

MARKETS AND ASSET PRICES



4 MARKETS AND ASSET PRICES

Figure 4.1 Markets and asset prices (a)





Real housing prices have risen due to the strength of demand in relation to supply. Against this background, indicators of house price imbalances have held at moderate levels



Mortgage lending standards remain stable





Tensions in the US public debt market and dollar depreciation following the tariff policy shifts



Equity market volatility spiked in April driven by economic policy uncertainty



Risky asset valuations remain high



High concentration of global stock market capitalisation in the technology sector

SOURCE: Banco de España.

a The green (red) shields denote circumstances that constitute strengths (vulnerabilities) should risks materialise. The strengths (vulnerabilities) reduce (increase) the likelihood of occurrence and the impact of the risks to financial stability.

4.1 The real estate market

4.1.1 Prices and activity

Activity in the housing market remained very strong in 2024 H2. In seasonally adjusted terms, 367,000 house purchases were signed before a notary, up 2.3% on 2024 H1 and 16.6% on 2023 H2 (Chart 4.1.a). House purchases by foreign nationals remained high (18.0% in 2024, compared with 16.9% in 2019), although their share in total purchases declined in Q4 (to 16.7%).

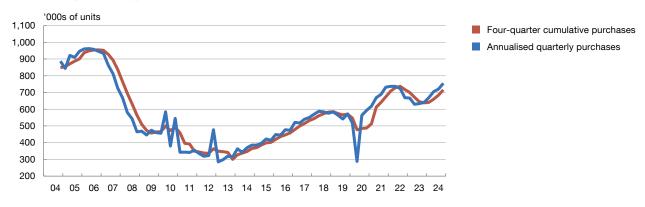
House prices continue to be pushed higher amid robust demand and relatively more rigid supply. By segment, the sharpest price growth again came in new housing, up 11% year-on-year in 2024 H2, the sharpest rise since 2007. Second-hand house prices grew by 9.5% in the same period. Price developments varied across regions, albeit with relatively strong momentum in all of them. The pressure on house prices in 2024 again reflected strong demand, driven in particular by net household formation (180,000) and lower borrowing costs,¹

¹ This demand is compounded by demand from non-residents, alternative uses of housing (e.g. holiday or seasonal rentals) and, more broadly, unmet demand from resident young people who have delayed leaving the family home.

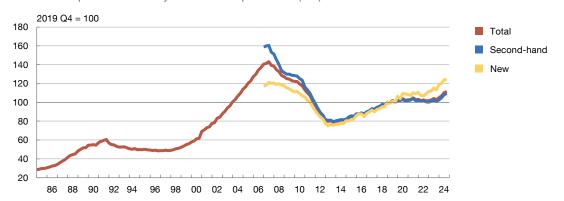
Chart 4.1

Strong demand and relatively more rigid supply continued to exert upward pressure on house prices





4.1.b House prices. Deflated by the consumer price index (CPI)



SOURCES: Banco de España, INE and Ministerio de Vivienda y Agenda Urbana (MIVAU). Latest observation: December 2024.

a Purchases signed before a notary.

while supply was relatively more rigid.² At end-2024, house prices in real terms stood 11.5% above pre-COVID-19 levels and close to 2004 figures, albeit 22% down on the previous peak reached during the global financial crisis (2007 Q3) (Chart 4.1.b).³

On the estimates available, at end-2024 the average house price in Spain was somewhat above the long-term equilibrium level. Specifically, according to various models, this imbalance stood between 1.1% and 8.5%, compared with an estimated range of 0.8% to 4.8% six months earlier (Chart 4.2).

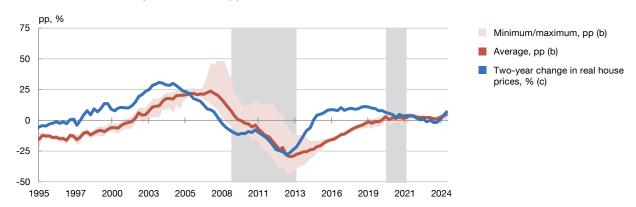
Commercial property prices increased in 2024 Q4, while transactions in the segment declined slightly. The overall price index rose by 3.3% year-on-year in 2024 Q4, contrasting with the negative year-on-year change recorded in 2023 Q4 (-0.4%). This was driven by rising prices for industrial and commercial premises and the prime segment, while office prices

² The supply of new housing, proxied by housing completions, grew by around 100,000 units in 2024. For further details, see Box 4 of the Banco de España Annual Report 2024.

³ In real terms, new house prices exceeded their previous high by 2.6%.

Chart 4.2 Indicators of house price imbalances rose in 2024, but remain at moderate levels

4.2.a Indicators of house price imbalances (a)



SOURCES: Banco de España and INE. Latest observation: December 2024.

