

Jefferies European Economic Outlook

Jefferies

The ECB starts to shift expectations for 2019. Brexit enters its final approach, the BoE on stand-by whatever the final destination.

- The ECB lags the US Fed in terms of where it is in the policy cycle, but its intentions to normalise policy are clear. The market's immediate focus is on final months of QE, however, the ECB is starting to frame the big picture: when, and how quickly, it should be raising interest rates. Given the changes required to forward guidance, and the departure of Draghi, Praet and Coeure, 2019 is shaping to be an eventful year as the ECB resets policy.
- In the meantime, in the upcoming meetings (25 October and 13 December), there are several technical issues for the ECB to address: the new capital key weights (which may need further adjusting after Brexit), and whether it plans to correct the deviations from the capital key that have built-up during the QE programme. For some euro area countries (Portugal, Ireland, Finland, Slovenia) these decisions could make a meaningful difference in terms of how much sovereign paper is bought by the domestic National Central Banks next year.
- In terms of the ECB's reading of the incoming data, the slowdown in the quarterly GDP numbers was expected, but what matters more at this point is a tightening labour market and higher wage growth. Its forecasts for core inflation two years out may still be too optimistic; but, as with the US Fed, inflation will be viewed as a lagging indicator, and will have only a limited bearing on the ECB's decisions next year.
- Domestically, the risks of another general election are ever-present in Italy, but the ECB will make every attempt to stay above the political fray. Internationally, a messy Brexit is an obvious hazard; but the bigger challenge from the ECB's perspective is developments in the US: the pace of Fed tightening, the spillover effects from reduced capital flows as QE comes to an end, and the potential disruptions to global trade flows.
- In the UK, with six months to go before the 29 March Brexit date, the Government is struggling to present a vision for the UK-EU relationship acceptable to either Brussels or the majority in Parliament. The negotiations will go down to the wire, but even assuming a deal between the two sides can be agreed on the basic terms of trade after the two-year transition period, what happens if MPs still vote it down? Another general election cannot be ruled out, but is not likely; another referendum is possible, but what options would be put to the voters? In terms of monetary policy, if the Brexit process is managed successfully, the BoE will look to raise rates several times in 2019; if it isn't, the Bank's reaction function is anything but straightforward.

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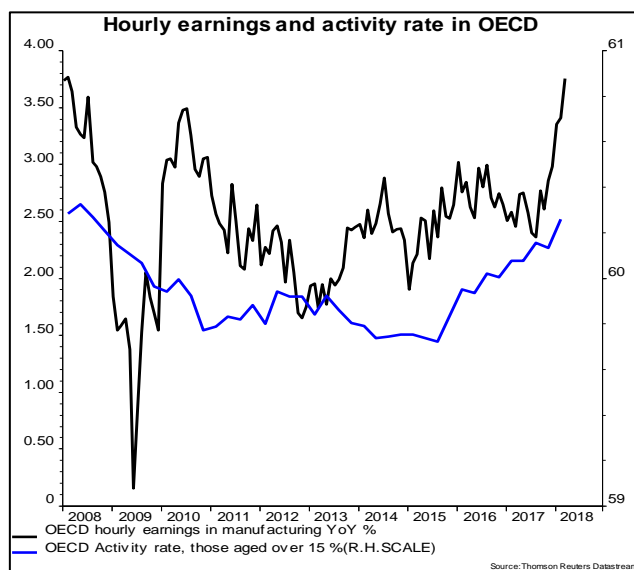
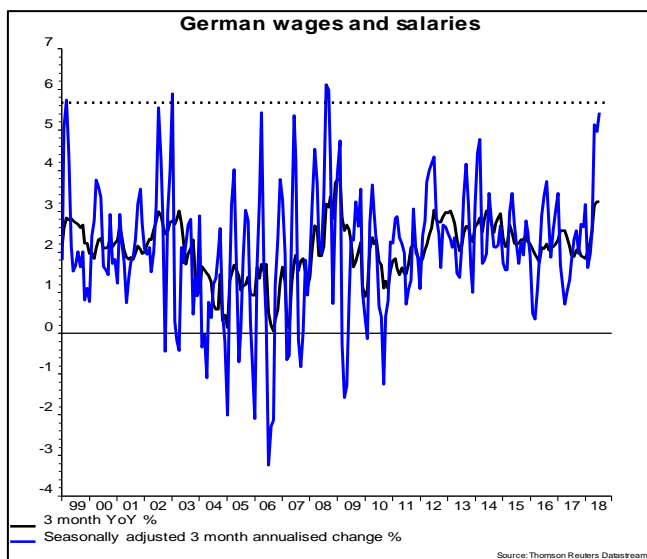
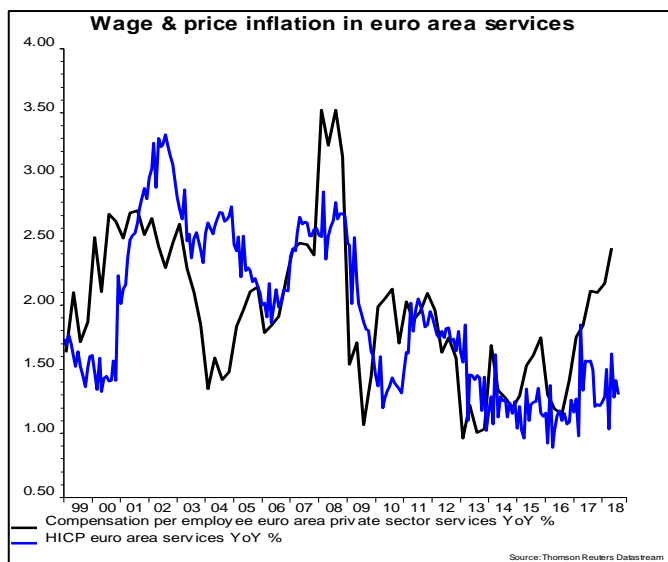
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GLOBAL FIXED INCOME

ECB eyes the exit as wages accelerate

ECB optimism about achieving its inflation mandate over the policy relevant horizon should have been given a further boost by a significant increase seen in wage inflation in the euro area. The ECB's measure of negotiated wages has gone from a low of 1.4% year-on-year in Q2 2016 to 2.2% in the year to Q2 2018, compensation per employee has gone from less than 1.1% to 2.3% over the same period.

This trend towards higher wages in the euro area is also been seen in the US and UK, and the OECD more generally. In the UK, annualized growth in regular pay was put at 3% in the three months ending July, the highest figure recorded since last November, the month when the BoE first raised rates in this cycle. The equivalent figure for compensation per employee in the euro area was also put at 3% annualized in the second quarter.



Jefferies Fixed Income

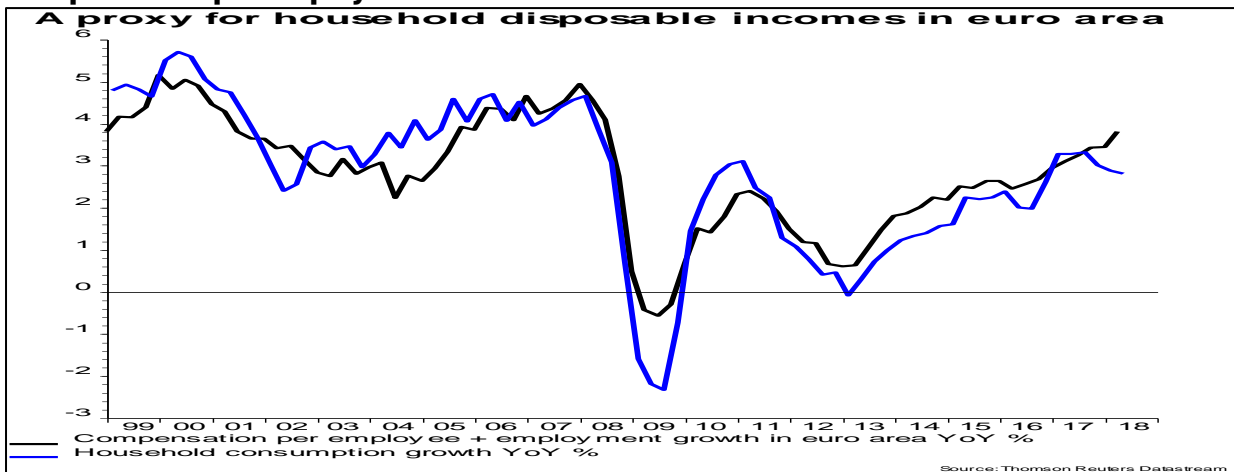
Of course, higher wages do not guarantee higher prices (say, because of growing use of the internet driving down prices across much of the euro area) but it is important to recognize that Central Banks are setting policy over a two to three-year time horizon. If wages pick-up but prices don't, then everything being equal, higher real wages imply a stronger economy. At the end of the day, with deflation risk having receded (see our Deflation Monitor analysis later on), that is what really matters, not whether the ECB achieves its inflation mandate in say, 2020, especially if there is a strong case for saying that inflation is lower for structural reasons, and the same trends can be seen in other economies.

And, against the backdrop of a stronger economy there will be more Governing Council Members who will likely take the view that where wages lead, prices will eventually follow. Certainly, there seems to be a belief that along with the oil price (that has risen) compensation per employee in services leads service sector price inflation. Moreover, to put numbers on it, the euro area is now looking at nominal household disposable incomes growth of around 4% on year, the highest figure recorded since 2008.

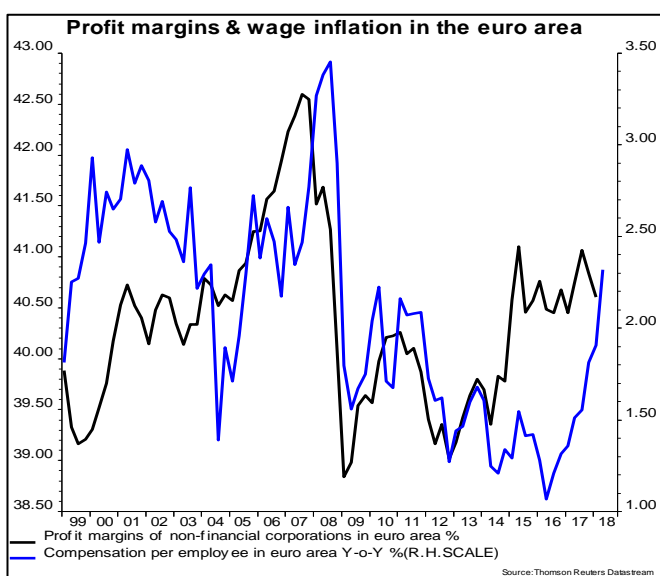
	2013-Q4	2014-Q4	2015-Q4	2016-Q4	2017-Q1	2017-Q2	2017-Q3	2017-Q4	2018-Q1	2018-Q2
Euro area	1.7	1.3	1.4	1.3	1.4	1.5	1.6	1.8	1.9	2.3
Germany	2.0	2.9	2.7	2.3	2.4	2.7	2.6	2.6	2.7	2.9
France	1.5	1.1	1.0	0.8	1.3	1.7	1.8	2.0	1.9	2.2
Italy	1.9	-0.1	0.4	0.9	0.3	-0.3	0.1	0.8	0.8	2.8
Spain	2.7	0.4	2.5	-0.2	0.5	0.0	0.4	0.5	0.9	1.1
Netherlands	0.7	2.8	-1.0	1.6	0.8	1.1	1.1	1.8	2.1	1.4
Belgium	2.3	0.4	-0.1	0.1	0.5	2.2	2.4	2.7	2.0	1.6
Austria	2.0	1.8	2.6	1.7	1.6	1.5	1.7	1.7	2.1	2.1
Ireland	0.2	0.9	2.4	2.3	0.4	1.4	0.4	0.7	3.0	2.8
Finland	1.6	1.5	1.1	0.5	-1.1	-1.2	-1.4	-1.3	0.6	1.3
Portugal	0.5	-1.1	1.1	2.0	2.3	1.1	1.2	1.9	0.7	2.4
Greece	-10.9	-1.7	-0.9	-0.8	0.3	-0.4	-0.5	0.6	0.9	0.9
Slovakia	2.0	1.3	4.6	2.7	2.9	4.0	5.1	4.2	6.3	6.3
Luxembourg	2.5	0.1	3.4	1.5	3.2	4.0	3.1	2.4	0.4	
Slovenia	1.3	1.5	1.9	2.7	2.3	2.9	3.2	4.2	4.2	4.5
Lithuania	4.4	4.5	6.4	7.4	7.9	10.5	9.7	9.2	10.0	8.6
Latvia	8.0	6.5	9.4	8.1	9.1	9.4	7.1	6.2	6.5	7.2
Estonia	6.9	2.8	4.2	7.1	6.6	9.7	7.0	4.2	8.5	5.3
Cyprus	-6.2	-0.4	-2.7	0.0	-0.3	0.7	1.1	1.0	1.9	1.0
Malta	1.2	2.3	5.4	1.0	0.2	2.3	1.7	2.6	2.7	2.2

Source: ECB and Jefferies

Compensation per employee Year-on-Year

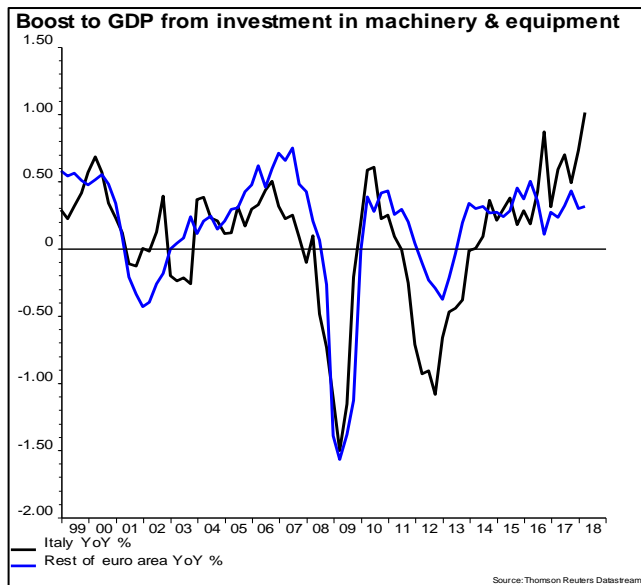
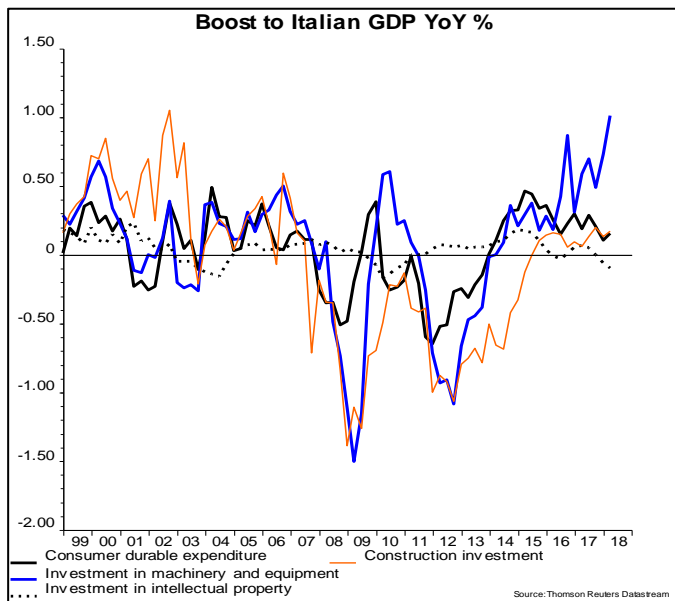


There have been suggestions that this pick-up in wages will squeeze profit margins. However, this flies in the face of the evidence that higher wages are typically associated with higher margins, as companies find it easier to push through price rises, on the back of a stronger economy. The chart below shows the relationship between the ECB’s preferred measure of profit margins, the gross operating surplus of non-financial corporations to the gross value added of non-financial corporations, alongside growth in compensation per employee in the euro area. One can see a clear positive relationship both in the years running into the financial crisis and those years just after. Meanwhile, latest money supply data may have contained a slowdown in M3, but importantly lending to non-financial corporations consistent with a further pick-up in investment and a move by the corporate sectors towards deficit.

