MIMS – Research Area

Macro Research Team

Report – May 2021

Investors have been concerned with rising inflation for a few months now, thus driving long-term interest rates upward. In this report, Minerva's Macro Research tries to provide a global framework to address whether such concern is justified by a series of economic metrics that underpin inflationary and deflationary cycles, ranging from elementary indicators of rising prices to the fiscal facilities and monetary actions that have been implemented, and are to be implemented, worldwide. We analyze both short-run and long-run potential causes of inflation, spanning from the real economy, e.g., the labor market, to institutions, such as the degree of independence enjoyed by monetary authorities, and demographic forces.

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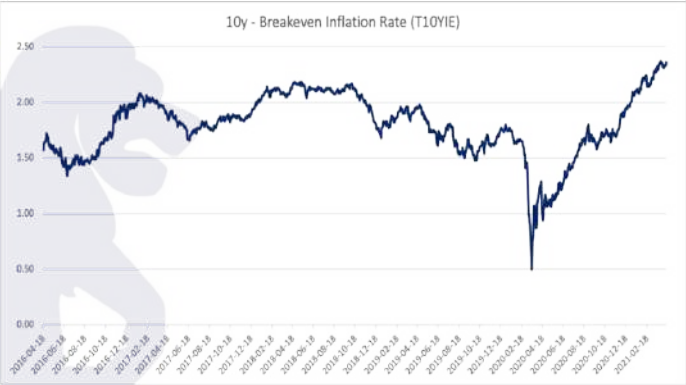
Investors Sentiment

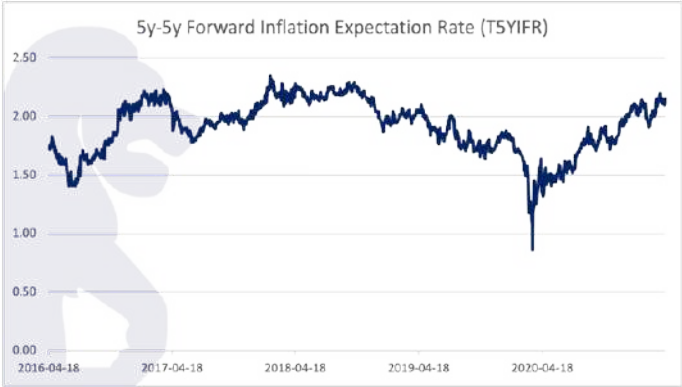
In the past few months, market-based indicators of inflation show that investors fear future inflationary forces, perhaps associated with the $ 1.9 trillion economic stimulus of the Biden's administration, roughly 15% of US Gross Domestic Product. The US Break-Even Inflation Rate ($T10YIE$=$10y\ Treasury\ Nominal\ Yield$–$10y\ TIPS\ yield$), i.e., the average rate of CPI inflation of the next ten years for which an investor is indifferent between holding a Treasury and a TIPS, captures investors' sentiment about future inflation, and it has been rising since the beginning of 2021.



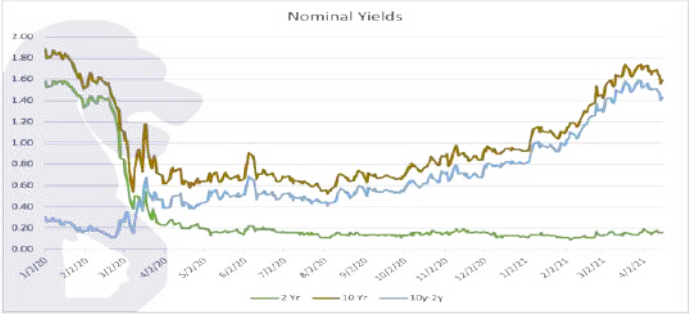
Source: FED St. Louis

A similar case is offered by the more straightforward 5-Year, 5-Year Forward Inflation Expectation Rate (T5YIFR), that is, an estimate of inflation expectations for the five-year period that begins five years from the present. Like the breakeven rate, it is calculated by comparing TIPS yields with nominal Treasury yields.

Accordingly, the Yield Curve has been steepening, as captured by the difference between the 10y and the 5y nominal yields.



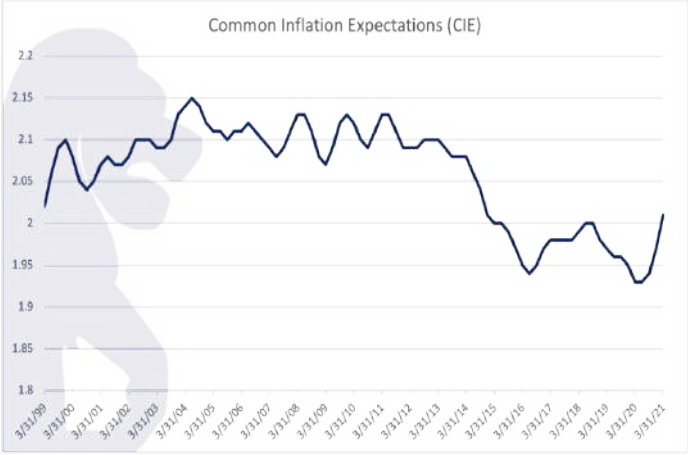
Source: FED St. Louis



Source: FED St. Louis

However, these measures are all noisy as they capture both true inflation expectations (our desired signal) and a risk-premium component (our noise), namely the premium that investors require when there is widespread uncertainty about future inflation. The US Federal Reserve provides a more clean and comprehensive measure known as the Common Inflation Index (CIE), which includes twenty-one different indicators derived from households, firms, professional forecasters, and financial market participants. Such measure is now at the levels of early 2018, in the midst of the interest rate hikes implemented by the FED, and it is rapidly increasing at a sustained pace.

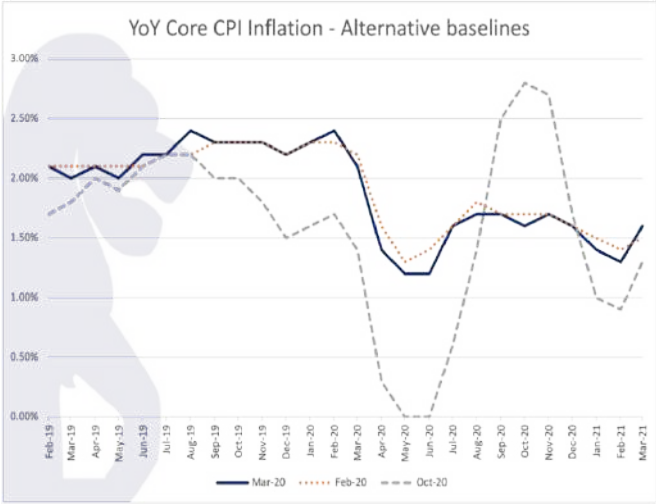
Source	Relevant inflation concept	Forecast horizon
Blue Chip survey	Consumer price index (CPI)	1 year ahead; long horizon (7 to 11 years ahead)
Conference Board survey	Prices in general	1 year ahead
Consensus Economics	CPI	6 to 10 years ahead
TIPS	CPI	5 years; 10 years; 10-year, 10-year forward; 5-year, 5-year forward
Livingston	CPI	1 year ahead; 10 years ahead
Michigan survey	Prices in general	Next 12 months; next 5 to 10 years
Michigan survey (25, 75 percentile)	Prices in general	Next 5 to 10 years
Survey of Professional Forecasters (SPF)	CPI	1 year ahead; 6 to 10 years ahead; next 10 years
	Personal consumption expenditures (PCE) price index	1 year ahead; 6 to 10 years ahead; next 10 years
	Core PCE price index	1 year ahead



Source: FED

A brief note on CPI: the US case

April 13th, the Bureau of Labor Statistics reported that the American consumer price index (CPI) in March 2021 was 2.6% higher than in March 2020, while the core measure of the CPI, which excludes volatile food and energy prices, was 1.6% higher than a year ago. One might be tempted to jump to the conclusion that this data will make policymakers be concerned about economic "overheating" stemming from the fiscal support provided in recent Biden's legislation. However, the data do not show that prices have risen rapidly since recovery legislation passed: they just show that prices, in particular oil-related ones, plummeted during the near-total shutdown of large sections of the economy during 2020 in response to the COVID-19 shock. Measured on an annualized basis from February 2020—before the COVID-19 economic shock—inflation in March 2021 was running at just 1.5%. Measured since October—shortly before the $2.8 trillion in additional relief spending provided by legislation in December 2020 and the American Rescue Plan (ARP) in March—inflation is running at an annualized rate of 1.3%. In short, the CPI measured which used March 2020 as a baseline captures something unusual that happened a year ago, not anything unusual that is happening currently. This same logic will hold for the next few months of inflation data, which will be using a "base" period that includes the near-total shutdown of large swaths of the U.S. economy that happened a year ago.

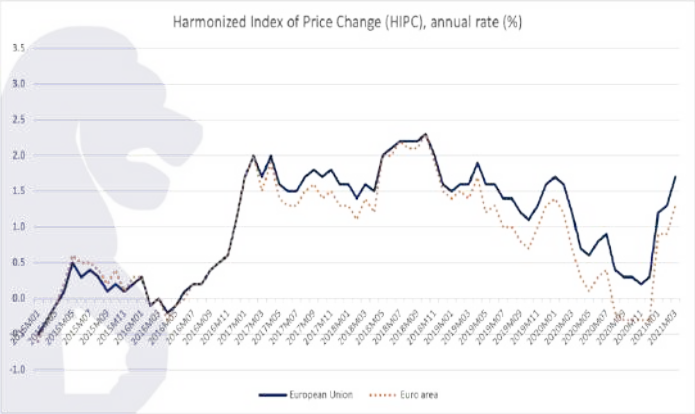


Source: BLS

The first alternative measure (measuring inflation since February 2020) includes data from the period of the extreme COVID-19 shock, but it does not use it as the base in the inflation formula. The second measure is more volatile since it's capturing a shorter period of time, but the last portion of the graph would capture any inflationary pressure stemming from the surge of fiscal spending that began at the end of last year to now.

As can be seen in the previous figure, even today's inflation measure—the one that allows the base period to be set in the very unusual months when large swaths of the U.S. economy shut down completely in March 2020—is not really close at all to even reaching the 2-2.5% comfort zone of the Federal Reserve.

European data are quite similar, with a natural rebound in price levels after the months of lockdowns, with depressing household spending and delayed business investments. Year over Year inflation rate is now slightly above 1.5%, in line with pre-Pandemic trends. Whether the recent rise of inflation rates is a natural consequence of the extraordinary first two quarters of 2020 or a piece of a steep upward pressure of price levels is discussed in the next section.

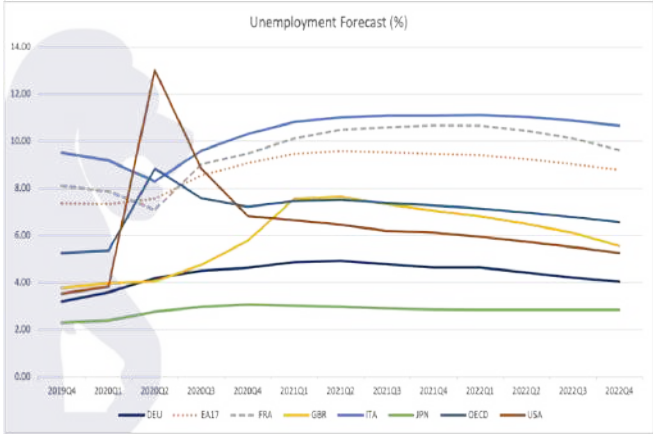


Source: Eurostat

A non-price analysis

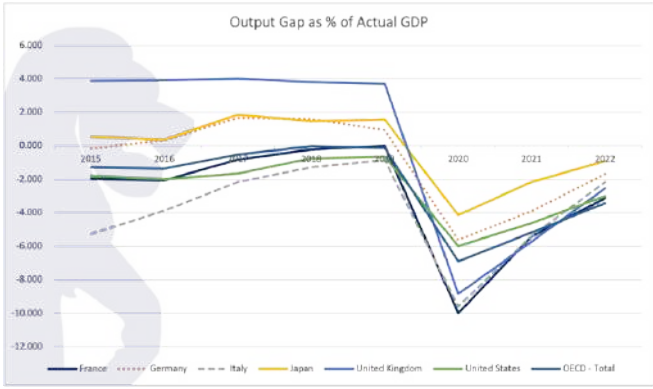
A proper analysis of inflation must involve non-price factors that might speak of an "overheating" economy, that is, one that runs beyond its physiological capacities at a given point in time. In this report, we carefully scrutinize whether major economies are likely to show signs of such trend. That is, whether the predicted economic rebound in 2021 and 2022, spurred also by fiscal and monetary actions, might push the economy too far too quick, thus propelling an inflationary cycle. Focusing on the short-term, labor market data constitute a first-order precious source, even though the empirical evidence, at least a reduced-form one, of a short-run quasi-mechanic trade-off between inflation and unemployment seems to be vanished. The underlying intuition is that, whenever the labor market is tight, workers demand a higher wage, and producers charge a higher price per unit of output. According to OECD most recent estimates (December 2020), thus embedding fiscal and monetary support in their analysis, virtually no Country will have unemployment levels as low as they were during pre-pandemic times.

By looking at some of the biggest economies covered by OECD, the Euro Area is expected to have unemployment rates well its natural level, usually estimated between 4% and 5%, whereas the UK and the US will fall into such band only at the end of 2022.



Source: OECD

A more comprehensive statistics capturing economic slack (or "tightness") is the output gap, that is, the difference between the actual and potential production levels in an economy. The concept of potential GDP might be summarized as follows: it is the highest level of production that can be sustained over the long haul in an economy, given its natural and technological constraints, without triggering inflation, which takes place when the demand for factors of production exceeds its supply, i.e., when the economy is "overheating". The following figure shows the forecasts of output gap as a percentage of actual GDP according to OECD estimates. No major economy is expected to fully recover up until the end of 2022, and most economies, except for the UK, Germany, and Japan, had negligible or negative values of the output gap.



