

FINANCIAL STABILITY REPORT

Spring 2020

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Resolution

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DIRECTORATE GENERAL FINANCIAL STABILITY, REGULATION AND RESOLUTION



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- 4. Chapter 3. Systemic risk and prudential response to COVID-19**



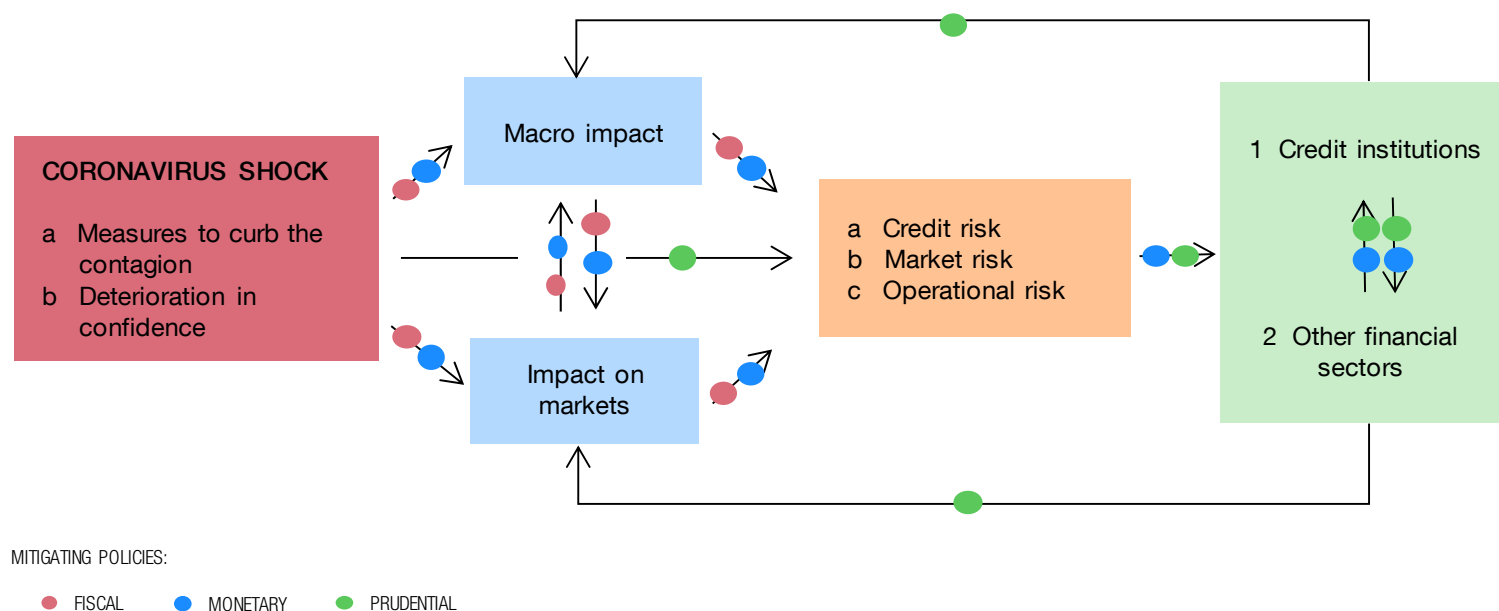
- The boxes for the Spring 2020 FSR are the following:
- **Box 1.1. The economic policy response to the COVID-19 crisis**
 - **Box 1.2. Build-up of household debt defaults**
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 - **Box 2.2. Annual exercise by the FSB on non-banking financial intermediation**
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 - **Box 3.2. Cost-benefit analysis of macroprudential policy**

TRANSMISSION CHANNELS AND RISKS TO FINANCIAL STABILITY FROM COVID-19

- The COVID-19 crisis entails both (1) supply- and demand-side shocks to real activity and (2) tightening on the different financial markets owing to the increase in risk-aversion, with consequences for financial stability
- The shock may also be amplified through the interconnections between financial sub-sectors, and the economic policy response may act as a shock-absorber in various channels

Figure 1

IMPACT OF CORONAVIRUS PANDEMIC ON FINANCIAL STABILITY, AND MITIGATING POLICIES

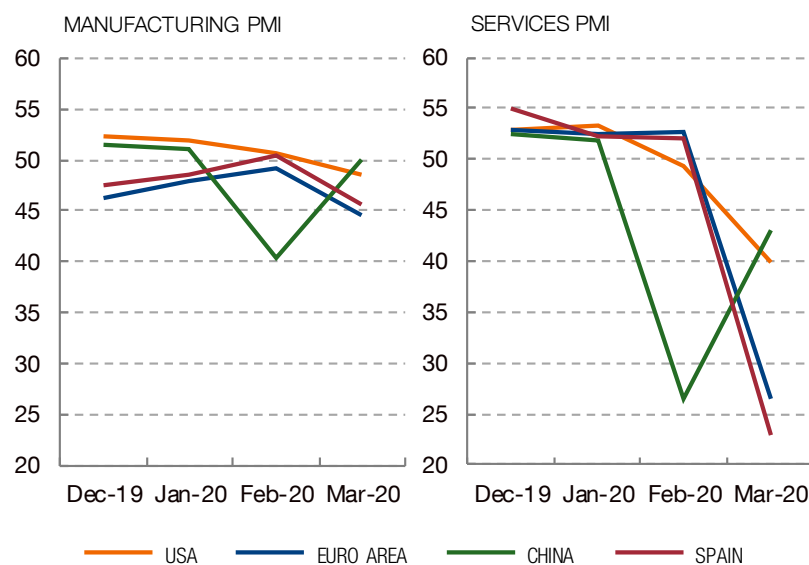


RISKS TO FINANCIAL STABILITY FROM COVID-19

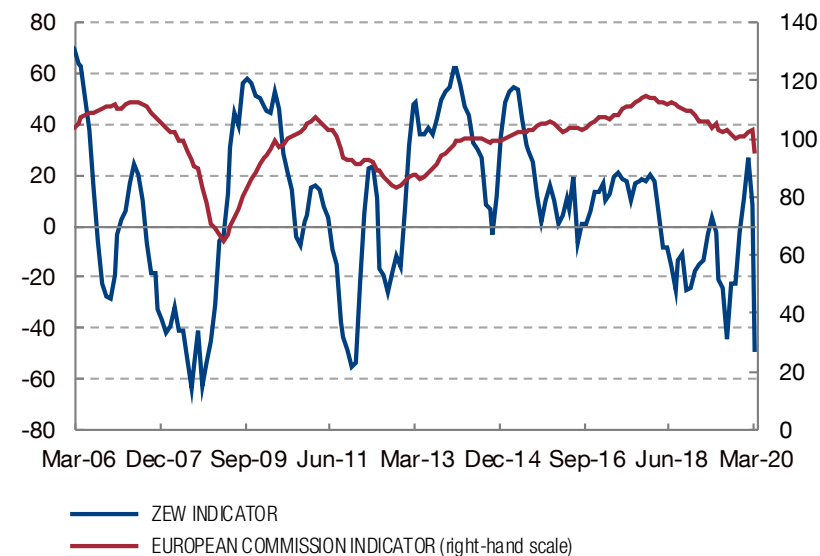
Impact on Real Activity

- The COVID-19 pandemic and the necessary containment measures are significantly disrupting economic activity, which is already reflected in the qualitative indicators, as well as in the March 2020 employment figures and the growth estimates for the first quarter
- The downturn in the indicators is equal to or greater than that in the 2008 global financial crisis
- This will involve a substantial increase in both firms' and households credit risk

1 PMI INDICATORS



2 CONFIDENCE INDICES

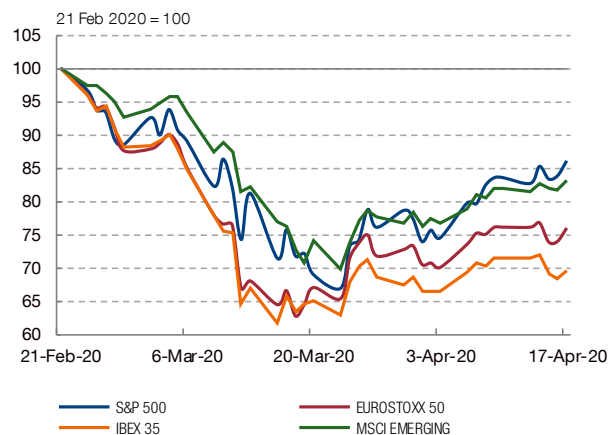


RISKS TO FINANCIAL STABILITY FROM COVID-19

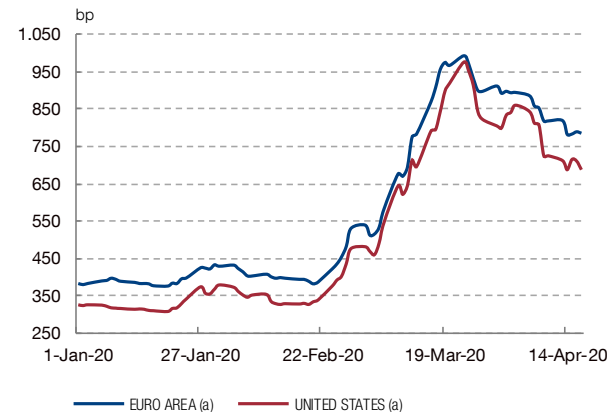
Valuation Adjustments and Increase in Risk Premia

- The coronavirus, which increases risk-aversion, has notably reduced the values of the riskiest assets (such as equities) and has increased risk premia. That said, resolute economic policy measures, and particularly action by the central banks, has achieved some stabilization
- The close interconnections globally between financial markets, and between bank and non-bank intermediaries, are a possible channel of crisis contagion and need to be monitored

3 STOCK MARKET INDICES

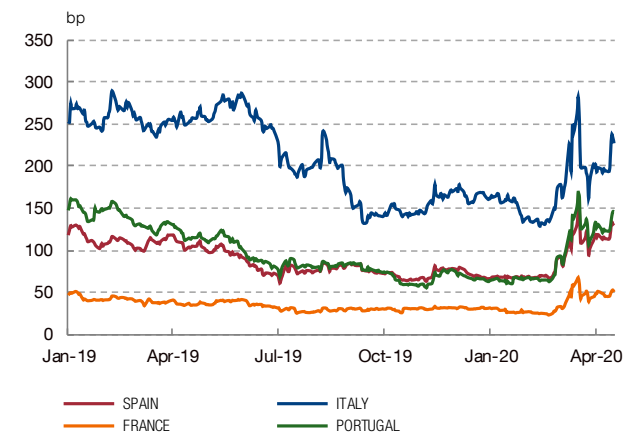


4 HIGH-YIELD BOND SPREADS OVER SWAP CURVE



a ICE Bank of America Merrill Lynch Single-B High Yield Index.