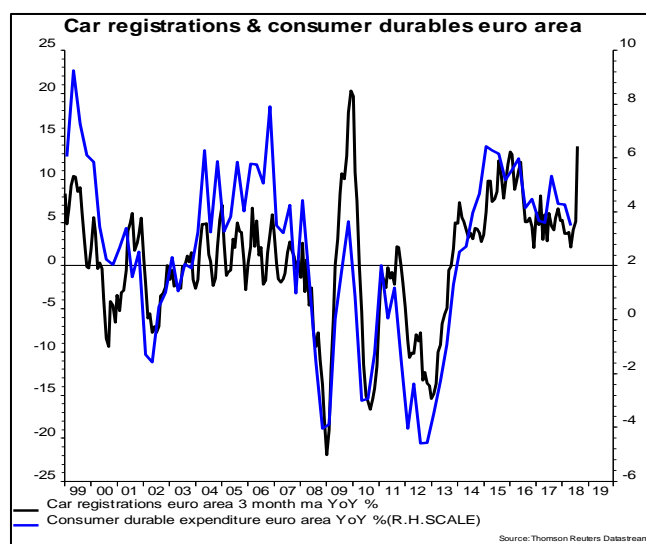
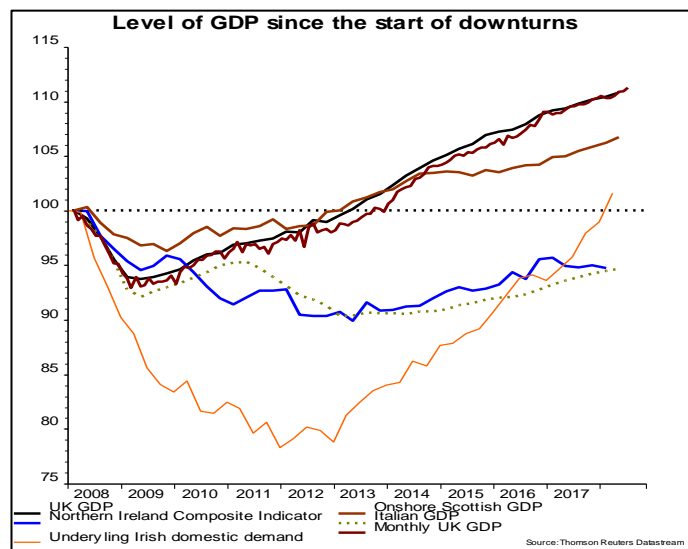


Importantly, a breakdown of GDP shows the importance of domestic demand in driving the euro area recovery. This, in turn, boosted imports, contributing along with a slowdown in world trade, to net trade being a significant drag on euro area GDP in the second quarter.

In terms of investment in machinery and equipment, what may surprise many is that Italy has certainly punched above its weight in recent quarters (see first two charts opposite). Indeed, investment in machinery and equipment boosted Italian GDP by one percentage point in the year to the second quarter, compared to 0.3% in the rest of the euro area. And, that was in a quarter when Italian GDP grew by only 1.2% on year. True, tax breaks may have brought forward investment in Italy, but arguably that is precisely what is needed across the euro area more generally, to help raise long-term growth. A push towards greater public sector investment across the euro area could be a further game-changer for the bloc.



We also now have more of a breakdown of Irish GDP. This shows underlying domestic demand (the preferred measure of Irish activity given the distortions caused by transfer pricing and aircraft leasing) growing by over 2.5 percentage points on the quarter. Clearly, even this stripped-down measure of Irish domestic demand is volatile and liable to revision, but it is still noteworthy that it now stands above its Q1 2008 peak for the first time in this cycle. And, then car registrations, a lead indicator of consumer durable expenditure in the euro area, jumped in August (see second chart), and intra-euro trade kicked in again in July (and is now growing, at current prices, by 6.3% in the year to July).

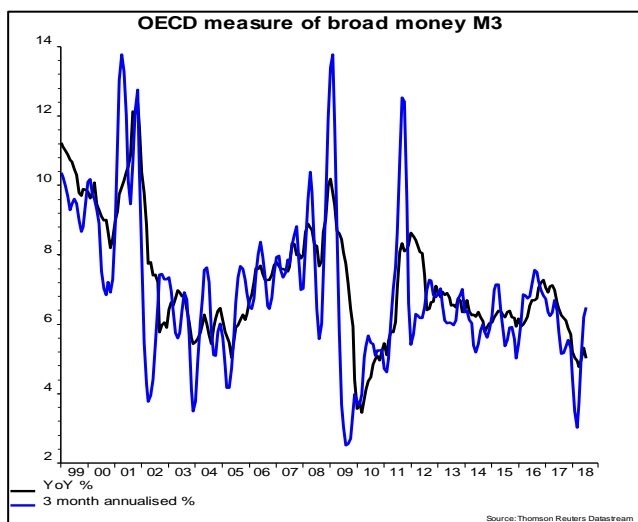
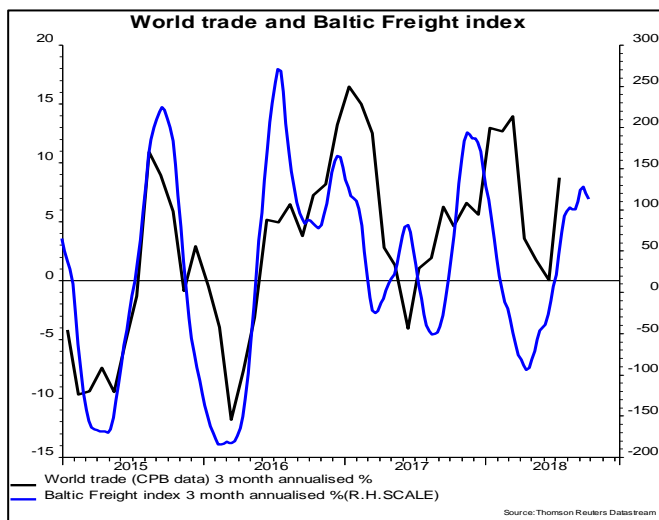
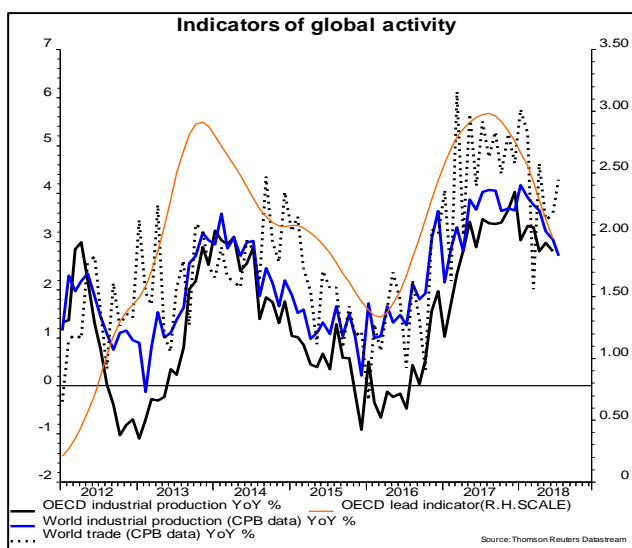


Jefferies Fixed Income

GLOBAL FIXED INCOME

Importantly, CPB in the Netherlands reported a pick-up in world trade in July by 1.1%, following June’s 0.3% fall, consistent with what the Baltic freight indicator had suggested. However, the jury is still out about what will happen to world trade going forward; including discussion about whether US-Chinese tariffs will lead to trade diversion, potentially benefiting parts of the EU. But what the data also shows is world trade growing faster than world industrial production, something that was seen consistently prior to the financial crisis.

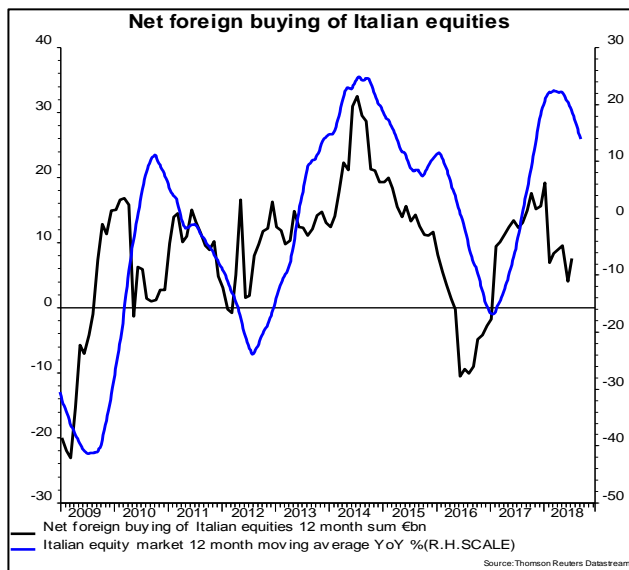
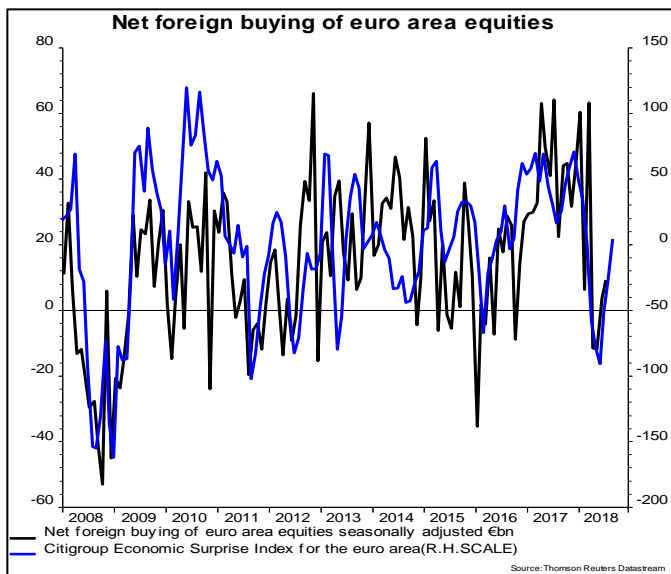
It is commonplace to hear references to growth rates diverging globally, but analysis of the CPB data shows that this is not really the case. The final chart below shows a measure of the variation in industrial growth rates globally, the weighted coefficient of variation (this expresses the weighted standard deviation of industrial growth rates globally to their weighted mean). On this measure, there is surprisingly little variation in growth rates globally, especially when compared to the financial crisis, but also the years preceding the 2008 downturn. True, 2018 has been a year of monetary policy divergence (when comparing the US Fed to the ECB and the BoJ), but that is different. Moreover, going forwards we are likely to see more Central Banks, including the ECB, following the US lead.



Jefferies Fixed Income

GLOBAL FIXED INCOME

As data releases have surprised more on the upside there has been net foreign buying of euro area equities (€3.1bn in July, after €14.3bn in June), including €3.5bn of net foreign buying of Italian equities in July, after €4.1bn of net foreign selling in June.

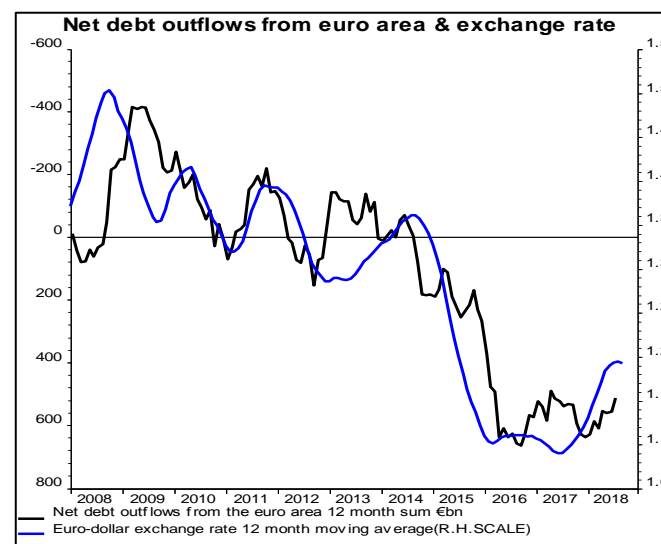
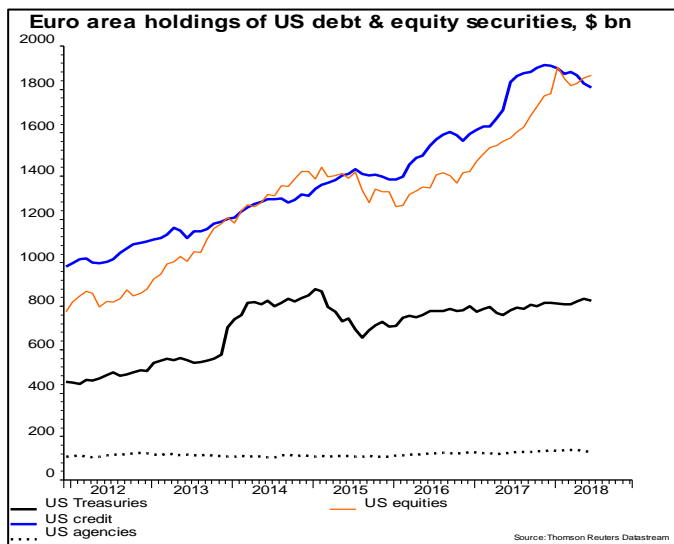
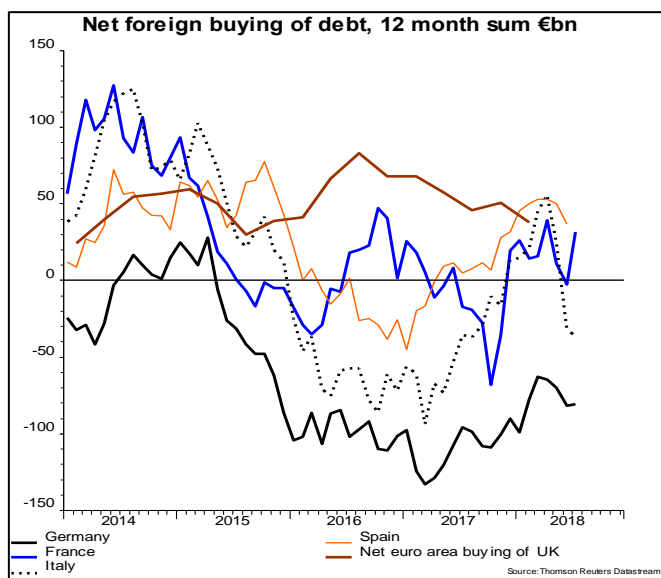
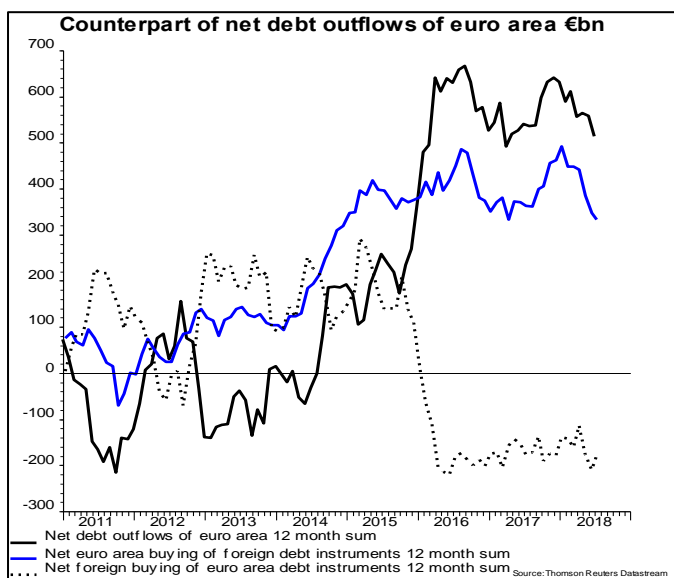


