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IN THIS ISSUE

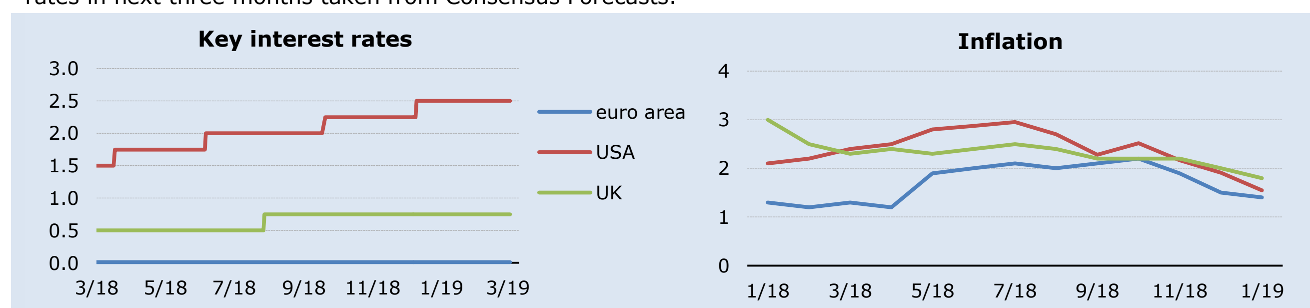
Economic growth is slowing across the economies we monitor and central banks' outlooks indicate that the slowdown will continue in the quarters ahead. Inflation is fluctuating around central banks' inflation targets in all the economies under review except Norway, Canada and Switzerland. The labour markets of most countries remain fairly tight, as reflected in rapid wage growth. Central banks' policy rates (except the federal funds rate) are below 2%, still giving their economies a monetary policy stimulus and also offering significant space for gradual monetary policy normalisation. However, only the Fed and the Riksbank are likely to normalise their policies by raising interest rates in the next three months. By contrast, the ECB has moved the date for raising its rates further into the future and announced the start of a new round of targeted longer-term refinancing operations. Spotlight *focuses on the twentieth anniversary of the establishment of the euro area. In our* Selected speech*, Richard H. Clarida, Vice Chair of the Fed's Board of Governors, outlines the monetary policy strategy review that the Fed will conduct this year.*

1. LATEST MONETARY POLICY DEVELOPMENTS AT SELECTED CENTRAL BANKS

Key central banks of the Euro-Atlantic area

	Euro area (ECB)	USA (Fed)	United Kingdom (BoE)
Inflation target	<2%[1]	2%[2]	2%
MP meetings (rate changes)	24 Jan (0.00) 7 Mar (0.00)	18–19 Dec[5] (+0.25) 29–30 Jan (0.00)	20 Dec (0.00) 7 Feb (0.00)
Current basic rate	0.00%; -0.40%[3]	2.25–2.50%	0.75%
Latest inflation	1.5% (Feb 2019)[4]	1.6% (Jan 2019)	1.8% (Jan 2019)
Expected MP meetings	10 Apr 6 Jun	19–20 March[5] 30 Apr–1 May	21 Mar 2 May
Other expected events	6 June: publication of Eurosystem staff projections	July: publication of Monetary Policy Report	2 May: publication of Monetary Policy Summary
Expected rate movements[6]	→	↑	→

[1] ECB definition of price stability "below but close to 2%"; [2] January 2012 definition of inflation target; [3] deposit rate; [4] flash estimate; [5] meeting associated with summary of FOMC economic forecasts; [6] direction of expected change in rates in next three months taken from Consensus Forecasts.



The **ECB** kept its key rates unchanged but pushed back its rate hike outlook. It now expects rates to remain at their present levels at least through the end of 2019. It will continue reinvesting the principal payments from maturing securities purchased under the asset purchase programme. It also announced the launch of a new TLTRO series (see *News* for more details). Compared with December, the GDP growth outlook was lowered in March for both this year and the next. The ECB expects GDP to grow by just 1.1% (versus 1.7%) in 2019 and 1.6% (versus 1.7%) in 2020; it still expects growth of 1.5% for 2021. The inflation forecast was revised down across the projection horizon. The ECB foresees inflation at 1.2% (versus 1.8%) in 2019, 1.5% (versus 1.6%) in 2020 and 1.6% (versus 1.7%) in 2021.

