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**Inflation: recent developments, outlook and monetary policy
implications**

XII Encuentro Financiero Expansión-KPMG

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*English translation of the original speech in Spanish.

I should like, first, to express my gratitude for the invitation to participate once again in this event, attended each year by the senior managers of the main financial institutions in Spain.

On this occasion, I would like to take the opportunity of this closing session to address the question of recent inflation developments. This is a subject that has, over the course of the year, attracted increasing attention from those of us having some responsibility for economic policy, the media and also the general public, not only in Spain, but also worldwide. This should come as no surprise, when we consider that the harmonised index of consumer prices in the euro area had not reached October's level of 4.1% year-on-year since 2008, while in Spain the 5.4% rate recorded was the highest since September 1992.¹ Globally, the increase has been most striking in the United States, where the 6.2% rate recorded amounts to the largest increase in consumer prices since December 1990.

Accordingly, the interest in analysis of the extent and characteristics of this rise in inflation is fully justified. We are all well aware of the undesirable consequences of persistently high inflation, such as the distortion of resource allocation in the economy and the effects on the income and wealth of different groups of agents.

My address will consist of three parts. First, I will examine the factors behind the current rise in the rate of inflation. A detailed analysis of these factors is a necessary first step in the process of making a well-founded assessment of the expected degree of persistence of these developments, an issue which I will discuss in the second part of my presentation. Finally, I will offer some thoughts on the manner in which the ECB's monetary policy should be conducted in this environment.

My conclusion, I will tell you now, is that, on the basis of the information and analysis currently available, the rise in inflation rates that we have been seeing can be expected to be transitory, despite having proved to be stronger and more persistent than anticipated a few months ago. However, this conclusion is based on certain considerations – both external and regarding the behaviour of economic agents – that I will discuss in some detail later on. In any event, this assessment should lead us to avoid a premature withdrawal of monetary stimulus, in particular in a context in which the course of the health crisis and its economic effects continues to be surrounded by significant uncertainty.

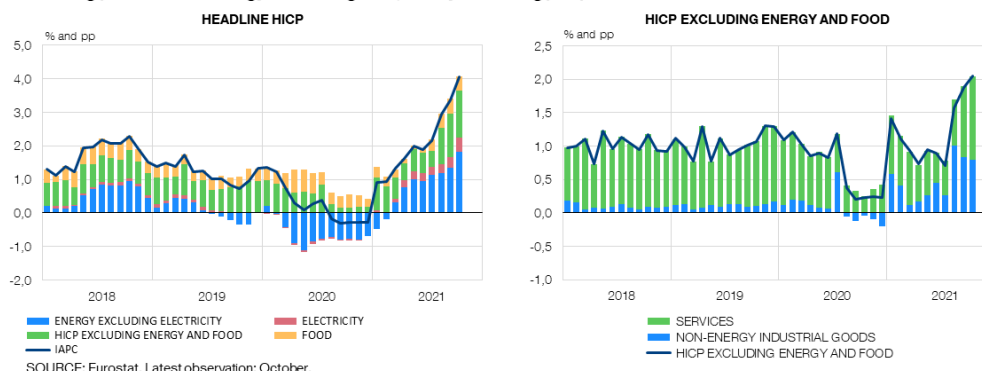
The causes of the rise in inflation

Inflation in the euro area, and in Spain too, has increased almost uninterruptedly over the course of 2021, a phenomenon that has also been observed globally. Between February (one year on from the month before the start of the pandemic) and October, headline inflation has surged from 0.9% to 4.1% in the euro area. The increase in Spain over the same period was even more pronounced, namely from -0.1% to 5.4%.

¹ According to the early estimate for November, the year-on-year HICP growth rate will pick up further to 5.6% in Spain this month.

INFLATION HAS ACCELERATED SHARPLY THIS YEAR (IN THE EURO AREA, FROM -0.9% IN FEBRUARY TO 4.1% IN OCTOBER)

- **The energy component accounts for most of the increase:**
 - It contributed 2.3 pp to inflation in October (the electricity component accounted for 20% of the increase).
 - The non-electricity energy component combines the (temporary) base effect prompted by the fall in oil prices in spring 2020 with the price rises observed in recent months, against a backdrop of global recovery.
- Likewise, the growth of the HICP excluding food and energy accelerated between July and October (from 0.7% to 2.0%), owing above all to rising prices of non-energy industrial goods, clearly exceeding pre-pandemic levels.



The high level of inflation in October in the euro area as a whole is explained, primarily, by energy prices, which contributed 2.3 pp to the headline rate of 4.1%. In Spain, the contribution of energy prices was even larger (3.7 pp), since the weight of energy in the consumption basket is greater and because the responsiveness of retail electricity prices to wholesale prices is above the euro area average. Hence, while in the euro area the higher electricity prices contribute one fifth of the increase in the energy component of the inflation rate (with high heterogeneity across countries), in Spain they contribute 50%.

But underlying inflation² has also accelerated this year, rising from 1.1% to 2% in the euro area between February and October, with similar increases in services (from 1.2 % to 2.1 %) and non-energy industrial goods (from 1 % to 2%). In Spain, underlying inflation rose to an even greater extent during this period, from 0% to 1.4%. However, in the case of Spain the acceleration was essentially attributable to the services component, which in this eight-month period rose from -0.1 % to 1.6%, while non-energy industrial goods increased from 0.3% to 0.9%.

What are the factors that account for this relatively broad-based increase in the rates of change of prices of different consumer goods and services?

For the purposes of this analysis, I think it is useful to consider separately the contributions of three groups of factors, although they are not fully independent of each other.

The **first** of these factors is statistical in nature and arises from the sudden sharp fall in demand at the beginning of the pandemic. This slump in demand gave rise, from March

² Indicator of prices excluding unprocessed food and energy.

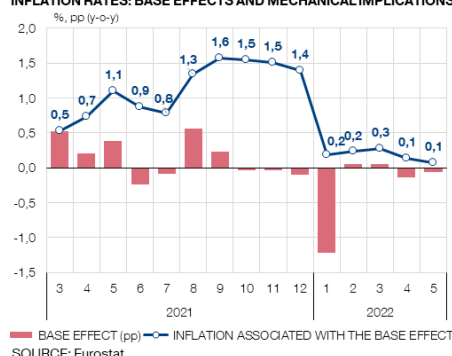
2020, to a pronounced slowdown in the prices of many products, particularly of those whose consumption requires social mobility and interaction, such as energy products and numerous services.

We usually measure price changes over time by means of year-on-year rates, that is to say by comparing their level at a particular point in time with their level 12 months previously. Consequently, the slowdown, or even decline, in prices in spring 2020 was reflected in very low or negative year-on-year inflation rates until the same months of 2021, given that these rates were calculated by comparing price levels in a pandemic month with those of a pre-pandemic month.