10 10-YEAR GOVERNMENT BOND YIELD SPREAD OVER GERMANY



SOURCE: Thomson Reuters Datastream.

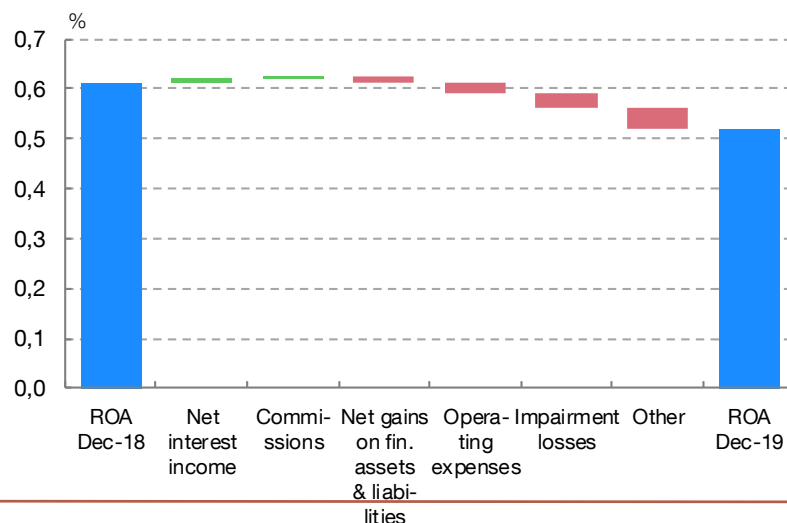
a ICE Bank of America Merrill Lynch Single-B High Yield Index.

RISKS TO FINANCIAL STABILITY FROM COVID-19

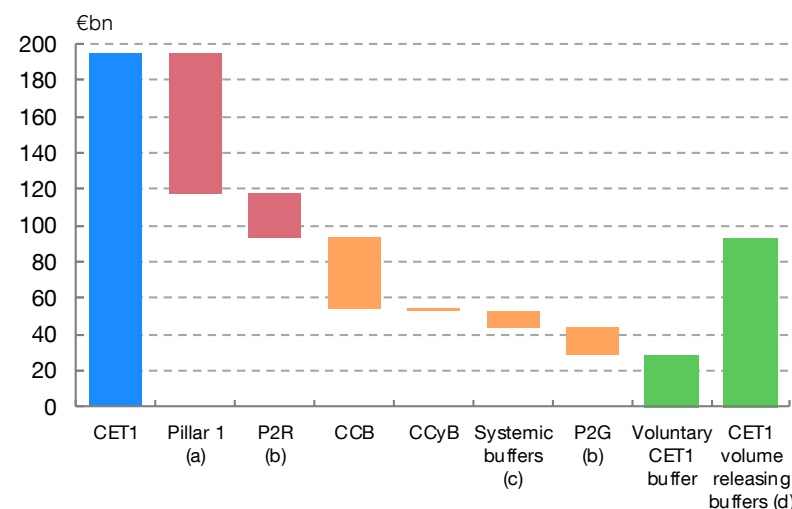
Impact on Financial Institutions' Profitability and Solvency

- The Spanish banking sector's net consolidated results fell in 2019, with ROE below COE. However, a portion of this decline was due to extraordinary factors
- Recession in global and national activity, worsening credit quality and the increase in market and operational risks will exert adverse pressure on the results and solvency of all financial sub-sectors
- Banks have capital levels above the minimum regulatory requirements and they should play a key role in absorbing this shock
- The financial impact on banks is expected to vary as a function of their initial financial situation and degree of exposure to sectors and geographies that are most affected
- This requires very close supervisory monitoring

1 BREAKDOWN OF THE CHANGE IN PROFIT
Consolidated profit as a percentage of ATA (a)



8 VOLUME OF CAPITAL ABOVE MINIMUM REQUIREMENT
December 2019



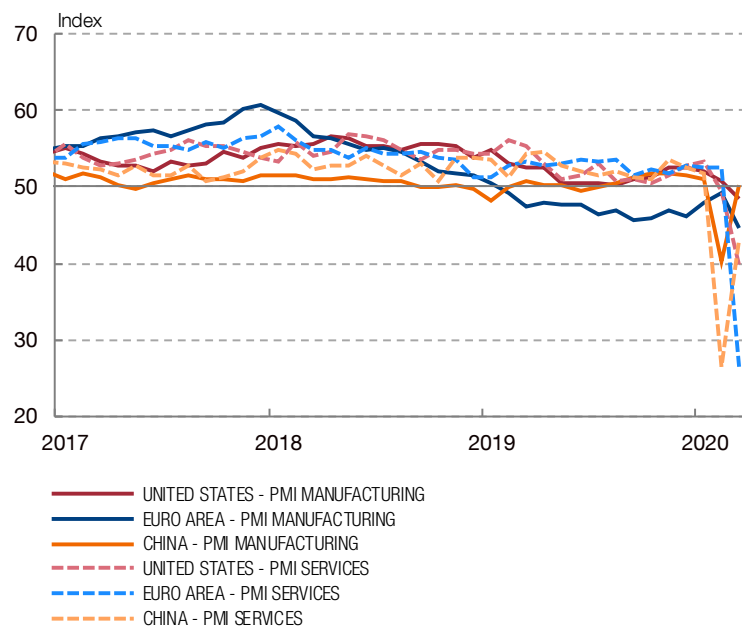
- A forceful, swift and coordinated response by the economic authorities is crucial to mitigate the effects of the crisis and to prevent such effects from becoming durable over time
- Fiscal policy will be acting as the first line of defense
 - In the case of Spain, this has implied liquidity support and financing facilities for companies and guarantee of income and moratoriums on financial obligations for households
 - The response must not only be national, it must also involve the European authorities and must adapt to the final intensity of the disturbance and accompany the economy during the reactivation process
 - This necessary reaction of fiscal policy will mean a very significant increase in public indebtedness; its reduction will have to be faced once the effects of the crisis are dissipated, through a medium-term fiscal consolidation program and structural reforms
- The reaction by central banks has also been crucial to keeping monetary policy transmission channels fully operational and preventing the fragmentation of financial markets
 - The ECB has reiterated its determination to do whatever is necessary to ensure that monetary policy is transmitted to all areas of the economy and to all countries in the area
- Both micro- and macroprudential policy decisions have been geared to enabling the use of the capital buffers built up to withstand the unexpected losses associated with this crisis, preventing potential and unwanted procyclicality in the application of accounting and prudential rules

CHAPTER 1

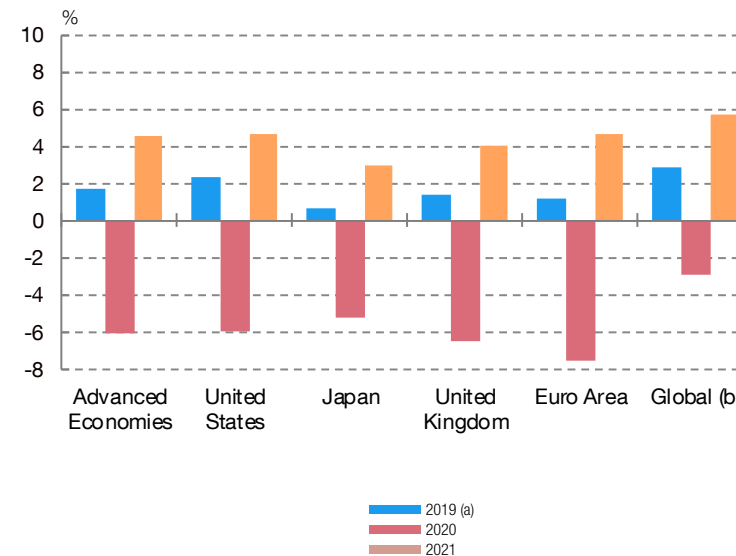
Economic Activity and Global Trade

- The spread of COVID-19 and the necessary measures to contain it have strongly impacted the national and international economic situation over the past quarter
 - In emerging markets with a Spanish banking presence, risks are very significant
- The level of uncertainty over the scale of the adverse impact on activity and international trade is very high; it is, in any event, expected to be very pronounced
- The IMF's growth forecasts for this year envisage a strong decline in activity this year and a moderate recovery in 2021. The downside risks remain predominant

1 PMI MANUFACTURING AND SERVICES



3 REAL GDP GROWTH PROJECTIONS. IMF (WEO) APRIL 2020:
ADVANCED ECONOMIES

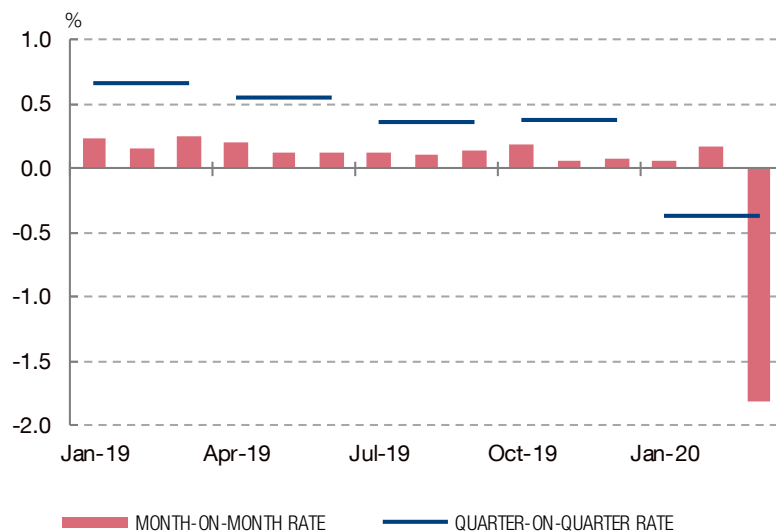


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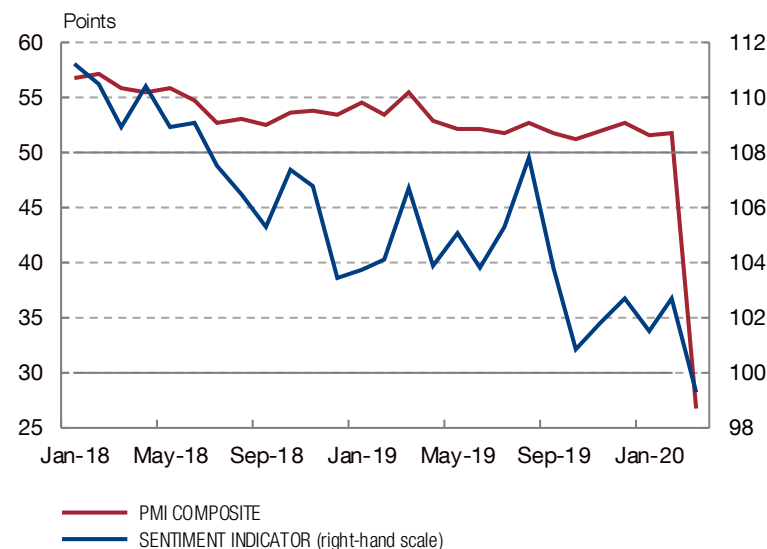
Economic Activity in Spain