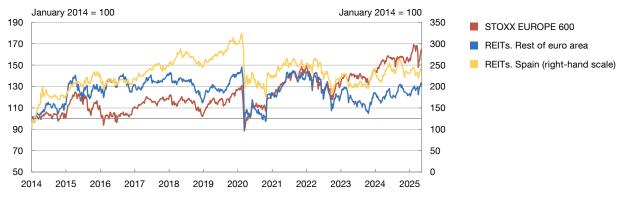
- a The grey vertical bands denote periods of economic crisis in Spain: the last systemic banking crisis and the economic crisis triggered by the COVID-19 health crisis.
 b Drawing on four indicators of house price imbalances: (i) the house price gap; (ii) the house price-to-household disposable income ratio gap; (iii) the ordinary least squares (OLS) model that estimates house prices based on long-term trends in household disposable income and mortgage rates; and (iv) the error correction model that estimates house prices based on household disposable income, mortgage rates and fiscal effects. All variables expressed in real terms relative to the GDP and consumption deflators. The long-term trends for indicators (i) to (iii) are calculated using a statistical one-sided Hodrick-Prescott filter with a smoothing
- parameter equal to 400,000. All four indicators have an equilibrium value of zero.

 c Two-year cumulative house price growth also holds some predictive power for price imbalances and is used as an additional simple indicator.

Chart 4.3

Listed REIT share prices fell moderately over the course of 2024, but have recovered in 2025 so far, albeit with some volatility

4.3.a REIT share prices (a)



SOURCES: LSEG Datastream and Banco de España. Latest observation: 12 May 2025.

a REIT indices comprising a selection of listed REITs that trade with a certain frequency and have been listed since 2014. Most REITs in the "REITs. Rest of euro area" group are based in France. The Spanish REITs included under "REITs. Spain" represent around 10% of the stock market capitalisation of euro area listed REITs.

remained largely unchanged. The year-on-year change in transactions was -0.5% in 2024 Q4, down 6 pp on 2023 Q4. This owed to the slowdown in the commercial premises and office segments, and a decline in industrial premises transactions.

Share prices of listed real estate investment trusts (REITs) fell moderately over the course of 2024, before rising so far this year, albeit with volatility. In 2024 European REIT share

prices declined year-on-year by between 0.9% (other European REITs) and 4.8% (Spanish REITs) (Chart 4.3). REIT share prices have fluctuated so far in 2025 both in Spain and other European countries. However, the upside movements have dominated and in early May prices stood above end-2024 levels by between 4.2% (Spanish REITS) and 6.8% (other European REITs).

4.1.2 Financing

The flow of new lending for house purchase continued to rise in 2024. In 2024 Q4 the year-on-year growth rate was 34.6% (Chart 4.4.a). In 2025 Q1 that year-on-year growth rate accelerated to 39.9%. Despite this increase being sizeable, the share of new lending in GDP and total credit remains well below the peak levels seen in 2006, before the global financial crisis, and towards the end of the 1990s (Chart 4.4.b).

The stock of loans for house purchase increased moderately in 2024, contrasting with the near continuous declines since the end of the global financial crisis. Specifically, it grew by

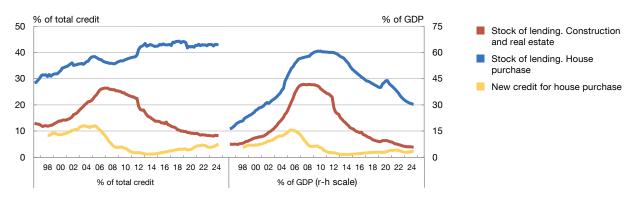
Chart 4.4

Growth in lending to the real estate sector quickened in 2024, but the stock of loans expanded more moderately and lending as a share of GDP remained subdued





4.4.b Lending to the real estate sector as a share of GDP and of total credit to the resident private sector



SOURCES: Association of Registrars and Banco de España. Latest observation: March 2025.

a The rise in the year-on-year change in new loans for house purchase in June 2021 is attributable to the post-pandemic credit recovery.

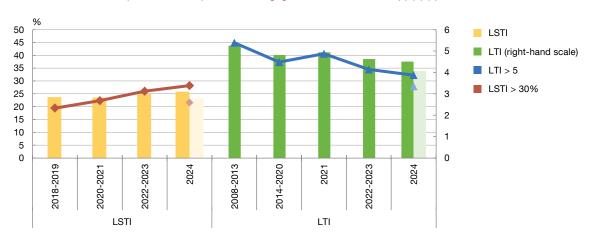
0.5% year-on-year in 2024 Q4, following two years of decreases coinciding with the monetary policy tightening cycle. Since 2014 higher year-on-year growth has only been recorded in the period from mid-2021 to mid-2022. In GDP terms, the stock of housing credit has been in steady decline for approximately a decade, although its share in total credit increased in 2024 due to a larger relative drop in the stock of other lending (Chart 4.4.b). The increasing trend accelerated in 2025 Q1, with year-on-year growth of 1.3%.

Bank lending to the construction and real estate sector also grew moderately. The stock of such lending increased by 1% year-on-year on average in 2024 H2, the first positive rate in 15 years. However, its level in terms of GDP and credit to the private sector is currently lower

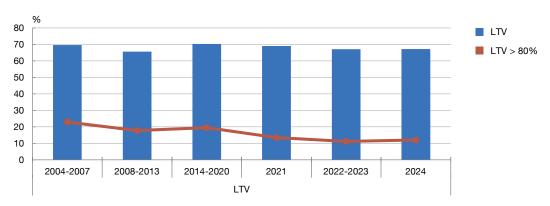
Chart 4.5

Credit standards for new mortgage loans to households for house purchase held relatively stable in 2024

4.5.a Credit standards (income-related) for new mortgage loans to households (a) (b) (c)



4.5.b Credit standards (collateral value-related) for new mortgage loans to households (d)



SOURCES: Association of Registrars, INE and Banco de España. Latest observation: December 2024.