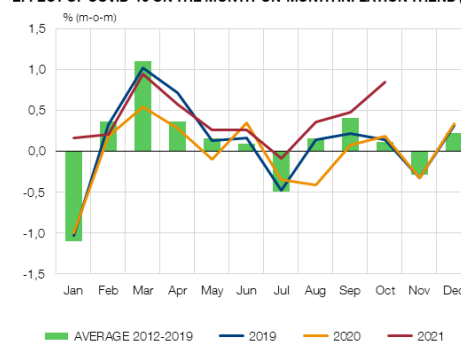
FACTOR 1: THE ROLE OF BASE EFFECTS FROM FALLING INFLATION DURING THE PANDEMIC

- The slowdown in some components between March and June 2020 has given rise to base effects that play a significant role in explaining the acceleration in inflation since February this year.
- The contribution of the base effects appears to have peaked in September (1.6 pp) and wane in the following months.
- The crisis has also prompted (one-off) changes in the normal patterns of some prices (such as those linked to tourism), giving rise to an atypical inflation performance in some months.

INFLATION RATES: BASE EFFECTS AND MECHANICAL IMPLICATIONS



EFFECT OF COVID-19 ON THE MONTH-ON-MONTH INFLATION TREND (%)



Naturally, once a year had passed since the start of the pandemic the year-on-year inflation rate began to be calculated by comparing price levels in months that followed the onset of the crisis, thus incorporating its disinflationary effect. This contributed significantly to the acceleration in the year-on-year rate of change of consumer prices from March 2021.

The consequences of the emergence of these positive base effects have been particularly pronounced in the case of non-electricity energy goods, a component that plummeted in 2020 owing to the fall in oil prices. Thus, between February and October 2021, the base effect of this component appears to have contributed, in cumulative terms, a total of 0.9 pp to the acceleration in headline inflation observed during that period in the euro area (1.3 pp in Spain).

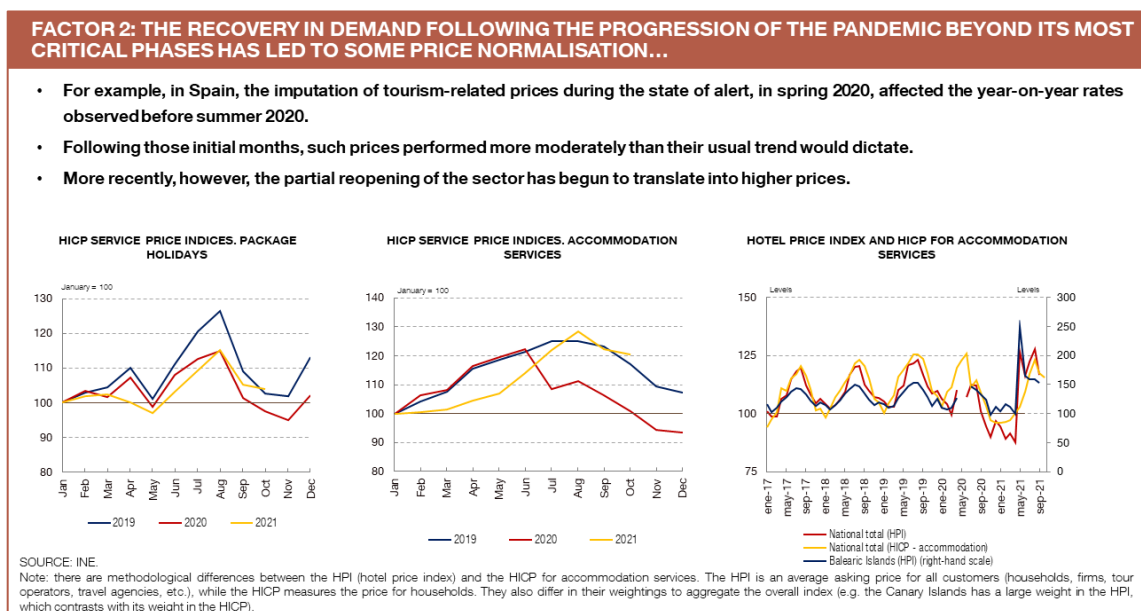
Likewise, in the case of services, the base effects did not begin to emerge until summer 2021,³ but still had an upward impact of 0.4 pp in the euro area as a whole (0.6 pp in Spain) on the increase in headline inflation observed between February and October.

³ This relative delay is because the prices of a significant proportion of the items of this component, corresponding to tourism and leisure services, had to be imputed in the months following the start of the pandemic, since the restrictions imposed to contain COVID-19 cases led to the almost complete shutdown of these activities. When the economy began to be reopened, in July 2020, prices could be measured again in these sectors, and significant declines were recorded.

Thus, all in all, around 40% of the acceleration in the overall inflation rate in the euro area would be due to the aforementioned base effects. In Spain they would account for a little less: around 30%.

In addition, some idiosyncratic effects have been present in some countries with a material effect on the euro area as a whole. In particular, it is worth noting the temporary reduction of VAT in Germany between July and December 2020, which caused euro area HICP to increase by nearly 0.4 pp in January this year, and also entailed a positive base effect of a similar magnitude in July.

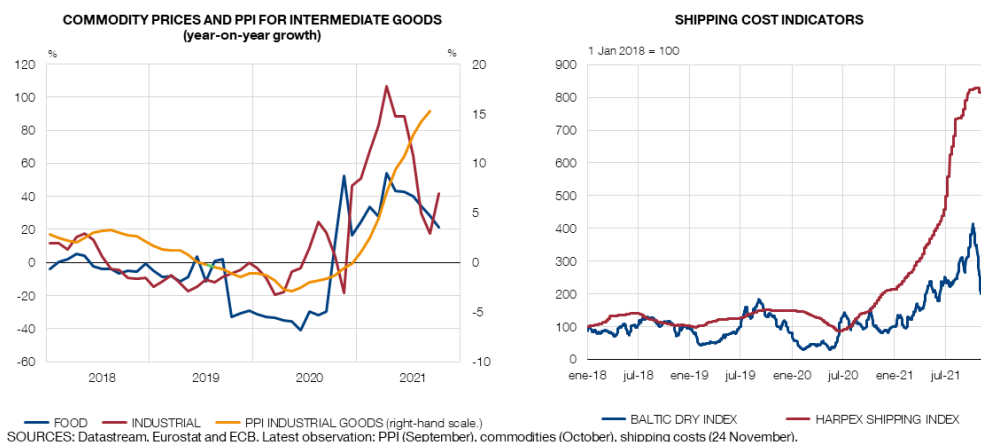
Second, part of the rise in inflation relates to the recovery in demand following the gradual progression of the pandemic beyond its most critical phases, which has led to some normalisation of price levels. In the case of Spain, tourism-related prices are a case in point: their developments since the middle of this year have resembled those seen in 2019 more than those in 2020.