July also saw €10bn of net foreign buying of Italian debt securities, but this followed a record €72bn of net foreign selling in the previous two months. And, there was net foreign selling of Portuguese and Greek debt securities in July (€0.9bn and €1.2bn, respectively). In fact, Portugal saw €5.2bn of net foreign selling of debt securities between May and July, compared to the €2.7bn of net foreign buying in the previous three months. When it comes to Portugal, there will now be a lot more focus on re-investment of the QE portfolio in supporting the market.



We still expect the winding down of QE by the ECB to have a significant impact on capital flows globally. The counterpart of the euro area's outsized current account surplus (3.5% of GDP in the 12-months ending July, compared to 3.3% in the corresponding period of the year before) remains skewed towards net debt outflows, in part courtesy of the ECB and QE. US fixed income markets, especially US credit, and the UK Gilt-Edged market, have been major beneficiaries of these flows.

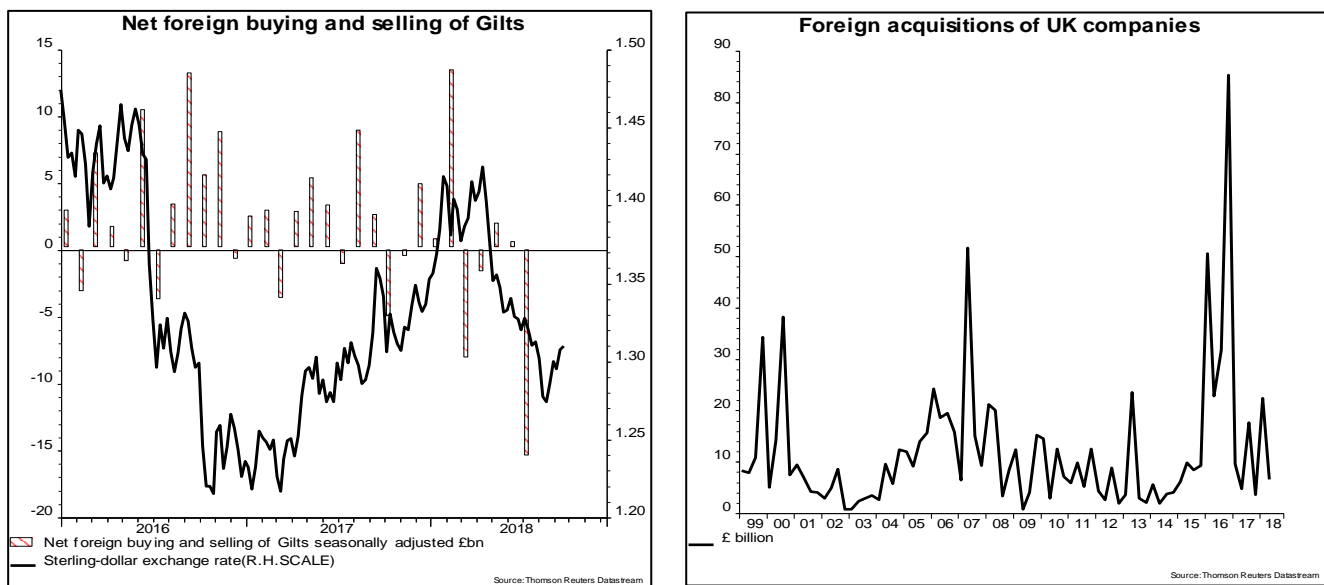
These net debt outflows from the euro area have also been associated with a stronger dollar.



Jefferies Fixed Income

The UK Gilt market saw a record £17.2bn of net foreign selling in July. True, July was also a month of heavy Gilt redemptions and some foreign investors may have held off re-investing the proceeds back into the market until the BoE followed through and raised rates on 2 August. However, since the June 2016 EU referendum there have been 4 other months of heavy Gilt redemptions. These months did not see net foreign selling on this scale. Indeed, between July 2016 and June 2018, net foreign buying of the Gilt market amounted to £55bn, helping finance the UK’s large current account deficit (last put at 3.4% of GDP).

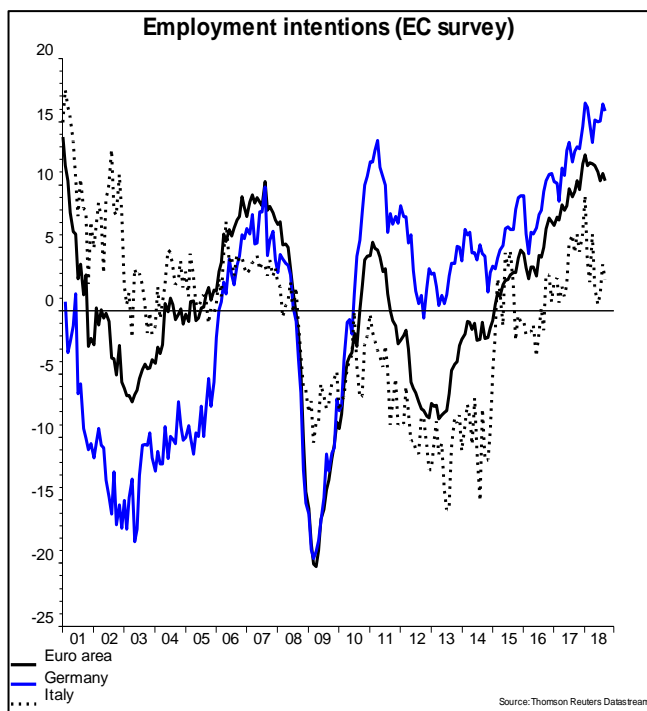
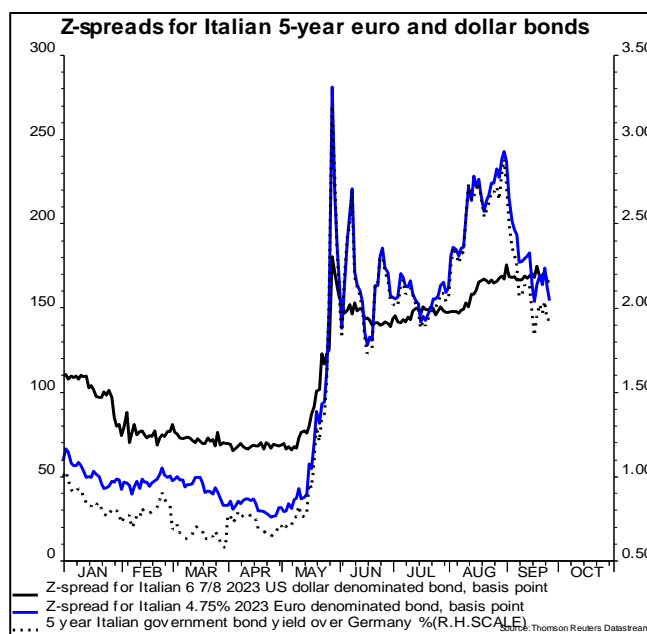
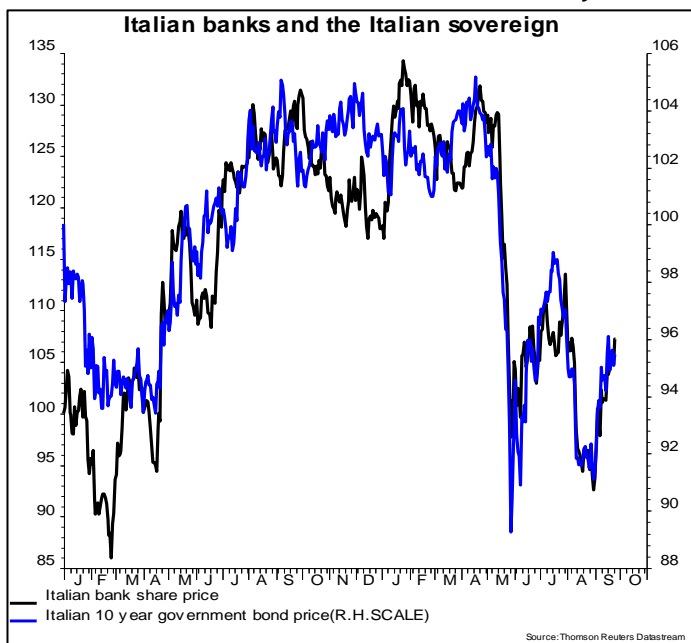
The difference this July is arguably that the former Foreign Secretary, Boris Johnson, and former Secretary of State for exiting the EU, David Davis, both resigned. If nothing else, the net foreign selling of the Gilt market in July should underline the importance of managing the UK’s exit from the EU as smoothly as possible, especially given the need to help finance the UK’s current account deficit. Indeed, latest ONS data confirmed that foreign acquisitions of UK companies remained relatively muted in the second quarter, in contrast to what was seen around the EU referendum.



In terms of interest rate differentials, we are moving further into uncharted territory, with the US Fed on course to raise rates potentially another seven times in the next two years and the ECB perhaps nudging rates higher before Mario Draghi leaves in end-October of next year. However, we continue to warn that the market may be in danger of missing the bigger picture in terms of what happens to interest rates in the euro area in 2020 and 2021.

One of the big risks for the ECB is a growth accident, with the US economy rolling over, or more importantly a disorderly UK exit from the EU next March that pushes the region back into recession, albeit for a relatively short period. The ECB can be expected to warn about the dangers of a No Deal Brexit for the rest of the EU.

To stress again quantitative tightening (QT) in the US has so far been conducted in a period when the ECB has still been doing QE, helping recycle the euro area’s current account surplus into the US. Things may get trickier when Central Banks are moving much more in the same direction. Italy will remain a focus. Redenomination risk, measured as the difference in the Z-score for the Italian 5-year US dollar issue and the Italian 5-year euro issue may have receded, but could easily flare up again. (When redenomination risk was relatively high, the Italian 5-year paper denominated in dollars outperformed that priced in euros.) What is very clear is that the ECB will not step in, at least not in the first instance, to stop Italian bond yields rising. So much depends on the political response and the need to maintain the momentum of recovery.



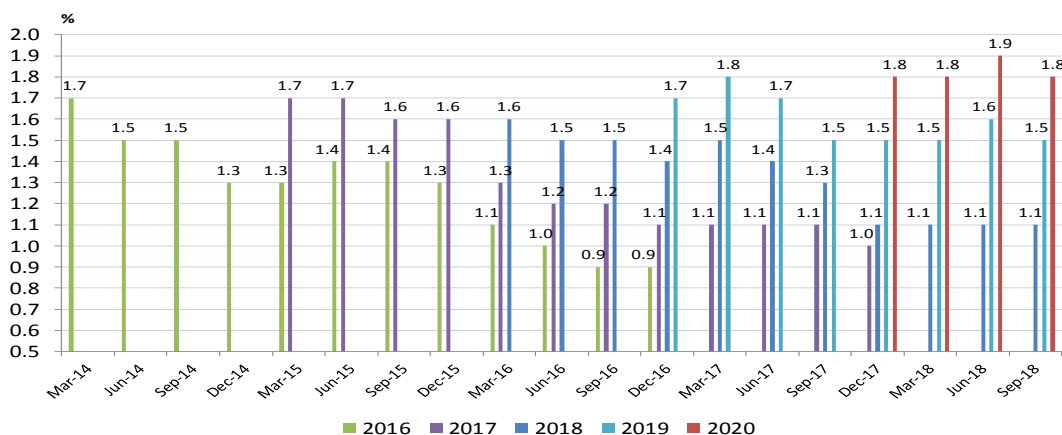
ECB holds steady course in September, ‘committees’ to start working on QE reinvestment policy

As expected, Draghi had very little new to say at the September press conference, downplaying the marginal changes to the new macroeconomic forecasts, and giving only a basic steer in terms of how the ECB will approach its reinvestment policy next year. In terms of the headline numbers, a small downward revision to the 2018 and 2019 GDP forecasts just as QE is entering its final stretch is not what the ECB would have preferred to see. However, after a 2016-2017 period when euro area grew above trend, a slowdown this year was possible, and its 2020 GDP estimate was left unchanged at 1.7%; and in terms of understanding the Governing Council’s reaction function, the longer-term forecasts for core inflation and for wage growth continue to show that the ECB expects pricing pressures to build over the coming two years. Rewind back a year ago, and much of the focus amongst economists was the breakdown in the relationship between unemployment and wage growth in most developed economies. But since the start of the year, there has been a slow but steady acceleration in wage growth in the US and the UK economies, with euro area data also showing a clear improvement, and in terms of the ECB’s thinking, this will matter much more than a small undershoot in historic GDP numbers.