- a The LTI ratio is estimated for each mortgage as the ratio of the mortgage principal to the household's net annual income. The LSTI ratio for each mortgage is estimated as the ratio of the total annual cost of servicing the mortgage loan (including principal and interest payments), calculated according to the terms of the loan agreement (maturity, outstanding principal, interest rate type and interest rate spread), to the household's net annual income. For more details see A2.4.1.1 in Annex 2.
- b The average LTI and LSTI ratios are calculated as the averages of those ratios in each mortgage weighted by their relative share (in terms of the principal) in the total stock of mortgage loans for which the information to calculate the ratio is available.
- c The darker bars and markers denote the LTI and LSTI ratios calculated using net income information by postcode. The lighter bars and markers denote the LTI and LSTI ratios calculated using net income information at transaction level (only available from 2024). For more details see A2.4.1.1 in Annex 2.
- d The LTV ratio is the amount of the mortgage principal relative to the collateral value when the property is purchased, based on Association of Registrars information. The average LTV values are weighted by the principal of each mortgage.

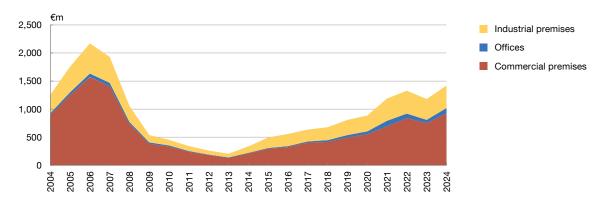
than at the turn of the century, prior to the boom cycle that preceded the global financial crisis (Chart 4.4.b). The stock of loans to the construction and real estate sector grew 2% year-on-year in 2025 Q1, accelerating its expansion.

The loan-to-income (LTI) and loan service-to-income (LSTI) ratios for residential mortgage lending to households held relatively stable in 2024. This despite the expansionary price and volume dynamics in the housing market. Generally speaking, on the historical information available, these ratios stood at contained levels in 2024 (Chart 4.5.a).

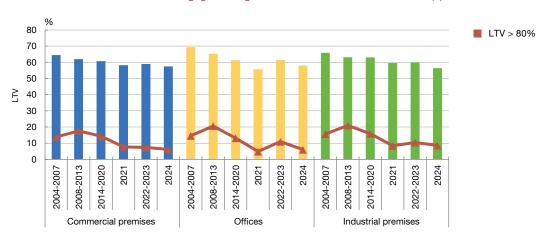
Chart 4.6

The volume of commercial real estate mortgage loans grew markedly in 2024, while credit standards in this segment held stable





4.6.b Credit standards for new mortgage lending to the commercial real estate sector (b)



SOURCES: Colegio de Registradores and Banco de España. Latest observation: December 2024.

- a Values adjusted in real terms using the GDP deflator.
- b The LTV ratio is the amount of the mortgage principal relative to the appraisal value of the property, based on Association of Registrars information. The average LTV values are weighted by the principal of each mortgage.

⁴ Mortgage loans for house purchase make up the bulk of lending to households (around 59% of new loans to households in 2024). However, it is important to monitor mortgage loans associated with commercial real estate to identify any build-up of risks (see Recommendation ESRB/2016/14 on closing real estate data gaps). These considerations justify the differentiated analysis of lending standards and conditions in these segments.

In 2024 the average amount of new residential mortgage loans to households decreased slightly relative to the purchase price of the financed properties and held stable relative to the appraisal value. The average loan-to-price (LTP) ratio for these new loans remained fairly stable over 2024 at around 76.6%, slightly below the average for the period 2022-2023. Moreover, the relative share of new mortgage loans with an LTP ratio higher than 80% stood at 41.3% in 2024, marginally higher than in the period 2022-2023 and below the levels reached in 2020-2021 (Chart A2.4.1.2. in Annex 2). The amount of new mortgage loans to households relative to the appraised value of the mortgaged residence (loan-to-value, or LTV, ratio) held relatively stable, at around 67.2% on average in 2024. The relative share of new mortgage loans with LTV ratios of over 80% was 12.0% in 2024, barely higher than in the period 2022-23 and below the levels reached in 2021 (Chart 4.5.b).

Loan maturities for new mortgage lending to households increased slightly in 2024. The average maturity of new mortgage loans to households increased by more than three months in 2024 to 26 years.

In 2024 the volume of new commercial real estate mortgage loans grew, while their lending standards remained stable. New lending to this sector grew by 20.4% year-on-year in 2024 Q4 and a sustained recovery since the low of 2013 has been observed, but levels remain far from their historical highs (Chart 4.6.a). Meanwhile, lending standards for these loans remained stable in 2024 after having improved over the course of the previous decade (Chart 4.6.b and Chart A2.4.1.3 in Annex 2).