Also, globally, the increase in demand has been concentrated on certain goods at the expense of services, and the supply of these products has not expanded at the same rate, which has resulted in a broad range of intermediate goods used in productive processes becoming more expensive. At the same time, the frailties of the global shipping network have given rise to delays in delivery periods to supply this demand, prompting an additional increase in their prices. A striking example of the scarcity of supplies is the case of semiconductors, which has led to worldwide delays in the production of cars and other goods requiring these electronic components.

...AND THE GLOBAL BOTTLENECKS ARE RAISING PRODUCTION PRICES

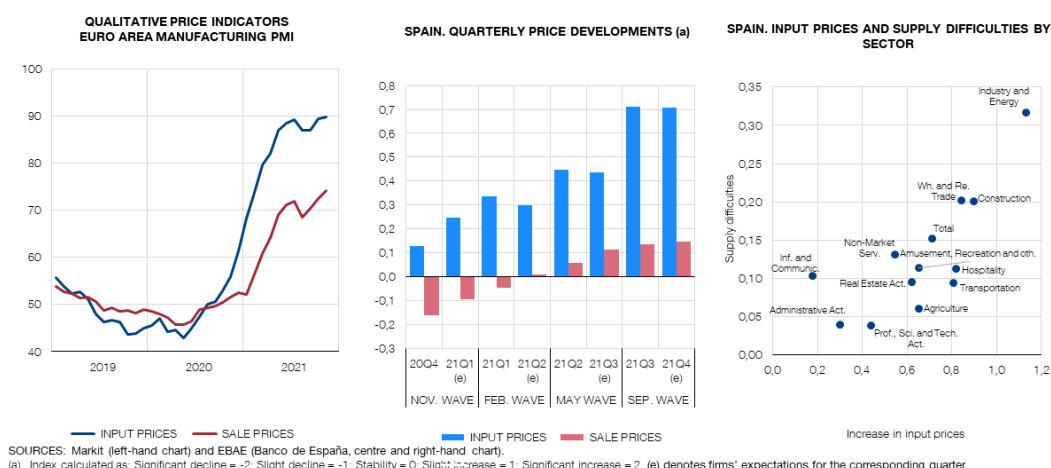
- The recovery in global demand, the shift in the latter's composition in favour of certain goods and the frailties of the global shipping network have generated bottlenecks.
- This has led to a sharp acceleration in industrial production prices particularly for intermediate goods.



As one would expect, the productive sectors in which supply difficulties are most pronounced are those seeing the largest increases in the prices of their productive factors. In any event, PMI survey data indicates that, for the time being, firms are only partially passing the increase in their input prices through to selling prices. The same finding is obtained from the Banco de España business activity survey (EBAE). This information points to a squeeze on profit margins.

FIRMS ARE ONLY PARTIALLY PASSING ON THE INFLATIONARY PRESSURE GENERATED BY SUPPLY DIFFICULTIES, THEREBY NARROWING THEIR MARGINS

- Euro area firms are not fully passing production cost increases through to sale prices.
- In Spain, the sectors where supply disruptions are greatest are those experiencing the largest cost increases.

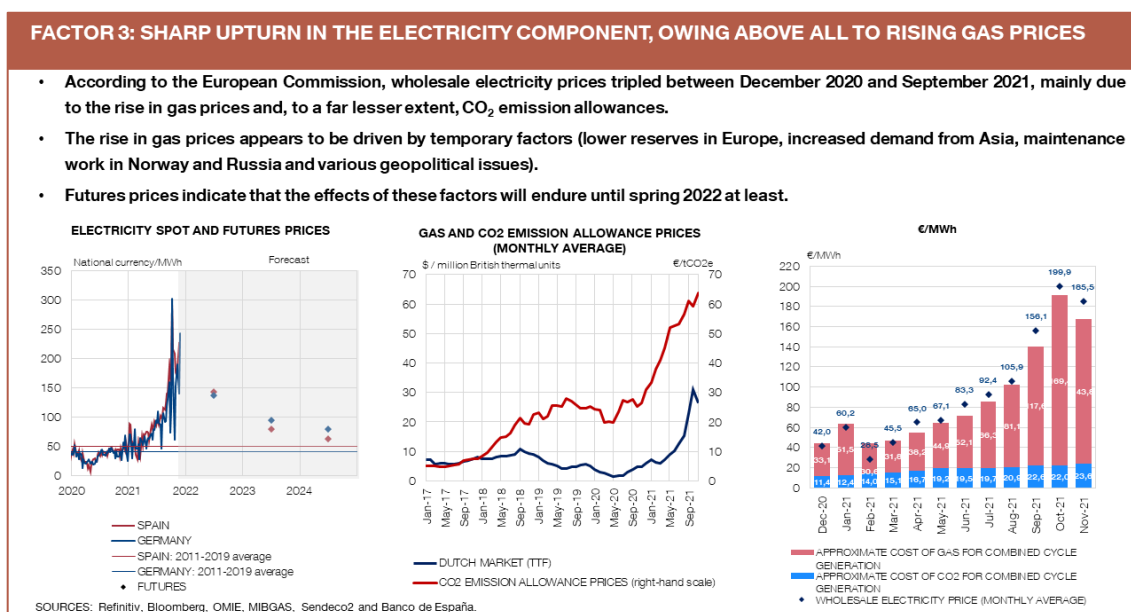


Third, and lastly, I would like to focus on the prices of the energy goods in the consumption basket. These prices have been considerably affected by the supply bottlenecks for certain goods that I have just referred to and by base effects. However, the magnitude of the increases in these prices has been greater than can be explained by these two factors.

The price rises have been particularly notable in the case of gas, which has had very significant effects on electricity prices, on account of the wholesale market price setting

mechanisms that exist in the European Union. Moreover, the energy bill has also been affected, albeit to a lesser extent, by the increase in the prices of greenhouse gas emission allowances.

If, for example, we take developments in the Spanish wholesale electricity market, where trends have been very similar to those in other European countries, prices had, by the middle of November, increased by a factor of 4.4 since the end of last year. Almost 80% of this increase is explained by the rise in gas prices, while the price of emission allowances contributed almost 10%.



The medium-term outlook

From this analysis of the factors that have led to rising inflation rates, we may conclude that they are **predominantly temporary in nature** and, in the absence of further shocks, should start to subside over the course of the coming year.

First, in relation to the base effects, the step up of inflation rates as a result of comparison with the price levels observed at the beginning of the pandemic is already being reabsorbed; from spring 2022 it will cease to make any additional contribution, positive or negative, to the rate of change of consumer prices, thus contributing to the moderation in inflation rates that we are seeing in this final stage of the year.