- March 2020 Social Security registrations showed already the extraordinarily severe impact of the crisis. The 4.3% decline in registrations (833,979 people) was concentrated in the second fortnight of March
 - By sector, the fall in registrations was more marked in relative terms in accommodation and food service activities (-11.9%) and construction (-11.3%); and, by type of contract, among temporary employees
- The qualitative indicators, including most notably the consumer and business confidence surveys and the composite consumption index, also reflect the severe impact of this crisis
- Preliminary estimates indicate a quarterly decline of GDP of 5.2% in Q1 2020

1 SOCIAL SECURITY REGISTRATIONS (EXCL. CARERS) (b)



2 SURVEY-BASED INDICATORS

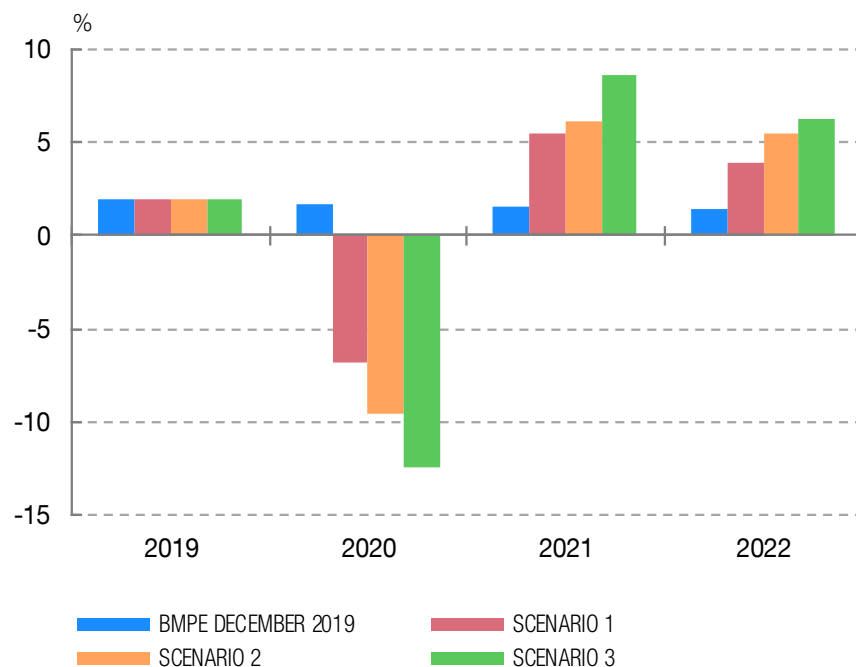


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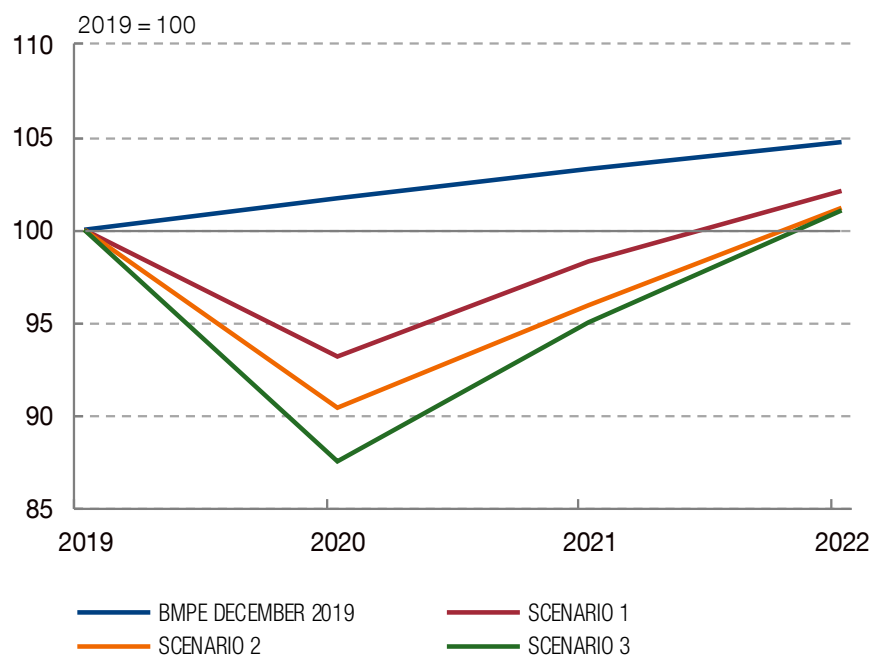
The Banco de España Macroeconomic Scenarios

- The Banco de España has prepared three scenarios using different approaches and assumptions about the duration of confinement and the effectiveness of the policies implemented
- The decline in GDP this year stands at between 6.6% and 13.6%, rebounding somewhat in 2021

1 ANNUAL RATES OF CHANGE IN GDP



2 ANNUAL GDP

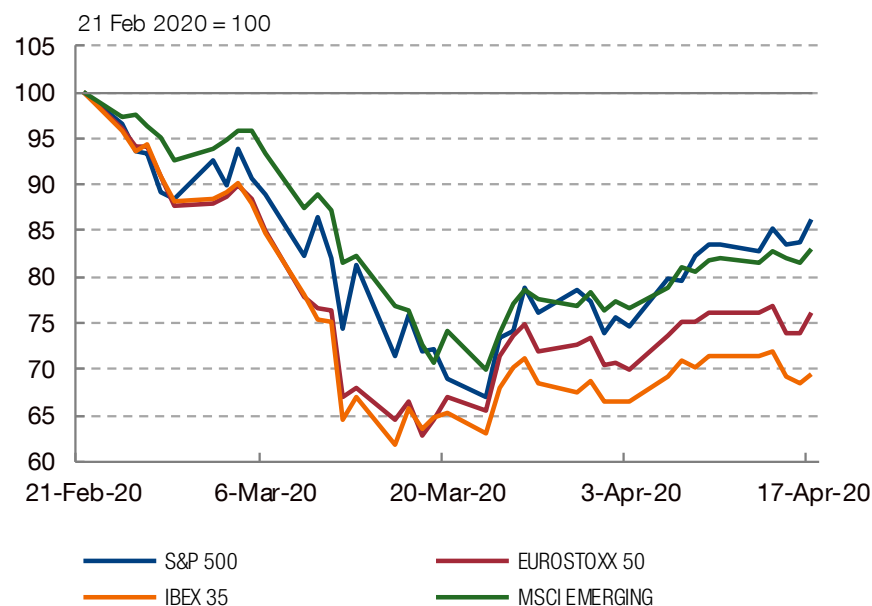


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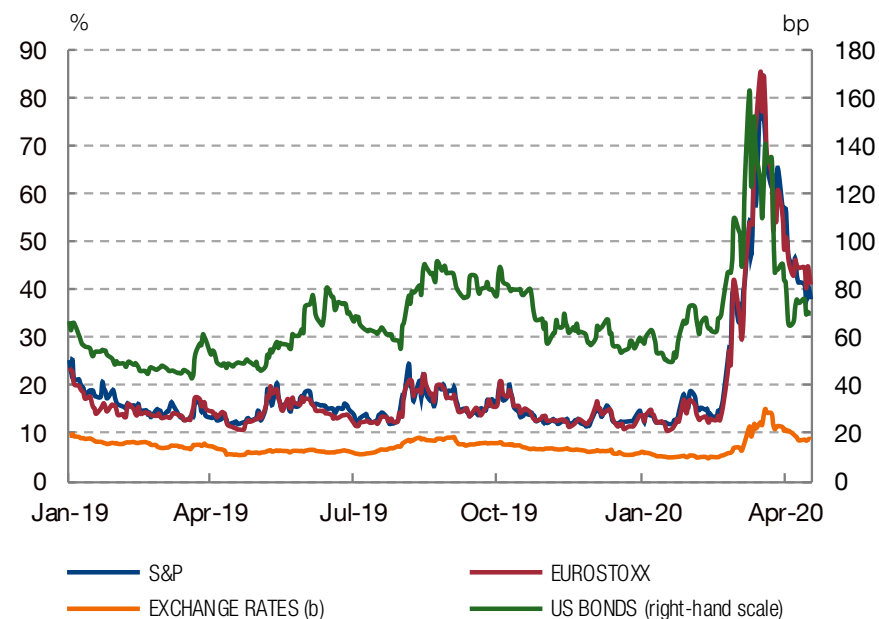
Financial Markets

- Another consequence of the health crisis has been the sizeable correction in financial asset prices and the sharp rise in the volatility
- From 21 February to end-March there was a marked fall-off in stock market indices and a strong rise in the risk premia on both corporate and sovereign debt
- The economic authorities' measures have achieved some stability on financial markets since late March, but the cumulative declines are most significant

1 STOCK MARKET INDICES



3 VOLATILITIES



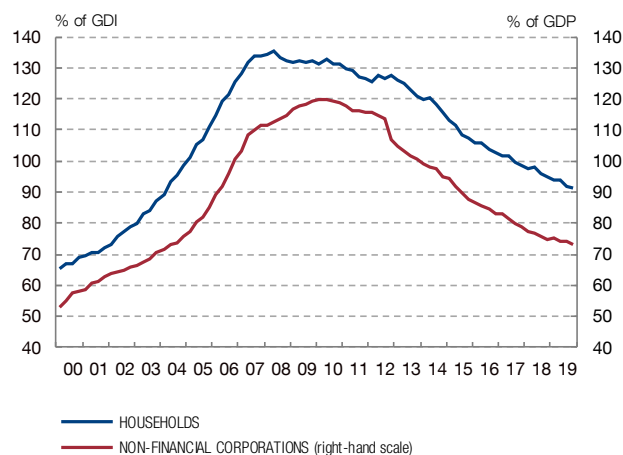
b Average of 3-month volatilities for USD/EUR, USD/GBP and JPY/USD.