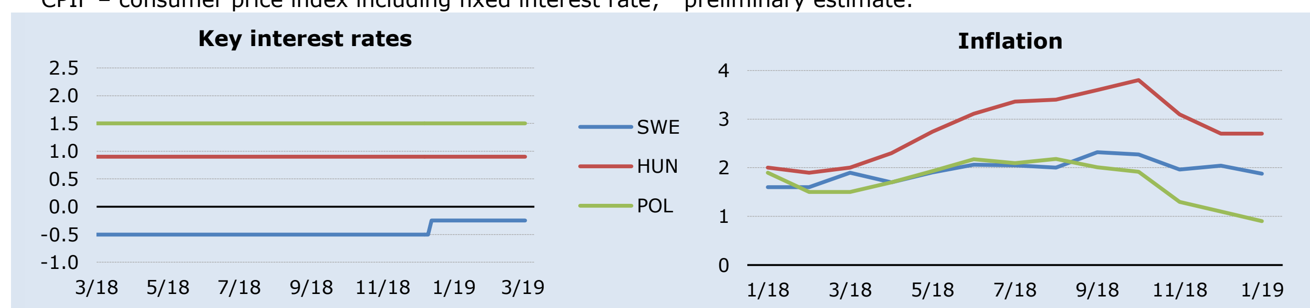
As expected, the **Fed** raised its base rate by 0.25 pp to 2.25%–2.50% in December 2018. At the January meeting, it left the rate unchanged and undertook to be patient as it determines the future adjustments to rates. According to the December 2018 FOMC macroeconomic projections, two 0.25 pp increases in the key rate can be expected this year (the September prediction had envisaged three such hikes). One rate increase can be expected in 2020. The FOMC expects slightly weaker GDP growth this year and the next than forecasted in September, i.e. 3.0% versus 3.1% in 2018 and 2.3% versus 2.5% in 2019. For 2020, it expects economic growth of 2.0%, the same as in the September forecast. Inflation is projected at 2% and the unemployment rate at 3.5%–3.8% in the next three years. Early this year, the FOMC issued a statement about its balance sheet strategy (see *News* for more details).

The **BoE** kept its key interest rate at 0.75% and the stock of government and corporate bond purchases at GBP 435 billion and GBP 10 billion respectively. GDP growth decelerated at the end of 2018 and is expected to keep slowing this year, reflecting softer activity abroad and Brexit uncertainties. Compared with the previous forecast, the BoE lowered its GDP growth outlook to 1.2% this year (from 1.7%), 1.5% in 2020 and 1.9% in 2021. It also revised down its interest rate outlook. The BoE initially expected rates to rise gradually to 1.4% at the end of 2021, but expects 1.1% in the current forecast. Inflation fell below the central bank's inflation target (to 1.8%) in January due to a temporary slowdown in energy price growth. The BoE expects inflation to be at the target in 2020 and rise slightly above it over the rest of the three-year forecast period as domestic inflationary pressures firm.

Selected central banks of inflation-targeting EU countries

	Sweden (Riksbank)	Hungary (MNB)	Poland (NBP)
Inflation target	2%[3]	3%	2.5%
MP meetings (rate changes)	19 Dec (+0.25) 12 Feb (0.00)	18 Dec (0.00) 29 Jan (0.00) 26 Feb (0.00)	8–9 Jan (0.00) 5–6 Feb (0.00) 5–6 Mar (0.00)
Current basic rate	-0.25%; -1.00%[2]	0.9%; -0.15%[2]	1.50%
Latest inflation	1.9% (Jan 2019)	2.7% (Jan 2019)	0.9%[4] (Jan 2019)
Expected MP meetings	24 Apr	26 Mar 30 Apr 28 May	2–3 Apr 14–15 May 4–5 Jun
Other expected events	25 Apr: publication of Monetary Policy Report	26 Mar: publication of Inflation Report	10 Jun: publication of Inflation Report
Expected rate movements[1]	→	↑	→

[1] Direction of expected change in rates in next three months taken from Consensus Forecast survey; [2] deposit rate; [3] CPIF – consumer price index including fixed interest rate; [4] preliminary estimate.



As expected, the **Riksbank** raised its policy rate by 0.25 pp to -0.25% at the December meeting and held it unchanged at the February one. According to the Riksbank's forecast, rates will rise further in the second half of this year. The mandate to intervene on the foreign exchange market, adopted in January 2016, expired on 12 February and the Riksbank decided not to extend it further. Inflation was 1.9% in January. The Riksbank kept its inflation outlook for the next three years broadly unchanged in its current forecast, expecting inflation of close to 2%. GDP grew by 2.2% in 2018. The Riksbank lowered its GDP growth forecast for this year to 1.3% (from 1.5%). It expects growth of 1.9% (versus 2.0%) next year and 1.8% in 2021. It still expects unemployment of between 6.3% and 6.6% over the next three years.

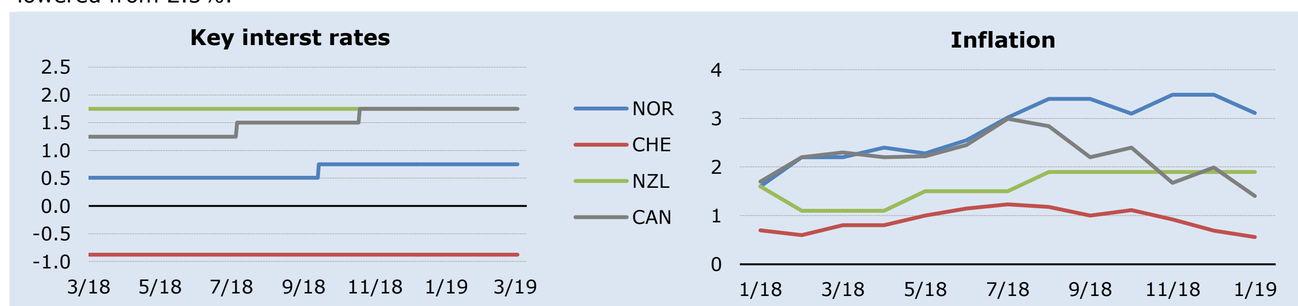
The **MNB** maintained its base rate at 0.9% and its deposit rate at -0.15% and is ready to gradually normalise monetary policy. It will use a combination of two instruments: the traditional interest rate corridor and swap instruments providing domestic currency liquidity. In January, the MNB launched the Funding for Growth Scheme Fix and is sterilising excess liquidity using a preferential deposit facility bearing interest at the base rate. Inflation was 2.7% and core inflation 3.2% in January. According to a preliminary estimate, the Hungarian economy grew by 5.0% in Q4 and will thus grow by 4.8% in 2018 as a whole. This is due mainly to growth in household consumption and investment, supported by credit financing. According to the MNB forecast, however, GDP growth will slow this year.