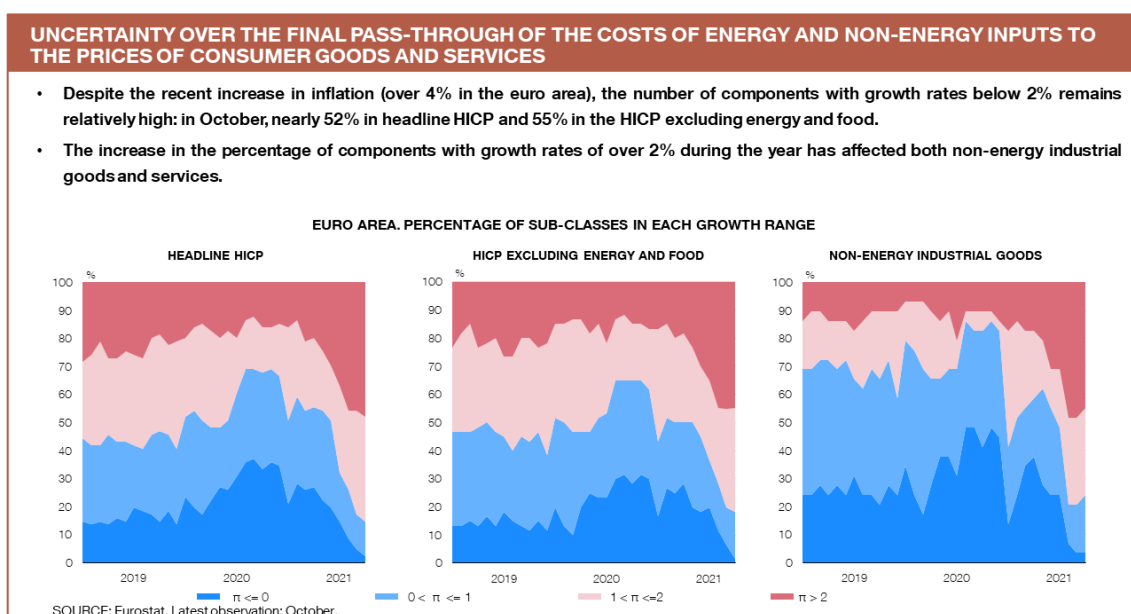
Second, as supply adjusts to demand, we can expect some of the observed cost increases to be corrected. The eventual shift of global consumer expenditure towards services, as the remaining restrictions on activity in these sectors are lifted, should contribute to this process.

Third, a considerable part of the increase in prices in the wholesale electricity market should also be expected to be predominantly transitory. In this regard, as already mentioned, these prices are linked to those of gas which have surged since the beginning of the year. Gas futures markets point to a significant price fall as of next spring, possibly reflecting the current prospects for an increase in supply when some of the factors that have been

depressing it in recent quarters fade away – supply problems for geopolitical reasons and disruptions arising from a lack of infrastructure maintenance (postponed during the pandemic) – and also the reduction in demand after the winter. This would, in turn, have a moderating impact on the price of electricity. It should also be noted that even if prices were to stabilise at their current high levels, the year-on-year inflation rate would theoretically be 0% a year after the rise began.

However, some **uncertainties** surround this gradual price normalisation scenario.

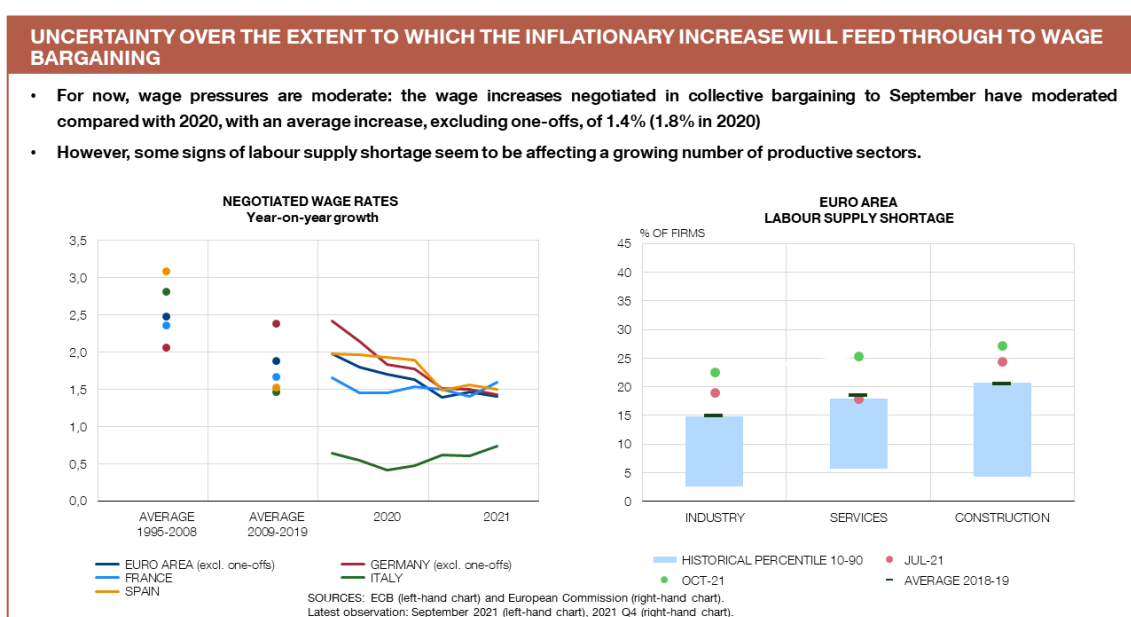
The **first** stems from the higher costs of energy and non-energy inputs feeding through to consumer goods and services prices. At present, these higher prices have not been fully passed through to the various HICP items. As a result, despite this indicator surging in recent months, the inflation rate for more than one-half (52%) of the goods in the euro area consumption basket is still below 2%. The same applies to 55% of such items when considering the HICP excluding unprocessed food and energy. Indeed, the prices of 15% of the items of both these indices are still growing at rates below 1%. This price acceleration signal is even more subdued in Spain, since in October 70% of the HICP items were growing at a rate below 2%. The proportion is similar in the case of underlying inflation.



Nevertheless, looking ahead, a potential prolongation of the higher costs, for example, because the supply chain bottlenecks take longer to clear or because the difficulties facing the normal supply of gas in Europe perpetuate, would make it less likely that profit margins can continue to absorb the higher costs. This would exert greater pressure on headline inflation. Furthermore, historical evidence suggests that there is some lag between an increase in intermediate goods' prices and these higher costs feeding through to consumer prices. Therefore, the increases observed in the past could still contribute to an increase in inflationary pressures on final goods in the coming months.

