	101.1	101.9	74.3	74.8	58.2	144.0	142.3	149.1	156.3	--	
2018	103.3	104.1	103.0	79.3	77.4	57.3	145.4	143.8	150.6	158.6	--	
2019 (b)	103.6	104.4	103.2	82.1	79.6	57.3	144.1	140.5	155.2	152.2	--	
2017	II	102.3	100.4	101.9	73.8	74.4	59.7	146.1	145.5	148.1	154.2	--
	III	102.4	100.5	102.0	75.2	74.9	58.2	138.7	135.5	148.6	159.0	--
	IV	103.1	102.1	102.2	75.8	75.8	54.9	150.9	151.3	149.6	164.9	--
2018	I	102.7	102.2	102.9	76.9	76.2	58.5	141.2	138.1	150.7	148.6	--
	II	103.3	103.4	103.1	78.8	77.2	58.5	147.0	146.2	149.6	155.6	--
	III	103.4	105.6	103.1	80.5	77.3	55.7	141.3	138.0	151.4	163.3	--
	IV	103.9	105.2	103.0	80.9	78.7	56.6	152.2	152.7	150.6	166.8	--
2019	I (b)	103.6	104.2	103.0	82.1	79.6	57.3	144.1	140.5	155.2	152.2	--
2019	Mar	--	104.0	103.2	--	--	--	--	--	--	--	--
	Apr	--	104.7	103.4	--	--	--	--	--	--	--	--
	May	--	104.6	103.3	--	--	--	--	--	--	--	--
Annual percent changes (c)												
2012	0.1	3.8	1.7	-13.7	-8.7	-6.4	-0.6	-0.6	-0.8	-0.1	1.0	
2013	0.4	0.6	0.7	-10.6	-5.8	-15.7	0.2	0.0	0.6	0.4	0.5	
2014	-0.2	-1.3	-0.8	0.3	-2.4	-4.6	-0.3	-0.1	-1.0	0.2	0.5	
2015	0.5	-2.1	0.3	3.6	1.1	4.3	0.6	1.1	-0.7	0.6	0.7	
2016	0.3	-3.1	-0.4	4.7	1.9	5.3	-0.4	-0.3	-0.8	-0.2	1.0	
2017	1.2	4.4	2.3	6.2	2.4	0.8	0.2	0.1	0.5	0.0	1.4	
2018	1.0	3.0	1.1	6.7	3.4	-1.6	1.0	1.0	1.0	1.4	1.8	
2019 (d)	0.9	1.9	0.2	6.8	4.4	-2.1	2.0	1.7	3.0	2.4	2.2	
2017	II	1.3	4.8	2.5	5.6	2.0	1.8	-0.1	0.0	-0.3	1.3	
	III	1.2	3.3	2.1	6.6	1.8	7.4	0.4	0.3	0.7	-0.3	1.4
	IV	1.8	2.6	2.1	7.2	0.9	-10.9	0.7	0.5	1.5	0.7	1.4
2018	I	1.2	0.8	1.4	6.2	1.4	-2.6	0.7	0.8	0.4	1.0	1.5
	II	1.0	3.0	1.1	6.8	2.6	-2.1	0.6	0.5	1.0	0.9	1.6
	III	1.0	5.0	1.1	7.2	2.2	-4.3	1.9	1.9	1.9	2.7	1.7
	IV	0.8	3.1	0.8	6.6	0.4	3.0	0.9	0.9	0.7	1.2	1.8
2019	I (e)	0.9	1.9	0.2	6.8	1.5	-2.1	2.0	1.7	3.0	2.4	2.2
2019	Apr	--	2.4	0.3	--	--	--	--	--	--	--	2.2
	May	--	1.1	0.3	--	--	--	--	--	--	--	2.2
	Jun	--	--	--	--	--	--	--	--	--	--	2.2

(a) Seasonally adjusted. (b) Period with available data. (c) Annualized percent change from the previous quarter for quarterly data, non-annualized percent change from the previous month for monthly data, unless otherwise indicated. (d) Growth of available period over the same period of the previous year. (e) Annualized growth of the average of available months over the monthly average of the previous quarter.

Sources: M. of Public Works, M. of Labour and INE (National Statistics Institute).

Chart 13.1 - Housing and urban land prices

Index (2007=100)

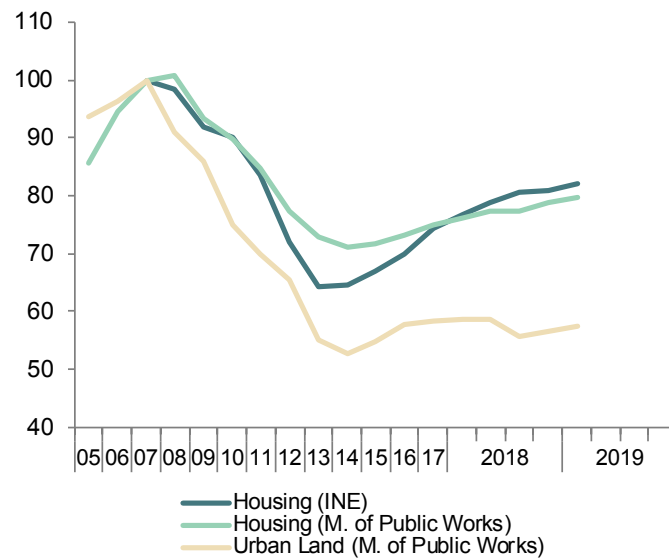


Chart 13.2 - Wage costs

Annual percent change

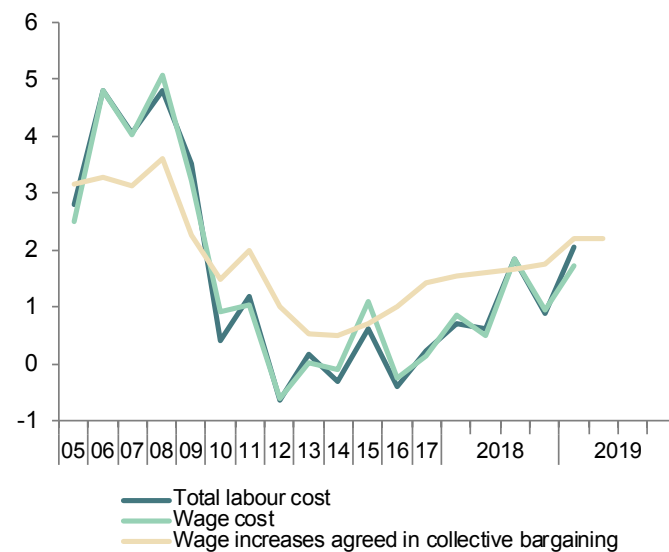


Table 14

External trade (a)