The **NBP** left its interest rate at 1.5% over the past three months. GDP growth remained buoyant in Q4 (5.1%), driven by still strong consumer demand fuelled by increasing employment, rapid wage growth and investment. Despite this, consumer inflation remains moderate. According to the March forecast, the central bank took into consideration the pro-growth fiscal package and raised the GDP growth outlook for this year from 3.6% to 4.0%. The economy will grow by 3.7% (versus 3.4%) in 2020 and 3.4% in 2020. The NBP lowered the inflation forecast for this year from 3.2% to 1.7% and that for 2020 from 2.9% to 2.7%; in 2021 inflation is expected to be close to the inflation target. The new inflation forecast also reflected a statutory freeze on electricity prices.

Other selected inflation-targeting countries

	Norway (NB)	Switzerland (SNB)	New Zealand (RBNZ)	Canada (BoC)
Inflation target	2%[5]	0–2%	2%	2%
MP meetings (rate changes)	24 Jan (0.00)	13 Dec (0.00)	13 Feb (0.00)	9 Jan (0.00) 6 Mar (0.00)
Current basic rate	0.75% -0.25%[1]	from -1.25% to -0.25%[2]; -0.75%[3]	1.75%	1.75%
Latest inflation	3.1% (Jan 2019)	0.6% (Jan 2019)	1.9% (2019 Q4)	1.4% (Jan 2019)
Expected MP meetings	21 Mar 9 May	21 Mar	27 Mar 8 May	24 Apr 29 May
Other expected events	21 Mar: publication of Monetary Policy Report	27 Mar: publication of Quarterly Bulletin	8 May: publication of Monetary Policy Statement	24 Apr: publication of Monetary Policy Report
Expected rate movements[4]	↑	→	→	→

[1] Only on reserves exceeding quota ("reserve rate"); [2] chart displays centre of band; [3] negative deposit rate on banks' account balances held at SNB, graded according to balance amounts; [4] direction of expected change in rates in next three months taken from Consensus Forecasts or, in the case of New Zealand, from RBNZ survey; [5] inflation target lowered from 2.5%.



The **NB** kept its policy rate unchanged at 0.75% in January and maintained the rate on reserves in excess of banks' individual quotas at -0.25%. Based on the December 2018 forecast, the NB expects the policy rate to increase to 1% in March and rise gradually to 2% at the end of 2021. This represents slower growth in the rate this year compared with the autumn forecast. The Norwegian economy grew by 2.3% in 2018. It will expand at a rate of 2.2% in 2019. The positive output gap is forecasted to narrow earlier than in the autumn forecast, but remains open over the entire forecast horizon. A tighter labour market indicates that wages will continue to rise. Inflation is projected to approach the 2% inflation target from above. It reached 3.1% in January, due mainly to faster growth in electricity prices.

The **SNB** has held no policy meetings since the latest CBM issue and the target range for its monetary policy rate (3M LIBOR) remains negative (at between -1.25% and -0.25%), as does the rate on banks' account balances with the SNB (at -0.75%). The SNB continues to reserve the right to intervene in the foreign exchange market as necessary. It anticipates GDP growth of 2.5% in 2018, slowing to 1.5% in 2019. The bank left its inflation forecast for 2018 at 0.9% and revised its forecast for 2019 down to 0.5%. The inflation outlook for 2020 is 1.0%. The SNB announced that it expects a CHF 15 billion loss for 2018.

The **RBNZ** left its official rate at 1.75% and expects to keep it at this level through 2020. Inflation was 1.9% in 2018 Q4 and will rise above the inflation target in the medium term as capacity pressures build. Employment is near its maximum sustainable level and stood at 2.3% in Q4. Economic growth slowed to 2.6% in 2018 Q3. According to the RBNZ forecast, the economy will expand at a rate of almost 3% next year and slow to around 2% in 2020. The RBNZ sees a risk of an even sharper slowdown.

The **BoC** maintained its key rate at 1.75% in January. GDP growth reached almost 2% last year. This year, GDP will grow by 1.7%, slightly lower than forecasted in October (2.1%). This is due mainly to lower oil prices, which have declined to such an extent (by 25% since October) that they are dragging on GDP growth. Economic conditions have been affected by uncertainty related to the US-led trade war. The March data suggest a sharper slowdown in GDP growth early this year than the BoC projected in January. Inflation was 1.4% in January and will gradually rise to the 2% inflation target by the end of this year.

