Fundación MAPFRE

2023 ECONOMIC AND INDUSTRY OUTLOOK

MAPFRE Economics

2023 Economic and Industry Outlook

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MAPFRE Economics

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Presentation

Fundación MAPFRE presents a new edition of the MAPFRE Economics *Economic and Industry Outlook* report, this time discussing the macroeconomic and global financial outlooks for 2023 and their impact on insurance activities. The contents and forecasts in this study will be updated quarterly throughout the year, incorporating changes in the global economic environment and the insurance industry.

2022 is over. This year, the start of the invasion of Ukraine has created a humanitarian crisis, military tensions and the correlation of global forces and has changed outlooks for the global economy. Looking to 2023, estimates by MAPFRE Economics point to a global economic slowdown, with elevated geopolitical risk and with some of the principal economies facing a possible recession, which, in theory, is expected to be mild and short-term. Consequently, forecasts place global growth in 2023 at 2.0%, to increase in 2024 by around 2.7%. At the sector level, the global context will continue to pose a complex scenario for the business and profitability of the insurance sector.

Improving people's quality of life and social progress is the driving force behind all of Fundación MAPFRE's activities, which are carried out in more than 28 countries. The foundation's objectives are aimed at fighting inequality, disseminating culture, and promoting knowledge, with special emphasis on issues related to road safety, health, and the world of insurance and social welfare. This ultimate goal includes the publication of the *2023 Economic and Industry Outlook* to help educate citizens on these subjects and provide a work tool for those who require this type of information to make decisions.

Fundación MAPFRE

Introduction

This new version of the MAPFRE Economics *Economic and Industry Outlook* report presents, as it does each year, a review of the outlooks for economic performance both at a global level and in the world's principal economies and on that basis, an analysis of the context for the performance of the insurance sector.

In general terms, in its *baseline scenario,* the report predicts global economic growth in the range of 2.0% for 2023 and 2.7% for 2024. It involves a short and medium-term *stagnation* scenario, followed by a low-intensity recovery period. Regarding monetary policy, a rise in terminal interest rates is forecast following the increased tightening bias revealed by major central banks during the second part of 2022. A broad-based and generalized path of slower expansion is expected on the fiscal policy front, gradually approaching neutral territory.

These forecasts point to a global slowdown that will continue to pose a complex scenario for the business and profitability of the insurance sector. The combined effects of the monetary policy (with restrictive financial conditions) and the fiscal policy (a lower driver of economic activity) will be short-term obstacles to the growth of insurance demand. In this context, some insurance lines, such as automobile, will continue to face the effect of lesser demand and still high inflation. In contrast, others, like health insurance, will enjoy a relatively more positive scenario due to the demand side of these types of products, while having to deal with the challenge of cost pressures as a result of the second round effects of the inflationary process. On the positive side, the environment of higher interest rates and inflation trending downwards may help offset the loss of profitability the insurance sector experienced in the previous year in 2023. They are also a significant stimulus for the Life savings segment.

We are confident that this new version of our *Economic and Industry Outlook* will contribute to a better understanding of the economic environment for 2023, as well as the main factors that will influence the development of the insurance sector.

MAPFRE Economics

Executive summary

2023 Economic and Industry Outlook

Economic outlook

At the end of 2022, the global economy showed some signs of relative optimism. On the supply side, the improved operation of supply chains consolidated the trend toward recovery. On the demand side, despite facing a period of moderation linked to the effect of monetary restriction, the loss of real purchasing power of wages, the progressive depletion of accumulated savings and the deterioration in the consumer confidence channel, which was largely depressed, a positive aspect was observed, framed by robust employment.

In this context, central banks showed a transitional dynamic in their monetary stance, with some overreaction during the second half of the year, compared to their inaction at the beginning of 2022. Concerning fiscal policy, a dynamic of greater neutrality began to emerge, given the adaptation to an environment in which the support of central banks was fading and more market-priced financing channels were being introduced that were more sensitive to plausible sustainability paths in terms of the debt-deficit relationship.

As regards 2023, moderate global economic growth is forecast, as well as still high inflation that could present some second-round effects. On the supply side, supply chains are expected to continue returning to normal, thanks to factors such as a progressive relaxation in the price of raw materials and the shift in demand from services to goods, which will drain the imbalance and reduce energy pressure, among other things. And, on the demand side, a mild slowdown is expected, reducing some still latent imbalances. This slowdown will be slightly contractionary in terms of employment.

Generally, the global economy faces the effects of a restrictive monetary policy. Some interest rate curves show an ever more inverted yield slope, reflecting security discrepancies between maturities and consistent credit quality and denoting an early and widely accepted signal of recession. In the first months of 2023, monetary tightening is expected to continue revolving around inflation concerns, which during the second half of the year will maintain a less harsh posture compatible with financial stability, with the expectation that some degree of tightening will be reversing towards a broader state of monetary neutrality. Fiscal policy, in turn, will continue to align with monetary policy, accompanied by more selective measures and limiting its impulse in general terms

In reference to the governance and geopolitical crisis, there are various challenges to achieve global stability: (i) the Ukraine conflict, with which trade relationships do not seem to be rapidly returning to the normal seen prior to the conflict; (ii) the new rounds of Russia sanctions which, while effective, may lead to partially undesired results in terms of the management of means of payment (against the dollar) and a restructuring of global trade channels, (iii) governance of the European Union which is facing a difficult return to fiscal discipline in 2023, in addition to the withdrawal of financial asset purchases by the European Central Bank in a context of slower growth; (iv) the situation in the United States given difficult elections, which will hinder the approval of new fiscal measures and transatlantic cooperation; and (v) an environment in Latin America where Luiz I. Lula de Silva's victory in Brazil strengthens the presence of left-wing governments in the region, as well as the scrutiny of public accounts by the markets due to the risk of an unbalanced fiscal policy.

Meanwhile, global debt decreased again in the third quarter of 2022, representing 343% of GDP, around 22 percentage points below its 2021 high. In the case of developed markets, there was a decrease, led by the debts of governments and households. In contrast, there was a new increase in emerging markets due to the greater indebtedness of financial companies and, to a lesser degree, non-financial companies, noting the substantial cumulative depreciation of currencies against the dollar as an obstacle.

From the outlook of forecasts, the *baseline scenario* considered in this report places global growth at 3.5% in 2022, slowing down 2.0% in 2023. It involves a short and medium-term *stagnation* scenario, although with lesser impact than previous events, which would be followed by a period of low-intensity recovery. On the fiscal policy front, a broad-based slower expansion is forecast, gradually approaching neutral territory. Monetary policy, meanwhile, would raise the terminal interest rates following the increased tightening bias revealed by the major central banks during the first half of 2023. Furthermore, in the geopolitical terrain, the conflict in Ukraine is expected to continue at least through the first quarter of 2023, with a gradual de-escalation which would advance slowly. This, added to the weakening of global demand, would bring pressure to lower raw materials prices, although it would stabilize long-term levels to a greater degree.

Meanwhile, in the *stressed scenario* analyzed in this report, global growth in 2023 is forecast at around 1.2% (after the 3.5% attained in 2022). In this alternative risk scenario, a drop more abrupt than anticipated drop in global demand, with more intense and tighter inflationary pressures, a still expansive fiscal policy and an opposing and more aggressive monetary policy. In this scenario, developed economies would not have a soft landing and the permanent erosion of buying power would lead to a contraction in consumption not compensated by a new round of fiscal expansion. Emerging economies, meanwhile, would benefit from a cycle of high-priced raw materials but could not avoid the decline in economic activity levels given the weakening of outside demand, with lower trade at high but insufficient prices.

Industry outlook

Estimates for 2023 point to a global economic slowdown, with high geopolitical risk and some of the main economies facing a possible recession which, in theory, is expected to be mild. This environment continues to pose a complex scenario for the business and profitability of the insurance industry this year.

The central banks of the main developed economies have announced that they will continue tightening their monetary policy in the fight against inflation, although at a slower pace following the improvement of some indicators, but maintaining restrictive financial conditions in an environment accustomed to high levels of indebtedness on the part of all economic agents, low-interest rates and high liquidity, which will put a brake on aggregate demand and the insurance business.

In the emerging markets that reacted earlier to the sharp upturn in inflation (such as Brazil and Mexico), their inflation rates are falling more sharply, and their economies are already at a stage where they are feeling the brunt of the economic slowdown caused by tightening financing conditions. Thus, their respective insurance markets face a year in

2023 with greater difficulty carrying out business, after 2022, when the economy and the insurance business had stronger performance than initially forecast. Other countries like Argentina or Turkey remain in a scenario of high inflation and profoundly negative real interest rates, which complicate the operation of the insurance business.

The shortage of semiconductors and other components in the automobile sector has improved, although it has not yet completely normalized. Now it faces tightening financing conditions for acquiring new vehicles, so the outlook for the auto insurance business and profitability remains complex. Meanwhile, health insurance presents a positive outlook regarding its business volume due to the aversion to health risks caused by the pandemic and the greater awareness of the need to supplement the coverage offered by public health systems. However, its profitability faces a significant challenge due to the pressure of the high cost of health coverage as a result of the second-round effects caused by the inflationary process. On the positive side, the environment of higher interest rates (once the negative impact on insurance companies' balance sheets is absorbed) and falling inflation in 2023 may help to offset the loss of profitability suffered by the insurance industry in the previous year and are a stimulus for the Life savings business, which will continue to benefit from the favorable interest rate environment this year.

Meanwhile, after 2022, when there were major corrections in the main asset categories in which insurance companies invest, 2023 poses an outlook in which opportunities could arise, not just in the more conservative products with interest rate guarantees but also in products in which the policyholder assumes the investment risk, depending on the evolution of inflation and the reaction of the central banks to new data. There is significant uncertainty about when the restrictive financial conditions will relax, which it has been announced will not occur until inflation clearly approaches monetary policy goals.

In short, although uncertainty and volatility in the financial markets remain high, the substantial adjustment they have undergone suggests that the main problem facing the insurance markets this year will be the effect of restrictive financial conditions on economic agents (governments, households, and companies) and, therefore, on the real economy in the form of lower growth, with labor markets that remain strong but will be affected by the new scenario posed by inflation, interest rate hikes, and the withdrawal of monetary stimuli. The central banks are entering a new phase in which the possible interest rate hikes will be milder to maintain a restrictive monetary policy until there are clear signs that inflation is under control, far from pivoting towards an accommodative monetary policy that stimulates growth and added demand in the economy.

1. Economic outlook

1.1 The global economic outlook

1.1.1 Flight summary: retrospective of endogenous and exogenous factors

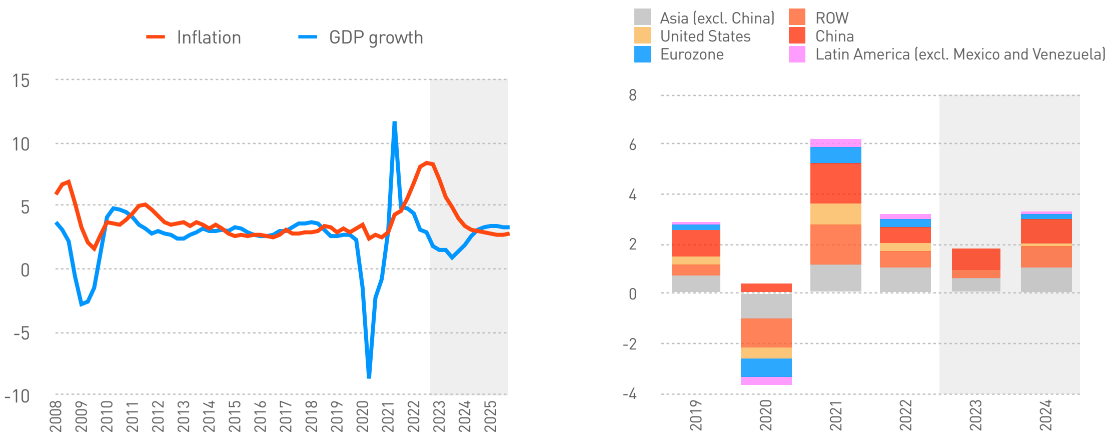
The end of 2022 has seen some optimism emerge after the convulsions and uncertainties of much of the year, as some factors weighing down the global economy over the course of the year showed more benign behavior than anticipated. On the supply side, breathing life into supply chains consolidated the path of recovery with the improvement in the links that were facing the most significant difficulties (reopening of Chinese manufacturing, semiconductors, and logistics centers, among others), while the services sector continued to absorb the congestion accumulated around durable goods. On the demand side, the positive aspect is marked by robust employment. However, a moderation phase has been added to this normalization of consumer patterns, linked to the loss of buying power of wages in real terms, the progressive depletion of accumulated savings, and a decline in the consumer confidence channel that places it in the broadly depressed territory.

Consequently, and in anticipation, the raw materials cycle has been normalizing and softening the price imbalances. This has allowed the economies most exposed to these inputs to leave price peaks behind, followed by the economies that are intensive in manufacturing and close to the production cycle. The latter have blamed the setback, anticipating a setback that is starting to be largely transferred to the developing economies, which, in terms of inflation data and the most recent expectation surveys, can see that the worst part of the inflationary process is starting to be left behind.

Regarding the response of the central banks, the transition dynamic of 2022 has proven to be one of the most intense and abrupt maneuvers in recent history, where an overreaction in the second half of the year has counteracted the inaction with which 2022 began. Thus, this evolution has caused the initially broadly pro-cyclical and accommodating environment to consolidate, after a brief period of neutrality, in a restrictive and countercyclical environment, the cumulative effect of which, while still in the lag phase on the side of aggregate demand and employment, given the direct translation through the financial channel, is beginning to be reflected in a credit cycle that is tightening access requirements. Similarly, the expansionary nature of fiscal policy, promoted since the beginning of the conflict between Russia and Ukraine as a mechanism for containing and cushioning the shock, is beginning to show signs of a more neutral dynamic, given the adaptation to an environment in which the support of central banks is fading, and more market-priced financing channels are being introduced that were more sensitive to plausible sustainability paths in terms of the debt-deficit relationship.

Finally, the prevalence of the conflict in Ukraine, and generally, the looming geopolitical outlook from a broader approach of a reversal of globalization, the establishment of blockades, and a return to protectionist policies continue to exert a constant counterweight to the dynamics of global activity, prolonging the tailwinds faced by the economy, which coincide with the delicate practice of maneuvering towards a soft landing of the global economy, where the possibility of a crash remains within a wide confidence interval, for the third consecutive year.

Chart 1.1.2-a
Global: GDP growth and global inflation and contribution to growth by region
(%; percentage points)

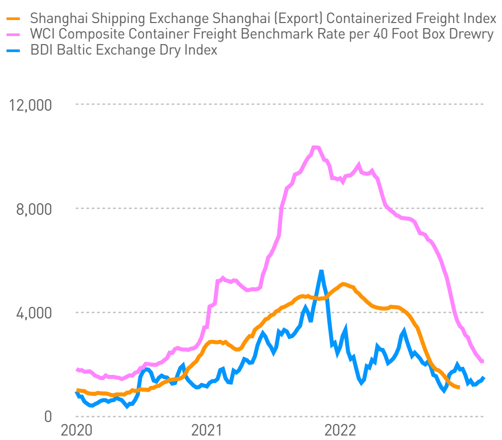


Source: MAPFRE Economics

1.1.2 Asynchronous landing: soft, irregular prospective with latent weak points

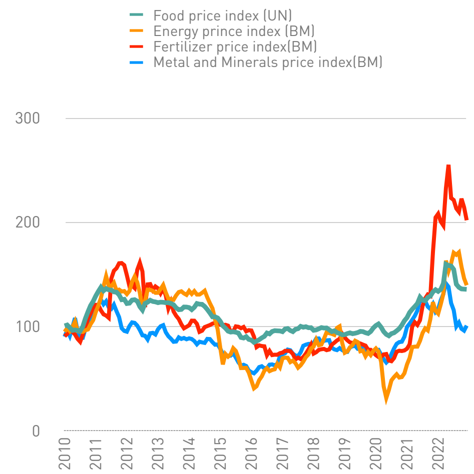
Looking to 2023, both growth expectations and inflationary outlooks will continue to be linked to the factors and tailwinds described above (see Chart 1.1.2-a and Tables A-1 to A-5 in the appendix to this report), with a modest and below potential growth outlook, as well as the burden of long-lasting and undesirably high inflation which may present some second-round effects, although so far not enough to up-anchor expectations, in conjunction with an extended restrictive monetary policy, as well as an asymmetrical fiscal policy due to divergences in the fiscal spaces, but consolidating in aggregate terms. Under this general outlook, a reconfiguration is expected in the risk dynamic, where problems of insufficient supply on the one hand and inflationary pressures on the other lose vigor over the course of the year and stay to a certain degree "in the rearview mirror." Other factors will become relevant, such as supply contraction and the loss of momentum of the

Chart 1.1.2-b
Global: supply chains



Source: MAPFRE Economics (based on Bloomberg data)

Chart 1.1.2-c
Global: raw material and energy prices



Source: MAPFRE Economics (with Haver data)

labor markets, a manifestation of the effects of the monetary restriction activated throughout 2022, and Ricardian effects in line with the new fiscal dynamics, which, in general, are expected to be more balanced in the medium and short term.

Supply-related factors

On the supply side, supply chains are expected to continue resuming normalcy. This would occur hand-in-hand with the progressive reestablishment of certain broken links in these chains, from a continued relaxation of prices of raw materials (although more diluted given the effects of China's reopening), a shift in the demand for services over goods that continues to drain the imbalance, and less energy pressure (mainly in Europe, despite the structural component) as a result of the lower demand globally, although conditioned on new disruptions and the reconfiguration of adverse geopolitical scenarios that create additional price tensions, or that interrupt the diversification of supply sources (see Charts 1.1.2-b and 1.1.2-c).

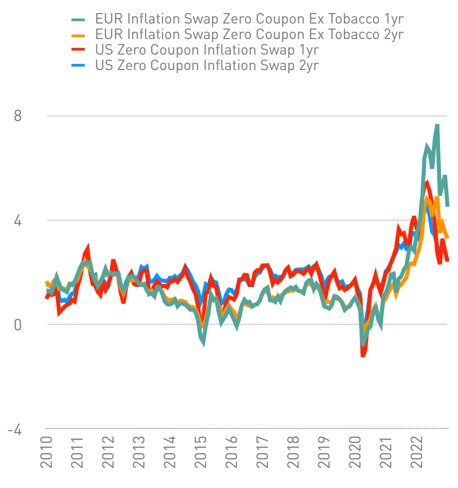
Inflation

Inflation readings have continued to reach historically high levels worldwide, although with different dynamics due to both *endogenous* factors (overheated demand, credit expansion, direct transfers, speculation, and hoarding due to fears of shortages) and *exogenous* factors (notably the energy shock as the main driver of prices). However, on the positive side, the price hike dynamic is beginning to gradually take on a retrospective character, both in the principal emerging economies, which prematurely integrated the downward process due to their proximity to the first links in the production chains and developed economies, albeit with some lag. While some components are expected to continue to exert background pressure on inflation (wage negotiations, energy transition, and slow reversal of products that make up core inflation), the base effect, receding pressure on energy prices, and demand depletion will lead the process of trending toward less intense inflation rates throughout the year (see Charts 1.1.2-d and 1.1.2-e).

Demand-related factors

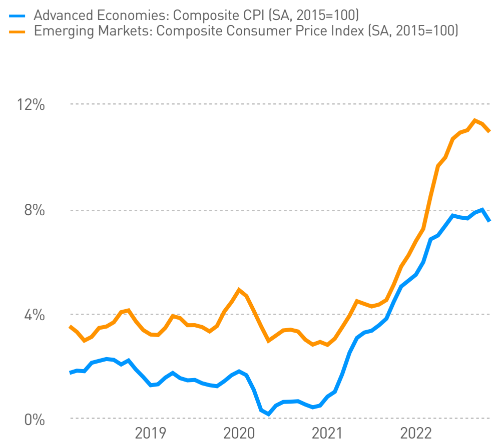
On the demand side, a mild slowdown is expected, which will reduce some still latent and slightly contractionary imbalances in terms of employment (in line with a shallow recession, *a priori*) This would be accompanied by price moderation, which would tend

Chart 1.1.2-d
United States and Eurozone: inflation



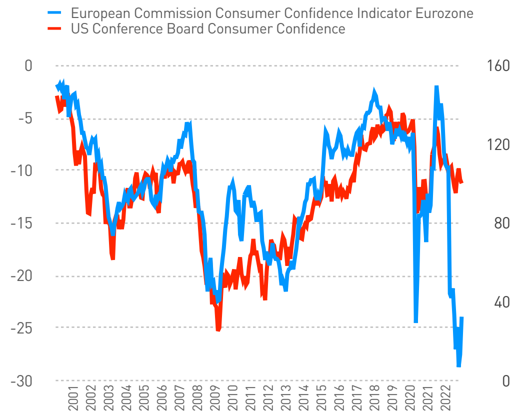
Source: MAPFRE Economics (based on Bloomberg data)

Chart 1.1.2-e
Advanced and emerging markets: inflation



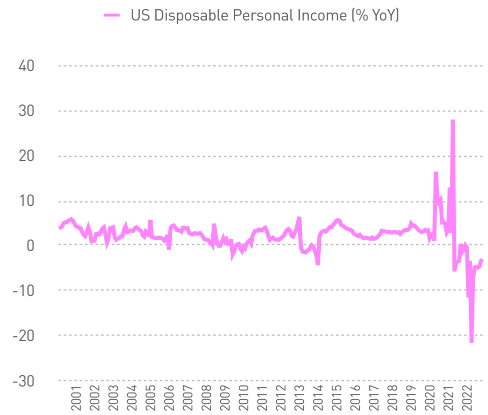
Source: MAPFRE Economics (with Haver data)

Chart 1.1.2-f
United States and Eurozone: consumer confidence



Source: MAPFRE Economics (based on Bloomberg data)

Chart 1.1.2-g
United States: real wages



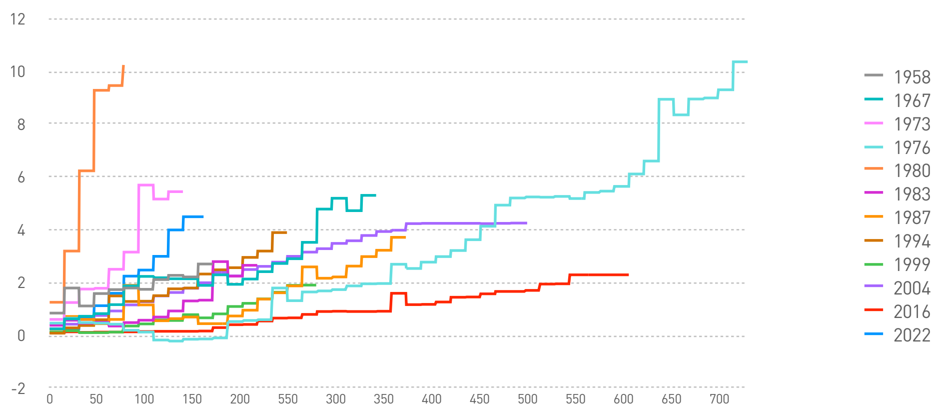
Source: MAPFRE Economics (with Haver data)

to bring unemployment rates in the labor market to return to levels slightly higher than natural (levels that do not feed inflation). In this sense, it must be noted that a limited increase in unemployment is expected, where the current narrowing of the labor markets (due to both high unfilled vacancies and the high percentage of workers leaving their jobs) is at a new break-even point from the outlook of both the Phillips curve (an economic policy aimed at price stability promotes unemployment) and the Beveridge curve (efficiency in the labor market that leads to higher unemployment detracting from job offers and the labor market adjusts to cover the skill gap). However, the possibility that higher unemployment is not enough to slow wage pressures or restore the balance of a structural skills deficit could lead to the need for an additional decline in the labor market, leading to a deeper recession (see Charts 1.1.2-f and 1.1.2-g).

Economic policy

Concerning monetary policy, it is expected that, after the notable tightening in 2022, in 2023, it will turn toward a more data-depen-

Chart 1.1.2-h
United States: monetary policy interest rate cycles
(%)



Source: MAPFRE Economics (based on Federal Reserve data)

Box 1.1.2
Monetary Policy Update

Federal Reserve

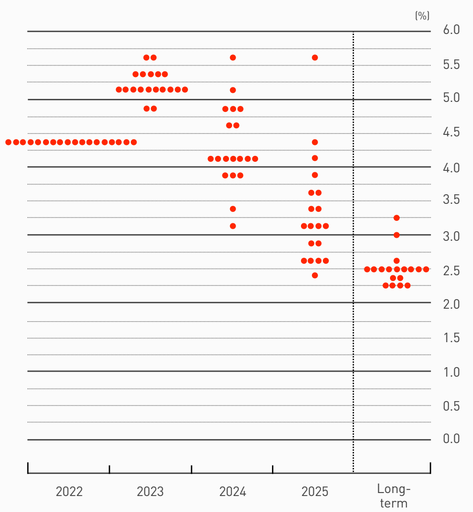
At its last meeting of 2022, the United States Federal Reserve raised key interest rates 50 basis points (bps), reducing the rate of the current adjustment cycle and placing the range at 4.25%-4.50%. As for projections regarding the future path of increases, the Federal Open Market Committee (FOMC) *Dot Plot* shows modest advances in 2023 that would imply reaching a *terminal rate of* 5.1% (voted unanimously), followed by a sustained period of rates in that environment, at least until 2024, at which point they could be progressively adjusted downward (see Chart A).

In regards to the balance reduction, the Federal Reserve maintains the action outlook to reduce securities holdings over time at the rate established in September, of 95 billion dollars per month, through 60 billion dollars in Treasury Bonds and the remainder in the maturity of Mortgage Backed Securities (MBS); they did not announce changes in that amount or the composition of the sale portfolio.

Regarding the macroeconomic plan, the estimates show little change. Economic activity in 2022 is revised upward to 0.5%, and downward in 2023 to 0.5% (from 0.2% and 1.2% previously). On the side of inflation, a moderate adjustment is observed, with greater pressure on prices, both in 2022 and in 2023, with an expected PCE of 5.6% and 3.1%, respectively (compared to the 5.2% and 2.6% previously estimated), and core inflation on the same line of persistence (4.8% and 3.5% for both years) and whose return to the target range would not occur until the long term.

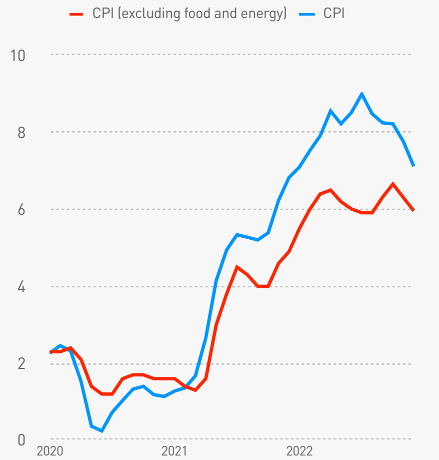
Regarding the narrative, the Federal Reserve offered aggressive language, emphasizing that while the pace of tightening was slower given the cumulative effect so far this year, continued tightening of monetary policy is necessary, so the evidence for a change in bias is insufficient for now. According to the latest publications, the moderation of inflation continues in the right direction, although it still does not ensure price control, with the risk of a wage-price spiral still in force (see Chart B).

Chart A.
United States:
Federal Reserve dot plot



Source: MAPFRE Economics (based on Federal Reserve data)

Chart B.
United States:
Inflation indicators



Source: MAPFRE Economics (with Haver data)

Box 1.1.2 (continued)
Monetary Policy Update

Assessment

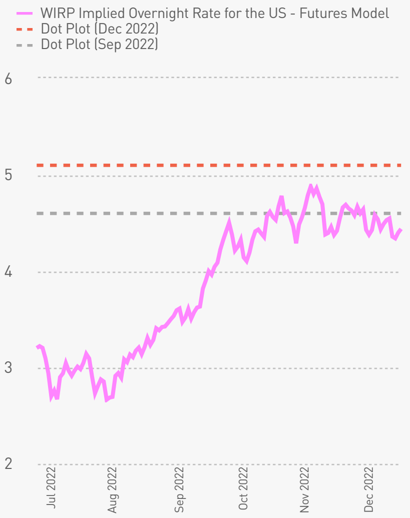
The Federal Reserve meeting offered a line similar to what was stated in September (slowdown, inflation, and stricter financial conditions over more time). However, some different aspects are worth noting, which cause some decoupling with respect to the implicit expectations of futures markets with an earlier cutoff than expected, and a more benign *terminal interest rate* (see Chart C).

On the growth side, the latest activity data in the United States have been surprisingly upward. This demonstrates better performance than initially expected in the final stretch of the year and, therefore, offering some additional room to harden the message, push back employment and ease aggregate demand, thus refuting the FOMC's view, given the endogenous and differential overheating factor in the U.S. economy.

On the inflation front, the November data revealed further moderation in both the general and core indexes, suggesting that the worst part is likely to begin to show in retrospect. However, on one hand, the reading of both indicators continues to be historically high and still far from the objective of the Federal Reserve, and, on the other, given the greater resistance of the economy, the anchoring of core inflation could show similar behavior supported by: (i) persistent components, both housing and rental inflation, as well as services, remain unmoderated; (ii) the reluctant momentum of wages (real wages fell for the twentieth consecutive month) in a market that, according to official data, remains robust, and (iii) the effect of the reopening of China, *a priori* neutral, due to the inflationary impact on raw materials versus the disinflationary effect due to the improvement of supply chains (but with basic supplies exerting more immediate pressure due to its impact as the first link in the production chain.)

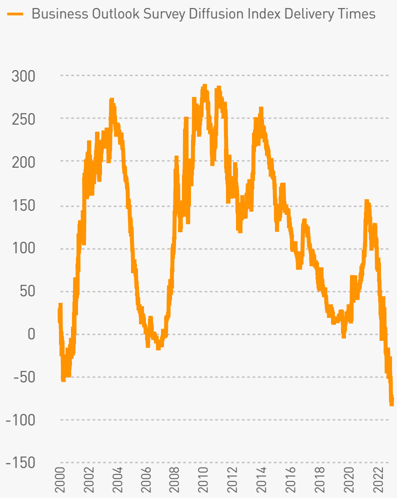
As far as tighter financial conditions are concerned, with all of the above and under the still prevailing assumption of soft landing as the Federal Reserve expects, the imbalance between supply and demand still has implications on the prices and the restrictive space is still evident. In the short term, this may cause

Chart C.
United States: Dot Plot vs. futures 2023



Source: MAPFRE Economics (based on Bloomberg data)

Chart D.
United States: differential interest rates 2y-10y



Source: MAPFRE Economics (based on Bloomberg data)

Box 1.1.2 (continued)
Monetary Policy Update

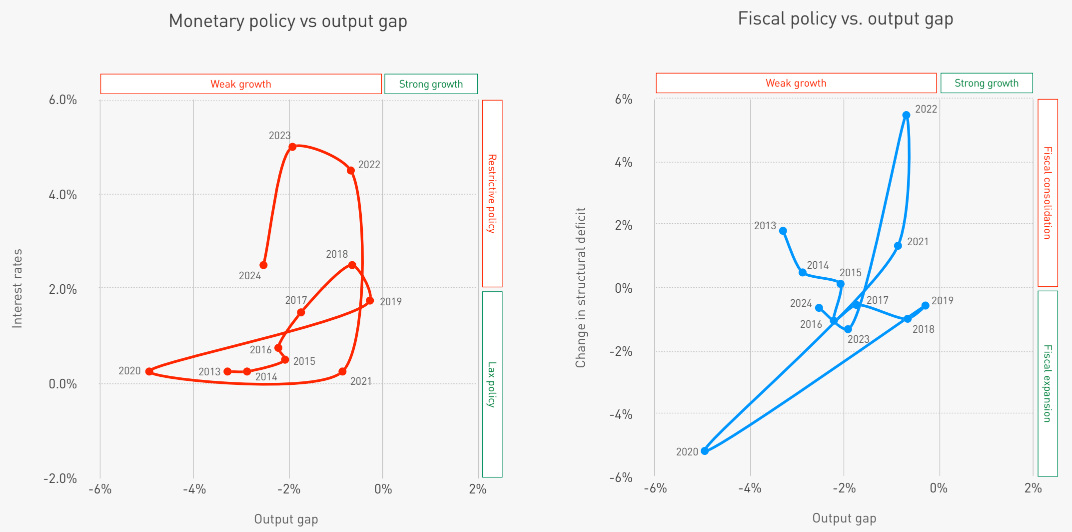
new tensions in the markets in terms of valuation until the correction of demand becomes more evident and more sustained improvement is noted over time. In the medium term, as time is still needed to change the game, the trend marked by restrictive financial conditions will still prevail and, with it, the probabilities of an "accident" occurring that would accelerate the process (see Chart D).

Point in the cycle

Chart E illustrates the monetary bias, which has not readjusted in the United States since the pandemic, as inflationary pressures grew and the output gap narrowed. The change in bias is expected to come after 2023 with more controlled inflation (3.9% in 2023 and 2.5% in 2024), an output gap still in negative territory, and the narrowing of the rate gap dictated by the Taylor rule after a historically accelerated and aggressive monetary cycle.

Regarding fiscal policy, consolidation is expected; this guideline was clearly stated in the Inflation Reduction Act in August 2022, which established the reduction of the fiscal deficit through new taxes on large corporations and wealth, which would also cover the climate project for domestic energy production (40% reduction in carbon emissions by 2030 and the promotion of renewable energies), thus reducing pressure on prices. This protectionist measure should be treated with care since producing with lower efficiency than the world may, on the one hand, raise the price of the product protected by law and, on the other hand, generate a trend that may be imitated by other countries that feel harmed by this import substitution policy. In addition, the political context resulting from the mid-term legislative elections will also be conducive to fiscal consolidation, as the Democrats' option (previously in control of both houses of Congress) for a budget compromise in the Senate will be eliminated. In this regard, the new Republican majority in the House of Representatives and the expansion of the Democrats' majority in the Senate are expected to create a political deadlock that will result in a limita-

Chart E.
United States: monetary and fiscal policies vs. output gap*



Source: MAPFRE Economics
* Variables expressed as differences

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Box 1.1.2 (continued)
Monetary Policy Update

tion of the Biden administration's expansive fiscal policy and the system's shift towards the enactment of bipartisan legislation. However, it is important to note that the U.S. Congress is a very reactive institution to unexpected economic or national security events and in a context of a possible recession next year, legislative priorities may change.