	Exports of goods			Imports of goods			Exports to EU countries (monthly average)	Exports to non-EU countries (monthly average)	Total Balance of goods (monthly average)	Balance of goods excluding energy (monthly average)	Balance of goods with EU countries (monthly average)	
	Nominal	Prices	Real	Nominal	Prices	Real						
	2005=100			2005=100								EUR Billions
2012	145.9	110.7	131.9	110.7	114.7	96.6	11.9	6.9	-2.7	1.2	1.0	
2013	152.1	110.5	137.7	108.3	109.8	98.7	12.3	7.3	-1.4	2.1	1.4	
2014	155.2	109.4	141.9	114.0	107.3	106.3	12.7	7.3	-2.1	1.1	0.9	
2015	161.2	110.1	146.5	118.0	104.6	112.9	13.5	7.3	-2.1	0.2	0.6	
2016	165.4	108.2	153.0	117.5	101.3	116.1	14.2	7.2	-1.4	0.3	1.2	
2017	178.2	108.9	163.7	129.8	106.1	122.4	15.1	7.9	-2.2	0.0	1.3	
2018	183.9	112.1	164.1	136.9	110.9	123.5	15.6	8.2	-2.8	-0.3	1.3	
2019(b)	185.7	112.8	164.6	138.0	110.9	124.5	15.9	8.0	-2.8	0.1	1.7	
2017	II	179.8	107.7	166.9	127.5	104.6	15.2	7.9	-1.6	0.4	1.6	
	III	179.2	108.8	164.7	130.3	105.1	14.8	8.1	-2.2	-0.2	1.1	
	IV	185.2	110.2	168.0	133.1	107.5	15.6	8.1	-2.0	0.1	1.4	
2018	I	185.2	110.9	167.1	135.0	108.2	15.8	7.9	-2.3	0.2	1.5	
	II	183.7	111.3	165.1	136.6	109.1	15.4	8.1	-2.9	-0.4	1.1	
	III	186.3	112.7	165.4	138.6	112.5	15.5	8.3	-2.9	-0.3	1.3	
	IV	186.2	113.5	164.1	139.8	113.7	15.6	8.3	-3.2	-0.4	1.3	
2019	I	183.3	112.8	162.6	138.3	110.1	15.6	7.9	0.0	-0.7	1.3	
2019	Feb	183.2	113.0	162.2	136.4	107.7	15.8	7.7	-2.9	-0.4	1.6	
	Mar	183.9	113.6	161.9	138.6	113.3	15.5	8.0	-3.2	-0.8	1.2	
	Apr	192.7	112.8	170.9	137.1	113.2	16.3	8.4	-1.8	-0.3	1.9	
Percentage changes (c)									Percentage of GDP			
2012		5.1	2.1	2.9	-2.0	4.7	-6.3	0.5	14.1	-3.1	1.4	1.2
2013		4.3	-0.2	4.5	-2.2	-4.2	2.1	3.1	6.3	-1.6	2.5	1.7
2014		2.0	-0.9	3.0	5.2	-2.3	7.7	3.5	-0.4	-2.4	1.3	1.0
2015		3.8	0.6	3.2	3.5	-2.5	6.1	5.8	0.4	-2.3	0.2	0.7
2016		2.6	-1.7	4.4	-0.4	-3.1	2.8	5.3	-2.3	-1.6	0.3	1.2
2017		7.7	0.7	7.0	10.5	4.7	5.5	6.5	10.1	-2.3	0.0	1.3
2018		3.2	3.0	0.2	5.4	4.5	0.9	3.1	3.5	-2.8	-0.2	1.3
2019(d)		0.9	1.9	-1.0	1.9	2.5	-0.6	0.6	1.6	--	--	--
2017	II	4.2	-2.7	7.1	-10.6	-9.1	-1.6	-0.4	3.9	-1.6	0.4	1.7
	III	-1.3	4.1	-5.2	9.2	1.7	7.3	-2.2	3.2	-2.3	-0.2	1.1
	IV	14.0	5.3	8.3	9.0	9.4	-0.4	5.3	-0.2	-2.0	0.1	1.4
2018	I	0.1	2.3	-2.2	5.7	2.6	3.0	1.2	-2.2	-2.4	0.2	1.5
	II	-3.3	1.4	-4.6	4.8	3.5	1.2	-2.5	2.4	-2.8	-0.4	1.1
	III	5.8	5.1	0.7	5.9	13.1	-6.4	0.9	2.5	-2.9	-0.3	1.3
	IV	-0.2	3.1	-3.1	3.7	4.1	-0.4	0.1	-0.3	-3.1	-0.4	1.3
2019	I	-6.1	-2.6	-3.6	-4.3	-12.0	8.7	0.0	0.0	0.0	-0.6	1.3
2019	Feb	0.3	1.1	-0.9	-2.5	-1.7	-0.9	2.6	-4.2	--	--	--
	Mar	0.4	0.6	-0.2	1.6	5.3	-3.5	-1.6	4.4	--	--	--
	Apr	4.8	-0.7	5.6	-1.1	-0.1	-1.0	4.6	5.1	--	--	--

(a) Seasonally adjusted, except for annual data. (b) Period with available data. (c) Annualized percent change from the previous quarter for quarterly data, non-annualized percent change from the previous month for monthly data. (d) Growth of available period over the same period of the previous year.

Source: Ministry of Economy.

Chart 14.1 - External trade (real)

Percent change from previous period

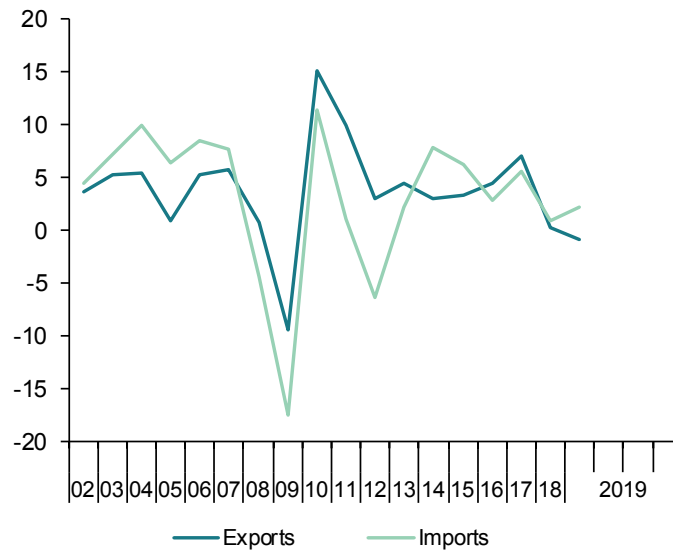


Chart 14.2 - Trade balance

EUR Billions, moving sum of 12 months

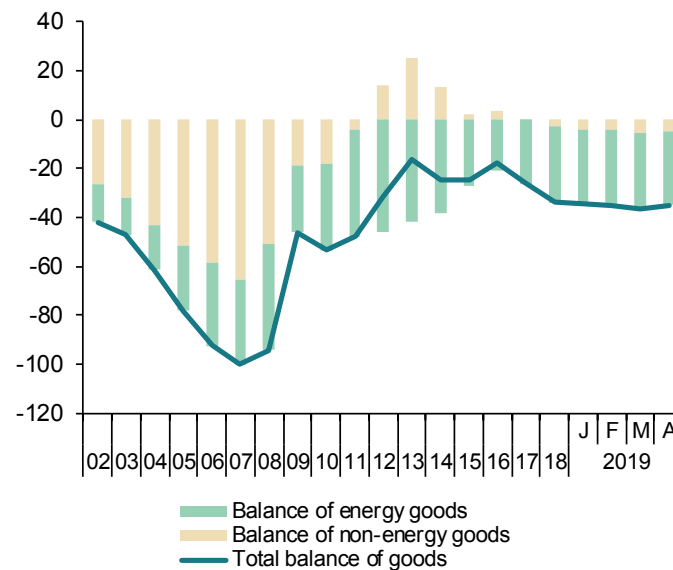


Table 15

Balance of Payments (according to IMF manual)
 (Net transactions)