2. NEWS OVER THE LAST THREE MONTHS

Fed comments on target size of its balance sheet

In its February Monetary Policy Report submitted to the US Congress, the Fed stated that the longer-run size of its balance sheet will be considerably larger than before the crisis. The Fed explained the longer-run size as being determined by projected trend growth for currency in circulation, the FOMC's decision to continue operating with ample reserves and the higher levels for other liabilities (the TGA, the foreign repo pool and DFMU balances). At the end of 2018, the Fed's balance sheet totalled USD 4.1 trillion, or about 20% of GDP. The Fed did not disclose the target level of its balance sheet, but it did report that, relative to GDP, its balance sheet remains smaller than those of other central banks in major advanced foreign countries (such as the ECB, the BoE and the BoJ). This announcement follows the January FOMC statement, in which the Committee expressed its readiness to adjust any of the details for completing balance sheet normalisation in light of economic and financial developments and in the preceding discussions mentions the possibility of slowing the balance sheet runoff. For more details on balance sheet normalisation, see the December, September and June 2017 CBMs.

Sole candidate for ECB chief economist is Ireland's Philip Lane

Ireland's central bank governor, Philip Lane, is to be ECB chief economist and will succeed Peter Praet, whose mandate expires at the end of May. Mr Lane was the only candidate nominated for the role by European governments; in February he was also endorsed by Eurozone finance ministers. As ECB chief economist, Mr Lane will also be a member of the ECB's Executive Board with a permanent voting right. He has yet to be formally confirmed for the role by the European Summit in May after consultations with the European Parliament and the ECB.

ECB announces new series of long-term loans to banks (TLTRO III)

At its March meeting, the Governing Council of the ECB decided unanimously to introduce a new round of operations to provide long-term liquidity to banks (i.e. targeted longer-term refinancing operations, TLTROs). These new quarterly TLTRO III operations, each with a maturity of two years, will start in September 2019 and end in March 2021. Under TLTRO III, banks will be entitled to borrow up to 30% of the stock of eligible loans as at 28 February 2019 at a rate indexed to the interest rate on the main refinancing operations over the life of each operation.

3. SPOTLIGHT: TWENTY YEARS OF THE EURO AREA AND THE EUROPEAN CENTRAL BANK

This January marked the twentieth anniversary of the introduction of the euro and the start of single monetary policy under the leadership of the European Central Bank. The euro area currently comprises 19 states. A total of 340 million EU citizens pay with the euro, which has become the second most used currency behind the dollar. In recent years, the euro area has undergone a period of crises, which revealed major gaps in its ability to face significant economic shocks. This notwithstanding, the single currency is supported by 75% of people in euro area countries. This article briefly describes the history of the single European currency and concludes by summing up the ways suggested in literature to improve the functioning of the economic and monetary union.

Twenty years ago this January, eleven EU member countries introduced the euro and started to pursue joint monetary policy under the leadership of the European Central Bank (ECB). This marked the implementation of Stage Three of the Economic and Monetary Union (EMU), a European economic integration project whose foundations were laid shortly after World War II.[1] Today, the euro area comprises 19 member states. The ECB currently sets monetary policy for 340 million people (for comparison, the US Fed does so for 325 million people). The euro area economy generates around 11% of global GDP and is hence comparable to the economies of the USA (16%) and China (18%, all in PPP).

Twenty years of the euro area – imperfect convergence[2]

"The euro is like a bumblebee. This is a mystery of nature because it shouldn't fly but instead it does."
Mario Draghi, President of the European Central Bank, in a *speech* given on 26 July 2012

The euro area has been a much discussed project right from the outset. Not every economist believed it would succeed in its goal to establish a single monetary policy for economically, culturally and linguistically different countries with independent fiscal policies. Given the observed differences, many believed the euro area was not an optimum currency area (OCA).[3] However, there were also expectations that favourable effects on trade would foster synchronisation of business cycles and the euro area would gradually start to satisfy the OCA parameters later on.[4]

Since the monetary union was established, euro area countries have profited from convergence of nominal variables, i.e. inflation and interest rates, and from exchange rate stability. The requirement to meet the Maastricht convergence criteria meant that inflation in each country had dropped to low levels before it joined the union. After the euro was introduced, inflation converged further across countries. This process was interrupted only by the onset of the crisis.[5] Even nominal long-term interest rates had converged to low levels before the euro was introduced. Before the crisis, they attained similar levels in all the member states, indicating that markets had ceased to differentiate between credit risks across the member states. This fact contributed, among other things, to the low motivation of some member states' governments to implement essential fiscal and structural reforms to increase their potential growth. Long-term interest rates diverged significantly across the member states after 2009, reflecting the varying magnitudes of their economic and debt problems.[6] The differences in yields across countries are now at their lowest post-financial crisis levels, but the degree of convergence of interest rates seen before the crisis has not been renewed.

