

A Changing Europe Monitor

A closer look at inflation and why it is not low

There is widespread surprise that Eurozone inflation appears low currently, notwithstanding that real GDP growth is brisk and even accelerating. In this report, we highlight several factors why underlying inflation is not as low as it appears, in our view, and measured inflation is likely to pick up well above expectations in the coming quarters.

Inflation is relatively low at the moment because there are fairly long lags between an economy operating above its potential rate and inflation materialising. In the Eurozone, capacity constraints began to materialise, in our calculations, around the summer of last year and they should reach levels comparable to those seen in 2008 only next year, on our estimates. This means that the recent behaviour of inflation is not likely to prove to be a good predictor of the coming quarters.

Commodities prices are the other big reason inflation has proved more modest than expected in recent years; however, this is no longer the case, at least for fuel prices. We forecast average eurozone inflation at 2% for this year and 2.5% for 2019E, above the ECB's projections of 1.4% and 1.5% respectively.

We have priced into our models the euro at 1.25 on average against the dollar this year and next, but the risk is biased in favour of a bolder rise, in our view, to 1.40 this year and an eventual reversal to 1.20 next year. Even in this case, inflation is likely to overshoot the ECB's forecasts.

Forecasting inflation correctly is, of course, enormously important as we come to the end of the quantitative easing programme. However, it is equally important, in our view, to realise that we are most likely underestimating inflation currently, for at least three reasons. It well documented that national statistics are still struggling to correctly measure housing costs: 78.5% of the eurozone population lives in a country with house price inflation above 3%yoy, thus is probably experiencing rising rents too.

The growing use of big data and artificial intelligence is changing the pricing strategy of companies – this in our view already affects a third of the goods of the CPI basket.

Faster depreciation of a product is an increasingly widespread sales strategy for companies, which de facto is a form of inflation for consumers. In our view this affects 16% of the CPI basket.

If we are correct on this, then we expect to see three broad set of consequences. First, monetary policy will remain accommodating for a long time, but modest tightening in future will have a big impact. Support for "unorthodox/populist" political parties will not fade away – the parties may change, but the electorate will continue to seek someone able to vent their dissatisfaction with perceived falling purchasing power. Consumption may increasingly disappoint relative to survey results if wages do not pick up briskly from here, as households' budgets get tighter and tighter.



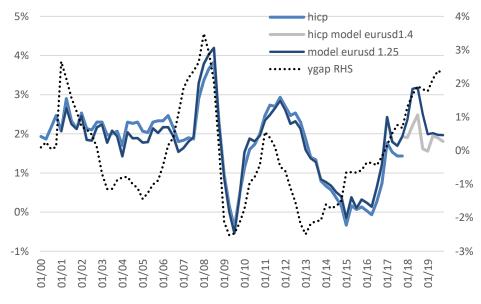
Inflation: growth & commodities prices

It is possible to boil down the dynamics of inflation using just three variables: food inflation, transport/fuel inflation and the output gap, which describes the rate at which an economy is operating, or above its productive capacity. Commodity prices, *de facto*, account for around 30% of inflation baskets in most countries and have an indirect impact on most of the rest of the basket. The passthrough of fluctuations in commodities inflation is usually immediate and lasts three-to-six months in most cases. Instead, the output gap tends to influence inflation with two-to-four quarters of delay.

Fluctuations in the exchange rate influence inflation projections in two ways: there is an immediate impact on the cost of imports, which affects food and fuel inflation, in turn, as well as any other component of CPI with a high import content. It also usually affects GDP performance, with a lag that ranges from two quarters to sometimes six. We find that the passthrough between the exchange rate appreciation and GDP growth has weakened in recent years, probably because the drop in labour costs that have taken place especially in the eurozone periphery and the historically low interest rates for large and ultra-large companies de facto have boosted the resilence of companies to € strenght relative to the past.

We have updated our inflation models, assuming that both world crude prices and world food price indices remain at current levels throughout 2019E, Eurozone GDP growth averages at 2.7% this year and 2% next year, and the Euro stays at 1.25 on average against the dollar over our forecast horizon, or that it rises to 1.40 vs. the dollar by April 2018 and reverses to 1.20 next year. The impact of these assumptions on the outlook for HICP can be seen as follows. In our central scenario, where the Euro is stable around 1.25 to the dollar in 2018/19, Eurozone inflation overshoots the ECB's projections by 1.4% and 1.5%, respectively, this year and next. If the Euro appreciates, our inflation projections would drop to 1.8% and 1.6%, still above the ECB's forecast in both years.