	Current account					Capital account	Current and capital accounts	Financial account						Errors and omissions	
	Total	Goods	Services	Primary Income	Secondary Income			Financial account, excluding Bank of Spain					Bank of Spain		
								Total	Direct investment	Portfolio investment	Other investment	Financial derivatives			
	1=2+3+4+5	2	3	4	5	6	7=1+6	8=9+10+11+12	9	10	11	12	13	14	
EUR billions															
2012	-2.40	-29.25	45.25	-7.01	-11.39	5.18	2.77	170.51	-21.12	55.40	144.57	-8.35	-168.76	-1.02	
2013	15.59	-14.01	47.78	-5.29	-12.89	6.58	22.17	-84.89	-18.54	-52.99	-14.40	1.04	118.19	11.13	
2014	11.22	-22.22	47.89	-3.37	-11.09	5.05	16.27	-15.39	6.48	-5.44	-17.71	1.28	27.49	-4.17	
2015	12.55	-21.59	47.51	-2.90	-10.47	7.07	19.62	62.08	25.57	-5.38	43.09	-1.19	-40.16	2.30	
2016	25.25	-15.27	51.24	1.06	-11.78	2.54	27.79	77.46	14.43	39.18	26.80	-2.94	-52.63	-2.96	
2017	21.51	-21.84	55.47	-1.21	-10.91	2.68	24.19	53.60	16.90	18.19	20.73	-2.23	-32.06	-2.66	
2018	11.15	-31.35	54.78	-0.30	-11.98	6.27	17.42	36.96	-9.35	0.57	44.46	1.28	-14.81	4.73	
2019 (a)	-5.55	-8.90	8.80	-0.63	-4.82	0.67	-4.88	-3.32	-3.60	-23.14	24.80	-1.38	1.69	3.24	
2017	II	5.81	-3.42	15.26	-3.56	-2.47	0.57	6.38	-3.68	3.94	-4.04	-3.20	-0.39	5.85	-4.21
	III	6.66	-7.26	19.09	-1.84	-3.33	0.55	7.21	7.83	7.28	4.50	-2.81	-1.14	-0.24	0.39
	IV	10.41	-4.96	12.29	4.66	-1.58	1.16	11.57	11.50	8.73	-10.59	12.38	0.98	5.70	5.63
2018	I	-1.97	-6.30	9.02	-1.14	-3.56	0.73	-1.24	1.64	-2.48	3.42	-0.82	1.52	-3.14	-0.27
	II	3.61	-6.91	15.36	-3.13	-1.71	0.74	4.35	17.74	-17.24	12.85	23.05	-0.92	-14.53	-1.14
	III	2.98	-9.98	18.17	-1.71	-3.50	1.10	4.08	-1.43	-3.93	-4.75	6.52	0.73	6.71	1.20
	IV	6.53	-8.17	12.24	5.68	-3.22	3.70	10.23	19.02	14.30	-10.94	15.71	-0.05	-3.85	4.94
2019	I	-5.55	-8.90	8.80	-0.63	-4.82	0.67	-4.88	-3.32	-3.60	-23.14	24.80	-1.38	1.69	3.24
			Goods and Services		Primary and Secondary Income										
2019	Feb	-3.50	0.11		-3.61	0.19	-3.31	-8.93	-1.97	-14.28	7.85	-0.52	3.64	-1.98	
	Mar	-0.11	0.72		-0.83	0.26	0.16	9.85	3.55	-10.42	17.10	-0.38	-4.70	5.00	
	Apr	-0.41	2.64		-3.05	0.38	-0.04	4.85	-0.90	5.53	-0.04	0.25	-1.29	3.59	
Percentage of GDP															
2012		-0.2	-2.8	4.4	-0.7	-1.1	0.5	0.3	16.4	-2.0	5.3	13.9	-0.8	-16.2	-0.1
2013		1.5	-1.4	4.7	-0.5	-1.3	0.6	2.2	-8.3	-1.8	-5.2	-1.4	0.1	11.5	1.1
2014		1.1	-2.1	4.6	-0.3	-1.1	0.5	1.6	-1.5	0.6	-0.5	-1.7	0.1	2.6	-0.4
2015		1.2	-2.0	4.4	-0.3	-1.0	0.7	1.8	5.7	2.4	-0.5	4.0	-0.1	-3.7	0.2
2016		2.3	-1.4	4.6	0.1	-1.1	0.2	2.5	6.9	1.3	3.5	2.4	-0.3	-4.7	-0.3
2017		1.8	-1.9	4.8	-0.1	-0.9	0.2	2.1	4.6	1.4	1.6	1.8	-0.2	-2.7	-0.2
2018		0.9	-2.6	4.5	0.0	-1.0	0.5	1.4	3.1	-0.8	0.0	3.7	0.1	-1.2	0.4
2017	II	2.0	-1.2	5.2	-1.2	-0.8	0.2	2.2	-1.2	1.3	-1.4	-1.1	-0.1	2.0	-1.4
	III	2.3	-2.5	6.6	-0.6	-1.2	0.2	2.5	2.7	2.5	1.6	-1.0	-0.4	-0.1	0.1
	IV	3.4	-1.6	4.0	1.5	-0.5	0.4	3.8	3.8	2.9	-3.5	4.1	0.3	1.9	1.8
2018	I	-0.7	-2.2	3.1	-0.4	-1.2	0.3	-0.4	0.6	-0.9	1.2	-0.3	0.5	-1.1	-0.1
	II	1.2	-2.3	5.0	-1.0	-0.6	0.2	1.4	5.8	-5.6	4.2	7.5	-0.3	-4.7	-0.4
	III	1.0	-3.4	6.1	-0.6	-1.2	0.4	1.4	-0.5	-1.3	-1.6	2.2	0.2	2.3	0.4
	IV	2.1	-2.6	3.9	1.8	-1.0	1.2	3.2	6.0	4.5	-3.5	5.0	0.0	-1.2	1.6
2019	I	-1.9	-3.0	3.0	-0.2	-1.6	0.2	-1.6	-1.1	-1.2	-7.8	8.4	-0.5	0.6	1.1

(a) Period with available data.

Source: Bank of Spain.