Source: OECD

Production and employment are inherently associated with one another. A classical relationship between these two, and, in particular, between the output gap and employment, is the so-called *Okun Law*, which is an empirical relationship that, in its simplest form, reads as follows:

$$\frac{Y - \bar{Y}}{Y} = \beta(u - \bar{u})$$

where the left-hand side is the output gap as a percentage of actual production, and the right-hand side is cyclical unemployment, and β is a parameter. Recent research (Owyang and Sekhposyan, 2012) shows that during recent US recessions – including the Great Recession – unemployment appears to be more sensitive to economic growth than before, and that (Cazes et al., 2013) the Okun coefficient varies over time and appears to be larger during recessions than during expansions. These findings suggest that forecasted economic growth might not be followed by an equivalent rise in employment rates, thereby reducing the extent through which increased production triggers an increase in price levels. More recently, Lim, Dixon and van Ours (2018), find that labor market flows are affected such that the long-run Okun coefficient (the change in the unemployment rate in response to a 1% change in growth) is 0.61 for a negative shock and 0.24 for a positive shock. This result likely reflects the observation that it is easier to lay-off workers in recessions than it is to hire workers in a boom, because employers tend to be hesitant about adjusting their workforce along the extensive margin, and may prefer, in the early stages of recovery, to expand along the intensive margin of labor supply by increasing overtime hours.

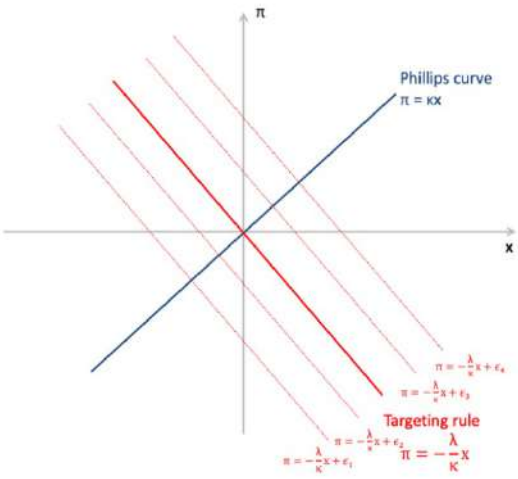
Structural and institutional features of inflation

Long-term trends in inflation across developed economies seem to suggest that inflation belongs to history more than it does to current times. Many factors have played a role in propelling such phenomenon. First, technological advancement has brought down the price of goods that use new technologies intensively. Indeed, innovation of smart electronic gadgets like smartphones has reduced the demand for various other gadgets, exemplified by the fact that the smartphones today can provide better cameras than professional equipment a decade ago. According to the U.S. Bureau of Labor Statistics, prices of general tuition and medical care have risen 29 % and 25 %, respectively, while prices of television and photographic equipment have decreased 73 % and 24 %, respectively, since 2010. Moreover, high-tech industries are those that rely on intense price competition with negligible marginal costs, thereby an increase in production is not followed by a sizeable increase in prices.

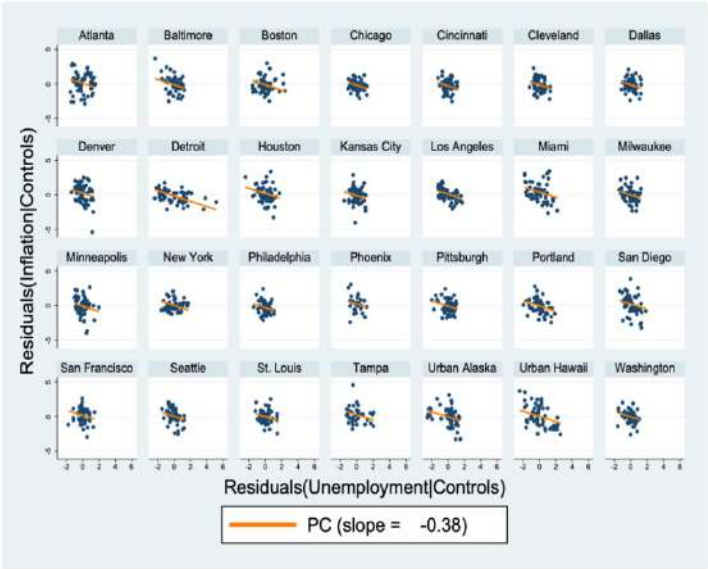
Technological advancement has also increased labor productivity, therefore reducing unit labor cost, and constraining inflation, as captured by the following graph:

Second, globalization has played a crucial role in constraining inflationary forces, as developing Countries offer a pool of low-wage workers that reduce the extent of labor's power in developed economies. Economists Claudio Borio and Andrew Filardo argue that current inflation models are too "country-centric," failing to acknowledge the growing role of global factors on the inflation process. They point out that the sensitivity of inflation to domestic output gaps (the difference between current output and potential output) has been falling, while the importance of global output gaps has been increasing. Hence, many commentators argue that the traditional relationship between unemployment and inflation, generally captured by the Philips Curve, is faded away. In other terms, employment fluctuations do not trigger sizeable price movements. However, such proposition does not consider a determining factor, that is, central banks' actions and their increased independence from political actors.

As a matter of fact, being the central banks' objective function that of minimizing welfare losses, their actions – namely increase inflation during downturns and reducing it during booms – give to a negative correlation between (negative) output gap and inflation, thus blurring the Philips Curve. This amounts to say that the non-observation of the Philips Curve in the data is not equivalent to its non-existence (or that is so flat): what we see is the reduced-form version of the Philips Curve once the Central Banks step in. Using the terminology introduced by McLeay and Tereyro (2019), the "Targeting Rule" of central banks (negative correlation between (positive) output gap and inflation) leans against the Philips Curve (positive correlation between (positive) output gap and inflation):

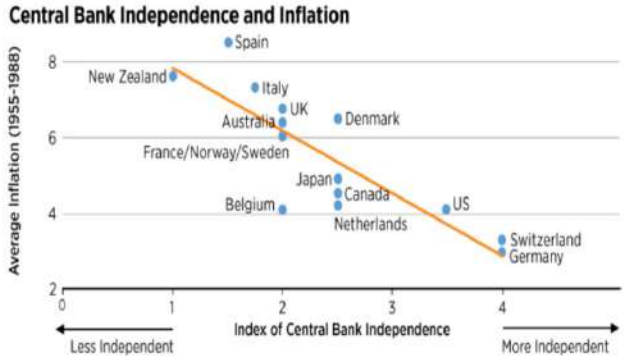


The authors show that the Philips Curve is still out there, and not so flat as it seems on an aggregate level, provided that we control for central banks' actions. In order to do so, they look at municipal data, as local shocks do not usually trigger an action by the federal monetary authority. The results are shown in the following figure:



Notes: The figures are a graphical illustration of the Phillips curve slope estimated in specification (4) in table 3. For each metropolitan area, the figure plots the residuals from a fixed effects regression of core CPI inflation on all regressors other than the unemployment rate, with a different area fixed effect plotted for each city, against the residuals from a fixed-effects regression of the unemployment rate on all other regressors.

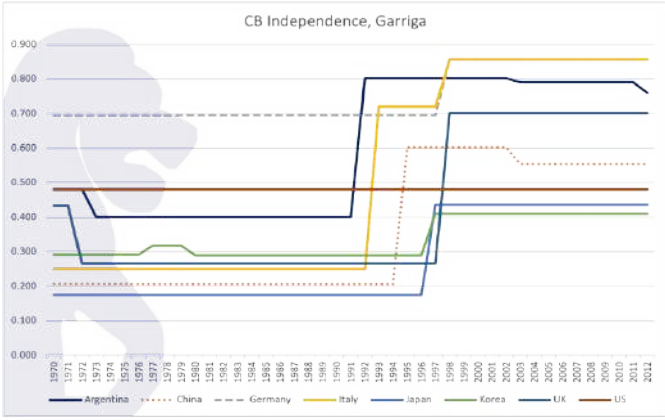
Hence, central bank independence from political actors, who are always willing to tolerate moderate levels of inflation to boost economic growth in the short run, is key in our analysis. Whereas globalization and technology are structural factors that are not likely to change in the short-run, central bank independence is not to be taken for granted. In the last thirty years, central bank independence has increased across different economies, but the increasing involvement of such institutions in the markets and in the real economy (e.g., QE), as well as the high level of world public debt, might change the rules of the game.



SOURCE: Alesina and Summers (1993).

NOTE: The orange line is the regression line, which suggests that countries with more independent central banks are associated with low average inflation.

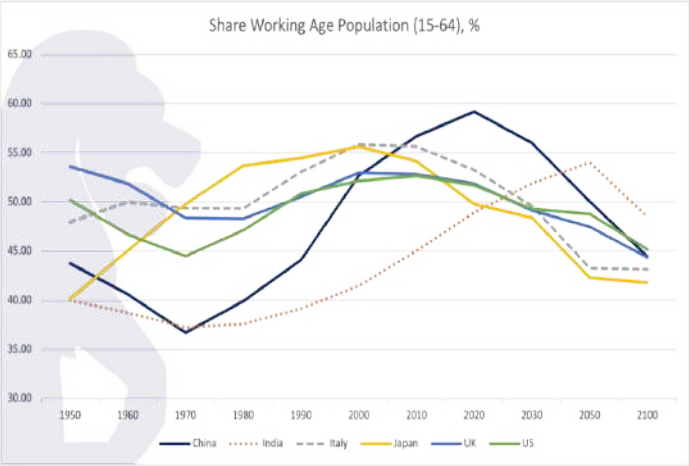
■ FEDERAL RESERVE BANK OF ST. LOUIS



Garriga's Central Bank Independence Index

Demographic factors

Finally, in this paper we consider long-term trends in demography. Over the past thirty years, the global labor supply for production of tradeable goods rose enormously. The big trading economies had falling birth rates and still youthful populations, reinforced by the entry of women into their labor forces: the workforce grew faster than population and output per head rose ahead of that per worker. This massive increase in labor supply was enough to accommodate rising demand for factors of production brough about by worldwide economic growth. According to economists Goodhart and Pradhan, such trend caused a fall in the market power of labor in high-income countries, higher profit shares in gross domestic product, rising domestic inequality, falling global inequality, a "savings glut", weak inflationary pressure and declining real interest rates. However, the ageing hits the growth of the labor force and exacerbates fiscal pressures, and, as the number of consumers rises relative to that of producers, inflationary pressure might increase. Indeed, it will raise real wages and the labor share of national income, thus lifting wage inflation, which has lingered at very low levels for years. This prediction is in line with the findings that Goodhart and Pradhan cite from Juselius and Takats (2018), who provide a comprehensive analysis of the relationship between inflation and the population age structure for a panel of 22 advanced economies from 1870 to 2016.



Source: World Bank

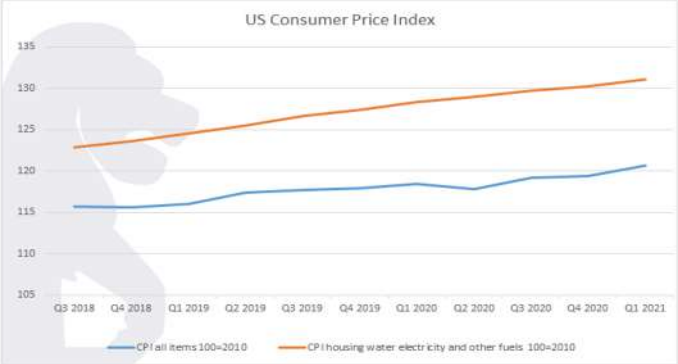
China is expected to experience a significant drop in the share of working age population, falling from the current 60% to less than 50% in 2050, and Western economies have been experiencing a drop as well, although not comparable to the Chinese one. India remains the only sizeable non-African Country to expand its working age population until 2050. Moreover, while wages have been stagnating in some Western economies for at least two decades, developing Countries have seen their wages rising, notably China:

To sum up, before delving into our granular analysis of inflation-determining factors, we would like to stress that: (i) there are structural factors likely to push inflation (demography) as well as to constrain it (trade and technology); (ii) institutions will be crucial, in particular how central banks will retain their independence given their increasing exposure to public scrutiny and the high level of public debt; (iii) we might experience some degree of short-term inflation as fiscal and monetary actions have been devoted to favoring economic rebound in 2021 and 2022, but the level of economic slack, especially in the labor market, is still a binding constraint.

USA

CPI

As we examine the Consumer price index in the United States, we can observe that it has been slowly increasing over the past years. One the main reasons for this is the increasing prices in housing, electricity and other fuels as can be observed in the graph below, as this indicator has increased significantly more then the CPI with all items. This is partially due to the fact that items such as clothing have been around the same price for a while. While talking about the CPI it is important to notice that in the last month (March 2021) CPI has risen by 0.6%, one of the fastest increases in a decade. This increase can be attributed to two main factors. For one last year in march oil prices in the United States dropped by around a third due to the Russia- Saudi-Arabia price war in oil. Therefore, as this year prices recover, the CPI will naturally seem higher then it should. That is why the same index without Oil and food only rose by around 0.3%. The rise in the consumer price index can also be attributed partially to the economic recovery from the coronavirus pandemic and increased spending after the stimulus package passed by president Biden at the beginning of march. Still the white house predicts that although there will be an immediate rise in CPI and inflation this will only temporary and die down in the coming months.