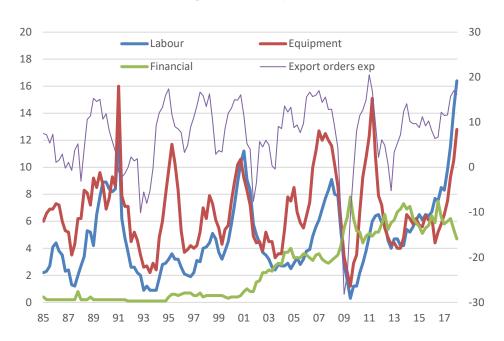
Inflation scenarios



Source: Macrobond, ADA Economics Ltd, %



Limiting factors for production



Source: Macrobond, ADA Economics Ltd, %

Construction sector pricing and hiring expectations



Source: Macrobond, ADA Economics Ltd, %

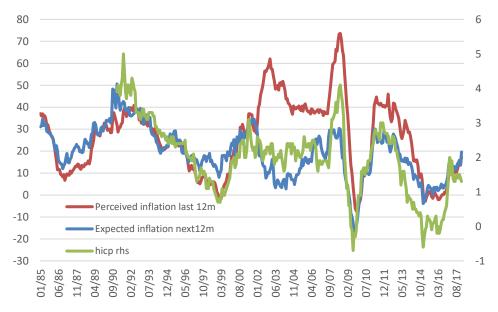


The message of surveys

Estimating the output gap of an economy is as much an exercise of science as it is of art, given that economies constantly go through cyclical changes and structural adjustments, and correctly interpreting the balance of the two is often challenging. As a result, it is very useful to look at what companies and household surveys indicate. We list below what we see as the most telling trends visible at the moment.

- a. Industrial sector expected pricing power indices suggest that companies are (or are planning to) increasing the cost of their services soon. In a historical context, the index is at levels seen in late-2010 or mid-2011, when inflation was close to 2%, or well above that.
- b. Construction sector surveys on price expectations for the next three months have risen since steadily mid-2014 and are currently close to the peaks reached in 2007, but still well below the peaks of 1990 and 2000. Construction pricing indices do not have a leading power for consumer price inflation, but hiring appetite in the sector is a very important factor influencing the total employment in an economy. The hiring appetite index is at least equivalent to the peaks of 1990, 2000 and 2007.
- c. The retail sector expected pricing power index has, de facto, moved sideways since March 2017, and the latest reading showed a slight drop. The correlation with HICP, historically, has been slightly better than that between industrial pricing surveys and HICP, but we find that this index does not perform as well as the industrial index during turning points.
- d. Consumer surveys on past and future inflation currently give the same message: inflation is going up. There was a mild drop registered for next year, coincident with the drop of HICP early next year; however, aside from this, the trend appears to be up convincingly. We see no clear difference between the inflation assessment and expectations of different age cohorts (this means that inflation trends do not appear concentrated only in some segments).

Households' perceived inflation exceeds measured inflation since 2002



Source: Macrobond, ADA Economics Ltd.



- e. There is an upward trend in the share of those that do not know what will happen to inflation, which started around 2000-01, reversing the mild downward trend that had instead characterised the previous 20 years.
- f. There is a clear drop in the share of individuals that expect prices to fall, expect a slight rise or expect prices to stay the same. Most respondents expect inflation to rise "moderately", while the share of those that expect inflation to rise a lot has been trending between 11% and 13% since late-2016, and previous business cycle peaks had seen a rate of 20-25%.

Things we are missing out

We believe there are at least three reasons we are probably underestimating inflation at this juncture: the recovery of the housing market, the changes in pricing structure that big data allow, and the faster depreciation of goods.

House prices are rising everywhere bar Italy, Cyprus and Greece

It is well-known that it is very difficult to get an accurate measure of housing costs/rental price dynamics. This has been a long-standing challenge for national statistics, but is particularly important now that the low interest rate environment has restarted the housing markets of most of the Eurozone. Using the Eurostat house price index, we only see three countries with house price inflation sub-3% yoy (at zero or below): Italy, Cyprus and Greece. This means that 78.5% of the Eurozone population is currently facing brisk or strong house price inflation, and probably rising rents.