Thus, both balance sheet and liquidity measures have deepened the contractionary monetary bias during 2022, and public debt has been consolidated, given the higher funding costs. However, a change in the fiscal bias is expected by 2023 in a context where the output gap remains negative and fiscal expansion would be required to offset the still recessionary effects of the monetary bias.

European Central Bank

At its meeting on December 15, the European Central Bank (ECB) announced that interest rates would increase, reaching 2.5% for main refinancing operations and 2.0% in deposit facility. Looking ahead to 2023, movements are expected to remain steadily upward until reaching (at least in forward-looking terms after the lack of indications) the revised 3.0%-3.5% range, sustaining a sufficiently tight monetary policy to ensure that inflation returns to the objective of 2%.

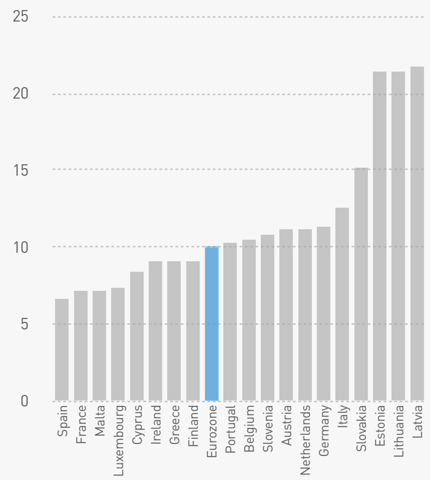
Regarding the asset purchase program, while remaining flexible in its reinvestment in the Pandemic Emergency Purchase Program (PEPP), as needed, until 2024, the ECB announced the reduction of its portfolio in the Asset Purchase Program (APP), which, starting in early March 2023, will decrease at a pace of 15 billion euros per month on average, until the end of the second quarter of 2023, at which time both the pace and composition will be re-evaluated. As regards the TRLTOs, they are expected to follow the course initiated at the previous meeting (to encourage early repayment) and through which 745 billion euros have been repaid to date. Finally, regarding the "antifragmentation" mechanism anticipated last July, no additional indication was concluded about its potential activity, triggers or operation under a declining balance sheet.

In the macroeconomic level, ECB's new projections foresee a 8.4% inflation rate in 2022, which would drop to 6.3% in 2023 and 3.4% in 2024 (contrary to 6.8%, 3.5%, and 2.1% path forecast previously). As for economic growth forecasts, the ECB has placed the estimates for 2022 at 3.4% (from 2.8% previously), for 2023 at 0.5% (from 2.1%), and for 2024 at 1.9% (from 2.1% previously), thus incorporating a relatively brief and shallow recession into the forecasts, *a priori.*

Assessment

As in the case of the Federal Reserve, the ECB also displayed hard-line language in its latest press conference, signaling a tightening cycle with still some way to go and even further to redress the prospects of diverging inflation in the Eurozone, albeit driven mostly by the energy factor, all despite the stagflation outlook and risks of recession. At the same time, emphasizing the need to close the current fiscal gap given the opposite direction of the current monetary policy.

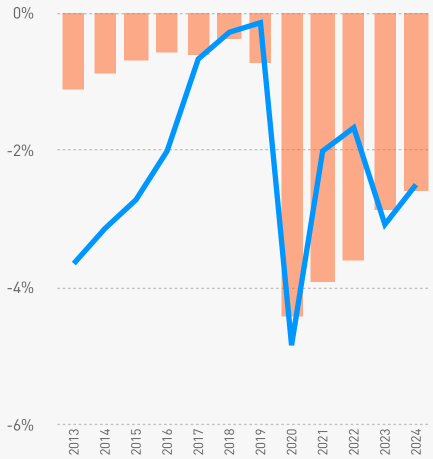
Chart F.
Eurozone: HICP index (November)



Source: MAPFRE Economics (with Haver data)

Box 1.1.2 (continued)
Monetary Policy Update

Chart G.
Eurozone: Output gap and
Cyclical Structural Balance

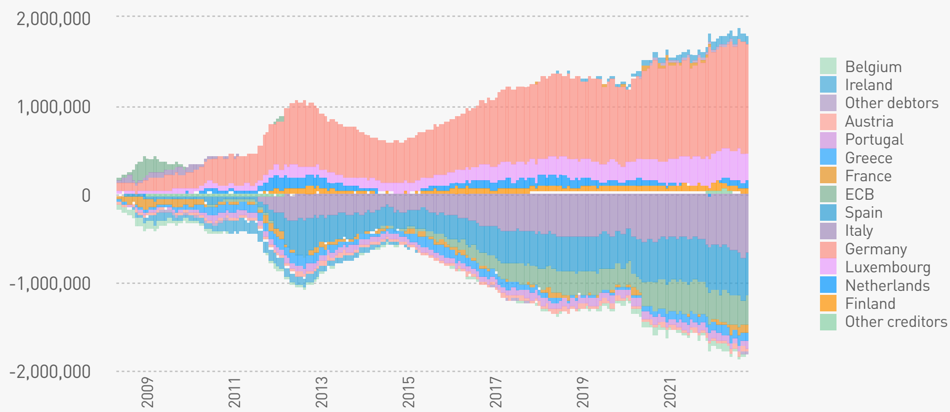


Source: MAPFRE Economics (with Haver data)

With respect to inflation, the dominance of the energy shock remains the main problem and, given the recently approved battery of additional measures (cap on Russian gas, agreement on key parts of the "Border Carbon Adjustment Mechanism" and the most recent agreement containing the ninth package of sanctions against Russia), the threat of further price distortions could be prolonged in terms of a long-term structurally inflationary component. In that case, and under the Phillips curve approach, despite both labor market rigidity and unchanged real wage pressures, this divergence could begin to separate over the course of 2023, under a similarly fragmented pattern of second-round effects (see Chart F).

Along the same lines, and given the economic buffer provided by fiscal policy during 2022, this momentum will begin to dissolve over the course of the year, moving towards more neutral ground (see Chart G), despite the fact that the Stability and Growth Pact is suspended until the end of 2023. While this is the general line, the so-called "frugal" countries with ample fiscal space will be able to deteriorate their positions in the form of broader support, while more indebted countries with more fragile sustainability paths will encounter greater constraints from the point of view of access to financing, albeit still supported by NGEU funds.

Chart H.
Eurozone: TARGET2 Balances



Source: MAPFRE Economics (based on ECB data)

Box 1.1.2 (continued)
Monetary Policy Update

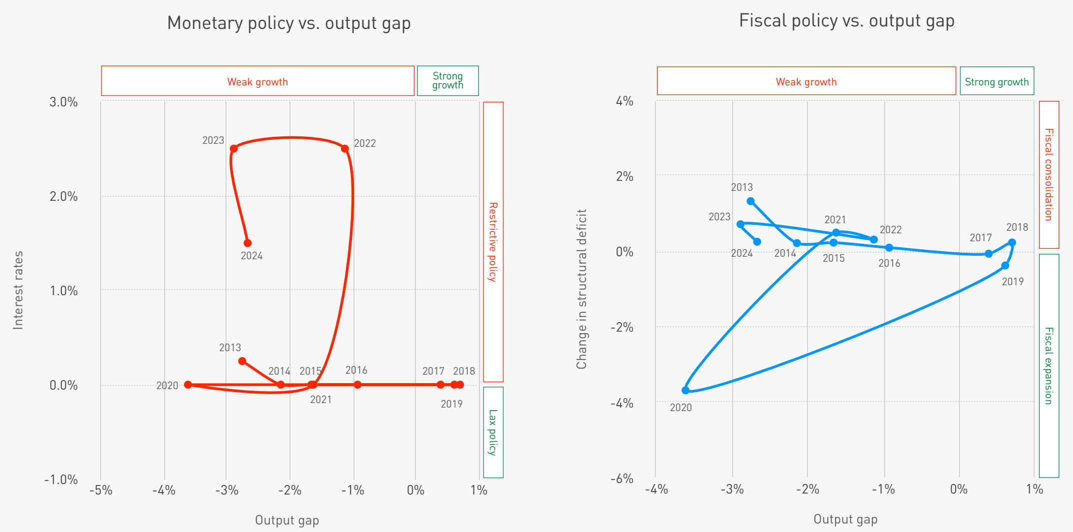
Consequently, and given the ECB's balance sheet reduction announcement from March, the possibility of triggering divergent offsetting movements in funding cost increases, while the effectiveness of the "anti-fragmentation" mechanism has a tailwind before it, has even become effective. In sum, and although the details of the asset sale program are not yet known, the starting point is uneven growth under divergent inflation rates and asymmetric fiscal expansion-austerity, adding the imbalances of balances already accumulated in TARGET2, governed by German law (see Chart H).

Point in the cycle

Chart I illustrates how the restrictive monetary policy in the Eurozone was activated in 2021 given the impossibility of keeping the refi rate at 0.0% due to growing inflation cemented by the energy component. In this regard, given the ECB's inflation expectations predicting inflation will remain high even by 2023, maintaining the restrictive policy stance is warranted, despite the negative output gap. In this sense, the gap with respect to the Taylor rate is expected to decrease, and a change in the monetary bias may occur by 2024.

Meanwhile, the Vice-President of the ECB, Luis de Guindos, has already warned of the problems that could arise from an expansionary fiscal policy in European governments, as it would lead to higher interest rate hikes in the markets, putting financial stability at risk. In this regard, European fiscal policy has followed an expansionary path, mainly in view of the need to promote alternative and renewable energies to reduce its energy dependence and promote digital transformation. This poses the new challenge of meeting the Eurozone's debt issuance needs in a context of inevitably rising risk premiums (and thus higher financing costs), which will have to be absorbed by private investors in exchange for quite high requirements. While the injection of NGEU funds is temporarily slowing down the

Chart I.
Eurozone: monetary and fiscal policies vs. output gap*



Source: MAPFRE Economics
* Variables expressed as differences

Click here to access the interactive version of this information

Box 1.1.2 (continued)
Monetary Policy Update

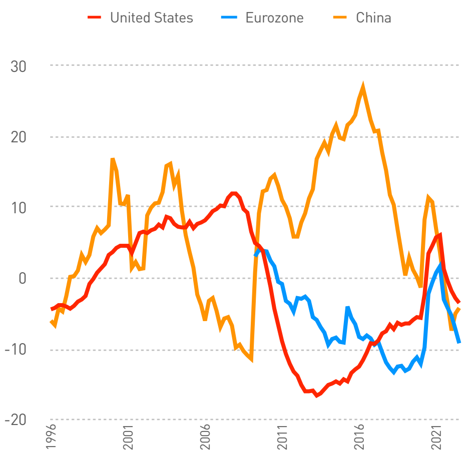
increased indebtedness of European governments, fiscal readjustment in the Eurozone economies is vital to have lower debt requirements (which will be more expensive in 2023) and to be in line with monetary policy and thus maintain the stability of the financial system.

Finally, since the cyclical, structural deficit of 2020 produced by the recession due to the Covid-19 pandemic, the cyclical balance has remained in slight surplus, despite the clear expansionary fiscal policy implemented by the Eurozone economies. In addition, the output gap is projected to be negative in 2023 and 2024, so the spending level is expected to be maintained, and the concern will fall on funding sources.

Source: MAPFRE Economics (based on Federal Reserve and ECB data)

dent focus, returning to concerns about the loss of economic activity to the detriment of declining inflation pressures, thereby progressively reversing some degree of tightening to a more broadly neutral monetary stance. With this, the orientation of monetary policy will continue to gravitate around concerns about controlling inflation in the first months of the year, which should be seen as unavoidable when approaching target inflation rates, to give way in the second half of the year, not to a "pivot" event, but to a less harsh stance compatible with financial stability. Therefore, the main determining factor for this scenario remains the risk of more persistent inflation over time, an unmooring of expectations leading to second-round effects and the need for additional adjustment in labor markets due to the inability to recover the state of rebalancing (see Box 1.1.2). Meanwhile, fiscal policy is expected to remain aligned with monetary policy, accompanied by more selective measures, and limiting its drive in general terms, although the need for additional advances that lead to further monetary tightening is not ruled out, under the assumption of persistent inflation which, consequently, would then raise the spending restriction towards deeper austerity levels, despite the resulting weakening in terms of economic activity.

Chart 1.1.2-i
Selected countries: credit cycle
(Credit to non-financial sector/GDP)

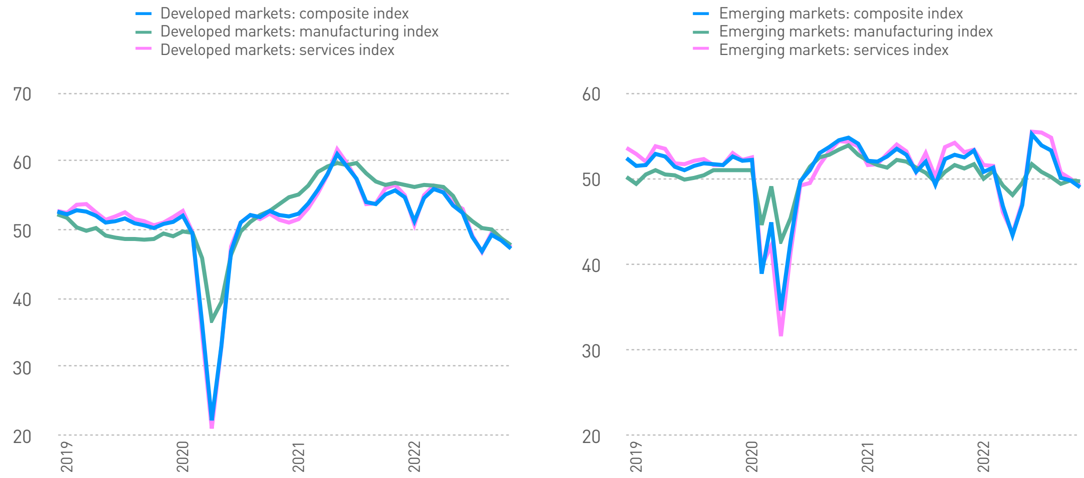


Source: MAPFRE Economics (based on BIS data)

1.1.3 Regional dynamics

In this report's forecast update, the confluence of the endogenous and exogenous factors mentioned above has led to an upward revision of global growth in 2022, to 3.5% compared to 3.2% in our previous report[1], and a downward revision in 2023, to 2.0% compared to 2.7%, with a rebound in activity in 2024 that would raise the forecast to 2.7%.

Chart 1.1.3-a
Global: PMIs advanced markets and emerging markets



Source: MAPFRE Economics (based on Bloomberg data)

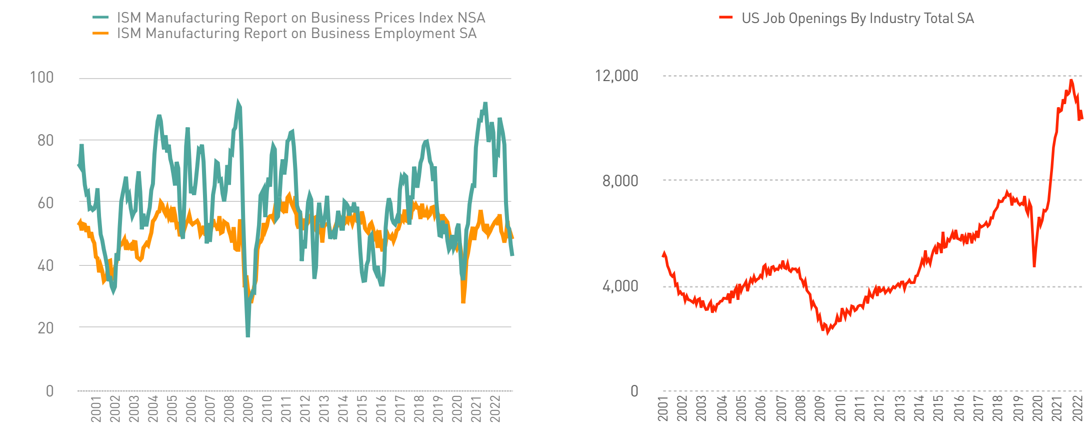
In terms of inflation, the forecasts in this report provide a revision for both years, placed at 8.2% and 5.6%, in 2022 and 2023, versus the 8.8% and 6.5% from our previous report, while looking to 2024, inflationary forecasts would moderate to 3.1%.

The rationale for these forecasts, which would see the entry into a period of global stagflation with moderate gains in economic activity fading to below potential and a prolonged high price path, is based on two factors. First, it is based on a brief contraction in the developed economies and a limited intense recovery, especially in Europe, where both the Eurozone and the United Kingdom face very somber outlooks. And second, there is a residual contribution of the Latin American economy, with modest and asymmetrical contributions, and the support of the main pillar of Asia (ex-Japan) as the main focus of positive contribution, traction to which China is reintegrated after the improvement of its outlook. Price pressures, on the other hand, will continue to accompany forecasts over a longer cycle, mainly due to structural components and factors with a more defined duration, which is already permeating the underlying basket, as was mentioned in the previous edition of our *Economic and Industry Outlook*[2] report (see Chart 1.1.3-a).

United States

In the United States, despite the economic resilience shown throughout the second half of the year, macroeconomic vulnerabilities are expected to manifest more intensely throughout 2023, with a loss of momentum, to the point of facing a short and shallow recession, although enough to close the annual positive computation at a positive 0.1% (0.2% in our previous quarterly report), followed by a slight recovery the next year (0.9% in 2024). The lagged effects of a more restrictive and lasting monetary policy would be a substantial drag on activity and employment, aggravating the contraction of real incomes, although easing the endogenous components of inflation towards a terrain of greater control by the Federal Reserve. The downside risk lies in more persistent wage pass-through inflation, accompanied by resilient employment that continues to surprise on the upside and triggers a more aggressive tightening of financial conditions, leading to a hard landing scenario and increasing the likelihood of a financial crash (see Chart 1.1.3-b).

Chart 1.1.3-b
United States: employment indicators

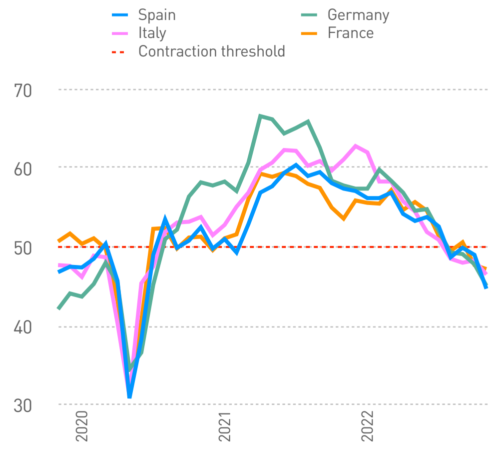


Source: MAPFRE Economics (based on Bloomberg data)

Eurozone

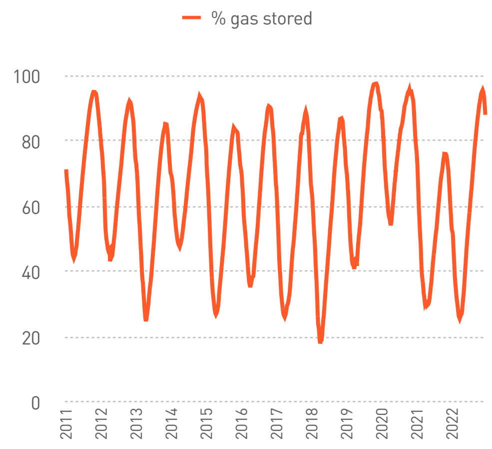
In the Eurozone, despite the improvement in the last indicators of the year, as well as greater energy efficiency (supported by milder-than-usual weather), the inertia of forecasts remains downward in activity and upward in inflation, with prospects of a more immediate entry into a deeper technical recession, followed by a recovery that is highly likely to disappoint, taking the 2023 annual computation into negative territory, down to -0.1% (compared to 0.0% forecast in our previous report). Similarly, given the inflation's imported origin, a later control position is expected on the part of the European Central Bank (ECB) in addition to some dissonance among the fiscal policies of the different member countries. Looking to 2024, the path to recovery is expected to remain weighed down by idiosyncratic factors and to be set on a path to lower production. For the Eurozone, risks are also low, both on the side of accelerating inflation driven by new shocks and feedback from endogenous factors (second round effects), as well as the effects of a disorganized fiscal policy in conflict with monetary policy (see Charts 1.1.3-c and 1.1.3-d).

Chart 1.1.3-c
Selected countries: manufacturing PMIs



Source: MAPFRE Economics (based on Bloomberg data)

Chart 1.1.3-d
Global: stored gas
(%)



Source: MAPFRE Economics (based on Bloomberg data)

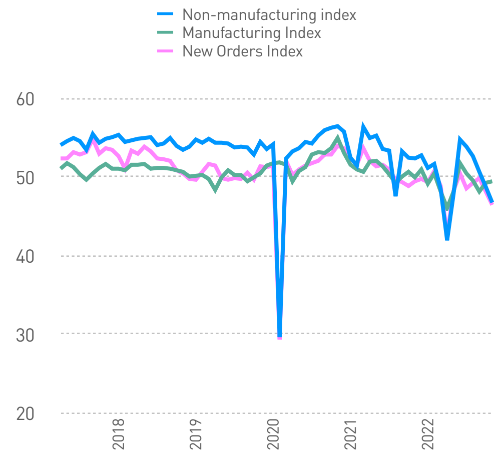
China and other merging markets

As for China's economy, the potential economic reopening with the progressive easing of restrictions towards a path of living with Covid-19, coupled with a favorable monetary policy stance (keeping liquidity and funding costs stable), as well as increased government intervention to provide some stability to the real estate sector, could help to regain China's buffer role in the global economy and boost its contribution to growth. However, risks remain: (i) a return to pandemic containment policies; (ii) a possible impact on exports due to deterioration of the global context; and (iii) persistent problems in the real estate market (see Charts 1.1.3-e and 1.1.3-f).

Concerning the rest of Asia, this economic region is expected to continue to act as a counterweight to the moderation of global growth while still enjoying lower inflation than most of the rest of the world's economies. Risks are focused on the Caucasus and Central Asia (due to proximity to geopolitical risks) and spillover effects on external demand as global economic activity weakens.

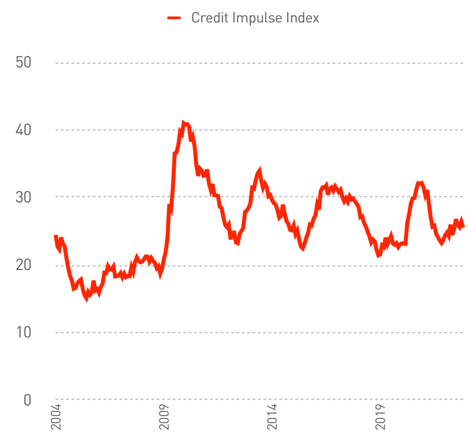
Finally, Latin America's performance has been revised downwards insofar as the region faces a series of obstacles and challenges throughout 2023. On the one hand, the cyclical slowdown of the economy will be aggravated by the loss of external momentum. However, the contribution is expected to remain positive in countries exporting raw materials, supported by the price cycle, which, although it will continue to fall, could remain at above-trend levels. On the other hand, domestic political tensions could delay the implementation of fiscal reforms and impact domestic consumption, undermining consumer confidence. On the positive side, the sum of an anticipated monetary policy (probably already at its high point) and a more advanced change of inflation place real interest rates in positive terrain, creating some wiggle room both in the case of a rebound in raw materials prices, which is again reflected in inflation and, in the base case, in more room to react and accommodate more favorable conditions for growth. The risks for this region lie in the impact of the global slowdown and a tighter monetary policy by the Federal Reserve (highly correlated to turbulent events), which reveal the tacit vulnerabilities of certain economies (see Charts 1.1.3-g and 1.1.3-h).

Chart 1.1.3-e
China: PMIs



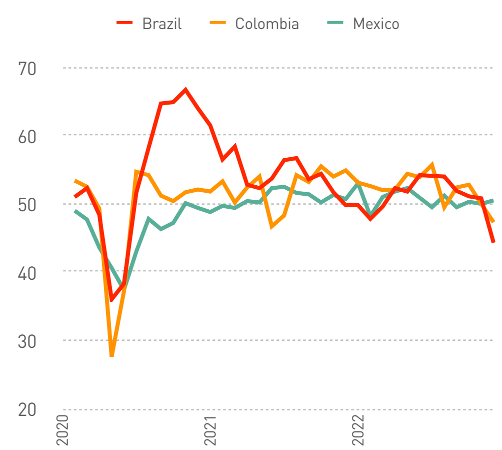
Source: MAPFRE Economics (based on Bloomberg data)

Chart 1.1.3-f
China: credit impulse



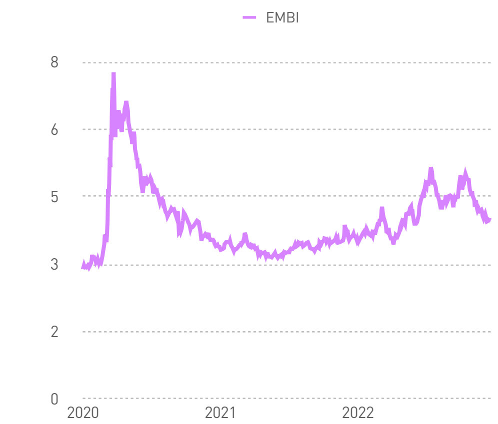
Source: MAPFRE Economics (based on Bloomberg data)

Chart 1.1.3-g
Selected countries: Manufacturing PMIs



Source: MAPFRE Economics (based on Bloomberg data)

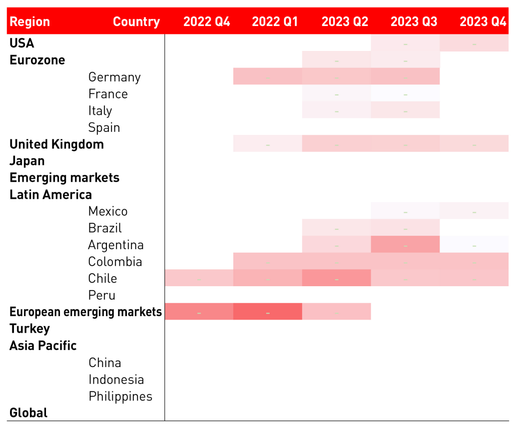
Chart 1.1.3-h
Latin America: EMBI



Source: MAPFRE Economics (based on Bloomberg data)

All in all, the marked weakness throughout 2022 in developed economies, many of them facing selective recessions, and not enough support from the emerging markets, with the exception of Asia (although not exempt from weaknesses), added to unresolved endogenous and exogenous dynamics, will continue to mark 2023, confirming the phase of entry into a global stagflation stage fed by risk that continues to trend down, with enough potential to trigger a broader and deeper recession event (see Chart 1.1.3-i).

Chart 1.1.3-i
Global: recession forecasts



Source: MAPFRE Economics

1.1.4 Scenarios and forecasts

Baseline scenario

Looking to 2023, this report maintains a short and medium-term *baseline scenario* of *stagflation*, accompanied by the incursion of a series of recessions in some economies, although with a limited impact less than that of previous events, followed by a period of low-intensity recovery. Thus, the scenario anticipates a gradual dissipation of inflation risks which, while levels remain high and above the goals of central banks, would soften the pace of downward adjustment more quickly than anticipated as demand shortfalls take over.

On the fiscal policy side, a broadly and across-the-board lower expansionary path is expected to gradually approach neutral territory, with the Eurozone lagging further behind over time and maintaining some expansionary tone during 2023, given the following: (i) the flows from NGEU funds continue to be released; (ii) the asymmetry of inflationary pressures and their consequent dampening of the shock, although considering the fiscal spaces; and (iii) the debt capacity under the less favorable conditions and avoiding fiscal dominance events with risk premium spikes.

Meanwhile, the path of monetary policy would raise the terminal interest rates due to the more significant tightening bias revealed by the main central banks during the first half of 2023, reaching 5%+ in the United States and 3.5%+ in the Eurozone by the second half of the year. In this sense, the baseline would start from an earlier easing, offsetting the loss of momentum in activity and declining inflationary pressures. A similar dynamic would be expected in emerging economies, although anticipated due to the more advanced state of their monetary cycle, with positive real interest rates.

On the geopolitical front, the conflict in Ukraine is expected to continue at least until the first quarter of 2023, with a slow-moving gradual de-escalation and deteriorating relations with the NATO bloc, which would sustain current sanctions at least through the entire projection timeframe. This, added to the weakening of global demand, would sustain pressure to lower the prices of raw materials, although these would stabilize, to a greater degree, long-term levels.

Stressed scenario

On the other hand, in the *stressed scenario* (risk scenario) considered in this report, the growth path diverges from the baseline scenario to levels that place global growth in 2023 at a rate of around 1.2%. The case is based on a drop more abrupt than the anticipated drop in global demand, with more intense and tighter inflationary pressures, a still expansive fiscal policy, and an opposing and more aggressive monetary policy.

In the activity framework, under this risk scenario, developed economies would avoid a soft landing, and the permanent erosion of buying power would lead to a contraction in consumption not compensated by a new round of fiscal expansion. While emerging economies would benefit from a cycle of high-priced raw materials, they would not avoid the decline given the weakening of outside demand, with lower trade at high but insufficient prices. The global economy will continue to be supported by Asia, although to a lesser extent by China, whose contribution to global growth is declining due to new endogenous shocks. So, the loss of momentum in the region would be notable and unable to keep global growth above expansion levels.

In this alternative scenario, inflation in 2023 would remain at rates above 5% in the United States, 7% in the Eurozone, and around 8.1% in emerging markets. The main factor would again fall upon raw materials prices, with energy leading the imbalance due to supply factors. At the same time, wage compensations would be sufficient to trigger second-round effects on inflation, although not enough to balance the accumulated real gap. The deflationary factors of this loss of aggregate demand would be offset by a new round of fiscal protection measures, mainly issued in the United Kingdom and the Eurozone (due to the structural deficit in energy and other supplies that could not be reversed until 2024).

Consequently, under this scenario, monetary policy would tighten further, reaching positive real rates in the United States and accelerating liquidity drainage with balance sheet tools. In the Eurozone, real interest rates would remain in negative territory, but the *terminal interest rate* would exceed 4% at the end of 2023, while the ECB balance sheet is expected to shrink at a steadily increasing pace from the 15 billion starting in the first quarter of the year. It should be noted that this scenario would not lead to a fiscal dominance effect, although it would generate a wide gap in credit spreads and selective fragmentation at controlled levels in the low TPI range (anti-fragmentation mechanism).

The change in financial conditions and lower liquidity would lead to implied volatility that would raise the VIX to levels of 40, with the annual average close to 30. The inference would result in a 2 sigma correction in risk assets which, this time and albeit moderately, would be deep enough factors to spread to the real estate sector. The rationale for the risk scenario would lead to an appreciating dollar against other currencies, in a flight-to-quality with emerging currencies facing an outflow similar to previous shocks. Meanwhile, the interest rate curves would first deepen the current inversion by maturity due to the upturn in the short term, moving towards a flattening in the medium and long term as the *terminal interest rate* leaves behind its cyclical peak.

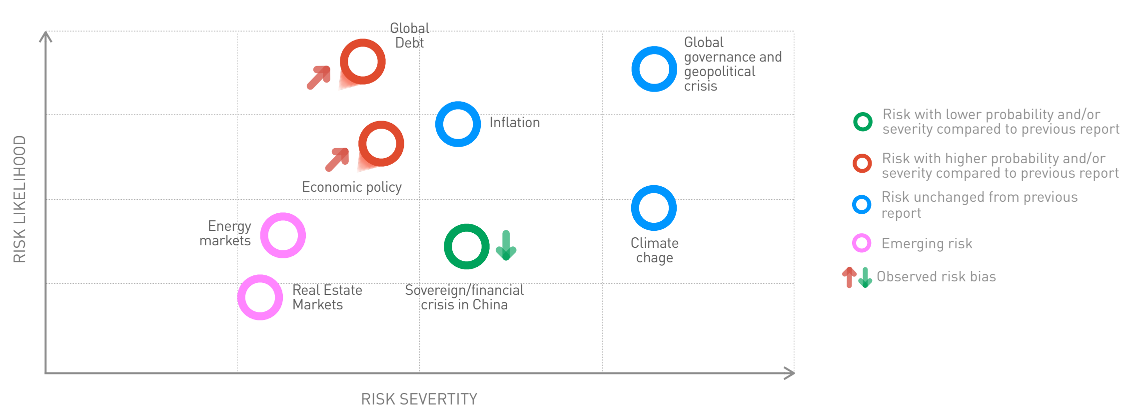
1.1.5 Risk assessment

There are various possible additional triggers for the global economy in 2023 outlooks, which are schematically illustrated in the risk map in Chart 1.1.5.

Global governance and geopolitical crisis

From a governance and global geopolitics outlook, there are several imminent challenges to global stability. Firstly, the NATO-Russia situation, in a context in which the conflict in Ukraine crystallizes and, even if it resolves in 2023, it does not appear that trade relationships, and with them gas prices and European Union-Russia trade relationships, will be able to return to their pre-conflict normal. Other conflicts along the same line may erupt in 2023, like the problems in Transnitria, Nagorno-Karaback, and Kosovo. Secondly, there are new rounds of sanctions that, while effective, could have partially undesired results in managing means of payment (against the dollar) and restructuring global trade channels. The limits on hydrocarbon prices and the lukewarm reaction of the other international competitors is an example of this potential situation. Thirdly, the governance of the European Union faces a difficult return to fiscal discipline in 2023, in addition to the withdrawal of financial asset purchases by the ECB in the context of slower growth. Fiscal dominance effects may reactivate risk premiums, so activating community relief mechanisms (firewalls) is advisable as opposed to the alternatives of the past (austerity), which increased the risk of fragmentation. Fourthly is the situation in the United States, facing difficult elections given the partisan animosity that has formed since the Trump era, which will make it difficult to approve new fiscal measures and transatlantic cooperation. And, finally, in Latin America, the victory of Luiz I. Lula da Silva in Brazil, which strengthens the presence of nominally leftist governments in the region, as well as the scrutiny of public accounts by the markets facing the risk of an imbalanced fiscal policy (see Box 1.1.5-a).