4.2 Financial markets⁵

Monetary policy and government debt

Monetary policies in the main advanced economies have continued to ease, albeit at differing rates. In the United States, the Federal Reserve has left the policy rate unchanged in 2025 to date, after having cut it by 100 bp in the last four months of 2024, to between 4.25% and 4.50%. However, the European Central Bank (ECB) continued to reduce its key interest rates in 2025. The deposit facility rate was lowered to 2.25% in April, meaning a cumulative decline of 175 bp since June 2024. Moreover, in contrast to the United States, in the euro area the escalation of the tariff war in early April led to heightened expectations of further policy rate cuts. Subsequent trade negotiations resulted in an upward revision of the expected path of policy interest rates in both areas (Chart 4.7). The ECB also continued to reduce excess

⁵ Cut-off date: 12 May 2025. The cut-off date for the Autumn 2024 FSR was 28 October.

⁶ The deposit facility enables banks to make overnight deposits at the national central banks of the Eurosystem. The deposit facility rate is currently used to steer the ECB's monetary policy stance. See the Banco de España blogpost "Which ECB interest rate affects my loan or mortgage?", published on 25 October 2023.

Chart 4.7

Monetary policy expectations have been revised differently for the United States and the euro area

4.7.a Policy rate expectations in the euro area and the United States for September 2025



SOURCES: Banco de España and Bloomberg Data License. Latest observation: 12 May 2025. 28/10/2024 was the cut-off date for the last FSR. 02/04/2025 is when the tariff war escalated.

liquidity, spurring increased activity in money markets, where, at the latest available date, the traded volumes of secured funding almost double those of 2019 (Chart A2.4.2.1 in Annex 2).^{7,8}

Against this background, interbank interest rates in the euro area have prolonged their decline. The one-year EURIBOR stood at 2.0% on average in May to date, down from 2.5% in October 2024. This decrease has been concentrated in the recent period, in line with the ECB's revision of monetary policy expectations (Chart A2.4.2.2 in Annex 2).

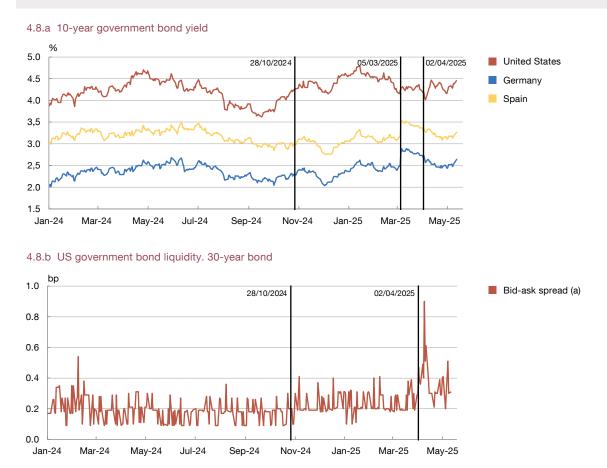
The escalation of the tariff war in early April negatively impacted the US government bond market. Until mid-January, US government bond yields were pushed up by expectations of higher policy rates than anticipated in late 2024. This rising path was then reversed on the back of weaker than expected macroeconomic data, which led to expectations of monetary policy loosening (Chart 4.8.a). In early April, however, the announcement by the United States of an aggressive increase in tariffs triggered an episode of tensions in global financial markets. In contrast to previous bouts of financial turmoil, US government bonds did not act as a safe-haven asset. For instance, there was an upturn in yields – especially in the longer tranches – and a loss of liquidity (Chart 4.8.b). These tensions have eased following the temporary postponement of some of the additional tariffs. At the cut-off date for this report, the US 10-year bond yield stood at 4.5%, slightly higher than that at the cut-off date for the October 2024 FSR.

⁷ Excess liquidity is the sum of a commercial bank's holdings at the central bank in excess of the reserve requirements (whether on the current account or in the deposit facility). Its fall mainly reflects the maturity of the final series of targeted longer-term refinancing operations (TLTROs) and the reduction of the asset purchase programme (APP) and the pandemic emergency purchase programme (PEPP) portfolios.

⁸ The money markets provide short-term, wholesale funding; its secured funding segment, instrumented through repurchase agreements (repos), is particularly important. In these agreements, banks and other financial intermediaries lend or borrow cash against collateral, mainly government bonds, to manage liquidity efficiently, obtain short-term funding and acquire specific securities. Repos offer a safe form of funding and of making use of cash deposits, and are essential for the smooth functioning of the government bond market.

Chart 4.8

Government debt markets were significantly influenced by expectations of higher public spending in Europe and the tariff war



SOURCES: Bloomberg data License, LSEG Datastream and Banco de España. Latest observation: 12 May 2025. 28/10/2024 was the cut-off date for the last FSR. 05/03/2025 marks the market reaction to Germany's fiscal announcement. 02/04/2025 is when the trade war escalated.

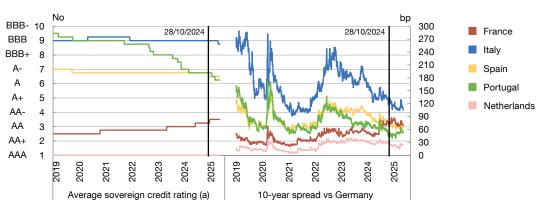
a Difference between the highest price a buyer is willing to pay and the lowest price at which the seller is willing to sell. A higher level indicates lower liquidity.