Wage developments and the possible emergence of “second-round effects” are a **second** source of uncertainty.

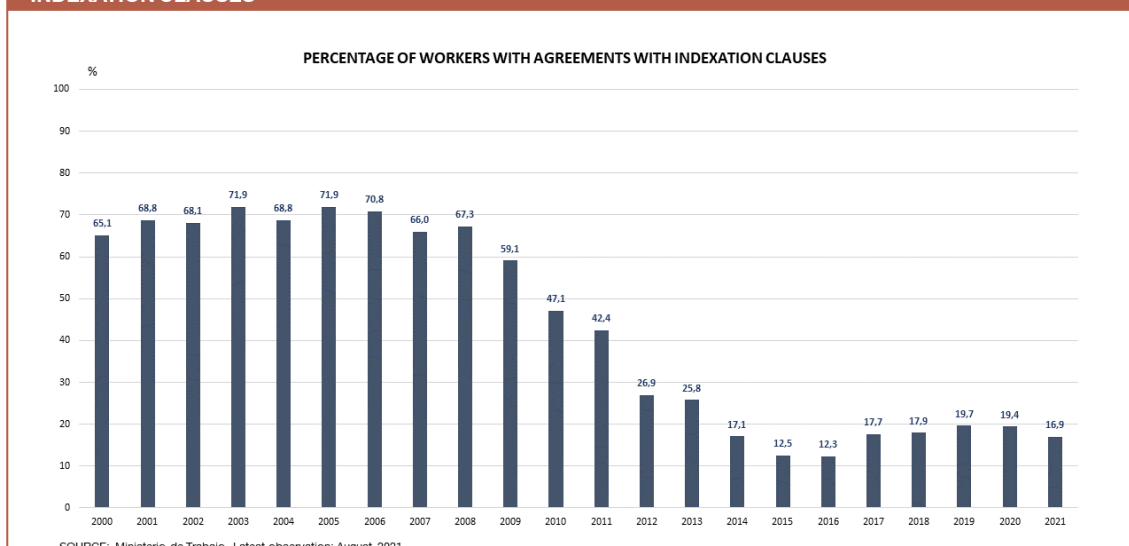
For the time being, the second-round effects observed across Europe are subdued. For the euro area, up to September, the average negotiated wage increase was 1.4% (excluding transitory effects), which was four tenths lower than last year. In Spain, to October, the average negotiated increase was 1.6% this year, 0.2 pp below that agreed for 2020. However, if the analysis is confined to newly signed agreements, which more closely reflect the outcome of collective bargaining at each specific point in time, we observe that the agreed wage increases for 2021 have picked up over the year, from 1.1% in the agreements reached in January to 1.7%, on average, for those concluded in the first ten months of the year. In Germany, where more detailed data than for other euro area countries are available, some of the latest settlements, such as in retail trade, show larger rises (3% for 2021). In Spain, the unions in the main sectors are demanding wage increases of 4-5% for next year. Nonetheless, these figures are not very different from those seen before the pandemic.



A factor that would support the expectations for moderate second-round effects is the limited incidence of indexation clauses in collective agreements, which has in fact decreased significantly in recent years. In Spain, for example, the decline has been particularly sharp, from around 70% before the onset of the global financial crisis to 17% at present. In the euro area as a whole⁴ only 3% of private sector employees have their wages automatically indexed to inflation.

⁴ See Gerrit Koester y Helen Grapow (2021), [“The prevalence of private sector wage indexation in the euro area and its potential role for the impact of inflation on wages”](#), Box in the ECB Economic Bulletin, Issue 7/2021.

IN SPAIN, THE RISKS OF SECOND-ROUND EFFECTS ARE MITIGATED BY THE DECLINING WEIGHT OF INDEXATION CLAUSES



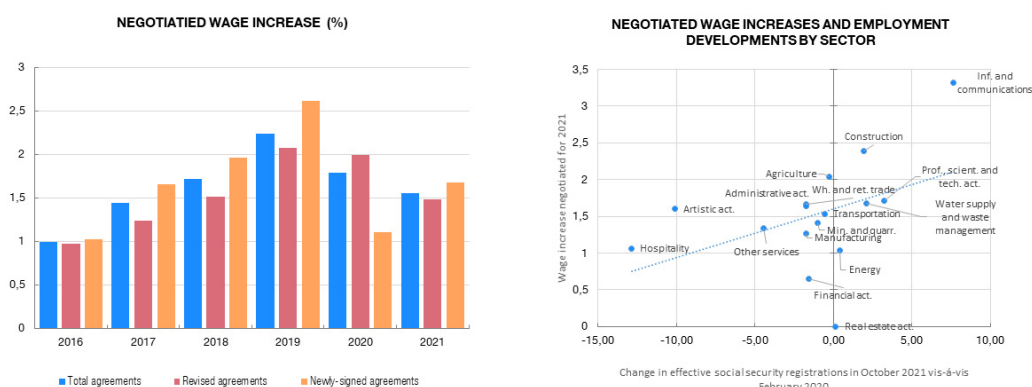
In addition, although evidence is limited, both in Spain and in the rest of the euro area, we are generally seeing greater wage increases in those productive sectors where employment is faring more favourably and there is therefore less slack. In other words, wage increases in certain sectors are for the time being reflecting factors that are consistent with a more favourable cyclical position in some sectors, rather than indiscriminate across-the-board increases in remuneration. However, signs of labour scarcity are spreading to an increasing number of sectors, which could affect future wage demands.

In this regard, while excessive wage increases across the board would be counter-productive in the current setting, increases in wages that are consistent with productivity and demand at individual and firm level, respectively, would be welcome. This would help us to achieve our inflation aim in the medium term, while avoiding undesired second round effects.

In any case, as regards these two factors, the longer the current inflation episode lasts, the greater the probability that the increase in inflation becomes persistent, both because cost increases are passed through more fully to final prices and because the increase in these prices gives rise to greater wage demands.

IN SPAIN, FOR THE TIME BEING, NEGOTIATED WAGE INCREASES ARE MODERATE

- The wage increases negotiated in collective bargaining to October have moderated relative to the previous year, with an average increase of 1.6% to 2021 (1.8% in 2020), although an increase is evident (to 1.7% in October) in newly signed agreements (from 1.1% observed in January).
- The wage increases tend to be somewhat larger in sectors with better employment developments to October.



Third, and closely related to my previous point, while estimating the degree of economic slack is particularly hard against the backdrop of the pandemic, especially given its uneven effects across sectors, it should be borne in mind that, although real GDP in the euro area is expected to reach its pre-pandemic level in the fourth quarter of this year, it is still a long way off the pre-crisis trend path (by around 3% compared to the December 2019 Eurosystem forecast), which is a good indicator of when the recovery from the pandemic is complete. Thus, unlike in the United States, the aggregate level of slack remains high in the euro area.

