

## Mario Draghi: Monetary policy in the euro area

Speech by Mr Mario Draghi, President of the European Central Bank, at The ECB and Its Watchers XIX Conference, organised by the Institute for Monetary and Financial Stability, Frankfurt am Main, 14 March 2018.

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Over the past year, the ECB has progressively recalibrated its asset purchase programme. We have thereby tuned our monetary policy stance to the changing pitch of the recovery – what I have previously termed “accompanying the recovery”.<sup>1</sup>

During this time, the economy has developed even more strongly than we expected and confidence in the euro area has increased. But it is not because real growth is strong that we can declare the job done.

There is a very clear condition for us to bring net asset purchases to an end: we need to see a sustained adjustment in the path of inflation towards our aim, which is a headline inflation rate of below, but close to 2% over the medium term.

Thereafter, our monetary policy will have to be calibrated so as to ensure that inflation continues along this path.

While we are now more confident than in the past that inflation is on the right track, risks and uncertainties remain. For this reason, even once the outlook becomes less dependent on net asset purchases, monetary policy still needs to be patient, persistent and prudent to guarantee the return of inflation to our aim.

### Developments in the real economy

The economy has been growing consistently above current estimates of potential growth, by more than a percentage point last year. All euro area confidence indicators are close to their highest levels since the start of monetary union, even if the latest readings came in slightly below expectations. And there are signs of pent-up demand for both consumption and investment that still needs to be satisfied.

For consumption, one useful indicator is the gap between essential purchases, such as food and rent, and non-essential ones, such as electrical goods and holidays. Non-essential purchases – which make up around 50% of household spending in the euro area – tend to be postponed during recessions and then to catch up as the business cycle advances.<sup>2</sup> Such purchases are currently only 2% above their pre-crisis level, compared with 9% for essential ones. This implies that discretionary household spending still has scope to support the expansion.

Business investment is also gathering steam as uncertainty in the euro area recedes. It now stands 7% above its pre-crisis level and surveys point to continued strong investment demand: capacity utilisation in the capital goods-producing sector is close to all-time highs for the euro area and for the four largest economies. Moreover, housing investment is still 17% below its pre-crisis level and is only now starting to pick up, which will likely add an extra impulse to the recovery dynamic.

This positive assessment of the growth outlook is reflected in the latest ECB staff macroeconomic projections. Annual real GDP is forecast to increase by 2.4% in 2018, 1.9% in 2019 and 1.7% in 2020. Compared with the December 2017 exercise, growth has been revised up for 2018 and remains unchanged for 2019 and 2020.

The strong performance of the real side of the economy is also visible in the labour market,

which continues on a recovery path. With employment rising by almost 7.5 million since the trough in mid-2013<sup>3</sup>, all of the job losses recorded during the crisis have now been recovered. The unemployment rate is the lowest since December 2008, despite a 2% increase in the labour force in that time.

There are some questions about the quality of these jobs: we have seen a rise in part-time and temporary work. But surveys point to continued employment momentum. Employment expectations are near record highs for both industry and services. We project that unemployment will fall to 7.2% by 2020.

The contribution of monetary policy to these developments has been crucial.

Our non-standard monetary policy measures have had a decisive influence on credit aggregates, as well as on bank-based transmission more broadly. We estimate that the growth rate of bank lending to euro area firms would be roughly half as strong today without our measures. Bank lending rates to firms would be almost 50% higher.

These positive findings are further buttressed by survey-based evidence. In the Bank Lending Survey, participating banks reported that our asset purchases contributed to an improvement of their liquidity position and their market financing conditions, and indicated that they have mainly used the additional liquidity related to these purchases to grant loans. Similarly, the ECB's negative deposit facility rate is assessed by banks to have had a positive impact on their lending volumes.

These beneficial effects of our policy measures have been accompanied by improvements in direct market financing conditions and, taken together, have made a substantial contribution to the economic recovery. Considering all of the monetary measures taken between mid-2014 and October 2017, the overall impact on euro area growth and inflation is estimated, in both cases, to be around 1.9 percentage points cumulatively for the period between 2016 and 2020<sup>4</sup>.

All this has also been facilitated by two further factors. The first is the strengthening of banks' balance sheets since the crisis, with CET1 ratios for significant banks rising by 580 basis points above their 2008 levels. The second is the improving the debt sustainability of both firms and households. Corporate and household indebtedness are now back to their early 2008 levels.

## **Developments in the inflation outlook**

The key question then becomes how quickly stronger demand will translate into rising prices.

Both the ECB staff projections and those of other international institutions suggest that inflation is moving in the right direction, over the medium-term horizon that is relevant for monetary policy. The latest ECB projections foresee a pickup in headline inflation from an average rate of 1.4% this year to 1.7% in 2020.

This is the latest in a sequence of projection vintages with relatively similar end-points. This stands in contrast with the disinflationary period from 2012 to 2015, where we saw continuous downward revisions to the inflation profile from one projection round to the next.

But there are reasons why we still need to firm our confidence in this forecast.