Chart 1.1.5
Short-term risk balance: vulnerabilities and global risks



Source: MAPFRE Economics

Global debt

In the third quarter of 2022, global debt again decreased by 10 billion dollars to 290 billion, representing 343% of GDP, around 22 percentage points (pp) below its 2021 high. In developed markets, the decline relative to GDP was 3 pp, led by government and household debt. Meanwhile in emerging markets, there was a new increase of 2.2pp of GDP, due in large part to the greater indebtedness of financial companies and, to a lesser degree, non-financial companies, noting the strong cumulative depreciation of currencies against the dollar as an obstacle. In the case of China, the debt ratio reached a new all-time high, with 352% of GDP, with all sectors contributing to the increase, in particular, the financial sector.

As funding costs consolidate under tight interest rates as a measure to combat price pressures, and there is less liability absorption on balance sheets by major central banks around the world, new issues face increased scrutiny in terms of sustainability. In the developed markets, while the non-financial private sector enjoys a better position, governmental issuers, even with expansionary fiscal policies as a buffer against the loss of purchasing power due to inflation, face: (i) refinancing with a high debt service cost, (ii) increasing amounts due to persistent contracyclical policies, and (iii) an adverse macroeconomic context. Consequently, there is the risk of a "vicious debt cycle" increases, and market scrutiny becomes highly sensitive to proposed paths to stability. Meanwhile, in emerging markets, currency depreciation against the dollar poses an additional challenge, for which the most short-term relief is focused on restructuring the debt maturity profile, the tacit vulnerability being debt in dollars, insufficient international reserves, and current accounts with financing needs.

Economic policy

As the Federal Reserve and the central banks of the G10 move into the restrictive realm of monetary policy in their attempt to contain inflation, they face the increasingly palpable dilemma of how much to erode aggregate demand and, with it, global growth, and what levels of inflation are consistent with medium- and long-term expectations. In this sense, while inflation rates are starting to move away from their peaks, the fragility in risk assets and warning signs of an eventual financial accident continue to accumulate side-by-side with a return to normalcy that is still out of balance due to lower production capacity that has not yet recovered, and demand depressors that have yet to show their impact given the delayed effect of monetary policy.

Under this scenario, the current narrative sustains the existence of a gap between the outlooks of monetary policy designers (more inflation, higher interest rates, and for a longer period due to a structurally complex horizon) and countered by the consensus (inflation symmetrically declining due to deflationary forces, interest rate cuts in 2023 and a return to the dynamics of the pre-pandemic normalcy). All of this is materialized in some interest rate curves that show an ever more inverted yield slope, reflecting security discrepancies between maturities and consistent credit quality and denoting an early and widely accepted signal of recession. In this sense, and added to the drain of additional liquidity through ongoing balance sheet reduction policies, the scope for further widening of these differences through central bank overreaction may result in the current sign of economic contraction on the near horizon gaining tilt, indicating a much deeper contraction than anticipated.

Sovereign financial crisis in China

The anticipated easing of Covid-19 restrictions in China will strengthen the Asian economy's performance potential, led by a foreseeable rise in consumption (both due to more consumer trust and savings accumulated over the prolonged period of restrictions) and a possible reinvigoration of manufacturing and service sectors, which will help alleviate the accumulated decline in exports

Box 1.1.5-a
Geopolitical environment: 2023 global challenges

It is difficult to predict with certainty what the main geopolitical challenges will be in 2023, as they will depend on a wide range of factors that can change rapidly. However, based on current trends and issues, several challenges could emerge or become more important in the coming years. They highlight tensions between the major powers, particularly the United States and China, and the impact of rapid technological change. Likewise, the threat of terrorism is likely to remain a major concern, and climate change is likely to continue to erode the income and wealth of the bottom of the world's socioeconomic layer, increasing inequality and perpetuating the middle-income trap.

Tensions between major powers

One of the main challenges that could continue to shape the geopolitical outlook in 2023 is the current tensions between the major powers, particularly the United States and China. These tensions have been fed by a series of concerns, such as trade, diplomacy, and military confrontations, and have the potential to disturb relations and global stability. This challenge takes on greater importance with the fading of the Theory of Commercial Expectations, whereby reasonable diplomatic relations were maintained in the interest of the mutual benefits of bilateral trade. That was the example again in China-US bilateral relations and the ban on technology sharing, the growing tensions regarding Taiwan, a critical link in the technological value chain, or the new arrangement of energy sources following the dissociation between Europe and Russia.

Impact of technology

The rapid pace of technological change is likely to continue to have a major impact on international relations in 2023 and beyond. This could include the emergence of new technologies that have the potential to change the balance of power between nations, as well as the potential for cyber-attacks and other forms of digital sabotage to disrupt global systems and infrastructure. The struggle to contain technology value chains and critical parts of the value chain will continuously increase tensions between the dominant powers. In addition, the risk that arises organically from technology, especially artificial intelligence (AI), is broadly underestimated. Algorithmic biases, the power and CO_2 costs of machine learning training, and the rise of AI foundation models produce a shift in productivity growth and pose lasting dangers to stability and inequality.

Climate change

The impacts of climate change, including rising sea levels, more frequent and severe natural disasters, and changing weather patterns, will likely remain significant challenges in 2023 and beyond. The impacts could disturb global commerce, displace a large number of people, and increase tensions between states, and cooperation and coordination on a global scale is needed to combat this. In addition, like all long-range risks, climate change acts as a regressive tax that erodes income and wealth from the bottom of the socio-economic stratum, increasing inequality and perpetuating the middle-income trap.

Terrorism

The threat of terrorism will probably remain a significant concern in 2023. It is also probable that using social networks to diffuse propaganda and inspire violence will continue to pose a significant challenge in the fight against terrorism. Terrorism functions as a coercive means to reach a goal with scarce resources and in a context in which contrasting clashes are created. Hence, the generalization of its tangible version needs a stable environment to create this coercive power. It is also foreseeable that terrorism, in times of upheaval, will be transformed into cyberterrorism.

Box 1.1.5-a (continued)
Geopolitical environment: global challenges 2023

Political instability and conflicts

Political instability and conflict are likely to remain major challenges in 2023, with several issues, such as economic inequality, ethnic and religious tensions, and resource scarcity, potentially leading to unrest and violence in various parts of the world. This could have significant repercussions on global security and stability. The feedback loop between inequality, disenfranchisement, and partisan animus must be broken to mitigate this type of risk. However, amid other geopolitical challenges, it seems difficult to achieve in the foreseeable future.

that the Chinese economy has faced in the last few quarters. In turn, the Chinese central bank's flexible monetary policy focused on growth, in combination with a more proactive fiscal policy, could provide a further catalyst and engine of endogenous growth for this country.

Downside risks, however, continue to be focused on the real estate sector, with developers still under pressure and the purchase and sale market contracting, both in terms of the number of transactions and prices. Given the real estate crisis, the Chinese government is beginning to show the first signs of support for the sector, providing some stability, which, while favorable, is still not enough to dispel the delicate outlook of a sector that needs to move towards restructuring and resizing given its potential systemic risk.

Climate change

The growing climate risk will be addressed again in November 2022, in Egypt, at the 27th United Nations Climate Change Conference (COP27). Agreements and progress were again limited, focusing on establishing a fund to help pay for losses and damages caused by climate change and updates on adaptation to carbon markets, again failing to arrive at a consensus position for more aggressive measures. Thus, the challenge of achieving an accelerated transition to a zero-carbon and carbon-neutral world continues to loom on a very long-term horizon, with the risks that this entails.

Inflation

While the latest inflation data has shown some signs of moderation, the risk of persistently high inflation over a long timeline remains. Deflationary components remain latent, base effects are showing themselves, and lower demand-side pressures, accompanied by supply catching up, are exerting downward pressure. However, core inflation continues to show a solid dynamic that could keep the path on track: (i) structurally inflationary forces driven by the progressive reversal of globalization and accelerated by geopolitical interaction on a broader and more lasting basis; (ii) the uncertain energy outlook weighed down by both the uncertainty surrounding global supply sources and the accelerating energy transition; (iii) the behavior of the re-opening China related to raw material prices, as well as the change toward a consumer-based model and added value exports; (iv) the effects of aging in labor markets, with a skill gap that could lead to a structural and inflationary replacement skills gap; (v) upward wage negotiations in an attempt to regain lost ground in terms of purchasing power in an increasingly generalized and widespread manner; and (vi) the effects

Box 1.1.5-b
Inflation considerations

Inflation and its secondary effects on stability and financial activity will negatively impact the economy; impacts will also be reflected in the performance of the insurance industry. Headline inflation has been the focus of the economic debate since mid-2021, remaining intense and resilient to this day. It was triggered by demand unleashed in the wake of the pandemic crackdown, fiscal stimulus packages and supply bottlenecks and accelerated by the energy crisis triggered by the war in Ukraine.

In November, harmonized inflation reached 10.1% in the Eurozone, 6.7% in Spain, and 7.1% in the United States. Meanwhile, core inflation represents the trend of this phenomenon in the long term, recording 5.0% in the Eurozone and 6.0% in the United States. This behavior is certainly worrisome since, in addition to the traditional forces of supply and demand, other secular forces seem to be appearing on the scene that are driving long-term inflation (permanent cost increases in some sectors and growing budget deficits, among others). Therefore, although current inflation rates will not be permanent, we cannot rule out a scenario in which, in the long term, headline inflation will be between 1.5% and 2.0% higher than the average inflation rate recorded over the last decade.

In order to control the inflationary outlook, economies have reacted by tightening monetary policy. Given this reaction, monetary policy rates are expected to peak near 5.0-5.5% in the United States and 3%-3.5% in Europe over the next four months. Monetary tightening has shaken financial markets, inducing corrections in bonds and equities, tightening credit conditions, eroding disposable income, and straining the fiscal sustainability of some economies. In this light, the most likely scenario for the next two or three quarters is one of *stagflation* or, in an alternative scenario of greater stress, a generalized *inflationary recession* with an inevitable impact on the performance of the insurance market.

In general terms, insurance activity will suffer a triple effect: (i) the need to adjust the prices of their products upwards; (ii) weaker underwriting demand; and (iii) volatile financial conditions. In particular, in the Non-Life insurance segment, lower disposable income and worse financial conditions will reduce the demand for insurance, except in some segments that could be compensatory, such as health insurance, due to higher risk aversion after the pandemic and its inelastic demand. In addition, higher inflation will affect claims costs, which could imply the need for insurers to increase claims provisions and a significant increase in the operating cost structure.

Lower disposable income will also mean lower demand for insurance products in the Life insurance segment. In addition, a more stressed financial situation could lead to more extreme policy surrenders, especially when the insured amounts are not indexed to inflation. This situation implies a reputational risk for the insurance industry. However, the increase in long-term interest rates will also help to monetize fixed-income investments.

Finally, with regard to the insurance industry's balance sheet, high nominal interest rates will conceal still negative real rates for some time. In addition, rate hikes are having a major impact on the valuation of assets at market prices, which will have to be adjusted to liabilities, impacting the industry's structure. However, the intensity will depend on the risk portfolio structures and asset-liability matching.

of a broad fiscal policy, with greater prominence than in the past and a persistent expansion dynamic. In summary, if inflationary factors are weighted higher on the scale, these could start a wage-price spiral and cause a major monetary reaction with the consequent impact of controlling added demand (see Box 1.1.5-b).

Real estate market

As interest rates move beyond neutral territory and limit the momentum of aggregate demand, housing markets face an environment of increased vulnerability. Although inventories remain at historically low levels on the supply side, the cumulative over-valuation fueled since the outbreak of the pandemic in certain markets, such as Canada, Australia, the United Kingdom, and the United States, face the risk of corrections given the demand affordability crisis due to tightening credit and the loss of purchasing power. Meanwhile, on the investor side, the renewed attractiveness of fixed income and the re-establishment of opportunities in the money markets absorb the channeling of savings from the most conservative profiles. The risk of price corrections, while expected to be moderate in 2023, could result in a prolonged and deeper shock, exacerbated by declining labor markets and a monetary policy that remains in tightening territory deeper and longer than anticipated.

Energy markets

Finally, in recent months the energy markets worldwide have been normalizing and re-adapting to the extended period of geopolitical shock. The gas and oil markets have stabilized, although at values above a long-term balance, given the improved outlook of the need for gas in Europe, a slow reopening in China, and the diversification of sources through supply agreements, as well as a global demand on the decline, due to both the shock of real income given the cumulative rise in prices, and the first effects of the change in bias of the monetary policy. Despite this, the tail risk persists. The weaknesses continue to be a still early energy transition policy, low levels of investment in traditional energies that hinder their continuity, global inventories at historically low levels, and a volatile and adverse geopolitical environment. Given the preceding, the price dynamic is expected to remain under stress for a prolonged period, and the decrease in demand continues to be countered by the scarcity of supply.

1.2. Forecasts and risk assessment in selected economies

1.2.1 United States

A robust economic contraction, which is the price to pay for controlling inflation.

The United States economy grew by 2.9% QoQ (annualized and seasonally adjusted) and 1.9% YoY in the third quarter, with consumption up 1.7% QoQ, but with investment falling significantly -9.1%, feeling the effects of the monetary restriction. Government consumption grew by 3.0%, while exports grew by 11.5% YoY and imports by 7.4%. The fourth quarter is expected to close at 0.8% YoY (0.6% QoQ), but the slowdown in economic activity levels is expected to occur as early as the first quarter of 2023, with contractions starting in the year's second quarter.

United States

- **The Federal Reserve is focusing on a short, shallow recession as a way to reign in inflation.**
- **There have already been good signs that inflation has reached a ceiling.**
- **The greatest risk for the United States economy is that the tightening of financial conditions will cause a systemic crash.**
- **United States GDP growth is projected to be 0.1% in 2023 and 0.9% in 2024.**

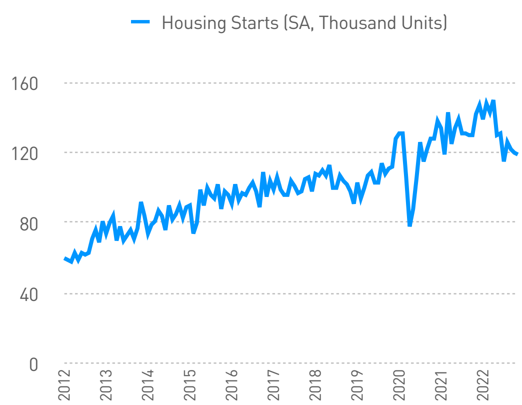
Stock markets recorded declines of between 15% (Dow Jones) and 30% (Nasdaq) in 2022, reflecting the worsening earnings outlook by companies and the rise in the 10-year Treasury bond yield, exceeding 3.5%, and the 2-year, which has exceeded 4.2% as of this report (up from 1.5% and 0.7%, respectively, at the beginning of the year). The 2- and 10-year bond interest rate curve is inverted, with a pronounced slope, an indicator that an economic recession is close.

As for the activity forecast, the purchasing managers' indexes (PMIs) for December point to deteriorating economic activity, with the composite at 44.6 points, the manufacturing at 46.2, and services at 44.4 points (below the contraction threshold of 50 points). Employment is still healthy but is starting to fall, which is in line with the news of layoffs that have started throughout the technology industry. The Conference Board's index of leading indicators turned negative in July and was already -2.7 in October. However, consumer confidence has slightly rebounded, although it had been on a downward trend for three years. Finally, in the real estate market, the National Association of Home Builders survey points to the rapid decline and drop in the 6-month outlook index, maintaining a path similar to that of 2007 (see Charts 1.2.1-a and 1.2.1-b).

We forecast that, in 2023, the economy will record a severe contraction in the second quarter. Despite this, we believe it could avoid falling into a full-year contraction, growing by 0.1% in 2023. This will depend largely on how the economy, especially investment, the real estate market, and the labor market react to the less favorable financing conditions (see Table 1.2.1 and Charts 1.2.1-c and 1.2.1-d). Looking to 2024, many matters are yet to be defined. However, we estimate a slow recovery due to continued tight financial conditions to combat inflation, which would lead the U.S. economy to grow at around 0.9% for the year.

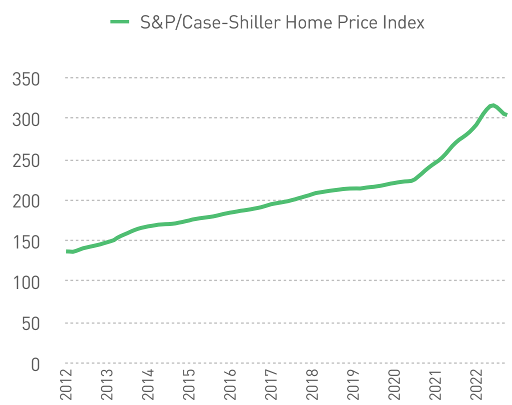
Headline inflation came in at 7.1% in November, with core inflation rising to 6.0%, a moderation from June's 9.1%. This fact has encouraged markets to believe the Fed will successfully control inflation. However, analyzing the prior inflationary processes, it is expected that it could take years to revert to the previous situation, especially due to core inflation and the second-round effects of wage revisions. Food prices rose 12% for households and 8.5% for restaurants in November. Automobile fuels are moderating and are 10.8% more expensive than the last year, with electricity at 13.7%. Meanwhile, producer prices have increased by 8.1% (substantially lower than in Europe, where growth exceeds 30%), and construction materials by 11.9%.

Chart 1.2.1-a
United States: housing starts



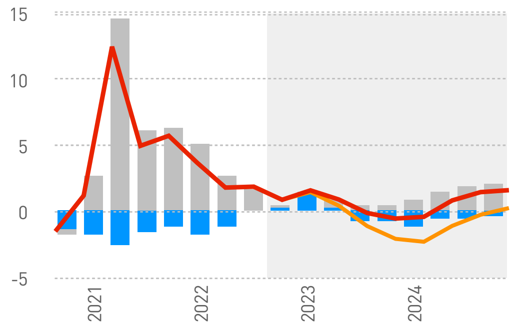
Source: MAPFRE Economics (based on Bloomberg data)

Chart 1.2.1-b
United States: housing prices



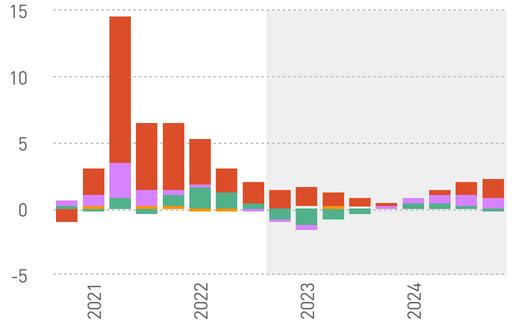
Source: MAPFRE Economics (based on Bloomberg data)

Chart 1.2.1-c
United States: GDP breakdown and forecasts



Source: MAPFRE Economics (based on Federal Reserve data)

Chart 1.2.1-d
United States: domestic demand breakdown and forecasts



Source: MAPFRE Economics (based on Federal Reserve data)

Table 1.2.1
United States: main macroeconomic aggregates

	2018	2019	2020	2021	2022(e)	Baseline (BS) 2023(p)	Baseline (BS) 2024(p)	Stressed (SS) 2023(p)	Stressed (SS) 2024(p)
GDP (% YoY)	2.9	2.3	-2.8	5.9	2.0	0.1	0.9	-0.3	-0.9
Domestic demand contribution	3.3	2.4	-2.7	7.3	2.4	0.4	1.6	-0.3	-0.2
External demand contribution	-0.4	-0.1	-0.2	-1.7	-0.6	0.1	-0.6	0.1	-0.5
Private consumption contribution	2.0	1.4	-2.1	5.7	1.9	0.9	0.8	0.4	-0.3
Total investment contribution	1.0	0.6	-0.3	1.2	-0.1	0.0	0.6	-0.3	-0.1
Public spending contribution	0.2	0.5	0.3	0.2	0.0	0.1	0.1	0.1	0.1
Private consumption (% YoY)	2.9	2.0	-3.0	8.3	2.7	1.2	1.1	0.6	-0.4
Public spending (% YoY)	1.2	3.4	2.2	1.3	-0.3	1.1	0.7	1.1	0.7
Total investment (% YoY)	4.7	2.6	-1.2	5.7	-0.4	-0.1	2.6	-1.4	-0.6
Exports (% YoY)	2.8	0.5	-13.2	6.1	7.7	-1.7	3.2	-3.0	1.0
Imports (% YoY)	4.2	1.1	-9.0	14.1	8.6	-1.5	5.1	-2.2	3.1
Unemployment rate (%, last quarter)	3.8	3.6	6.8	4.2	3.6	4.6	4.3	5.0	5.4
Inflation (% YoY, average)	2.4	1.8	1.2	4.7	8.0	3.9	2.5	5.1	4.6
Inflation (% YoY, last quarter)	2.2	2.0	1.2	6.7	7.2	3.0	2.1	4.9	4.2
Fiscal balance (% of GDP)	-6.1	-6.3	-15.2	-11.6	-4.1	-5.0	-5.6	-5.2	-6.5
Primary fiscal balance (% of GDP)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Current account balance (% of GDP)	-2.1	-2.1	-2.9	-3.6	-3.8	-3.8	-4.0	-3.6	-3.7
Official interest rate (end of period)	2.50	1.75	0.25	0.25	4.50	5.00	2.50	6.00	5.25
3-month interest rate (end of period)	2.81	1.91	0.24	0.21	4.66	5.01	2.68	6.11	5.42
10-year interest rate (end of period)	2.69	1.92	0.93	1.52	3.87	3.37	2.72	4.64	4.32
Exchange rate vs. U.S. dollar (end of period)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Exchange rate vs. euro (end of period)	1.15	1.12	1.23	1.13	1.06	1.03	1.05	0.99	1.01
Private lending (% YoY, average)	4.7	5.0	6.4	14.9	1.8	-2.1	2.1	-3.0	0.9
Household lending (% YoY, average)	3.5	3.0	3.4	6.5	7.7	5.9	5.9	5.5	5.3
P.S. non-financial lending (% YoY, average)	9.1	6.6	8.8	3.1	9.3	4.0	3.1	4.0	3.0
P.S. financial lending (% YoY, average)	1.9	2.4	6.8	4.3	7.7	1.2	0.3	1.4	0.9
Savings rate (% pers. disp. income, avg.)	7.6	8.8	16.8	11.9	3.5	3.2	4.2	3.3	4.9

Source: MAPFRE Economics (based on Federal Reserve data)
Forecast end date: 5 January 2023.

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The Federal Reserve raised interest rates 50 basis points (bps) at the December meeting, to 4.50%. The median of governors' expectations (Dot Plot) points to a 5.14% rate, which in practice could translate into 5.25%, i.e., 3 more 25 bps hikes until May, and then remain stable for a while until control of inflation is confirmed. For now, the start of interest rate cuts is not being considered unless there is a deterioration in the labor market and activity that justifies it. The rate futures market points to two more hikes (5.0% by April-May) and drops starting as of the middle of 2023. Regarding the balance reduction, the Federal Reserve maintains the action outlook to reduce securities holdings over time at the rate established in September, of 95 billion dollars per month, through 60 billion dollars in Treasury Bonds and the remainder in the maturity of Mortgage Backed Securities (MBS). The Federal Reserve is expected to maintain this strategy, as no changes in the amount or composition of the portfolio for sale were announced at the December meeting.

The latent risks, while diverse in nature, could be summarized into two: (i) a major economic contraction (which could lead to a recession) caused by the tightening of financial conditions, accompanied by an overheated labor market, and (ii) a systemic liquidity event in the markets, in the style of the October 2019 "repo" crisis, in which the Federal Reserve must intervene. Furthermore, it highlights the looming risk of an enormous volume, 80 trillion (80 billion in the long scale) of payment obligations in dollars, implemented through swaps and currency futures, which make up some payment obligations that are not found on the banks' balance sheets[3].

1.2.2 Eurozone

The coming economic contraction.

The Eurozone grew 0.3% QoQ (2.3% YoY) in the third quarter of the year, already feeling the slowdown in economic activity. This loss of momentum will probably become a decline in the last quarter of 2022 and the first quarter of 2023. Meanwhile, private consumption grew by 0.9% QoQ, public consumption rose by 0.4% QoQ, and investment by 3.6% QoQ.

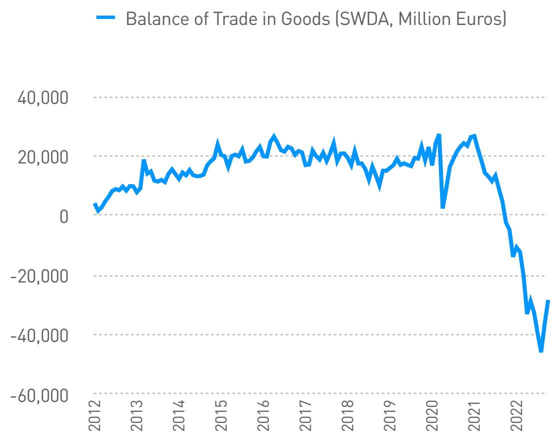
The purchasing managers' indexes (PMIs) from December are in negative territory, but less than in November, with the composite at 48.8, manufacturing at 47.8, and services at 49.1 points, all below the contraction threshold. Consumer confidence has also reported a negative value but appears to have bottomed out (-23.9 vs. -28.8 in September). Likewise, the industry survey points to a contraction of activity, while retail sales are in contraction, with -2.7% YoY (-1.8% MoM). Industrial production is holding up for the moment (3.4% YoY), and car sales are buoyant (18.2%), thanks to a pent-up demand due to chip supply problems in the automotive industry. Meanwhile, the trade balance is running record deficits, exceeding -300 billion euros, due to more expensive energy purchases and the dollar's strength until October (see Charts 1.2.2-a and 1.2.2-b).

Activity outlooks for the Eurozone predict a decline in GDP in 2023 (-0.1%), starting directly in the third quarter of the year. The outlook for 2024 is uncertain, with the European Central Bank (ECB) announcing that interest rates will remain high for longer and with inflation and energy prices in a dynamic of remaining high (see Table 1.2.2 and Charts 1.2.2-c and 1.2.2-d). Inflation, in turn, stood at 10.1% YoY in November, having stabilized

Eurozone

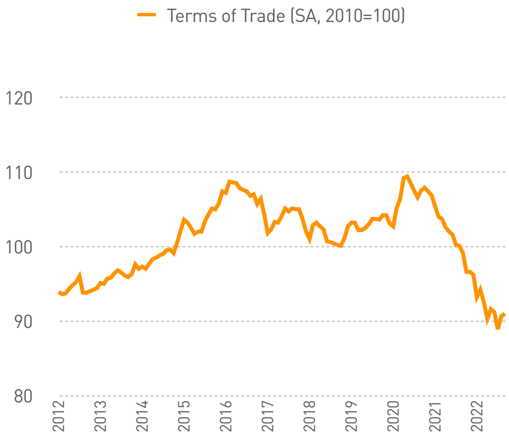
- **Industry in the Eurozone is fighting persistently high energy costs.**
- **Inflation is placed at 10% and producer prices are moderating, but remain high.**
- **The trade balance deficit is aggravated by the price of imported energy.**
- **GDP growth is projected to drop -0.1% in 2023 and recover 1.6% in 2024.**

Chart 1.2.2-a
Eurozone: trade balance



Source: MAPFRE Economics (with Haver data)

Chart 1.2.2-b
Eurozone: exchange terms



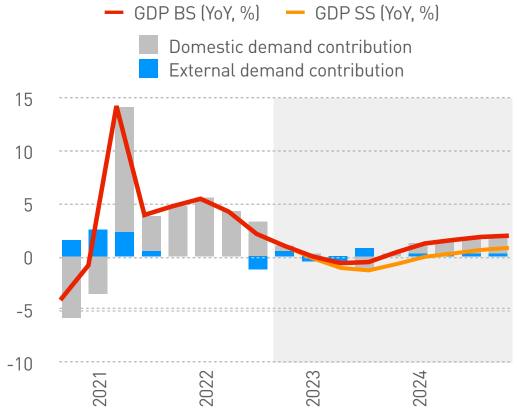
Source: MAPFRE Economics (with Haver data)

for the moment. However, core inflation appears to be entrenched at 5.0% YoY. Food prices increased by 16%, and in some countries in the region, the figure approached 20%. Fuels have moderated their climb and are now 11.5% higher than last year. However, some countries are thinking of eliminating fuel subsidies. Producer prices in the Eurozone rose by 27.1% in November, moderating but still at very high levels, indicative of future price increases for finished products.

At its December meeting, the ECB announced a 2.50% hike in interest rates (principal financing operations) and 2.00% (deposit facility). It indicated that interest rates would continue to rise for a long time. It remains to be seen how the economy and markets will react and to what extent the central bank is willing to drive the economy into a recession. It will also be interesting to observe the clash of forces between restrictive monetary policy and expansive fiscal policies. The debate over the increase in supply, particularly energy, as a means to control inflation is nearly absent, except for the boost to green energy, which seems unable to make up for the volume cut in oil and gas. Additionally, the ECB announced the start of quantitative tightening by reducing reinvestments in its asset purchase program (APP), starting in early March (reduction of 15 billion/month until June) and with the pace after that to be defined at a later date. In the PEPP (Pandemic Emergency Purchasing Program), reinvestments at maturity will be maintained for the time being.

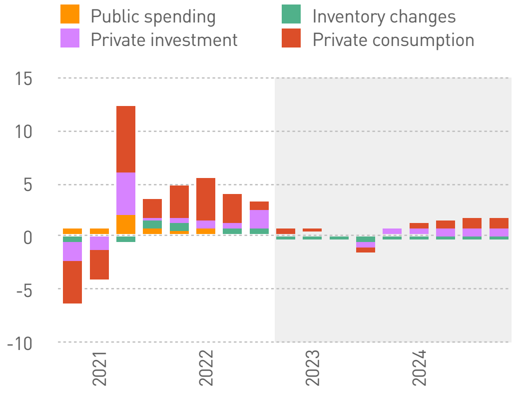
The outlook in the Eurozone is complex, and the risks are trending downward: energy costs increase the risk of persistently high inflation, and high levels of producer costs reduce the competitiveness of European industries. Thus, European industry may decline if the energy crisis is not resolved. Industrial investments will tend to be aimed at countries with cheap energy. In its effort to control inflation, the ECB risks leading the Eurozone into a recession which, for now, is expected to be brief but only if solutions are found to other problems associated with this phenomenon. Meanwhile, in a context of the highest interest rates and an economic cycle in contraction, it is normal that there will also be a credit reduction and an increase in business insolvency.

Chart 1.2.2-c
Eurozone: GDP breakdown and forecasts



Source: MAPFRE Economics (based on ECB data)

Chart 1.2.2-d
Eurozone: domestic demand breakdown and forecasts



Source: MAPFRE Economics (based on ECB data)

Table 1.2.2
Eurozone: main macroeconomic aggregates

						Baseline (BS)		Stressed (SS)	
	2018	2019	2020	2021	2022(e)	2023(p)	2024(p)	2023(p)	2024(p)
GDP (% YoY)	1.8	1.6	-6.3	5.3	3.2	-0.1	1.6	-0.8	0.4
Domestic demand contribution	1.7	2.4	-5.7	4.0	3.3	-0.2	1.3	-0.8	0.2
External demand contribution	0.0	-0.8	-0.5	1.3	-0.1	0.0	0.4	0.0	0.2
Private consumption contribution	0.8	0.7	-4.2	2.0	2.1	0.0	0.8	-0.3	0.4
Total investment contribution	0.6	1.4	-1.4	0.8	0.7	0.0	0.6	-0.3	0.1
Public spending contribution	0.2	0.4	0.2	0.9	0.3	0.2	0.1	0.2	0.1
Private consumption (% YoY)	1.5	1.4	-7.8	3.7	4.0	-0.1	1.5	-0.6	0.8
Public spending (% YoY)	1.0	1.7	1.0	4.3	1.6	1.2	0.4	1.2	0.4
Total investment (% YoY)	3.2	6.7	-6.5	3.7	3.4	-0.2	3.0	-1.6	0.3
Exports (% YoY)	3.5	2.9	-9.2	10.5	7.0	0.7	3.4	0.0	2.0
Imports (% YoY)	3.8	4.9	-8.7	8.3	7.9	0.8	3.0	0.1	1.7
Unemployment rate (%, last quarter)	8.0	7.5	8.3	7.1	6.8	7.3	7.2	7.6	8.0
Inflation (% YoY, average)	1.8	1.2	0.3	2.6	8.4	5.0	2.4	7.4	5.9
Inflation (% YoY, last quarter)	1.9	1.0	-0.3	4.6	10.1	5.0	3.7	7.0	5.6
Fiscal balance (% of GDP)	-0.4	-0.6	-7.0	-5.1	-3.0	-4.1	-3.1	-4.3	-3.9
Primary fiscal balance (% of GDP)	1.4	1.0	-5.6	-3.3	-1.2	-2.4	-1.5	-2.6	-2.3
Current account balance (% of GDP)	2.9	2.4	1.6	2.3	-0.6	0.4	1.4	0.5	1.0
Official interest rate (end of period)	0.00	0.00	0.00	0.00	2.50	2.50	1.50	3.50	3.25
3-month interest rate (end of period)	-0.31	-0.38	-0.55	-0.57	2.35	2.04	1.13	3.10	2.74
10-year interest rate (end of period)	1.17	0.32	-0.19	0.32	2.83	2.43	2.26	3.42	3.60
Exchange rate vs. U.S. dollar (end of period)	1.15	1.12	1.23	1.13	1.06	1.03	1.05	0.99	1.01
Exchange rate vs. euro (end of period)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Private lending (% YoY, average)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Household lending (% YoY, average)	2.4	3.4	3.0	3.9	4.0	3.5	4.6	3.0	3.1
P.S. non-financial lending (% YoY, average)	2.3	2.7	3.2	3.0	5.3	3.2	2.9	3.0	2.4
P.S. financial lending (% YoY, average)	-0.4	2.1	-1.0	0.0	6.4	2.4	1.8	2.5	1.9
Savings rate (% pers. disp. income, avg.)	12.5	13.2	19.8	17.9	13.4	11.8	11.4	11.8	11.6

Source: MAPFRE Economics (based on ECB data)
Forecast end date: 5 January 2023.