Indeed, unless one believes that the pandemic caused a large permanent destruction of supply - for which there is no evidence - potential output must have continued to rise during the pandemic. And the distance between that potential level of GDP and the actual level gives an indication of the size of the gap that remains to be closed. Until the gap is closed, it is hard to believe that inflation will remain high or even on target in the medium-term.

And, according to the available macroeconomic projections, this gap will remain negative over the next few quarters and will only be closed at the end of a medium-term horizon (two or three years).

Fourth, in the short term, risks to the growth outlook remain tilted to the downside. This could also weaken the hypothetical underlying inflation pressures.

The resurgence of the pandemic in some euro area countries is somewhat undermining the economic outlook and recent virus variants are a reminder that we are still not out of the woods as regards the pandemic crisis, even if economies have shown high adaptability to new waves.

Also in the near term, it should be borne in mind that the euro area is highly dependent on external energy. Therefore, the current shock is worsening the terms of trade and, as a result, entails a real loss of income for households and businesses, with potential adverse effects on consumption and investment. Thus, the exogenous price shocks we currently face pose a risk that may make the economy diverge further from the pre-pandemic path,

because of the downward impact they have on demand. Indeed, real wages are currently falling and firms' profit margins are being squeezed.

It is also true that the sizeable savings amassed by households during the crisis (estimated at more than 6% of euro area GDP) should enable these adverse effects to be mitigated; however, we also know that a very significant portion of the saving is mostly related to high-income households that usually have a relatively lower propensity to consume. Indeed, the current inflation shock is also likely particularly penalising for low-income households, who spend a larger part of their income on energy bills and food, the two areas where prices are currently rising. As a result, this may squeeze their ability to consume elsewhere.

Fifth, over a longer time horizon, we must also consider the role that the fiscal policy stance could possibly play. According to the information available, fiscal policy will remain expansionary in 2022. However, beyond some countries' pre-pandemic structural deficits and the need to tackle the challenge population ageing poses to the public finances, the deterioration of the public finances during the pandemic should necessarily lead to a gradual fiscal consolidation process in the medium term. While this is necessary to ensure fiscal sustainability, it will have an adverse effect on economic growth and inflation. This effect is not completely factored into the current macroeconomic projections. Nevertheless, it should be mitigated by the use of Next Generation EU funds.

When assessing the possible impact of the inflationary rise in the medium term, it is important to consider as a starting point the disinflationary **structural trends** observed over much of the past decade, which was the basis for very low inflation rates, and analyse the arguments that could change them.

One of the characteristics of the disinflationary process of the pre-pandemic years was the apparent weakening of the connection between the degree of cyclical slack and price and wage growth. Various arguments have been brandished to explain this globally observed phenomenon. These include developments such as globalisation, the automation of production processes and the expansion of e-commerce, which will have contributed to tempering workers' wage demands and firms' capacity to raise their profit margins. Further, demographic developments – which have a high level of inertia given their nature – will have contributed in recent years to keeping demand pressures relatively moderate.

In my view, it is very premature to consider that the future impact of the foregoing factors may have declined after the pandemic. There are, however, at least two main factors that could, in principle, at least partly counterbalance the effects of these past trends on inflation dynamics in the future.

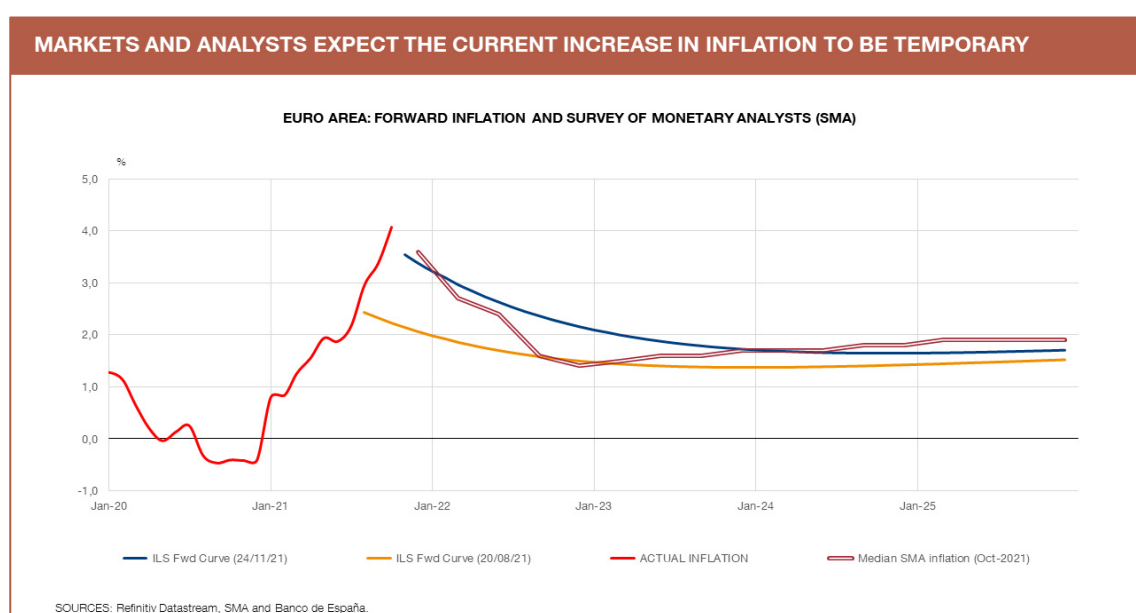
First, the energy transition, which will tend to drive up the cost of greenhouse gas emission allowances. In addition, as the fight against climate change requires that the most polluting sources of energy cease to be used, it will deter investment in fossil fuel production sectors. This could, during a transition period, push up energy production costs.

A **second** factor to consider is the possibility that some of the forces that have previously driven the increased globalisation of economic relations are slowing, with the knock-on dampening effect on final goods and services. Specifically, in the pandemic-induced setting,

we cannot rule out that a more secure supply, for example, rather than greater efficiency, is now the driver of decisions on relocating production or seeking suppliers.

Overall, the transitory nature of the current high inflation rate is well reflected in analysts' forecasts, which, on average, point to inflation for the euro area in 2023 and 2024 below the ECB's price stability target of 2%. For example, the latest European Commission macroeconomic projections (from early November) envisage euro area HICP peaking at 3.7% in 2021 Q4, before slowing to 1.4% in 2022 H2. It would then increase slightly to 1.5% by end-2023.

In the same vein, based on the latest ECB Survey of Monetary Analysts (for October), inflation will fall below 2% as of mid-2022 and will remain below that level for the rest of the current projection horizon.