Chart 15.1 - Balance of payments: Current and capital accounts

EUR Billions, 12-month cumulated

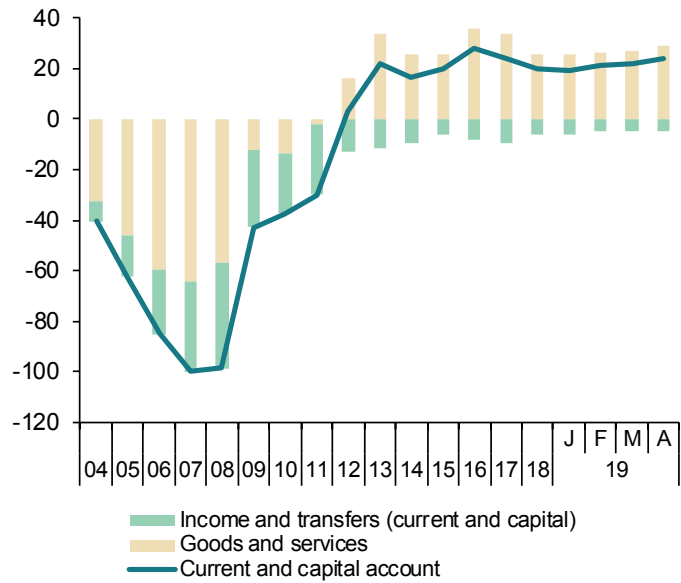


Chart 15.2 - Balance of payments: Financial account

EUR Billions, 12-month cumulated

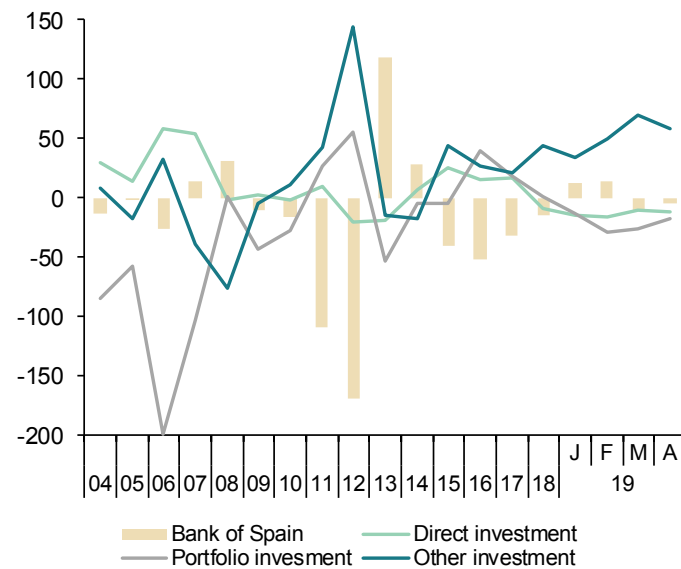


Table 16

Competitiveness indicators in relation to EMU

	Relative Unit Labour Costs in manufacturing (Spain/Rest of EMU) (a)			Harmonized Consumer Prices			Producer prices			Real Effective Exchange Rate in relation to developed countries
	Relative hourly wages	Relative hourly productivity	Relative ULC	Spain	EMU	Spain/EMU	Spain	EMU	Spain/EMU	
	1998=100			2015=100			2015=100			
2012	104.4	90.0	116.1	99.3	98.2	101.1	102.9	104.6	98.3	111.7
2013	102.8	93.0	110.5	100.8	99.5	101.3	103.5	104.4	99.1	113.4
2014	100.7	93.2	108.0	100.6	100.0	100.7	102.1	102.8	99.3	112.4
2015	98.4	92.0	106.9	100.0	100.0	100.0	100.0	100.0	100.0	108.8
2016	97.2	89.6	108.4	99.7	100.3	99.4	96.9	97.9	98.9	108.7
2017	97.3	88.8	109.5	101.7	101.8	99.9	101.2	100.7	100.5	110.2
2018	95.3	88.6	107.6	103.5	103.6	99.9	103.8	103.3	100.4	110.9
2019 (b)	--	--	--	104.0	104.2	99.8	104.0	104.0	100.0	109.8
2017	II	--	--	102.2	102.0	100.2	100.4	100.2	100.2	110.1
	III	--	--	101.3	101.8	99.5	100.8	100.4	100.3	110.1
	IV	--	--	102.6	102.4	100.2	102.2	101.4	100.8	111.3
2018	I	--	--	101.7	102.1	99.7	102.2	102.1	100.1	110.7
	II	--	--	104.1	103.8	100.3	103.2	102.8	100.4	111.4
	III	--	--	103.6	104.1	99.5	105.0	104.0	100.9	110.3
2018	IV	--	--	104.4	104.3	100.1	104.7	104.3	100.4	110.9
	I	--	--	102.9	103.5	99.4	103.8	104.0	99.8	109.5
	2019	Mar	--	--	103.9	104.4	99.6	103.7	104.1	99.6
2019	Apr	--	--	105.1	105.1	100.0	104.4	104.1	100.3	110.3
	May	--	--	105.3	105.2	100.1	104.3	104.0	100.3	110.4
	Annual percentage changes				Differential		Annual percentage changes		Differential	Annual percentage changes
2012	-1.0	1.3	-2.3	2.4	2.5	-0.1	3.8	2.9	0.9	2.3
2013	-1.6	3.4	-4.8	1.5	1.3	0.2	0.6	-0.2	0.8	1.5
2014	-2.1	0.2	-2.2	-0.2	0.4	-0.6	-1.3	-1.5	0.2	-0.9
2015	-2.3	-1.2	-1.0	-0.6	0.0	-0.6	-2.0	-2.8	0.8	-3.1
2016	-1.2	-2.6	1.4	-0.3	0.3	-0.6	-3.1	-2.1	-1.0	-0.1
2017	0.1	-0.9	1.0	2.0	1.5	0.5	4.5	2.8	1.7	1.3
2018	--	--	--	1.7	1.7	0.0	2.5	2.6	-0.1	0.6
2019 (c)	--	--	--	1.1	1.4	-0.3	1.6	1.7	-0.1	-1.0
2017	II	--	--	2.1	1.5	0.6	4.8	3.4	1.4	-0.3
	III	--	--	1.8	1.4	0.4	3.6	2.5	1.1	-1.4
	IV	--	--	1.6	1.4	0.2	2.7	2.3	0.4	-1.9
2018	I	--	--	1.1	1.1	0.0	0.8	1.4	-0.6	-3.4
	II	--	--	1.8	1.8	0.0	2.8	2.5	0.3	-3.5
	III	--	--	2.3	2.3	0.0	4.2	3.6	0.6	-3.0
2018	IV	--	--	1.8	1.8	0.0	2.4	2.8	-0.4	-2.6
	I	--	--	1.1	1.4	-0.3	1.6	1.9	-0.3	-1.0
	2019	Mar	--	--	1.3	1.4	-0.1	2.1	2.0	0.1
2019	Apr	--	--	1.6	1.7	-0.1	2.3	2.0	0.3	-1.0
	May	--	--	0.9	1.2	-0.3	1.0	1.1	-0.1	-0.9

(a) EMU excluding Ireland and Spain. (b) Period with available data. (c) Growth of available period over the same period of the previous year.

Sources: Eurostat, Bank of Spain and Funcas.

Chart 16.1 - Relative Unit Labour Costs in manufacturing (Spain/Rest of EMU)

1998=100

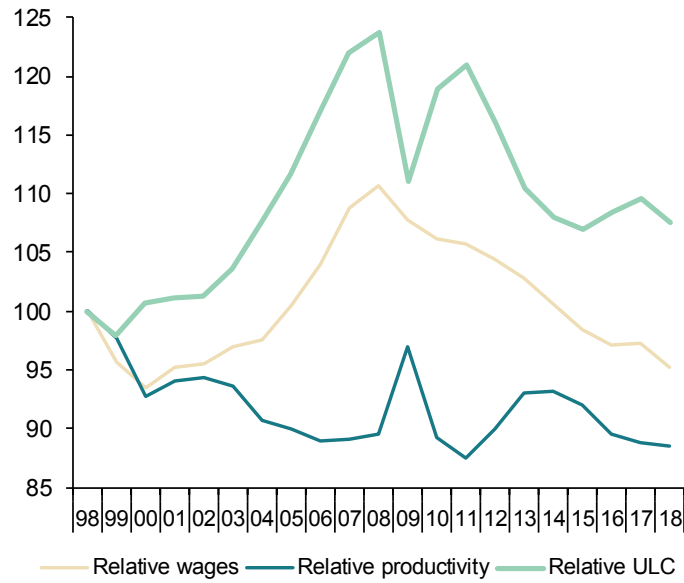


Chart 16.2.- Harmonized Consumer Prices

Annual growth in % and percentage points

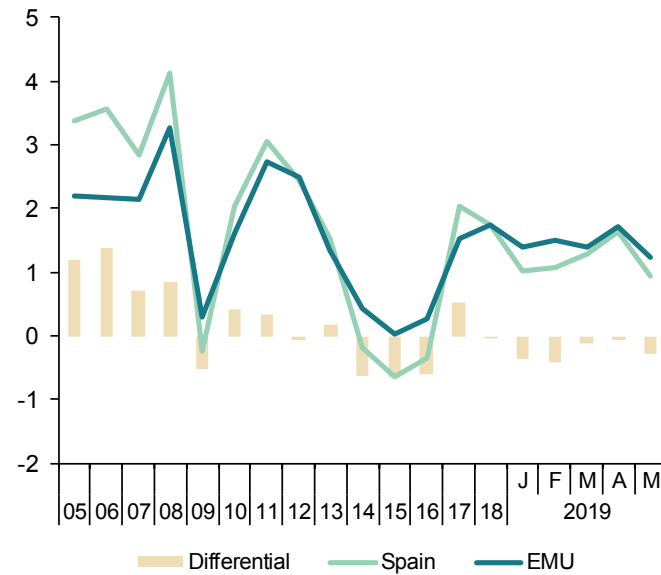


Table 17a

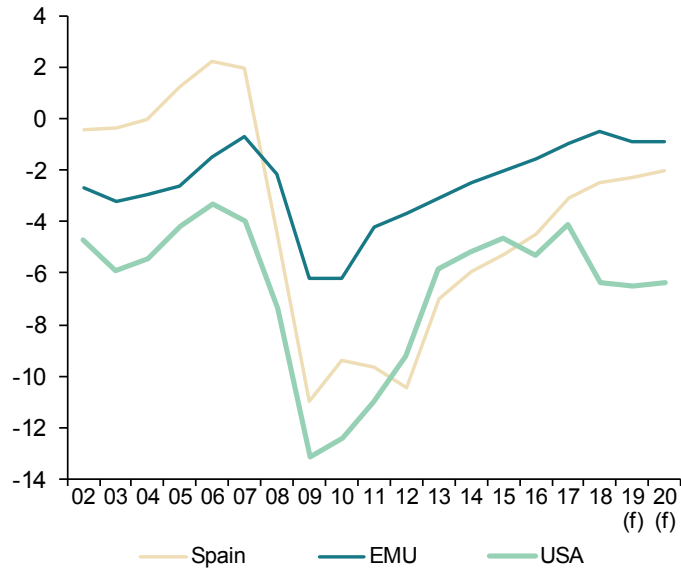
Imbalances: International comparison (I)
(In yellow: European Commission Forecasts)