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1.2.3 Spain

Slowdown in 2023, but no recession.

In the third quarter, economic activity in Spain began to lose momentum, with 0.2% QoQ (+3.8% YoY) growth. This was particularly due to the performance of private consumption, which grew by 1.1% YoY, and public consumption, which grew by 0.6% YoY, with investment cooling (with growth of 0.5% YoY), particularly in construction. With respect to indicators that allow us to anticipate the outlooks, the purchasing managers' index (PMI) improved slightly in December, with the composite index at 49.9 points, manufacturing at 46.4, and services at 51.6 points. Meanwhile, the consumer confidence indicator continues to be quite negative (-28.7), at levels similar to those of 2020, while the economic sentiment indicator (96.4) is below 2019 levels (see Charts 1.2.3-a and 1.2.3-b). The wholesale sector survey also worsened, while retail sales are maintaining (1.0% YoY). Other advance indicators (OECD) point to stabilization, but at lower levels than in 2021 and 2019.

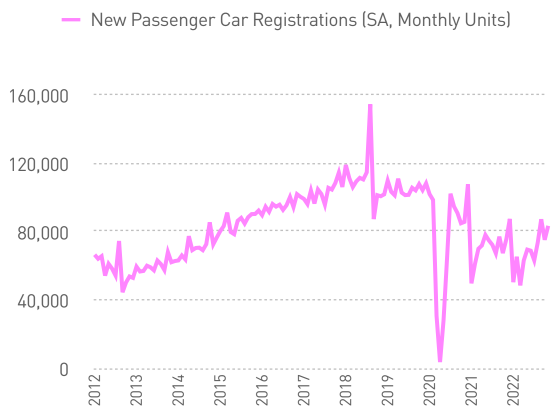
The growth estimate for 2023 points to a small contraction in the first quarter of 2023, growing again in the following quarters. The balance at year-end will depend on the effect of inflation on consumption, which, in the case of food, is taking a heavy toll on the middle class. With the hike in Euribor, the rising cost of housing is another factor to keep in mind. We estimate 1.0% growth in 2023 and 2.1% in 2024, while in 2022, which was the year of recovery from the pandemic and reopening to tourism, we believe it will have closed with growth of 4.6% (see Table 1.2.3 and Charts 1.2.3-c and 1.2.3-d).

Meanwhile, inflation reached 5.8% in December (compared to 6.8% in November), harmonized with 5.6% and core inflation at 6.9%, which increased by six-tenths of a percentage point. With the breakdown for November, food is up 15.3%, with growth in sugar (50%), eggs (27%), oils (31.5%), and meat and fish (>10%). The moderation in the general CPI is due to base effects and the moderation in the

Spain

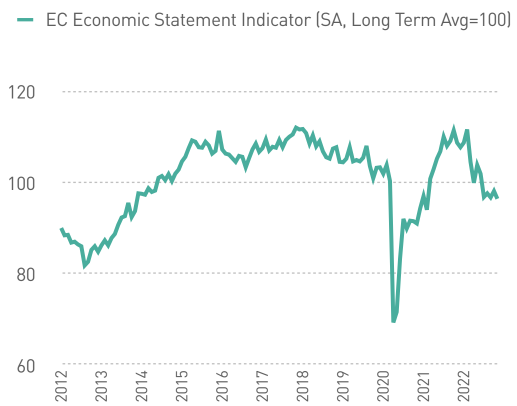
- **Inflation is already taking a toll on consumption levels.**
- **Wage increases are contained so that inflation does not take hold.**
- **The ECB seeks to cook inflation triggering a change in the economic cycle.**
- **The forecast is that the Spanish economy with grow 1.0% in 2023, and accelerate in 2024 by 2.1%.**

Chart 1.2.3-a
Spain: new vehicle registrations



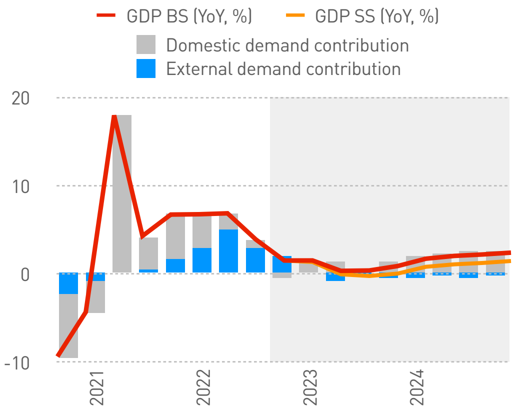
Source: MAPFRE Economics (with Haver data)

Chart 1.2.3-b
Spain: economic sentiment indicator



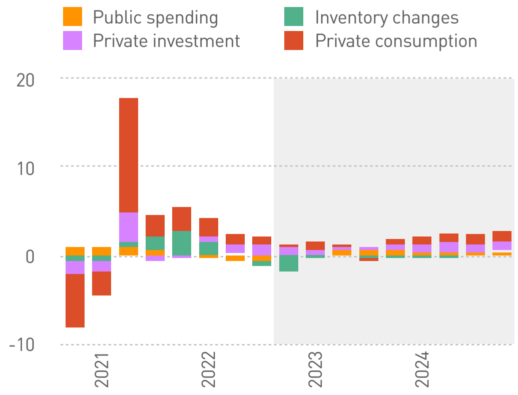
Source: MAPFRE Economics (with Haver data)

Chart 1.2.3-c
Spain: GDP breakdown and forecasts



Source: MAPFRE Economics (based on INE data)

Chart 1.2.3-d
Spain: domestic demand breakdown and forecasts



Source: MAPFRE Economics (based on INE data)

Table 1.2.3
Spain: main macroeconomic aggregates

						Baseline (BS)		Stressed (SS)	
	2018	2019	2020	2021	2022(e)	2023(p)	2024(p)	2023(p)	2024(p)
GDP (% YoY)	2.3	2.0	-11.3	5.5	4.6	1.0	2.1	0.2	1.1
Domestic demand contribution	2.9	1.6	-9.1	5.2	1.5	1.1	2.3	0.5	1.4
External demand contribution	-0.6	0.4	-2.3	0.3	3.1	-0.4	-0.3	-0.3	-0.4
Private consumption contribution	1.0	0.6	-7.0	3.4	1.1	0.3	1.1	0.0	0.7
Total investment contribution	1.2	0.9	-1.9	0.2	1.0	0.6	0.9	0.3	0.4
Public spending contribution	0.4	0.4	0.7	0.6	-0.4	0.4	0.4	0.4	0.4
Private consumption (% YoY)	1.7	1.1	-12.2	6.0	1.9	0.5	2.0	0.0	1.3
Public spending (% YoY)	2.3	1.9	3.5	2.9	-1.8	2.0	2.0	2.0	2.0
Total investment (% YoY)	6.3	4.5	-9.7	0.9	5.0	3.0	4.7	1.6	2.3
Exports (% YoY)	1.7	2.2	-19.9	14.4	17.5	-0.1	0.6	-0.5	-0.5
Imports (% YoY)	3.9	1.3	-14.9	13.9	8.9	1.0	1.7	0.4	0.5
Unemployment rate (%, last quarter)	14.5	13.8	16.1	13.3	12.6	13.6	13.1	14.1	14.0
Inflation (% YoY, average)	1.7	0.7	-0.3	3.1	8.4	4.3	2.5	6.1	3.7
Inflation (% YoY, last quarter)	1.8	0.5	-0.7	5.8	7.7	4.3	1.9	5.5	3.0
Fiscal balance (% of GDP)	-2.6	-3.1	-10.1	-6.9	-4.1	-4.8	-4.0	-5.0	-4.8
Primary fiscal balance (% of GDP)	-0.2	-0.8	-7.9	-4.7	-1.2	-2.2	-1.5	-2.4	-2.1
Current account balance (% of GDP)	1.9	2.1	0.6	0.9	0.5	1.2	1.9	1.3	1.0
Official interest rate (end of period)	0.00	0.00	0.00	0.00	2.50	2.50	1.50	3.50	3.25
3-month interest rate (end of period)	-0.31	-0.38	-0.55	-0.57	2.35	2.04	1.13	3.10	2.74
10-year interest rate (end of period)	1.42	0.47	0.06	0.60	3.10	2.84	2.75	3.93	4.24
Exchange rate vs. U.S. dollar (end of period)	1.15	1.12	1.23	1.13	1.06	1.03	1.05	1.07	1.08
Exchange rate vs. euro (end of period)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Private lending (% YoY, average)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Household lending (% YoY, average)	-0.3	-0.2	-1.0	0.1	1.2	2.0	2.2	1.5	0.4
P.S. non-financial lending (% YoY, average)	-1.9	0.0	2.0	3.5	1.7	2.4	2.4	1.4	0.3
P.S. financial lending (% YoY, average)	6.5	6.8	3.5	-0.8	-10.1	2.6	2.9	2.6	2.8
Savings rate (% pers. disp. income, avg.)	5.6	8.2	17.8	13.8	8.4	7.6	7.4	7.7	7.7

Source: MAPFRE Economics (based on INE data)
Forecast end date: 5 January 2023.

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increasing price of fuels (-1.1% MoM, trending toward moderation), electricity (-14.6% MoM) and gas (-0.7% MoM). Concerning expected inflation, companies have so far been moderating wage increases so that inflation does not become anchored at high levels.

The Spanish economy is considered one of the European economies that may escape the recession in 2023, thanks to the still manageable financial costs and the fiscal aids that have been activated. However, the outlook is that the ECB will continue to tighten monetary policy, and the commercial banks will become more cautious in granting credit. This would have a real contraction effect on the liquidity available for the economy. Thus, the short-term risks for the Spanish economy can be seen: a gradual reduction in consumption due to the loss of buying power and a contraction of credit to the economy.

1.2.4 Germany

The economic contraction is more acute among the Eurozone countries.

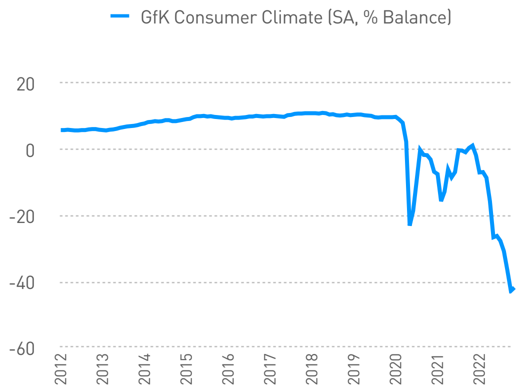
German GDP grew by 1.3% YoY during the third quarter (0.4% QoQ). During this period, consumption was still resilient (1.0% QoQ), as a slowdown is expected for the following quarters, compatible with the context of economic contraction. Exports grew by 2.0% QoQ, while imports increased more due to the price effect. Investment remained almost stable (0.2% YoY) and is expected to remain so in subsequent quarters, pending a more favorable macroeconomic context.

Germany

- **German inflation remains very high and wages are not keeping pace with the price containment effort.**
- **Consumer confidence and buying intent are at lows.**
- **The return to growth will depend on solutions to the energy mix.**
- **The German GDP will decrease about -0.9% in 2023 to recover 1.7% in 2024.**

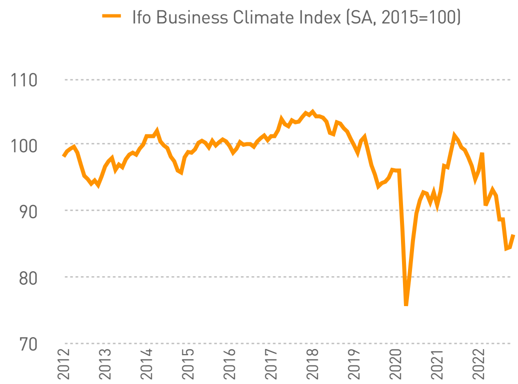
Outlooks for the coming quarters are of a contraction that would leave all of 2023 in negative values (-0.9%). The ZEW survey of investors in December placed the current situation on very negative ground (-61.4), but expectations, while still bad (-23.3), are improving (-36.7 the month before). The purchasing managers' indexes (PMIs) from December are in negative territory but already improving from October's lows, with the composite at 49.0, manufacturing at 47.1, services at 49.2, and construction at 41.7

Chart 1.2.4-a
Germany: consumer sentiment



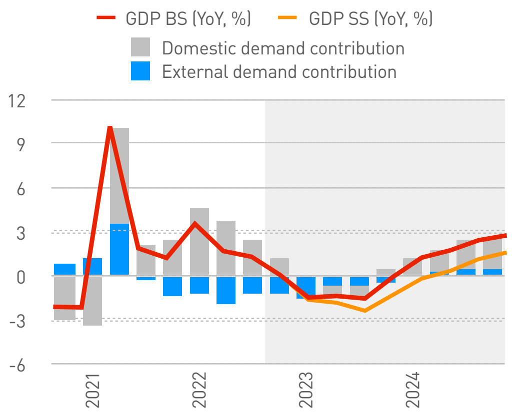
Source: MAPFRE Economics (with Haver data)

Chart 1.2.4-b
Germany: business sentiment



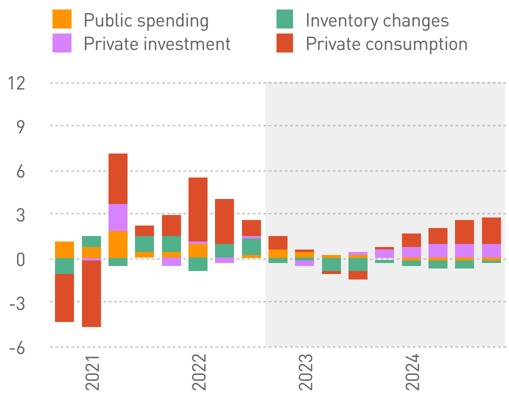
Source: MAPFRE Economics (with Haver data)

Chart 1.2.4-c
Germany: GDP breakdown and forecasts



Source: MAPFRE Economics (based on DESTATIS data)

Chart 1.2.4-d
Germany: domestic demand breakdown and forecasts



Source: MAPFRE Economics (based on DESTATIS data)

Table 1.2.4
Germany: main macroeconomic aggregates

						Baseline (BS)		Stressed (SS)	
	2018	2019	2020	2021	2022(e)	2023(p)	2024(p)	2023(p)	2024(p)
GDP (% YoY)	1.0	1.1	-4.1	2.6	1.6	-0.9	1.7	-1.8	0.7
Domestic demand contribution	1.6	1.7	-3.1	1.9	3.0	-0.3	1.7	-0.9	0.5
External demand contribution	-0.5	-0.6	-1.0	0.7	-1.4	-0.8	0.3	-0.9	0.2
Private consumption contribution	0.8	0.9	-3.1	0.2	2.3	-0.1	1.3	-0.3	0.9
Total investment contribution	0.7	0.4	-0.6	0.2	0.1	0.1	1.0	-0.2	0.4
Public spending contribution	0.2	0.5	0.8	0.8	0.4	0.2	-0.2	0.2	-0.2
Private consumption (% YoY)	1.5	1.7	-5.9	0.4	4.6	-0.1	2.4	-0.6	1.7
Public spending (% YoY)	0.8	2.6	4.0	3.8	1.9	0.8	-0.8	0.8	-0.8
Total investment (% YoY)	3.4	2.0	-3.0	1.0	0.3	0.3	4.6	-1.0	2.0
Exports (% YoY)	2.4	1.3	-10.1	9.5	2.4	0.1	4.6	-0.6	3.0
Imports (% YoY)	4.1	2.9	-9.1	8.9	5.9	1.9	4.2	1.2	2.9
Unemployment rate (%, last quarter)	5.0	5.0	6.1	5.3	5.6	5.6	5.5	6.0	6.3
Inflation (% YoY, average)	1.7	1.4	0.5	3.1	7.9	5.9	2.6	7.6	4.6
Inflation (% YoY, last quarter)	2.0	1.2	-0.2	5.1	10.4	3.8	2.5	5.9	4.2
Fiscal balance (% of GDP)	1.9	1.5	-4.3	-3.7	-2.0	-2.9	-2.0	-3.1	-3.0
Primary fiscal balance (% of GDP)	2.8	2.3	-3.7	-3.1	-1.4	-2.2	-1.3	-2.4	-2.2
Current account balance (% of GDP)	8.1	7.7	6.9	7.5	3.6	2.5	3.6	2.5	3.0
Official interest rate (end of period)	0.00	0.00	0.00	0.00	2.50	2.50	1.50	3.50	3.25
3-month interest rate (end of period)	-0.31	-0.38	-0.55	-0.57	2.35	2.04	1.13	3.10	2.74
10-year interest rate (end of period)	0.25	-0.19	-0.58	-0.18	2.10	1.80	1.63	2.46	2.48
Exchange rate vs. U.S. dollar (end of period)	1.15	1.12	1.23	1.13	1.06	1.03	1.05	0.99	1.01
Exchange rate vs. euro (end of period)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Private lending (% YoY, average)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Household lending (% YoY, average)	2.3	4.7	4.3	5.1	5.1	6.8	9.1	6.2	7.3
P.S. non-financial lending (% YoY, average)	9.9	4.5	4.4	2.7	6.3	3.7	3.2	3.7	3.1
P.S. financial lending (% YoY, average)	1.9	11.6	10.2	8.5	12.2	2.9	3.5	2.9	3.5
Savings rate (% pers. disp. income, avg.)	11.2	10.7	16.5	15.3	10.7	8.7	7.9	8.7	8.0

Source: MAPFRE Economics (based on DESTATIS data)
Forecast end date: 5 January 2023.

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points, all still below the contraction threshold. Factory orders have improved somewhat in October in some sectors, but others, such as the chemical sector, remain in negative territory. The construction industry survey also points to a significant slowdown looking toward 2023.

Consumer confidence is at series lows (-40.2 in December), with negative income expectations (due to the loss of real purchasing power), a factor that is reflected in economic expectations and intention to buy (see Charts 1.2.4-a and 1.2.4-b). Retail sales are contracting in practically all categories, especially those most affected by inflation (food, -11%, fuel, -9%, online shopping, -8%, shopping malls, -11%).

For 2023, the first three quarters are expected to maintain a downward trend, setting a contraction for the whole year at -0.9%. This is due, as indicated, to a slowdown in consumption (already palpable in retail sales), lower industrial production in some sectors and lower exports due to deteriorating external conditions. For 2024, however, the GDP is expected to recover, increasing around 1.7% (see Table 1.2.4 and Charts 1.2.4-c and 1.2.4-d).

Meanwhile, inflation remains high, at 8.6% (December's advance figure), with harmonized inflation (which allows comparison between European countries) even higher, at 11.3%, and non-energy inflation at 6.6%. Breaking down inflation, food rose by 19.9%, fuel for private use by 14.5%, gas by 81.4%, electricity by 27.1%, and flights by 14.6%. The German economy is therefore faced with high inflation and a decline in real wages. In fact, the drop already being verified in retail sales speaks for itself. The expectation that inflation will moderate should be viewed with caution, as higher financial costs also cause industries to look cautiously at their investments, a key aspect of an increase in supply. In the case of Germany and Europe in general, high energy costs are not likely to be resolved in the near term, and a return to the status quo with Russia seems impossible in practice. The energy transition, with a mix that is yet to be determined, is a phenomenon that will take decades and is not expected to be resolved in a few years. Germany, a highly industrialized country, must remember that its competitiveness was supported by cheap energy. Therefore, a slow decline in its momentum is now to be expected as certain energy-intensive industries (such as chemicals and metallurgy) gradually divert their investments to regions of the world with cheaper energy.

1.2.5 Italy

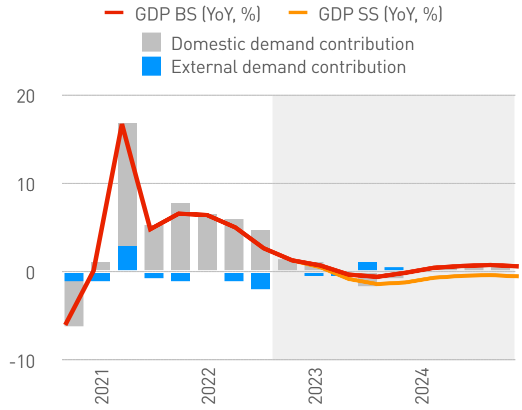
A short and shallow economic contraction in 2023.

Italy's third-quarter GDP grew 2.6% YoY (0.5% QoQ). Consumption has still performed well (+3.6% YoY, +2.5% QoQ), although some slowdown is already evident. Investment (0.8% QoQ) and exports (8.2% YoY) are up but stagnate in the third quarter. Imports, in turn, are up more due to energy costs (4.0% QoQ) and the euro's weakness with respect to the dollar. Industrial production has already started to show weakness, with a -1.6% drop YoY in October. Retail sales are also in contraction (-4.7% YoY and -1.0% MoM in October) and are already negative in some categories, except pharmaceutical products (see Charts 1.2.5-c and 1.2.5-d). Curiously, consumer confidence improved in November, portending that such

Italy

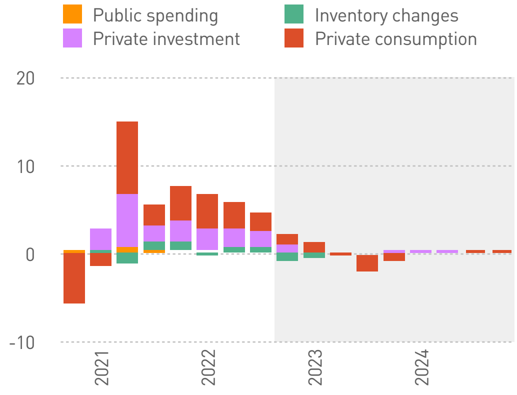
- Reactivation of the economy will depend on the consumer reaction to inflation and the effect of high interest rates.
- Industry is slowing down energy consumption, but no outages are expected.
- Consumer confidence is at a low.
- The cost of energy is fundamental for the competitiveness of the industry.
- The GDP is expected to decrease -0.1% in 2023, to recover 1.0% growth in 2024.

Chart 1.2.5-a
Italy: GDP breakdown and forecasts



Source: MAPFRE Economics (based on ISTAT data)

Chart 1.2.5-b
Italy: domestic demand breakdown and forecasts



Source: MAPFRE Economics (based on ISTAT data)

Table 1.2.5
Italy: main macroeconomic aggregates

						Baseline (BS)		Stressed (SS)	
	2018	2019	2020	2021	2022(e)	2023(p)	2024(p)	2023(p)	2024(p)
GDP (% YoY)	0.8	0.5	-9.1	6.7	3.8	-0.1	1.0	-0.8	-0.6
Domestic demand contribution	1.1	-0.2	-8.2	6.8	4.6	-0.3	0.3	-0.9	-0.7
External demand contribution	-0.3	0.7	-0.9	-0.1	-0.8	0.2	0.3	0.2	0.1
Private consumption contribution	0.6	0.1	-6.3	3.1	2.6	-0.4	0.1	-0.7	-0.3
Total investment contribution	0.5	0.2	-1.5	3.0	1.9	0.1	0.2	-0.2	-0.3
Public spending contribution	0.0	-0.1	0.0	0.3	0.1	0.1	-0.1	0.1	-0.1
Private consumption (% YoY)	1.0	0.2	-10.4	5.1	4.4	-0.7	0.2	-1.2	-0.5
Public spending (% YoY)	0.1	-0.6	0.0	1.5	0.5	0.6	-0.5	0.6	-0.5
Total investment (% YoY)	2.8	1.2	-8.2	16.5	9.4	0.4	0.9	-1.2	-1.6
Exports (% YoY)	1.6	1.8	-14.2	13.5	9.8	-0.1	0.9	-0.8	-1.0
Imports (% YoY)	2.8	-0.5	-12.7	14.8	13.1	-0.7	0.0	-1.4	-1.4
Unemployment rate (%, last quarter)	10.5	9.7	9.8	9.0	7.9	8.6	8.9	8.9	9.4
Inflation (% YoY, average)	1.1	0.6	-0.1	1.9	8.2	5.8	2.3	8.2	4.7
Inflation (% YoY, last quarter)	1.4	0.3	-0.2	3.5	12.1	4.4	2.6	6.6	4.2
Fiscal balance (% of GDP)	-2.2	-1.5	-9.5	-7.2	-5.6	-4.9	-3.6	-5.0	-4.4
Primary fiscal balance (% of GDP)	1.4	1.9	-6.0	-3.6	-1.7	-0.9	0.3	-1.0	-0.3
Current account balance (% of GDP)	2.6	3.4	3.8	3.0	-0.2	0.5	0.1	0.7	-0.9
Official interest rate (end of period)	0.00	0.00	0.00	0.00	2.50	2.50	1.50	3.50	3.25
3-month interest rate (end of period)	-0.31	-0.38	-0.55	-0.57	2.35	2.04	1.13	3.10	2.74
10-year interest rate (end of period)	2.77	1.43	0.52	1.19	4.02	3.71	3.58	4.78	5.16
Exchange rate vs. U.S. dollar (end of period)	1.15	1.12	1.23	1.13	1.06	1.03	1.05	0.99	1.01
Exchange rate vs. euro (end of period)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Private lending (% YoY, average)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Household lending (% YoY, average)	1.8	2.2	1.2	3.0	3.9	1.9	3.3	1.4	1.5
P.S. non-financial lending (% YoY, average)	-0.5	-0.7	3.3	0.1	1.7	2.4	2.5	1.9	1.1
P.S. financial lending (% YoY, average)	25.1	-5.8	-10.9	21.1	-3.2	0.2	3.1	0.9	2.9
Savings rate (% pers. disp. income, avg.)	9.6	9.5	17.0	14.4	10.5	8.6	8.6	8.6	8.9

Source: MAPFRE Economics (based on ISTAT data)
Forecast end date: 5 January 2023.

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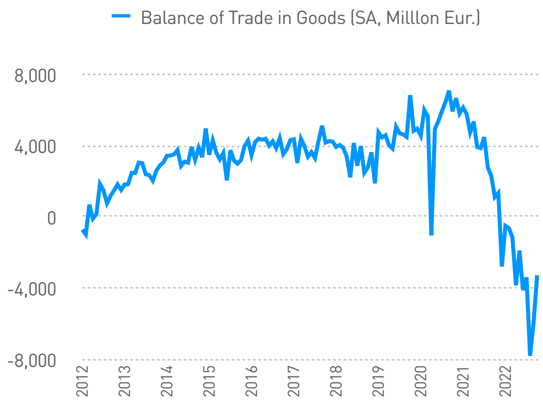
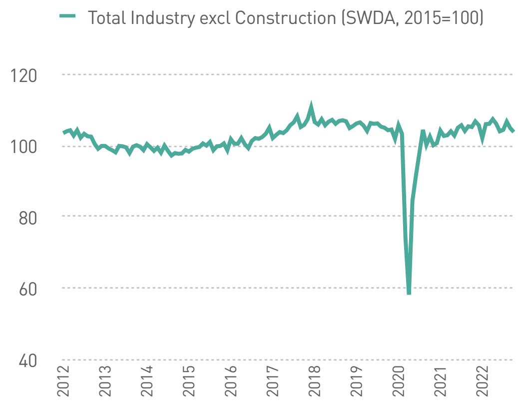
Chart 1.2.5-c
Italy: trade balance of goods



Source: MAPFRE Economics (with Haver data)

Chart 1.2.5-d
Italy: industrial production



Source: MAPFRE Economics (with Haver data)

economic contraction will be brief and shallow. Purchasing managers' indexes (PMIs) also improve in December, although they remain in the contraction range (<50), with the composite at 49.6, manufacturing at 48.5, services at 49.9 and construction at 47.0 points.

In 2023, Italy will probably go through a real contraction in its economic activity, which is estimated to be brief (two quarters) and shallow, but it will all depend on the impact of inflation on consumption and the effect of higher interest rates. Thus, for all of 2023, we forecast -0.1% GDP growth, while for 2024, the forecast is for a gradual recovery in the activity of around 1.0%, assuming there will be no major disruptions in energy supply (see Table 1.2.5 and Charts 1.2.5-a and 1.2.5-b).

Meanwhile, inflation has halted its ascent, although it is still at high levels: 11.8% in November, with harmonized inflation, comparable among countries of the European Union, at 12.5%. Food rose 13.6%, along with electricity (175%), gas (95%), automobile fuels (4.4%), and flights (95.0%). The future behavior of inflation in Italy will depend on the evolution of energy costs, which remain high for now. The interest rate hike implemented by the ECB and wage moderation may aid to limit rising prices.

Regarding risk, in the case of Italy, the rise in bond yields, which will gradually imply a greater burden for public accounts, is extremely important. For now, at the internal and external policy level, the situation is calm. For Italy, the lack of gas supply from Russia, while to a lesser degree than in Germany, means paying higher prices for energy sources. For those countries with a high level of industrialization, affordable energy prices are fundamental for the competitiveness of their industries.

1.2.6 United Kingdom

The fiscal plan for autumn seems sufficient to calm markets.

The United Kingdom's economy contracted slightly in the third quarter of 2022 (-0.2% QoQ and 2.4% YoY), marking the beginning of what is expected for the coming quarters: a sequence of declines confirming a contraction of the economy. Private consumption dropped -0.5% QoQ, and government consumption was up 1.3% QoQ, while investments were up 2.5% QoQ, exports increased 8.0% QoQ, and imports were down -3.2% QoQ (see Charts 1.2.6-a and 1.2.6-b). With its fall fiscal plan, the government of Prime Minister Rishi Sunak was able to find a balance that

United Kingdom

- **The fall fiscal plan put forward by the new government reduces spending in the medium term and increases taxes.**
- **Inflation exceeded 10%, and the energy crisis is not improving.**
- **In 2023, the economy will contract about -0.9%, recovering to 1.2% growth in 2024.**

allowed it to recover market confidence. In the short term, the cost remains high, but tax increases were announced, and the government has anticipated that it will implement cuts to energy subsidies starting in March 2023. Fiscal consolidation continues to be kicked down the road, and debt is expected to stabilize by 2024.

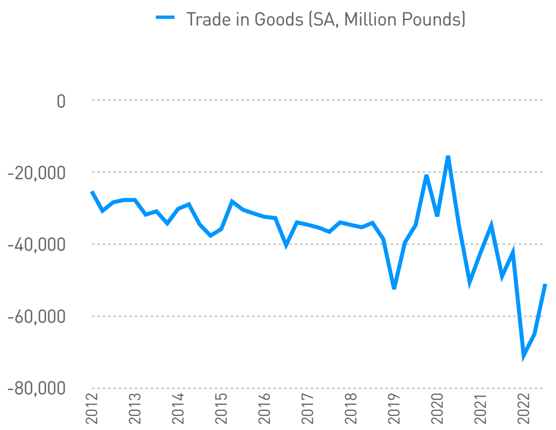
The PMIs (purchasing managers' indexes) were all in contraction territory in December, with the composite index at 49.0, the services index at 49.9, and the manufacturing index at 45.3 points. Retail sales in the last few months are contracting, with a year-over-year drop of -6.1% in November. Industrial production has also been contracting since the end of 2021, with the most recent data (October) at -2.4% YoY. Meanwhile, consumer confidence (GFK) remains very negative, although it seems to have bottomed out (-44 points in November).

Modest growth in activity is expected in the last quarter of 2022, which would leave 2022 growth at 4.4%. The outlook for 2023 is for economic contraction, with four quarters with drops in GDP, which would leave the indicator for the year as a whole at -0.9%, while by 2024, the economy would recover its momentum with growth of around 1.2% (see Table 1.2.6 and Charts 1.2.6-c and 1.2.6-d).

Inflation, in turn, reached 10.7% in November, with underlying inflation of 6.3%. Food rose 12.7%, household supplies 26.6%, among which electricity, gas, and other fuels rose 89%. Transport went up 7.2% (flights 24.3%), while hotels and restaurants rose 10.2%. Inflation is expected to be at more than 10% in the fourth quarter before beginning to ease in 2023. Although this process will be slower than previously anticipated.