CHAPTER 1

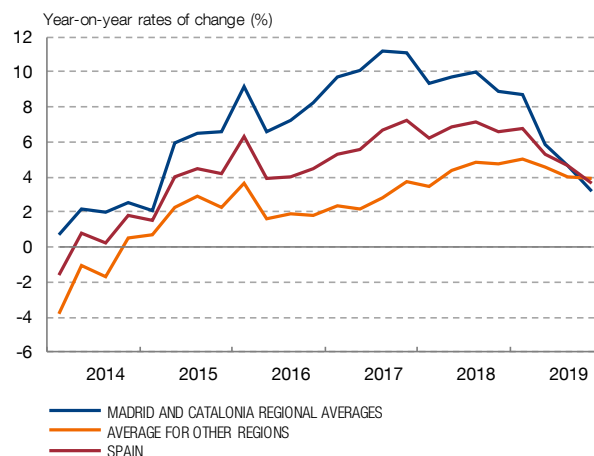
Economic Agents' Financial Position and the Real Estate Market

- The non-financial private sector's financial position is sounder than in 2007, although there are some corporate groups and households that still have a weaker financial position
- The housing market was slowing before the coronavirus crisis; that will prompt downward adjustments, at least in the short term
- After 2008, mortgage lending standards, in particular in terms of LTP (loan to price), have been much more prudent than they were before the global financial crisis

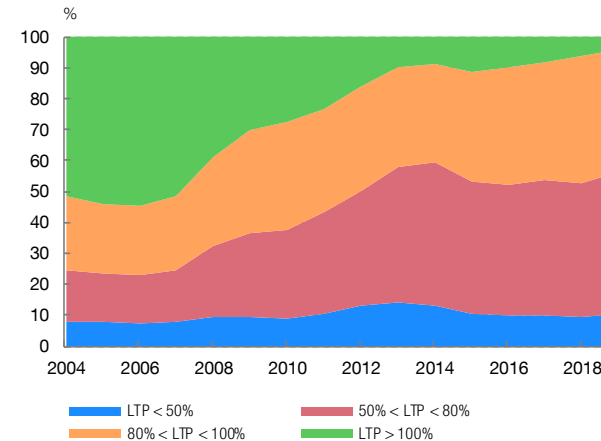
1 DEBT RATIOS



2 HOUSE PRICES PER REGION



2 LTP RATIO. DISTRIBUTION (a)



BOX 1.2: BUILD-UP OF HOUSEHOLD DEBT DEFAULTS

- The percentage of households with both mortgage loans and consumer credit with credit institutions is low (7.5% of total households and less than 20% of total households with loans from credit institutions)
- However, for households with both types of loans, a default on their consumer credit is associated with a significant increase in the probability of a subsequent default on their mortgage loan
- As a result of the shock triggered by coronavirus, consumer credit defaults will occur at an earlier stage than mortgage defaults in the case of households combining different loan products

Chart 3
PERCENTAGE OF SPANISH HOUSEHOLDS WITH LOANS
FROM CREDIT INSTITUTIONS. AVERAGE DATA 2011-2017

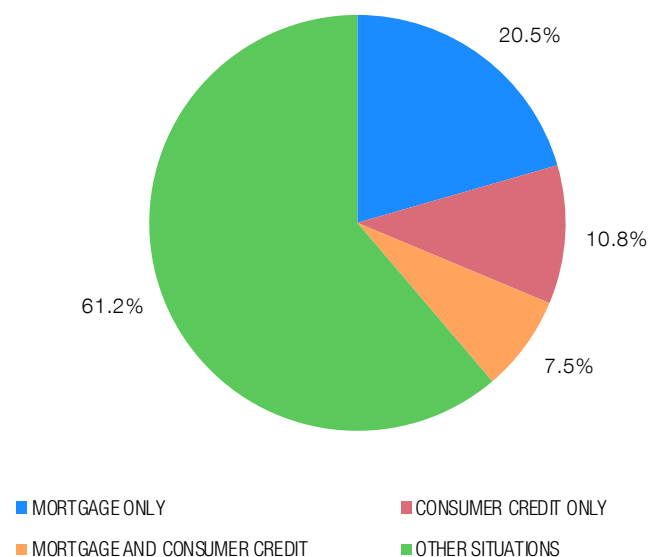
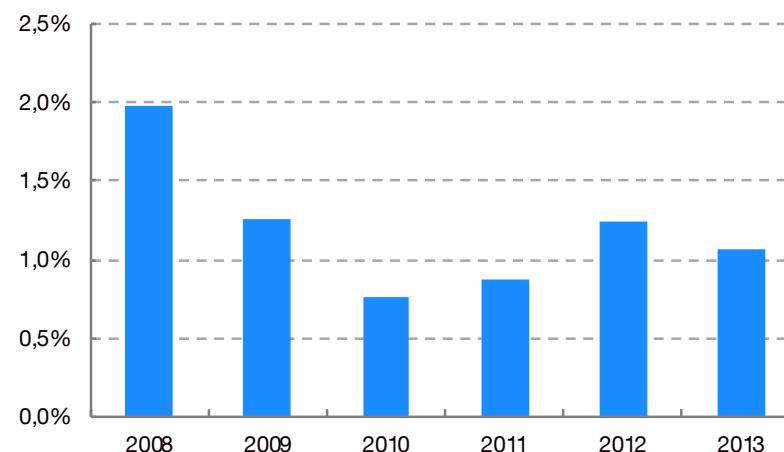


Chart 5
VARIATION IN THE PD FOR MORTGAGES OF CUSTOMERS WITH PAST DEFAULTS
ON OTHER BANK LOANS (a)

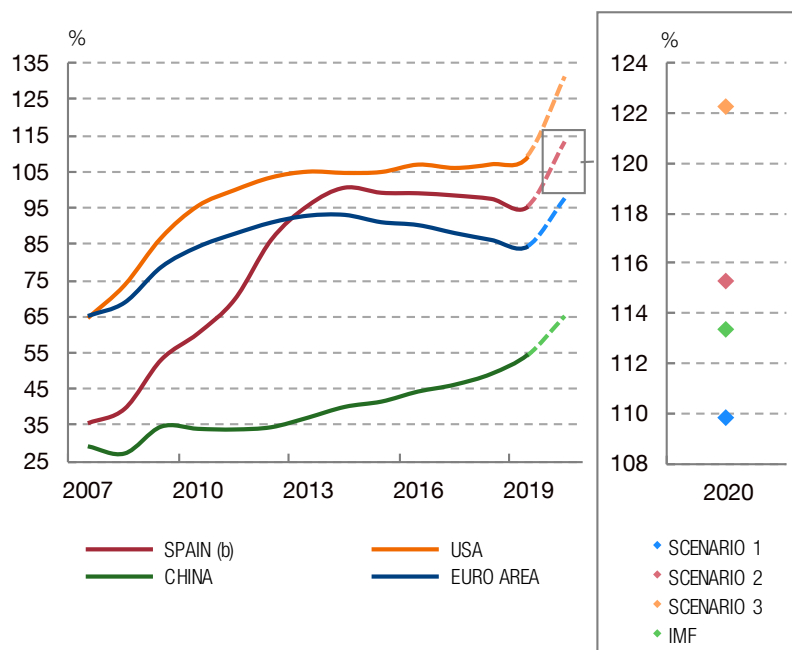


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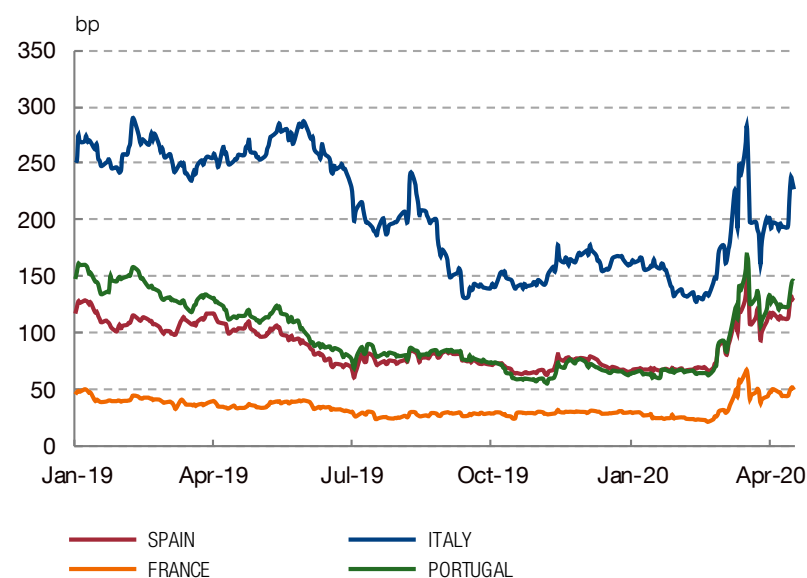
Public Finances Will Substantially Deteriorate as a Result of this Crisis

- Both the functioning of the automatic stabilisers and the necessary measures adopted will substantially increase the general government deficit and public debt in Spain this year
- This will not be exclusive to Spain and will affect most other economies
- A European response to share the risks is required, together with a medium-term fiscal consolidation programme that reduces the public finances imbalances, once the effects of the crisis fade

9 PUBLIC DEBT AS A PERCENTAGE OF GDP (a)



10 10-YEAR GOVERNMENT BOND YIELD SPREAD OVER GERMANY

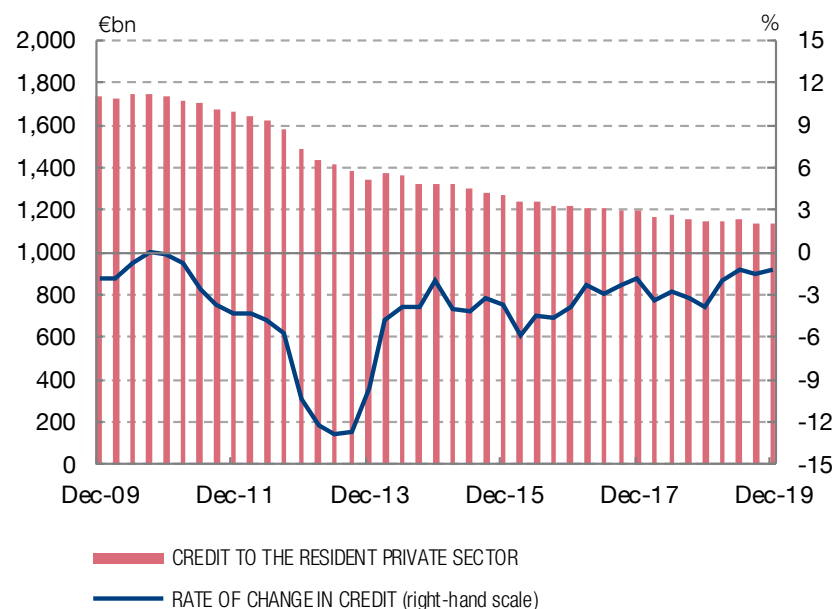


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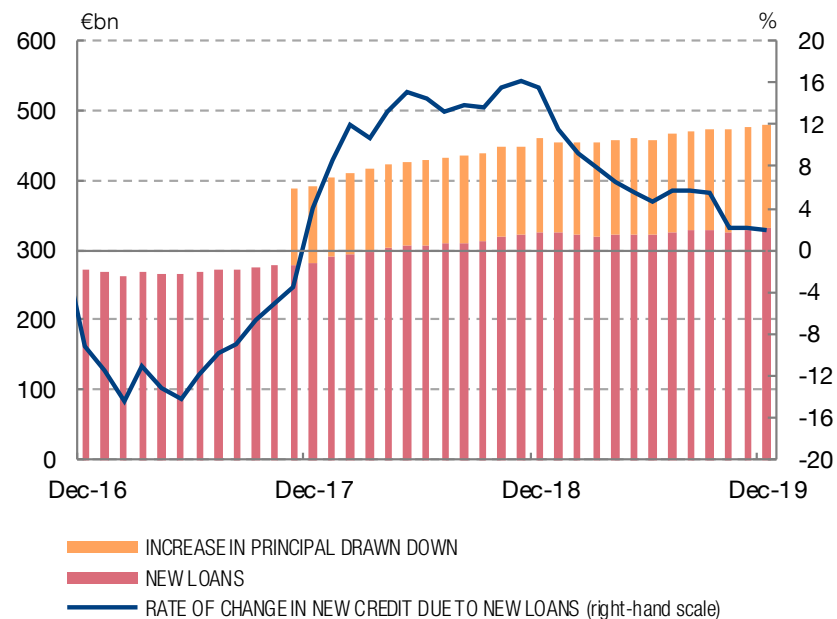
Lending in the Resident Private Sector