ECB’s new quarterly macro projections

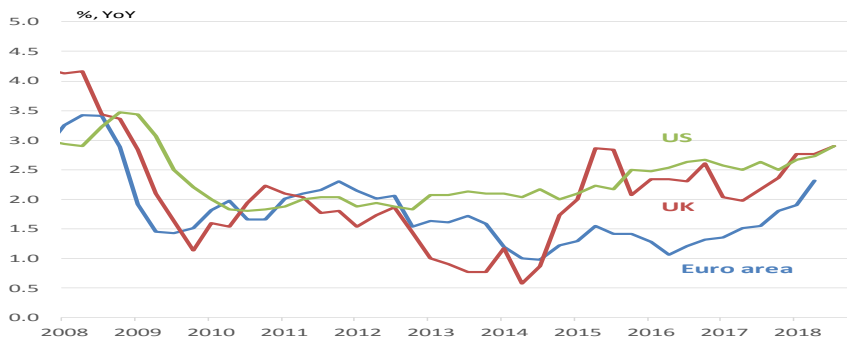
		2018 Range	Mid-point	2019 Range	Mid-point	2020 Range	Mid-point
GDP	Mar-16	0.6% - 3.0%	1.8%				
	Jun-16	0.5% - 2.9%	1.7%				
	Sep-16	0.4% - 2.8%	1.6%				
	Dec-16	0.6% - 2.6%	1.6%	0.4% - 2.8%	1.6%		
	Mar-17	0.7% - 2.7%	1.7%	0.5% - 2.7%	1.6%		
	Jun-17	0.8% - 2.8%	1.8%	0.6% - 2.8%	1.7%		
	Sep-17	1.0% - 2.6%	1.8%	0.6% - 2.8%	1.7%		
	Dec-17	1.7% - 2.9%	2.3%	0.9% - 2.9%	1.9%	0.6% - 2.8%	1.7%
	Mar-18	2.1% - 2.7%	2.4%	0.9% - 2.9%	1.9%	0.7% - 2.7%	1.7%
	Jun-18	1.8% - 2.4%	2.1%	0.9% - 2.9%	1.9%	0.6% - 2.8%	1.7%
Sep-18	1.8% - 2.2%	2.0%	1.0% - 2.6%	1.8%	0.6% - 2.8%	1.7%	
HICP Inflation	Mar-16	0.8% - 2.4%	1.6%				
	Jun-16	0.7% - 2.5%	1.6%				
	Sep-16	0.8% - 2.4%	1.6%				
	Dec-16	0.7% - 2.3%	1.5%	0.9% - 2.5%	1.7%		
	Mar-17	0.9% - 2.3%	1.6%	0.8% - 2.6%	1.7%		
	Jun-17	0.6% - 2.0%	1.3%	0.7% - 2.5%	1.6%		
	Sep-17	0.6% - 1.8%	1.2%	0.7% - 2.3%	1.5%		
	Dec-17	0.9% - 1.9%	1.4%	0.7% - 2.3%	1.5%	0.8% - 2.6%	1.7%
	Mar-18	1.1% - 1.7%	1.4%	0.6% - 2.2%	1.4%	0.8% - 2.6%	1.7%
	Jun-18	1.6% - 1.8%	1.7%	1.0% - 2.4%	1.7%	0.9% - 2.5%	1.7%
Sep-18	1.6% - 1.8%	1.7%	1.0% - 2.3%	1.7%	0.9% - 2.5%	1.7%	

History of ECB’s forecasts for core inflation



Source: ECB and Jefferies International

Wage growth in the euro area (compensation per employee), US (private sector) and UK (regular pay)



Source: Datastream and Jefferies International

In terms of Italy, predictably, Draghi managed to side-step the issues around the government’s budget proposals. However, he made a pointed remark that political uncertainty was already pushing up borrowing costs for Italian households and corporates. Yet, importantly, there was a comment about no obvious spill-overs from events in Italy to other euro area economies, which meant that the ECB has no obvious cause for concern.

With regards to future QE reinvestments, there is a need for the ECB to sharpen its guidance before year-end, and Draghi announced that the committees involved in this work will start working on this issue. The ECB will then announce a decision around this work either at the meeting on 25 October or 12 December. As expected, Draghi has signaled that the ECB will stick to the capital key framework in its approach to reinvestments. However, as the tables below shows, because of issues around eligibility (with regards to Greece) and scarcity (Portugal, Finland, Ireland, Slovenia, Slovakia) there have been deviations from capital key that have built up since QE started in 2015.

PSPP March 2015 – August 2018 and capital key deviation

ECB Capital Key (% of Eurosystem total)		Actual purchases (euro, bn)	Implied by capital key weighting excluding Greece (euro, bn)	Difference: actual vs implied (euro, bn)
25.6	Germany	503.4	504.7	-1.4
20.1	France	410.0	397.7	12.4
17.5	Italy	356.4	345.3	11.1
12.6	Spain	253.5	247.9	5.6
5.7	Netherlands	111.8	112.3	-0.5
3.5	Belgium	71.5	69.5	2.0
2.9	Greece	0.0	57.0	-57.0
2.8	Austria	56.7	55.1	1.6
2.5	Portugal	35.5	48.9	-13.4
1.8	Finland	32.6	35.2	-2.6
1.6	Ireland	29.3	32.6	-3.3
1.1	Slovakia	12.0	21.7	-9.6
0.5	Slovenia	7.7	9.7	-1.9

Source: ECB and Jefferies International

As a result, we think that in the coming months the ECB will amend its current rules on where reinvestment flows are directed. At the moment, the ECB states that, “During the period of net asset purchases, PSPP principal redemptions will be reinvested in the jurisdiction in which the maturing bond was issued”. However, to give itself future flexibility, it makes sense that the ECB drops this constraint from next year.

What would a shift in ECB policy mean for Greece? Greece has €345bn in central government debt (nominal GDP in 2017 was €178bn), but only €52bn of this is made up of government bonds. So even if the ECB decided to buy the full 33% of all outstanding debt securities (once Greece became investment grade), these purchases would amount to a maximum of €17bn – or roughly 5% of all outstanding Greek debt. For Greek bond investors, this of course would be very significant, but in terms of the big picture with regards to reducing debt service costs, the impact would be small.

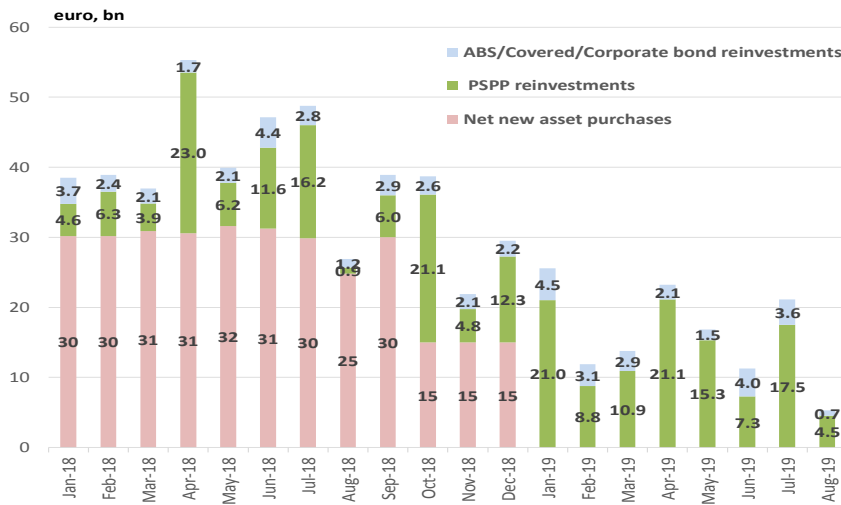
With regards to Cyprus – a country that regained investment grade rating in the past two weeks and whose government bonds become eligible for PSPP – the Central Bank of Cyprus accounts for just over 0.2% of the ECB’s capital key, so that would probably mean purchases of €20-30 million per month of Cypriot government debt between October and December. In themselves, these numbers don’t really make much of an impression. But if from next year the ECB decides to re-direct its QE reinvestments into the markets that have been ‘under-bought’ since the start of QE, the impact could be significant. Looking at the details, since 2015, Cyprus’ capital key weight implied potential PSPP purchases of up to €4.2bn, compared to just €200mn in assets actually bought. In practice, after yesterday’s issuance, Cyprus has only around €5.3bn of eligible tradable government securities; but that would still imply a maximum of €1.8bn in paper that the National Central Bank could hold (33% of €5.3bn) if the historic deviations from capital key were to be corrected over the coming years.

In terms of some of the larger euro area countries, since 2015, Portugal also missed out on some €13bn of QE; Finland and Ireland on about €3bn each; Slovenia on €2bn; and Slovakia on almost €10bn. And if the ECB chooses to respect its capital key framework fully (which, incidentally, will need to be changed if the UK leaves the EU in March 2019), reinvestment flows over the coming years could favour some of these underbought markets.

So where precisely will reinvestment end up next year by country? As things stand, we know the aggregate amounts that will be bought (see chart on the next page), but it we can only estimate what that means for individual euro area countries, and there is likely to be a large degree of error involved.

Jefferies Fixed Income

QE and reinvestment flows



Assets bought under PSPP as share of country's debt securities

	PSPP amount (euro, bn)	Outstanding debt securities (euro, bn)	PSPP as share of debt securities (%)
Germany	503	1107	45
France	410	1622	25
Italy	356	1808	20
Spain	254	884	29
Netherlands	112	290	39
Belgium	72	328	22
Austria	57	219	26
Portugal	35	131	27
Finland	33	96	34
Ireland	29	136	21

Source: ECB and Jefferies International

Why would the estimates be inaccurate? For one, there is no clarity in terms of what proportion of QE done by country is concentrated in domestic sovereign debt. In Germany, for instance, the stock of outstanding central government debt securities is currently around €1100bn, so perhaps only around 70% of PSPP purchases done since 2015 (€350bn out of €500bn) actually ended up in central government debt. Thus, when there is a redemption of a German government bond next year, the markets may assume that perhaps 25-33% of the amount will be owned under QE and reinvested – but there is a broad range of plausible outcomes. In the case of Italy, as the table on the previous page shows, market neutrality suggests that the Bank of Italy owns somewhere around 20% of each outstanding maturing bond. But part of this will be held under the Securities Markets Programme (SMP) and will not be reinvested, and so it is impossible for anyone to really know how much buying the Bank of Italy will do next year. The same argument applies to Spain, Portugal and Ireland where the National Central Banks also hold paper under the SMP.

Jefferies Fixed Income

As a reasonable guess, the table below attempts to match up the ECB's officially published data on aggregate monthly redemptions against country redemptions (the first part of the table below), and gives an estimate of how much of these bonds could be held under the PSPP for each country (second part of the table below). The point here is that while the broad rules of thumb around market neutrality is a reasonable guide to the amounts that could be reinvested by country in the coming year, the monthly errors are occasionally significant. This, to us, strengthens the argument that the ECB should start to provide a detailed breakdown of the amounts it plans to reinvest by country.

Bond redemptions & potential PSPP reinvestments by country

Bond Redemptions in 2018 and 2019		Redemptions though																
euro, bn		Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	end-2019
Germany		13	17	-	13	24	16	13	16	-	13	24	-	13	16	-	13	191
France		-	28	20	-	-	11	-	30	17	-	12	-	-	42	22	-	181
Italy		11	12	10	31	-	24	24	11	28	-	-	15	41	27	12	15	261
Spain		-	20	-	-	18	-	-	22	-	-	21	-	-	21	10	-	112
Netherlands		-	-	-	-	15	-	-	-	-	-	14	-	-	-	-	-	29
Belgium		-	-	-	-	-	-	11	-	-	-	-	-	13	-	-	-	23
Austria		-	7	-	-	-	-	11	-	-	7	-	-	-	7	-	-	33
Finland		5	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	10
Portugal		-	-	-	-	-	-	-	-	-	9	-	-	-	-	-	-	9
Ireland		-	9	-	-	-	-	-	-	-	7	-	-	-	6	-	-	22
Total		29	93	30	44	57	51	59	79	45	36	76	15	67	119	44	28	872

Our estimates of PSPP redemptions to approximately match ECB data		Redemptions over the																
euro, bn		Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	next 12 months
Germany		3.6	4.8	-	3.6	6.7	4.5	3.6	4.5	-	3.6	6.7	-	3.6	4.5	-	3.6	42
France		-	7.0	5.0	-	-	2.8	-	7.6	4.3	-	3.0	-	-	10.6	5.7	-	30
Italy		2.1	2.4	2.0	6.2	-	4.7	4.7	2.1	5.5	-	-	4.5	12.8	8.2	3.9	4.8	34
Spain		-	5.9	-	-	5.2	-	-	6.4	-	-	6.0	-	-	6.1	2.8	-	23
Netherlands		-	-	-	-	4.2	-	-	-	-	-	4.0	-	-	-	-	-	8
Belgium		-	-	-	-	-	-	2.3	-	-	-	-	-	2.8	-	-	-	2
Austria		-	1.8	-	-	-	-	2.9	-	-	1.9	-	-	-	1.9	-	-	7
Finland		1.4	-	-	-	-	-	-	-	-	-	1.4	-	-	-	-	-	3
Portugal		-	-	-	-	-	-	-	-	-	2.4	-	-	-	-	-	-	2
Ireland		-	1.9	-	-	-	-	-	-	-	-	1.5	-	-	1.3	-	-	3
Estimated redemptions		7	24	7	10	16	12	14	21	10	9	21	5	19	33	12	8	155
Actual ECB Redemptions		6	21	5	12	21	9	11	21	15	7	17	5	ECB yet to publish data				151

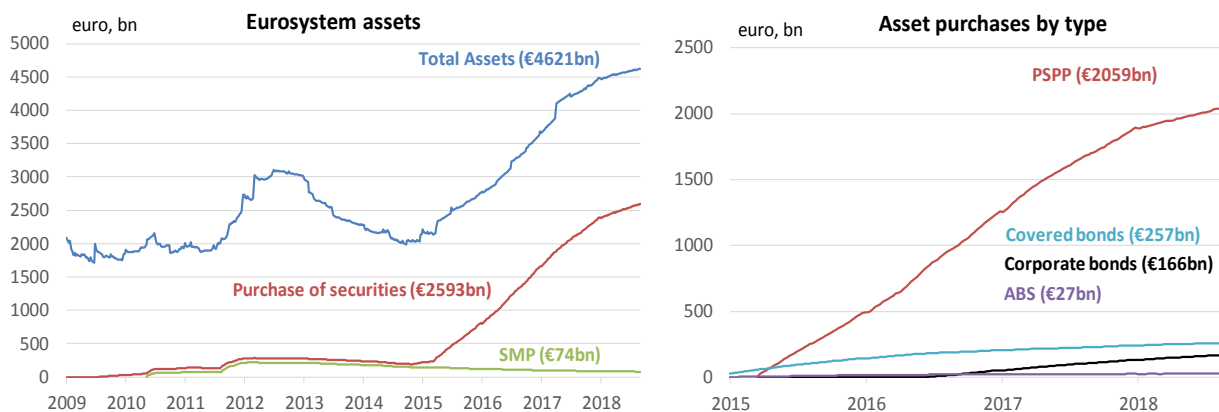
Source: ECB and Jefferies International

With regards to whether the ECB formally announces its own version of 'operation twist', this remains a long-shot in our view. As the ECB prepares to raise interest rates next year, depending on market conditions and policy objectives, it may make sense to buy bonds at either the short end or longer end of the curve (and this judgement may end up being changed fairly rapidly from quarter to quarter). So why become tied into an 'operation twist' policy which would restrict what each National Central Bank could do in the coming years? In our view, ECB policy needs be flexible and easily adaptable, which means dropping the unnecessary constraint to reinvest in the same market, and separately, not pre-committing to 'operation twist' – even if in practice that's exactly what naturally happens next year.