In the euro area, long-term government bond yields rose after higher public spending was announced in March 2025, but this increase was largely reversed following the financial turmoil in April. Long-term sovereign yields in the euro area rose sharply in early March amid the prospect of increased defence and infrastructure spending in the EU, particularly after the German fiscal plan was announced. However, the role of European government debt as a safe-haven asset during the turmoil, along with the potential consequences of tighter trade policies on the real economy, have brought yields down, returning them to levels close to those prior to the fiscal expansion announcements. More recently, trade negotiations have generated more optimism, reflected in a slight rise in long-term sovereign rates. However, since the previous report, 10-year government bond yields increased by 36 bp in Germany (to 2.6%) and 29 bp in Spain (to 3.3%). The German Bund yield spread over the overnight indexed swap (OIS) rate is now positive, in contrast with the negative levels recorded for over ten years⁹.

⁹ The OIS rate is the fixed leg of an interest rate swap contract where the floating leg is the 1-day euro short-term rate (€STR). Accordingly, the OIS rate reflects the expected path of the €STR throughout the duration of the contract (although it includes term premia). The OIS is the benchmark generally used to proxy risk-free rates in the euro area.

Chart 4.9

Amid uneven credit rating developments, euro area sovereign spreads experienced a broad-based, albeit temporary and moderate, widening during the April financial turbulence



4.9.a Sovereign debt: credit rating and spread vs German Bund

SOURCES: Banco de España and LSEG Datastream. Latest observation: 12 May 2025. 28/10/2024 is the cut-off date for the last FSR.

a Average S&P, Moody's, Fitch and DBRS credit ratings. The numerical scale has the following equivalencies: 1 corresponds to AAA/Aaa, 2-4 ranges from AA+/Aa1/AAH to AA-/Aa3/AA, 5-7 from A+/A1/AH to A-/A3/AL and 8-10 from BBB+/Baa1/BBBH to BBB-/Baa3/BBBL.

(right-hand scale)

The financial turmoil in April led to a moderate and temporary rebound in various euro area sovereign spreads against the German Bund. In some countries, such as Portugal and Spain, the better economic and fiscal outlook has led to an improvement in their credit rating. The Spanish sovereign bond spread against the German Bund narrowed slightly between the cut-off date for the last FSR and 2 April 2025, while for France there was sustained upward pressure in the latter stages of 2024 due to an unfavourable fiscal position. The beginning of the tariff war, however, generally caused spreads to widen slightly as investors turned to the German Bund as a safe-haven asset, causing its yield to fall. More recently, the progress in trade negotiations has contributed to moderating euro area sovereign spreads relative to the levels reached in April. Against this backdrop, Spain's 10-year spread against the German Bund stood at around 62 bp in May 2025, somewhat lower than the level observed at the cut-off date for the previous FSR (Chart 4.9).

Equities and corporate bonds

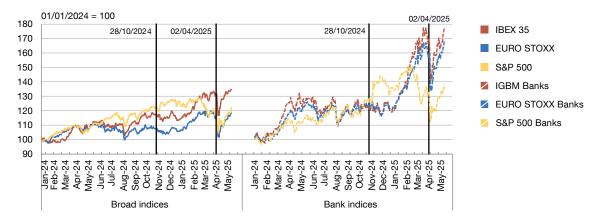
The stock market indices, which were trading at high valuations, dropped sharply in response to the aggressive tariff announcements. Up to mid-February, positive macroeconomic data for the United States, expectations of more favourable fiscal and regulatory policies for firms following the presidential elections, and better than expected corporate earnings had pushed US stock indices up to record highs (Chart 4.10). Thereafter,

¹⁰ Spain's debt credit rating from DBRS was upgraded one step to Aa on 29 October 2024 and is the highest of the four agencies considered here. Fitch rates Spain two steps lower (A-), Moody's three steps lower (Baa1) and S&P one step lower (A).

Chart 4 10

The escalation of the tariff war in early April triggered a sharp drop in equity prices, which subsequently reversed





SOURCE: LSEG Datastream. Latest observation: 12 May 2025. 28/10/2024 was the cut-off date for the last FSR. 02/04/2025 is when the tariff war escalated.

a downward correction started as the perception of the US economy's resilience weakened. This correction intensified sharply and spread to other international stock markets following the announcement of the tariff measures on 2 April and the retaliatory measures adopted by some countries. Falling indices and increased volatility reflected investors' concerns about the adverse impact of the tariff war on economic growth. This was reflected in an increase in the put/call ratio, as trading in put options increased, possibly indicating growing investor demand for strategies to protect the value of their portfolios against possible falls in asset prices (Chart 4.11).¹¹

Corporate debt risk premia rose sharply during the financial turmoil triggered by the escalation of the tariff war. Increases were observed in both the investment grade segment and, to a greater extent, the high-yield segment. These increases compounded the upward trend since February 2025 in these lower-rated instruments (Chart 4.12). Thus, the spreads relative to the swap curve grew from mid-February, peaking in April at around 150 bp and 190 bp for high-yield corporate bonds in the euro area and the United States, respectively.