Source: IMF

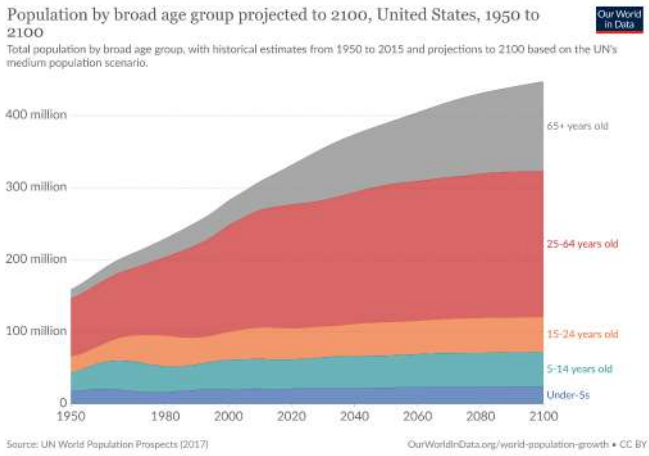
House Prices

During the pandemic the emphasis on comfortable housing as increased. As people stayed more indoors they desired more comfortable living conditions. this accelerated the existing trend in the US of migration to the south and out of city into the suburbs as indicated by the preliminary 2020 census data. This in turn caused a further increase in the price of housing in the United states, a trend that has been ongoing since after the end of the 2008 financial crisis. This can be observed on the graph as a slight rise in the speed at which house prices grew.

Source: OECD

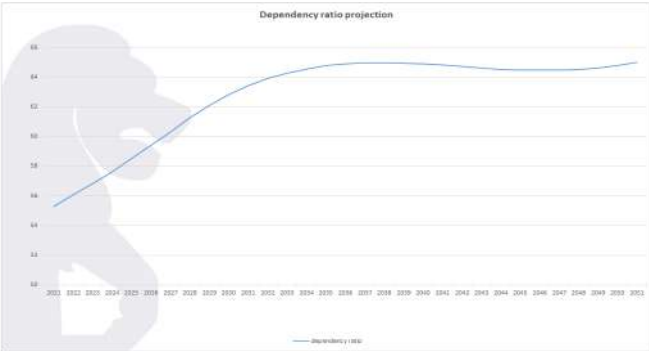
Demography

United Nation projects that in the coming years American population will become proportionally older and older due to longer lifespans and a stable number of births. As can be seen on the graph below population of the United states will grow, but this growth will be mostly due to more people above 65 living longer.



Source: United Nations population projections (2017)

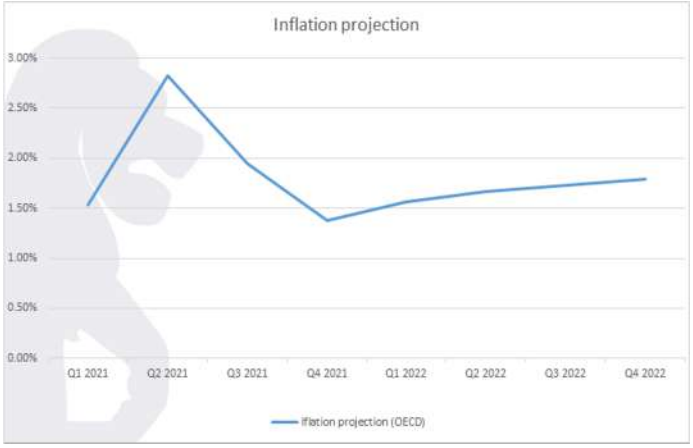
An increasing number of seniors and a stable amount of people in the working age (15-64) will result in a higher dependency ratio in the US. This as a result will increase the tax burden on younger people who will have to sustain sociali institutions, although not as mich as in Europe.



Source: United Nations population projections (2017)

Inflation expectations

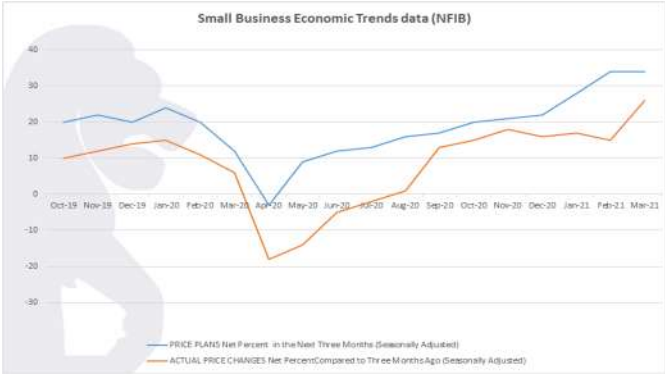
The OECD projects that inflation in the united states will pick in the second quarter of 2021 reaching 2.83%. then it will decrease to 1.38% by the end of the year and then tend to under 2%. This projection is also in line with what the Biden administration expects as it perfectly illustrates the upcoming spike connected to the covid pandemic recovery and low gas prices of last year while later going back to below 2% levels as experienced in the last 10 years. The Federal reserve is also not worried about this increase as it has announced an update to its inflation targeting claiming it will allow inflation above 2% to make up for the years before when it was below this target.



Source: OECD

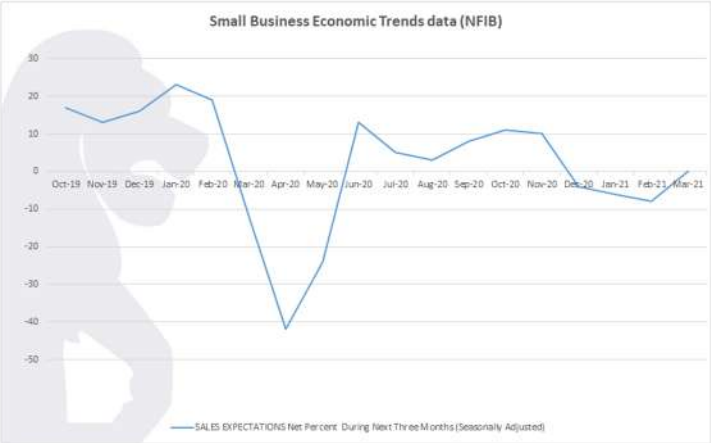
National surveys- Small business perspective

The national federation of independent business conducts a monthly economic survey every month about trends in small businesses. One of the questions concerns price plans. It can be observed that at the first lockdown business planed to lower prices. after that they planned to increase them throughout the year to pre-pandemic levels. still currently we can observe inflationary pressure as business plan to further increase prices in the coming months. Still it is important to note that usually actual price changes are lower than price plans , hence it is reasonable to expect lower price increases then planed by these businesses.



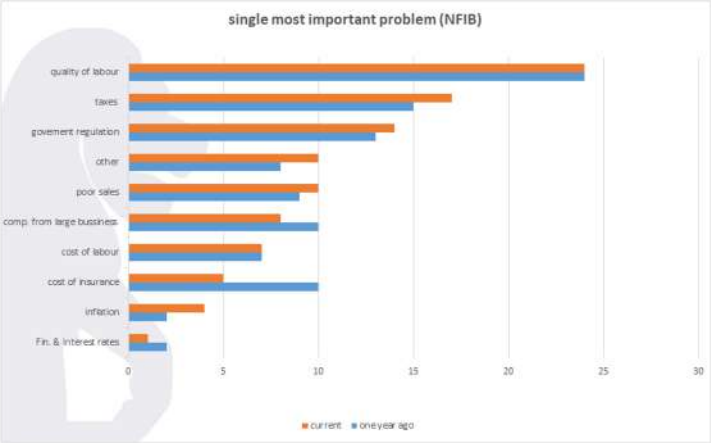
Source: NFIB

another important indicator are sales expectations. However, TS Lombard's U.S. economist Steve Blitz argues that this data is evidence against "cost-push" inflation as small business owners are predicting they will not be able to pass on their expenses onto the consumer.



Source: NFIB

It is also interesting to consider what issues do small business owners consider the most important to their business right now compared to with a year ago. As can be observed still the most important issue is the quality of labour followed by taxes with a 2% increase from last year. Although the number of people who consider inflation to be the most important problem doubled from two to four %, it still should not be raising any alarm bells as the issues is starting from a very significant low.



Source: NFIB

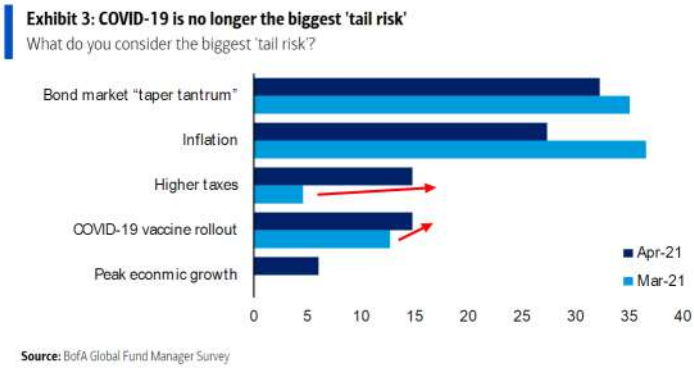
To summarize, from the NFIB surveys we can observe that there exists inflationary pressure on business, still the combination of expectation of higher prices and a bearish outlook on sales can be evidence of a lack of cost-push inflation. Additionally, business owners don't feel the need to worry about inflation as much as some might suspect.

National surveys- Investors perspective

On the 13th of April Bank of America published its monthly fund manager survey, which consists of opinions of pension and mutual funds managers. therefore the view is quite different compared to small business owners. The survey found that the percentage of respondents expecting higher inflation is the highest in the last 20 years. Additionally, managers indicate that they expect higher growth and higher inflation, making the case for reflation after the pandemic downturn the expected outcome in the coming year.

Source: BofA

It is also interesting to look at what investors consider the biggest tail-risk. Majority indicated that they consider a "taper tantrum" in the bond market the biggest risk followed by inflation. "Taper tantrum" refers to reaction of the markets when in 2013 the Federal reserve announced it will slow down it quantitative easing scheme lowering the money supply in the economy. It is also interesting that even though the pandemic is still very much ongoing fund managers are less and less worried about it as time goes on.



Source: BofA

Fiscal policy

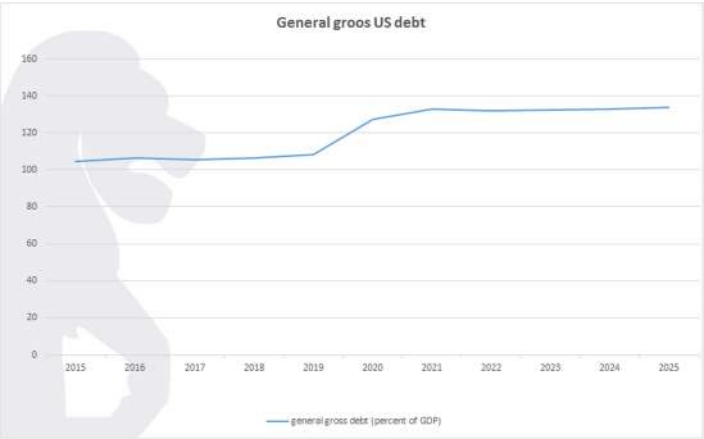
The United States passed a significant covid relief package at the beginning of March totaling 1.9 trillion dollars stimulating the economy. this stimulus package combined with the vaccine rollout is what many are partially blaming for the 0.6% CPi increase in march. Additionally Biden has revealed a 2 trn dollar infrastructure plan which if passes can further stimulate the economy and increase debt. Still it is hard to assess whether this plan will be beneficial as it all depends it the money is well spent and aproperitaly distributed on infrastructure that truly matters, still we know for sure that in the short time it will both stimulate the economy and increase debt.

Monetary policy

As of now the federal reserve has an inflation target of 2%. Still it is not planning on slowing down its bond-buying program, as it aims to help the economy recover to full employment after the pandemic. Still it has reassured in a letter to senators, as reported by routers, that the FED does not wish inflation above 2% for a prolonged period of time. this is another reason why investors should not worry as much as it seems the FED will act if inflation figures start getting out of hand.

Debt

The US has accumulated 28.1 trillion dollars in debt which is equal to 132.8 percentage points of their GDP. The debt has especially increased during and after the pandemic as more government spending was required to stop the economy from going into a deep recession. Still the IMF is expecting debt to stay stable above one-hundred and thirty % of GDP after 2021 as the economy recovers from the pandemic and government spending is matched more by the growth in GDP.



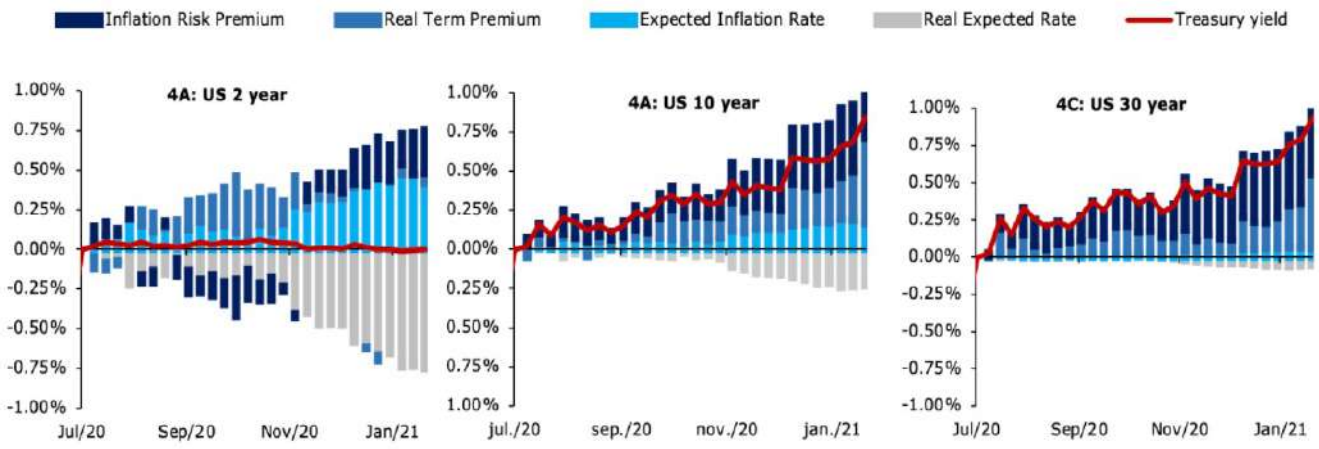
Source: IMF

Average Inflation Targeting

In August 2020 at the online Jackson Hole conference, Chair Jay Powell announced a revision to the Fed's long-run monetary policy framework by re-framing this goal as an average inflation target (AIT) of 2% over the long-run. With this new framework, the FOMC is communicating that it will tolerate inflation above its target for a period of time to offset periods when inflation was below its target. In other words, the FOMC is targeting average inflation of 2% in the long run. This new policy suggests that, if inflation can return to a range above 2%, the Federal Reserve will have to tolerate higher inflation than it has for much of the past 20 years—and tolerate it for significantly longer periods. Yet, given the pandemic, it could be challenging at this time to sustain average inflation above 2%. In this way, the FED attempts at changing households' beliefs about how it will react to short-run inflationary forces. By tolerating upward deviations from the 2% target, individuals should revise their inflation expectations north. In a recent research, Coibion, Gorodnichenko, Knotek and Schoenle (2020) study whether such mechanism is at place or not. To study the extent to which households heard about and understood the AIT announcement, they used a new module inside of a larger daily survey of consumers sponsored by the Federal Reserve Bank of Cleveland. Even for those who heard news about monetary policy following the announcement, the news had little impact. For example, those who reported hearing news about monetary policy after the announcement were not more likely to report AIT as a Fed strategy than respondents prior to the announcement. Both before and after the announcement, respondents were more likely to select IT as a Fed strategy than AIT. They were also no more likely to report that maximum employment and price stability were the two main objectives of the Federal Reserve. Instead, both before and after the announcement, respondents were more likely report that the main objectives of the Federal Reserve were maintaining a strong dollar and keeping interest rates low to reduce the government's cost of borrowing than to report maximum employment and price stability. Conditional on receiving news after the announcement, households' expectations about inflation, output growth, and personal income were effectively unchanged as well.