	Government net lending (+) or borrowing (-)			Government consolidated gross debt			Current Account Balance of Payments (National Accounts)		
	Spain	EMU	USA	Spain	EMU	USA	Spain	EMU	USA
Billions of national currency									
2006	22.2	-133.9	-460.5	392.1	6,003.5	8,883.7	-90.7	26.5	-594.0
2007	20.8	-63.3	-576.0	384.7	6,113.2	9,361.0	-104.1	18.2	-728.5
2008	-49.3	-208.7	-1,084.5	440.6	6,626.6	10,856.6	-102.9	-58.3	-866.1
2009	-118.2	-579.6	-1,896.6	569.5	7,364.5	12,548.9	-46.5	50.7	-564.3
2010	-101.4	-592.5	-1,863.1	650.1	8,121.9	14,324.7	-42.0	56.7	-497.7
2011	-103.2	-416.3	-1,709.1	744.3	8,586.8	15,522.9	-35.3	79.4	-412.4
2012	-108.8	-362.0	-1,493.3	891.5	9,044.2	16,737.7	-4.6	218.1	-206.8
2013	-71.7	-304.6	-977.4	979.0	9,357.5	17,604.3	15.0	273.4	-208.2
2014	-61.9	-252.6	-905.9	1,041.6	9,603.0	18,323.6	10.3	308.0	-76.6
2015	-57.0	-215.2	-843.4	1,073.9	9,720.1	19,091.9	11.4	349.6	-169.2
2016	-50.0	-168.4	-992.1	1,107.2	9,897.1	19,986.3	24.1	375.0	-318.9
2017	-35.9	-110.5	-808.4	1,144.4	9,991.5	20,498.5	22.4	438.5	-329.3
2018	-30.0	-60.5	-1,310.2	1,173.1	10,090.7	22,008.7	11.3	418.2	-440.0
2019	-28.8	-107.2	-1,383.7	1,206.3	10,215.0	23,061.0	11.3	397.5	--
2020	-26.4	-114.1	-1,419.5	1,241.7	10,355.0	24,194.7	11.9	391.3	--
Percentage of GDP									
2006	2.2	-1.5	-3.3	38.9	67.4	64.3	-9.0	0.3	-4.3
2007	1.9	-0.7	-4.0	35.6	65.0	64.8	-9.6	0.2	-5.0
2008	-4.4	-2.2	-7.4	39.5	68.7	73.8	-9.2	-0.6	-5.9
2009	-11.0	-6.2	-13.1	52.8	79.2	86.9	-4.3	0.5	-3.9
2010	-9.4	-6.2	-12.4	60.1	85.0	95.5	-3.9	0.6	-3.3
2011	-9.6	-4.2	-11.0	69.5	87.6	99.9	-3.3	0.8	-2.7
2012	-10.5	-3.7	-9.2	85.7	91.8	103.3	-0.4	2.2	-1.3
2013	-7.0	-3.1	-5.8	95.5	94.1	104.9	1.5	2.7	-1.2
2014	-6.0	-2.5	-5.2	100.4	94.4	104.6	1.0	3.0	-0.4
2015	-5.3	-2.0	-4.6	99.3	92.3	104.8	1.1	3.3	-0.9
2016	-4.5	-1.6	-5.3	99.0	91.4	106.8	2.2	3.5	-1.7
2017	-3.1	-1.0	-4.1	98.1	89.1	105.2	1.9	3.9	-1.7
2018	-2.5	-0.5	-6.4	97.1	87.1	107.4	0.9	3.6	-2.1
2019	-2.3	-0.9	-6.5	96.3	85.8	107.8	0.9	3.3	--
2020	-2.0	-0.9	-6.4	95.7	84.3	109.0	0.9	3.2	--

Source: European Commission Forecasts, Spring 2019.

Chart 17a.1 - Government deficit

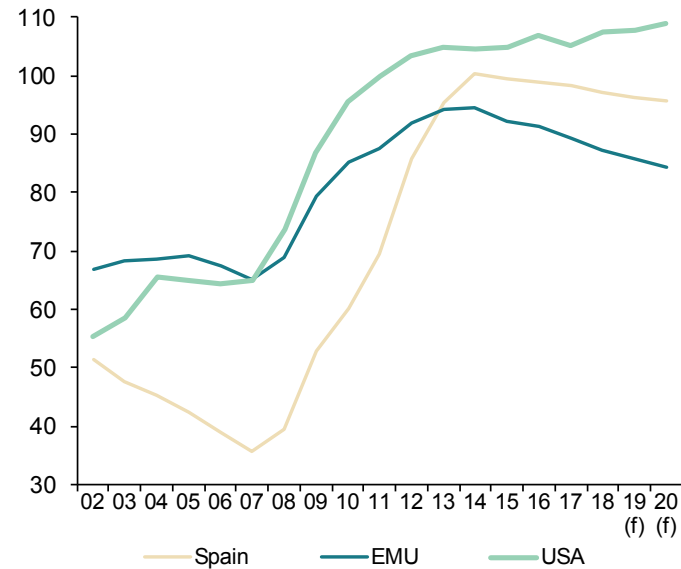
Percentage of GDP



(f) European Commission forecast.

Chart 17a.2 - Government gross debt

Percentage of GDP



(f) European Commission forecast.

Table 17b

Imbalances: International comparison (II)

	Household debt (a)			Non-financial corporations debt (a)		
	Spain	EMU	USA	Spain	EMU	USA
Billions of national currency						
2005	656.2	4,764.5	12,034.5	925.0	6,968.1	8,172.1
2006	783.5	5,187.5	13,319.7	1,158.8	7,590.8	8,988.9
2007	879.3	5,555.5	14,242.5	1,344.5	8,353.3	10,114.8
2008	916.7	5,768.6	14,111.5	1,422.6	8,998.2	10,679.9
2009	908.9	5,876.1	13,952.8	1,406.1	9,078.0	10,165.1
2010	905.2	6,019.4	13,737.2	1,429.4	9,272.2	10,020.3
2011	877.9	6,103.4	13,588.6	1,415.7	9,654.5	10,278.0
2012	840.9	6,097.0	13,595.7	1,309.8	9,837.1	10,781.8
2013	793.4	6,052.1	13,729.2	1,230.6	9,837.7	11,264.9
2014	757.3	6,055.4	13,984.8	1,180.0	10,286.5	11,972.2
2015	733.9	6,120.4	14,173.1	1,155.3	10,834.2	12,780.2
2016	721.3	6,223.1	14,614.6	1,141.9	11,176.9	13,467.2
2017	712.8	6,381.4	15,158.7	1,124.3	11,353.4	14,393.3
2018	712.0	--	15,627.7	1,125.8	--	15,243.4
Percentage of GDP						
2005	70.5	56.3	92.3	99.4	82.3	62.7
2006	77.7	58.2	96.4	115.0	85.2	65.1
2007	81.4	59.1	98.6	124.4	88.8	70.0
2008	82.1	59.8	95.9	127.4	93.4	72.6
2009	84.2	63.2	96.6	130.3	97.6	70.4
2010	83.7	63.0	91.6	132.2	97.1	66.9
2011	82.0	62.2	87.4	132.3	98.5	66.1
2012	80.9	61.9	83.9	126.0	99.9	66.6
2013	77.4	60.9	81.8	120.0	98.9	67.0
2014	73.0	59.5	79.8	113.7	101.1	68.4
2015	67.9	58.1	77.7	106.9	102.9	70.2
2016	64.5	57.5	78.0	102.1	103.2	72.0
2017	61.1	56.9	77.7	96.4	101.4	74.0
2018	58.9	--	76.2	93.2	--	74.8

(a) Loans and debt securities.

Sources: Eurostat and Federal Reserve.