A pause in the implementation of some tariffs and the trade negotiations have helped markets stabilise. In particular, stock market indices have returned to the levels prior to the escalation of the tariff war on 2 April. (Chart 4.10). Thus, European stock market indices have accumulated gains since the start of 2025, supported in particular by the strong earnings in the banking sector – which has a large share in the capitalisation of European stock exchanges – and the prospect of increased investment in defence. So far this year, the EURO STOXX

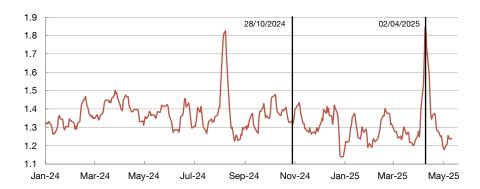
¹¹ The increase (decrease) in the put/call ratio, i.e. the traded volume of put options relative to the traded volume of call options, is indicative of the need for investors to protect their portfolios against possible decreases (increases) in asset prices.

¹² The investment-grade segment refers to lower-risk corporate bonds, specifically those with a credit rating equal to or higher than BBB- (Standard & Poor's and Fitch) or Baa3 (Moody's). High-yield bond ratings are below that level.

Chart 4.11

The bout of stock market instability that began in April also prompted investors to seek greater protection against falling asset prices

4.11.a S&P 500 put/call ratio (a)



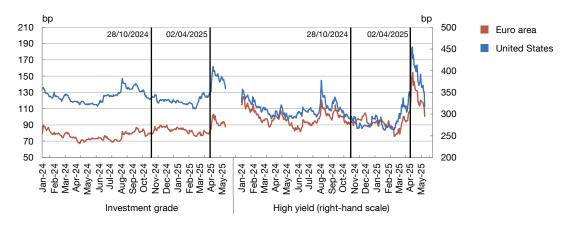
SOURCE: Bloomberg Data License. Latest observation: 12 May 2025. 28/10/2024 was the cut-off date for the last FSR. 02/04/2025 is when the tariff war escalated.

a Five-day moving average.

Chart 4.12

Corporate debt risk premia rose sharply following the escalation of the tariff war and, despite declining recently, remain higher than at the cut-off date for the previous FSR

4.12.a Corporate spreads over the swap curve (a) (b)



SOURCE: LSEG Datastream. Latest observation: 12 May 2025. 28/10/2024 was the cut-off date for the last FSR. 02/04/2025 is when the tariff war escalated.

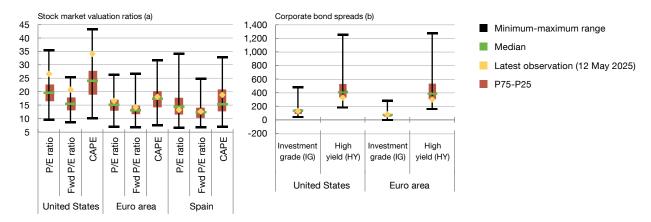
- a The swap curve refers to the ICE Bank of America Merrill Lynch indices and represents risk-free rates at different maturities. In an interest rate swap, the two parties agree to exchange periodic interest payments, one based on a fixed rate and the other on a variable rate.
- b In April 2025 the high-yield bond segment accounted for approximately 14% of the total outstanding debt of euro area non-financial corporations (according to Dealogic estimates based on historical issues) and 19% in the United States. In relative terms, the euro area high-yield market was 25% the size of its US counterpart.

index has risen by 11.6% (with the banking sector appreciating by over 36%), while the US S&P 500 index has fallen slightly (with its banking sector down by around 3.3%). In the bond markets, high-yield corporate bond spreads have reversed the increase experienced following 2 April and now stand at levels slightly lower than at that date. The investment-grade segment has seen a near full reversal (Chart 4.12). In any event, corporate spreads in both segments stand above the levels at the cut-off date for the previous FSR.

Chart 4.13

A time-based comparison shows that risk-bearing financial asset valuation metrics remain high for US stock market assets and for high-yield corporate bonds in the United States and the euro area

4.13.a Stock market (left-hand panel) and corporate bond (right-hand panel) metrics



SOURCES: Banco de España and LSEG Datastream. Latest observation: 12 May 2025.

- a Drawing on monthly stock market index series constructed by Datastream since 1985 for the euro area and the United States and since 1987 for Spain. The sample is somewhat smaller for Spain's cyclically adjusted price-to-earnings (CAPE) ratio and the euro area 1-year forward P/E (Fwd P/E) ratio. The CAPE ratio is calculated as the value of the stock market index in real terms (adjusted for CPI) divided by a 10-year moving average of the index firms' earnings in real terms. The P/E ratio and 1-year fwd P/E ratio capture the relationship between the stock price and earnings per share (observed or expected). These ratios are provided by Datastream.
- b Corporate spreads over the swap curve of the ICE Bank of America Merrill Lynch indices. The swap curve represents the risk-free rates at different maturities. In an interest rate swap, the two parties agree to exchange periodic interest payments, one based on a fixed rate and the other on a variable rate. Monthly series data since 1998.