On the other hand, financial markets assimilated AIT fairly well, way more than households did. Goy, Hoogland and Petersen (2021) decompose the recent yield curve movements in the 2, 10, and 30-year segment using an affine term structure model on both the US yield and the inflation linked swap (ILS) curve. Their analysis confirms that 'genuinely' expected inflation – that is, expected inflation corrected for the inflation risk premium (IRP) – rose across the entire curve. In line with the Fed's guidance to overshoot the inflation target in the short term, genuine inflation expectations at the 2-year horizon increased by 42 basis points since late July. On the other hand, at longer maturities, where inflation expectations are arguably better anchored, this contribution has been substantially smaller (6 basis points).

Instead, at the 10-year and 30-year horizon, the increase in the IRP dominated, with the largest increases in the weeks succeeding the AIT announcement and the Georgia run-off. This observation underlines the increased (upside) uncertainty surrounding the inflation outlook as already indicated by the option-implied distribution. Their decompositions further show that the increase in longer term yields was also driven by an increase in real term premia. This result is consistent with the duration channel given the anticipation of increased debt issuance and better growth prospects following the fiscal accommodation.



Decomposition of the yield curve changes since end July.
Source: Goy, Hoogland and Petersen (2021)

DISCLAIMER

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UNITED KINGDOM

The latest UK economic data has been significantly better than economists expected, suggesting households and companies have been more resilient to the latest lockdown and Britain will climb international economic performance league tables in the months ahead.

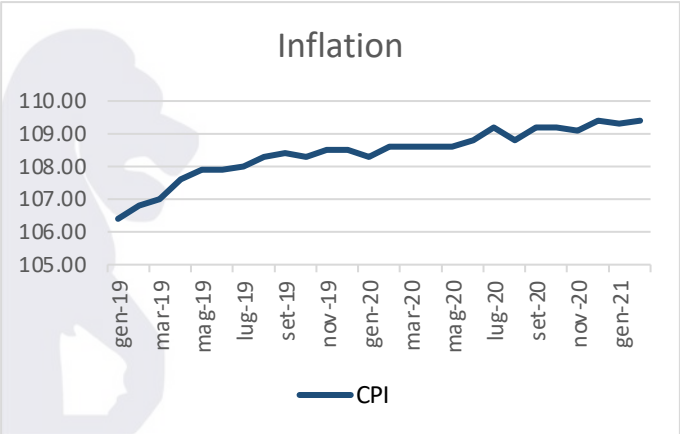
Most of the important economic data for the period of the lockdown that began on January 4, including output, employment, business sentiment and public finances, have been better than forecast and much stronger than in the first lockdown, showing the ability of businesses and consumers to adapt.

With the UK economy poised to reopen gradually in the weeks ahead amid a successful coronavirus vaccination rollout, unlike much of the EU, the prospects for the immediate economic recovery are strong.

Inflation

Annual inflation rate in the United Kingdom eased to 0.4% in February of 2021 from 0.7% in January, compared to market forecasts of 0.8 %. Main downward pressure came from a fall in prices for clothing and footwear (-5.7% vs -3.4% in January, the biggest annual decline since November 2009) and a slowdown in second-hand cars (3.5% vs 7.8%), and games, toys and hobbies (7.4% vs 8.4%). On the other hand, upward pressure was recorded for motor fuels, housing (1.8%, the same as in January) and household services overall. Core inflation rate also slowed to 0.9% from 1.4%. The Bank of England expect inflation to rise towards the BoE's 2% target in the first half of this year, mainly due to oil prices, regulated household energy prices and other one-off effects.

Moreover, core consumer prices in the United Kingdom increased 0.90 % in February of 2021 over the same month in the previous year. It is the lowest reading in six months, below forecasts of 1.4 %.



Source: World Bank

House Prices

Spring home buyers are facing the highest ever prices demanded by sellers - with the average price tag on a home having jumped by nearly £7,000 in the space of a month.

Across Britain, the increase of £6,733 or 2.1 per cent month-on-month pushed average seller asking prices to a new record high of £327,797 in April. Properties generally are being snapped up by buyers at a record speed. The recent extension of a stamp duty holiday, the return of some low-deposit mortgages, optimism over the coronavirus vaccination rollout and a shortage of properties for sale have pushed up house price momentum. This is only the second time over the past five years that prices have increased by over 2pc in a month, so it's a big jump, especially bearing in mind that the lockdown restrictions are still limiting the population's movements and activities

This was more than £4,000 higher than a previous record set last October. The average asking price jumped by 2.1% in April to a new all-time high of £327,797, an increase of £6,733 from March.

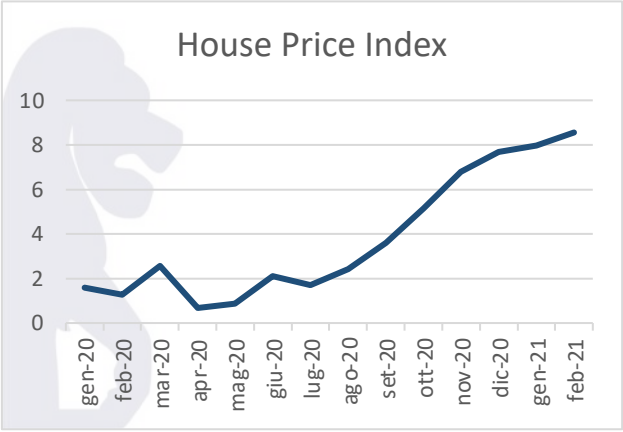
The surge was driven by a shortage of houses on the market, at a time when the coronavirus pandemic is driving many families to search for more spacious properties away from the cities, following the shift to working from home.

Some potential sellers are holding off until they have been vaccinated against Covid-19 adding to a dearth of properties available.

From Monday, several banks and building societies will begin offering mortgages covering 95% of a purchase price under the government guarantee scheme. Announced in March's budget, it will allow lenders to buy a guarantee on the portion of the mortgage between 80% and 95%.

The average number of days to sell a property has also dropped to its lowest-ever level, at just 45 days, reflecting the scramble to secure a deal.

As of February 2021, the average house price in the UK is £250,341, and the index stands at 131.3. Property prices have remained the same compared to the previous month, and risen by 8.6% compared to the previous year.



Source: Office of National Statistics

Expectations

The CBI's quarterly gauge of manufacturing optimism in the UK dropped to -22.0 in the first quarter of 2021, the lowest since an all-time low of -87 was hit in the second quarter of 2020, as manufacturers expect a sharp fall in output and new orders in the three months ahead. At the same time, stockpiling picked up ahead of Britain's departure from the EU. "This appears to be linked to widespread COVID-related supply disruption, such as delays in shipments from abroad, a shortage of containers across the world, and knock-on impacts from disruptions to production over 2020," the CBI said. "Border challenges and customs-related delays arising from Brexit also appear to be playing a role," it added.

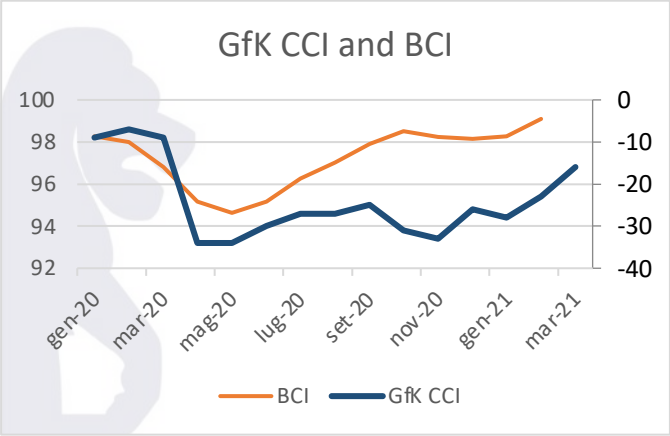
The planned reopening of the economy, the Budget's renewed support for workers and businesses, and the rapid vaccine rollout have boosted UK consumer confidence to the highest level since before the first lockdown last March, fuelling hopes of a spending rebound.

The UK consumer confidence index, a closely watched measure of how people view the state of their personal finances and wider economic prospects, rose seven points to minus 16 in March, according to research company GfK.

The reading, based on data collected between March 1 and 12, was the largest monthly jump in almost a decade. It was better than the minus 20 forecast by economists polled by Reuters and the highest score since March 2020, when data reflected the pre-lockdown period.

However, the assessment of consumers' past and future personal financial situation also brightened considerably and the proportion of people saying this was a good time to make major purchases rose markedly. The strong rise in consumer confidence in March is a positive development that fuels belief that the consumer can play a leading role in robust recovery developing from the second quarter as the economy increasingly opens up. Households have accumulated more than £160bn of bank savings, according to separate data from the Bank of England. Economists believe that if consumers are confident about their personal finances they might spend a larger proportion of those savings on goods and services, providing a strong stimulus to the expected economic recovery.

The United Kingdom's Gfk Consumer Confidence index rose seven points from the previous month to -16 in March 2021, beating market consensus of -20. It was the highest reading since March last year, as prospects for a recovery in the economy improved amid vaccination rollouts and falling numbers of daily coronavirus infections and deaths.



Source: Office of National Statistics

Monetary Policy

The Bank of England's Monetary Policy Committee (MPC) sets monetary policy to meet the 2% inflation target, and in a way that helps to sustain growth and employment. At its meeting ending on 3 February 2021, the Committee judged that the existing stance of monetary policy remains appropriate. The MPC voted unanimously to maintain Bank Rate at 0.1%. The Committee voted unanimously for the Bank of England to maintain the stock of sterling non-financial investment-grade corporate bond purchases, financed by the issuance of central bank reserves, at £20 billion. The Committee voted unanimously for the Bank of England to continue with its existing programme of UK government bond purchases, financed by the issuance of central bank reserves, maintaining the target for the stock of these government bond purchases at £875 billion and so the total target stock of asset purchases at £895 billion.

Holders of UK government bonds are suffering the worst quarter in at least two decades as Britain's economic prospects brighten, setting a contrast with the eurozone where a more sputtering recovery from the coronavirus crisis is helping haven assets hold their value.

The drop in the price of UK debt has come as the swift rollout of coronavirus vaccines has given investors more confidence in the route to economic recovery. Traders have unwound expectations that the Bank of England will need to cut its main policy rate below zero and the narrative has shifted to focus on when policymakers will need to raise rates from historic lows if more rapid growth leads to stronger inflation. The BoE meanwhile followed in the footsteps of the US Federal Reserve, keeping its policy levers unmoved and upgrading its growth forecasts. Andrew Bailey, BoE governor, said that the rise in gilt yields is consistent with the "change in the economic outlook".

Fiscal Policy

In UK, fiscal policy continues to play a central role in mitigating the immediate economic disruption from COVID-19 by supporting businesses and households. According to the Office for Budget Responsibility (OBR), the UK Government's fiscal interventions were worth £192.3 billion, or around 10% of GDP as of the 14th July 2020 and, after that moment, the stimulus has continued to increase. As a matter of fact, if in March 2020 the chancellor of the exchequer announced an emergency budget pledging £12 billion to tackle coronavirus, one year later, in March 2021, the government had already spent £280 billion, and spending by spring 2022 will exeed £400 billion.

United Kingdom's fiscal plan for 2021, unveiled at the beginning of march, is mainly aimed at helping business and jobs through the pandemic and at supporting the UK's long-term economic recovery and a series of tax-raising plans to help rebalance the public finances. The plan announced will provide a massive stimulus to economic transition toward the end of lockdown.

However, the UK Chanchellor has made it clear that it will be necessary to take steps to get the public finances back on track once the economic recovery is durably underway.

The chanchellor has frozen public sector pay and fought hard against any permanent increases in spending, such as in universal benefit, while rejecting calls from NHS hospitals for more funding after the pandemic. The government's own Novermber 2020 spending review pointed out that spending by most government departments other than health and defence would fall in future, with further cuts of £4 billion of public spending now planned in future years. The total planned reduction in public spending by £14 billion is the second biggest element in reducing the deficit after corporate tax increases. Moreover, on the receivable side, the March 2021 plan forecasts that, in 2023, well after the economy has regained its pre-pandemic peak, the rate of corporation tax paid by the largest and most profitable businesses will increase. The government's action to repair the public finances will be supported by new steps to tackle tax avoidance and evasion that will raise £2.2 billion between now and 2025-26.