- Total credit continued to decrease in 2019 Q4, albeit at lower rates (-1.3%) than in previous quarters
- In 2020 the coronavirus crisis may reinforce the contractionary trend of credit recorded in 2019, although the guarantee programmes are expected to limit this effect for credit to NFCs
- Very preliminary data suggest that up to March the decline in credit to the private sector has diminish, having become more intense in the households sector and stabilizing in the case of firms

1 CREDIT VOLUME AND YEAR-ON-YEAR RATE OF CHANGE
Business in Spain, ID

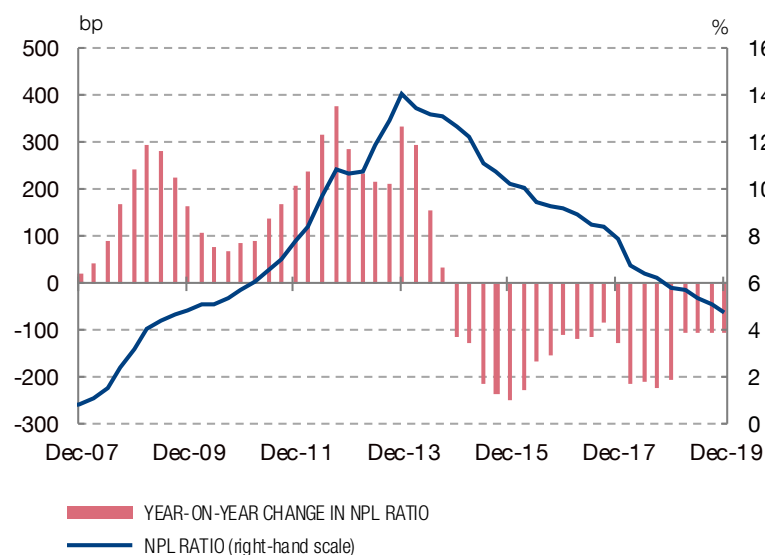


2 VOLUME OF NEW CREDIT IN THE PAST 12 MONTHS AND YEAR-ON-YEAR RATE OF CHANGE. HOUSEHOLDS AND NON-FINANCIAL CORPORATIONS (a)
Business in Spain, ID

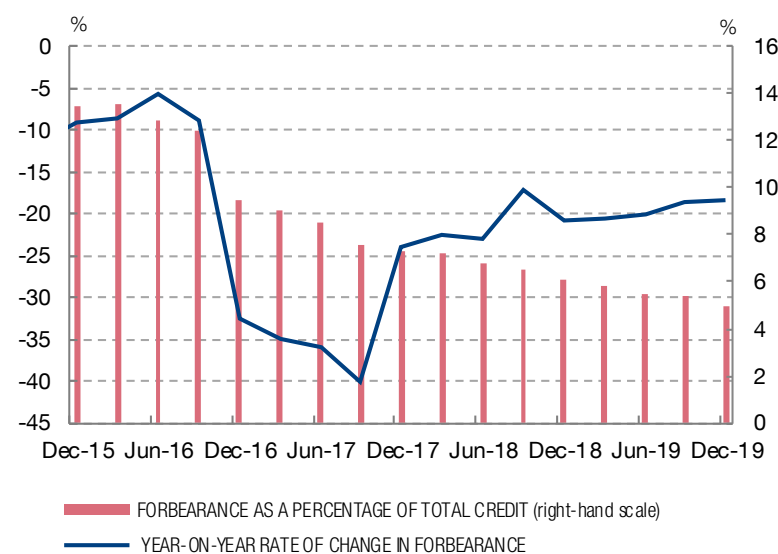


- The NPL ratio continued the decline shown in recent years to stand at 4.8% in December 2019, a fall of more than 1 pp year-on-year
- Forbearance also continued to decrease, accounting for 5% of lending to the private sector in December 2019
- The spread of COVID-19 will cause increases in these ratios, although they are expected to be mitigated by the economic policy response

1 RESIDENT PRIVATE SECTOR'S NPL RATIO
Business in Spain, ID



2 RESIDENT PRIVATE SECTOR FORBEARANCE
Business in Spain, ID

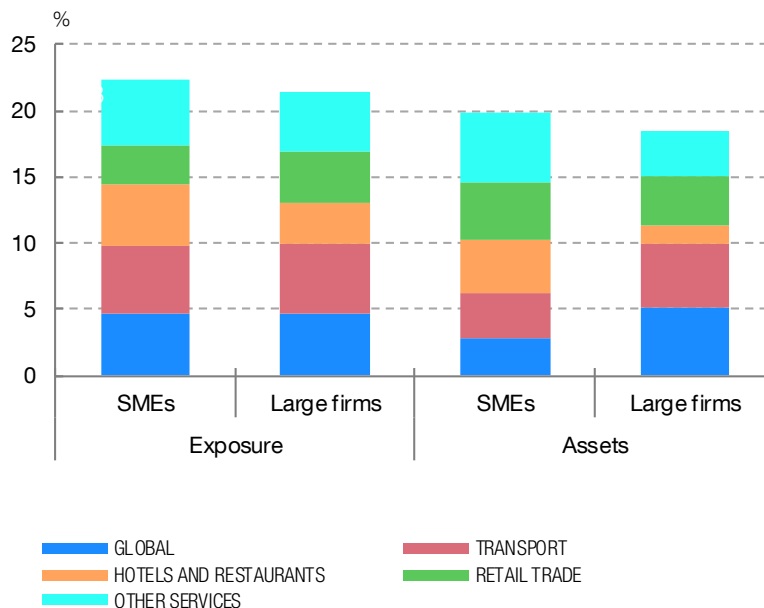


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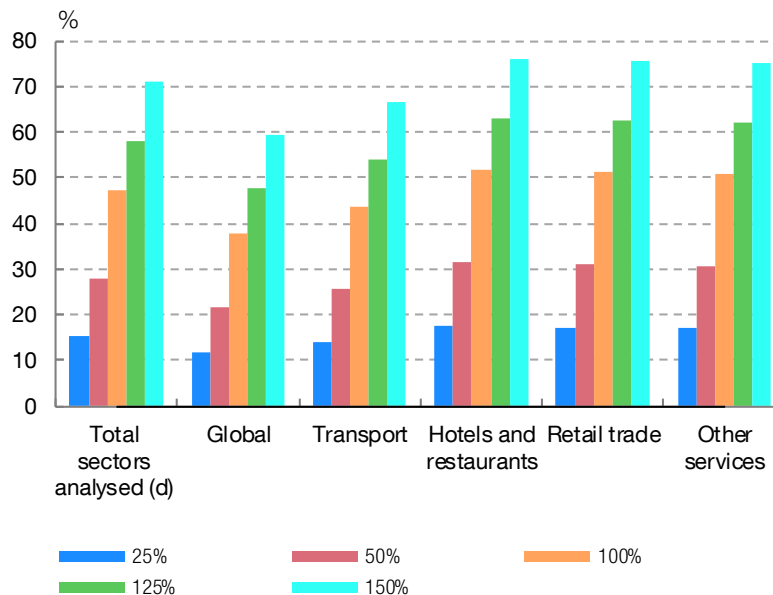
Impact of the Fall in Economic Activity on Non-Performance of Loans to Businesses

- In December 2019, deposit institutions' exposure to sectors particularly sensitive to the coronavirus crisis accounted for around 20% of lending to non-financial corporations
- The adverse impact of the coronavirus crisis on the non-performance of loans to firms will vary among sectors and among firms, and will hinge on their initial financial position
- The economic measures to support the private sector will lessen the pandemic's impact on the non-performance of loans to businesses, by directly supporting firms' financial position and through the macroeconomic stimulus

1 CREDIT EXPOSURE AND TOTAL ASSETS



2 NON-PERFORMING EXPOSURE AS A PERCENTAGE OF TOTAL EXPOSURE

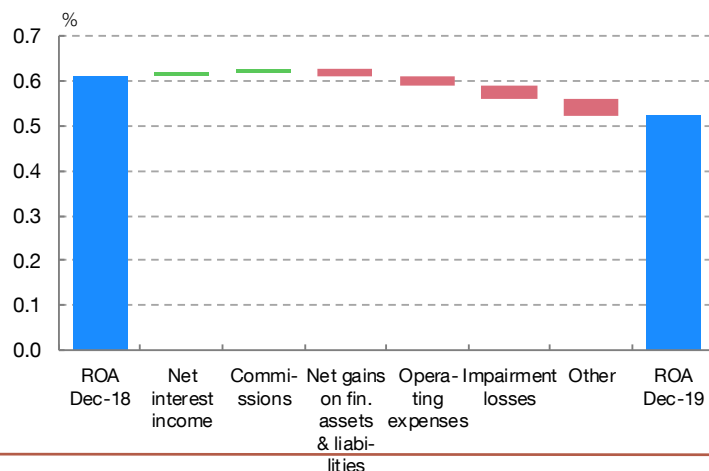


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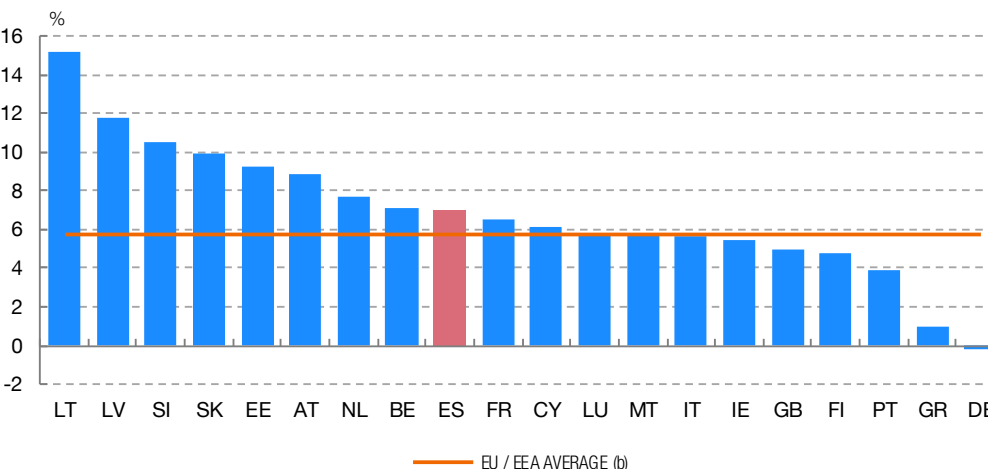
Profitability