Chart 17b.1 - Household debt

Percentage of GDP

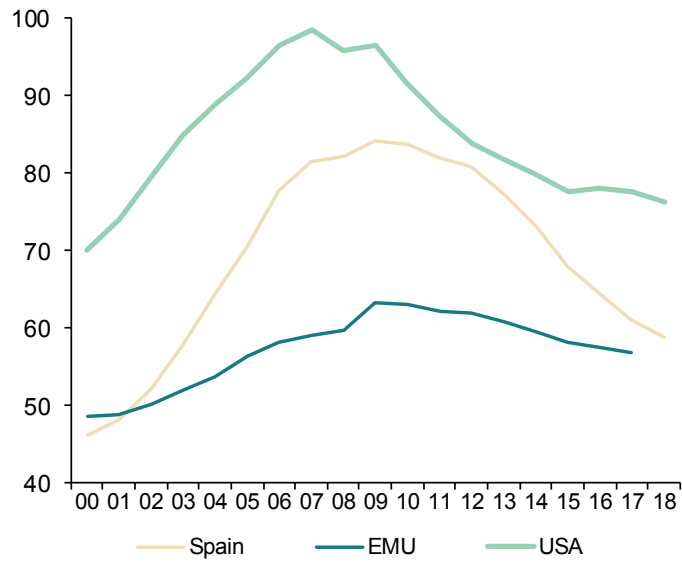
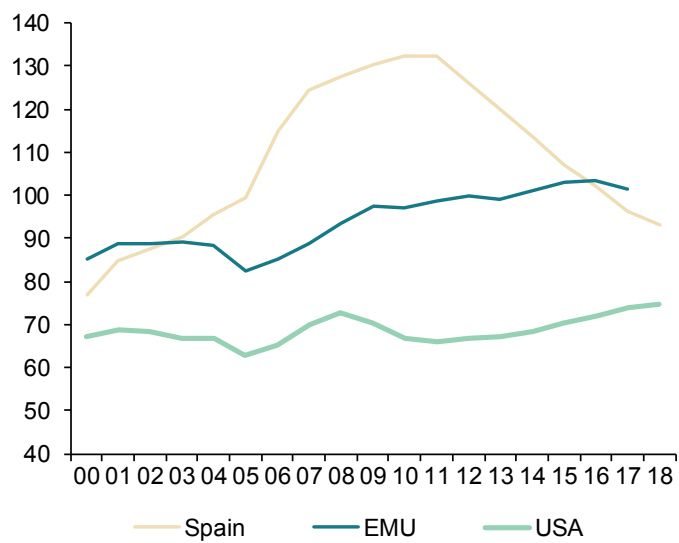


Chart 17b.2 - Non-financial corporations debt

Percentage of GDP



50 Financial System Indicators

Updated: June 30th, 2019

Highlights		
Indicator	Last value available	Corresponding to:
Bank lending to other resident sectors (monthly average % var.)	-0.1	April 2019
Other resident sectors' deposits in credit institutions (monthly average % var.)	-0.8	April 2019
Doubtful loans (monthly % var.)	-0.5	April 2019
Recourse to the Eurosystem L/T (Eurozone financial institutions, million euros)	718,609	May 2019
Recourse to the Eurosystem L/T (Spanish financial institutions, million euros)	166,923	April 2019
Recourse to the Eurosystem (Spanish financial institutions million euros) - Main refinancing operations	187	April 2019
"Operating expenses/gross operating income" ratio (%)	54.39	December 2018
"Customer deposits/employees" ratio (thousand euros)	9,461.19	December 2018
"Customer deposits/branches" ratio (thousand euros)	68,190.72	December 2018
"Branches/institutions" ratio	109.28	December 2018

A. Money and Interest Rates

Indicator	Source	Average 2001-2016	2017	2018	2019 May	2019 June	Definition and calculation
1. Monetary Supply (% chg.)	ECB	5.6	4.7	4.1	-	-	M3 aggregate change (non-stationary)
2. Three-month interbank interest rate	Bank of Spain	1.9	-0.329	-0.309	-0.311	-0.328	Daily data average
3. One-year Euribor interest rate (from 1994)	Bank of Spain	2.2	-0.186	-0.117	-0.168	-0.213	End-of-month data
4. Ten-year Treasury bonds interest rate (from 1998)	Bank of Spain	4.0	1.5	1.4	0.7	0.4	Market interest rate (not exclusively between account holders)
5. Corporate bonds average interest rate	Bank of Spain	3.9	1.4	1.5	-	-	End-of-month straight bonds average interest rate (> 2 years) in the AIAF market

Comment on "Money and Interest Rates": Interbank rates fell in June. The 3-month interbank decreased from -0.311% in May to -0.328% in June, and the 1-year Euribor fell from -0.168% to -0.213%. The ECB has reconfirmed its plan to change the stance of monetary policy and there is an open debate on whether official rates should enter negative territory. As for the Spanish 10-year bond yield, it fell to 0.4%.

B. Financial Markets

Indicator	Source	Average 2001-2016	2017	2018	2019 April	2019 May	Definition and calculation
6. Outright spot treasury bills transactions trade ratio	Bank of Spain	16.3	54.60	84.19	159.43	200.64	(Traded amount/outstanding balance) ×100 in the market (not exclusively between account holders)
7. Outright spot government bonds transactions trade ratio	Bank of Spain	17.5	27.60	49.25	89.66	100.34	(Traded amount/outstanding balance) ×100 in the market (not exclusively between account holders)
8. Outright forward treasury bills transactions trade ratio	Bank of Spain	0.4	3.46	1.07	0.86	0.40	(Traded amount/outstanding balance) ×100 in the market (not exclusively between account holders)
9. Outright forward government bonds transactions trade ratio	Bank of Spain	0.3	4.76	1.84	1.58	1.11	(Traded amount/outstanding balance) in the market (not exclusively between account holders)
10. Three-month maturity treasury bills interest rate	Bank of Spain	0.7	-0.7	-0.52	-0.48	-0.47	Outright transactions in the market (not exclusively between account holders)
11. Government bonds yield index (Dec 1987=100)	Bank of Spain	676.8	1,127.1	1,164.63	1,262.69	1,300.02	Outright transactions in the market (not exclusively between account holders)
12. Madrid Stock Exchange Capitalization (monthly average % chg.)	Bank of Spain and Madrid Stock Exchange	0.4	-1.3	-5.9	2.7	-5.0	Change in the total number of resident companies
13. Stock market trading volume. Stock trading volume (monthly average % var.)	Bank of Spain and Madrid Stock Exchange	3.2	2.2	-5.3	41.3	-18.1	Stock market trading volume. Stock trading volume: change in total trading volume
14. Madrid Stock Exchange general index (Dec 1985=100)	Bank of Spain and Madrid Stock Exchange	1,013.32	1,055.4	862.6	964.9	926.1 (a)	Base 1985=100
15. Ibex-35 (Dec 1989=3000)	Bank of Spain and Madrid Stock Exchange	9,732.1	10,451.5	8,539.9	9,004.2	9,198.8 (a)	Base dec 1989=3000
16. Madrid Stock Exchange PER ratio (share value/profitability)	Bank of Spain and Madrid Stock Exchange	15.8	15.8	12.2	12.9	13.1 (a)	Madrid Stock Exchange Ratio "share value/ capital profitability"
17. Long-term bonds. Stock trading volume (% chg.)	Bank of Spain and Madrid Stock Exchange	5.3	-	-	-	-	Variation for all stocks

B. Financial Markets (continued)

Indicator	Source	Average 2001-2016	2017	2018	2019 April	2019 May	Definition and calculation
18. Commercial paper. Trading balance (% chg.)	Bank of Spain and AIAF	1.6	-	-	-	-	AIAF fixed-income market
19. Commercial paper. Three-month interest rate	Bank of Spain and AIAF	2.2	-	-	-	-	AIAF fixed-income market
20. IBEX-35 financial futures concluded transactions (% chg.)	Bank of Spain	1.4	0.6	-6.14	-9.8	14.5	IBEX-35 shares concluded transactions
21. IBEX-35 financial options concluded transactions (%chg.)	Bank of Spain	10.6	5.8	58.5	-40.9	28.5	IBEX-35 shares concluded transactions

(a) Last data published: June 28th, 2019.

Comment on "Financial Markets": During May, there was an increase in transactions with outright spot T-bills to 200.64% and also of spot government bonds transactions to 100.34%. The stock market has improved in June with the IBEX-35 up to 9,199 points, and the General Index of the Madrid Stock Exchange to 926. There was also an increase in Ibx-35 futures and financial options of 14.5% and 28.5%, respectively.

C. Financial Saving and Debt

Indicator	Source	Average 2008-2015	2016	2017	2018 Q3	2018 Q4	Definition and calculation
22. Net Financial Savings/GDP (National Economy)	Bank of Spain	-2.3	2.1	2.0	1.6	1.5	Difference between financial assets and financial liabilities flows over GDP
23. Net Financial Savings/GDP (Households and non-profit institutions)	Bank of Spain	2.1	2.6	0.5	-0.1	0.1	Difference between financial assets and financial liabilities flows over GDP
24. Debt in securities (other than shares) and loans/GDP (National Economy)	Bank of Spain	261.5	297.0	287.4	283.6	280.7	Public debt. non-financial companies debt and households and non-profit institutions debt over GDP
25. Debt in securities (other than shares) and loans/GDP (Households and non-profit institutions)	Bank of Spain	64.6	64.4	61.3	59.6	58.9	Households and non-profit institutions debt over GDP
26. Households and non-profit institutions balance: financial assets (quarterly average % chg.)	Bank of Spain	0.5	0.6	3.8	-1.5	-1.6	Total assets percentage change (financial balance)
27. Households and non-profit institutions balance: financial liabilities (quarterly average % chg.)	Bank of Spain	-1.5	1.1	-0.1	-1.1	0.1	Total liabilities percentage change (financial balance)

Comment on "Financial Savings and Debt": During 2018Q4, the financial savings to GDP in the overall economy fell to 1.5% of GDP. There was an increase in the financial savings rate of households from -0.1% to 0.1%. The debt to GDP ratio fell to 58.9%. Finally, the stock of financial assets on households' balance sheets registered a decrease of 1.6%, and there was a 0.1% increase in the stock of financial liabilities.