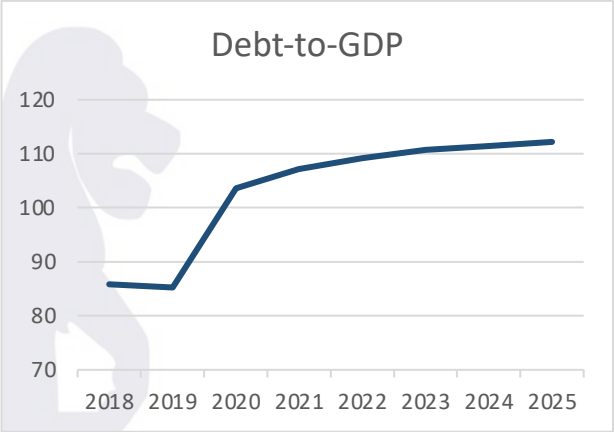
Public Debt

General government gross debt was £1,876.8 billion at the end of the financial year ending (FYE) 2020, equivalent to 84.6% of gross domestic product (GDP) and 24.6 percentage points above the reference value of 60.0% set out in the protocol on the excessive deficit procedure.

General government gross debt first exceeded the 60.0% Maastricht reference value at the end of FYE 2010, when it was 69.0% of GDP.

General government deficit (or net borrowing) was £63.3 billion at the end of FYE 2020, equivalent to 2.9% of GDP and 0.1 percentage points below the reference value of 3.0% set out in the protocol on the excessive deficit procedure.

This is the fourth consecutive financial year in which general government deficit has been below the 3.0% Maastricht reference value.



Source: IMF

Central Bank Independence

When analyzing central bank objectives and measures, it is important to take into account independence from central government, which results in the freedom to prioritize financial stability objectives against government's needs. Nowadays, this aspect is crucial because, as the economic recovery gathers pace next year, it will be important for the financial and economic equilibrium that central banks remain squarely focused on their core medium-term price stability mandates.

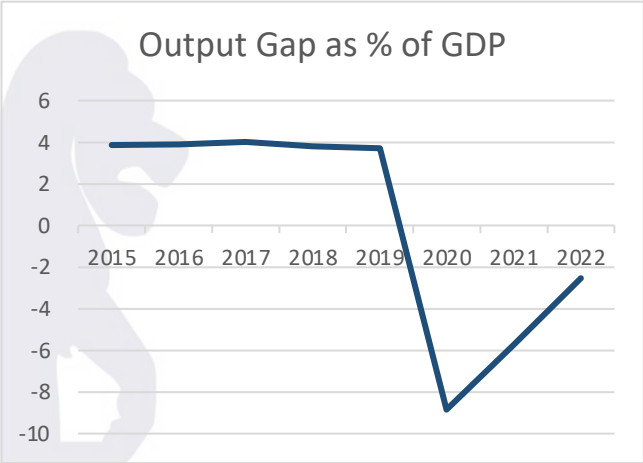
Bank of England independence can be analyzed from different points of view. At first it is necessary to say that with no codified constitution, there is no constitutional provision safeguarding the Bank of England from political interference, as the Bank's independence can be repealed by ordinary legislation. However, this scenario is very unlikely, as this choice would damage the market confidence, and consequently the government itself. Furthermore, The Bank operates with operational independence over its tools to meet its statutorily-set objectives. In other words, the Bank is instrument-independent for monetary policy and financial stability tools.

Nevertheless, Bank of England independence is not complete, as, in the UK, the objectives of the Bank's three policy committees (the Monetary Policy Committee (MPC), Financial Policy Committee (FPC) and Prudential Regulation Committee (PRC)) are defined in primary

legislation and set by Parliament. In other words, the Bank is target-dependent. This again differs elsewhere – for example, in the euro-area where the ECB is target-independent. UK legislation also requires HM Treasury to elaborate on these objectives periodically.

Output Gap

Since the output gap is calculated to be negative and forecasted to be below zero until at least 2022, the Bank of England will likely be mantaining its accomodatuve policies in the next years.



Source: OECD

Demography and Labor Supply

The latest figures suggest that the jobs market has been broadly stable in recent months.

After a few months of increases, there was a small monthly decrease in the number of payrolled employees in March 2021. The largest monthly falls were seen at the start of the coronavirus (COVID-19) pandemic. Over the year, the largest falls in payrolled employment have been in the hospitality sector, among those aged under 25 years, and among those living in London.

The number of job vacancies in January to March 2021 fell by nearly 23% on the year; arts, entertainment and recreation, and accommodation and food service activities continue to be the worst affected. Growth in the number of vacancies has slowed this quarter although experimental single-month statistics indicate a strong increase in March and experimental statistics of online job adverts provided by Adzuna suggest a potential acceleration into April. The slowing down in the rate of recovery for job vacancies to March 2021 is more evident among smaller companies.

Annual growth in average employee pay continued to strengthen, the growth is driven in part by compositional effects of a fall in the number and proportion of lower-paid employee jobs.

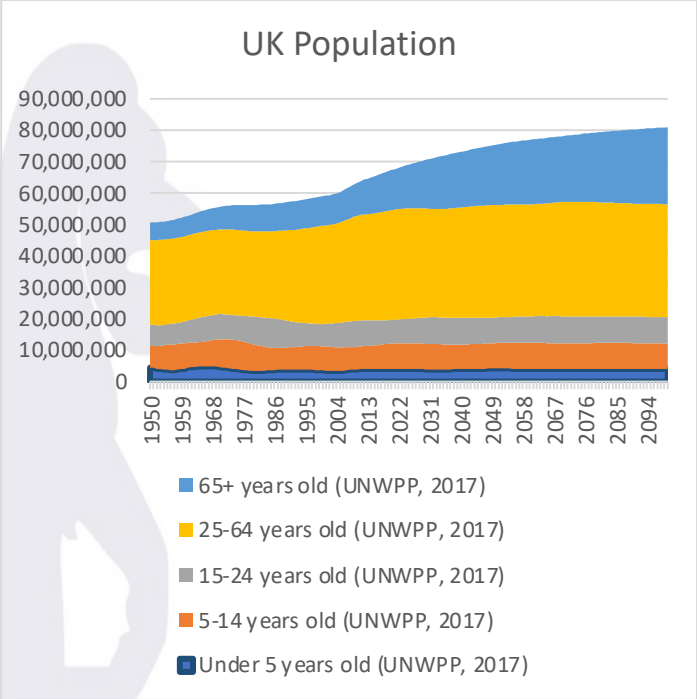
56,000 fewer people were in payrolled employment in March 2021 when compared with February 2021. The UK employment rate was estimated at 75.1%, 1.4 % lower than a year ago and 0.1 % lower than the previous quarter.

The UK unemployment rate was estimated at 4.9%, 0.9 % higher than a year earlier but 0.1 percentage points lower than the previous quarter. The UK economic inactivity rate was estimated at 20.9%, 0.7 % higher than a year earlier and 0.2 % higher than the previous quarter.

The total number of weekly hours worked was 959.9 million, down 92.3 million hours on the same period the previous year and down 20.1 million hours compared with the previous quarter.

There were an estimated 607,000 job vacancies in January to March 2021, which is a 22.7% fall compared with a year ago.

Growth in average total pay (including bonuses) among employees for the three months December 2020 to February 2021 was 4.5%, and growth in regular pay (excluding bonuses) was 4.4%; it is estimated that by removing the compositional effect, the underlying wage growth is around 2.5% for total and regular pay.



Source: World Bank

EU – Main Countries

CPI

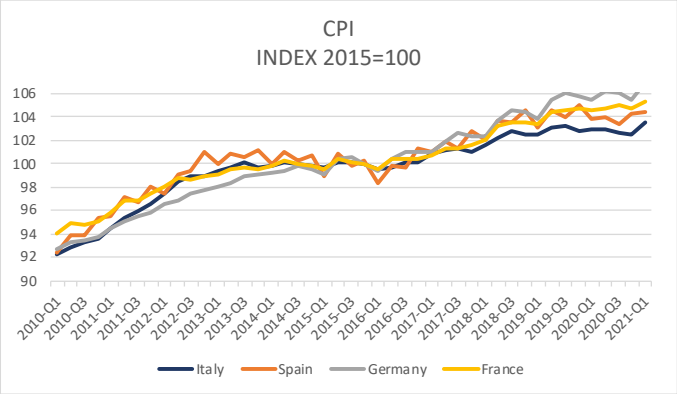
In March 2021 the rate of change of the Italian consumer price index for the whole nation (NIC) was +0.3% on monthly basis and +0.8% on annual basis (from +0.6%). The slight quickening of All-item index was mainly due to the trend reversal of prices of Non-regulated energy products (from -3.6% to +1.7%) and, to a lesser grade, to prices of Services related to transport (from +1.0% to +2.2%). Both core inflation (excluding energy and unprocessed food) and inflation excluding energy were +0.8% (down from +0.9% in the previous month). Prices of Grocery and unprocessed food increased by +0.1% on monthly basis and recorded a zero variation on annual basis (down from +0.2% in the previous month). In March 2021 the rate of change of the Italian harmonized index of consumer prices (HICP) was +1.8% on monthly basis, mainly due to the end of the winter sales of Clothing and footwear (not considered by NIC), and +0.6% on annual basis (from +1.0% in February). The dilatation , in some cases, of the winter sales resulted in an increase of + 23.0% of prices of Clothing and footwear on monthly basis, less than in March 2020 when it was equal to +31.1%. The difference between the two rates of change affected the dynamics on annual basis of prices of clothing and footwear, which reversed the trend from +5.8% to -0.7%, and of the All-item index of HICP, which recorded a growth lower than NIC.

In Spain, the estimated annual inflation of the CPI in March 2021 is 1.3%, according to the leading indicator prepared by the INE (Instituto Nacional de Estatistica). This indicator provides a preview of the CPI which, if confirmed, would represent an increase of almost one and a half points in its annual rate, since in February this variation was 0.0%. Notable in this behavior are the increases in electricity prices and fuels, compared to the decreases registered in March of last year. For its part, the estimated annual variation rate of core inflation (general index excluding non-processed food and energy products) remains at 0.3%, which is one point below that of the general CPI. In March, the estimated annual variation rate of the HICP stood at 1.2%, almost one and a half points above that registered the previous month. For its part, the estimated monthly variation of the HICP is 1.9%.

The German consumer price index is harmonised within the EU, the same cannot be said for Germany where the current price developments of goods and services are very different. Here, rising food prices are offset by significantly falling energy prices, primarily as a result of the fall in oil prices on the world market. Food prices rose by 2.2%. Higher prices were recorded in particular for meat and meat products (+3.5%), fruit (+3.2%) and vegetables (+3.1%). In contrast, the prices of energy products were 2.3% lower than in the same month a year earlier. Lower year-on-year prices were recorded for heating oil (-13.0%) and motor fuels (-2.9%). The prices of natural gas (+2.0%) and electricity (+1.2%) were higher than a year earlier, despite the decrease in the EEG surcharge. Germany's overall non-harmonized consumer price index came in at 0.5% on a monthly basis and 1.7% year-on-year in March, up from 1.3% in February, according to a new estimate from the Federal Statistics Office. The temporary reduction in the rates of value added tax, which was a measure of the Federal Government's stimulus package, ended on 31 December 2020. The reduced tax rate only continues to apply to restaurants and catering services. The fact that the higher tax rates since January 2021 have been passed on to the consumers is one reason for the increase in consumer prices. In addition to the end of the reduction in value added tax, the CO2 charge introduced at the beginning of the year has had an impact on prices.

Speaking about France, the strong and rapid change in the structure of households' consumption basket during the lockdown may have led to an underestimation of inflation. During the lockdown, while overall consumption fell by around 30%, some items of expenditure declined very sharply (transport, accommodation/catering and fuel dropped by between 70 and 90%), while others increased (food). All in all, the structure of consumption was thus profoundly altered, which may have affected the inflation observed by households. Indeed, the less consumed goods are those for which prices rose the least rapidly or even fell (fuel, leisure, transport, etc.) while the more consumed goods are those for which prices were the most dynamic (food). According to Insee, taking into account this distortion in the structure of consumption, the annual price increase in France in April 2020 was 1.1 percentage points higher than CPI inflation measured using the pre-Covid 19 fixed consumption basket.
Year on year, services prices increased by 0.7% in November, after +0.4% in October 2020. The prices of communication services rose by 1.1% after –1.6% in the previous month in link with the rebound of mobile phone service prices (+0.2% after −5.6%). The decrease in the prices of transport services softened (–3.7% after –5.4%) in the wake of airfares (–8.1% after –14.6%). The prices of health services (+0.5% after +0.4%) and those of « other services » (+1.2% after +1.1%) accelerated slightly. The prices of housing-related services increased at the same rate as in the previous month (+0.3%). In November 2020, food prices increased more sharply year on year than in October (+2.0% after +1.5%).