The ECB starts to drop hints on 2019 guidance

The finer details around PSPP reinvestments could be very important for the markets, but in the context of over €2.5 trillion bought in assets since 2015, for the ECB, these deviations are nothing more than a rounding error. Which is precisely why technicalities around capital key did not feature in what otherwise felt like a major recent speech by Benoit Coeure (see [here](#)). In it, he took aim at the three separate tenets of central bank interest rate guidance: the initial point of lift-off, the subsequent path of rates, and the terminal rate. At the moment, with its guidance that interest rates will remain at their present levels at least through the summer of 2019, the ECB deals with only the first element – but that will soon become insufficient. Coeure then argues that given the uncertainties involved, the ECB cannot be expected to publish a terminal rate in terms of where interest rates may settle in the long term. But what the ECB should start to do, he believes, is to start providing guidance on the expected pace of future rate hikes, subject to certain macroeconomic conditions being met.

Eurosystem balance sheet and asset purchases



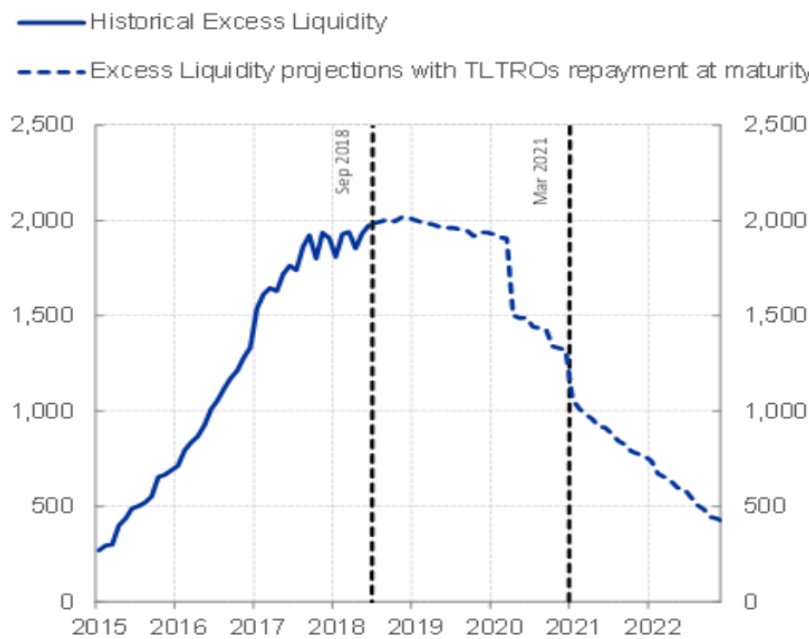
Source: ECB and Jefferies International

Reading between the lines, that could mean that early next year the ECB's focus will shift from the timing of the first hike (on the whole, the Governing Council will think it is irrelevant whether the first hike happens in September, October, or December), to where interest rates are likely to go in 2020 and 2021. This could mean the ECB formally signaling that rates may need to rise by, say, 50bp per year over its three year forecast horizon. That would not be a pre-commitment, and the ECB could always go slower or faster than this depending on how the economy develops. But it would be presented as a reasonable rule of thumb that could help the markets understand how interest rates may evolve in the coming years. Coeure suggests that the ECB does not see the Fed's "dot plot" projections as the most appropriate model to follow. But also, it would appear, that the ECB could choose to be more explicit than the Bank of England's current language configuration of "were the economy to continue to develop broadly in line with projections, an ongoing tightening of monetary policy over the forecast horizon would be appropriate."

One thing to keep in mind, however, is an important practical consideration to the ECB amending its guidance in mid-2019. The Executive Boards’ three main players Draghi, Praet and Coeure (although there are question marks over his future) are all scheduled to leave the ECB before 2020; so they could be setting forward guidance in a way that a more hawkish ECB president replacing Draghi next November may not view as appropriate; and what happens then? Another important consideration is how to balance rate rises with what could be a rapid shrinkage of the Eurosystem balance sheet in 2020/21, as TLTROs start to be repaid, and QE reinvestments potentially come to an end.

Evolution of excess liquidity

(€ bn)



Sources: ECB.

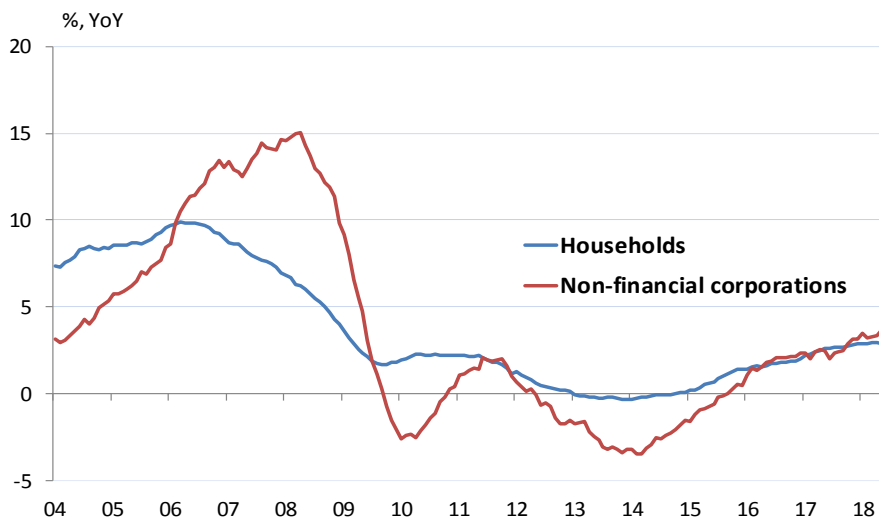
Notes: The projected excess liquidity is based on a comprehensive simulation of the evolution of the Eurosystem balance sheet. In constructing the projection, the arbitrary assumption was made that reinvestments will be carried out until December 2020 and securities will be rolled over into a mix of securities in line with market neutrality. Last observation: August 2018.

Source: Peter Praet, 20 September 2018

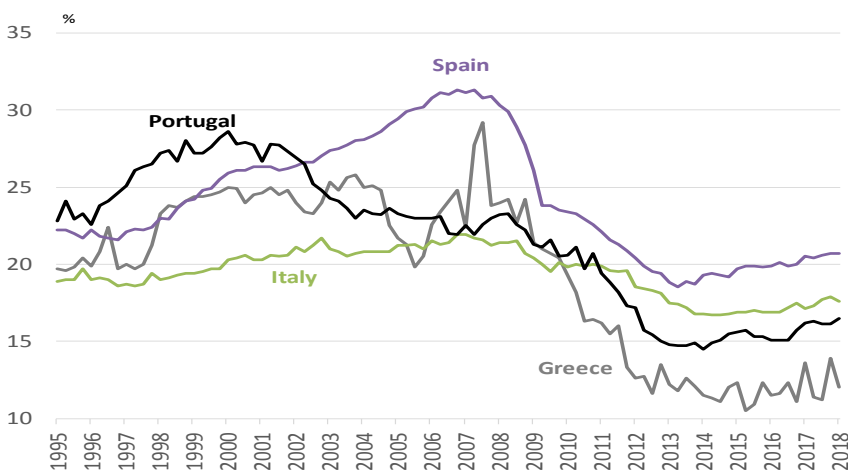
Should the ECB target a steeper yield curve?

One reason to remain positive on the European outlook is the marked improvement in bank lending. Lead by Germany, France, Belgium and Austria, loan growth – particularly to non-financial corporations – is the strongest in a decade. Not everyone is in the same boat, with lending growth in Italy, Spain, Portugal, Ireland and Greece still struggling to get into positive territory – but at least the loan books are no longer shrinking. At present, the ECB forecasts for euro area investment growth are on the conservative side, but if credit growth in these laggard economics does improve, then projections for next year’s growth could be revised higher, which is not necessarily the message one gets from some of the lackluster surveys out there.

Euro area lending to households and non-financial corporations

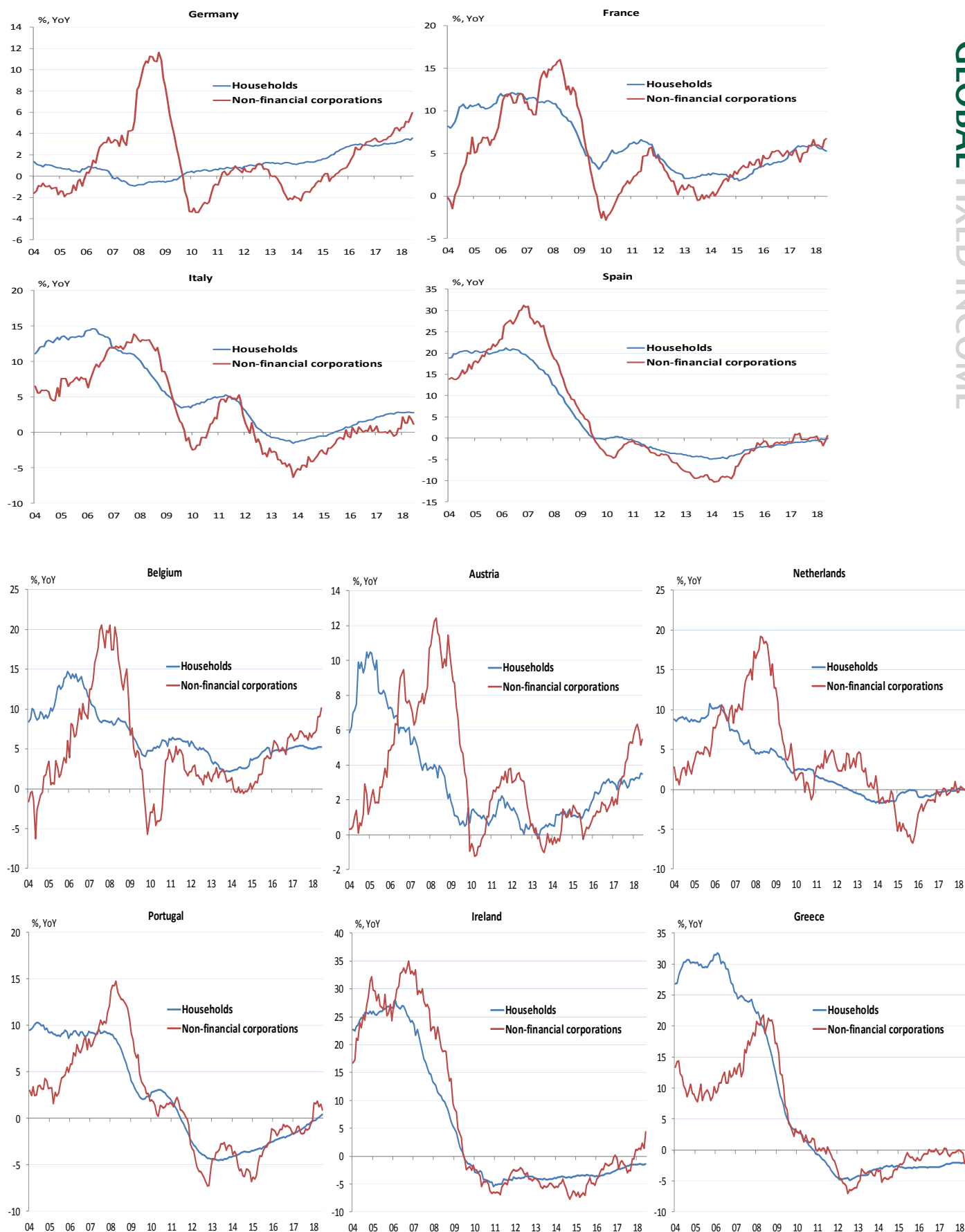


Investment as share of GDP



Source: ECB and Jefferies International

Lending growth across the euro area

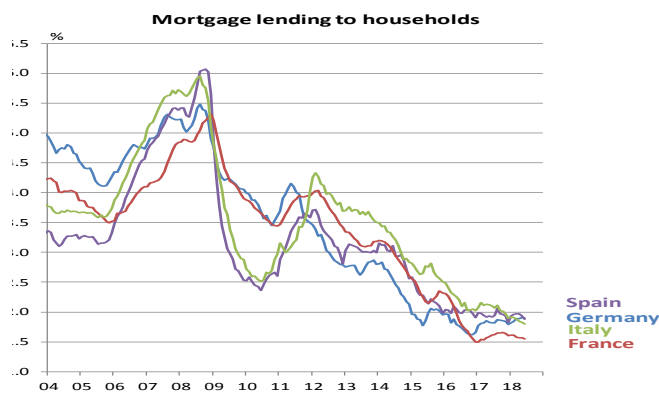
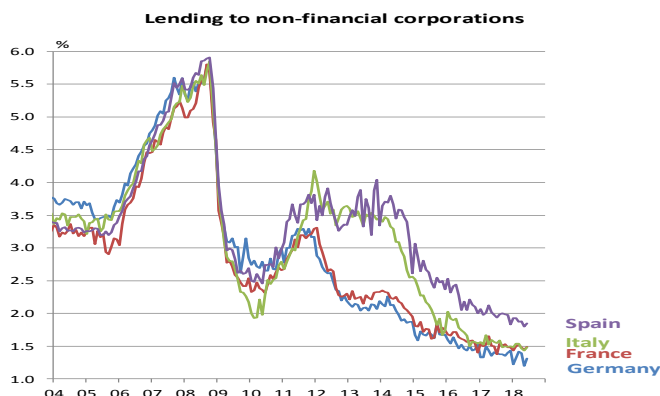


Source: ECB and Jefferies International

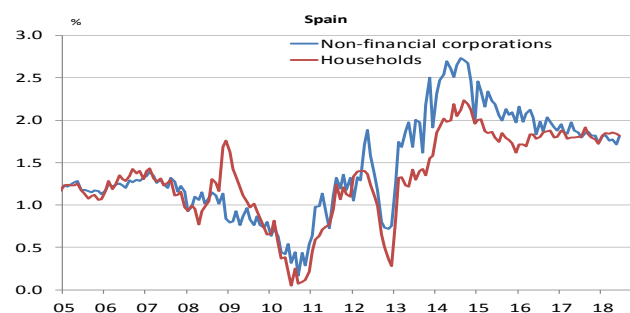
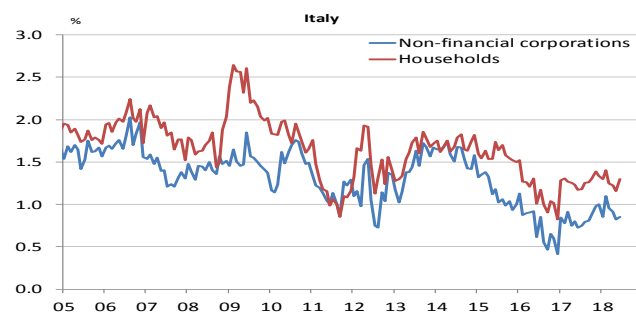
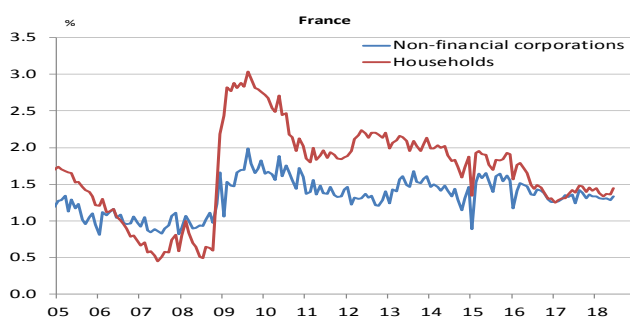
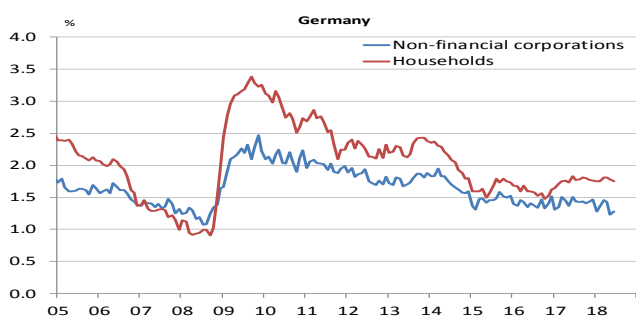
The flip side of the discussion about stronger lending volumes is what's been happening to banks' balance sheets. The popular assertion since the ECB cut interest rates into negative territory and started doing QE is that these policies have been bad for bank profitability. Now, there is a common school of thought that because the ECB believes that banks need a steeper yield curve to be profitable, it essentially rules out the introduction of an operation-twist-like policies. But are the arguments backed-up by the data?