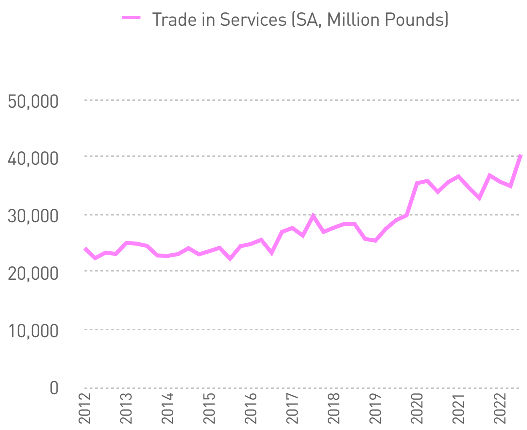
The Bank of England raised interest rates by 50 bps to 3.50% at its December meeting. So, the central bank's economic team expects a -0.1% contraction in activity QoQ in the last quarter of 2022. November inflation has already dropped from 11.1% to 10.7%, and the recently an-

Chart 1.2.6-a
United Kingdom: trade balance of goods



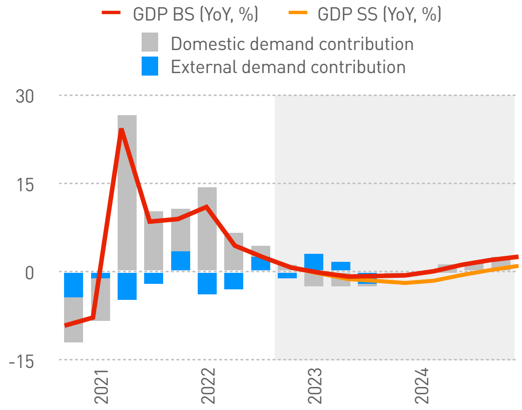
Source: MAPFRE Economics (with Haver data)

Chart 1.2.6-b
United Kingdom: trade balance of services



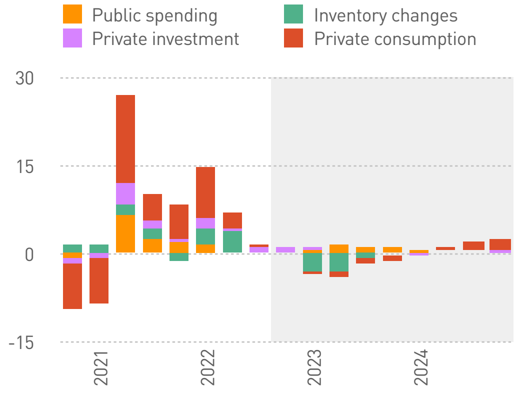
Source: MAPFRE Economics (with Haver data)

Chart 1.2.6-c
United Kingdom: GDP breakdown and forecasts



Source: MAPFRE Economics (based on data from the Office for National Statistics)

Chart 1.2.6-d
United Kingdom: domestic demand breakdown and forecasts



Source: MAPFRE Economics (based on data from the Office for National Statistics)

Table 1.2.6
United Kingdom: main macroeconomic aggregates

						Baseline (BS)		Stressed (SS)	
	2018	2019	2020	2021	2022(e)	2023(p)	2024(p)	2023(p)	2024(p)
GDP (% YoY)	1.7	1.6	-11.0	7.5	4.4	-0.9	1.2	-1.3	-0.3
Domestic demand contribution	0.8	1.8	-11.9	8.2	5.8	-1.4	1.3	-2.2	-0.6
External demand contribution	-0.1	-0.3	1.5	-1.0	-1.3	0.7	0.0	0.8	0.3
Private consumption contribution	1.3	0.6	-8.0	3.8	2.8	-0.9	1.0	-1.4	-0.3
Total investment contribution	0.0	0.3	-1.9	1.0	1.0	0.1	0.0	-0.1	-0.6
Public spending contribution	0.1	0.8	-1.4	2.5	0.4	1.0	0.3	1.0	0.3
Private consumption (% YoY)	2.1	1.0	-12.9	6.2	4.7	-1.5	1.6	-2.3	-0.5
Public spending (% YoY)	0.3	4.1	-7.3	12.6	1.8	5.1	1.6	5.1	1.6
Total investment (% YoY)	-0.2	1.9	-10.5	5.6	5.8	0.6	0.2	-0.8	-3.1
Exports (% YoY)	3.1	1.7	-12.1	-0.3	8.9	3.6	3.3	3.1	2.2
Imports (% YoY)	3.3	2.6	-16.0	2.8	12.8	1.1	3.2	0.4	1.1
Unemployment rate (%, last quarter)	4.0	3.8	5.2	4.0	3.7	4.5	4.2	4.8	5.0
Inflation (% YoY, average)	2.5	1.8	0.9	2.6	8.9	6.9	2.5	8.1	5.3
Inflation (% YoY, last quarter)	2.3	1.4	0.6	4.9	10.9	4.6	2.0	7.0	4.5
Fiscal balance (% of GDP)	-2.2	-2.5	-13.1	-8.2	-6.3	-7.4	-4.5	-7.5	-5.5
Primary fiscal balance (% of GDP)	0.5	-0.1	-11.0	-5.4	-1.4	-2.4	-0.7	-2.5	-1.5
Current account balance (% of GDP)	-4.1	-2.8	-3.2	-2.0	-5.4	-4.2	-3.6	-4.1	-3.7
Official interest rate (end of period)	0.75	0.75	0.00	0.25	3.50	4.00	3.00	5.25	4.50
3-month interest rate (end of period)	0.91	0.79	0.03	0.26	3.85	4.37	3.39	5.47	4.84
10-year interest rate (end of period)	1.27	0.83	0.20	0.97	3.25	3.22	2.81	3.96	3.80
Exchange rate vs. U.S. dollar (end of period)	1.28	1.32	1.36	1.35	1.20	1.20	1.21	1.14	1.16
Exchange rate vs. euro (end of period)	1.11	1.18	1.11	1.19	1.16	1.16	1.16	1.15	1.15
Private lending (% YoY, average)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Household lending (% YoY, average)	2.8	2.0	2.3	3.3	3.4	3.4	3.3	3.3	3.0
P.S. non-financial lending (% YoY, average)	2.1	1.2	9.4	-6.3	2.6	1.6	2.9	1.6	2.8
P.S. financial lending (% YoY, average)	9.4	2.0	12.1	-4.3	4.0	2.7	3.3	2.7	3.5
Savings rate (% pers. disp. income, avg.)	5.1	5.4	15.9	12.5	6.7	6.2	6.3	6.1	6.3

Source: MAPFRE Economics (based on data from the Office for National Statistics)
Forecast end date: 5 January 2023.

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nounced energy bill subsidies for households will have a minimal positive effect on inflation (estimated at -0.75 pp). The Bank of England is expected to hike interest rates another 50 bps, to 4.00%, in its February meeting, and estimates are that it will continue to rise to 4.75% given persistent inflation. Implicit rates on the futures market are considered higher, reaching up to 4.69% by August or September.

The economic contraction of the European Union is a given. The additional risks could bring about a new panic in the markets related to the fiscal credibility of public accounts. High energy costs and continued high inflation for a long period will continue to weigh on economic performance. On the political side, legislative elections will not be held until 2024, and the conservatives are at a large disadvantage of 20-25 points behind labor, according to recent polls. Thus, the conservatives will be incentivized to try to narrow the gap through fiscal generosity, always within acceptable stability limits for debt markets.

1.2.7 Japan

Fragile economic growth with a weakening currency trend.

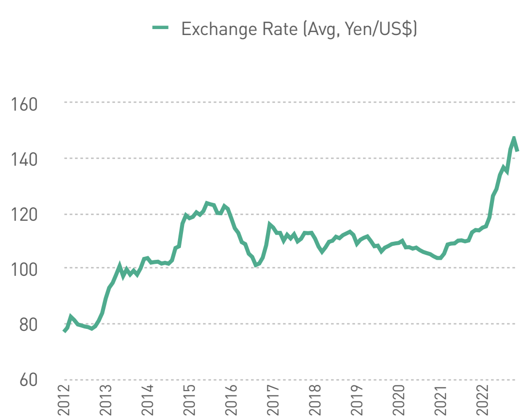
The Japanese economy contracted -0.3% QoQ in the third quarter, with private consumption growing only 0.3% QoQ and exports 1.9% QoQ. The economy is weak, caused by various factors, notably among them the aging process of the population. The energy crisis and weakness of the yen are only consolidating this fragile dynamism of economic activity (see Charts 1.2.7-a and 1.2.7-b). In addition, the energy price is adding to the cost of imports, which are growing at 5.2% QoQ. The effect of exchange terms is reflected in the fact that the cost of imported products have risen over 40%, while the cost of exports only rose around 20%. Thus, the current account balance has reduced its surplus (1.75% of GDP, down from 2.3%) due to increased import costs.

Meanwhile, retail sales in the third quarter recovered and maintained their vigor in Octo-

Japan

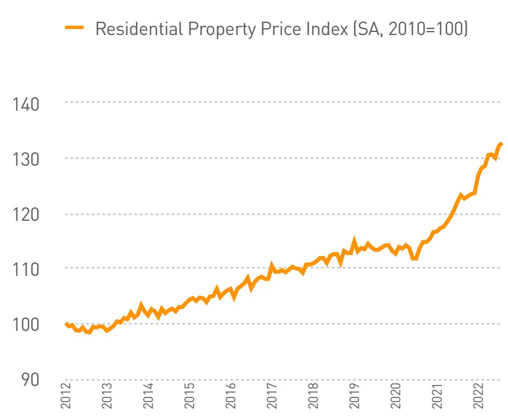
- **Consumer confidence made an inflection and turned downward.**
- **The trade balance remained positive but worsened in terms of exchange.**
- **The Bank of Japan widened the 10-year bond inters rate fluctuation range, which means the struggle to keep it low has been reduced.**
- **Expectations point to GDP growth of 1.1% in 2023 and 1.2% in 2024.**

Chart 1.2.7-a
Japan: exchange rate evolution



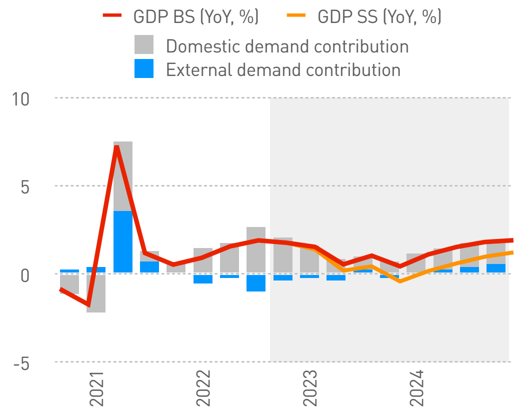
Source: MAPFRE Economics (with Haver data)

Chart 1.2.7-b
Japan: residential property prices



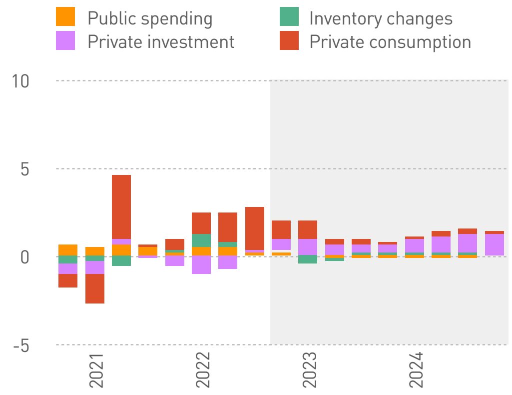
Source: MAPFRE Economics (with Haver data)

Chart 1.2.7-c
Japan: GDP breakdown and forecasts



Source: MAPFRE Economics (based on Statistics Bureau data)

Chart 1.2.7-d
Japan: domestic demand breakdown and forecasts



Source: MAPFRE Economics (based on Statistics Bureau data)

Table 1.2.7
Japan: main macroeconomic aggregates

						Baseline (BS)		Stressed (SS)	
	2018	2019	2020	2021	2022(e)	2023(p)	2024(p)	2023(p)	2024(p)
GDP (% YoY)	0.6	-0.4	-4.7	1.7	1.5	1.1	1.2	0.4	0.7
Domestic demand contribution	0.6	0.1	-3.8	0.7	2.0	0.9	1.2	0.6	0.5
External demand contribution	0.0	-0.5	-0.9	1.1	-0.5	-0.1	0.4	-0.2	0.2
Private consumption contribution	0.1	-0.3	-2.9	0.7	1.6	0.4	0.2	0.3	0.0
Total investment contribution	0.1	0.1	-1.3	-0.3	-0.2	0.6	1.0	0.4	0.5
Public spending contribution	0.2	0.4	0.5	0.4	0.3	-0.1	-0.1	-0.1	-0.1
Private consumption (% YoY)	0.2	-0.5	-5.2	1.3	2.9	0.8	0.4	0.6	0.1
Public spending (% YoY)	1.0	1.9	2.3	2.1	1.5	-0.4	-0.5	-0.4	-0.5
Total investment (% YoY)	0.6	0.5	-5.0	-1.3	-0.8	2.7	4.1	1.7	2.1
Exports (% YoY)	3.8	-1.4	-11.7	11.9	4.7	1.1	3.3	0.1	1.6
Imports (% YoY)	3.8	1.1	-6.8	5.1	7.3	1.7	1.5	1.1	0.4
Unemployment rate (%, last quarter)	2.4	2.3	3.0	2.7	2.6	2.5	2.3	2.6	2.6
Inflation (% YoY, average)	1.0	0.5	0.0	-0.2	2.4	1.5	0.8	2.3	2.1
Inflation (% YoY, last quarter)	0.9	0.5	-0.9	0.5	3.7	1.2	0.8	2.1	2.0
Fiscal balance (% of GDP)	-2.5	-3.0	-9.0	-6.0	-7.2	-5.3	-3.3	-5.3	-3.5
Primary fiscal balance (% of GDP)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Current account balance (% of GDP)	3.5	3.4	2.9	4.0	2.1	3.0	3.6	3.2	3.8
Official interest rate (end of period)	0.00	0.00	0.00	0.00	0.00	0.00	-0.25	0.00	-0.25
3-month interest rate (end of period)	0.07	0.07	0.08	0.07	0.07	0.05	-0.02	0.05	-0.02
10-year interest rate (end of period)	0.01	-0.02	0.04	0.09	0.24	0.08	-0.05	0.25	0.21
Exchange rate vs. U.S. dollar (end of period)	110.83	109.12	103.54	115.00	133.73	141.71	137.13	145.41	141.03
Exchange rate vs. euro (end of period)	126.90	122.59	127.05	130.25	145.64	146.33	143.70	144.24	142.29
Private lending (% YoY, average)	2.6	1.8	5.2	3.1	2.2	1.0	0.3	1.0	0.6
Household lending (% YoY, average)	2.5	2.2	3.1	3.6	1.3	0.0	-0.1	-0.2	-0.4
P.S. non-financial lending (% YoY, average)	2.4	3.6	7.9	3.2	1.4	-0.2	-0.3	-0.2	-0.3
P.S. financial lending (% YoY, average)	6.3	2.9	17.1	7.3	11.2	-0.1	-0.1	0.0	0.5
Savings rate (% pers. disp. income, avg.)	1.8	3.2	12.1	7.9	1.6	0.2	0.9	0.5	1.5

Source: MAPFRE Economics (based on Statistics Bureau data)
Forecast end date: 5 January 2023.

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ber (4.3% YoY). Passenger car sales also recovered (23.6% in October), while the figures for trucks and buses continue to drop, although less so (-3% and -8%, respectively). Consumer confidence has not been able to return to pre-pandemic levels and has dropped again in recent months (-58.4 in September). The leading indicators index also continues to drop (97.5 in September). In particular, November's purchasing managers' indexes (PMIs) showed worsening conditions, with the composite at 48.9, manufacturing at 49.4, and services at 50.0. Likewise, the Tankan business conditions indices reflect concerns about the future, especially among small and medium businesses.

In this context, while some recovery is forecast in the fourth quarter of 2022 (placing growth for the whole year at 1.5%), growth will again be weak in 2023 and 2024, partly due to the global economic slowdown and high energy costs. Therefore our estimates point to GDP growth at 1.1% in 2023 and 1.2% in 2024 (see Table 1.2.7 and Charts 1.2.7-c and 1.2.7-d).

Meanwhile, inflation has reached 3.8% in November, with core inflation at 1.5%, high values in the Japanese context. Food rose 6.9%, and energy 13.3%, along with electricity (20.1%), gas (21.0%), and other fuels (5.5%) recovering. In its December 20 meeting, the Bank of Japan kept interest rates at -0.10% but broadened the 10-year bond yield fluctuation range. This means it will let interest rates rise, reducing its influence on "curve control." The Japanese central bank was the only one that had not changed its monetary policy position, and this decision on monetary policy surprised the markets. The yield on the 10-year bond rose 15 bps, from 0.25% to 0.40%, the stock market dropped -2.5%, and currency appreciated 3.4%.

The greatest risk for the Japanese economy lies in the currency's weakness, although more recently, it has stabilized as the dollar has also lost some strength. The policy of unlimited bond buying to control the interest rate curve portends further currency weakness if other central banks do not continue this policy. Exchange rate interventions have had little effect, and the outlook for a recession in the United States and the recent moderation in interest rate hikes by the Federal Reserve have slowed the yen's decline.

1.2.8 Turkey

Macroeconomic stability in the run-up to the next elections.

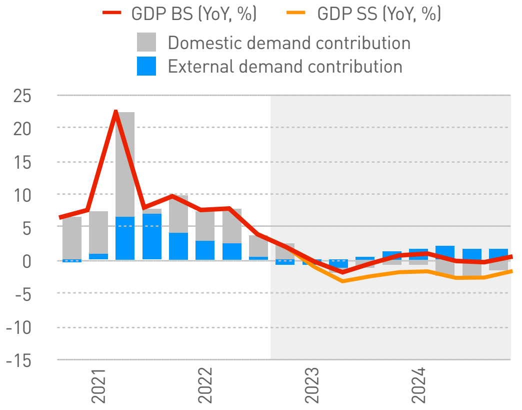
Turkey's economy grew 3.9% YoY in the third quarter of 2022, but at the QoQ level it is already marginally slowing down (-0.1% QoQ). Private consumption dropped -3.9% QoQ, although it has continued to rise by 19.9% YoY, possibly encouraged by low interest rates and inflation expectations. Exports also grew 13.2%, and imports 11.5%. December's advance manufacturing sector index (PMI) (45.7) has remained in contraction territory since March, indicating a manufacturing slowdown for the coming months. Meanwhile, the services survey (-1.1%) and retail trade (0.0% YoY) also show the economy cooling.

After a strong first half, a certain slowdown began to be noticeable in the second. It is estimated that, in the absence of any surprise event, the economic contraction will be short, shallow, and limited to the second quarter of 2022, so the economy will have grown for the year as a whole in the range of 5.0%. Growth of 1.6% is forecast for 2023 and 2.0% for

Turkey

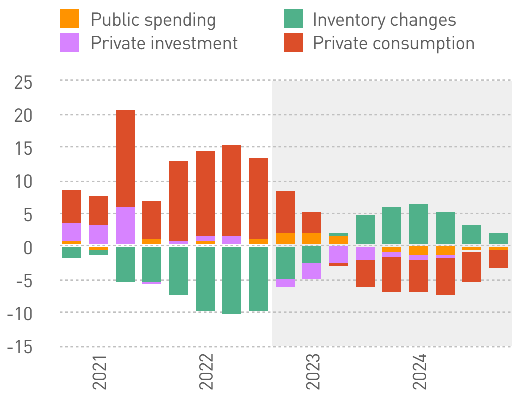
- **Inflation persists: the general index is 84%, the underlying at 69% and producer prices are 136%.**
- **The central bank kept interest rates at 9.0% in December.**
- **GDP is projected to grow 1.6% in 2023 and around 2.0% in 2024.**

Chart 1.2.8-a
Turkey: GDP breakdown and forecasts



Source: MAPFRE Economics (based on TURKSTAT data)

Chart 1.2.8-b
Turkey: domestic demand breakdown and forecasts



Source: MAPFRE Economics (based on TURKSTAT data)

Table 1.2.8
Turkey: main macroeconomic aggregates

						Baseline (BS)		Stressed (SS)	
	2018	2019	2020	2021	2022(e)	2023(p)	2024(p)	2023(p)	2024(p)
GDP (% YoY)	3.0	0.8	1.9	11.4	5.0	1.6	2.0	-2.2	-2.2
Domestic demand contribution	-0.6	-1.4	7.0	6.6	3.7	-0.6	-1.6	-2.6	-4.1
External demand contribution	3.6	2.2	-5.0	4.8	1.3	0.1	1.8	0.4	1.9
Private consumption contribution	0.3	0.9	1.9	9.1	11.0	-1.8	-4.6	-3.3	-6.3
Total investment contribution	-0.1	-3.6	1.8	1.9	0.2	-1.8	-0.2	-2.4	-1.0
Public spending contribution	0.9	0.5	0.4	0.4	1.0	0.6	-0.8	0.6	-0.8
Private consumption (% YoY)	0.6	1.5	3.3	15.3	17.8	-2.6	-6.8	-4.8	-9.4
Public spending (% YoY)	6.5	3.8	2.5	2.6	7.6	4.5	-5.5	4.5	-5.5
Total investment (% YoY)	-0.2	-12.5	7.4	7.4	0.7	-7.6	-1.0	-9.9	-4.7
Exports (% YoY)	8.8	4.2	-14.4	24.9	10.3	-0.3	3.0	-0.6	1.8
Imports (% YoY)	-6.2	-5.0	6.7	2.4	5.7	-0.8	-5.2	-2.9	-7.1
Unemployment rate (%, last quarter)	12.3	13.3	12.9	11.0	10.3	11.1	11.0	11.8	12.4
Inflation (% YoY, average)	16.3	15.2	12.3	19.6	72.2	51.0	26.1	55.0	39.2
Inflation (% YoY, last quarter)	22.4	10.3	13.5	25.8	79.0	42.9	28.3	47.4	34.2
Fiscal balance (% of GDP)	-1.9	-2.9	-3.5	-2.7	-1.9	-2.3	-0.9	-2.7	-2.0
Primary fiscal balance (% of GDP)	0.0	-0.6	-0.8	-0.2	0.0	-1.0	0.1	-1.2	-0.7
Current account balance (% of GDP)	-2.6	1.4	-4.4	-0.9	-5.2	-3.0	-1.5	-2.7	-2.0
Official interest rate (end of period)	24.00	11.50	17.00	14.00	9.00	8.00	6.50	13.50	13.00
3-month interest rate (end of period)	24.07	10.76	17.53	15.63	9.88	8.91	7.49	14.48	13.99
10-year interest rate (end of period)	16.53	11.95	12.51	22.99	10.56	10.07	9.14	14.39	13.53
Exchange rate vs. U.S. dollar (end of period)	5.29	5.95	7.44	13.32	18.63	20.50	22.02	22.26	23.59
Exchange rate vs. euro (end of period)	6.06	6.68	9.11	15.23	19.00	21.17	23.07	22.08	23.81
Private lending (% YoY, average)	20.2	8.4	30.1	23.9	53.7	32.9	16.9	34.0	16.9
Household lending (% YoY, average)	9.8	3.3	41.8	20.3	24.7	13.6	11.8	10.7	8.3
P.S. non-financial lending (% YoY, average)	18.2	5.5	29.0	23.2	50.2	30.8	22.6	25.8	15.4
P.S. financial lending (% YoY, average)	25.1	18.3	21.2	31.5	104.2	47.7	27.6	46.9	27.4
Savings rate (% pers. disp. income, avg.)	32.0	30.4	20.9	22.7	9.0	5.7	4.4	7.0	6.4

Source: MAPFRE Economics (based on TURKSTAT data)
Forecast end date: 5 January 2023.

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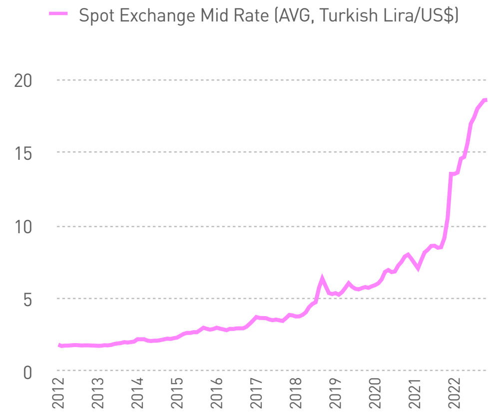
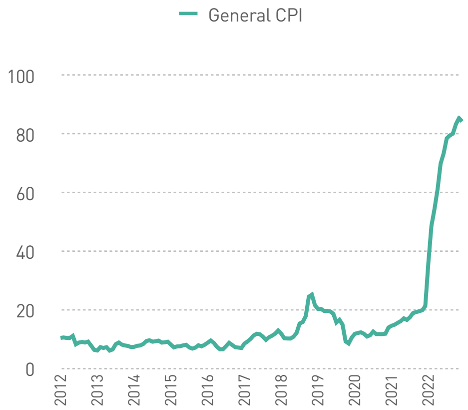
Chart 1.2.8-c
Turkey: exchange rate



Source: MAPFRE Economics (with Haver data)

Chart 1.2.8-d
Turkey: general inflation



Source: MAPFRE Economics (with Haver data)

2024, which is a significant slowdown from the 2022 figure, driven by inflationary conditions and the context of global slowdown (see Table 1.2.8 and Charts 1.2.8-a and 1.2.8-b).

Inflation reached 84.4% in November, with food up 103%, housing 83%, restaurants and hotels 80%, and transport 107%. Core inflation (76.2%) and producer prices (136%) suggest that inflation will remain anchored at higher levels for some time. With exchange rates approaching 18.71 TRY/USD and 19.9 TRY/EUR, the Turkish lira will continue its depreciation trend (see Charts 1.2.8-c and 1.2.8-d). The Central Bank of Turkey kept interest rates in December (1-week repo) at 9.00%. The central bank has announced that it will continue to use all available tools within the framework of the "liralization" strategy (increased use of the Lira) until indicators point to a permanent drop in inflation and the 5% medium-term target is reached. According to the central bank, the stability of the general price level will promote macro-economic stability and financial stability through a drop in the country risk premium, the ongoing reversal of currency substitution, and the upward trend in foreign exchange reserves, as well as the lasting decline in financing costs. This would create a viable basis for investment, production, and employment to continue to grow in a healthy and sustainable manner. However, Turkey is accumulating a large amount of risk. The depreciation of its currency is aggravating its current account deficit (-4.6% of GDP in the third quarter of 2022). Meanwhile, the reduction in investment flows toward this country affect the international reserves.

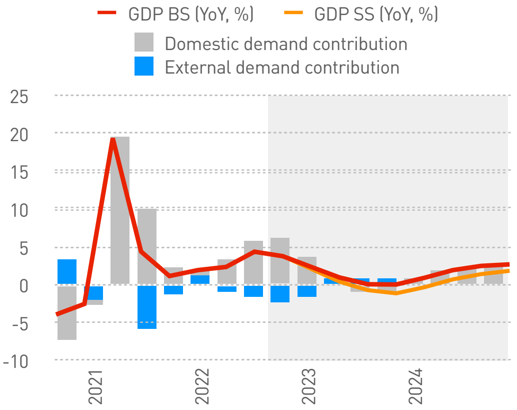
On the political front, Turkey will hold presidential elections in June 2023, with a second round in July if necessary. The unorthodox monetary policy strategy of lowering interest rates when the rest of the world is raising them is counter-intuitive and high risk. However, the current government seems willing to do anything in its power to maintain the momentum of economic activity to ensure permanence.

1.2.9 Mexico

2023 looks complicated.

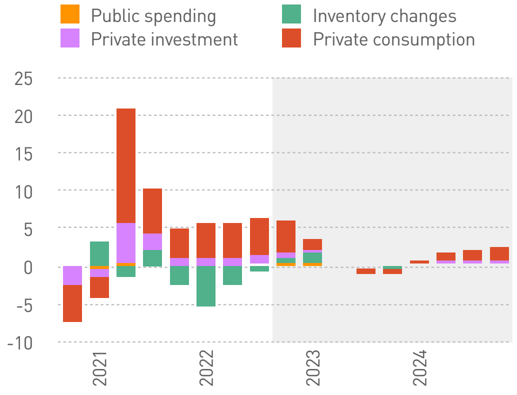
The Mexican economy grew 4.3% YoY (+0.9% QoQ) in the third quarter of the year, with private consumption growing 6.4% YoY, investment 3.8% YoY and exports up 11.6% YoY. With this, GDP is expected to have grown by

Chart 1.2.9-a
Mexico: GDP breakdown and forecasts



Source: MAPFRE Economics (based on INEGI data)

Chart 1.2.9-b
Mexico: domestic demand breakdown and forecasts



Source: MAPFRE Economics (based on INEGI data)

Table 1.2.9
Mexico: main macroeconomic aggregates

						Baseline (BS)		Stressed (SS)	
	2018	2019	2020	2021	2022(e)	2023(p)	2024(p)	2023(p)	2024(p)
GDP (% YoY)	2.2	-0.2	-8.2	4.9	2.7	1.0	1.8	0.1	0.9
Domestic demand contribution	2.4	-1.0	-10.7	7.3	3.9	0.6	1.8	-0.5	0.5
External demand contribution	-0.2	0.8	2.6	-2.4	-0.9	0.2	0.1	0.6	0.4
Private consumption contribution	1.7	0.2	-7.1	5.1	4.6	0.0	1.1	-0.7	0.3
Total investment contribution	0.2	-1.0	-3.4	1.6	1.1	0.0	0.3	-0.3	-0.1
Public spending contribution	0.3	-0.2	0.0	0.1	0.2	0.3	0.2	0.3	0.2
Private consumption (% YoY)	2.6	0.4	-10.5	7.7	6.8	0.0	1.6	-1.0	0.5
Public spending (% YoY)	2.8	-1.8	-0.2	1.0	1.6	2.5	2.0	2.5	2.0
Total investment (% YoY)	0.8	-4.7	-17.8	9.5	5.8	0.2	1.7	-1.4	-0.8
Exports (% YoY)	5.9	1.5	-7.2	6.8	7.0	-0.1	3.7	-0.7	2.1
Imports (% YoY)	6.4	-0.7	-14.1	14.1	9.4	-0.6	3.3	-2.2	1.1
Unemployment rate (%, last quarter)	3.3	3.4	4.5	3.7	3.6	3.7	3.8	4.0	4.3
Inflation (% YoY, average)	4.9	3.6	3.4	5.7	8.0	5.2	3.8	6.2	5.4
Inflation (% YoY, last quarter)	4.8	2.9	3.5	7.0	8.2	4.6	3.8	6.1	4.9
Fiscal balance (% of GDP)	-2.0	-1.7	-2.8	-3.0	-2.8	-3.1	-3.0	-3.4	-3.7
Primary fiscal balance (% of GDP)	0.6	1.1	0.1	-0.3	0.1	-0.3	0.0	-0.4	-0.4
Current account balance (% of GDP)	-2.0	-0.3	2.5	-0.4	-1.3	-1.8	-1.7	-0.9	-0.4
Official interest rate (end of period)	8.25	7.25	4.25	5.50	10.50	9.00	6.25	11.50	7.75
3-month interest rate (end of period)	8.63	7.45	4.47	5.86	10.75	9.31	6.56	11.68	7.99
10-year interest rate (end of period)	8.70	6.84	5.23	7.57	9.76	8.79	7.32	11.15	8.66
Exchange rate vs. U.S. dollar (end of period)	19.65	18.93	19.88	20.50	19.99	21.01	21.36	22.08	22.40
Exchange rate vs. euro (end of period)	22.50	21.26	24.40	23.22	20.38	21.70	22.39	21.90	22.60
Private lending (% YoY, average)	10.4	8.9	5.2	-1.0	8.8	7.2	5.8	6.8	4.9
Household lending (% YoY, average)	8.4	6.2	1.6	4.4	8.3	6.3	8.0	5.1	6.8
P.S. non-financial lending (% YoY, average)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P.S. financial lending (% YoY, average)	-0.8	6.2	3.7	18.3	12.2	16.3	9.1	17.2	9.8
Savings rate (% pers. disp. income, avg.)	12.3	16.4	22.0	22.5	21.7	17.0	16.7	17.3	16.8

Source: MAPFRE Economics (based on INEGI data)
Forecast end date: 5 January 2023.

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Mexico

- **The high inflation and tightening of financial conditions forecast economic worsening, with the real estate and construction sectors being the most sensitive to the environment.**
- **The economic slowdown of its main trade partners, especially the United States, will be reflected in exports.**
- **A 1.0% economic slowdown is expected in Mexico in 2023 to recover some dynamic activity in 2024.**

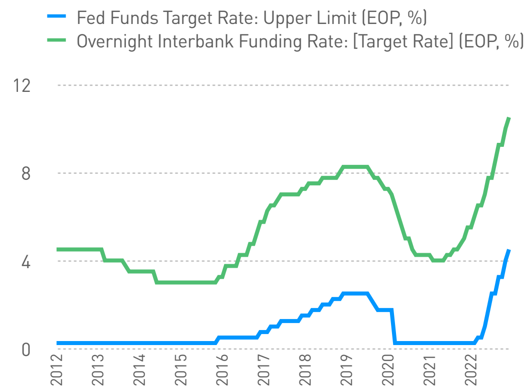
around 2.7% in 2022 as a whole. However, higher interest rates, inflation, and the slowing external economic context will result in softer growth in the last quarter of the year and the beginning of 2023. Industrial production rebounded slightly in October (0.3% MoM), including construction at 1.0%, and retail sales rose slightly in October at 0.7%, but food dropped (-3.7%).

On the activity survey front, factory order expectations improved to 53.2 points, business confidence declined to 49.3, and the November purchasing manager's index (PMI) for manufacturing was slightly positive at 50.6 points. Likewise, auto production has improved throughout 2022 as supply chains normalized, while sales have stabilized after six years in decline. Against this backdrop, our forecasts point to weaker growth in the next two years, estimated at 1.0% in 2023 and 1.8% in 2024 (see Table 1.2.9 and Charts 1.2.9-a and 1.2.9-b).

Meanwhile, inflation in the Mexican economy stood at 7.77% in the first two weeks of December, with core inflation at 8.35%. In the most recent monthly measurement, food was up 14.0%, hotels and restaurants, 12.4%, services 10.4%, and energy 3.2% (managed prices, 5.6%). Thus, inflation is expected to remain high, with an average of 5.2% in 2023. At its December meeting, the Bank of Mexico raised interest rates by 50 bps to 10.5%. The central bank started raising rates before the Federal Reserve, and from the beginning, it has accompanied the hikes to maintain the spread and protect the exchange rate and its pass-through effect on inflation. For this reason, and due to export dynamics, the peso has strengthened from MXN 21/USD at the beginning of the year to MXN 19.35/USD as of the date of this report (see Charts 1.2.9-c and 1.2.9-d).

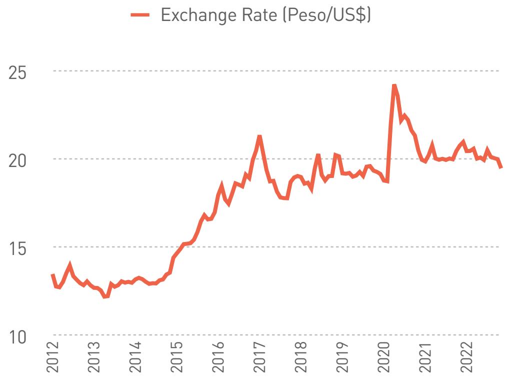
Concerning risks to the Mexican economy, a slowdown in growth is anticipated due to high inflation, tighter financial conditions, a contraction in external demand, and the potential reduction of energy subsidies. In fact,

Chart 1.2.9-c
Mexico: official interest rate vs. Federal Reserve rates



Source: MAPFRE Economics (based on Bloomberg data)

Chart 1.2.9-d
Mexico: exchange rate



Source: MAPFRE Economics (based on Bloomberg data)

tighter financial conditions are already affecting the construction sector, and the possible recession in the United States will affect the level of Mexican exports.