Excluding fresh produces, food prices increased at the same rate as in October (+0.5%). The prices of milk, cheese and eggs (+0.2% after –0.2%) and those of alcoholic beverages (+0.8% after +0.7%) grew while those of meat slowed down (+1.4% after +1.7%).
Year on year, the decline in **energy prices** was the same than in the last month (−7.8%). Petroleum product prices decreased less strongly than in October (−15.2% after −15.5%). Those of electricity increased at the same rate as in the previous month (+3.8%) and those of natural and town gas diminished more strongly (−6.1% after −5.3%)



Source: OECD

House Prices

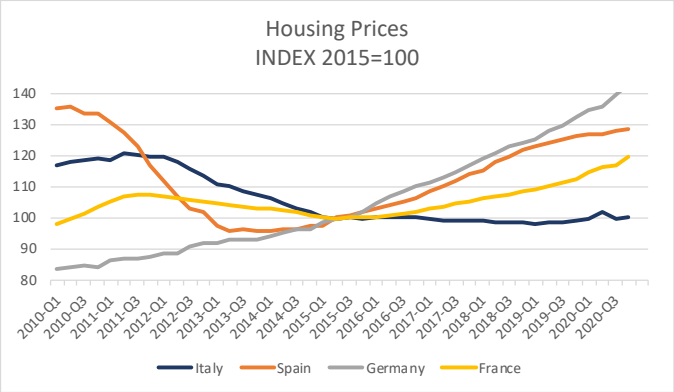
According to rating companies, house prices in Europe are set to grow more slowly in 2021 than in 2020, partly due to the gradual absorption of unmet demand from 2020, partly due to the income and employment situation that may affect purchasing capacity. In Italy in particular, house prices are expected to decline in 2021 and then return to growth in 2022-2023. Prices in 2020, according to S&P, were even more dynamic than in 2019: the long time spent at home due to periodic closures led Europeans to realize the need to have their own home; price-to-rent and price-to income rates therefore rose close to historic highs in most European markets, as well as purchase intentions, to a record high since 2003. In the fourth quarter of 2020, the index of house prices (IPAB) purchased by households, for housing or investment purposes, increased by 0.3% compared to the previous quarter and by 1.6% compared to the same period of 2019 (was + 1.0% in the third quarter of 2020). On average, in 2020, house prices increase by 1.9% with the prices of new houses registering a + 2.1% and those of existing houses (which account for more than 80% on the aggregate index) which grew by 1.9%. In March 2021 the price per square meter of a property was equal to € 1,718 / m2, compared to a historical maximum of 2.372 €/m2 reached in June 2012, with a quarterly variation of -1,5% and an annual variation of +1,1%.

After years of consistent rises, the Spanish brick has started a turnaround. In fact, the price of Iberian houses would have dropped as early as the second half of 2019. According to the findings of idealista España, in the month of May 2020 the general drop in the price per square meter of used houses stood at -1.3% (-1% per annum), settling at € 1730. The exceptions are represented by Barcelona and Madrid, which have seen further increases in prices, respectively of 1.3% and 0.5%. The most important drop in prices is recorded in Madrid and Barcelona, respectively -3.85% and -3.26%. Seville, Hospitalet de Llobregat, Zaragoza, Malaga and Valencia are currently showing slightly higher prices; for 2020, real estate values are expected to decline in these cities as well. Looking at the price per square meter, Barcelona still remains the city with the highest values (3,143 euros per square meter). Madrid follows with € 2,594. On a national level, prices fell by 34% from the maximum prices reached between the end of 2006 and the beginning of 2007, when they reached 3,550 euros per square meter. The current prices are placed at the levels of 2011. The immediate future of housing in Spain is linked to the evolution of the pandemic and the mass vaccination of the population. At a time of heightened uncertainty, the market expects the first half of 2021 to be volatile, although experts are confident that the economic and real estate recovery in Spain will begin in the summer.

Despite the coronavirus pandemic, there are no signs of an abrupt correction in house prices in Germany, according to the Bundesbank's assessment. As the Bundesbank's experts point out, developments in residential real-estate prices have been robust so far during the coronavirus crisis, and, in particular, there have been no signs of a slowdown yet. According to data provided by the Association of German Pfandbrief banks (Verband deutscher Pfandbriefbanken, vdp), residential property prices rose by 6.8% in the second quarter of 2020 compared with the same period in the previous year.

In France, despite the pandemic and multiple lockdowns which brought uncertainty to many industries, the French property market has been resilient: recent data shows that prices across France have continued to rise.
House prices rose by 4.2% and apartment prices rose by 6.5% in the 12 months before September, and demand continued to increase too, though (unsurprisingly) not quite at the same rate as in 2019. In short, the acceleration of property prices during

2020 can be largely attributed to the continued demand for properties, but a lack of supply as a result of the Covid-19 lockdowns. While many people have been unable to move, others have been prompted by the confinement to move out of city centres and into areas with more space and a better quality of life – perhaps this is why properties on the outskirts of cities have been increasing faster than those in the centre, an unusual trend.



Source: OECD

Monetary Policy

For 2021, the Governing Council has decided to maintain its conciliating monetary policy stance.

First, it stated that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and deposits with the central bank will remain unchanged at 0.00%, 0.25% and -0.50%, respectively.

The Governing Council expects key ECB interest rates to remain at or below today's levels until it sees inflation outlooks converging robustly at close enough, but below, 2%.

Second, the Governing Council then declared its intention to continue purchasing under the pandemic emergency purchase program (PEPP) with a total budget of € 1.850 billion. The Governing Council will make purchases of net assets under PEPP at least until the end of March 2022 and, in any event, until it judges that the coronavirus crisis phase is over. The endowment may undergo changes over time if it becomes necessary to maintain favorable financing conditions to help counter the negative pandemic shock on the path of inflation.

Third, net purchases under the asset purchase program (APP) will continue at a monthly pace of € 20 billion. The Governing Council said monthly net asset purchases under the APP will last as long as it takes to sustain the effect of its dovish policy rates and end shortly before key ECB interest rates begin to raise.

Finally, the Governing Council intends to continue injecting a large amount of liquidity through its refinancing operations. In particular, the third set of targeted longer-term refinancing operations (TLTROs III) remains an attractive source of funding for banks, supporting bank lending to businesses and households.

The Governing Council continues to be ready to adjust all its tools, as appropriate, to ensure that inflation approaches its target in a sustained manner, in line with its commitment to symmetry.

Fiscal Policy

In Italy, the Prime Minister did not want to anticipate the figures of the next deviation, but was clear in saying that "we need to keep an expansionary fiscal policy in the next six months in all European countries". There is no danger of "austerity". Draghi looks to mid-April, simultaneously with the new Def. between Palazzo Chigi and the Mef the figures move around levels above 15 billion. According to Mef, the mechanism, with the usual parameters proportional to the drop in turnover, cost 4.737 billion per month. With closures continuing in March and threatening April, a life preserver like this would cost close to 20 billion. The intersection of these data therefore brings to 20 billion the financial requirement for a replica of the non-repayable fund. Which, moreover, should be accompanied according to the requests of many of the parties of the majority by an expansion of aid for 2020 judged too limited compared to the collapse in turnover.

The Spanish government has communicated that in 2021 it will be essential to maintain the expansionary fiscal policy of recent months. Firstly, because the restrictions on activity will remain, at least, until summer. Second, because public investment will be needed to stimulate recovery and increase post-crisis growth potential. In this context, the public deficit will exceed 100,000 million euros also in 2021, as extracted from the financing strategy of the Public Treasury for the year. The agency expects to issue almost 290,000 million euros, of which approximately 190,000 million will be the refinancing of the debt maturities and another 100,000 million will be a new deficit to cover the cash needs. In the coming year, the country will repeat itself as a partner of the eurozone with the highest public deficit. Not only that, the projected deficit for next year will even exceed the deficit of the euro area as a whole in 2020. Furthermore, in 2022 it would continue to be above 8% of GDP, which would mean being in line with the budget gap. for the entire euro area in 2020.

Germany announced a €130 bn ($154bn) stimulus package to lessen the blow of coronavirus – one of the world's largest fiscal responses to the pandemic.
"Germany has moved from austerity champion to big spender. No more austerity fetish," said Carsten Brzeski, Chief Economist at ING. "Germany has moved from austerity champion to big spender. No more austerity fetish." However, it doesn't necessarily spell a new economic era for the country. In fact, it's more likely the recent stimulus package will only vindicate policymakers who have long argued that Germany should tighten its purse-strings during good economic times, in order to prepare for the bad. In addition, Germany is expected to have a lower debt ratio after the crisis than all other G7 countries before the crisis.

France's policy response to the crisis was timely, flexible, and proportional to the size of the shock. The government launched comprehensive fiscal plans for 2020–22, totaling about 26 % of GDP in emergency and recovery measures. The emergency response was flexibly adjusted as the crisis unfolded, providing additional resources to the health sector and supporting households and firms by preserving jobs and providing liquidity. France's recovery plan, reinforced by the Next Generation EU Recovery Fund, focuses on the digital and green transformation of the economy, upgrading skills, and improving competitiveness.

Public Debt

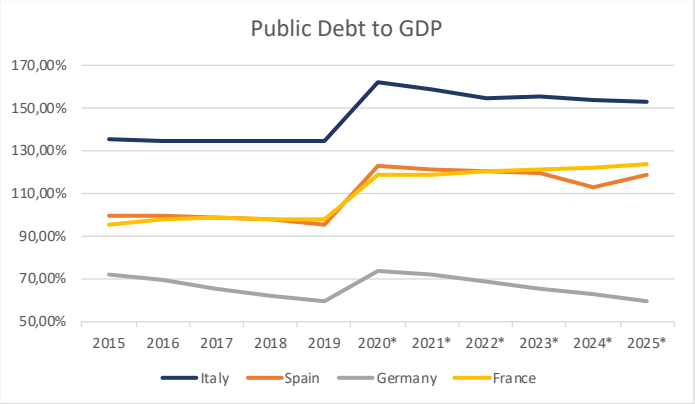
Italy's budget deficit will reach 7.5% of GDP in 2021, down from 10.9% in 2020, the International Monetary Fund said. Public debt will rise to 159.7% of GDP, up from 157.5% last year, the IMF said. "Italy's public debt is sustainable, supported by low interest rates and an expected recovery in growth," said Vitor Gaspar, head of the IMF's Fiscal Monitor. Gaspar added that "it is essential" that Italy uses the more than 200 billion euros it should obtain from the EU's COVID Recovery Fund "to finance high-quality projects that stimulate growth prospects, facilitate the transition to a green future. and digital and accelerate debt relief ". Italy is set to get the largest single portion of the Recovery Fund's 750 billion, 209 billion. Other EU funds will push total funding up to 223 billion.

New record of the public debt in Spain in absolute terms. The balance of the debt of the Public Administrations following the Excessive Deficit Protocol (EDP) has some 1,314 billion euros in January 2021, which represents a growth of 9.9% compared to last year. In the start of the year dry in 3,037 million. It is said that the public debt already drops to 117.3% of the GDP, keeping in mind the GDP of 2020 at current prices published by the INE. The debt-to-GDP ratio is the highest since 1902.

We have to go back to the beginning of the 20th century to see such a high debt in Spain compared to GDP. The coronavirus crisis is shaking public finances in such a way that since the measures to mitigate the impact of the pandemic began, public debt has not stopped growing from record to record in absolute terms. Never before has the debt of the Public Administrations reached 1,314 trillion euros.

October 12, 2020, will go down in German financial history. For the first time, new public debt increased at a rate of more than €10,000 ($11,900) per second, faster than during the 2007-09 global financial crisis, when a huge volume of net borrowing was needed. This headlong acceleration of debt, in Germany and in countries around the world, is the price being paid to stave off the economic consequences of COVID-19.

The French government now owes more money than at any time since the end of World War II. The elevated level of public debt is due to the impact of the coronavirus pandemic and ensuing economic crisis, according to the latest report from the national statistics office. France's public debt in 2020 was the equivalent of 116 % of annual GDP, and the budget deficit amounted to over 9 % of GDP, "the highest level since 1949," national statistics office Insee said. In 2019, before the Covid-19 pandemic, French government debt was 98 % of GDP and the budget deficit slightly more than 3 %.



Source: Statista

ECB Independence

The ECB is formally very independent and its mandate sets price stability as its overriding objective. Any change to either independence or the mandate would require a Treaty change, which must be approved by all member countries. It is most unlikely that such a change will ever be agreed upon. The independence of the ECB is seen as rock-solid.

Once the pandemic is over, fiscal policies will have to remain strongly expansionary and the ECB should keep indirectly financing the resulting budget deficits for as long as needed. The ECB will remain in full control of its policy stance, even if that means generously financing indirectly the budget deficits of its member countries. Things are subtler, however. Imagine the case when some countries need to pursue their expansionary fiscal policies for longer than initially expected (it will be the case of the most highly indebted countries).

Inflation will still be subdued in the high-debt level countries but rising in the low-debt countries. As the overall euro area inflation rises, the ECB will want to raise the interest rate and to discontinue its asset purchase programs. This would have two dangerous effects on the high-debt countries . A higher interest rate will raise their borrowing costs and debt service, and the latter would deepen their budget deficits. In this increasingly fragile situation, the end of indirect deficit financing could well trigger a new debt crisis and endanger the stability of the financial system.

This could very well lead the ECB to keep interest rates low and to continue to indirectly finance budget deficits. If it successfully manages to prevent a new debt crisis, inflation will rise in the low-debt countries, quite possibly bringing the overall euro area rate above target. In effect, the ECB would become hostage to the high-debt, large-deficit countries. Whether it is a formal or an informal hostage makes little difference. The ECB would be formally independent but informally dependent and subject to fiscal dominance.

The ECB will have to confront some implications of its very active and welcome actions during the pandemic. Having indirectly financed a large share of new public debts by its member governments, it will have to tread a fine line between its price stability mandate and the need to avoid disrupting debt markets, which could lead to fiscal dominance and, some fear, a loss of independence.

Demography and Labor Supply

The latest figures from Mediterranean countries have shown remarkable declines in rates of childbirth in the first months of 2021. Italy, for example, where population has been steadily shrinking since 2017, witnessed a dramatic decline in births throughout 2020 – from 420,000 in 2019 to around 400,000, according to the country's national statistics agency ISTAT. Even in 2019 total fertility rate in Italy was as low as 1.27, and this languishing level now looks set to fall even further this year. The latest figures from the agency show that Italy recorded 21.6% fewer births in December 2020 — nine months after the country went into lockdown — than in December 2019. With Italy already facing a diminishing population, low birth rates and fewer religious and civil marriages, the COVID-19 pandemic severely impacted those numbers for 2020.

According to the Italian National Institute of Statistics, commonly referred to as ISTAT, more than 746,000 deaths were registered in 2020, almost 112,000 more than 2019 — an increase of 17.6 % — and the highest number recorded since the end of World War II . The COVID-19 pandemic has triggered a deep economic crisis not seen since the Great Depression. Italy was one of the OECD countries most affected by the economic fallout of COVID-19: when accounting for both the extensive margin of adjustment (fewer employed workers) and the intensive margin (fewer hours worked among those in employment because of part-time or short-time work), Italy experienced one of the largest drop in hours worked among all OECD countries for which data are available (-28% in the initial three months of the crisis). The crisis has disproportionally affected the self-employed, temporary and low-pay workers, youth and women. In April 2020, in Italy, workers in the top earnings quartile were about 50% more likely to work from home than those in the bottom quartile who, conversely, were twice as likely to have stopped working. This may exacerbate pre-crisis labour market inequalities.