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[1] A brief history of European integration efforts is given in the box at the end of this article.
[2] A detailed view of developments in the euro area, including analyses and accompanying charts, is provided, for example, in the Analyses of the Czech Republic's Alignment with the Euro Area 2011–2018, http://www.cnb.cz/en/monetary_policy/strategic_documents/emu_accession.html.
[3] See, for example, Eichengreen, B. (1991): "Is Europe an optimum currency area?", NBER Working Paper No. 3579.
[4] See, for example, Frankel, J. A., Rose, A. K. (1997): "Is EMU more justifiable ex post than ex ante?", *European Economic Review*, 41(3–5): 753–760, and Frankel, J. A., Rose, A. K. (1998): "The endogeneity of the optimum currency area criteria", *Economic Journal*, 108(449): 1009–1025.
[5] Inflation in the euro area has averaged around 1.7% over its twenty years of existence (1999–2018). It has thus been consistent with the ECB's definition of price stability, namely a consumer inflation (HICP) rate which is below 2% in the medium term; in 2003 it refined this definition to "below but close to 2%". However, the overall average conceals a difference between the period of relatively stable inflation before the global economic and financial crisis (inflation averaged 2.2% in 1999–2008) and the period of much more volatile and, on average, lower inflation in subsequent years (the average for 2009–2018 was 1.2%).
[6] The misalignment decreased at the end of 2012 after the ECB launched unconventional programmes, but the differences between yields rose again in 2015.

The member states of the monetary union differed in terms of economic level (as measured, for example, by real GDP per capita) before the euro area was established, and these differences grew further afterwards. Only in the period of the financial crisis did the gaps narrow slightly. This, however, was due to a greater decline in real GDP in wealthier states. The level of economic development remains uneven in euro area countries to this day.

Fiscal indiscipline has been apparent in most euro area countries since the monetary union started up. Although there are mechanisms designed to ensure public finance sustainability in the euro area (the Maastricht convergence criterion on the government deficit and debt before entry into the monetary union and the Stability and Growth Pact), they have often been disregarded. The problems escalated after the global financial and economic crisis started, when the debt of some countries surged due, among other things, to bail-outs of their banking sectors. The southern countries of the euro area, whose budget imbalances were linked with general macroeconomic and financial instability, were particularly hard hit by fiscal problems. In the last few years, however, the situation has improved or at least stabilised, especially in the case of the deficit criterion, due to fiscal consolidation and renewed economic growth. Nonetheless, fewer than half of the euro area countries are compliant with the government deficit and debt thresholds.

Tested by the crisis

"The euro had an easy childhood but a difficult adolescence."
Jens Weidmann, President of the Deutsche Bundesbank, in a speech given on 30 January 2019

The cohesion of the monetary union was tested by the global financial crisis and the subsequent euro area debt crisis. The global financial crisis broke out in the USA in 2008 and, given the global nature of financial markets, quickly spread elsewhere. It hit Europe hard in 2009, when EU GDP dropped by 4% on average. The debt crisis erupted in Europe in 2010. It was caused by the high levels of debt in some countries (especially the southern ones), which triggered financial market concerns about public finance sustainability in those countries. Both the ECB and the EU institutions introduced measures in response to the escalation of the debt crisis and the slowdown in the euro area.

1) The response of the ECB

The ECB responded to the deepening debt crisis by bringing in measures to reduce government financing costs in the southern countries.[7] In a situation of a fragmented euro area financial market and an absence of uniform remedial instruments, which prevented the single monetary policy from being sufficiently effective, the ECB had to opt for unconventional monetary instruments. In May 2010, it commenced the first Securities Markets Programme (SMP). However, it meanwhile also tightened monetary policy by raising its policy rate twice – in April and July 2011 – in response to developments in the real economy of the euro area as a whole, and especially in rapidly recovering economies led by Germany. These contrary ECB actions reflected the economic heterogeneity of the euro area.

At the end of 2011, the euro area economy started to slow sharply, due mainly to fiscal consolidation efforts in southern countries and generally procyclical fiscal policy in the member states. In the fourth quarter of 2011, it slipped into recession. The ECB responded by easing monetary policy. At the end of 2011, the Board of Governors lowered interest rates to the level attained before the previous increase, and in 2012 it lowered them further to zero. Steps were also taken to increase the liquidity in the banking sector through two extraordinary longer-term refinancing operations. Last but not least, the minimum reserve requirements were reduced.

A surge in uncertainty about future economic developments brought the flow of capital into the southern countries to a halt at the end of 2011 and in 2012. Investors started to sell off their assets in these countries after their borrowing costs reached historical highs. Another factor was uncertainty surrounding the continued euro area membership of some countries (especially Greece) and the ensuing risk of a fall in the value of originally euro-denominated investments due to these countries switching to their own devalued currencies. The possibility of a collapse of the euro area thus became the main risk. In this situation, ECB President Mario Draghi gave a speech at the Global Investment Conference in London in July 2012 saying that the ECB would do anything within its mandate to preserve the euro and adding,

[7] Given the prohibition of monetary financing, the ECB could not assist in financing governments or recapitalising banks. Rescue mechanisms were established at the EU level for this purpose (EFSF, EFSM, ESM – see later).