Financial market data, such as inflation-linked swap rates, point in the same direction. And, in addition, we must bear in mind that the rates implicit in those swaps are not a perfect gauge of investors' genuine inflation expectations, as they incorporate undetermined risk premia that can be highly unstable over time. With this caveat in mind, according to the swaps market, medium and long-term inflation expectations have increased since August but remain below 2%. In particular, the forward curve implicit in these swaps depicts a downward path for inflation in the euro area as a whole as of next year, which will take it to below the target of 2% as of 2023. Therefore, market price-based expectations also point to the current inflationary pressures being reabsorbed in the medium and long term.

By comparison, the consensus forecasts for inflation in the medium term in the United States are clearly higher than in the euro area (2.4% in 2023 and 2.3% in 2024). And the implicit forward curve in inflation-linked swaps shows inflation expectations of 2.6% and 2.5% at four and ten years, respectively, far higher than those observed for the euro area.

Monetary policy implications

When analysing the monetary policy implications of this inflation outlook, we must bear in mind the new strategic framework that has informed ECB monetary policy since it was introduced in July.

The new monetary policy strategy adopts a 2% inflation target over the *medium term* for the euro area as a whole. The medium-term stance of this target enables an important consideration to be taken into account, namely that monetary policy decisions have a gradual, rather than immediate, effect on inflation, to the extent that their full effect tends to occur with quite a delay. Therefore, the inflation relevant to monetary policy decisions is not the latest observed rate, or even that forecast for the coming year, but rather that which we expect over the medium term, which is typically a timespan of around two or three years. I would add that the length of the medium term is dependent on the state of the economy. When demand shocks prevail, it is shorter and closer to the standard transmission lag of around two years. When supply shocks prevail, and there are no serious risks that inflation expectations might be contaminated by the effect these shocks normally have on actual inflation, the medium-term horizon tends to be longer.

The new strategy also establishes that the inflation target is *symmetric*, meaning negative and positive deviations of inflation from the target are equally undesirable. Achieving this symmetry in inflation rates, namely a situation in which inflation oscillates evenly around the target, is not always easy, due to the *lower bound* on interest rates. As a result, the new strategy also takes into account the implications of this lower bound. First, by establishing the need for especially forceful or persistent monetary policy measures when the economy is operating close to this lower bound, as has been the case in recent years. And second, by stressing that these measures may also entail a transitory period in which inflation is moderately above target.

How has the ECB carried over its new strategic framework to monetary policy instruments?

One initial and particularly visible aspect was the revision of our forward guidance last July, which now describes three conditions that should be met before interest rates are raised. First, the ECB Governing Council must see “inflation reaching 2% well ahead of the end of its projection horizon”. As President Lagarde explained, the term “well ahead” can be interpreted as the midpoint of our projection horizon. Second, inflation must stand at 2% “... durably for the rest of the projection horizon”. Third, the Governing Council must be of the view that “progress in underlying inflation is sufficiently advanced to be consistent with inflation stabilising at 2% over the medium term”.

With these conditions, we aim to avoid premature tightening of monetary policy in response to inflation running above the target, when such deviation is deemed to be temporary or to owe to more volatile and exogenous components, such as energy prices.

Indeed, the monetary policy strategy we adopted in July finds its value precisely in the sort of situation we now face. Confronted with an exogenous price shock and while still in a context of economic slack, a tightening of monetary policy would only add to the negative consequences of that shock on demand and, therefore, on medium-term inflation. Moreover, in the current presence of a mismatch between supply and demand triggered by

demand shifting from services to goods, the correct policy response to bring inflation back down is to facilitate increased supply. That in turn is an argument for keeping financing conditions supportive.

On the basis of, first, the new monetary policy strategy and the current forward guidance, and, second, the inflation outlook that I described earlier, it can be concluded that we are unlikely to witness interest rate hikes next year or even for some time thereafter, since the information and analysis available to us suggest that the aforementioned conditions for an interest rate increase seem unlikely to be met within that time frame.⁵

In any event, it should be recognised that we monetary policymakers must arrive at decisions against a background of considerable uncertainty as to the path of inflation. Accordingly, we are inevitably susceptible to mistakes. There are essentially two types of such mistakes. First, we might opt to delay too long in tightening monetary policy, on the erroneous diagnosis that the current high inflation is largely temporary and will peter out in the medium term. Conversely, we may tighten monetary conditions prematurely in the mistaken belief that the overshooting is not only not temporary, but will persist in the medium term.

In the current context, it is better, in my view, to err on the side of caution when it comes to adjusting our monetary policy, and therefore to be patient. This is because premature tightening would probably prove costlier, since it could potentially trigger an even larger undershooting of inflation than envisaged at present, advancing us towards a scenario not entirely different from that we experienced for much of the period between the end of the financial crisis and the onset of the pandemic. All this at a time when our capacity to add monetary stimulus through additional interest rate cuts is hindered by the lower bound. On the contrary, there is no similar limit when raising interest rates to anchor inflation expectations to their medium-term target. In other words, it should be taken into account that our monetary toolkit is *a priori* better suited to confronting potential scenarios of high inflation than to lifting inflation expectations when they have been too low for too long, as the experience of the best part of the last decade shows.

In any case, we must be on the lookout for any indications of a deanchoring of inflation expectations, since this would be a key factor in making this bout of high inflation endure. Accordingly, we will have to monitor the signals from a broad range of information, such as prices on financial markets and the responses to surveys of different economic agents, including households, firms and professional forecasters. Nor must we forget that, in addition to sound monetary policy actions, anchoring expectations requires effective and credible communication.

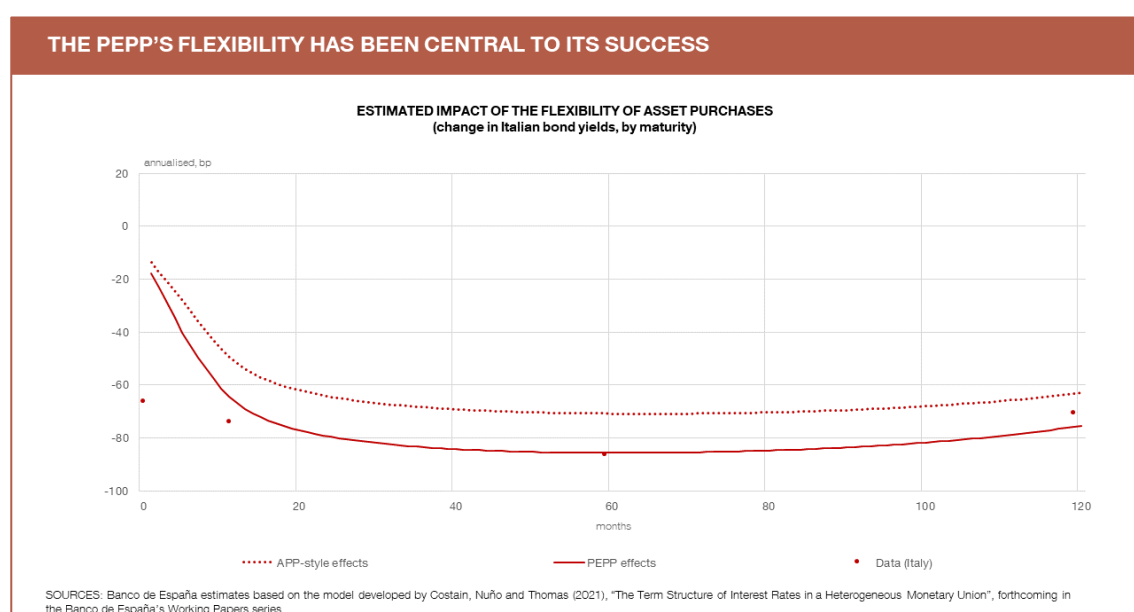
Allow me to now share some thoughts on our asset purchase programmes.