1.2.10 Brazil

A better 2022 than expected, but an economic slowdown is beginning.

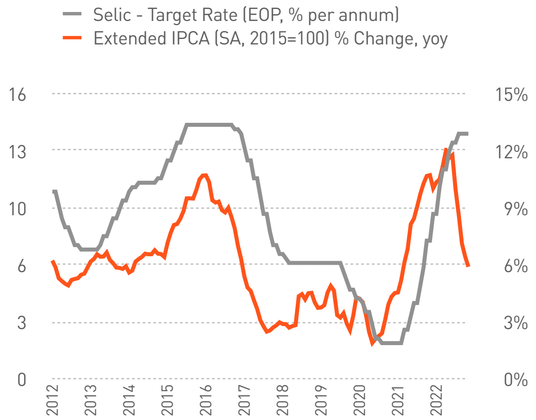
Brazil

- The growth estimate for 2022 has been revised upward to 3.0%.
- The Brazilian economy is less tied to the United States and Europe but is being affected by increased energy prices and more restrictive financial conditions worldwide.
- A slowdown around 0.9% is expected for 2023 and 2.0% growth in 2024.

The Brazilian economy was surprisingly strong in 2022. In the third quarter of the year, it grew 3.6% YoY (0.4% QoQ). Private consumption is still healthy with growth of 4.6% YoY, while investment is up 5.0% YoY, and exports are up 8.1%, but less than imports (10.6%). The industry confidence indicator (Getulio Vargas Foundation) points to worsening conditions (-7.0), while consumer confidence has peaked, improving in 2022 thanks to better economic performance. Elsewhere, November's purchasing managers' indexes (PMIs) worsened with the composite at 49.8, manufacturing at 44.3, and services at 51.6 points. Thus, growth is expected to slow to 0.9% in 2023 (from the 3.0% estimated for 2022) and 2.0% in 2024 (see Table 1.2.10 and Charts 1.2.10-c and 1.2.10-d).

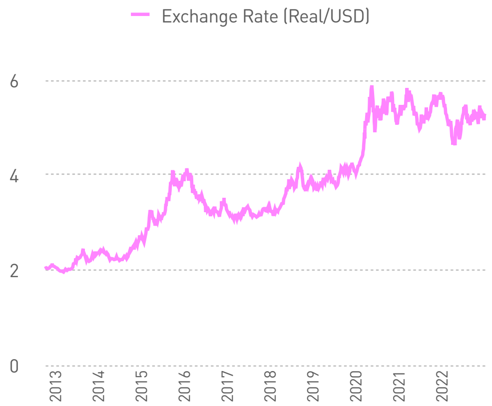
Inflation in Brazil has moderated after falling for five consecutive months, from a high of 11.9% in June to 5.9% in November (0.4% MoM, general IPCA). The categories with the highest price increases were food (11.8%), household goods (8.7%), and clothing (18.7%), while fuels were the category that caused the CPI to drop the most (-23.9%). In its December meeting, the central bank kept SELIC interest rates at 13.75% (see Charts 1.2.10-a and 1.2.10-b). This decision reflects the uncertainty around its risk scenarios and a risk balance with an even greater variance than normal for prospective inflation. In addition, the decision is compatible with the strategy of inflation convergence around the target over the relevant horizon, which includes 2023 and 2024. Without prejudice to its fundamental objective of ensuring price stability, this decision by the

Chart 1.2.10-a
Brazil: inflation vs. official interest rate



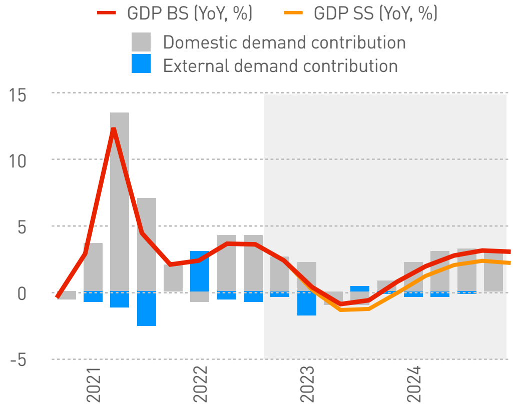
Source: MAPFRE Economics (with Haver data)

Chart 1.2.10-b
Brazil: exchange rate



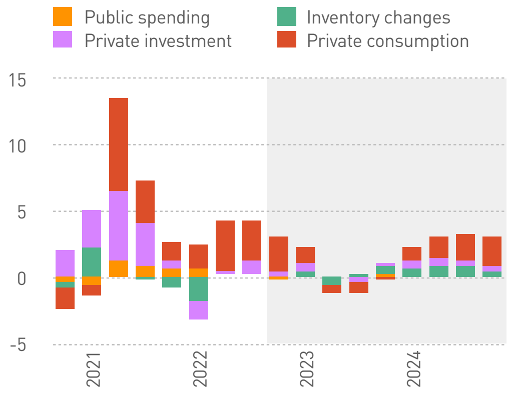
Source: MAPFRE Economics (with Haver data)

Chart 1.2.10-c
Brazil: GDP breakdown and forecasts



Source: MAPFRE Economics (based on data from the Brazilian Institute of Geography and Statistics - IBGE)

Chart 1.2.10-d
Brazil: domestic demand breakdown and forecasts



Source: MAPFRE Economics (based on data from the Brazilian Institute of Geography and Statistics - IBGE)

Table 1.2.10
Brazil: main macroeconomic aggregates

						Baseline (BS)		Stressed (SS)	
	2018	2019	2020	2021	2022(e)	2023(p)	2024(p)	2023(p)	2024(p)
GDP (% YoY)	1.7	1.2	-3.6	5.3	3.0	0.9	2.0	-0.6	2.0
Domestic demand contribution	2.5	1.8	-4.9	6.4	2.7	0.3	3.0	-0.4	2.1
External demand contribution	-0.8	-0.6	1.3	-1.1	0.4	-0.4	-0.2	-0.2	-0.1
Private consumption contribution	1.6	1.8	-3.2	2.6	2.8	-0.1	1.8	-0.5	1.3
Total investment contribution	0.8	0.7	-0.3	2.9	0.1	0.1	0.5	-0.2	0.1
Public spending contribution	0.1	-0.1	-0.6	0.6	0.2	0.1	0.1	0.1	0.1
Private consumption (% YoY)	2.4	2.6	-4.6	3.7	4.2	-0.2	2.6	-0.7	1.9
Public spending (% YoY)	0.8	-0.5	-3.7	3.5	1.1	0.6	0.5	0.6	0.5
Total investment (% YoY)	5.2	4.0	-1.7	16.6	0.5	0.5	2.6	-1.3	0.4
Exports (% YoY)	3.4	-2.5	-2.7	6.4	4.1	-1.4	3.7	-2.0	2.3
Imports (% YoY)	7.7	1.4	-9.4	12.1	1.3	0.9	4.3	-0.5	2.6
Unemployment rate (%, last quarter)	11.7	11.1	14.2	11.1	8.5	8.5	8.3	8.7	8.8
Inflation (% YoY, average)	3.7	3.7	3.2	8.3	9.3	5.0	3.8	6.8	6.3
Inflation (% YoY, last quarter)	4.1	3.4	4.3	10.5	6.0	4.9	3.9	7.3	5.6
Fiscal balance (% of GDP)	-7.0	-5.8	-13.3	-4.3	-4.6	-7.7	-7.4	-8.0	-8.1
Primary fiscal balance (% of GDP)	-1.5	-0.8	-9.2	0.7	1.3	-1.7	-0.7	-1.8	-1.2
Current account balance (% of GDP)	-2.8	-3.6	-1.9	-2.8	-2.6	-2.8	-3.4	-2.9	-3.6
Official interest rate (end of period)	6.50	4.50	2.00	9.25	13.75	12.50	8.25	16.50	14.25
3-month interest rate (end of period)	6.40	4.40	1.90	9.15	13.65	12.30	8.22	16.37	14.08
10-year interest rate (end of period)	9.24	6.81	6.98	10.31	12.64	12.20	11.34	15.35	14.66
Exchange rate vs. U.S. dollar (end of period)	3.87	4.03	5.20	5.58	5.25	5.35	5.41	5.68	5.74
Exchange rate vs. euro (end of period)	4.44	4.53	6.38	6.32	5.36	5.52	5.67	5.64	5.79
Private lending (% YoY, average)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Household lending (% YoY, average)	7.0	10.8	10.1	17.7	19.6	8.0	9.4	7.9	9.6
P.S. non-financial lending (% YoY, average)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P.S. financial lending (% YoY, average)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Savings rate (% pers. disp. income, avg.)	16.4	15.8	19.0	22.2	19.4	15.8	14.4	15.7	14.3

Source: MAPFRE Economics (based on data from the Brazilian Institute of Geography and Statistics - IBGE)
Forecast end date: 5 January 2023.

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central bank implies smoothing fluctuations in the level of economic activity and promoting full employment.

A tighter international financial environment and a strong dollar will contribute to expectations of a slowdown in the Brazilian economy in the coming quarters. In the medium term, Brazil struggles to balance its public accounts (deficit above 4% of GDP). On the positive side, Brazil is a less open economy than Western countries, and this may be an advantage when facing the slowdown in global demand, although energy costs, exports, and imports remain vulnerable to the international context and the strength of the dollar.

1.2.11 Argentina

Economic slowdown with general elections in sight.

The Argentine economy grew 5.9% YoY (1.7% QoQ) in the third quarter of 2022, with consumption increasing 10.2%, public consumption -0.1%, investment 14.0%, exports -4.6%, and imports 21.0% (see Charts 1.2.11-a and 1.2.11-b). This relative strength in economic activity precedes a slowing year-end and an expected difficult start to 2023, with inflation above 90% and a currency that will continue to depreciate as the monetary base continues

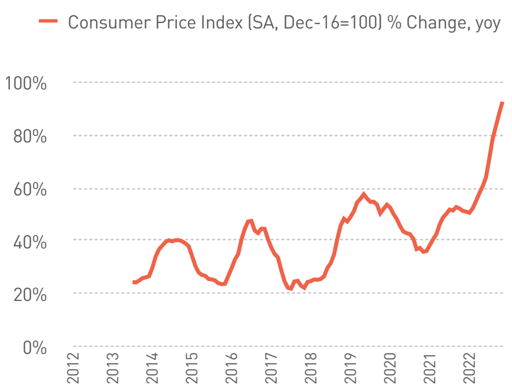
Argentina

- **Argentine inflation has become anchored at very high levels.**
- **Currency depreciation has resulted from a constant increase in the money supply, which feeds back into inflation.**
- **Significant growth is expected for 2022 (4.9%), but followed by a sharp slowdown in 2023 to around 0.4%.**

to grow, aided by the inflow of money from multilateral organizations (International Monetary Fund and Inter-American Development Bank).

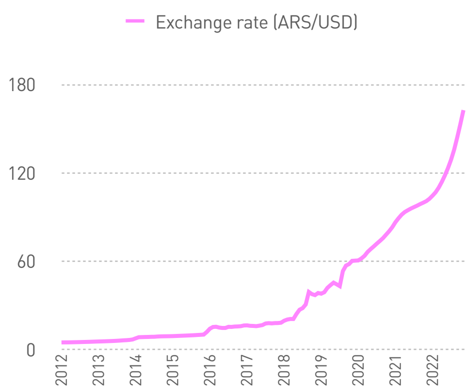
Meanwhile, consumer confidence continues to fall (35.15 in November), trending down in the long term. Retail sales are growing, but at a slower pace (18% in shopping malls and 0.8 in supermarkets in September). Car sales have stabilized at low levels for the last four years, and industrial production is up but is starting to moderate (4.3% YoY in October). The advance indicator (Universidad Torcuato Di Tella) has been falling for months, indicating an economic slowdown. In this context, our growth forecast for 2023 is 0.4% (from an estimated 4.9% in 2022) and a gradual recovery in 2024 to 1.2% (see Table 1.2.11 and Charts 1.2.11-c and 1.2.11-d).

Chart 1.2.11-a
Argentina: inflation
(%)



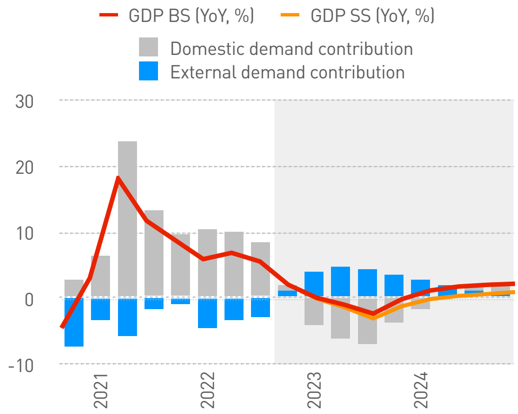
Source: MAPFRE Economics (with Haver data)

Chart 1.2.11-b
Argentina: exchange rate



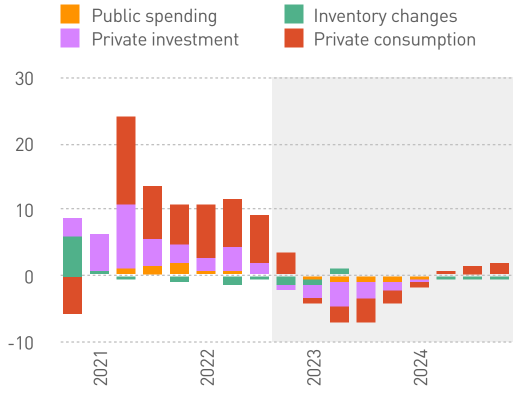
Source: MAPFRE Economics (with Haver data)

Chart 1.2.11-c
Argentina: GDP breakdown and forecasts



Source: MAPFRE Economics (based on INDEC data)

Chart 1.2.11-d
Argentina: domestic demand breakdown and forecasts



Source: MAPFRE Economics (based on INDEC data)

Table 1.2.11
Argentina: main macroeconomic aggregates

						Baseline (BS)		Stressed (SS)	
	2018	2019	2020	2021	2022(e)	2023(p)	2024(p)	2023(p)	2024(p)
GDP (% YoY)	-2.6	-2.0	-9.9	10.4	4.9	0.4	1.2	-1.4	0.5
Domestic demand contribution	-4.1	-9.5	-10.3	13.3	7.5	-5.2	0.1	-5.9	-1.3
External demand contribution	1.5	7.5	0.3	-2.9	-2.3	4.4	1.8	4.6	1.8
Private consumption contribution	-1.7	-4.6	-9.8	6.8	6.4	-2.2	0.7	-2.7	-0.3
Total investment contribution	-1.2	-3.2	-2.2	5.6	1.6	-2.4	0.0	-2.6	-0.4
Public spending contribution	-0.3	-0.9	-0.2	1.0	0.3	-0.8	-0.2	-0.8	-0.2
Private consumption (% YoY)	-2.2	-6.1	-13.7	10.0	9.4	-3.1	1.0	-3.9	-0.5
Public spending (% YoY)	-1.9	-6.4	-1.9	7.1	2.3	-5.7	-1.7	-5.7	-1.7
Total investment (% YoY)	-5.7	-16.0	-13.0	33.4	8.1	-11.7	0.0	-12.8	-2.3
Exports (% YoY)	0.6	9.8	-17.7	9.2	4.4	0.7	1.2	0.2	-0.4
Imports (% YoY)	-4.5	-18.7	-18.5	22.0	13.5	-16.3	-6.8	-17.3	-8.8
Unemployment rate (%, last quarter)	9.1	8.9	11.0	7.0	7.0	8.4	7.4	8.7	8.1
Inflation (% YoY, average)	34.3	53.5	42.0	48.4	73.1	99.6	75.7	103.4	84.6
Inflation (% YoY, last quarter)	47.4	52.2	36.4	51.4	94.2	93.1	67.3	99.5	76.4
Fiscal balance (% of GDP)	-4.9	-3.8	-8.4	-3.6	-3.9	-3.0	-1.9	-3.1	-2.3
Primary fiscal balance (% of GDP)	-2.3	-0.4	-6.4	-2.1	-2.1	-1.6	-1.1	-1.7	-1.4
Current account balance (% of GDP)	-4.9	-0.8	0.8	1.4	-0.5	-0.5	0.3	-0.5	0.2
Official interest rate (end of period)	59.25	55.00	38.00	38.00	87.00	90.00	70.00	90.50	74.50
3-month interest rate (end of period)	56.76	45.13	29.55	31.49	85.00	88.01	68.01	88.42	72.57
10-year interest rate (end of period)	16.85	30.24	21.68	25.52	33.09	32.71	30.87	35.25	33.58
Exchange rate vs. U.S. dollar (end of period)	37.70	59.89	84.15	102.72	175.16	327.63	536.03	361.24	585.44
Exchange rate vs. euro (end of period)	43.17	67.28	103.26	116.34	178.60	338.31	561.74	358.39	590.82
Private lending (% YoY, average)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Household lending (% YoY, average)	52.3	15.3	22.9	34.6	53.0	12.1	66.0	10.9	63.3
P.S. non-financial lending (% YoY, average)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P.S. financial lending (% YoY, average)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Savings rate (% pers. disp. income, avg.)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Source: MAPFRE Economics (based on INDEC data)
Forecast end date: 5 January 2023.

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Meanwhile, inflation sits at 92.4% in November, with core inflation at 89.1%, which is expected to remain high throughout 2023, around 99.6%. The rise in prices is being seen across all segments, including food, clothing, transport, recreation, and culture. The increase in the electricity, gas, and water category (66.3%) is less significant, as prices are regulated. The last monthly survey of expectations conducted by the central bank suggests that year-end inflation in 2022 will be around 99%, 99.7% in 2023 and 75.0% in 2024. The 28-day LELIQ stood unchanged at 75.0%. The other reference rate is the private bank BADLAR, which as of this report, sits at 69.6%, and the market is estimated to approach 70% in 2023. The Argentine peso will continue to depreciate due to the increase in money supply and injections of money in the form of outside assistance. As of the date of this report, the currency had already exceeded 174 pesos/USD.

Argentina will hold general elections in 2023, and in the preceding period, structural reforms are often postponed, pushing them to the next president. In general, inflation is expected to remain high, and the currency will continue to depreciate amid a challenging medium-term outlook.

1.2.12 China

The global economic slowdown and internal problems will mark a more complex 2023.

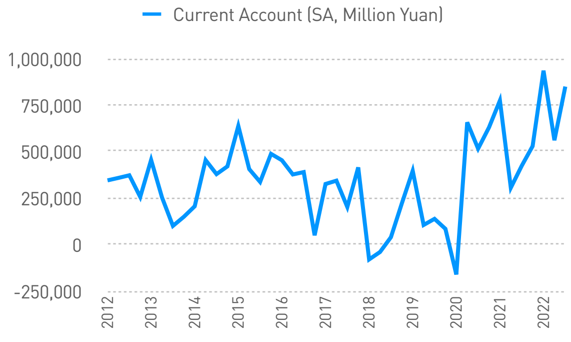
The Chinese economy recovered momentum in the third quarter of 2022, with 3.9% growth YoY (3.9% QoQ). However, mandatory health quarantines returned in the fourth quarter, under which growth could moderate (0.9% QoQ estimated). Private consumption is expected to start slowing but recovering if quarantines are lifted, while exports could fall in 2023 due to the recession in many destination countries.

Concerning more recent indicators that forecast the performance of the Chinese economy in the last quarter of 2022, retail sales have slowed (0.5% in November), while passenger car sales are up, but not as much (11% in October vs. 33% in September), and commercial vehicles suffer a 16.1% drop. Consumer confidence has been at extraordinarily low levels since April and has not recovered (86.8 in October), reflecting liquidity problems in the retail banking sector and forced quarantines of the population due to Covid-19 outbreaks. Confidence in the real estate sector also plummeted in 2022; investment in the real

China

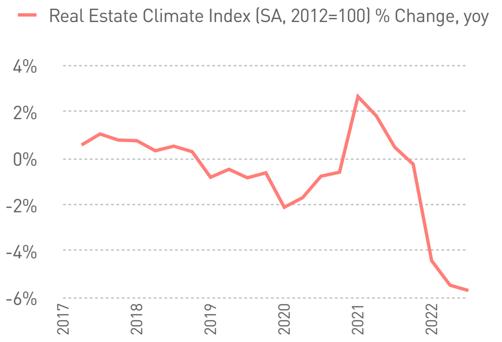
- Exports are falling due to the economic slowdown in the main markets.
- The recovery in consumption could continue in 2023 if lockdowns are lifted.
- Problems in the real estate sector persist, and the central bank is helping the banking system lowering the reserve ratio.
- Even so, stable growth is expected for 2023 and 2024, around 4.8%.

Chart 1.2.12-a
China: current account balance



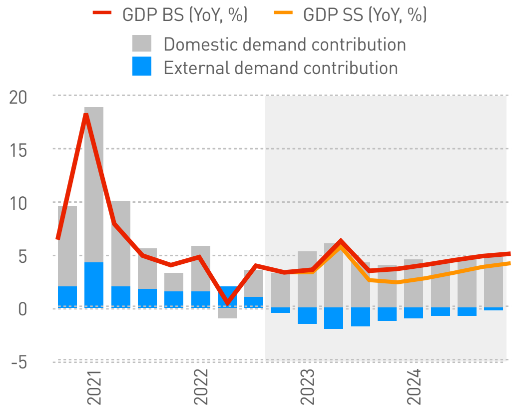
Source: MAPFRE Economics (with Haver data)

Chart 1.2.12-b
China: real estate sector sentiment index



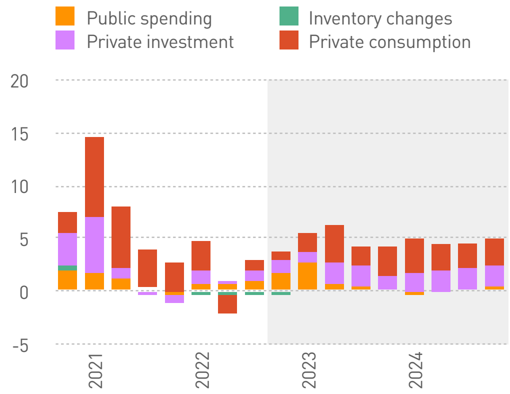
Source: MAPFRE Economics (with Haver data)

Chart 1.2.12-c
China: GDP breakdown and forecasts



Source: MAPFRE Economics (based on BoPRC data)

Chart 1.2.12-d
China: domestic demand breakdown and forecasts



Source: MAPFRE Economics (based on BoPRC data)

Table 1.2.12
China: main macroeconomic aggregates

						Baseline (BS)		Stressed (SS)	
	2018	2019	2020	2021	2022(e)	2023(p)	2024(p)	2023(p)	2024(p)
GDP (% YoY)	6.7	6.0	2.2	8.1	3.1	4.8	4.7	3.4	3.6
Domestic demand contribution	7.3	5.3	1.6	6.4	2.3	4.9	4.6	4.1	3.4
External demand contribution	-0.3	0.6	0.7	2.3	0.9	-1.6	-0.6	-1.5	-0.6
Private consumption contribution	3.2	2.5	-1.0	4.7	0.6	2.5	2.6	2.2	2.3
Total investment contribution	3.1	2.2	1.3	1.0	0.9	1.6	2.0	1.0	1.1
Public spending contribution	1.2	1.1	0.8	0.6	1.1	0.9	0.0	0.9	0.0
Private consumption (% YoY)	8.1	6.3	-2.4	12.3	1.5	6.4	6.5	5.7	5.7
Public spending (% YoY)	7.1	6.6	4.6	3.5	6.8	5.3	0.1	5.3	0.1
Total investment (% YoY)	7.3	5.1	3.1	2.3	2.3	4.0	5.0	2.5	2.9
Exports (% YoY)	4.4	2.3	1.7	18.2	1.2	-5.8	5.6	-6.4	4.0
Imports (% YoY)	6.5	-0.7	-2.2	6.6	-4.4	3.1	11.2	1.8	8.9
Unemployment rate (%, last quarter)	2.9	3.1	3.5	3.2	3.6	3.5	3.4	3.8	4.0
Inflation (% YoY, average)	2.1	2.9	2.5	0.9	2.3	2.4	2.1	3.2	3.2
Inflation (% YoY, last quarter)	2.2	4.3	0.1	1.8	2.9	2.0	2.3	3.3	3.2
Fiscal balance (% of GDP)	-4.7	-5.6	-7.6	-5.2	-8.6	-8.0	-7.1	-8.2	-7.7
Primary fiscal balance (% of GDP)	-1.5	-2.2	-3.7	-1.5	-4.8	-4.0	-3.0	-4.1	-3.4
Current account balance (% of GDP)	0.2	0.7	1.7	1.8	2.2	0.5	0.1	0.7	0.7
Official interest rate (end of period)	3.25	3.25	3.00	3.00	2.75	2.75	3.00	4.00	4.25
3-month interest rate (end of period)	3.35	3.02	2.76	2.50	1.60	1.62	2.40	2.83	3.60
10-year interest rate (end of period)	3.23	3.14	3.14	2.78	2.81	3.29	3.62	4.94	5.18
Exchange rate vs. U.S. dollar (end of period)	6.88	6.99	6.52	6.35	6.96	7.05	6.53	7.33	6.81
Exchange rate vs. euro (end of period)	7.87	7.85	8.00	7.19	7.24	7.28	6.85	7.28	6.87
Private lending (% YoY, average)	12.9	13.1	13.1	12.3	11.3	10.9	9.3	7.7	6.6
Household lending (% YoY, average)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P.S. non-financial lending (% YoY, average)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P.S. financial lending (% YoY, average)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Savings rate (% pers. disp. income, avg.)	28.8	29.0	32.9	30.4	31.1	30.0	29.4	30.1	29.8

Source: MAPFRE Economics (based on BoPRC data)
Forecast end date: 5 January 2023.

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estate sector is falling by nearly -9.8% (November), with real estate prices declining in several provinces (see Charts 1.2.12-a and 1.2.12-b).

Meanwhile, the purchasing managers' indexes (PMIs) for November reflect worsening outlooks with the composite at 47.0, manufacturing at 49.4 and services at 46.7 points. The cumulative growth of China's economy in 2022 has been dampened by health quarantines, reaching a full-year estimate of 3.1%, but is expected to regain growth momentum in 2023 and 2024, recording 4.8% and 4.7%, respectively (see Table 1.2.12 and Charts 1.2.12-c and 1.2.12-d).

Inflation in China fell to 1.6% in November, a substantially lower level than that seen in Western countries, thanks to energy not rising by the same proportion (11.3% for automotive fuels) and food prices moderating to 3.7%. Core inflation (excluding energy and food) is 0.6%, while that of producer prices has eased and dropped -1.3% (-0.6% in the case of materials). Regarding monetary policy, which is mainly controlled by the reserve level the banks require, the central bank lowered them in November by 25 bps, to 11.00%, effective December 5, to alleviate current liquidity pressures. Likewise, the 7-Day Reverse Repo rate stands at 1.83%, the deposit rate at 1.5%, and the 5-year lending rate at 4.30%.

Generally, the most significant risks facing the Chinese economy are: (i) those linked to the real estate sector, which is facing several developers with problems in completing and delivering housing, after some developers filed bankruptcy a few months ago (Evergrande, Fantasia, etc.); (ii) the protests over health quarantines, at the limit and with growing protests by the population; (iii) the economic slowdown in the West, which includes some of the main markets for Chinese exports; and (iv) the geopolitical tensions regarding Taiwan and Chinese neutrality in the US-Russia issue.

1.2.13 Indonesia

Growth will be tempered in 2023.

Indonesia's economy grew 5.7% YoY in the third quarter (1.8% QoQ), with consumption up 5.4% and investment up 5.0%, while government consumption dropped -2.9%. Exports were up 21.6% and imports 23.0%, leading to a deterioration of trade terms (the cost of imports rose more than exports). Moderation of growth is expected in the coming quarters, the main factor being the reduction of fuel subsidies, which are difficult to maintain long-term due to their cost to public accounts.

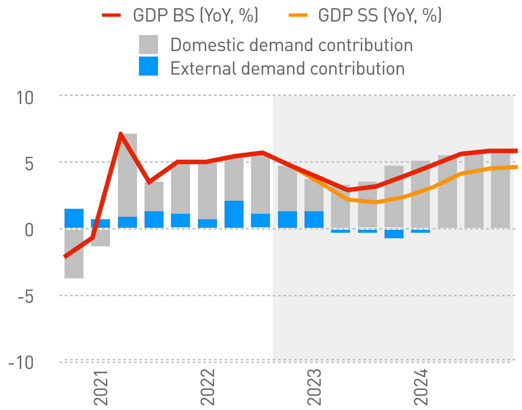
The purchasing managers' indexes (PMI) conducted by the Bank of Indonesia for the last quarter of 2022 sat at 53.2 points, maintaining already high production levels (55.1) and new factory orders (55.3), which is a good sign for the coming quarters. Likewise, retail sales rebounded in October (3.0%), and auto sales, after a mid-year drop, have recovered, while auto manufacturing is now at record highs. Against this backdrop, our GDP growth forecast for Indonesia stands at 4.5% for 2023 (a slight slowdown from the 2022 estimate of 5.2%) and 5.2% for 2024 (see Table 1.2.13 and Charts 1.2.13-a and 1.2.13-b).

Meanwhile, inflation stood at 5.4% in November, already on a path of moderation after peaking at 6.0% in September, while core inflation stood at 3.3%, although it is not yet clear whether the turning point has passed.

Indonesia

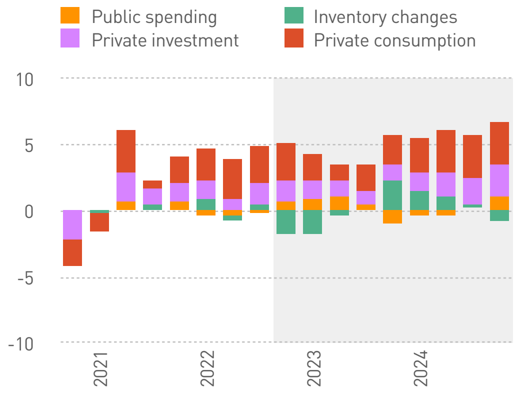
- **In December, the central bank raised monetary policy interest rates by 25 basis points to 5.50%.**
- **Currency stability and inflation control are the central bank's priorities.**
- **Fuel subsidies will gradually disappear.**
- **Indonesian GDP is projected to grow 4.5% in 2023 and 5.2% in 2024.**

Chart 1.2.13-a
Indonesia: GDP breakdown and forecasts



Source: MAPFRE Economics (based on BPS data)

Chart 1.2.13-b
Indonesia: domestic demand breakdown and forecasts



Source: MAPFRE Economics (based on BPS data)

Table 1.2.13
Indonesia: main macroeconomic aggregates

						Baseline (BS)		Stressed (SS)	
	2018	2019	2020	2021	2022(e)	2023(p)	2024(p)	2023(p)	2024(p)
GDP (% YoY)	5.2	5.0	-2.1	3.7	5.2	4.5	5.2	2.5	4.1
Domestic demand contribution	6.2	3.6	-3.5	2.7	3.9	3.5	5.6	2.4	4.2
External demand contribution	-1.0	1.4	1.4	1.0	1.3	0.0	-0.1	0.0	-0.1
Private consumption contribution	2.8	2.9	-1.5	1.1	2.8	1.9	3.1	1.4	2.6
Total investment contribution	2.2	1.5	-1.6	1.2	1.4	1.3	1.9	0.7	1.0
Public spending contribution	0.4	0.3	0.2	0.3	-0.1	0.3	0.1	0.3	0.1
Private consumption (% YoY)	5.1	5.2	-2.7	2.0	5.1	3.4	5.7	2.6	4.8
Public spending (% YoY)	4.8	3.3	2.0	4.2	-1.4	4.0	1.6	4.1	1.6
Total investment (% YoY)	6.7	4.5	-5.0	3.8	4.4	4.0	6.0	2.1	3.0
Exports (% YoY)	6.5	-0.5	-8.1	24.0	18.6	-1.1	0.6	-1.8	-1.0
Imports (% YoY)	12.1	-7.1	-16.7	23.3	15.9	-1.1	1.0	-2.5	-0.8
Unemployment rate (%, last quarter)	5.1	5.1	6.7	6.2	5.6	5.5	5.3	6.0	6.2
Inflation (% YoY, average)	3.3	2.8	2.0	1.6	4.3	4.2	2.8	4.9	4.1
Inflation (% YoY, last quarter)	3.3	2.7	1.6	1.8	5.5	3.7	2.6	4.7	3.7
Fiscal balance (% of GDP)	-1.7	-2.2	-6.2	-4.6	-2.8	-3.5	-3.0	-3.7	-3.3
Primary fiscal balance (% of GDP)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Current account balance (% of GDP)	-2.9	-2.7	-0.4	0.3	0.5	0.5	0.5	0.8	1.1
Official interest rate (end of period)	6.00	5.00	3.75	3.50	5.50	5.75	5.00	7.50	6.50
3-month interest rate (end of period)	7.70	5.51	4.06	3.75	6.40	6.62	5.80	8.50	7.31
10-year interest rate (end of period)	7.98	7.10	6.10	6.38	7.00	7.28	7.35	9.33	9.17
Exchange rate vs. U.S. dollar (end of period)	14,380	13,883	14,050	14,253	15,705	15,610	14,634	16,270	15,230
Exchange rate vs. euro (end of period)	16,465	15,596	17,241	16,143	16,013	16,119	15,336	16,140	15,366
Private lending (% YoY, average)	10.8	8.8	1.4	1.0	9.9	7.7	9.4	8.4	9.9
Household lending (% YoY, average)	10.2	7.9	2.1	2.2	7.6	7.3	5.4	6.1	4.5
P.S. non-financial lending (% YoY, average)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P.S. financial lending (% YoY, average)	5.6	-3.0	-6.0	-12.6	15.1	22.4	17.8	22.2	17.7
Savings rate (% pers. disp. income, avg.)	24.0	22.8	21.4	25.7	29.2	27.1	25.0	27.3	25.2

Source: MAPFRE Economics (based on BPS data)
Forecast end date: 5 January 2023.