Risky asset prices remain high from a historical perspective, especially in the United States. Equity risk premia have risen, although they remain well below their historical average in both the United States and Europe (see Section 5.2). Price-to-earnings (P/E) ratios are well above their historical average in the United States, in fact exceeding the 75th percentile of their historical distribution (Chart 4.13, left-hand panel). In the corporate bond markets, spreads in both the US and euro area investment-grade segments have remained close to their historical median (Chart 4.13, right-hand panel). However, in the high-yield segment they still remain below their historical median in both areas.

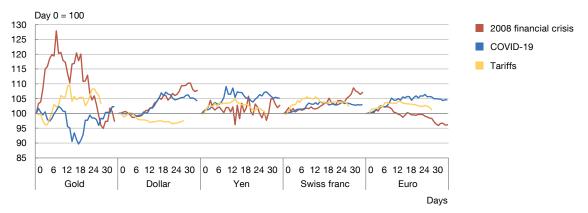
Foreign exchange markets and gold

The tensions associated with the tariff war have led to a broad-based depreciation of the US dollar. After depreciating noticeably against the US dollar up to end-2024, the euro has appreciated by 6.9% in 2025 to date, exceeding \$1.14 per euro in April, a level not seen since early 2022. During the current crisis US dollar assets have not played their traditional role as a safe haven during episodes of turmoil. By contrast, the search for safehaven assets has prompted gold prices to rise and the appreciation of the Japanese yen and the Swiss franc, in a pattern similar to that of previous periods of turmoil (Chart 4.14). Recently, the progress in trade negotiations has led to a slight appreciation of the dollar against the main currencies.

Chart 4.14

The April 2 tariff announcement prompted a depreciation of the dollar, unlike in past periods of financial turmoil and also in contrast to the response of other traditional safe-haven assets

4.14.a Price of gold and exchange rates during periods of stock market instability (a)



SOURCE: LSEG Datastream.

a Changes in the price of gold and the nominal effective exchange rates for the dollar, the yen, the Swiss franc and the euro during 36 working days of the COVID-19 crisis (from 21/02/2020 to 10/04/2020) and the 2008 financial crisis (from 12/09/2008 to 31/10/2008) and during 30 working days of the tariff episode (from 01/04/2025 to 12/05/2025).

Chart 4 15

Following the tariff escalation, some increases in the cost of obtaining dollars through 3-month EUR/USD cross-currency basis swaps were observed

4.15.a 3-month EUR/USD cross-currency basis since March 2025 (a)



SOURCES: LSEG Datastream and ECB. The vertical line denotes 02/04/2025 (escalation of the trade conflict). Latest observation: 12 May 2025.

a The cross-currency basis is calculated based on the difference between the interest paid for borrowing US dollars in exchange for euro in the swap market and the cost of borrowing that currency directly in the cash market. A non-zero basis denotes a divergence in covered interest rate parity. Negative values indicate that obtaining US dollars in exchange for euro in the swap market is more expensive than borrowing dollars directly in the cash market (i.e. if negative, the investor pays a premium over the interest rate spread between euro and US dollars).

The escalation of the trade war in April had a moderate impact on the differentials associated with euro/dollar cross-currency basis swap contracts.13 The relative cost of obtaining dollars through 3-month euro/dollar cross-currency basis swap contracts increased

¹³ A currency swap involves the exchange of a specific amount of two currencies at the outset and on a pre-agreed date, typically maturing in less than one year. Cross-currency basis swap contracts can have long-term maturities and, as well as the exchange of currencies, include interest payments in the two currencies.

moderately in response to the tariff announcements of 2 April.¹⁴ This increase reversed partially after the 90-day pause on the additional tariffs (Chart 4.15). The information available on other types of euro/dollar swap contracts involving European banks has not shown any abnormal patterns in trading volumes after 2 April (Chart A2.4.2.3 in Annex 2).

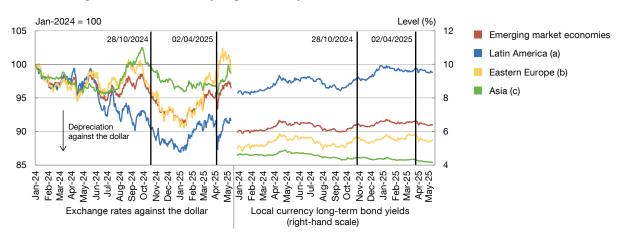
Emerging financial markets

Financial markets in emerging market economies have shown some resilience during the current turbulence. In most of these economies exchange rates against the dollar depreciated very briefly following the US tariff announcement but subsequently appreciated. Long-term yields on emerging government bonds remained contained (Chart 4.16). Further, stock market indices posted gains, while the widening of sovereign spreads was modest and short-lived (Chart A2.4.2.4 in Annex 2). Latin American financial markets have been performing less favourably since the summer as a result of local risk factors.¹⁵ Compared with other emerging market economies, the region's currencies also reacted more adversely to the crisis that began on 2 April, with a more pronounced depreciation. While the latest available data shows a full reversal, the comparison remains unfavourable relative to the appreciation seen from other emerging market currencies.