"And believe me, it will be enough."[8] This speech is regarded as the turning point in saving the euro. In September, the ECB decided to bring in a new Outright Monetary Transactions (OMT) programme.

The euro area economy started to grow again in mid-2013. However, inflation was very low in most member states.[9] Amid unchanged nominal rates, this posed two problems: the growth in real rates counteracted investment growth, which was being dampened by low economic growth and high uncertainty, and the low inflation also hindered the resolution of the southern countries' debt issues.

Owing to the risk of the euro area falling into deflation and returning to recession, and with inflation expectations decreasing, the ECB embarked on three monetary easing strategies in June 2014: (1) it lowered rates to negative territory; (2) it introduced further targeted longer-term refinancing operations (TLTRO); and (3) it launched quantitative easing in the form of an extended asset purchase programme (EAPP).[10] The net asset purchases were ended in December 2018, but the principal payments from maturing securities continue to be reinvested.[11]

The ECB's complex monetary policy also necessitated a greater focus on communication. In July 2013, the ECB started to influence market expectations in the form of "forward guidance", i.e. by providing information about its future monetary policy plans. This covered future policy rate movements and later also the asset purchase programme horizon. In January 2015, the ECB's Board of Governors decided to publish the minutes of monetary policy meetings (with a four-week delay). The frequency of the meetings was simultaneously reduced from monthly to eight a year.

2) The response of the EU

The growing market pressure on more vulnerable member states prompted a need for a response at the EU level as well. In order for assistance to be provided to member states, the parameters of the EFSF and EFSM rescue mechanisms were reworked and a standing European Stability Mechanism with a bank recapitalisation facility was launched in 2012. Given the increasing importance of compliance with fiscal rules, a "European Semester" was launched in 2011.[12] Together with improvements to the financial rescue mechanisms, a "Six Pack" – a set of six legislative measures to strengthen the Stability and Growth Pact – was adopted in 2011 and took effect in 2012. It also contains a macroeconomic imbalance procedure (MIP).[13] Preparations also started for the establishment of a banking union to be responsible for supervision of financial markets at supranational level.

Owing to non-compliance with the rules of the Stability and Growth Pact, it became apparent that the Pact had to be strengthened by legal obligations at the national level. However, efforts to introduce such requirements directly into the Treaty on the Functioning of the European Union were unsuccessful. In response, some member states decided to continue their efforts in intergovernmental form and in March 2012 adopted a Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (TSCG; the "Fiscal Pact" for short). The Treaty, which entered into force at the start of 2013, imposes an

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[8] For the full speech, see https://www.ecb.europa.eu/press/key/date/2012/html/sp120726.en.html

[9] Headline euro area inflation stood below 1% in 2013 and even dropped below 0% in 2015. In 2016, inflation in the euro area as a whole was still well below the ECB's definition of price stability and more than a third of the euro area countries were facing deflation. In 2017, headline inflation rose, averaging 1.5%, and in 2018, it went up to 1.7% on average. In January and February 2019, it stood at just 1.4% and 1.5% respectively.

[10] The ECB extended and amended its quantitative easing programmes multiple times as the need arose. For example, it added a corporate sector purchase programme (CSPP), an asset-backed securities purchase programme (ABSPP), a covered bond purchase programme (CBPP3) and a public sector purchase programme (PSPP). The total monthly purchases were set at EUR 60 billion on their introduction in March 2015. They were raised to EUR 80 billion in April 2016, then lowered to EU 60 billion in April 2017, EUR 30 billion in January 2018 and EUR 15 billion in October 2018.

[11] According to the Board of Governors' latest decision of January 2019, reinvestment will take place "for an extended period of time past the date when we start raising the key ECB interest rates, and in any case for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation".

[12] The European Semester is a cycle of economic and fiscal policy coordination within the EU. Under the European Semester, the member states submit their national state budgets to the European Commission in March so that any country-specific recommendations of the Commission are available in time. The main problem, however, remains the low rate of compliance with the recommendations, which are not legally binding, as they fall outside the powers conferred on the EU.

[13] The MIP helps identify and address macroeconomic imbalances that could adversely affect economic stability in a particular member state or the euro area as a whole. The indicators are used by the Commission to identify countries for which a subsequent in-depth review is conducted and possible further actions are taken in accordance with EU law.

obligation to transpose binding budgetary rules, including balanced or surplus budgets and a "debt brake", into national legislation. In order to incorporate at least some elements of the TSCG into EU law, a package of two legislative measures (the "Two Pack") was subsequently elaborated. Endorsed in 2013, the Two Pack strengthened the budgetary and macroeconomic surveillance powers of EU institutions.

In November 2014, a Single Supervisory Mechanism (SSM) was launched as part of the formation of the banking union. Under the SSM, the ECB assumed supervisory powers over systemically important financial institutions in the euro area. A Single Resolution Mechanism (SRM) has been in operation since January 2016.[14] The third pillar of the banking union is the Single Rulebook. Discussions are still underway about the establishment of a fourth pillar – a European deposit insurance scheme (EDIS).