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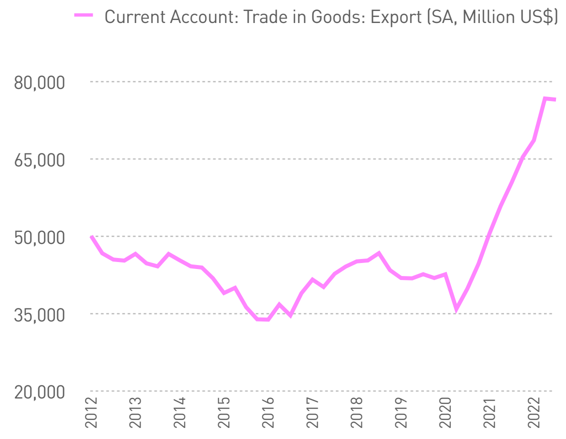
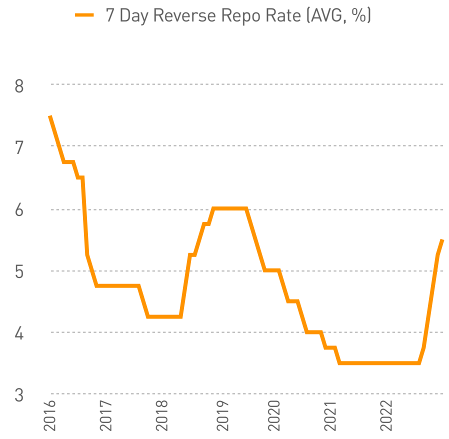
Chart 1.2.13-c
Indonesia: current account balance



Source: MAPFRE Economics (with Haver data)

Chart 1.2.13-d
Indonesia: official interest rate



Source: MAPFRE Economics (with Haver data)

Producer prices rose by 5.8%, a much lower increase than those of European countries. In relation to inflation in Indonesia is lower than in other countries, as it is helping prop up consumption. The Central Bank of Indonesia raised interest rates by 25 bps to 5.50%. The objective is to bring headline inflation back to the 2%-4% target in the first half of 2023. The central bank believes core inflation will still rise through the first quarter of 2023 but does not expect it to exceed 4.0%. The purpose of this restrictive monetary policy, on par with interventions in the exchange market, is to stabilize the currency (see Charts 1.2.13-c and 1.2.13-d).

Risks to the growth of the Indonesian economy will come mainly from the gradual elimination of energy subsidies. Meanwhile, the raw materials boom, especially coal, has allowed these subsidies to be financed. The current account balance is slightly positive, thanks to strong exports. The strong dollar affected the exchange rate in September and October, but the rate has recently stabilized. Rising interest rates in the international dollar debt markets are a challenge for all emerging markets when the time comes to renew these debt issues.

1.2.14 Philippines

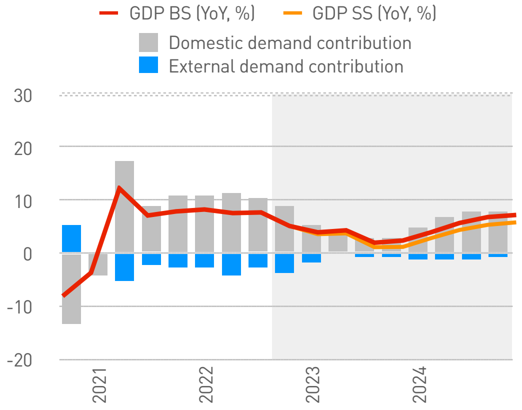
Solid economic growth, yet tempered by inflationary pressures.

The Philippines' economy grew by 7.6% YoY (2.9% QoQ) in the third quarter of 2022. Private consumption increased 8.0% YoY, while government consumption is nearly stable with 0.8% YoY growth. Meanwhile, investment remains very dynamic (21.7%), and exports are again accelerating (13.1%), although imports continue to exceed that growth (17.3%). Regarding activity indicators, the purchasing managers' index (PMI) is improving; in No-

Philippines

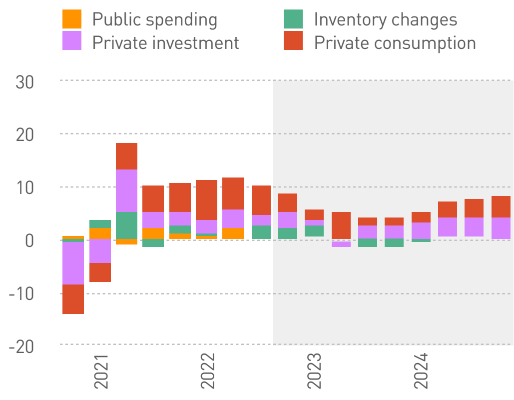
- Inflation is becoming anchored at higher levels.
- The current account deficit has widened to -4.5% of the GDP.
- The Philippine government will promote internal energy sources.
- GDP could grow 7.0% in 2022, but growth will be tempered at 4.7% in 2023.

Chart 1.2.14-a
Philippines: GDP breakdown and forecasts



Source: MAPFRE Economics (based on PSA data)

Chart 1.2.14-b
Philippines: domestic demand breakdown and forecasts



Source: MAPFRE Economics (based on PSA data)

Table 1.2.14
Philippines: main macroeconomic aggregates

						Baseline (BS)		Stressed (SS)	
	2018	2019	2020	2021	2022(e)	2023(p)	2024(p)	2023(p)	2024(p)
GDP (% YoY)	6.3	6.1	-9.5	5.7	7.0	4.7	6.0	2.3	4.5
Domestic demand contribution	8.6	6.3	-13.5	8.1	10.3	3.8	6.9	2.7	5.4
External demand contribution	-2.3	-0.2	4.0	-2.4	-3.4	-0.7	-1.0	-0.5	-0.9
Private consumption contribution	4.2	4.3	-5.8	3.1	5.6	2.6	3.4	2.0	2.5
Total investment contribution	3.3	1.1	-7.3	2.1	2.8	1.3	3.4	0.8	2.8
Public spending contribution	1.5	1.1	1.3	1.1	0.7	0.2	0.4	0.2	0.4
Private consumption (% YoY)	5.8	5.9	-8.0	4.2	7.7	3.6	4.6	2.8	3.4
Public spending (% YoY)	13.4	9.1	10.5	7.1	4.8	1.5	2.5	1.5	2.5
Total investment (% YoY)	12.9	3.9	-27.3	9.9	12.4	5.4	14.1	3.5	11.6
Exports (% YoY)	11.8	2.6	-16.1	8.0	9.3	-1.1	3.9	-1.6	2.7
Imports (% YoY)	14.6	2.3	-21.6	13.0	15.9	1.0	5.3	0.1	4.0
Unemployment rate (%, last quarter)	5.1	4.6	8.7	6.8	5.2	5.3	5.0	5.6	5.9
Inflation (% YoY, average)	5.3	2.4	2.4	3.9	5.7	4.4	2.9	6.2	5.7
Inflation (% YoY, last quarter)	6.1	1.4	2.9	3.6	7.9	4.1	3.3	5.8	5.2
Fiscal balance (% of GDP)	-3.1	-3.4	-7.6	-8.6	-6.7	-6.4	-5.5	-6.7	-6.2
Primary fiscal balance (% of GDP)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Current account balance (% of GDP)	-2.6	-0.8	3.2	-1.5	-6.0	-5.7	-5.4	-5.1	-4.3
Official interest rate (end of period)	4.75	4.00	2.00	2.00	5.50	5.75	5.00	7.75	7.25
3-month interest rate (end of period)	5.03	3.97	2.00	1.81	5.42	5.74	4.92	7.83	7.37
10-year interest rate (end of period)	7.05	4.44	2.97	4.72	7.00	6.50	5.81	8.89	8.21
Exchange rate vs. U.S. dollar (end of period)	52.72	50.74	48.04	50.27	57.32	57.03	54.61	59.80	57.13
Exchange rate vs. euro (end of period)	60.37	57.01	58.94	56.93	58.44	58.89	57.23	59.32	57.65
Private lending (% YoY, average)	16.8	9.5	4.0	0.9	7.9	6.6	8.2	7.5	8.8
Household lending (% YoY, average)	14.3	12.8	11.2	-2.1	7.0	10.2	9.7	9.3	8.1
P.S. non-financial lending (% YoY, average)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P.S. financial lending (% YoY, average)	10.3	6.9	-7.9	8.2	12.4	7.8	9.7	8.3	10.7
Savings rate (% pers. disp. income, avg.)	6.4	5.0	3.4	-0.4	-2.3	-2.3	-1.7	-2.1	-1.1

Source: MAPFRE Economics (based on PSA data)
Forecast end date: 5 January 2023.

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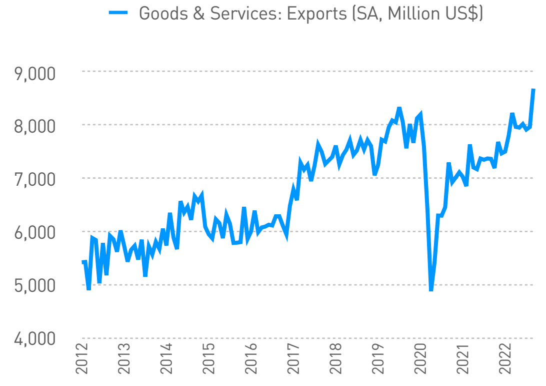
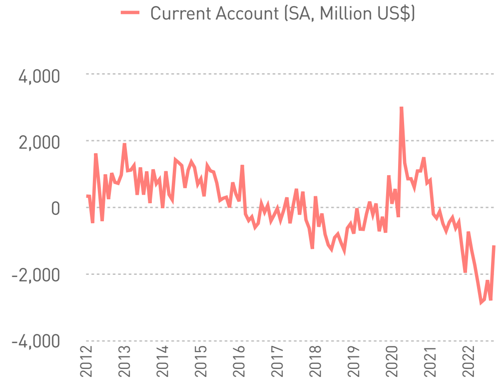
Chart 1.2.14-c
Philippines: exports



Source: MAPFRE Economics (with Haver data)

Chart 1.2.14-d
Philippines: current account balance



Source: MAPFRE Economics (with Haver data)

vember, it sat at 52.7 points. Meanwhile, consumer confidence worsened in the last quarter of 2022 to -14.6, from -5.2 in the year's second quarter. Unemployment has decreased to 5.0% (2019 levels), while industrial production was up 5.1% in October, with substantial increases in the automobile sector (21.3%) and chemicals (39.5%). Per this general context, we forecast that the Philippines economy in 2022 will end the year with growth of around 7.0%, but in 2023 this will moderate to 4.7% due to an internal and external slowdown, to then resume momentum in 2024, to around 6.0% (see Table 1.2.14 and Charts 1.2.14-a and 1.2.14-b).

Inflation reached 8.0% in November (0.9% MoM), with food rising 10%, transport 12%, and household energy 13.7%. Producer inflation, meanwhile, sat at 7.2% and wholesale prices at 8.2%. The Central Bank of the Philippines raised interest rates by 50 bps to 5.00% (Overnight Repo) in November. Inflation risks are increasing, as fertilizer and transportation costs are unlikely to fall soon. Thus, the central bank's inflation forecast rose to 5.8% on average in 2022, 4.5% in 2023, and 2.8% for 2024, to be within the target range of 2-4%.

The largest risks for the Philippine economy are related to inflation exceeding the 2-4% target range at this time. The greatest rise in import prices, together with their higher growth, is widening the current account deficit, which reached -4.5% in the second quarter (see Charts 1.2.14-c and 1.2.14-d).

2. Industry outlook

2.1 The economic environment and its impact on insurance demand

2.1.1 Global markets

Estimates for 2023 point to a sharp global economic slowdown, with growth forecast at 2.0% (3.5% in 2022), high geopolitical risk and some of the main economies facing a possible recession which, according to the baseline scenario established in this report, is expected to be mild. This environment continues to pose a complex scenario for the business and profitability of the insurance industry this year. Meanwhile, inflation data are beginning to show signs of improvement but continue at high levels in an environment in which the monetary policies of central banks are facing different situations, marked by the moment in which they began to take measures against the strong rebound in prices, practically generalized with few exceptions (highlighting the case of the Chinese economy).

Thus, the central banks of the main developed economies (which reacted later by considering the upturn in inflation as a temporary phenomenon that would tend to correct itself after the process of economic reopening) have announced that they will continue to tighten their monetary policy in their fight against inflation, although at a slower pace, following the improvement of some indicators, while maintaining restrictive financial conditions until there are clear signs that inflation is approaching their monetary policy targets. For the time being, the environment continues to favor a deterioration in the purchasing power of households and business margins, while financing conditions are tightening in a context accustomed to high levels of indebtedness on the part of all economic agents (especially governments), low interest rates and high liquidity, which will put a brake on aggregate demand and increase credit risk, creating a complex outlook for the insurance industry.

Meanwhile, emerging market central banks, which reacted earlier to the sharp upturn in inflation by raising interest rates and withdrawing monetary and fiscal stimulus (as was the case in countries like Brazil and Mexico), are seeing more pronounced drops in their inflation rates, still above their monetary policy targets, but approaching them. These countries are in a phase where their economies are suffering from the economic slowdown caused by the tightening of financing conditions and the loss of purchasing power suffered by households due to the high inflation experienced in the last year. Thus, their respective insurance markets are facing 2023 with increased difficulties for business development after 2022 when the economy performed better than initially expected, which has been reflected especially in the Non-Life insurance segment, with significant growth for the year and a remarkable recovery in all lines of business, some of them beating high inflation. In addition, the high-interest rate environment resulting from the tightening of monetary policy has been an additional stimulus for the Life savings business, which will continue to benefit this year from a favorable interest rate environment that may at least partially offset the negative effect of the economic downturn in the insurance business. On the other hand, lower inflation, strong exchange rate performance, and high-interest rates may help improve the profitability of insurance markets in emerging countries in 2023. Other countries, such as Argentina or Turkey, which are still failing to control high inflation, are facing a scenario of deeply negative real interest rates, especially in the case of Turkey, so their respective insurance markets are facing a more complex scenario.

In terms of financial investments, after 2022, which saw large corrections in the main asset classes in which insurers invest, 2023 poses a scenario where opportunities may arise as the year progresses. Thus, the accelerated interest rate hikes by the main central banks and the quantitative easing of their balance sheets have caused an adjustment in the financial markets, which in 2022 adversely affected both the valuation of sovereign and corporate bonds and equities and other alternative investments with practically unprecedented depth and, above all, consistency (not seen even in the 2008 crisis, after the collapse of Lehman Brothers, when the collapse came from equities and not from fixed income). It should be noted that the effect of this deterioration has been absorbed by the high solvency levels of the insurance industry, and, on the positive side, the environment continues to improve for the traditional Life savings and annuity business with interest rate guarantees. The outlook is also improving for the future profitability of investment portfolios, which is broadly used by the insurance industry to supplement its technical profitability, bearing in mind insurance companies' advantageous position in terms of high liquidity and low leverage owing to the characteristics of their business model.

In the automobile sector, the shortage of semiconductors, although it has not yet completely normalized. Now it faces tightening financing conditions for the acquisition of new vehicles, so the outlook for auto insurance business and profitability remains complex. In the same vein, persistently high inflation continues to drive up the cost of repairs and put upward pressure on insurance prices in a market characterized by high levels of competition. Meanwhile, health insurance still presents a positive outlook in terms of its business volume due to greater awareness of households and companies of the need to supplement the health coverage offered by public health systems. However, its profitability faces a significant challenge due to the pressure of the high cost of health coverage as a result of the second round effects caused by the inflationary process.

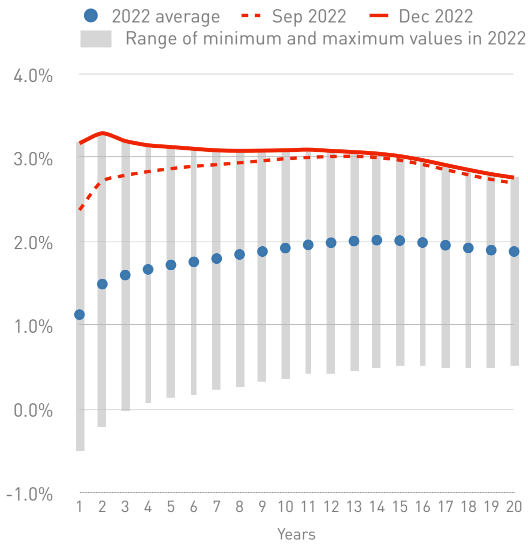
In short, although uncertainty and volatility in the financial markets remain high, the strong adjustment they have undergone suggests that the main problem facing the insurance markets this year will be the effect of restrictive financial conditions on economic agents (governments, households and companies) and, therefore, on the real economy in the form of lower growth, with labor markets beginning to feel the effects of the new scenario posed, interest rate hikes and the withdrawal of monetary stimuli. Central banks are still at a stage far from pivoting towards an accommodative monetary policy in which possible interest rate hikes will be softer, in an effort to maintain their restrictive stance until there are clear signs that inflation is under control.

2.1.2 Eurozone

The forecast for the Eurozone for this year points to a marked economic slowdown, with real aggregate GDP growth likely to be around -0.1% (3.2% in 2022) and a return to the 1.6% economic growth forecast for 2024. The tension on energy and food prices caused by the war in Ukraine continues to affect Europe in particular, with inflation seeming to have peaked but remaining at levels never before seen in the Eurozone, standing at 10.1% in November (10.6% in October), which places average inflation for the year 2022 at 8.4%. This environment presents a still complicated outlook for business development in the insurance industry, which is suffering from a significant increase in claims and operating costs, with premium growth that has not been able to beat high inflation, except in some lines of business of lesser relative weight at the aggregate level, putting pressure on insurance prices and eroding the profitability of the entities.

The European Central Bank (ECB) continued to tighten monetary policy with another 50 basis point (bps) rate hike in December, leav-

Chart 2.1.2
Eurozone: risk-free yield curve
(%)



Source: MAPFRE Economics (based on EIOPA data)

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ing interest rates at 2.5% for the main refinancing operations and 2.0% for the deposit facility, and hinting at further rate hikes in its statements for upcoming meetings in the face of persistently high inflation levels. Another unexpected development from the December meeting was the announcement of a quantitative tightening program to begin in early March 2023, reducing bond holdings at a rate of 15 billion euros per month for the next four months, which is translating into increased stress on sovereign bond risk premiums, especially those of southern European countries.

On the risk-free yield curves produced by the European Insurance and Occupational Pensions Authority (EIOPA)[4], a rise in interest rates is again observed for the Eurozone in all sections, exceeding levels reached at the end of September 2022, marking the highest levels of the year, with an inverted curve in maturities over the two years (see Chart 2.1.2). From this information it is evident that risk-free interest rates remain below inflation, but levels are moving on an upward path, continuing to improve the outlook for insurers' traditional Life savings and annuity business.

On the other hand, the Euro Stoxx 50 and S&P500 indexes (and, in general, the main stock markets worldwide), despite having recovered some of the ground lost in the last months of the year, have suffered a sharp contraction in 2022 of -11.7% and -19.4%, respectively. In the case of the Nasdaq, the drop in 2022 was -33.1%. This situation, together with a probable entry into recession in an environment of tightening monetary policy, complicates the outlook for the operations of Life insurance products in which the policyholder assumes the investment risk, which have to adapt to a new environment of high volatility in equities and fixed income that offers higher interest rates and risk premiums more in line with issue credit risk (especially based on the ECB's announcement of the quantitative easing program).

2.1.3 Germany

The German economy continues to be particularly affected by the problems arising from the war in Ukraine, with high inflation (8.6% in December and 7.9% on average for 2022 as a whole) and is still vulnerable to the risk of possible gas supply problems, although to a lesser extent due to the management of its reserves and the search for alternative supply sources it is undertaking to reduce its energy dependence on Russia and attempt to cover the winter months. This outlook points to a sharp economic contraction in 2023, with an estimated -0.9% drop in Germany's real GDP (1.6% in 2022), which complicates the outlook for business development and profitability of the insurance industry (as a result of high inflation). This situation could improve in 2024 with expected economic growth of around 1.7%, although uncertainty remains high as a result of the war in Ukraine and the high energy dependence of the German economy.

Meanwhile, the yield on the German sovereign bond experienced a strong rebound in December as a result of the tightening of monetary policy by the ECB. This continues to be passed on to the yield on the German sovereign bond, which increased substantially in the last months of 2022 (presenting a yield curve with a slightly negative slope in the last days of December, except in its shortest tranches). This environment continues to foreshadow a favorable environment for the traditional Life savings and annuity business, which is somewhat more complex to manage with a flatter risk-free interest rate curve with timely investments. The German DAX, on the other hand, is showing continued volatility and suffered a -12.3% drop in 2022, complicating the outlook for Life insurance products in which the policyholder assumes the investment risk.

2.1.4 Italy

The Italian economy is expected to experience a marked slowdown in 2023, with real GDP growth for the year as a whole estimated at around -0.1% (compared to 3.8% growth in 2022), a situation that could improve by 2024 with 1.0% estimated growth. The sharp slowdown in the Italian economy, the loss of household purchasing power and the reduction in corporate margins as a result of high inflation (11.6% in December and an average inflation rate of 8.2% for 2022 as a whole) continue to pose a complicated outlook for the development and profitability of the insurance industry in 2023, especially as far as the Non-Life business is concerned.

On the other hand, the risk premium on Italian sovereign debt has rebounded following the change in the ECB's monetary policy stance, with interest rate hikes and the announcement of the quantitative easing program of net bond sales starting in early March 2023. This higher interest-rate environment and a rate curve that allows a positive term premium to be offered continues to improve the outlook for traditional Life savings and annuity insurance products, although negative real interest rates persist due to high inflation. Meanwhile, the volatility and drops in the equity markets continue, in particular, the FTSE MIB, which dropped by -13.3% in 2022, complicating the development of Life insurance products in which the policyholder assumes the investment risk, which had been gaining importance in the Italian market in recent years.This situation could also be changing as these are products that also invest in fixed income and for which the outlook is improving despite the poor performance in 2022, which affected practically all financial asset classes.

2.1.5 Spain

Forecasts for the Spanish economy point to a significant slowdown in 2023, though not entering a recession, with 1.0% estimated growth (compared to 4.6% in 2022), a situation that could improve in the coming year with a growth forecast for 2024 of around 2.1%. For now, the economic slowdown forecasts, the effects of inflation on household disposable income, and the tightening of financing conditions continue to pose a complex outlook for the insurance sector in the coming months. Inflation data show signs of improvement but remain high (5.8% in December and an estimated average inflation rate of around 8.4% for 2022 as a whole), eroding household disposable income and business margins, in addition to the tightening of financial conditions for public administrations, companies and households due to the rise in interest rates, in a market in which approximately three out of every four mortgages are variable rate mortgages. This outlook, which will slow aggregate demand, will create complexities for insurance industry operations, which, in 2022, grew under average inflation for the year and suffered in terms of profitability as a result of inflation, keeping pressure on insurance prices high.

The supply shortage problem that had been weighing down the automotive sector has begun to normalize and may be an important element for the turnaround toward a recovery in new registrations to be consolidated in 2023. However, it is estimated that they will still be far from pre-pandemic levels due to the new burden posed by tightening financing conditions for new vehicles and the expected economic slowdown. This situation will be weigh down the auto insurance business, whose profitability is suffering due to high inflation, in a market with high levels of competition that make it difficult to pass the negative impact on margins in this line of business to insurance prices.

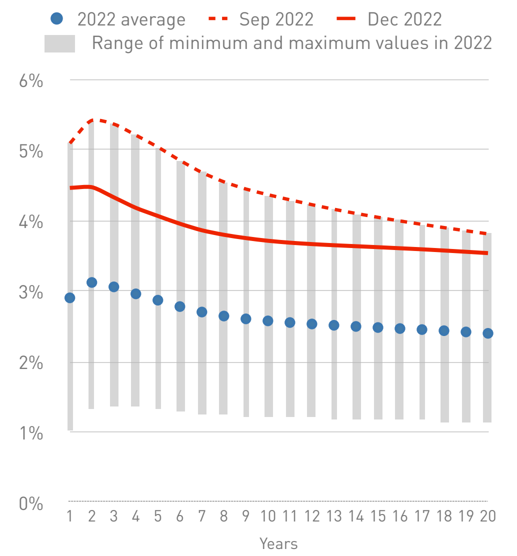
As for Life insurance, the business context continues to improve for the traditional Life savings and annuity business due to the rising inters rates, which is elevating the market interest-rate curve for the sovereign debt and particularly for the Spanish sovereign bond across all terms, offering a positive term premium that trends upward for longer maturities.

2.1.6 United Kingdom

The British economy is expected to suffer a sharp slowdown in 2023, with real GDP growth estimated at around -0.9% (compared to a higher-than-expected 4.4% growth in 2022), a situation that could improve in 2024 with expected growth of 1.2%. The financial market seems to have weathered the turbulence following the Bank of England's intervention in the sovereign bond market and the announcement of a medium-term fiscal plan to reduce spending and increase taxes, in an environment of high inflation that shows no signs of improvement (10.7% in November and average inflation in 2022 of around 8.9%). The environment of high inflation continues to erode household disposable income and business margins in an economy that is expected to slow sharply. This is a complex outlook to carry out the insurance industry's business and profitability, and pressure on insurance prices remains high.

Regarding Life savings and traditional annuities, the Bank of England raised interest rates again at its December meeting, to 3.5%, in the face of persistently high inflation. According to EIOPA's risk-free interest rate curves for the end of December (see Chart 2.1.6), a decline in risk-free interest rates can be observed in all sections of the curve compared to September, despite the new hike in monetary policy interest rates; this is due to the Bank of England's intervention with selective bond purchases to stabilize the sovereign bond market, following the volatility caused by the liquidity problems in British pension funds with difficulties meeting the cash requirements of OTC derivative counterparts in their financial immunization operations for defined benefit plans. Despite this turbulence, high interest rates continue to be favorable for the marketing of Life savings products and annuities with guaranteed interest rates, although the volatility of market interest rates, the environment of negative real interest rates (with nominal rates significantly below the latest inflation data) and a curve that shows occasional inverted sections, continue to complicate the management of this business. With regard to equities, the FTSE 100 remains exposed to high volatility, although it is one of the few world indexes that did not decline in 2022 as a whole, closing the year with a slight increase of 0.9%. This could favor the marketing of Life insurance products in which the policyholder assumes the investment risk, which is deeply rooted in this market, with products based on a composition in which fixed income plays a greater role.

Chart 2.1.6
United Kingdom: risk-free yield curve
(%)



Source: MAPFRE Economics (based on EIOPA data)

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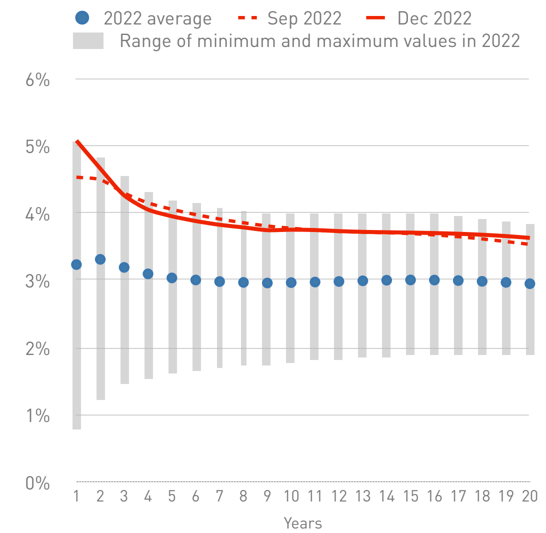
2.1.7 United States

Forecasts for the United States economy point to a significant slowdown in 2023, with 0.1% estimated growth (compared to 2.0% in 2022), a situation that could improve slightly in the coming year with a growth forecast for 2024 of around 0.9%. Inflation is beginning to show signs of easing, although it remains high, which continues to create a less favorable environment for the development of the insurance industry due to the loss of purchasing power suffered by households and the negative effect on the profitability of insurance companies due to the sharp rise in prices, which increases the cost of claims and their operating expenses. However, on the positive side, the labor market's strength may prove helpful to the insurance business, and rising interest rates may help improve the outlook for future returns on their investment portfolios.

Concerning traditional Life savings and annuities, the US Federal Reserve continued to tighten monetary policy (raising interest rates once again by 50 bps at its December meeting to a range between 4.25% and 4.50%) and is expected to continue to do so at its next meetings, maintaining a restrictive monetary policy until there are solid signs that inflation is under control at levels close to its 2% target (the latest data seem to indicate that it is beginning to reverse, with 7.1% in November, leaving average inflation for 2022 at around 8.0%). On the risk-free yield curve for December produced by EIOPA (see Chart 2.1.7), an additional rise in interest rates can be seen, the highest in 2022. The curve continues to present a negative slope, which affects practically all lines. The interest-rate environment, therefore, remains complex for the sale of traditional savings and annuity products: nominal interest rates remain below inflation, generating an environment of negative real interest rates, being unable to offer a positive term premium as the curve is inverted. However, this environment could be favorable for launching savings products with shorter-term rate guarantees and periodic reviews of guaranteed rates. Meanwhile, equity markets have dropped significantly in 2022 (-19.4% in the case of the S&P 500 and -33% for the Nasdaq), and volatility remains high. This continues to paint a complex picture for the sale of Life insurance products in which the policyholder assumes the investment risk, which are widespread in this market.

Chart 2.1.7
United States: risk-free yield curve
(%)



Source: MAPFRE Economics (based on EIOPA data)

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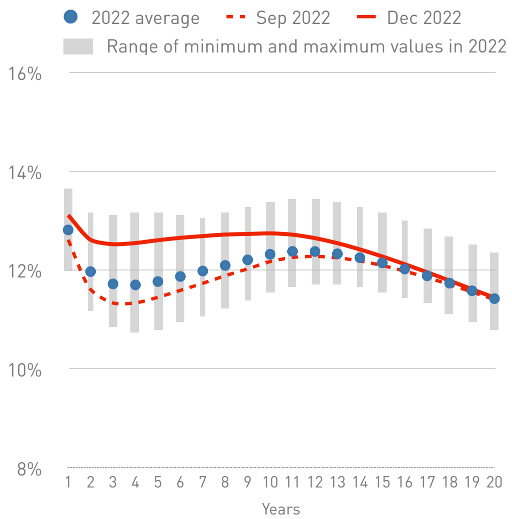
2.1.8 Brazil

The Brazilian economy has performed better than expected in 2022, with a 3.0% estimated growth. However, forecasts point to a significant slowdown in activity levels, with GDP growth estimated at around 0.9% in 2023, driven by the tightening of financing conditions and the loss of household purchasing power as a result of high inflation, which, nevertheless, continues on a clear path of moderation with the latest available data (although still with a certain baseline effect), as a result of the rapid response of Brazil's central bank, which was among the first to take measures by tightening its monetary policy.

Chart 2.1.8
Brazil: risk-free yield curve
(%)



Source: MAPFRE Economics (based on EIOPA data)

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Economic activity levels could improve by 2024 when GDP growth is forecast at 2.0%.

In this context, the Brazilian insurance market performed well in 2022, especially in the Non-Life business, which has experienced notable growth in its business volume in the first nine months of the year, with a significant recovery in all lines of business, especially in auto and agricultural insurance, with growth well above inflation, which will have averaged around 9.3% in 2022. Meanwhile, the moderation of inflation helps to boost insurance companies' profitability. However, the outlook for the insurance industry is complicated due to the predicted economic slowdown in a context with tighter financing conditions because of still high interest rates, which could weigh down the growth of the Non-Life insurance market.

With regard to the interest rate environment, which is highly relevant to the development of the Life insurance business, the Brazilian central bank decided to keep interest rates at 13.75% at its December meeting (for the third consecutive time), with inflation continuing to fall sharply in September (7.2%), October (6.5%) and November (5.9%). This positive real interest rate environment is highly favorable for carrying out the life savings and annuities business, with interest rates offering returns significantly higher than the latest inflation data.

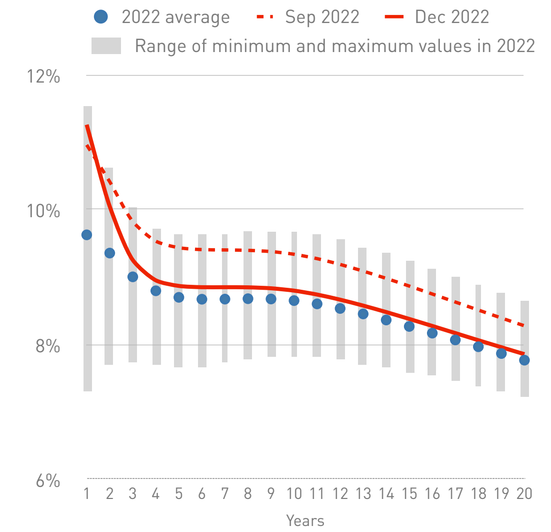
On the EIOPA risk-free yield curves shown in Chart 2.1.8, a slight increase is observed in the curve for December, which slopes gently downward in the first sections. This may favor the development of products backed by sovereign bonds with short maturities, which are very common in this market (VGBL and PGBL), and even the possibility of entering longer-term bonds, taking advantage of the high interest rates in all sections of the curve, which may be dropping if inflation continues on its current downward trend.

2.1.9 Mexico

Forecasts for 2023 point to a slowdown of the Mexican economy, estimating real GDP growth around 1.0% (versus 2.7% estimated for 2022). The Bank of Mexico's tightening of monetary policy is proving effective in its fight against inflation, but the economy is beginning to suffer from the tightening of financing conditions and the loss of household purchasing power as a result of the high inflation rates experienced during the year. This foreshadows a less favorable outlook for the development of the insurance business this year, especially for Non-Life insurance, with the exception of health insurance, which continues to perform well, supported by the increased aversion to health risk caused by the pandemic, as well as by the weakness of the public health system. It is estimated that the overall economic situation could improve by 2024 when economic growth could be around 1.8%.