D. Credit institutions. Business Development

Indicator	Source	Average 2001-2016	2017	2018	2019 March	2019 April	Definition and calculation
28. Bank lending to other resident sectors (monthly average % var.)	Bank of Spain	6.5	-0.4	-4.7	0.5	-0.1	Lending to the private sector percentage change for the sum of banks, savings banks and credit unions
29. Other resident sectors' deposits in credit institutions (monthly average % var.)	Bank of Spain	7.3	2.4	0.7	1.9	-0.8	Deposits percentage change for the sum of banks, savings banks and credit unions
30. Debt securities (monthly average % var.)	Bank of Spain	108.1	-3.7	-0.9	2.2	-2.6	Asset-side debt securities percentage change for the sum of banks, savings banks and credit unions
31. Shares and equity (monthly average % var.)	Bank of Spain	9.9	0.7	-8.8	0.01	1.1	Asset-side equity and shares percentage change for the sum of banks, savings banks and credit unions
32. Credit institutions. Net position (difference between assets from credit institutions and liabilities with credit institutions) (% of total assets)	Bank of Spain	-2.3	-1.7	-0.6	0.1	-14.3	Difference between the asset-side and liability-side "Credit System" item as a proxy of the net position in the interbank market (month-end)
33. Doubtful loans (monthly average % var.)	Bank of Spain	-0.1	-3.8	-2.3	-1.5	-0.5	Doubtful loans. Percentage change for the sum of banks, savings banks and credit unions
34. Assets sold under repurchase (monthly average % var.)	Bank of Spain	-3.0	-3.5	-1.4	6.7	8.8	Liability-side assets sold under repurchase. Percentage change for the sum of banks, savings banks and credit unions
35. Equity capital (monthly average % var.)	Bank of Spain	8.4	-1.2	-4.1	0.07	0.2	Equity percentage change for the sum of banks, savings banks and credit unions

Comment on "Credit institutions. Business Development": The latest available data as of April show a decrease in bank credit to the private sector of 0.1%. Data also show a fall in financial institutions deposit-taking of 0.8%. Holdings of debt securities fell 2.6%. Doubtful loans decreased 0.5% compared to the previous month.

E. Credit institutions. Market Structure and Eurosystem Refinancing

Indicator	Source	Average 2001-2015	2016	2017	2018 December	2019 March	Definition and calculation
36. Number of Spanish credit institutions	Bank of Spain	194	124	122	115	115	Total number of banks, savings banks and credit unions operating in Spanish territory
37. Number of foreign credit institutions operating in Spain	Bank of Spain	75	82	83	83	81	Total number of foreign credit institutions operating in Spanish territory
38. Number of employees	Bank of Spain	246,618	189,280	187,472	181,999(a)	-	Total number of employees in the banking sector
39. Number of branches	Bank of Spain	40,047	28,643	27,320	26,011	25,755	Total number of branches in the banking sector
40. Recourse to the Eurosystem: long term (total Eurozone financial institutions) (Euro millions)	Bank of Spain	318,141	527,317	762,540	725,455	718,609 (b)	Open market operations and ECB standing facilities. Eurozone total
41. Recourse to the Eurosystem: long term (total Spanish financial institutions) (Euro millions)	Bank of Spain	65,106	138,455	170,445	167,421	166,923 (b)	Open market operations and ECB standing facilities. Spain total
42. Recourse to the Eurosystem (total Spanish financial institutions): main refinancing operations (Euro millions)	Bank of Spain	20,270	1,408	96	167	187 (b)	Open market operations: main long term refinancing operations. Spain total

(a) Last data published: December 2018.

(b) Last data published: May 2019.

Comment on "Credit institutions. Market Structure and Eurosystem Refinancing": In May 2019, recourse to Eurosystem funding by Spanish credit institutions reached 166,923 billion euro.

MEMO ITEM: From January 2015, the ECB also offers information on the asset purchase programs. The amount borrowed by Spanish banks in these programs reached 332 billion euro in May 2019, and 2.6 trillion euro for the entire Eurozone banking system.

F. Credit institutions. Efficiency and Productivity, Risk and Profitability

Indicator	Source	Average 2000-2013	2014	2015	2016	2017	2018	Definition and calculation
43. "Operating expenses/gross operating income" ratio	Bank of Spain	50.89	47.27	50.98	54.18	54.03	54.39	Operational efficiency indicator. Numerator and denominator are obtained directly from credit institutions' P&L accounts
44. "Customer deposits/employees" ratio (Euro thousands)	Bank of Spain	3,519.51	5,892.09	5,595.62	5,600.48	6,532.25	9,461.19	Productivity indicator (business by employee)
45. "Customer deposits/branches" ratio (Euro thousands)	Bank of Spain	21,338.27	40,119.97	36,791.09	39,457.04	47,309.12	68,190.72	Productivity indicator (business by branch)

F. Credit institutions. Efficiency and Productivity, Risk and Profitability (continued)

Indicator	Source	Average 2000-2013	2014	2015	2016	2017	2018	Definition and calculation
46. "Branches/institutions" ratio	Bank of Spain	205.80	142.85	229.04	139.84	122.22	109.28	Network expansion indicator
47. "Employees/branches" ratio	Bank of Spain	6.1	6.8	6.57	7.05	6.97	7.20	Branch size indicator
48. "Equity capital (monthly average % var.)	Bank of Spain	0.11	0.07	0.01	-0.62	0.84	-0.79	Credit institutions equity capital variation indicator
49. ROA	Bank of Spain	0.45	0.49	0.39	0.26	0.44	0.57	Profitability indicator, defined as the "pre-tax profit/average total assets"
50. ROE	Bank of Spain	6.27	6.46	5.04	3.12	3.66	4.25	Profitability indicator, defined as the "pre-tax profit/equity capital"

Comment on "Credit institutions. Efficiency and Productivity, Risk and Profitability": During 2018, most of the profitability and efficiency indicators improved for Spanish banks. Productivity indicators have also improved since the restructuring process of the Spanish banking sector was implemented.

Social Indicators

Table 1

Population

Population										
	Total population	Average age	65 and older (%)	Life expectancy at birth (men)	Life expectancy at birth (women)	Dependency rate	Dependency rate (older than 64)	Foreign-born population (%)	New entries (all nationalities)	New entries (EU-27 born) (%)
2008	46,157,822	40.8	16.5	78.2	84.3	47.5	24.5	13.1	726,009	28.4
2010	47,021,031	41.1	16.9	79.1	85.1	48.6	25.0	14.0	464,443	35.6
2012	47,265,321	41.6	17.4	79.4	85.1	50.4	26.1	14.3	370,515	36.4
2014	46,771,341	42.1	18.1	80.1	85.7	51.6	27.4	13.4	399,947	38.0
2015	46,624,382	42.4	18.4	79.9	85.4	52.4	28.0	13.2	455,679	36.4
2016	46,557,008	42.7	18.6	80.3	85.8	52.9	28.4	13.2	534,574	33.4
2017	46,572,132	42.9	18.8	80.4	85.7	53.2	28.8	13.3	637,375	39.3
2018	46,722,980	43.1	19.1	80.5●	85.9●	53.6	29.3	13.7		
2019●	47,007,367	43.4	19.3			53.6	29.6	14.3		
Sources	EPC	EPC	EPC	ID INE	ID INE	EPC	EPC	EPC	EVR	EVR

ID INE: Indicadores Demográficos INE.

EPC: Estadística del Padrón Continuo.