- Consolidated profit of the Spanish banking sector fell by 13.1% year-on-year in 2019
- The reasons for this drop are the decrease in gains or losses on financial transactions, the rise in operating expenses (affected by workforce restructurings), the increase in impairment losses for the first time since 2012, and adjustments to goodwill of two significant institutions
- Despite the decline, the sector's profitability ratios stood above the European average and those of the main EU economies, excluding Italy
- The COVID-19 crisis will also put pressure on the banking sector's profitability, specifically through a fall in revenue and a rise in impairment expenses
 - In fact, in 2020Q1 the drop in results in the case of listed Spanish banks has been very significant, due to the strong preventive increase in provisions associated to the crisis

1 BREAKDOWN OF THE CHANGE IN PROFIT
Consolidated profit as a percentage of ATA (a)

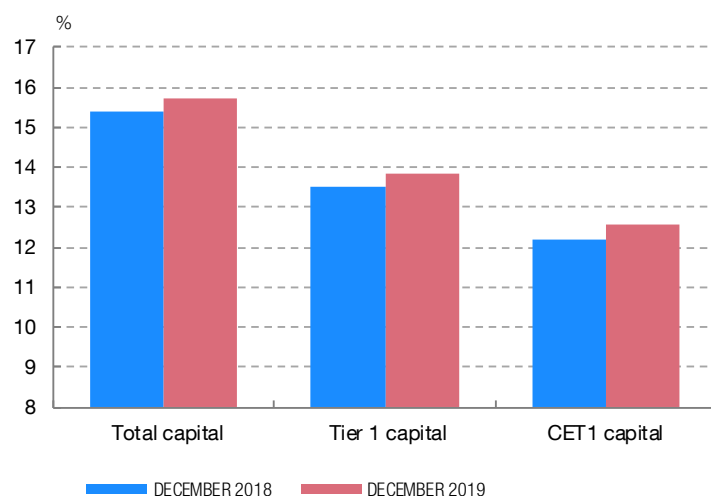


2 ROE
Consolidated data

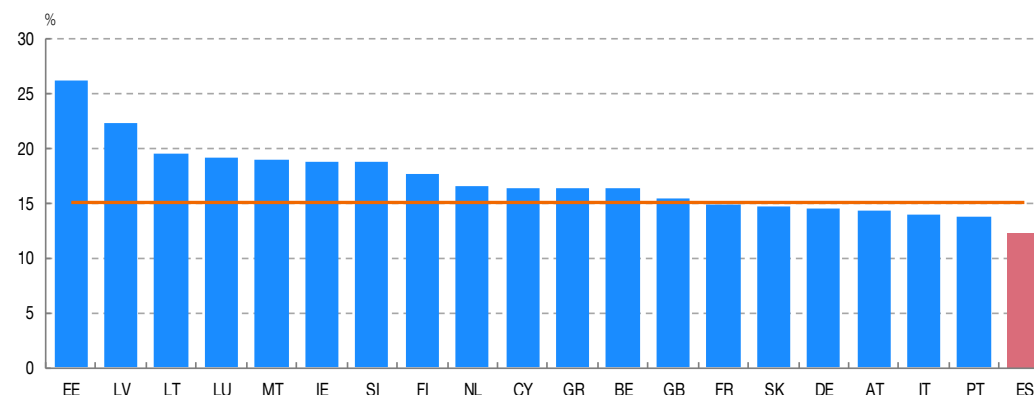


- Bank solvency has increased significantly since the end of the financial crisis, with the CET1 Ratio standing at 12.6% in December 2019, after a rise in 34 bp in the last year
- Despite this increase, in September 2019, Spanish institutions remained on the bottom rung of the European solvency ranking (based on the CET1 ratio)...
 - ...although their position improves when viewing the leverage ratio
 - The low ranking in terms of the CET1 ratio is partly due to the prevalent use of the standard method, which implies higher risk weights, but also lower sensitivity to changes in risk

1 CAPITAL RATIOS

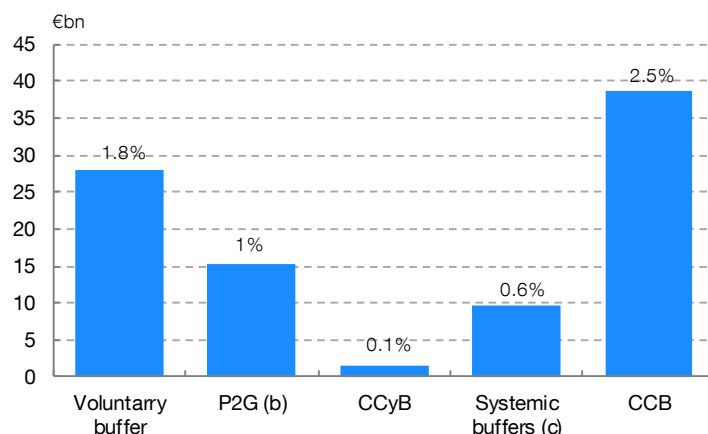


1 CET1 RATIO
Consolidated data



- The voluntary buffer of CET1 of the Spanish banking system as a whole stood at €28 billion in December 2019
 - Of the capital buffers that can be released, the conservation buffer is, by a wide margin, the most significant, whereas the countercyclical capital buffer represents a minimal percentage
- The buffers whose release is permitted as part of the prudential response to the crisis are estimated to be sufficient to cover an increase in the NPL ratio of 8.2 pp
 - This rises significantly when combined with the positive impact of the moratoria and the guarantee programme for firms, which also contributes to reducing RWAs

1 VOLUME OF BUFFERS AND THEIR RELATIVE WEIGHT AS A % OF RISK-WEIGHTED ASSETS (a)
December 2019



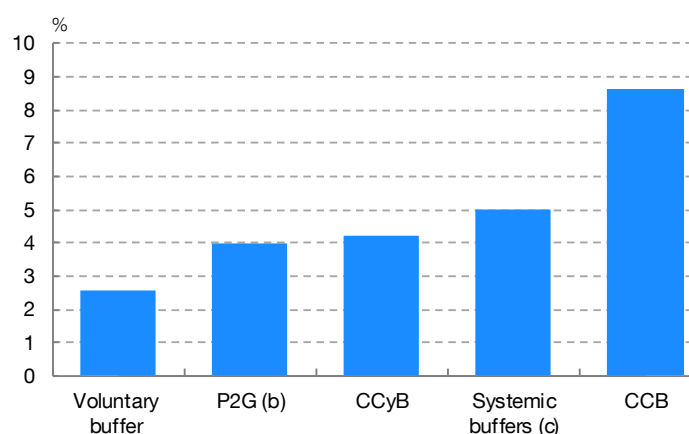
a Above each bar is the percentage of total risk-weighted assets that it represents.

b P2G refers to Pillar 2 Guidance.

c This item includes both the buffer for global systemically important institutions and the buffer for other systemically important institutions.

d Each bar represents the cumulative percentage of credit at December 2019 whose classification as non-performing could be covered by the various buffers. Under the current supervisory guidance of the ECB and the national authorities, the voluntary buffer, the countercyclical capital buffer, the systemic buffers, the capital conservation buffer and the capital linked to P2G can be released to absorb losses, whereas the Pillar 2 Requirements are maintained, although the related rules on the composition thereof are relaxed, with a lower weight of CET1 required.

2 CUMULATIVE PERCENTAGE OF POTENTIAL NPLs THAT EACH BUFFER COULD ABSORB (d)
December 2019



BOX 2.2: NON-BANKING FINANCIAL INTERMEDIATION (NBFI) – FSB REPORT

- In Spain the decline in banks' weight in total financial sector assets, ongoing since the end of the crisis, has continued
- At December 2018, the narrow measure of NBFI in Spain (and at global level) represented 6.6% (13.6%) of financial assets, having decreased by 3.5% (risen by 1.7%) in the previous year
- The United States concentrates the greatest NBFI activity (30% of the global total). However, its weight has decreased in recent years, in contrast with the growing importance of China
- By type of entity, investment funds make up most of the sector, both at global level and in Spain

Chart 3
SIZE OF MUNFI AS COMPARED WITH THE NARROW MEASURE OF NBFI, BY COUNTRY (a)
% of total financial assets of financial institutions