In particular, the performance of underlying inflation remains subdued compared with previous recoveries. Looking at a broad range of measures of underlying inflation, we certainly see an upward shift relative to the lows of 2015. But most measures have yet to show convincing signs of a sustained upward trend.

This is relevant because underlying inflation provides the slow-moving trend that exerts a pull on

wage- and price-setting in the medium term. Measures of underlying inflation can therefore provide information about the medium-term “attractor” to which headline inflation will gravitate once short-term shocks have faded out.<sup>5</sup>

There are two factors that might explain why the reaction of underlying inflation to a strengthening economy is slower than in the past.

First, the responsiveness of inflation to slack has weakened in recent years – a phenomenon we have seen across advanced economies as they recover from the crisis. Comprehensive analysis by the Eurosystem suggests this disconnect should be temporary, as cyclical forces linked to the crisis have been the main driver.<sup>6</sup> But it is still uncertain how persistent the effects of these forces might be.

Second, the degree of slack itself is uncertain. Even if slack is now receding, estimates of the size of the output gap have to be made with caution. Strong growth may be leading to higher potential output, as crisis-induced hysteresis may be reversed in conditions of stronger demand. And the effects of past structural reforms, especially in the labour market, may now be showing up in potential output.

For example, three-quarters of employment growth over the recovery has come from older workers and more than half from women. This is in part because past labour market reforms have encouraged both groups to enter the workforce in response to higher growth.<sup>7</sup> If substantially more workers can be drawn into the labour force, it would be possible for the labour market to strengthen further without generating wage pressures.

In this environment, policymakers have to be more cautious than in the past about the assumptions that underpin our forecasts – and simple policy rules based around estimates of the output gap are no longer a useful guide for our actions. The severity of the crisis means that we cannot rely exclusively on traditional historical relationships to determine how quickly real developments will be passed through into nominal ones.

The key issues we need to examine are wage dynamics, their pass-through to prices, and the possible risks to the inflation outlook.

Wage growth has been trending upwards for the euro area as a whole, rising by 0.5 percentage points from the trough in mid-2016.<sup>8</sup> But consistent with the weakening of the relationship between slack and inflation, the adjustment of wages during the recovery has so far been atypically slow.

That said, our analysis suggests that, as the cycle advances, the standard wage Phillips curve should hold better for the euro area on average. The unexplained residuals in the model – which in the past were sizeable – are diminishing, suggesting the link between unemployment and wages should improve.

Moreover, the anchors for wage formation are gradually becoming more aligned with our inflation objective. Backward-looking factors appear to be becoming less important, and the forward-looking anchor, inflation expectations, is strengthening.

Phillips curve decompositions find that past low inflation dragged down wage growth from its long-term average by around 0.2 percentage points each year between 2014 and 2017. But these same analyses suggest that, as headline inflation recovers to more normal levels, the impact of past low inflation on wages could be waning.

In terms of the pass through from wages to prices, the signals remain mixed. As wages have picked up, labour productivity has also recovered. Labour productivity grew by 0.5 percentage points in 2017, more than offsetting the increase in compensation per employee in the same

period. This has in turn caused the growth rate of unit labour costs (ULC) to slow, leading to questions about how quickly we can expect rising wages to feed through into inflation.

There are reasons why this phenomenon might be temporary. For example, in conditions of stronger demand, productivity tends to accelerate initially because GDP rises more strongly than capital and labour inputs, since it takes time to hire more staff or invest in new machinery. But as these inputs catch up, productivity growth typically slows, and wage pressures translate into higher ULCs.

At the same time, after a long spell of very weak capital formation, the strong performance of business investment could prolong the productivity cycle and push back the time when ULC growth leads to price pressures.

So this is an issue we will have to monitor closely, especially in an environment where one has to be cautious about extrapolating past relationships into the future. To build confidence that inflation dynamics are on track, we will need to see the actual data improving over time, which means stronger evidence of both strengthening wage growth and wage growth translating into ULC growth.

Moreover, there are still two risks to the outlook that could – if they intensify – conspire to reduce our confidence in the inflation path.

The first risk relates to the global environment, and in particular the possible spillovers of the new trade measures announced by the US administration.

Our own internal estimates suggest that the first-round effect on the euro area of the proposed measures is likely to be small, even if there is symmetric retaliation from US trading partners. But there are potential second-round effects that could have much more serious consequences. These include the risk of retaliation across other goods and an escalation of trade tensions; and the potential for negative confidence effects, which would weigh on business investment in particular.

The second risk relates to developments in foreign exchange markets and wider financial markets.

The euro has appreciated since the beginning of last year, and according to our analysis, this has recently been driven more by exogenous factors – that is, purchases of euros that cannot be explained solely by the economic expansion. This might weigh on inflation down the line as it does not fully arise from stronger euro area fundamentals. So this is a development we need to monitor closely.

In terms of wider financial markets, the volatility we saw in February has so far remained concentrated in equities, and the spillovers to other asset classes in the euro area that are more correlated with sentiment indicators has been moderate. But should there be any further sharp repricing in financial markets, we will need to monitor the consequences carefully.