Regarding the interest rate environment, in December, the Bank of Mexico decided to raise the key monetary policy interest rate by 50 bps to 10.50%. This is the eighth rate hike in 2022 (following five hikes in 2021), with inflation data improving (albeit still with some baseline effect), standing at 7.8% in November (leaving average inflation for 2022 at

Chart 2.1.9
Mexico: risk-free yield curve
(%)



Source: MAPFRE Economics (based on EIOPA data)

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around 8%). The EIOPA curves (see Chart 2.1.9) show relatively stabilized risk-free market interest rates in the middle of the curve, with a certain drop towards average 2022 levels in maturities of more than one year and a curve that increases its negative slope in maturities of less than three years. All of this creates an adequate interest rate scenario for the development of the Life savings business, with products that can offer compensation above the latest inflation figures in an environment of positive real interest rates. However, the erosion in household purchasing power due to rising prices continues to erode their savings capacity and may hinder the development of this business. Likewise, the inversion in the interest rate curve is appropriate for launching savings products with shorter-term rate guarantees and periodic reviews of guaranteed rates.

2.1.10 Argentina

Estimates point to a marked slowdown in the Argentine economy in 2023, with real GDP growth of around 0.4% (compared to higher-than-expected growth of 4.9% in 2022), inflation remaining high (92.4% in November, which would put average inflation in 2022 at around 73.1%) and the currency continuing on its depreciation path. This economic context complicates the outlook for carrying out the insurance business and keeps pressure on insurance prices high to prevent the profitability of insurance companies from deteriorating as a result of inflation, also fed by depreciation in the exchange rate, which makes the cost of claims more expensive. Estimates indicate that the Argentine economy could return to around 1.2% growth in 2024, which would improve the environment for the insurance industry for the following year.

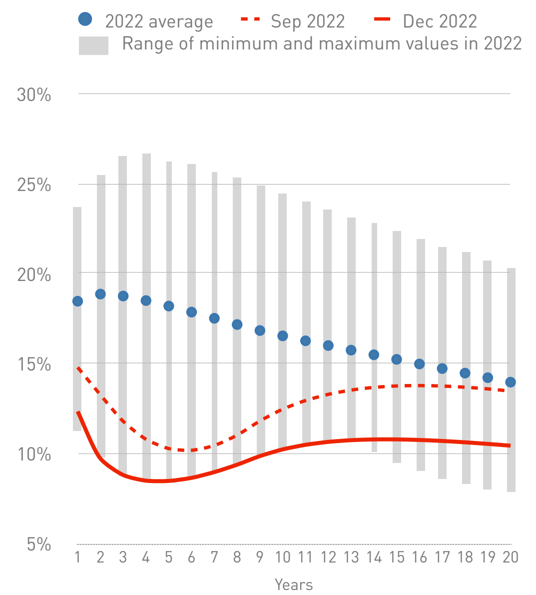
On the other hand, the central bank has kept the key interest rate at 75% (below the latest inflation data) in an environment in which real interest rates are moving deeper into negative territory. This means that the outlook for Life savings remains very complex, as it cannot offer sufficient interest rates to offset for the loss of household purchasing power due to the lack of financial assets on the market with enough profitability to support this type of product.

2.1.11 Turkey

The Turkish economy is expected to slow down in 2023, with growth estimated at 1.6% (after better-than-expected growth in 2022 of 5.0%), a situation that could improve towards next year, with growth in 2024 at around 2.0%. The Turkish central bank continues to pursue an unorthodox monetary policy and, at its December meeting, cut interest rates to 9.0% in a high inflation environment (64.27% in December, bringing average inflation for the year 2022 to 72.2%). The anticipated economic slowdown and the erosion of household disposable income and corporate margins as a result of high inflation are damaging the outlook for the insurance industry's business and profitability, keeping pressure on insurance prices high.

The Life savings business will continue to be particularly weighed down by the effect of the central bank's unorthodox monetary policy in a high-inflation environment, which contin-

Chart 2.1.11
Turkey: risk-free yield curve
(%)



Source: MAPFRE Economics (based on EIOPA data)

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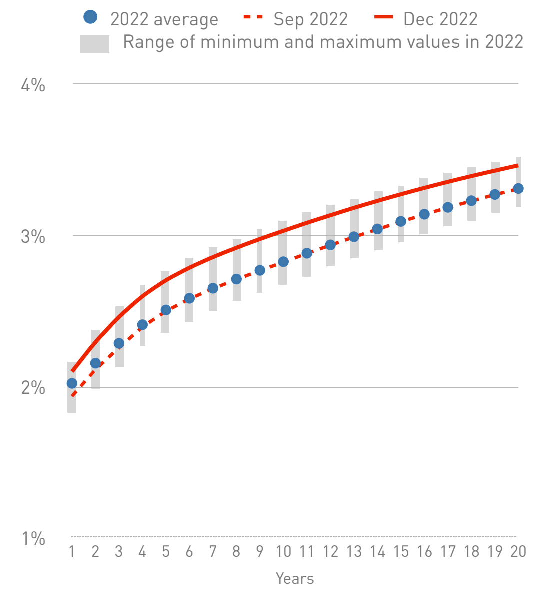
Chart 2.1.12
China: risk-free yield curve
(%)



Source: MAPFRE Economics (based on EIOPA data)

Click here to access the interactive version of this information

ues to push real interest rates further into negative territory. The EIOPA curves (see Chart 2.1.11) show the further decline in risk-free interest rates, with a curve that is far from capable of compensating for the loss of purchasing power caused by the high inflation rate in all sections.

2.1.12 China

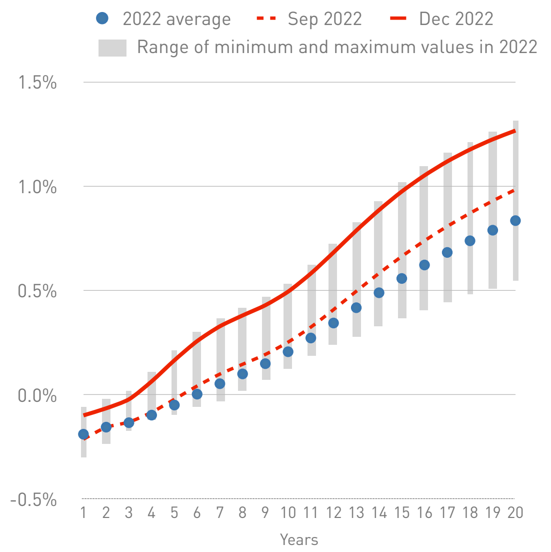
Estimates point to an acceleration of China's economy, with expected growth of around 4.8% in 2023 and 4.7% in 2024 (3.1% in 2022). However, with some uncertainty due to factors such as the effect new outbreaks of the virus may have on the economy with the relaxation of the Covid-zero policy and an accommodative monetary policy in the face of persistent problems in the real estate market. On the other hand, China is one of the few economies in the world where inflation has remained low. In general terms, this economic environment, along with the low level of insurance penetration in the country, poses a favorable outlook for the performance of the insurance industry next year.

In relation to interest rates, inflation in China, which had experienced a slight rebound in recent months, has dropped again, standing at 1.6% in November, which leaves average inflation for 2022 around 2.3%. This has permitted the central bank to continue applying an accommodative monetary policy, leaving interest rates at 3.65% at its December meeting. In the EIOPA curves (see Chart 2.1.12), some risk-free interest rates appear sufficiently stabilized around the average values of 2022, with a curve that presents a slight upward movement in December and a positive term premium; a context that remains highly favorable for the Life savings and annuities business, with stable interest rates and a curve that allows rate guarantees to be offered in the medium- and long-term higher than the short-term rates, above inflation.

2.1.13 Japan

Growth estimates for the Japanese economy in 2023 point to a slowdown, with anticipated growth of around 1.1% (1.5% in 2022). High

Chart 2.1.13
Japan: risk-free yield curve
(%)



Source: MAPFRE Economics (based on EIOPA data)

Click here to access the interactive version of this information

energy prices continue to negatively affect the economy, and the anticipated economic slowdown could weaken the growth of the insurance business, whose profitability may also be negatively affected by the rebound of inflation, which has reached unforeseen levels in the Japanese economy in recent decades.

Regarding the Life business, the Bank of Japan has decided not to change its ultra-accommodative monetary policy, leaving interest rates at -0.1% at its December meeting, despite the rebound of inflation (3.8% in November, once again farther away from its target of 2%). However, it has relaxed control of curve of long-term interest rates, which have rebounded. This has heavily reversed its currency's depreciation against the dollar, given the sign of possible new measures tightening the ultra-accommodative monetary policy, which has been applied for over a decade. On the EIOPA curves (see Chart 2.1.13), disturbances are observed in the risk-free yield curve, which has continued to steepen, with positive values for practically all sections. This new interest rate hike and the slope of the curve allow a positive term premium to be offered with yields not seen on the Japanese market in recent years, which favors the marketing of Life savings and annuity products.

2.1.14 Philippines

The Philippines' economy is expected to slow down in 2023, with estimated growth of 4.7% (after 7.0% anticipated growth in 2022), weighed down by the increasing energy imports, while growth supported by private consumption and investment is also significant. This economic environment continues to favor the development of the insurance business, with the help of the low insurance penetration in the Philippine economy. However, inflation does not show signs of moderation and rebounded in December, sitting at 8.1% (which leaves average inflation for 2022 around 5.7%). This could negatively affect insurance companies' profitability by increasing the cost of claims and other operating expenses, maintaining pressure on insurance prices.

Concerning Life savings, the Central Bank of the Philippines is tightening its monetary policy considerably to combat inflation, and it raised the reference rate in its December meeting to 5.5%. The 10-year sovereign bond yield sat at around 7% at the end of the year, raising the interest rate curve in all its shortest lines, presenting a positive slope somewhat under that of the previous quarter. This environment continues to favor the marketing of Life savings and annuity products, as medium- and long-term rates higher than short-term rates can be guaranteed, also gaining attractive products of this type with shorter-term maturities.

2.1.15 Reinsurance

According to estimates of the Swiss Re Institute[5], in 2022, natural disasters have caused economic losses in the amount of 260 billion dollars, of which 115 billion were insured. These figures, while lower than those experienced in 2021, are over the 81 billion dollars annual average of the last 10 years, and this is the second consecutive year in which estimated insurance claims reach more than 100 billion dollars, with annual growth of 5-7% in the last decade. Hurricane Ian, which touched down in west Florida at the end of September, is the most costly catastrophe of 2022, with preliminary insurance claims estimated at 50 to 65 billion dollars. In addition to Hurricane Ian, in the first half of the year, the United States was affected by strong lightning storms, with tornadoes causing very costly economic losses (28 billion dollars) and insurance claims (19 billion dollars)[6]. In this country, natural disasters in the first half of 2022 were dominated by climate-related disasters.

In February and March 2022, Australia suffered the most costly floods in its history, which affected the southeast of Queensland and the coast of New South Wales. Based on the real costs of the 233,000 claims received in both states, the Insurance Council of Australia[7] indicates that by September, it had reached 5.28 billion Australian dollars (3.553 billion dollars) in insurance claims.

Meanwhile, in northern and northeastern Europe, a series of winter storms in February caused insurance claims estimated at more than 3.7 billion dollars. In the summer, France experienced the most severe series of hailstorms ever seen, with insurance claims estimated at 5 billion euros, according to estimates by the Swiss Re Institute. In addition, the extreme heat and dry conditions at the start of summer caused drought and forest fires, especially in Italy, Spain, and Portugal.

Based on insurance claims of around 120 billion dollars in 2022 and the increasing frequency and severity of natural catastrophe claims, as well as rising claims costs due to inflation and reduced capital capacity in the global reinsurance markets, double-digit percentage increases in reinsurance premium rates for catastrophic property damage coverage are expected to occur in 2023[8].

2.2 Regulatory and supervisory trends

2.2.1. Risks and vulnerabilities of the global insurance industry

Last December, the International Association of Insurance Supervisors (IAIS) published its most recent report on the global insurance market for 2022 (GIMAR)[9], which was written in the framework of risk evaluation to monitor and detect the possible accumulation of systemic risk in the insurance industry by compiling data on the main international insurance groups representing more than 90% of the premiums written worldwide.

The report focuses on three macro-prudential issues. First, macroeconomic outlooks of slowdown, high inflation, rising interest rates and increased risk on the financial markets. Second, structural changes in the Life insurance sector, including private equity participation. And, finally, risks related to climate. The analysis addresses the final data of 2021 and the most recent data available on the financial markets. In this regard, the report warns that while 2021 was a year in which the solvency and profitability positions of insurance groups improved overall in all regions (supported by the strong performance of financial markets that year), several macro-prudential factors are creating uncertainty around the solvency, profitability, and liquidity position of the insurance sector by 2023. Geopolitical conflicts, inflation, tightening monetary policy, and a deteriorating economic outlook increase market, credit and liquidity risks going forward.

As for the global insurance industry balance sheet figures covered by the analysis, the report stresses that the valuation of total assets at the end of 2021 reached $44 trillion, up 4.9%, while total liabilities reached $38 trillion, up 4.3% from the previous year. The vast majority of the insurance industry's assets are comprised of corporate debt, sovereign debt, and equities. Overall asset credit quality is high, with a limited proportion of assets below investment grade (3% globally at the end of 2021); however, this was up from 2.4% at the end of 2020 and 1.9% at the end of 2019.

For Life insurance companies, the main impact came from the rise in interest rates. This has been positive for capital resources and the profitability of certain products, with the potential to reduce the risk of deficiencies in technical provisions. For Non-Life insurance companies, on the other hand, the main impact comes from higher inflation, in the form of increased expenses and claims severity, in addition to revaluations of technical provisions. On the asset side, fixed-income portfolios have lost value due to rising interest rates, especially in the case of longer-term securities. However, on average, Non-Life insurance companies have shorter duration fixed income portfolios, which reduces the negative impact of higher interest rates on the value of their asset holdings and thus on their solvency positions, and allows for more immediate increases in financial income from higher interest rates.

Equity markets recorded substantial losses in 2022, but supervisors note that the impact on the solvency positions of insurance companies was, in general, relatively limited because most have a relatively small allocation to equities. However, the drop in the equity markets reduces fee income on unit-linked products. In addition, the report highlights that increased liabilities in collateralized equity-linked products could put pressure on solvency positions, although this could be mitigated to some extent by rising bond yields.

From a financial stability standpoint, supervisors note that these risks will be closely monitored and analyzed for potential liquidity and profitability stress, taking into account the interaction between these risks and the rest of the financial sector and the real economy. Globally, supervisors have increased their monitoring and surveillance of risks to the insurance sector arising from the current environment and are planning further interventions to strengthen their monitoring and analysis processes to identify systemic risks in the insurance industry.

Inter-sector analysis shows that the total systemic risk scores for insurance companies remain significantly lower than those of banks. However, insurance company scores trended upward from the end of 2016 to the end of 2021, while banks' scores trended slightly downward. The increase in systemic risk scores for the insurance industry is mainly due to the interconnection and asset liquidation categories; this accounts for the majority of the total systemic risk rating. The overall scores for these categories have increased by 21% and 44%, respectively. At the level of individual systemic risk indicators, the highest growth occurred in the indicators for Level 3 assets (future and difficult-to-value assets), intra-financial assets, derivatives, short-term financing, and intra-financial liabilities.

The report's second topic examines private equity firms' involvement in the insurance industry through investments, acquisitions, partnerships, reinsurance, and other arrangements. The report highlights that this trend is generally consistent with the transformation of the Life insurance industry. In certain jurisdictions, insurance companies collaborating with private equity firms have been associated with greater involvement in specific activities such as cross-border reinsurance, asset allocation to complex and future assets, and complex and less transparent business practices. However, the analysis of this issue has revealed that these activities are neither new nor exclusive to insurance companies participating in private equity firms, notwithstanding the desire to improve oversight of alternative investments and unregulated markets by refining the analysis exercise to better capture transfers of life insurance portfolios (including through reinsurance).

Finally, it is worth noting that the report discusses climate-related risks to the insurance industry, warning that a lack of progress in reducing global fossil fuel emissions may result in a delayed and divergent transition between countries. In this regard, it is considered essential for insurance supervisors to strengthen their understanding of the type and magnitude of climate-related exposure to support effective supervisory responses. Supervisors expect the impact of climate change to broaden and materially affect insurance companies' assets, risk management, and product development.

2.2.2 EIOPA Financial Stability Report 2022

On December 15, 2022, the European Insurance and Occupational Pensions Authority (EIOPA) published its Financial Stability Report[10], which highlights what it considers to be the main risks for the insurance industry and pension funds. They are concentrated into five main risks: macroeconomic risk, market risk, credit risk, cyber risk, and risks associated with climate change.

Macroeconomic Risk

In Europe, the energy-related component is the main driver of price increases. At the end of September, inflation on consumer prices was estimated at 10% for 2022, and industrial production prices, which often precede consumer prices, jumped to 43.3% in the 12 months preceding August 2022. However, for the moment, inflation expectations anticipated by the financial markets have remained relatively stable. From the analysis of inflation-linked bond prices, these expectations remain slightly above 2% for maturities between 3.5 and 7.5 years, but if the situation continues in a strong labor market environment (with an unemployment rate of 6% on average in Europe in August 2022), the possibility of a spiral of wage and price increases goes up.

On the other hand, Europe's outlook for economic growth has deteriorated significantly. Sustained inflation across the board could eventually lead to a further contraction in the real disposable income of households and businesses and a decline in savings and investment ratios. This, in turn, may lead to lower growth, leaving less room for further tightening of monetary policy without the risk of recession. Thus, the economies of some key countries in the European Union, such as Germany and Italy, are expected to contract in 2023.

From an industry perspective, claims and expense inflation may increase insurance company reserves to account for upward adjustments to expected inflation. The EIOPA report warns that although the largest impact is in the Non-Life and health segment, the inflation of expenses may affect the entire industry. Without higher premiums, underwriting results will also decline. However, even in the compulsory lines, policyholders' lower purchasing power, coupled with intense competition, could restrict the scope for such increases.

Market Risk

The report warns of the risk of increased volatility in bond prices and the use of interest rate derivatives that may result in cash deposit requirements to cover losses arising from these instruments, as occurred with UK pension funds. As for the rise in interest rates, it emphasizes that there may be both positive and negative effects for insurance companies. Thus, when the term of liabilities exceeds that of assets (particularly in Life insurance companies), higher discount rates increase the surplus of assets over liabilities, although the possible revaluation of risk premiums could offset this. Meanwhile, the volume of new business may decrease as a result of a more adverse economic environment, and policyholders may surrender existing contracts on life insurance policies.

Credit risk

European Union sovereign and corporate bond spreads (risk premiums) are considerably higher than at the beginning of the year. An increase in risk premiums has a negative effect on insurance companies' portfolios. Thus, the risk of abrupt repricing of spreads due to higher defaults and liquidity risk for corporate bonds remains relevant, particularly if financing conditions tighten and policy measures supporting these sectors fade out.

In this regard, the report includes an exercise to gauge how much risk premiums can increase before the surplus of insurance companies' assets over liabilities, after all the shocks, falls below the level of the fourth quarter of 2021. It estimates that risk premiums overall could increase by 190 basis points (bps) before fully offsetting the positive effect of inflation and rising interest rates on insurance companies' balance sheets. However, the critical level of increase in risk premiums varies considerably depending on the type of business. The model results in a 240 bps increase in risk premiums for Life insurance companies, which could be understated as the model does not capture loss absorption capacity, 80 bps for Non-Life companies, which are even more exposed without further absorption capacity buffers, and 145 bps for mixed companies. He points out that, due to the overall negative asset-liability term gap, the higher the level of the risk-free interest rate, the higher the level of risk premiums an insurance company can absorb before recording negative effects on its balance sheet.

Cyber risk

Supervisors continue to believe that the importance of digitalization and cyber risks has increased, especially in the current geopolitical context. When considering anticipated developments in terms of risk materiality over the next year, digitalization and cyber risks remain in second place, behind macroeconomic risks. Finally, in this context of growing concern among supervisors regarding digitalization and cyber risks, in November, EIOPA published a discussion paper on methodological principles for insurance stress testing with a particular focus on cyber risks[11]. This document sets out methodological principles that can be used to support the design phase of future stress testing exercises aimed at assessing the vulnerability of insurance companies to cyber risks.

Risks associated with climate change

Finally, the impact of climate change on insurance companies and pension funds remains one of the main priorities of EIOPA's work. In this regard, the report recalls that last summer, which again brought record temperatures, droughts, and fires across Europe, was another reminder of the need for action.

Appendix: macroeconomic forecasts

Table A-1
Baseline and stressed scenarios: gross domestic product (GDP)
(annual growth, %)

	Baseline Scenario (BS)					
	2019	2020	2021	2022(e)	2023(p)	2024(p)
United States	2.3	-2.8	5.9	2.0	0.1	0.9
Eurozone	1.6	-6.3	5.3	3.2	-0.1	1.6
Germany	1.1	-4.1	2.6	1.6	-0.9	1.7
France	1.9	-7.9	6.8	2.5	0.1	1.3
Italy	0.5	-9.1	6.7	3.8	-0.1	1.0
Spain	2.0	-11.3	5.5	4.6	1.0	2.1
United Kingdom	1.6	-11.0	7.5	4.4	-0.9	1.2
Japan	-0.4	-4.7	1.7	1.5	1.1	1.2
Emerging markets	3.7	-2.0	6.8	3.6	3.7	4.1
Latin America	0.1	-7.0	6.8	4.0	1.4	2.1
Mexico	-0.2	-8.2	4.9	2.7	1.0	1.8
Brazil	1.2	-3.6	5.3	3.0	0.9	2.0
Argentina	-2.0	-9.9	10.4	4.9	0.4	1.2
Colombia	3.2	-7.0	10.7	7.6	1.2	1.9
Chile	0.7	-6.2	11.9	2.6	-0.8	1.6
Peru	2.3	-11.0	13.6	2.7	2.5	2.7
Emerging markets, Europe[1]	2.5	-1.8	6.7	0.0	0.1	2.5
Turkey	0.8	1.9	11.4	5.0	1.6	2.0
Asia Pacific	5.9	1.6	7.7	3.4	4.8	4.8
China	6.0	2.2	8.1	3.1	4.8	4.7
Indonesia	5.0	-2.1	3.7	5.2	4.5	5.2
Philippines	6.1	-9.5	5.7	7.0	4.7	6.0
Global	2.9	-3.1	6.1	3.5	2.0	2.7

	Stressed Scenario (SS)					
	2019	2020	2021	2022(e)	2023(p)	2024(p)
United States	2.3	-2.8	5.9	2.0	-0.3	-0.9
Eurozone	1.6	-6.3	5.3	3.2	-0.8	0.4
Germany	1.1	-4.1	2.6	1.6	-1.8	0.7
France	1.9	-7.9	6.8	2.5	-0.5	0.3
Italy	0.5	-9.1	6.7	3.8	-0.8	-0.6
Spain	2.0	-11.3	5.5	4.6	0.2	1.1
United Kingdom	1.6	-11.0	7.5	4.4	-1.3	-0.3
Japan	-0.4	-4.7	1.7	1.5	0.4	0.7
Emerging markets	3.7	-2.0	6.8	3.6	3.1	4.0
Latin America	0.1	-7.0	6.8	4.0	0.8	1.7
Mexico	-0.2	-8.2	4.9	2.7	0.1	0.9
Brazil	1.2	-3.6	5.3	3.0	-0.6	2.0
Argentina	-2.0	-9.9	10.4	4.9	-1.4	0.5
Colombia	3.2	-7.0	10.7	7.6	-2.7	0.3
Chile	0.7	-6.2	11.9	2.6	-2.8	-0.2
Peru	2.3	-11.0	13.6	2.7	1.9	1.4
Emerging markets, Europe[1]	2.5	-1.8	6.7	0.0	-0.1	2.1
Turkey	0.8	1.9	11.4	5.0	-2.2	-2.2
Asia Pacific	5.9	1.6	7.7	3.4	3.3	3.6
China	6.0	2.2	8.1	3.1	3.4	3.6
Indonesia	5.0	-2.1	3.7	5.2	2.5	4.1
Philippines	6.1	-9.5	5.7	7.0	2.3	4.5
Global	2.9	-3.1	6.1	3.5	1.2	2.0

Source: MAPFRE Economics (using data from national statistical centers and IMF)

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[1]Eastern Europe
Forecast end date: 5 January 2023.

Table A-2
Baseline and stressed scenarios: inflation
(% YoY, average)

	Baseline Scenario (BS)					
	2019	2020	2021	2022(e)	2023(p)	2024(p)
United States	1.8	1.2	4.7	8.0	3.9	2.5
Eurozone	1.2	0.3	2.6	8.4	5.0	2.4
Germany	1.4	0.5	3.1	7.9	5.9	2.6
France	1.1	0.5	1.6	5.7	4.8	2.2
Italy	0.6	-0.1	1.9	8.2	5.8	2.3
Spain	0.7	-0.3	3.1	8.4	4.3	2.5
United Kingdom	1.8	0.9	2.6	8.9	6.9	2.5
Japan	0.5	0.0	-0.2	2.4	1.5	0.8
Emerging markets	5.1	5.2	5.9	9.8	7.5	4.4
Latin America	7.7	6.4	9.8	19.7	19.9	17.3
Mexico	3.6	3.4	5.7	8.0	5.2	3.8
Brazil	3.7	3.2	8.3	9.3	5.0	3.8
Argentina	53.5	42.0	48.4	73.1	99.6	75.7
Colombia	3.5	2.5	3.5	10.0	8.7	3.9
Chile	2.3	3.0	4.5	11.5	7.9	2.7
Peru	2.1	1.8	4.0	7.9	5.7	3.0
Emerging markets, Europe[1]	6.6	5.3	9.5	27.9	19.4	9.3
Turkey	15.2	12.3	19.6	72.2	51.0	26.1
Asia Pacific	2.9	2.5	1.0	2.5	2.6	2.2
China	2.9	2.5	0.9	2.3	2.4	2.1
Indonesia	2.8	2.0	1.6	4.3	4.2	2.8
Philippines	2.4	2.4	3.9	5.7	4.4	2.9
Global	3.5	3.2	4.7	8.2	5.6	3.1

	Stressed Scenario (SS)					
	2019	2020	2021	2022(e)	2023(p)	2024(p)
United States	1.8	1.2	4.7	8.0	5.1	4.6
Eurozone	1.2	0.3	2.6	8.4	7.4	5.9
Germany	1.4	0.5	3.1	8.0	7.6	4.6
France	1.1	0.5	1.6	5.7	6.1	5.3
Italy	0.6	-0.1	1.9	8.2	8.2	4.7
Spain	0.7	-0.3	3.1	8.4	6.1	3.7
United Kingdom	1.8	0.9	2.6	9.1	8.1	5.3
Japan	0.5	0.0	-0.2	2.4	2.3	2.1
Emerging markets	5.1	5.2	5.9	9.8	8.1	5.0
Latin America	7.7	6.4	9.8	19.7	21.0	18.5
Mexico	3.6	3.4	5.7	8.0	6.2	5.4
Brazil	3.7	3.2	8.3	9.3	6.8	6.3
Argentina	53.5	42.0	48.4	73.1	103.4	84.6
Colombia	3.5	2.5	3.5	10.0	10.0	6.2
Chile	2.3	3.0	4.5	11.5	9.5	7.6
Peru	2.1	1.8	4.0	7.9	6.8	4.8
Emerging markets, Europe[1]	6.6	5.3	9.5	27.9	20.0	10.0
Turkey	15.2	12.3	19.6	72.2	55.0	39.2
Asia Pacific	2.9	2.5	1.0	2.5	3.4	3.3
China	2.9	2.5	0.9	2.3	3.2	3.2
Indonesia	2.8	2.0	1.6	4.3	4.9	4.1
Philippines	2.4	2.4	3.9	5.7	6.2	5.7
Global	3.5	3.2	4.7	8.2	6.0	3.6

Source: MAPFRE Economics (using data from national statistical centers and IMF)

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[1]Eastern Europe
Forecast end date: 5 January 2023.

Table A-3
Baseline and stressed scenarios: 10-year government bond yield
(end of period, %)

	Baseline Scenario (BS)					
	2019	2020	2021	2022(e)	2023(p)	2024(p)
United States	1.92	0.93	1.52	3.87	3.37	2.72
Eurozone	0.32	-0.19	0.32	2.83	2.43	2.26

	Stressed Scenario (SS)					
	2019	2020	2021	2022(e)	2023(p)	2024(p)
United States	1.92	0.93	1.52	3.87	4.64	4.32
Eurozone	0.32	-0.19	0.32	2.83	3.42	3.60

Source: MAPFRE Economics (using data from national statistical centers and IMF)
Forecast end date: 5 January 2023.

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Table A-4
Baseline and stressed scenarios: exchange rates
(end of period, %)

	Baseline Scenario (BS)					
	2019	2020	2021	2022(e)	2023(p)	2024(p)
USD-EUR	0.89	0.81	0.88	0.94	0.97	0.95
EUR-USD	1.12	1.23	1.13	1.06	1.03	1.05
GBP-USD	1.32	1.36	1.35	1.20	1.20	1.21
USD-JPY	109.12	103.54	115.00	133.73	141.71	137.13
USD-CNY	6.99	6.52	6.35	6.96	7.05	6.53

	Stressed Scenario (SS)					
	2019	2020	2021	2022(e)	2023(p)	2024(p)
USD-EUR	0.89	0.81	0.88	0.94	1.01	0.99
EUR-USD	1.12	1.23	1.13	1.06	0.99	1.01
GBP-USD	1.32	1.36	1.35	1.20	1.14	1.16
USD-JPY	109.12	103.54	115.00	133.73	145.41	141.03
USD-CNY	6.99	6.52	6.35	6.96	7.33	6.81

Source: MAPFRE Economics (using data from national statistical centers and IMF)
Forecast end date: 5 January 2023.

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Table A-5
Baseline and stressed scenarios: official benchmark interest rate
(end of period, %)

	Baseline Scenario (BS)					
	2019	2020	2021	2022(e)	2023(p)	2024(p)
United States	1.75	0.25	0.25	4.50	5.00	2.50
Eurozone	0.00	0.00	0.00	2.50	2.50	1.50
China	3.25	3.00	3.00	2.75	2.75	3.00

	Stressed Scenario (SS)					
	2019	2020	2021	2022(e)	2023(p)	2024(p)
United States	1.75	0.25	0.25	4.50	6.00	5.25
Eurozone	0.00	0.00	0.00	2.50	3.50	3.25
China	3.25	3.00	3.00	2.75	4.00	4.25

Source: MAPFRE Economics (using data from national statistical centers and IMF)
Forecast end date: 5 January 2023.

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References

1/ See: MAPFRE Economics (2022), *2022 Economic and Industry Outlook: Fourth Quarter Perspectives*, Madrid, Fundación MAPFRE.

2/ MAPFRE Economics (2022), *2022 Economic and Industry Outlook: Fourth Quarter Perspectives*, op. cit., pp. 12-21.

3/ Latent risks for the United States economy are varied, but this risk reported in the quarterly Bank for International Settlements (BIS) report, published on December 5, 2022, is notable.

4/ See the risk-free yield curves prepared by the European Insurance and Occupational Pensions Authority (EIOPA), indicating the minimum, average and maximum levels reached in 2021 as well as the level of the latest published curves for the months of June and December 2021. The information can be viewed at: "EIOPA Curves", at: https://app.klipfolio.com/published/29577612d0ba9ff3681af85b8ee8a998/curvas-eiopa

5/ Swiss Re Institute (2022). *Hurricane Ian drives natural catastrophe year-to-date insured losses to USD 115 billion, Swiss Re Institute estimates.* Press release.

6/ Munich Re (2022). *Natural disaster review for first half of 2022.* Media information.

7/ Insurance Council of Australia (2022). *New research shows every Australian pays for extreme weather.* News release.

8/ Fitch Ratings (2022). *Hard Property Catastrophe Reinsurance Market to Support 2023 Margins.*

9/ See: International Association of Insurance Supervisors (2022), *Global Insurance Market Report 2022*, at: https://www.iaisweb.org/activities-topics/financial-stability/gimar/

10/ See: EIOPA (2022), *Financial Stability Report 2022*, at: https://www.eiopa.europa.eu/document-library/financial-stability-report/financial-stability-report-december-2022_en

11/ See: EIOPA (2022), *EIOPA consults on cyber component in its insurance stress testing framework*, at: https://www.eiopa.europa.eu/media/news/eiopa-consults-cyber-component-its-insurance-stress-testing-framework_en?source=search

Other reports from MAPFRE Economics

MAPFRE Economics (2022), *GIP-MAPFRE 2022,* Madrid, Fundación MAPFRE.

MAPFRE Economics (2022), *The Latin American Insurance Market in 2021*, Madrid, Fundación MAPFRE.

MAPFRE Economics (2022), *The Spanish Insurance Market in 2021*, Madrid, Fundación MAPFRE.

MAPFRE Economics (2022), *2021 Ranking of Insurance Groups in Latin America*, Madrid, Fundación MAPFRE.

MAPFRE Economics (2022), *2021 Ranking of the Largest European Insurance Groups*, Madrid, Fundación MAPFRE.

MAPFRE Economics (2022), *Global Savings After the Pandemic and Insurance Industry Investments*, Madrid, Fundación MAPFRE.

MAPFRE Economics (2022), *COVID-19: A Preliminary Analysis of Demographic and Insurance Industry Impacts*, Madrid, Fundación MAPFRE.

MAPFRE Economics (2021), *A Global Perspective on Pension Systems*, Madrid, Fundación MAPFRE.

MAPFRE Economics (2020), *Elements for the Development of Life Insurance*, Madrid, Fundación MAPFRE.

MAPFRE Economics (2020), *Financial Inclusion in Insurance*, Madrid, MAPFRE Economics.

MAPFRE Economic Research (2019), *Population Aging, Madrid*, Fundación MAPFRE.

MAPFRE Economic Research (2018), *Global Insurance Potential Index*, Madrid, Fundación MAPFRE.

MAPFRE Economic Research (2018), *Health Systems: A Global Analysis*, Madrid, Fundación MAPFRE.

MAPFRE Economic Research (2018), *Insurance Solvency Regulation Systems*, Madrid, Fundación MAPFRE.

MAPFRE Economic Research (2017), *Elements for Insurance Expansion in Latin America*, Madrid, Fundación MAPFRE.

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