Foreigners have compensated for the high mortality and low birth rate registered during the first half of 2020 due to the pandemic, according to data from the INE. Statistics for 2020 show that, in a period marked by the pandemic and the limitation of mobility, the population of Spain has increased by 18,953 people and stood at 47,351,567 inhabitants. The INE explains that the population growth in Spain was due to the increase in the population of foreign nationality — 99,183 people, to a total of 5.3 million—, since the population of Spanish nationality fell —by 80,230 people—. Thus, there was a negative balance of 94,057 people (167,559 births, compared to 261,616 deaths), which was offset by a positive migratory balance of 113,856 people. The largest increases in relative terms occurred in the Balearic Islands (0.37%), the Canary Islands (0.33%) and Murcia (0.28%); at the opposite extreme, the most marked decreases were recorded in Castilla y León (–0.42%), Asturias (–0.34%) and Extremadura (–0.25%). From an employment standpoint, Spain's business structure is highly fragmented, consisting of small business units. In fact, eight out of every 10 companies in Spain has two or fewer employees. The largest percentage of small enterprises is in the services sector, especially in trade. In contrast, the bulk of large companies is concentrated in the industrial sector. Moreover, a significant number of large companies are major international players in sectors related to infrastructure development, renewable energy, tourism, banking, insurance, the textile industry, health technology, aeronautics, the agri-food sector, and the car industry.

As concern labour market, the number of jobless hit 4,008,789 in February 2021. Meanwhile, 2020 saw the unemployment rate in Spain reach 16.13%, with analysts calling it the country's worst year in terms of employment since 2012. February's unemployment statistics are Spain's worst since the onset of the pandemic in March last year, when economic activity ground to a halt. Persons protected by temporary layoff plans increased by 160,414 in February to reach a new total of 899,393. The Spanish government in April 2020 stepped in to save thousands of jobs through an emergency program called Expedientes de Regulación Temporal de Empleo, or ERTE, which has put in place temporary layoff schemes. Those benefiting from ERTE programs are officially considered to be employed. Spain's economic problems were further exacerbated by the closure of tourism, which accounts for around 12.4% of the country's GDP. Spain welcomed 432,362 tourists in January, 89.5% less than in the same month of 2020, when the pandemic had not yet been officially declared. Tourist spending decreased by 90.5% to 451.8 million euros. In 2021, the national minimum wage in Spain remained fixed at 1,108.3 € per month, that is 13,300 euros per year, taking into account 12 payments per year. Accordingly the national minimum wage has remained stable, while the CPI of 2020 which was -0.5%, so workers have lost purchasing power in the last year.

In Germany, The measures introduced in Germany to push back the COVID-19-pandemic have also lead to a significant reduction of economic activities and consequently have effects on the labour market. For persons in employment this can mean reduced working times, slack work ("Kurzarbeit"), or even the loss of employment. On the other side, persons working in so called "essential jobs" might even experience substantially more working hours and a higher work strain.
Short-time allowance became a protective shield for millions of workers. The far-reaching shutdown of the economy pushed the number of unemployed up sharply to 2.6 million in April, an in-crease of 415,000 on April 2019. But a historical comparison shows that sharp-er rises in unemployment rates have occurred in the wake of oil crises and the collapse of the GDR economy.

In March and April, companies reported short-time work for 10.1 million workers to the Federal Employment Agency – 25% of all salaried workers. More than half the short-time workers reported were in manufacturing (28%), retail (13%) and hospitality (10%). How many are or will be receiving short-time allowance will not be evident for some months, as some companies report short-time work as a mere precaution. The short-time allowance and compre-hensive economic assistance schemes are securing millions of jobs in Germany. This becomes clear in a com-parison with the US, where some 34 mil-lion workers have applied for unem-ployment benefits since mid-March.

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In France, thanks to a very intensive use of short-time work, which covered about half of employees at the end of April 2020, the employment drop has been limited. It has mainly been due to the freeze of hiring. Between the end of December 2019 and the end of June 2020, salaried employment decreased by 715,000 or -2.8%. This decline, which is unprecedented in magnitude, remains much more limited than the decline in activity (-13.8% in the second quarter after -5.9% in the first).

During the period of confinement, a large number of unemployed persons had interrupted their search, leading, despite the decline in employment, to a decline in the number of unemployed persons as defined by the International Labor Office. This effect would largely fade away in the second half of the year. Thus, the unemployment rate would rise sharply in the second half of the year: it would be 9.0% in the third quarter of 2020 and reach 9.7% at the end of the year, 1.6 points higher than a year earlier.

APAC

CPI

Examining China, Japan, and Australia for the APAC region it is possible to observe different patterns regarding the influence of composing elements of CPI. For Japan and China crude oil prices, transportation and communication are the main drivers of the CPI fluctuations in the recent periods. Instead for Australia, the main drivers for inflation have been the rise in tobacco excise, the rise in alcohol prices, the introduction, continuation, and conclusion of childcare fee subsidies and home building grants. Japan's consumer prices declined 0.4 % year-on-year in February 2021, after falling 0.6 % in the previous month, as the pandemic continued to weigh on consumption. Prices were mainly dragged by utilities (-5.8 % vs -6.3 % in January), education (-2.1 % vs -2.2 %), transportation & communication (-1.3 % vs -1.8 %), medical care (-0.4 % vs -0.5 %), and culture & recreation (-0.2 % vs -0.1 %). Meanwhile, food prices were unchanged after edging down 0.1 %. The consumer price index in China rose by 0.4% YoY in March 2021, after a 0.2% drop a month earlier and compared with the market consensus of a 0.3% gain. This was the highest reading since October 2020, amid a sharp rebound in cost of for non-food goods (0.7% vs -0.2% in February), driven by transportation & communication (2.7% vs -1.9%); clothing (0.1% vs -0.5%); rent, fuel & utilities (0.2% vs -0.3%). Food prices dropped 0.7%, the second straight fall, with prices of pork declining faster (-18.4% vs -14.9%). The annual inflation rate in Australia unexpectedly was at 0.9% in Q4 2020, compared with market consensus and the prior quarter's figure of 0.7%. This was the highest reading in three quarters. Prices increased faster for both alcohol & tobacco (9.3% vs 8.1% in Q3) and education (2.1% vs 1%). Also, there were rises in cost of food (2.3% vs 3.4%), furnishings & household equipment (3.6% vs -0.1%), and insurance & financial services (1.2% vs 1.6%). At the same time, the cost of recreation & culture was flat (vs -0.7%). In contrast, cost fell further for housing(-0.9% vs -0.2%), transport (-4.6% vs -4%), clothing & footwear (-1.3% vs -0.5%), and communication (-2.7% vs -3.3%). On a quarterly basis, consumer prices also went up by 0.9%, after a 1.6% gain in Q3 and above forecasts of a 0.7% gain.

Source: IMF

House Prices

Covid-19 changed the perception of how people look into houses, emphasizing the need for a more comfortable place as in the new normal boundaries between working and living spaces are undefined. Japan is defined as a safe haven for wealthy individuals in Asia. Japan's housing market remains steady, amidst the economic repercussions brought by the COVID-19 pandemic. The nationwide residential property price index rose by about 0.8% (0.7% inflation-adjusted) during the year to Q3 2020, following yoy rises of 0.6% in 2019, 2.1% in 2018, and 2.4% in 2017, according to the Land Institute of Japan. Average new home prices in China's 70 major cities rose by 4.3 % year-on-year in February 2021, accelerating from a 3.9 % rise in the previous month. This was the steepest pace of growth in new home prices since October last year, as government cooling measures were largely offset by strong demand for property in some major cities. On a monthly basis, new home prices went up by 0.4 % in February, the most in five months. Real estate, a key pillar of China's economy, has helped fuel the country's robust economic recovery from last year's coronavirus hit to output. But an extended surge in home prices in recent months has raised concerns about speculative asset bubbles, prompting tighter regulations to close loopholes in home transactions and contain illegal fund-flows into the sector.

With regard to the property house price, Australia is experiencing the highest level since the COVID-19 crisis, with a real house price index at 108.1 during last quarter of 2020, according to OECD statistics. The nation's property values have taken off again after the central bank slashed interest rates to a record low and said they'll stay there for at least three years, furtherly supported by an improving economic backdrop as the roll-out of vaccines promises to bring the pandemic to an end.

People are also looking for larger houses with space to work from home. That could see home prices surge 16% over the next two years, according to Commonwealth Bank of Australia, the nation's largest mortgage lender. Moreover, a shortage of supply is helping fuel the price boom. The number of houses advertised for sale in the first three weeks of February was down 26% from a year earlier. While rising house prices are likely to bolster aspects of household consumption via wealth effects and confidence, surging asset prices and loan approvals also present an emerging financial stability challenge for the RBA and APRA. A re-emergence of macroprudential policy constraints is a risk over the coming months.

Source: OECD

Commodities

Commodities price has been an important driver for inflation trends, influencing industries costs and, consequently, product prices. In the past months, the rise of commodity prices in Japan, China, and Australia was inevitable and financial officials are warning about its lead to rising consumer inflation. Japanese wholesale prices marked their first annual increase in more than a year in March, a sign that rising commodities costs are pinching corporate margins and adding inflationary pressure to the world's third-largest economy. Analysts, however, expect the impact on consumer inflation to remain more modest in Japan as soft wage growth and a slow vaccine rollout are seen weighing on household spending. There is growing optimism in Japan that the Tokyo Olympics will aid a jet fuel-led oil products demand recovery in 2021, seen as the light at the end of a tunnel after a long period of feeble sales, although the COVID-19 pandemic will continue to dictate decisions on run rates. Instead of China, the results of rising commodity prices has more drastic effects. Data released on Friday showed that prices that Chinese factories charge wholesalers for their products rose the most in almost three years in March, while consumer inflation also rose for the first time in three months. With respect to Australian data, estimates for March indicate that the commodity price index increased by 1.6 % (on a monthly average basis) in SDR terms, after increasing by 3.1 per cent in February.

The non-rural and base metals sub-indices increased in the month, while the rural sub-index decreased. In Australian dollar terms, the index increased by 1.3 per cent in March. Data provided by RBA outline a rapid growth in commodity price, with the index reaching the value of 111.3 (year 2019-2020 = 100) in March 2021, pushed by non rural commodity price, with the specific index reaching the value of 114.4 in the same month.

Expectations

Expectations are great indicators of the efficiency of implemented policy from households' point of view. Moreover, they shape the mutual relationship between the employees and employers, in the phase of wage bargaining. People in Japan think that the change in price levels will be either slightly increasing or not changed significantly. They believe in the same level of consistency amid the market uncertainty. For China, the expectations are characterised by people's lack in purchasing power. Even though the product is going up, consumers do not have the incentive to purchase more. According to national survey from Reserve Bank of Australia, consumers expect inflation to increase above the central bank target, touching 4.1% in March 2021. Nevertheless, the expected price is far from the official inflation forecast published in April 2021 by Reserve Bank of Australia and confirmed by the estimates elaborated by IMF. The international organization predicts the inflation to remain, at least until 2026, within the target and below it until 2024. In contrast, markets' inflation expectations follow a different trend, as their projections forecast a sharp decline from this moment on, reaching gradually the lowest point in March 2022, when inflation is expected to be at 1.6 percentage points.

The inflation in the region is expected to remain subdued, notwithstanding higher commodity prices. The passthrough to core inflation, excluding volatile items such as food and energy, will remain weak so long as activity is well below potential. A robust service sector rebound, and an associated rise in hiring, will be needed to ignite inflation. In turn, this will keep most central banks on the sidelines.

Monetary Policy

During the past year, countries were forced to implement drastic measures in order to minimize the economic downturns of Covid-19. From this time on, governments have not changed their attitude and have kept their policy standard and loose. The last meeting for Japan's monetary policy was held on March,19 and the latest policies were kept unchanged. The review prompted three key measures. Firstly, the Bank will establish the Interest Scheme to Promote Lending, which will provide incentives to financial institutions based on the absolute value of its short-term policy rate. This will enable the BoJ to "cut short- and long-term interest rates more nimbly while considering the impact on the functioning of financial intermediation". Secondly, the Bank clarified that its tolerance range for fluctuations in the 10-year government bond yield would be plus or minus 0.25% from the target level, thus implicitly widening it from the previously assumed 0.20% band. Lastly, the BoJ announced it would maintain the Covid-19-motivated upper limits for purchases of exchange-traded funds (ETFs) and Japan real estate investment trusts (J-REITs) at JPY 12 trillion (around USD 110 billion) and JPY 180 billion (USD 1.6 billion) respectively, but removed its previous guidelines for recommended annual purchases. The BoJ reiterated its dovish tone in its communiqué, stating that it will "closely monitor the impact of the novel coronavirus and will not hesitate to take additional easing measures if necessary", while it also "expects short- and long-term policy interest rates to remain at their present or lower levels".

China has recovered so rapidly from the coronavirus pandemic that authorities are pulling back support for the economy more quickly than they did following the 2008 financial crisis, according to Allianz. China's monetary easing policy, which includes lower interest rates, kicked off in January 2020 after an acceleration in the spread of Covid-19 domestically. The support reached its height nine months later in October, with only 41% of the intensity seen following the financial crisis according to proprietary analysis.

The aim of China's policy tightening is more about financial vulnerabilities and addressing the risk of overheating in the real estate and financial markets. In a sign of how Beijing is taking a moderate approach, the People's Bank of China on Monday kept the loan prime rate — a benchmark for lending costs — at the same level in March for an 11th-straight month. The last time the central bank changed the rate was a cut in April 2020.

Australia monetary policy has not changed since the breakdown of COVID pandemic, in an effort to increase confidence to spend and boost economic recovery.