### **Implications for monetary policy**

So what does this mean for the sustained adjustment in the path of inflation, which is the key condition for bringing net asset purchases to a gradual end?

A sustained adjustment is a forward-looking concept, consistent with the medium-term orientation of our monetary policy framework.

It is not determined by the latest flow of data or the performance of any specific indicator of price pressures. Rather, we have to look through short-term price fluctuations and focus on how inflation will develop at the end of a medium-term horizon. This means a span of time that is not

too short – as monetary policy cannot control inflation in the near term – and that is not too long, because our commitment to our inflation objective has to be verifiable.

Specifically, a sustained adjustment requires three conditions to be in place.

The first is convergence: headline inflation has to be on course to reach our aim over a meaningful definition of the medium term. The second is confidence: we need to be sure that this upward adjustment in inflation has a sufficiently high probability of being realised. The third condition is resilience: the adjustment in inflation has to be self-sustained even without additional net asset purchases.

As I said, successive rounds of projections give us comfort that inflation is on a rising path and is converging toward our aim in the medium term. As for the second criterion, the confidence interval of our baseline projections has both narrowed and become less skewed on the downside. Nevertheless, the upward trend of inflation is still subject to some degree of uncertainty and downside risks have not disappeared. And this trend is still dependant on quite some amount of monetary policy support.

This is why the fundamental conditionality built into our reaction function, which makes the horizon of the asset purchase programme conditional on a sustained adjustment in the path of inflation, remains in place.

At present, our policy stance is made up of three main elements: the flow of net asset purchases, the stock of outstanding bonds and principal reinvestments, and our forward guidance on the future path of key policy rates. But it is evident that the relative importance of the different elements will evolve over time, in three key ways.

First, net asset purchases remain necessary for now to validate the stimulus that is already priced into key indices of financial conditions and on which the inflation path depends. Thereafter, when progress towards a sustained adjustment in the path of inflation is judged to be sufficient, net purchases will come to an end. At that point, next to our forward guidance, appropriate financial conditions will be maintained by our reinvestment policy.

Re-investments will ensure a continued presence in the market, long after net asset purchases expire. The cumulative redemptions under the asset purchase programme between March 2018 and February 2019 are expected to be around EUR 167 billion. And reinvestment amounts will remain sizeable thereafter.

Second, as regards the evolution of our policy rates beyond the end of our net purchases, we will maintain the sequencing that is currently set out in our forward guidance, namely our pledge to keep key interest rates at their current levels “well past” the end of net purchases. This time-based element of our guidance is already vital today, in particular to ensure that our policy stimulus is not weakened by premature expectations of a first rate rise, and so financial conditions remain consistent with inflation convergence.

Third, as we move forward in time, the anchor for monetary policy, and the main tool for shaping the stance, will become the path of our key policy rates and forward guidance about their likely evolution. Our forward guidance has assured in the past, and continues to assure today stability to the short-end of the curve. As such, our communication, and rate path itself, will be calibrated to ensure that inflation continues to evolve along a trajectory that is consistent with the sustained adjustment path.

Adjustments to our policy will remain predictable, and they will proceed at a measured pace that is most appropriate for inflation convergence to consolidate, taking into account continued uncertainty about the size of the output gap and the responsiveness of wages to slack.

We have proven in the past that our forward guidance is credible. This has been the case both for our guidance on rates and on our reaction function, notably when we laid out the contingencies that would justify launching an asset purchase programme in response to a too-prolonged period of low inflation.<sup>9</sup>

## Conclusion

To conclude, we currently see inflation converging towards our aim over the medium term, and we are more confident than in the past this convergence will come to pass.

But we still need to see further evidence that inflation dynamics are moving in the right direction. So monetary policy will remain patient, persistent and prudent.

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<sup>1</sup> Draghi, M. (2017), “Accompanying the economic recovery”, speech at the ECB Forum on Central Banking, Sintra, 27 June 2017.

<sup>2</sup> This relationship is based on evidence from France and Finland in the 1980s and 1990s. For similar evidence from the United States, see McCarthy J. (2017), Discretionary Services Spending Has Finally Made It Back (to 2007), *Liberty Street Economics*, Federal Reserve Bank of New York.

<sup>3</sup> Data until 2017Q3.

<sup>4</sup> Updated on 16 March 2018: Mario Draghi mistakenly referred to the period 2016 to 2019, whereas the correct period is 2016 to 2020.

<sup>5</sup> For further details, see Box 7 entitled “The relationship between HICP inflation and HICP inflation excluding energy and food”, ECB Economic Bulletin, Issue 2 / 2016.

<sup>6</sup> See “Low inflation in the euro area: Causes and consequences”, ECB Occasional Paper Series, No 181, January 2017.

<sup>7</sup> Bodnár, K. (2018), “Labour supply and employment growth”, ECB Economic Bulletin, Issue 1/2018.

<sup>8</sup> All data on wages, productivity and GDP deflator components are until 2017Q3.

<sup>9</sup> See speech by Mario Draghi, [Monetary policy communication in turbulent times](#), at the Conference De Nederlandsche Bank 200 years: Central banking in the next two decades, Amsterdam, 24 April 2014.