June 2015 saw the publication of the Four/Five Presidents' Report, aimed at reviving the idea of a deeper reform of the EMU. However, the efforts to deepen integration were shaken in 2016 by the outcome of the Brexit referendum, in which UK citizens voted to leave the EU.

Proposals for improving the EMU

EU representatives, analysts and experts largely concur that the euro area (and the EMU as a whole) is not entirely fit for purpose in its current form. On the one hand, Eurosceptics have proposed that it be partially or entirely dismantled. Such a radical solution is possibly off the agenda given the level of public support for the single currency (in the latest Eurobarometer survey, the euro was supported by 62% of EU citizens and a full 75% of euro area citizens on average) and also given the high costs of exiting the euro area and re-introducing national currencies.

On the other hand, EU representatives have tabled proposals aimed at further deepening the EMU. In 2017, for example, the President of the European Commission proposed the establishment of a European Minister of Economy and Finance, the introduction of a special budgetary line for the euro area within the EU budget and the conversion of the ESM into a European Monetary Fund. In 2018, the Commission submitted proposals for the creation of a European Investment Stabilisation Function (EISF)[15] and a Reform Support Programme. The idea of joint euro area bonds (European Safe Bonds) is another long-discussed concept in the EU.

However, most of the proposals to improve the functioning of the EMU emphasise the need to complete the banking union project and also the capital markets union ("capital union") project,[16] which could help establish an integrated euro area financial market. Another proposal is the creation of a central fiscal capacity at euro area level to temporarily support and complement national budgets in their stabilisation function if necessary. This direction has so far only been suggested by an agreement on the joint euro area budget reached at the end of 2018.

Conclusion

From the outset, the euro area – a monetary union of sovereign EU states with their own fiscal and supervisory policies – was not a routine project "doomed to success". In a favourable economic climate and under the leadership of the European Central Bank, the benefits of the monetary union were quickly felt in the first few years. The differences in economies and economic policy across the member states did not disappear, however, and the problem areas materialised in full during the financial crisis, which tested the functioning and cohesion of the euro area. It turns out, though, that politicians and other players have the courage to take unconventional and often unpopular measures when the euro area truly comes under threat. The euro area project has proven its internal resilience and shown that it is likely to withstand other potential difficulties in the future.

[14] However, no publicly funded "backstop" has yet been established for the SRM.
[15] The purpose of the EISF is to support euro area member states and states participating in the ERM II experiencing a large asymmetric shock manifested in an increase in the unemployment rate and complying with certain eligibility criteria by providing them with loans to finance public investment at a subsidised interest rate. The EISF aims to maintain the level of public investment being channelled into pre-defined projects.
[16] The capital markets union (capital union) is a long-term Commission initiative, announced in 2015, aiming to deepen and further integrate the capital markets of the EU member states and to develop the financial system, enabling it to complement banking sector financing and offer alternative opportunities to investors.

Box: Steps towards economic and monetary integration in Europe

1951 – six European states (Belgium, France, Italy, Luxembourg, the Netherlands and the Federal Republic of Germany) establish the **European Coal and Steel Community** (ECSC) as a way of overseeing any future German rearmament.

1957 – the Treaties of Rome, establishing the **European Economic Community** (EEC) as a single market with free movement of people, goods and services, are signed.

1970 – the **Werner Plan**, proposing to turn the EEC into an economic and monetary union, to establish a European central bank and to transfer many fiscal powers to the European level, is published. The plan is abandoned by mutual agreement, but some of its ideas are used later on.

1979 – the **European Monetary System** (EMS) is established. The cornerstone of the EMS is an exchange rate mechanism (ERM) between the currencies of the participating countries. The exchange rates have a permitted fluctuation band with a standard width of ±2.25% from the central parity (and a temporary permitted exemption of ±6%). If an exchange rate nears the margin of the fluctuation band, the two central banks in question are obliged to start foreign exchange interventions. An artificial basket currency unit, the **ECU**, is also introduced under the EMS. The central parities changed quite often in the initial years of the ERM. Later, the ERM became a "Deutsche Mark zone" (maintaining exchange rate stability against the Deutsche Mark). On the one hand, this fostered closer convergence of economic policies, and on the other, it made the German central bank the monetary leader of the EEC. These two reasons revived the idea of an economic and monetary union project.

1989 – the **Delors Report** is published. The report proposes three steps towards Economic and Monetary Union (EMU): the first stage (1990–1994) includes, among other things, complete liberalisation of capital trades; the second stage (1994–1998) involves the creation of a temporary European Monetary Institute (EMI), to be succeeded by the European Central Bank (ECB), and the establishment of the European System of Central Banks (ESCB); the third stage (from 1 January 1999) entails the irrevocable fixing of exchange rates, the introduction of the euro and the start of the single monetary policy, with the entry into effect of an exchange rate mechanism within the EU (ERM II) and the Stability and Growth Pact.

1993 – the Treaty on European Union (TEU), aka the **Maastricht Treaty**, is signed. **Convergence criteria** are also formulated, compliance with which is a condition for participation in the monetary union, and the institutional arrangement of the future monetary union, headed by the newly established ECB with the objective of pursuing price stability, is clarified. Steps towards EMU are approved in line with the Delors Report.