As you know, the pandemic emergency purchase programme (PEPP) has been an essential part of our monetary policy response to the pandemic crisis. Indeed, the PEPP has allowed favourable financing conditions to be maintained for all euro area agents and countries

⁵ As an illustration, if those median expectations that were recorded in our Survey of Monetary Analysts (SMA) for October are still anything to go by, even standing in 2023 and looking ahead from that point in time, our forward guidance would still give no reasons to hike rates in 2023.

during the pandemic crisis. Net purchases under the PEPP will last as long as the pandemic crisis and its effect on inflation persist. At our December meeting, we will decide whether the conditions are in place to potentially end net purchases under this programme. In any event, once those net purchases stop, we will continue to reinvest maturing principal payments from the bonds purchased under the PEPP until the end of 2023 at least.

As regards our regular asset purchase programme (APP), our forward guidance is for net purchases to continue until “shortly before” we begin to raise interest rates. Consequently, the conditions determining the right time for the next interest rate increase, which I have already described, will also indirectly determine the horizon of our net asset purchases. In any event, it is worth recalling here that both the duration and the pace of net purchases under this programme will have to be calibrated as necessary to provide financing conditions that are consistent with achieving our inflation target of 2% over the medium term.

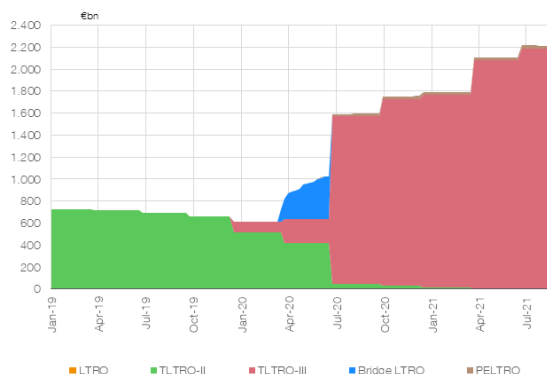


This brings me to an important aspect as regards our asset purchase programmes going forward, namely their *flexibility* in terms of the allocation of purchases, not only over time but also across asset classes (public and private) and among jurisdictions. Clearly, the flexibility of the PEPP, which was one of its main novelties, has been central to its effectiveness. This has been shown by the Banco de España's analysis, which found that the PEPP's flexibility considerably increased the effectiveness of the government bond purchases in easing the financing conditions of euro area governments, particularly for countries that saw their risk premia spike during the early stages of the pandemic. It has also been most useful in terms of efficiency. For example, the cross-jurisdiction flexibility only had to be heavily used during the initial stages of the crisis.

In view of this important lesson, I believe retaining this flexibility going forward would be warranted, in the interest of our purchase programme's efficiency and effectiveness and to provide for a sufficiently nimble response to any situation in which the smooth transmission of common monetary policy across all euro area countries might be compromised, as was the case at the start of this crisis.

TLTRO-III: RISK OF “CLIFF EFFECTS” WHEN THE OPERATIONS CONDUCTED DURING THE PANDEMIC MATURE

EUROSYSTEM REFINANCING OPERATIONS (OUTSTANDING AMOUNTS)



SOURCE: ECB. Latest observation: September 2021.

Turning to our targeted longer-term refinancing operations (TLTROs), these too have unquestionably played an essential role in our monetary policy response to the COVID-19 crisis, having contributed decisively to facilitating firms' and households' access to bank credit during the crisis. One important question for the future is whether there should be new TLTROs. Two aspects should be considered here. First, TLTROs form part of our monetary policy toolkit, as set out in our new strategic framework. Through their effect on bank financing conditions for firms and households, TLTROs contribute to active bank-based intermediation and, indirectly, to an appropriate monetary policy stance and the attainment of the inflation target. Accordingly, the future decision on new TLTROs will naturally be grounded on whether maintaining credit conditions consistent with the inflation target continues to be necessary. Second, and following on from the first, the very high volume of funds obtained under the TLTROs during the pandemic raises the prospect of “cliff effects” linked to the maturity of the operations, particularly those maturing in June 2023. As the time to reach a decision draws nearer, we will be better placed to assess the implications of those cliff effects for the supply of bank credit and whether or not new operations will be needed.

Conclusions

I should like to conclude by recapping the main messages that I have hoped to convey in this address. We have seen a pronounced upturn in inflation, both in terms of its size and the speed at which it has taken place. However, this pick-up in actual inflation has, broadly speaking, been driven by specific and largely pandemic-related factors, whose impact can be expected to wane, or in some cases even disappear, over the course of next year.

Admittedly, the upturn in inflation is proving more pronounced and longer-lasting than we anticipated some months ago. However, for now events remain consistent with a return to the situation of moderate inflationary pressure in the medium term that characterised the pre-pandemic period. For these reasons, the monetary policy approach should remain patient in terms of any future revision of the current accommodative stance, with a view to stabilising inflation at the new monetary policy target of around 2% over the medium term.

However, the already considerable level of concern surrounding the upturn in inflation would heighten further if the steep cost and price rises observed to date for certain consumer goods and services were included more extensively and to a higher degree in end prices and wage settlements, giving rise to a hypothetical inflationary spiral. From the standpoint of the overall euro area economy, there have so far been no discernible indications that this is the case.

At the same time, monetary policy, as with other economic policies, must remain particularly watchful of future developments. Although the current situation differs enormously from that of the 1970s oil price crisis, we must not ignore the lessons learned from that episode, when tolerance for high inflation wrought significant and enduring damage. The likelihood of a scenario even remotely similar to that is extremely small. However, that episode should serve as a reminder that economic authorities must be careful when finding the necessary balance between providing patient support to the recovery and simultaneously preserving the capacity to act swiftly should it prove necessary.

Thank you very much for your attention.