Chart 4.16

Emerging market economies demonstrated resilience during the April turmoil, albeit with Latin America faring worse





SOURCES: Banco de España and LSEG Datastream. 28/10/2024 was the cut-off date for the last FSR. 02/04/2025 is when the tariff war escalated. Latest observation: 12 May 2025.

- a Average for Brazil, Chile, Colombia, Mexico and Peru.
- **b** Average for Czech Republic, Poland and Hungary.
- c Average for China, South Korea, the Philippines, India, Indonesia, Malaysia and Thailand.

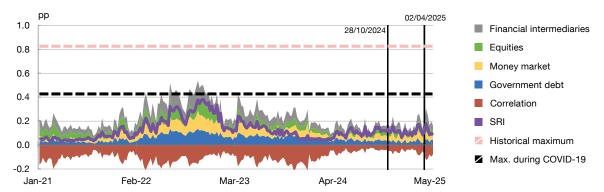
¹⁴ The cross-currency basis (or relative cost) is calculated based on the difference between the interest paid for borrowing US dollars in exchange for euro in the swap market and the cost of borrowing that currency directly in the cash market. A non-zero spread denotes a divergence in the covered interest rate parity. Negative values indicate that obtaining US dollars in exchange for euro in the swap market is more expensive than borrowing dollars directly in the cash market (i.e. if negative, the investor pays a premium over the interest rate spread between euro and US dollars).

¹⁵ For more details, see Banco de España. International Economics and Euro Area Department. (2025). Report on the Latin American economy. Second half of 2024.

Chart 4.17

Spanish financial markets rebounded quickly from the adverse effects of the April turbulence, although this revealed their sensitivity to negative economic policy news





SOURCES: LSEG Datastream and Banco de España. 28/10/2024 was the cut-off date for the last FSR. 02/04/2025 is when the tariff war escalated. Latest observation: 7 May 2025.

a The SRI aggregates 12 individual stress indicators (including volatilities, interest rate spreads and maximum historical losses) from four segments of the Spanish financial system. The effect of cross-correlations is taken into account to calculate the SRI, such that it registers higher values when the correlation between the markets is high and lower values when the correlation is low or negative. For a detailed explanation of this indicator, see Box 1.1 of the May 2013 FSR.

Systemic risk indicator for the Spanish financial markets

In Spain, the systemic risk indicator (SRI)¹⁶ showed volatility due to the April turbulence, but remains at moderate levels. Following an increase in August 2024, the SRI had held relatively stable until the turmoil that began in early April 2025 (Chart 4.17), which triggered a jump in the index that was swiftly corrected. The components with the sharpest fluctuations were the stock markets and bank finance markets. The SRI currently stands at relative low levels in historical terms, comparable to those of 2024 H2. These SRI fluctuations reveal financial markets' significant sensitivity to positive and negative news amid the current high trade and economic policy uncertainty.

Crypto-assets

The price correlation between the main crypto-assets and equity has declined since end-2024, but remains high. Historically, the correlation between crypto-asset and equity prices has fluctuated.¹⁷ For instance, in 2024 crypto-asset prices displayed a strong positive correlation with the US and European stock market indices, as well as with the banking sub-indices of both regions. However, since late 2024 this correlation has weakened (Chart 4.18). The correlation briefly strengthened following the US tariff announcement

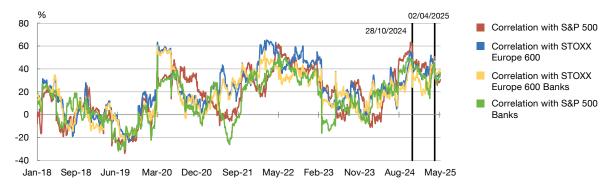
¹⁶ The SRI gauges the materialisation of systemic risks and rises when simultaneous losses occur across different segments of the financial markets. For more details, see Box 1.1 of the May 2013 FSR.

For instance, during periods of high market stress the MVIS crypto-asset index has moved in line with equities, demonstrating that it is not a safe-haven asset.

Chart 4.18

The price correlation between equity and the main crypto-assets has declined since end-2024, but remains high





SOURCES: LSEG Datastream and MVIS Investable Indices. 28/10/2024 was the cut-off date for the last FSR. 02/04/2025 is when the tariff war escalated. Latest observation: 12 May 2025.

The MVIS CryptoCompare Digital Assets 100 Index is used, which comprises the top 100 (backed and unbacked) crypto-assets. Correlations calculated using three-month rolling windows of each index's daily returns.

before subsequently declining, although it remains high compared with the same period a year earlier.

The capitalisation of crypto-assets has declined since early 2025, but remains high by historical standards. The market capitalisation of crypto-assets increased over 2024, driven by events such as the regulatory approval of exchange-traded funds (ETFs) that invest in such instruments, as well as the crypto-friendly stance of the new US Administration. However, having initially surged after the US election, the crypto-assets market has posted falls. Further, the April turbulence caused a slight and short-lived additional correction, mirroring that seen on financial markets. Crypto-assets still make up a small fraction of financial markets, which limits the current risks to financial stability. However, they could contribute more significantly to systemic risk if their expansion continues, hence the need for in-depth analysis (see Box 4.1).