1995 – **the name "euro"** and the symbol "€", inspired by the Greek letter epsilon (Є), are approved.

1998 – it is decided that **eleven EU member states** are compliant with the conditions of participation in Stage Three of the EMU and the adoption of the single currency: Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain. In June, the ECB starts operating and the European Monetary Institute closes down. The exchange rates of the eleven countries of the future euro area are fixed permanently to the euro on 31 December.

1999 – the **euro** is introduced on 1 January. For the first three years, it is cashless and used only for accounting and electronic payments. At the same time, the ECB starts to conduct single monetary policy for the euro area states.

2001 – **Greece** joins the euro area. The ECB publishes the security features of euro banknotes. Frontloading (the supply of commercial banks with euros) and subfrontloading (the supply of shops with euros) begins in September and December respectively, and starter kits of euro coins go on sale to the public.

2002 – **euro banknotes and coins** become legal tender in 12 EU countries. National currencies and the euro co-exist in these countries until the end of February, then national currencies cease to be legal tender.

Other euro area members: **Slovenia (2007)**, **Cyprus and Malta (2008)**, **Slovakia (2009)**, **Estonia (2011)**, **Latvia (2014)** and **Lithuania (2015)**. These countries' central banks automatically joined the Eurosystem on their date of accession to the euro area.

4. SELECTED SPEECH: THE FEDERAL RESERVE'S REVIEW OF ITS MONETARY POLICY

The U.S. Federal Reserve System announced in November 2018 that this year it will review the strategy, tools and communication practices it uses to pursue its mandate. Vice Chair of the Board of Governors Richard H. Clarida outlined the motivation for and scope and timeline of this review in a speech given at the U.S. Monetary Policy Forum in February in New York.

According to Vice Chair Clarida, the fact that the Fed is conducting this review does not suggest that they are dissatisfied with the existing policy framework. Nonetheless, in light of the unprecedented events of the past decade, it is a good time to assess whether the Fed can refine its strategy, tools, and communication practices to continue to meet its statutory goals in the coming years.

The motivation for the review is also based on the fact that economies have evolved in recent years. Perhaps most significantly, neutral interest rates appear to have fallen. This reflects factors such as aging populations, changes in risk-taking behaviour and a slowdown in technology growth. The implications are important, as a fall in neutral rates increases the likelihood that a central bank's policy rate will reach its effective lower bound (ELB) in economic downturns, making it more difficult for monetary policy to meet its goals. Another key development is that the short-run Phillips curve appears to have flattened, implying a change in the dynamic relationship between inflation and employment. This permits the Fed to support employment more aggressively during downturns, as a sustained inflation breakout is less likely. However, it also increases the cost of reversing unwelcome increases in longer-run inflation expectations. Anchoring them at levels consistent with the inflation objective thus becomes more important.

According to Clarida, the review this year will take the Fed's statutory mandate "to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates" (the "dual mandate") as given and will also take as given that inflation at a rate of 2% is most consistent with this mandate. The review of the Fed's current framework will be wide ranging, and Fed officials will not prejudge where it will take them, but events of the past decade highlight three broad questions.

The first question is, "Can the Fed best meet its statutory objectives with its existing monetary policy strategy, or should it consider strategies that aim to reverse past misses of the inflation objective?". The ELB on interest rates makes inflation undershoots more likely than overshoots, which can lead to inflation expectations becoming poorly anchored or anchored below the inflation goal. Some economists see solutions in targeting average inflation over a multiyear period, or in price-level targeting, in which policymakers seek to stabilize the price level around a constant growth path either permanently or temporarily. These strategies can only be successful if they are perceived by the public as a credible commitment. Thus, one of the most challenging questions is whether the Fed could, in practice, attain the benefits of makeup strategies that are possible in models.

The next question is, "Are the existing monetary policy tools adequate to achieve and maintain maximum employment and price stability, or should the toolkit be expanded? And, if so, how?". At present, the federal funds rate is the Fed's primary monetary policy instrument. However, after the ELB was reached, the Fed had to use additional instruments: balance sheet policies and forward guidance. Now is the time to assess their efficacy and to consider what additional tools could be used to ease policy when the ELB is binding. One example is the policy of the Bank of Japan, which established a ceiling for Treasury yields at longer maturities by standing ready to purchase them at a preannounced floor price.

The third question the review will consider concerns the Fed's communication. Over the past decade, it has undergone a number of changes to bring the Fed's goals, strategy and actions closer to the public. As part of the review, these changes will be assessed and other forms of communication will be considered.

Clarida also outlined the timeline of the review. At first, the Fed will conduct "Fed Listens" events and hear from a range of interested groups. Summaries of these events are expected to be released. In June, a conference will take place in Chicago, with speakers from outside the Fed. Beginning around the middle of the year, the Fed will conduct its own assessment of its monetary policy framework. Its conclusions will be released in the first half of 2020. Fed representatives do not want to predict their ultimate finding. However, any changes to the Fed's framework that might be made will be aimed solely at enhancing its ability to achieve and sustain its dual-mandate objectives.

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