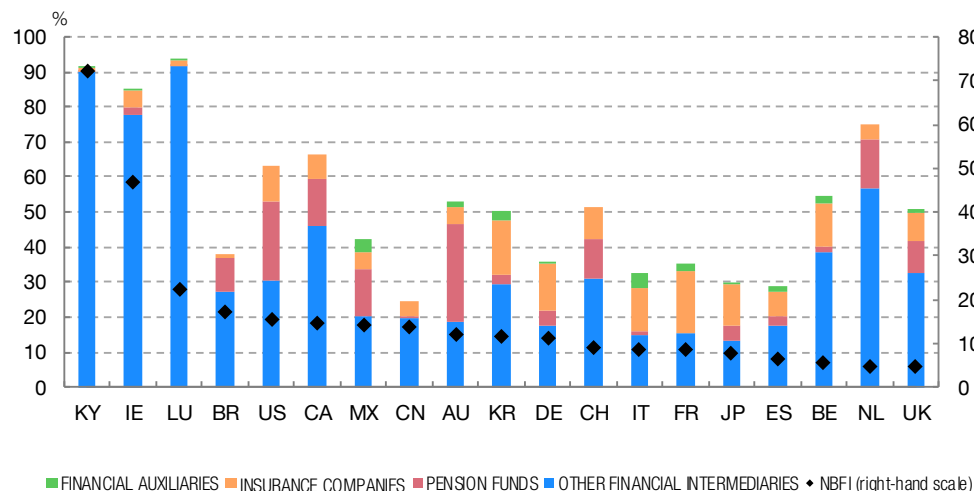
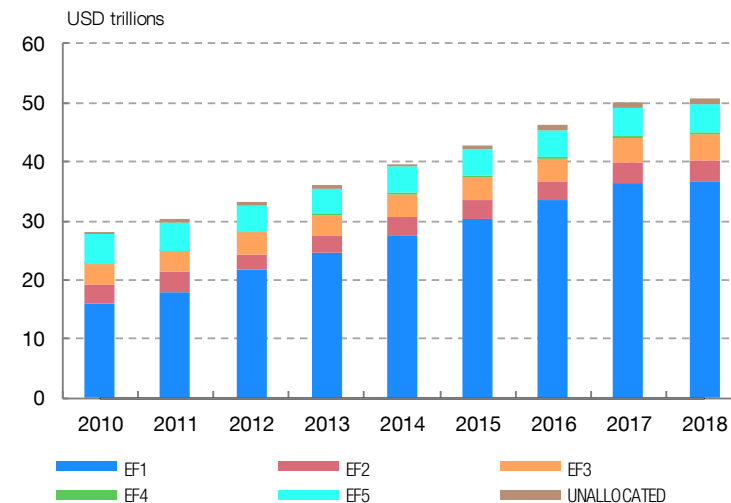


Chart 5
NARROW MEASURE OF GLOBAL NBFI BY ECONOMIC FUNCTION

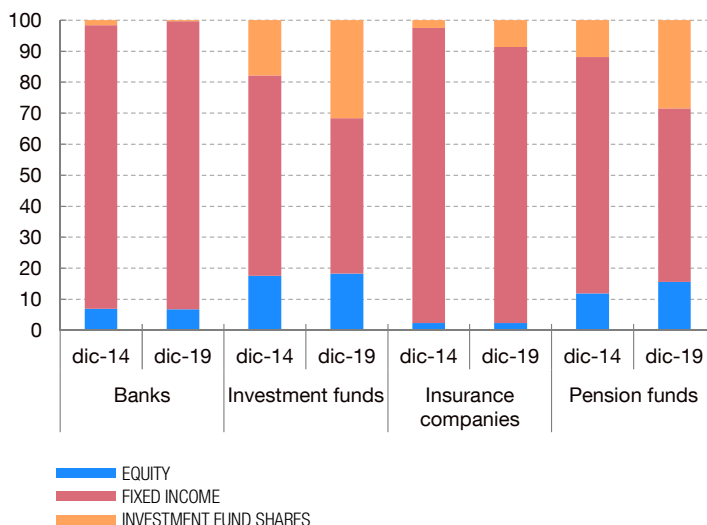


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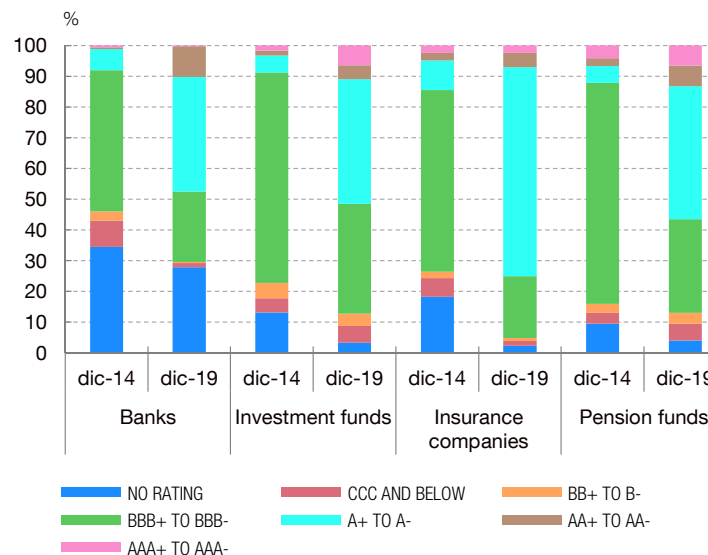
Systemic Interconnections

- In addition to the direct interconnections, it is important to bear in mind the possible ramifications of the shock triggered by the spread of coronavirus through indirect interconnections as a result of similarities in the marketable securities portfolios of banking and non-banking financial intermediaries
 - The securities holdings of banks and insurance companies are highly concentrated in fixed income, whereas investment funds and pension funds are more exposed to equity securities and shares in other funds
 - Fixed-income securities with a marginal investment grade rating account for a significant percentage of portfolios. Rating agencies have once again a key role

1 COMPOSITION OF SECURITIES PORTFOLIOS BY INSTRUMENT TYPE
% of the total portfolio



2 CREDIT RATING (a)
% of total fixed-income portfolio

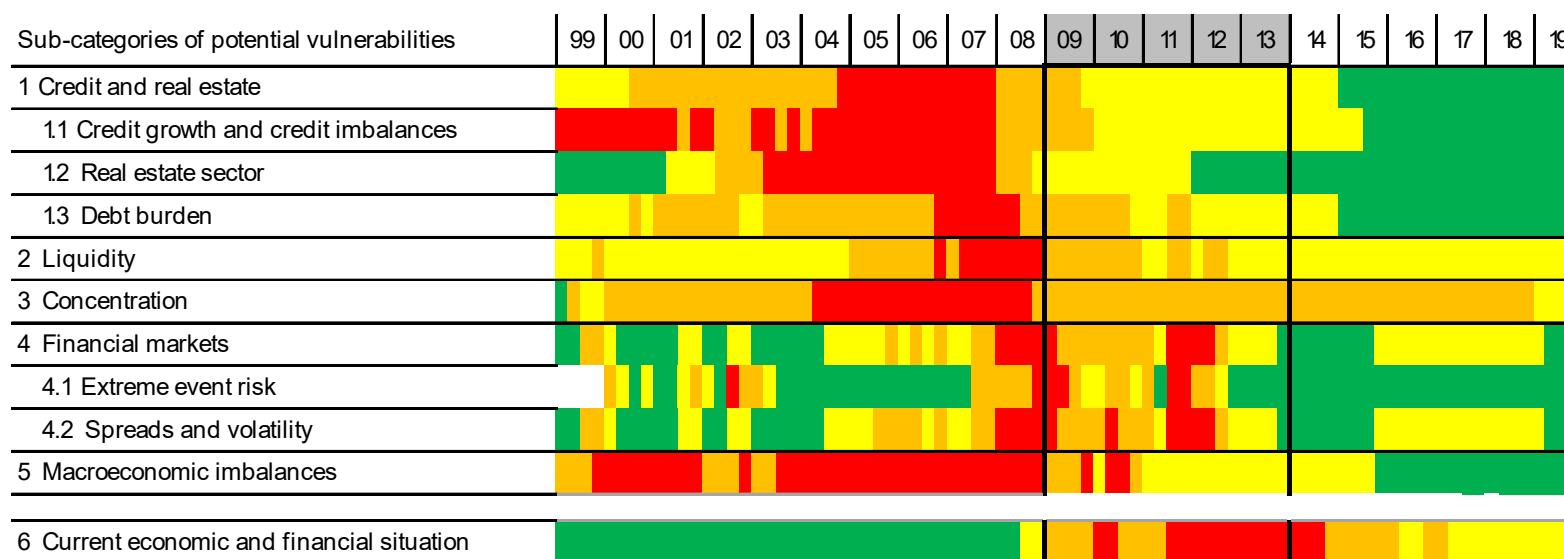


CHAPTER 3

Analysis of Systemic Vulnerabilities

- Until December 2019 the map of systemic vulnerability indicators remained stable and did not show signs of systemic risk build-up
- The crisis associated with COVID-19 will possibly lead to a sharp revision of these indicators in the coming months
- The Banco de España is monitoring closely the changes in the various macrofinancial vulnerability indicators following the outbreak of the COVID-19 crisis

MAP OF SYSTEMIC VULNERABILITIES

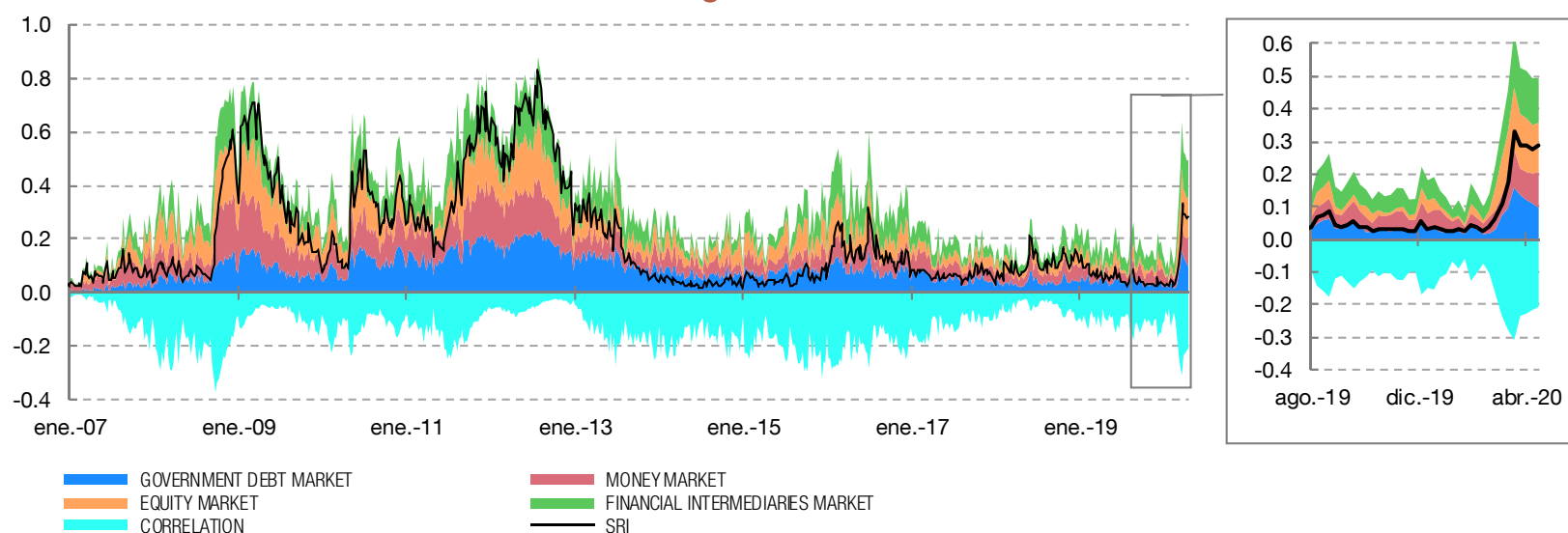


a. The colour scheme identifies four levels of risk: i) green denotes a normal, risk-free situation, ii) yellow indicates low risk, iii) orange is medium risk and, iv) red is high risk. The shaded band denotes the last systemic crisis. Some December 2019 indicators are based on provisional

CHAPTER 3

Changes in the Systemic Risk Indicator

- The systemic risk indicator (SRI) for the Spanish financial system, which held at very low levels throughout 2019, has spiked owing to the effects associated with the COVID-19 crisis on the financial markets
- There are varying levels of stress in the different markets making up the Spanish financial system, with it being particularly intense in the equity market and less so in the money market
 - The measures adopted by the ECB and other central banks have curbed the increase in this indicator, which has stabilised at a high level in recent weeks



SOURCES: Datastream and Banco de España.

a. The Systemic Risk Indicator (SRI) aggregates 12 individual indicators of stress (volatilities, interest rate spreads, maximum historical losses, etc.) of different Spanish financial system (markets for money, government debt, equity and financial intermediaries). In calculating the SRI, the effect of cross-correlations is taken into account, whereby the SRI posts higher values when the correlation between the four markets is high (i.e. situations in which there is a high - or low - level of stress in the four markets at the same time), and lower values when correlation is lower or negative (i.e. situations in which the level of stress is high in some markets and low in others). For a detailed explanation of this indicator, see Box 1.1 in the May 2013 FSR.