The RBA targets a yield of around 0.1 per cent for the yield on the 3-year Australian Government bond and is prepared to purchase whatever quantity is required to achieve the target. This is a price target at the shorter part of the yield curve. Sovereign bond yields have increased over recent months due to the positive news on vaccines and the additional fiscal stimulus in the United States. Inflation expectations have also lifted from near record lows to be now closer to central banks' targets. The 3-year government bond yield in Australia is at the Board's target of 10 basis points and lending rates for most borrowers are at record lows. The Board is committed to maintaining highly supportive monetary conditions until its inflation and employment goals are achieved. The Board will not increase the cash rate until actual inflation is sustainably within the 2 to 3 per cent target range. For this to occur, wages growth will have to be materially higher than it is currently. This will require significant gains in employment and a return to a tight labour market. The Board does not expect these conditions to be met until 2024 at the earliest.

Fiscal Policy

Similar to monetary policy measures, governments' fiscal plans during pandemic times were directed at boosting economic recovery, which resulted in high deficit and expansive measures. Consequently, one of the main problems China, Japan and Australia are facing is managing and controlling the spike in debt/gdp ratio and while trying to avoid economic recession.

For Japan this fiscal year alone, the issuance of new Japanese government bonds (JGBs) will be about ¥112 trillion — the highest ever and more than double the previous record of ¥52 trillion seen in fiscal 2009, when the global financial crisis hit the country. Experts say that increased spending due to the emergency is unavoidable but that Japan will need to start seriously discussing how it will be dealing with its debt once the pandemic eases — otherwise, it may face severe ramifications.

They also said the Bank of Japan's exit strategy from its ultra-easy monetary policy will be a grueling issue, with the central bank's ballooning balance sheet likely to pose a risk to the country's fiscal sustainability somewhere down the line depending on the market's situation.

China's fiscal policy will remain proactive but to be more sustainable this year, focusing on promoting its efficiency and quality, reflecting a "people-centered" principle, Finance Minister Liu Kun, said at a news conference on Friday.

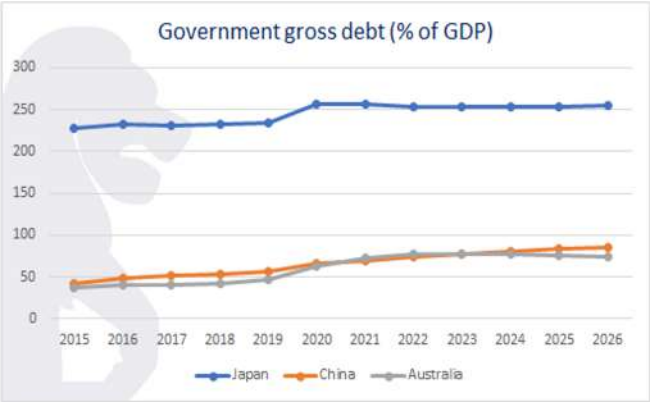
The fiscal policy will remain basically stable, without any sharp shift. Compared with 2020, this year, the target of fiscal deficit to GDP ratio and the local government special bond quota will decline, but still higher than the level in 2019.
According to the finance minister, the central government's transfer payment to local will increase this year, to more than 8.3 trillion yuan ($1.28 trillion), and these funds will be saved from controlling the central government's spending. The World Bank (WB) pointed out in its latest report on China's economy that the country's gross domestic product is expected to grow 2 % in 2020 and further rebound to 7.9 % in 2021. The bank has attributed the "faster than expected" recovery of economic activities to China's effective epidemic-control strategy, strong policy support and resilient exports. According to China's tax authorities, tax and fee cuts in the first 11 months of 2020 totaled 2.37 trillion yuan (about 363.22 billion U.S. dollars), out of which 1.64 trillion yuan was saved under the preferential tax and fee measures unveiled in 2020 to bolster economic development and COVID-19 containment.
The start of the pandemic has not found Australian Balance in a bad state, as the debt to GDP ratio was at a relative low stage. However, Australian Government debt has experienced a terrific increase, and the trend is not expected to invert, as the budget is projected to be in deficit for at least the next decade. These impacts to the Budget are being driven by a worsening economy, which fell into recession in 2019–20 primarily as a result of the COVID-19 pandemic and responses to it, including the shutting of businesses and closing of state and international borders. The pandemic has also reduced government tax receipts, including personal income tax receipts and company tax receipts which have been impacted by lower employment, average incomes and reduced corporate profitability. Further, the Australian Government has significantly increased payments through policy decisions such as providing economic stimulus and additional income support to households. However, the major part of the measures put into stage with the purpose of offsetting the impact of the pandemic crisis are expected to end in 2022, according to the Parliament statement.

As a matter of fact the new temporary support payments such as JobKeeper and the coronavirus supplement, has come to an end in March 2021, so the account balance is expected to stabilize, despite remaining in a negative territory.

Public Debt

As mentioned in the Fiscal Policy section, the biggest challenge for APAC countries is to stabilize the Public Debt. Japan is already the global leader in accumulating debt, by adding nearly $2 trillion during this fiscal year with record stimulus packages to cushion the impact of coronavirus. With debt levels around two and a half times the size of its economy, Japan manages to keep government bond yields ultra-low and investor confidence high that it can avoid default.

China's ongoing struggle with debt continues, as the government attempts to reduce leverage in the wake of COVID-19 fiscal spending. Figures from the Bank of International Settlements (BIS) for over 40 countries suggest China's the increase in debt-to-GDP ratio from the start of 2020 to end of June was quite ordinary compared to the other countries. China's debt-to-GDP ratio, nevertheless, is distinctly higher than in other emerging economies and on par with US and euro area, which have more developed financial markets. Household sector debt grew 16.3 % in February, up from 15.2 % in January. Government debt grew by 15 % in February, down from 15.9 % in January. The target for government debt growth is forecasted to be 11.5 % by the end of the year. Non-financial firms are predicted to strengthen their balance sheets as economic recovery continues. Growth of household debt is predicted to decline as real estate prices, and therefore real wealth, continue to decline. This will help to reduce debt pressures. The stock of shadow banking debt has declined since its peak in 2017, although the flow increased year-on-year in February. The sector will continue to be monitored closely for rising leverage.



Source: IMF

As a consequence of the relaxed fiscal policy measures, Australian gross debt on GDP ratio is expected to increase in the next year, reaching the peak of 78 percentage points in 2023, and subsequently decrease gradually to 75 percentage points in 2026, according to IMF estimates, thanks to the decrease in fiscal spendings.

Central Bank Independence

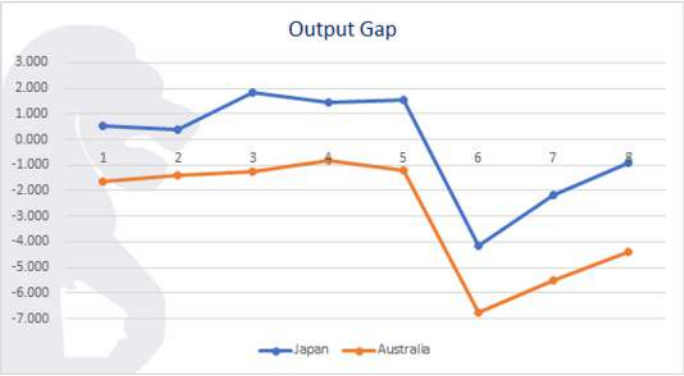
Generally speaking, the independence of the central bank refers to the extent to which the central bank is not subject to the political influence of the government. In China, the existing central bank is characterized by being independent, but not fully independent. It is a "relatively independent" situation. The central bank reform in 1995 is a part of the reform of China's financial system. The main goal of the reform is to build the bank into a market-oriented macro-control institution and a financial regulatory agency. One of the main contents of the reform is to improve the independence of the central bank. However, as with most countries in transition, the main problem with Chinese central bank independence is that China has a very strong centralization tradition. And government dominates both social and economic life, especially in financial control.

Although there is no quantitative analysis regarding the independence of the Reserve Bank of Australia over Australian government, the legislation discussed and signed about this aspect outlines the situation of an independent central bank, the main act having in mind the monetary policy objectives. As a matter of fact, both the current and previous Treasurers have signed agreements with the Reserve Bank Governor publicly expressing their 'common understanding...on key aspects of Australia's monetary policy framework'. However, it is important to notice and to take into account the fact that Reserve Bank of Australia has to make consultations with the government about important decisions, as monetary and banking policy are 'directed to the greatest advantage of the people of Australia'. This could result in a lower level of independence, considering also the fact that, in case of impossibility to reach an agreement, Treasurer may submit a recommendation to the Governor-General who, with the advice of the Federal Executive Council, may determine the policy to be adopted by the Bank. The Treasurer would then inform the Reserve Bank Board of the policy so determined and the Board would be obliged to implement it.

Output Gap

The output gap is an economic measure of the difference between the actual output of an economy and its potential output. In the narrow period, all three countries are predicted to operate in a negative area of output gap, which decreases the risk of pressure on inflation.

According to the estimates by IMF, in Australia the potential gdp growth in the next years should be at 2.6 %, but at the moment the ratio is still below its potential (1.7%), although forecasts are optimistic about future trends. As a matter of fact GDP is expected to grow and reach a 2.2% growth in 2023, and as a consequence output gap is going to narrow, despite remaining negative.



Source: OECD

Demography and Labour Supply

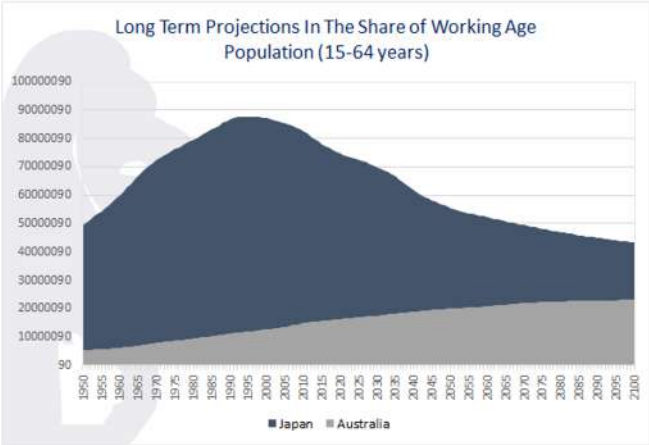
Demographic concerns were always part of the economical planning as the aging population is the main indicator of the potential labour supply in a country. Accordingly the risk of unemployment going down can be associated with the increase in higher wage demand, thus causing pressure on inflation.

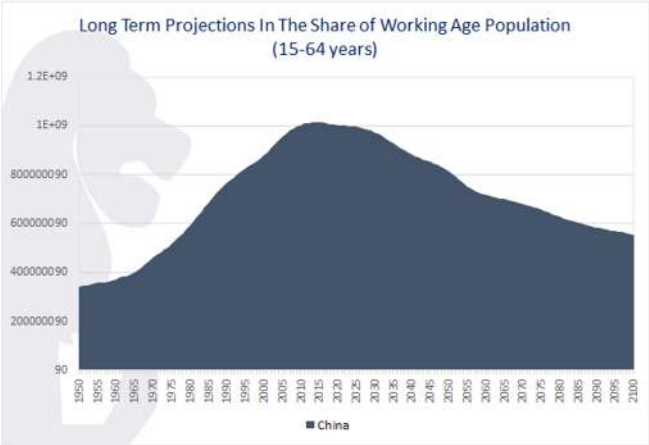
There are two fundamental aspects behind Japan's aging population. One aspect is the increase in the proportion of the elderly in the total population. The other is the slower growth of the population, arising directly from the declining fertility rate. The former affects Japan's economic performance by increasing the social security burden and benefits. The latter has a direct impact on economic growth by reducing the labor force, which is a major factor in production. "A rapidly aging population and shrinking labour force are hampering growth," warned the IMF in its latest country report on Japan.This further implies that some of Japan's big industries — like motor vehicles and electronics — do not possess the manpower to continue at the current level of production. If Japan cannot maintain its levels of production, it may subsequently lose its spot as the third largest economy in the world. The IMF also calculated that the impact of aging could drag down Japan's average annual GDP growth by 1 percentage point over the next three decades.

Demography and Labour Supply

A report, issued this month by the Chinese Academy of Social Sciences, is the latest recognition that while China's notorious "one child" policy may have achieved its original aim of slowing population growth, it has also created new challenges for the government. A decline in the birth rate and an increase in life expectancy means there will soon be too few workers able to support an enormous and aging population, the academy warned. The academy estimated the contraction would begin in 2027, though others believe it would come sooner or has already begun. A decline in the working-age population could also slow consumer spending and thus have an impact on the economy in China and beyond. Many compare China's demographic crisis to the one that stalled Japan's economic boom in the 1990s. On the one hand, smaller increase of the working-age population and fast economic growth has led to labour shortage, and rising wages. Rising labour cost undermines the comparative advantage of labour-intensive industries, making it imperative to upgrade the industrial structure towards capital- and technology-intensive industries. On the other hand, China's percapita income has just reached the upper-middle level, and it has not yet gained notable advantage in physical capital. In addition, it still lags far behind developed countries in terms of labour quality and the development of science and technology. Therefore, it has little comparative advantage in capital and technology-intensive industries.

At the moment Australia has the same problem as other developed countries which is population ageing. Large inflows of relatively young migrants have supported population growth and increased the share of the population aged 25–34 over the 2010s. Despite this, the population has continued to grow older on average because the large baby boomer generation have begun to move into the 65 and over category and because of the ongoing trend increase in life expectancy. As a result, the number of people at retirement age per 100 working-age people (those aged between 15 and 64) has risen from around 20 to 25 over the past decade and is expected to rise further over the next decade.
Moreover, the shrink of labor supply that could lead to an increase in wages in the next year is supported by unemployment projections. The IMF statistics suggest that after the peak of unemployment during the pandemic (6.5%), Australia is already experiencing a recovery (6%) which will continue at least until 2026, according to the organization estimates and despite the end of Joobkeeper program on the 28th of March 2021.





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