One of the key points of reference when looking at how banks have coped with negative interest rates is the ECB's own data on lending margins. And as the charts below highlights, despite the fact that interest rates on new loans have drifted significantly lower since 2014, banks across the four major economies have squeezed the rates they pay on deposits sufficiently to keep their margins at levels which have not really changed all that much on a decade ago.

Interest rates on new lending to non-financial corporations and on new mortgages



Bank lending margins (interest rates on new lending minus interest rates on new deposits)



Source: ECB and Jefferies International

Jefferies Fixed Income

What is also noteworthy is that despite the banks obviously squeezing depositors, there hasn't been any evidence of European savers systematically taking their cash out and sticking it under the mattress. For sure, around the anxious moments in 2008, and again in 2015, there was increased demand for cash; but, these were stress points for the financial system as a whole, and in themselves, low interest rates, while certainly creating a challenge, have not been an outright catastrophe – neither for the banks, nor for the majority of the general public.

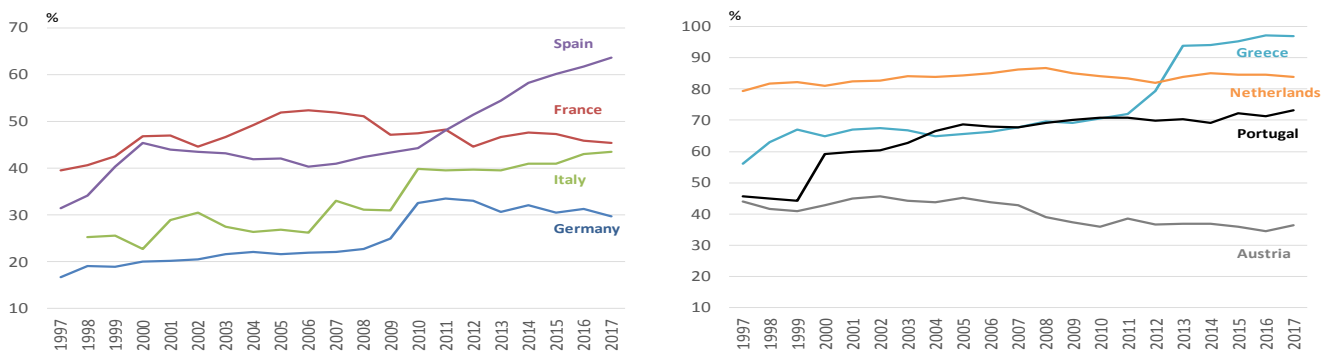
Growth of banknotes in circulation (cash) in Germany and Italy



Source: ECB and Jefferies International

As further proof of this, in June, the Bank of England amended its guidance on unwinding QE, declaring that the stock of purchases will not be unwound until the Bank Rate reaches around 1.5%, compared to the previous guidance of 2%. The justification being that whereas in 2009 some banks couldn't cope with interest rates below 0.5%, 10 years on, UK banks (and Building Societies) have adjusted their models sufficiently that the Bank Rate could fall to almost 0% without the policy being a net negative for the economy. So, the BoE clearly recognises that the UK banking system had evolved in the last decade in a way that allows the Bank to have more flexibility over how it sets monetary policy, and the same is almost certainly true for the ECB. For instance, compared to a decade ago, in most countries, the largest five banks now have a bigger share of the market (see chart below). And if banks are generally running leaner and more profitable business models then, like with the BoE, this probably implies that, if required, the ECB could take interest rates even lower than the original floor (-0.6%/-0.7%) it had in mind a few years ago.

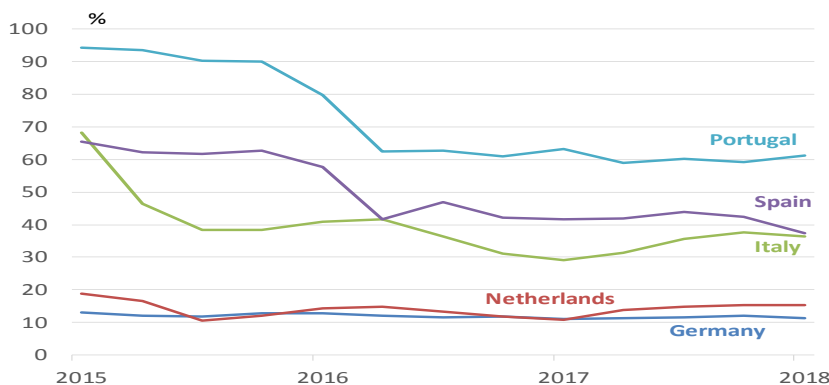
Share of total assets held by the 5 largest banks



Source: ECB and Jefferies International

And what about the argument that banks need a steeper yield curve to make money? Intuitively, that of course makes sense, banks borrow at the short end of the yield curve and lend at the long-end. Except that, in reality, this basic thesis doesn't uniformly apply to mortgage lenders across Europe. For example, in 2015, in Italy, Spain and Portugal new mortgages were predominantly priced off the short end of the yield curve (12M Euribor rate), so the steepness of the yield curve mattered far less there than in Germany and in the Netherlands. In the last few years, however, mortgage lending in the periphery had evolved such that more fixed rate mortgages are being taken out (see first chart below). But, overall, the view that 'a steeper yield curve is good for banks' is a very broad generalisation, which fits the facts at certain times in the cycle and doesn't fit at other times. Indeed, that was the conclusion from the economists at the Bank of England who in a [blog](#) earlier this year, analysed the data across a number of developed economies over a 30 year period and concluded that the level of long rates matters more to banks' Net Interest Margins than the steepness of the yield curve (see table below, and read the full article for the methodology behind the conclusion).

Share of new mortgage loans issued on a variable rate (up to 1 year initial rate fixation)



Source: European Mortgage Federation and Jefferies International

Long-run relationship between Interest rates and net interest margins (NIMs): steepening of the yield curve associated with a fall in NIMs, while higher long rates with an increase

Country	Yield curve	Short rate	Long rate	Sample period
Canada	-0.08	-0.04	0.24*	1988-2016
France	-0.19*	-0.01	0.19*	1988-2016
Germany	-0.01	-0.07	0.22*	1979-2016
Italy	-0.26*	0.16*	-0.01	1984-2016
Norway	-0.17	-0.07	0.27*	1980-2016
Spain	-0.42*	0.12*	0.09	1979-2016
Sweden	-0.19	-0.01	0.23*	1979-2016
Switzerland	-0.09*	0.02	0.07	1980-2016
United Kingdom	-0.26*	-0.01	0.31*	1987-2016
United States	0.09	-0.05	-0.01	1981-2016

Notes: This table reports the results of a regression of bank net interest margins on the slope of the yield curve, and short and long interest rates. The sample period varies by country, based on data availability. Results in red indicate a negative effect, in green a positive effect. * indicates results, which are significant at 1% level.

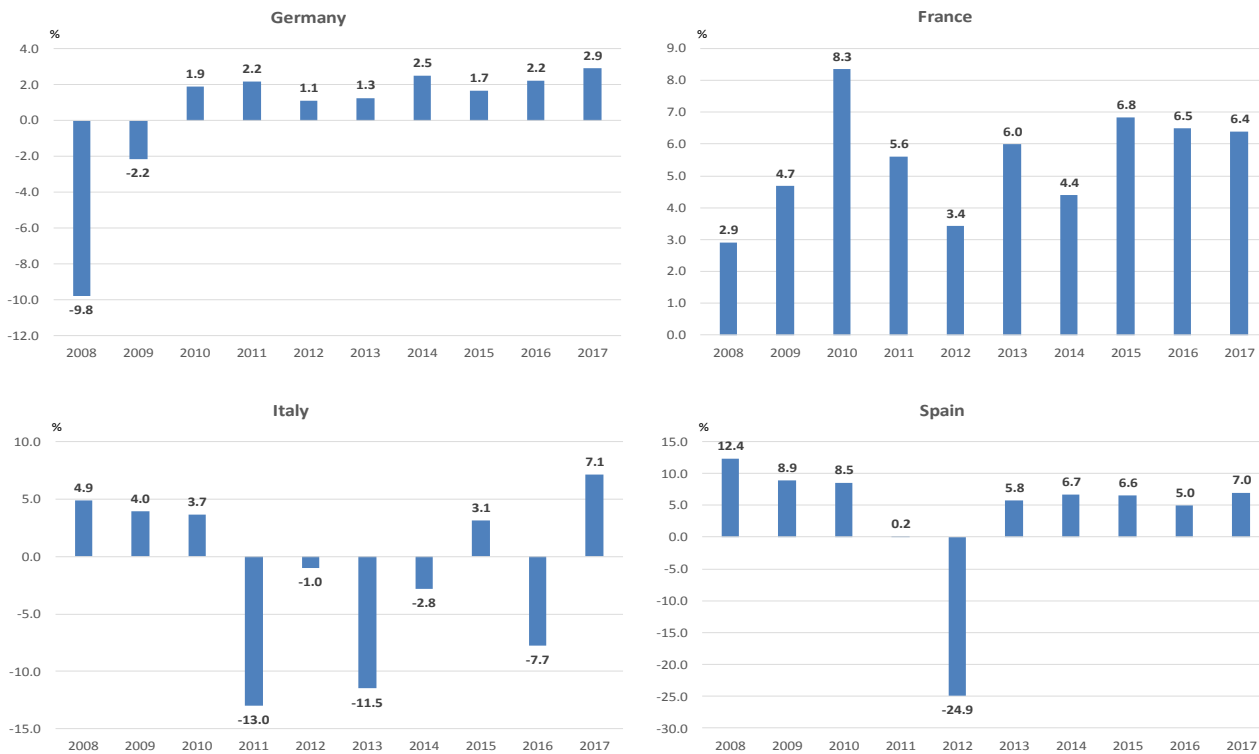
Source: [Bank of England blog BankUnderground.co.uk](#)

Jefferies Fixed Income

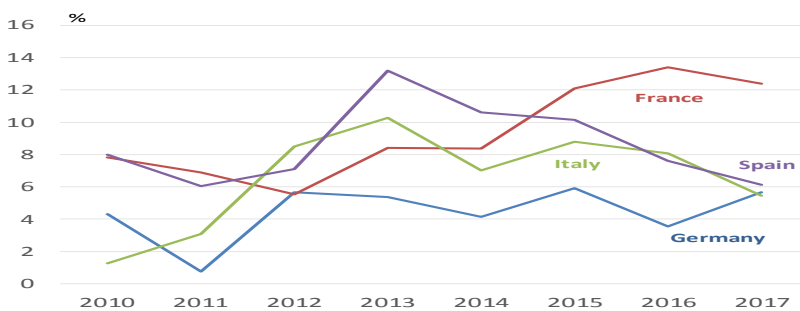
Finally, what about the contribution that trading activity makes to banks' profits? The official ECB data shows that, in 2017, trading (and FX) profits made a contribution of around 6% to the income of the German, Italian, and Spanish banks, and around 12% to the total income of French banks – with no clear indication that a steeper, or indeed a flatter yield curve, really makes a big difference to how these numbers move around from year to year. Again, this is not entirely surprising, given that what generally matters most to trading performance is the presence of volatility.

All in all, then, when analysing how the ECB will set policy – next year when it thinks about raising the depo rate and how to reinvest QE redemptions, or in three years' time when it perhaps starts unwinding QE – the conventional wisdom about short-term interest rate and the steepness of the yield curve both being critical to bank profitability should be treated with some healthy scepticism.

Return on equity for banks in Germany, France, Italy and Spain



Trading and foreign exchange results as share of total income earned by banks in Germany, France, Italy and Spain

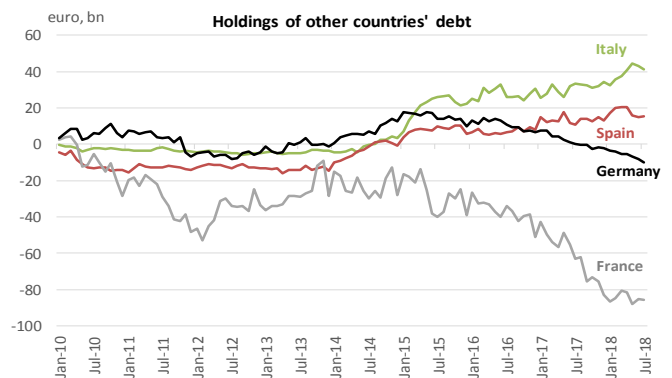
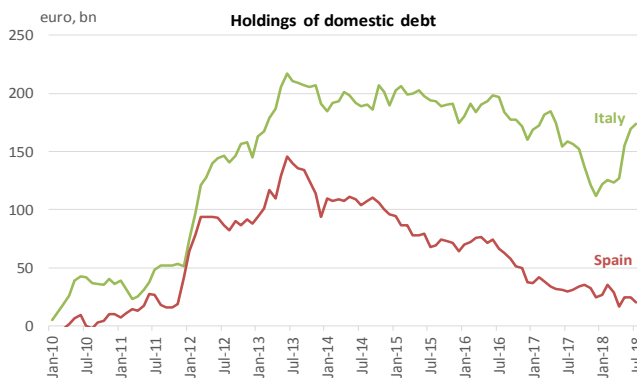


Source: ECB and Jefferies International

As QE ends, banks-sovereign link as strong as ever

As ECB stops QE, one of the drivers of price action in sovereign bond markets will be the behavior of Italian banks. For example, against the backdrop of heavy selling of Italian debt by foreign investors (€72bn in May and June combined), the Italian banks have added significantly to their holdings of domestic sovereign bond (€42bn combined in May and June, followed by a further €4bn in July). However, as the table below highlights, estimating where we go from here is mostly guesswork. The usual pattern of activity over the recent couple of years is that the Italian banks reduce their sovereign bond holdings in the second half of the year. But this year could very well be different (the rise in Italian bond yields over the course of the year means that the paper bought earlier in the year is likely trading at a loss) and perhaps the end-year unwinding of positions does not happen. However, it's also not likely that domestic banks will be significantly adding to their holdings over the final months. That is, counterintuitively, unless the situation escalates and becomes critical, with shades of 2012.