Smarter pricing, often means higher pricing in the long run

In the past 10-15 years, two important things have taken place globally, but particularly in the Eurozone. First, the advances in technology related to computer power and big data, etc., have allowed new services to emerge, permit those companies that have the ability to monitor consumer tastes and needs, and optimise their pricing accordingly, and allow them to change their pricing almost continuously throughout the year – as opposed to the good old economics textbook, which used to underscore that prices were sticky also as a result of the inconvenience and cost of changing and communicating new prices to customers. The second change relates to the labour market as, post the 2008 crisis, most countries loosened their labour laws to allow companies to manage their staffing needs more easily.

These changes, in our view, imply that the price measures collected by the national statistics office might not be as accurate as they used to be. Here are some examples of the new challenges. First, if a company can change pricing continuously, it may have a high or low price at the time when the national statistical offices collect their observations (which is usually around a week in the middle of the month in the case of HICP). Example: think of Uber taxi fares during normal times and price surges. Of course, it maybe that statistical offices have noticed a certain volatility in a segment of the market, but the more companies exist that have an interest in changing prices often, the harder it will be to continue with the current method.

Secondly, there are a growing number of services where the "main price" is no longer the "only" one, sometimes not even the "most important". Think about the pricing structure often used on AirBnB and compare it with a traditional hotel room: one has a "main price per night", often plus entry and exit fees, while the other has only the room price.



In order to collect consistent prices, it maybe that national statistics are currently leaving out the extra charges, which do matter for those who travel, of course.

Thirdly, the more we make labour markets flexible, the more tipping is being encouraged, or even expected. This is, of course, a further material change in the pricing of a service that is not being captured by HICP.

Overall, in our assessment, about one-third of the weight of the HICP basket, in our view, is now influenced by one of the above factors.

Faster depreciation of a product is a form of inflation

Last, but not least: depreciation. There is no simple way to measure depreciation, but there is something that everyone has probably noticed by now: many items these days seem to have a shorter lifespan than in the past. This counts as inflation for the average person. In our view, at the moment, we can identify about 16% of the consumer basket where a higher depreciation rate is very evident by now: clothing, furniture, housing items, and telephones/computers, for example, all seem to last a lot less than in the past. Why is this more relevant than before? In our view, it is more important than before because some products' lifespans have shortened to a matter of a few years at most, on average, which implies a much higher cost to maintain the same service than before.

If we are right – what you should expect

Assuming our assessment of real inflationary pressures is correct, we see four broad sets of consequences. First, monetary policy will keep interest rates very low in a historical context for a long period of time. Admittedly, our inflation projections are higher than the ECB's but, even if QE comes to an end in September 2018 and interest rates rise 50bp in 2019, it would still constitute a very low interest rate environment in a historical context.

Perversely, this is going to accentuate all the factors we have listed above as reasons to believe that we are underestimating inflation. Low interest rates, *de facto*, favour large and super-large companies in particular, which are more likely, with a low interest rate environment, to gain market share and, thus, market power, and are best-positioned to use the new technology to increase their pricing power.

We also suspect that, in future, smaller monetary tightening will suffice to tip economies into recession than before. Why? First, tighter banking regulation post the 2008 global financial crisis has meant tighter deposit to loan conditions for most households, thus changes in interest rates and/or macroprudential measures can have a material impact on the accessibility of mortgages and its affordability, especially as long as wage growth is modest. Also, it also appears to us that, when a rate increase materialises in the Eurozone, actual inflation would already be quite high, so the tightening may add a burden to an already stretched consumer financial situation, ending up as a double whammy for the financial markets.

According to the findings from our field research of the last year, inflation – or rather the perceived loss of purchasing power well beyond what the inflation rate suggests - is also an important factor driving voters' towards non-mainstream parties.



In our view this trend will not be reversed simply with falling unemployment rates, as in many parts of the eurozone falling unemployment is coincident with repricing down of labour, which actually exacerbates the frustration associated with falling purchasing power.

The impact of higher-than-measured inflation on wage dynamics will be mixed, in our view, but critical for the outlook of consumer spending. In our view, higher-than-measured inflation in a country with a very tight labour market and a growing business sector should boost wage growth. This is the case, for example, of the Eastern European countries: where wage growth at double-digit growth rates is increasingly frequent, although actual inflation rates barely touch the central banks' targets.

In countries where the labour market is either not genuinely tight, or it is mildly tight but the business sector is still going through a restructuring phase, in our view, wage increases will not be significant compared with the genuine rise in living costs. This will translate into underwhelming to stagnant consumer spending or falling savings as households smooth consumption by running down savings buffers.



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