EVR: Estadística de Variaciones Residenciales.

Dependency rate: (15 or less years old population + 65 or more years old population)/ 16-64 years old population, as a percentage.

Dependency rate (older than 64): 65 or more years old population/ 16-64 years old population, as a percentage.

● Provisional data

Table 2

Households and families

	Households				Nuptiality					
	Households (thousands)	Average household size	Households with one person younger than 65 (%)	Households with one person older than 65 (%)	Marriage rate (Spanish)	Marriage rate (foreign population)	Divorce rate	Mean age at first marriage, men	Mean age at first marriage, women	Same sex marriages (%)
2008	16,742	2.71	12.0	10.2	8.5	8.4	2.39	32.4	30.2	1.62
2010	17,174	2.67	12.8	9.9	7.2	7.9	2.21	33.2	31.0	1.87
2012	17,434	2.63	13.7	9.9	7.2	6.7	2.23	33.8	31.7	2.04
2014	18,329	2.51	14.2	10.6	6.9	6.5	2.17	34.4	32.3	2.06
2015	18,376	2.54	14.6	10.7	7.3	6.5	2.08	34.8	32.7	2.26
2016	18,444	2.52	14.6	10.9	7.5	6.8	2.08	35.0	32.9	2.46
2017	18,512	2.52	14.2	11.4	7.4	7.0	2.10	35.3	33.2	2.67
2018	18,581	2.51			6.9■	6.4■				
2019■	18,652	2.52								
Sources	LFS	LFS	EPF	EPF	ID INE	ID INE	ID INE	ID INE	ID INE	MNP

Table 2 (continued)

Households and families

	Fertility					
	Median age at first child, women	Total fertility rate (Spanish women)	Total fertility rate (Foreign women)	Births to single mothers (%)	Abortion rate	Abortion by Spanish-born women (%)
2008	29.3	1.36	1.83	33.2	11.8	55.6
2010	29.8	1.30	1.68	35.5	11.5	58.3
2012	30.3	1.27	1.56	39.0	12.0	61.5
2014	30.6	1.27	1.62	42.5	10.5	63.3
2015	30.7	1.28	1.66	44.4	10.4	65.3
2016	30.8	1.27	1.70	45.8	10.4	65.8
2017	30.9	1.25	1.71	46.8	10.5	66.1
2018	31.0	1.19	1.63			
Sources	ID INE	ID INE	ID INE	ID INE	MSAN	MSAN

LFS: Labour Force Survey. EPF: Encuesta de Presupuestos Familiares. ID INE: Indicadores Demográficos INE. MNP: Movimiento Natural de la Población. MSAN: Ministerio de Sanidad, Servicios Sociales e Igualdad.

Marriage rate: Number of marriages per thousand population.

Total fertility rate: The average number of children that would be born per woman living in Spain if all women lived to the end of their childbearing years and bore children according to a given fertility rate at each age.

Divorce rate: Number of divorces per thousand population.

Abortion rate: Number of abortions per thousand women (15-44 years).

■ Data refer to January-March.

Table 3

Education

	Educational attainment				Students involved in non-compulsory education					Education expenditure	
	Population 16 years and older with primary education (%)	Population 30-34 with primary education (%)	Population 16 years and older with tertiary education (%)	Population 30-34 with tertiary education (%)	Pre-primary education	Secondary education	Vocational training	Under-graduate students	Post-graduate studies (except doctorate)	Public expenditure (thousands of €)	Public expenditure (%GDP)
2008	32.1	9.2	16.1	26.9	1,763,019	629,247	472,604	1,377,228	50,421	51,716,008	4.63
2010	30.6	8.6	17.0	27.7	1,872,829	672,213	555,580	1,445,392	104,844	53,099,329	4.91
2012	28.5	7.5	17.8	26.6	1,912,324	692,098	617,686	1,450,036	113,805	46,476,414	4.47
2014	24.4	6.1	27.2	42.3	1,840,008	690,738	652,846	1,364,023	142,156	44,846,415	4.32
2015	23.3	6.6	27.5	40.9	1,808,322	695,557	641,741	1,321,698	171,043	46,597,784	4.31
2016	22.4	6.6	28.1	40.7	1,780,377	687,595	652,471	1,303,252	190,143	47,578,997	4.25
2017	21.4	6.6	28.5	41.2	1,758,271●	675,990●	657,143●			49,458,049	4.24
2018	20.5	6.4	29.2	42.4							
2019■	19.8	6.6	29.9	43.8							
Sources	LFS	LFS	LFS	LFS	MECD	MECD	MECD	MECD	MECD	MECD	Contabilidad Nacional del INE

LFS: Labor Force Survey.

MECD: Ministerio de Educación, Cultura y Deporte.

INE: Instituto Nacional de Estadística.

● Provisional data.

■ Data refer to January-March.

Table 4

Social protection: Benefits

	Contributory benefits *							Non-contributory benefits			
	Unemployment total	Retirement		Permanent disability		Widowhood		Unemployment	Social Security		
		Total	Average amount (€)	Total	Average amount (€)	Total	Average amount (€)		Retirement	Disability	Other
2008	1,100,879	4,936,839	814	906,835	801	2,249,904	529	646,186	265,314	199,410	63,626
2010	1,471,826	5,140,554	884	933,730	850	2,290,090	572	1,445,228	257,136	196,159	49,535
2012	1,381,261	5,330,195	946	943,296	887	2,322,938	602	1,327,027	251,549	194,876	36,310
2014	1,059,799	5,558,964	1000	929,484	916	2,348,388	624	1,221,390	252,328	197,303	26,842
2015	838,392	5,641,908	1,021	931,668	923	2,353,257	631	1,102,529	253,838	198,891	23,643
2016	763,697	5,731,952	1,043	938,344	930	2,364,388	638	997,192	254,741	199,762	21,350
2017	726,575	5,826,123	1,063	947,130	936	2,360,395	646	902,193	256,187	199,120	19,019
2018	751,172	5,929,471	1,091	951,838	946	2,359,931	664	853,437	256,842	196,375	16,472
2019	788,911 ■	6,011,039 ●	1,134 ●	954,630 ●	971 ●	2,359,423 ●	709 ●	918,435 ■	258,477 ■	194,779 ■	15,488 ■
Sources	BEL	BEL	BEL	BEL	BEL	BEL	BEL	BEL	IMSERO	IMSERO	IMSERO

BEL: Boletín de Estadísticas Laborales.

IMSERO: Instituto de Mayores y Servicios Sociales.

* Benefits for orphans and dependent family members of deceased Social Security affiliates are excluded.

■ Data refer to January-April.

● Data refer to January-May.

Table 5

Social protection: Health care

	Expenditure				Resources				Satisfaction		Patients on waiting list (days)	
	Total (% GDP)	Public (% GDP)	Total expenditure (\$ per inhabitant)	Public expenditure (per inhabitant)	Medical specialists per 1,000 inhabitants	Primary care doctors per 1,000 people assigned	Specialist nurses per 1,000 inhabitants	Primary care nurses per 1,000 people assigned	With the working of the health system	With medical history and tracing by family doctor or pediatrician	Non-urgent surgical procedures	First specialist consultations
2008	8.29	6.10	2,774	2,042	1.8	0.8	3.0	0.6	6.4	7.0	71	59
2010	9.01	6.74	2,886	2,157	1.8	0.8	3.2	0.6	6.6	7.3	65	53
2012	9.09	6.55	2,902	2,095	1.8	0.8	3.1	0.6	6.6	7.5	76	53
2014	9.08	6.36	3,057	2,140	1.8	0.8	3.1	0.7	6.3	7.5	87	65
2015	9.16	6.51	3,180	2,258	1.9	0.8	3.2	0.7	6.4	7.5	89	58
2016	8.98	6.34	3,248	2,293	1.9	0.8	3.3	0.6	6.6	7.6	115	72
2017	8.84	6.25	3,370	2,385		0.8		0.6	6.7	7.5	106	66
2018									6.6	7.5		
Sources	OECD	OECD	OECD	OECD	INCLASNS	INCLASNS	INCLASNS	INCLASNS	INCLASNS	INCLASNS	INCLASNS	INCLASNS

OECD: Organisation for Economic Co-operation and Development.

INCLASNS: Indicadores clave del Sistema Nacional del Salud.

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Notes

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