Cumulative change in holdings of euro area debt by banks in Germany, France, Italy and Spain



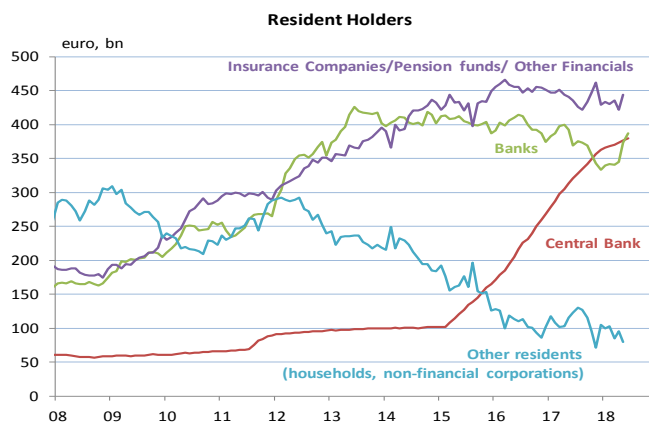
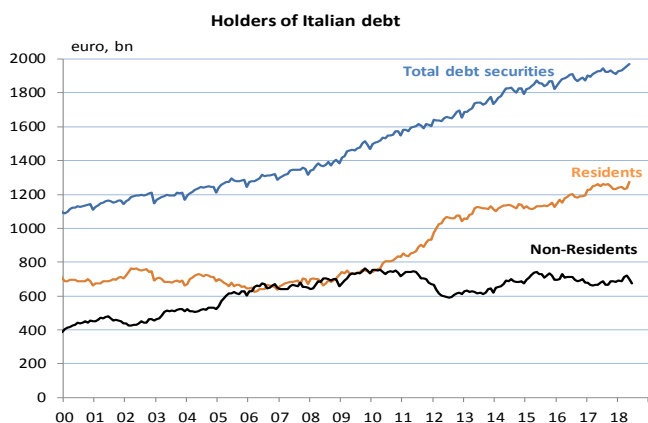
Monthly change in holdings of domestic sovereign debt by banks

Italy		euro, bn											Spain		euro, bn										
euro, bn		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	euro, bn		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Jan	7	5	3	23	18	-6	13	6	8	10		6	-7	-2	22	5	16	-1	6	0	2				
Feb	4	7	-7	23	4	7	4	11	4	3		7	-3	3	15	8	-3	-7	2	5	9				
Mar	16	7	-9	24	12	1	-7	-7	9	-2		6	7	4	15	16	2	-1	4	-4	-7				
Apr	1	8	2	6	8	8	0	6	3	3		8	4	-2	0	-7	-1	-8	1	-4	-12				
May	6	13	6	12	19	-3	3	3	-10	28		2	5	4	0	19	4	0	-5	-2	8				
Jun	4	4	7	5	11	-6	-5	5	-20	14		8	3	10	0	17	-3	2	3	-1	0				
Jul	2	-1	11	2	-6	-3	-4	-2	4	4		-4	-9	-1	-7	-5	-5	-12	-8	-1	-4				
Aug	1	-5	4	-6	-2	2	-1	-13	-2			1	-2	-8	-4	-4	4	1	-4	2					
Sep	8	-1	0	6	-2	-4	-4	-6	-5			8	5	-3	8	-1	2	5	-5	2					
Oct	1	0	0	10	-1	20	1	-1	-15			4	1	0	-4	-10	-4	-2	-6	1					
Nov	-3	5	1	2	1	-6	1	-5	-16			4	6	3	5	-11	-6	-1	-2	-3					
Dec	-6	-4	-2	-13	-16	-11	-17	-12	-10			3	0	23	-4	-20	-5	-7	-12	-8					

Germany		euro, bn											France		euro, bn										
euro, bn		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	euro, bn		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Jan	6	4	1	4	-4	-2	2	0	-5	-3		4	-3	0	3	9	5	8	16	-1	10				
Feb	-1	3	-2	1	1	1	3	0	-5	-3		6	2	12	9	10	7	0	4	-2	-11				
Mar	1	5	-1	3	0	0	-2	-3	0	-3		6	1	2	4	-2	-1	-6	-6	3	4				
Apr	6	2	2	0	0	1	0	-2	-3	-3		1	-4	2	-3	0	-1	0	-2	0	0				
May	2	4	1	-3	-5	2	-5	-3	2	-2		2	2	-2	3	5	4	0	-2	3	-5				
Jun	3	16	-3	8	2	2	-1	-4	-6	-3		5	5	8	7	-4	-5	-1	-2	-6	-3				
Jul	1	0	-3	2	3	3	3	2	-4	-1		0	-2	-8	-5	-21	-10	-5	-10	-8	-2				
Aug	-1	2	-3	2	1	1	4	-4	2			5	-3	5	1	-1	3	8	-2	2					
Sep	5	0	-1	3	-1	1	0	-2	-1			-1	3	2	10	-3	8	-7	-10	0					
Oct	4	105	0	3	3	2	-1	-4	-1			-5	4	1	5	6	0	-2	4	-6					
Nov	2	-65	2	7	2	0	3	0	0			-2	0	4	-3	1	6	0	-1	6					
Dec	-1	-21	-8	-8	0	-8	-5	-3	-7			-11	-12	2	-3	-2	-6	-10	4	-3					

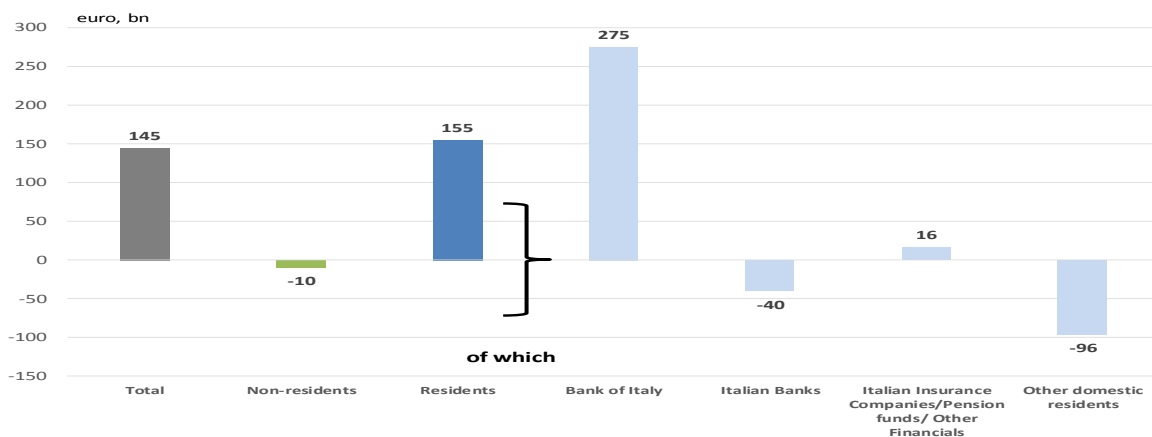
Source: ECB and Jefferies International

Holders of Italian debt securities



GLOBAL FIXED INCOME

Holders of Italian debt: change since the start of QE



Source: Bank of Italy and Jefferies International

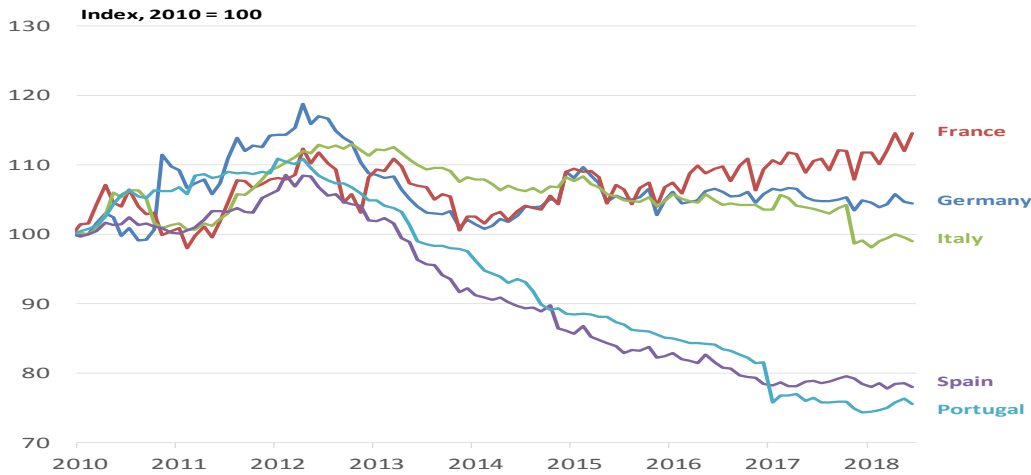
As a reference, the charts on the next page show just how little has actually changed over the past several years in terms of the sovereigns-banks interlinkages across the periphery economies. As the first chart on the next page highlights, part of the explanation why sovereign debt still accounts for over 9% of Spanish bank assets, and in Portugal that figure it at a record high of 12.6%, is the fact that bank assets in both countries have shrunk by close to 30% from the peak. Nonetheless, it doesn't change the fact that banks in Italy, Spain and Portugal are as exposed to what happens to sovereign bond markets as they were prior to QE.

So under what scenario would a bank in the periphery suddenly decide that it should hold even more, not less, domestic sovereign debt? Rewind the clock back to 2012-2013, and there was a clear logic to periphery banks piling into domestic sovereign debt: in case of a euro area break-up, which then meant currency redenomination, it made sense to match your liabilities (customer deposits) with assets denominated in the same currency (including domestic sovereign debt). One could even make the case that both from a risk perspective – both financial and reputational – that was the safe, conservative thing to do (if the lira suddenly replaced the euro, as a CEO of a bank you didn't have to worry about the value of your assets).

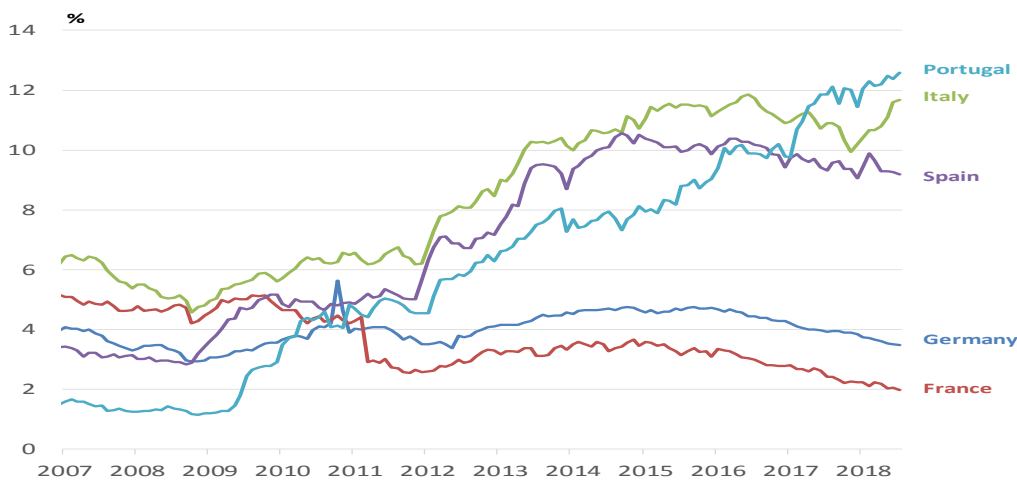
Jefferies Fixed Income

So it would not be irrational if the same logic holds in the next crisis. If political uncertainty escalates to a point that currency redenomination becomes something that the markets are actively discussing, then foreigner investors will sensibly rush for the door, but for a local bank, domestic sovereign debt becomes the only true ‘risk-free’ asset to hold.

Size of bank assets/liabilities



Holdings of government debt as share of bank assets, by country



Source: ECB and Jefferies International

BoE thinks how best to start shrinking their balance sheet

When it comes to the BoE we welcome the 7-month extension of Mark Carney's term as BoE Governor and the re-appointment of Sir Jon Cunliffe as Deputy Governor for Financial Stability, to further ensure there are some grown-ups in the room if things really go pear-shaped with Brexit. All being well, Mark Carney may have announced two further rate rises before he steps down on 31 January 2020. But, recent speeches by Deputy Governor for monetary policy, Ben Broadbent, and External MPC Member Gertjan Vlieghe, alongside BoE calls for view about what might represent an optimal BoE balance sheet in the new normal could suggest that we are getting closer to the BoE reversing QE (or QT for short).

The latest official guidance is that the BoE will not start the process of balance sheet normalization in the UK until the Bank Rate (currently 0.75%) gets to around 1.5%. However, such guidance can evolve, and there have been warnings about the size of the balance sheet in potentially threatening central bank independence, especially if there is a change of government (May 2022 assuming the Tories survive their 5 year-fixed term, currently dependent on the votes of 10 DUP MPs for support). After all the Fed started shrinking its balance sheet when the Fed Funds rate was lower than 1.5%, and most commentators would probably, in a post-Brexit world, put the neutral rate in the US above that of the UK.

Moreover, one point that Ben Broadbent made in his speech is that in theory the BoE could continue unwinding QE, even though at some later stage they were cutting the Bank Rate again. In other words, these two levers of monetary policy do not have to always move in the same direction, perhaps an obvious point, but an important point.