- Macroprudential policy aims to mitigate the impact of systemic financial shocks, such as that triggered by COVID-19, on the real economy
 - In particular, one of its objectives is to help institutions to continue providing the necessary financing to households and firms, even in adverse environments such as the current one
- The current circumstances call for maintaining at 0% the countercyclical capital buffer rate applicable to credit exposures in Spain for a prolonged period
 - At least until the main economic and financial effects of the coronavirus crisis have dissipated
- The ECB, the European Banking Authority (EBA) and the BCBS have encouraged credit institutions to use the capital and liquidity buffers available and to make flexible use of prudential regulation
- Several important European countries have released their CCyB and adopted additional macroprudential measures in response to the COVID-19 crisis
- Box 3.1 details exhaustively the macroprudential policy response in Europe to the COVID-19 crisis

BOX 3.2: COST-BENEFIT ANALYSIS OF MACROPRUDENTIAL POLICY

- To analyse the balance between short-term costs and medium- and long-term benefits, the Banco de España has conducted a study that estimates the effects of macroprudential policy on future economic growth
- The main result is that activating or tightening macroprudential measures reduces growth under normal circumstances, but substantially moderates the decline in GDP in adverse scenarios. Easing macroprudential measures offsets the negative effects of adverse scenarios
- However, the scale and speed of the benefits depends on the type of instrument used, with capital buffers and borrower-based measures having different effects

Chart 2
IMPACT OF RELEASING THE CCyB ON THE 5TH AND 50TH PERCENTILES OF THE GDP GROWTH DISTRIBUTION AT HORIZONS BETWEEN 1 AND 16 QUARTERS (a)

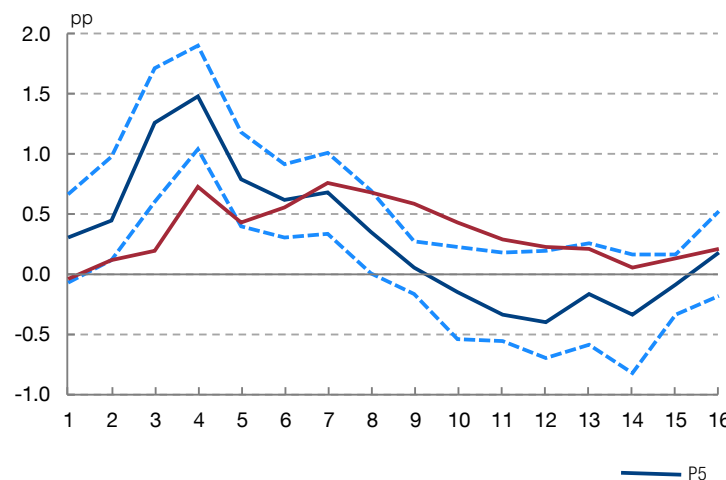
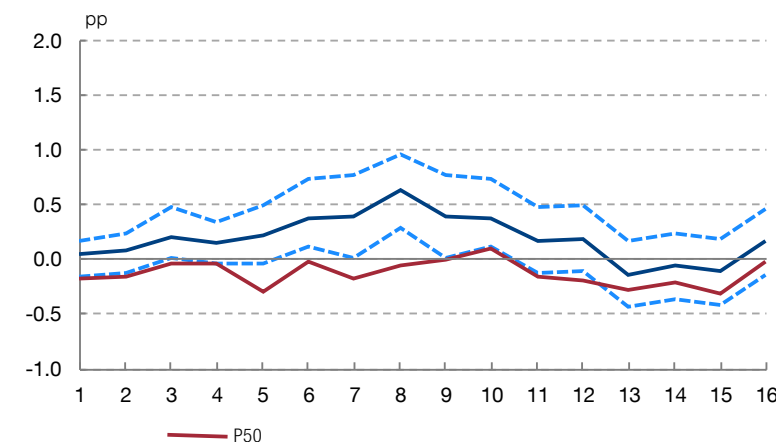


Chart 3
IMPACT OF LENDING CONDITIONS ON THE 5TH AND 50TH PERCENTILES OF THE GDP GROWTH DISTRIBUTION AT HORIZONS BETWEEN 1 AND 16 QUARTERS (a)

3.2 EASING OF LIMITS TO LENDING CONDITIONS IN PERIODS OF FINANCIAL CRISIS



a. The solid blue and red lines represent the estimated impact in percentage points on the 5th and 50th percentiles, respectively; of the conditional distribution of GDP growth. The dotted blue lines represent the 95% confidence bands, obtained through the use of bootstrapping. The analysis is conducted for a sample of 28 EU countries. The periods of crisis are those identified by the national authorities as significant systemic events from a macroprudential viewpoint and published on the ECB/ESRB EU crises database (for further details, see Lo Duca, M., Koban, A., Basten, M., Bengtsson, E., Klaus, B. and Kusmierczyk, P. (2017). *A new database for financial crises in European countries*. ECB/ESRB EU crises database, ESRB Occasional Paper Series 13, July). Expansionary or normal periods are those outside a crisis. Capital measures (provisioning and capital requirements, including buffers) are captured by means of a cumulative index which distinguishes between activation or tightening and release or easing of measures (for further details, see Galán J.E. (2020). *The benefits are at the tail: uncovering the impact of macroprudential policy on growth-at-risk*. Working Paper 2007. Banco de España).

CHAPTER 3

Prudential Response: Microprudential Policy Measures and Measures Relating to Accounting Regulation

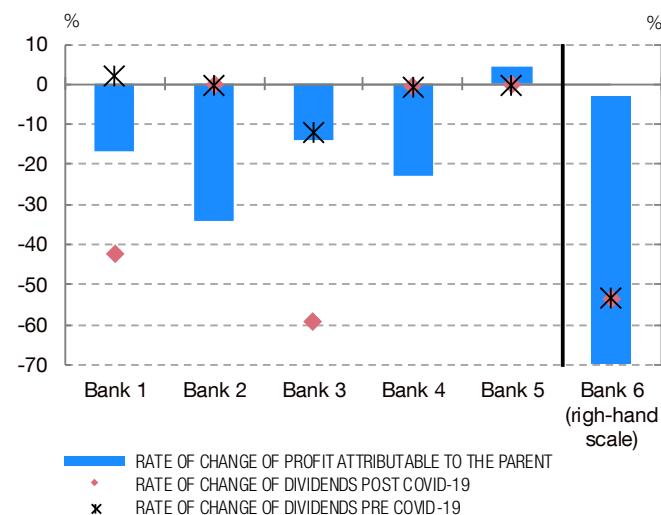
- Supervisory processes have been adapted to release the operational resources of banks that can be channelled towards ensuring business continuity
 - The EBA has postponed the stress test exercise to 2021
- Supervisory requirements have been adjusted to allow banks to make use of the buffers available to absorb unexpected losses associated with the pandemic
 - The ECB has announced that banks would be allowed to operate temporarily below the levels defined by the P2G, the capital conservation buffer and the liquidity coverage ratio
- The national and international authorities responsible for accounting regulation have issued different statements adapting the regulatory financial reporting framework to the COVID-19 crisis
- The accounting-related matters aim for an adequate calculation of impairment due to credit risk in 2020, distinguishing temporary from permanent impairment, and recognising the role of the public support measures
 - They will thus help to prevent provisions from behaving procyclically and mechanistically, resulting in a downward adjustment to credit, and to moderate the impact on profitability
- Authorities are also trying to temporarily reduce the amount of accounting information banks are required to report

CHAPTER 3

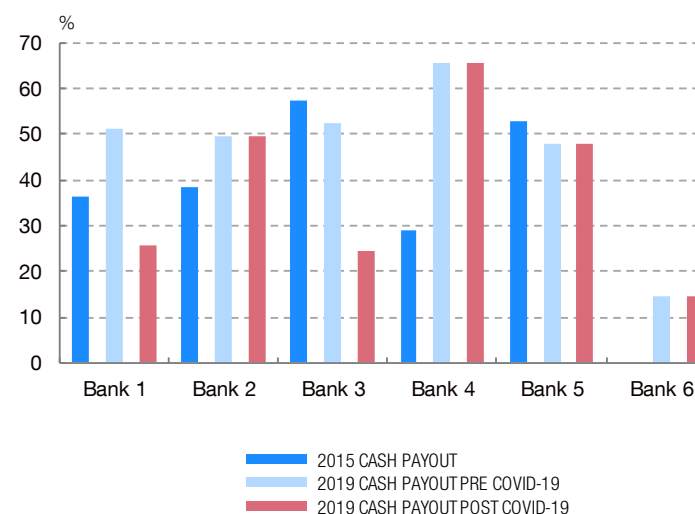
Prudential Response: Other Measures

- The ECB and the EBA have approved recommendations to suspend the distribution of dividends by banks and for them to practice prudence in the payment of bonuses to employees, in order to channel the generation of profit to the strengthening of solvency (the Banco de España has extended these recommendations to the less significant institutions under its supervision)
- The recommendation by the ECB and the Banco de España to not distribute dividends will enable banks to bolster their capital levels to absorb the impact of the crisis

1 CHANGES IN 2019 IN CONSOLIDATED PROFIT ATTRIBUTABLE TO THE PARENT AND IN DIVIDENDS (a)
Top listed banks in Spain



2 CASH PAYOUT RATIO (a) (b)
Top listed banks in Spain



THANKS FOR YOUR ATTENTION