If Gertjan Vlieghe is correct and QE operated less through pushing down long-term interest rates directly (through the term premium), but *"primary via expectations, with additional powerful liquidity effects that are temporary and mainly relevant during periods of market stress"* then *"unwinding QE need not have a material impact on the shape of the yield curve, or indeed the economy, if properly communicated and done gradually."*

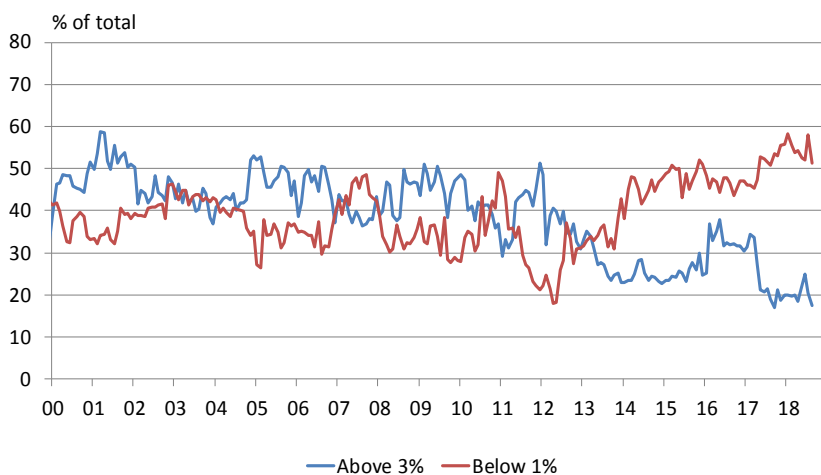
This year's UK Autumn Budget has been confirmed for Monday 29 October, the same week as the next BoE Inflation Report (Thursday 1 November). What chance the Chancellor unveils a Budget for Brexit, containing greater public sector investment and the end to austerity, to be followed by the BoE raising rates again?

At the current juncture, nothing can perhaps be ruled out, but it will be interesting to hear both Philip Hammond and Theresa May address the Conservative party conference in a few days' time.

Jefferies Deflation Monitor: pricing pressures remain far from normal

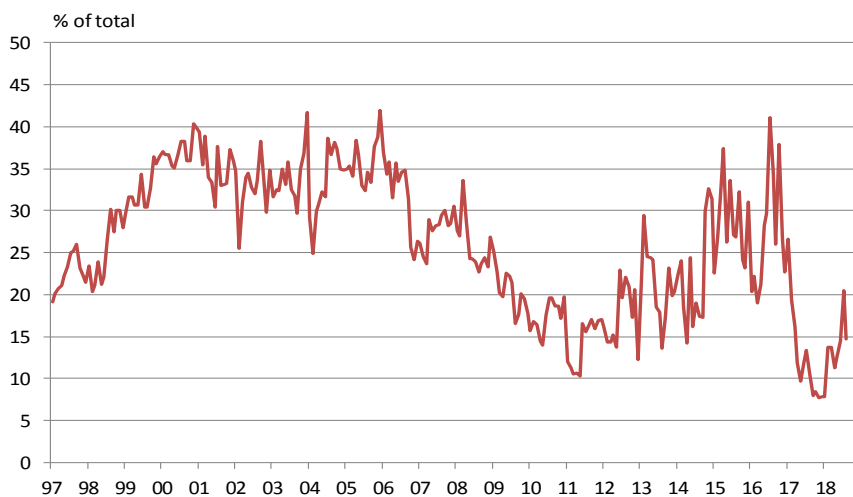
Global inflation data in August were a mixed bag: on the softer side of expectations in the US and the euro area, but exceeding forecasts in the UK. As the bottom chart below highlights, a sharp depreciation in the currency after the Brexit Referendum lead to a significant fall in the proportion of items in the UK CPI basket in outright deflation; and the pricing behaviour in the UK remains out of step with what was happening prior to 2016.

Shares of US core CPI basket (excl. housing) where inflation is above 3% or below 1%



Source: BLS and Jefferies International

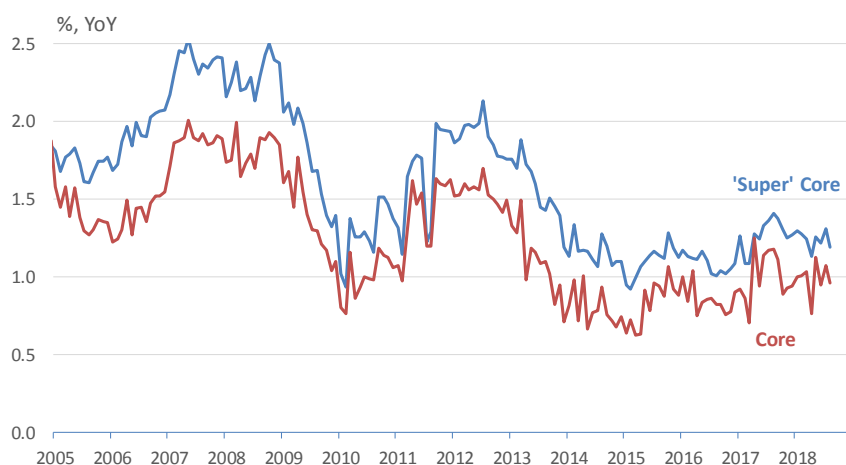
Shares of UK core CPI basket in deflation (weight of items where prices are falling year-on-year)



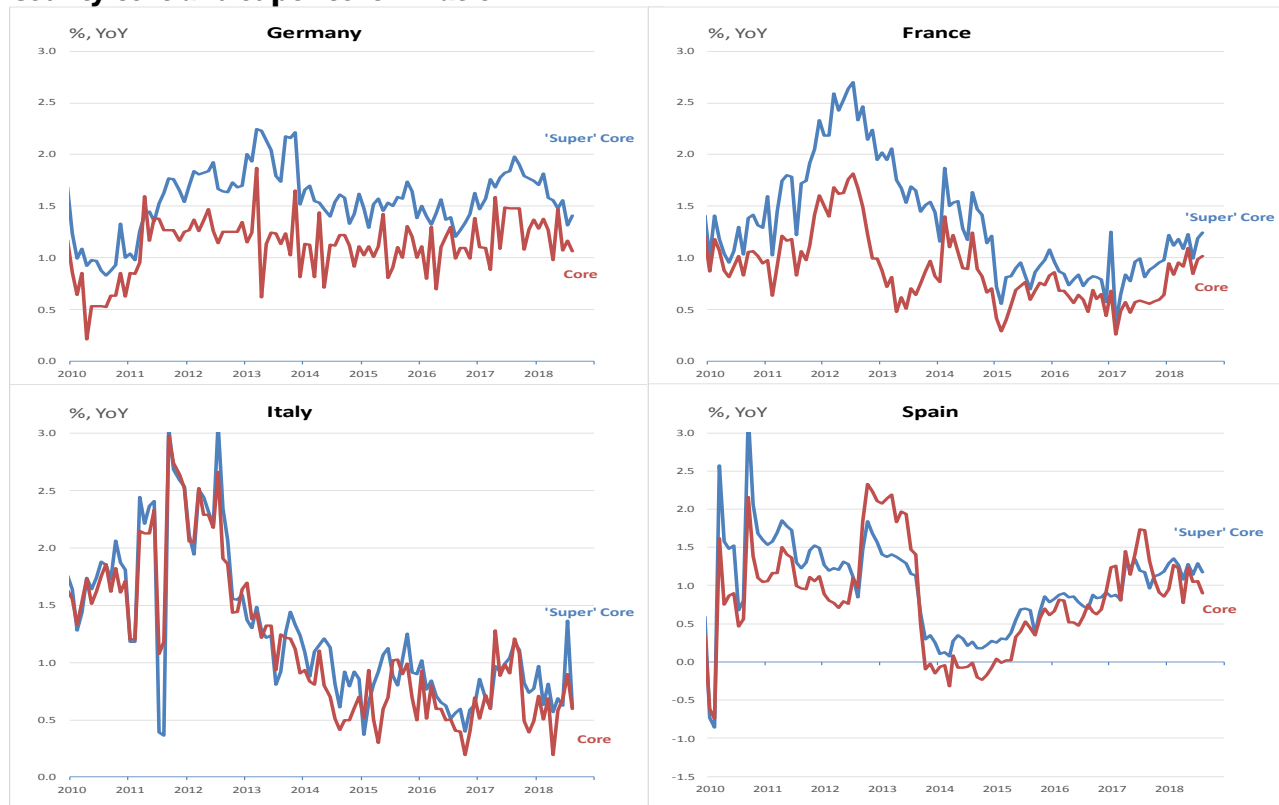
Source: ONS and Jefferies International

In the euro area, we continue to highlight developments in ‘super-core’ inflation – a measure that not only strips out food, energy, alcohol and tobacco from the HICP basket, but also takes out those HICP components which are seen to be not particularly responsive to domestically generated price pressures. Across most euro areas countries ‘super-core’ inflation has recently been printing about 0.3% above core inflation, thus giving a healthier picture of the underlying inflation dynamics. Going forward, as the ECB continues to build the case for further policy normalisation, it naturally makes sense to put greater emphasis on this measure of underlying inflation rather than the standard core inflation measure.

Euro area core and super core inflation



County core and super core inflation



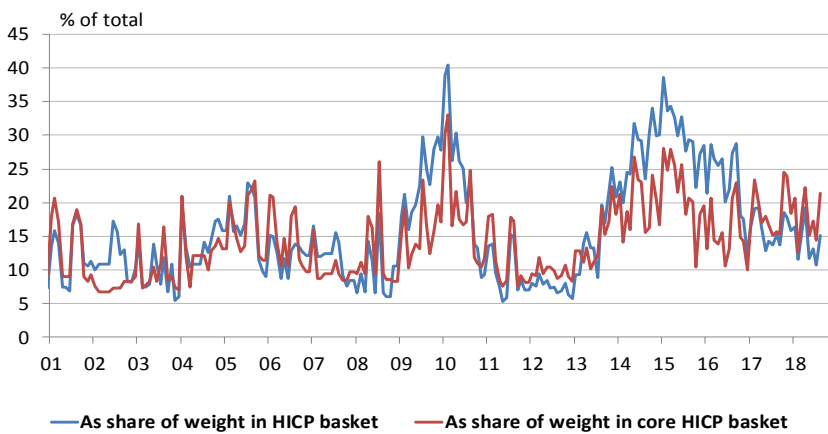
Source: Eurostat and Jefferies International

Finally, we also analyse the latest inflation data as part of our Deflation Monitor analysis. As a reminder, we calculate the inflation rates of the 94 components of the euro area HICP basket and the 73 components within the core HICP measure, and then track whether more or less of the basket is in deflation. The charts on the next page show the proportion of the euro area HICP basket where prices are falling year on year. We calculate two measures: the first, is the weight of items in deflation in the *total* HICP basket; and the second, the weight of items in deflation in the *core* part of the HICP basket (to strip away the movement of volatile food and energy components).

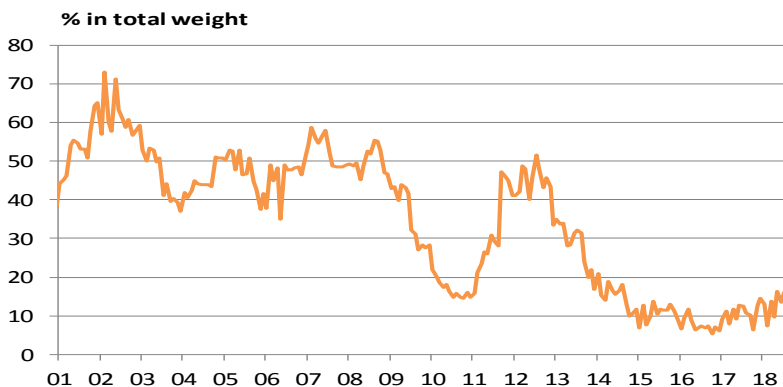
The key result for the month of August is that the proportion of the euro area HICP basket in deflation rose to 15% from 11%. In terms of specifically the core portion of the inflation basket, the share in deflation rose to 21% from 15% - this is the highest reading since April.

This usual monthly volatility aside, however, the shares in deflation on both measures have clearly fallen since QE started in 2015. Yet, as the charts below also show, inflation dynamics in the euro area remain far from normal. For example, prior to 2013, about half of the components within the core inflation basket would normally register an inflation rate of over 2%; the current reading, by comparison, is just 14%.

Share of euro area HICP basket in deflation

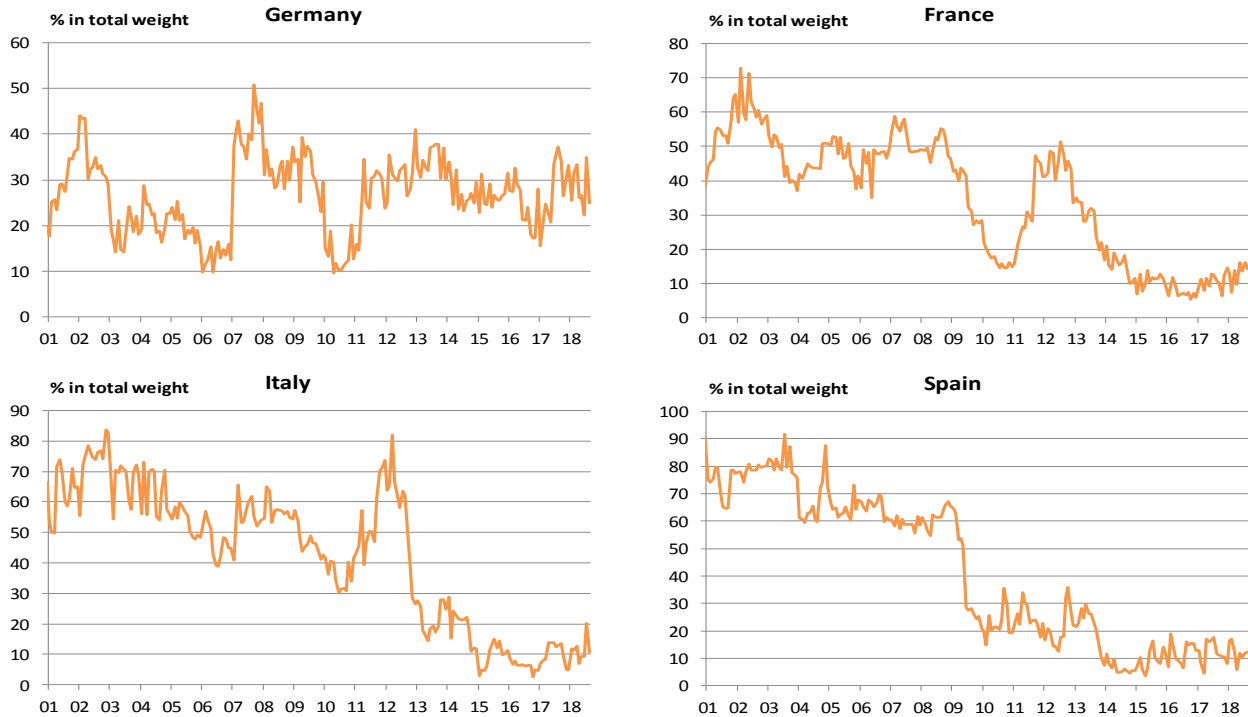


Share of euro area core HICP basket where inflation is above 2%



Source: Eurostat and Jefferies International

Share of core HICP basket where inflation is above 2% by country



Source: Jefferies International

Finally, the table below is a summary of the results for the weight of items in deflation in the *total* HICP basket across the various euro area countries, as well as the UK and the US.

Weight of inflation basket in deflation (% by country)

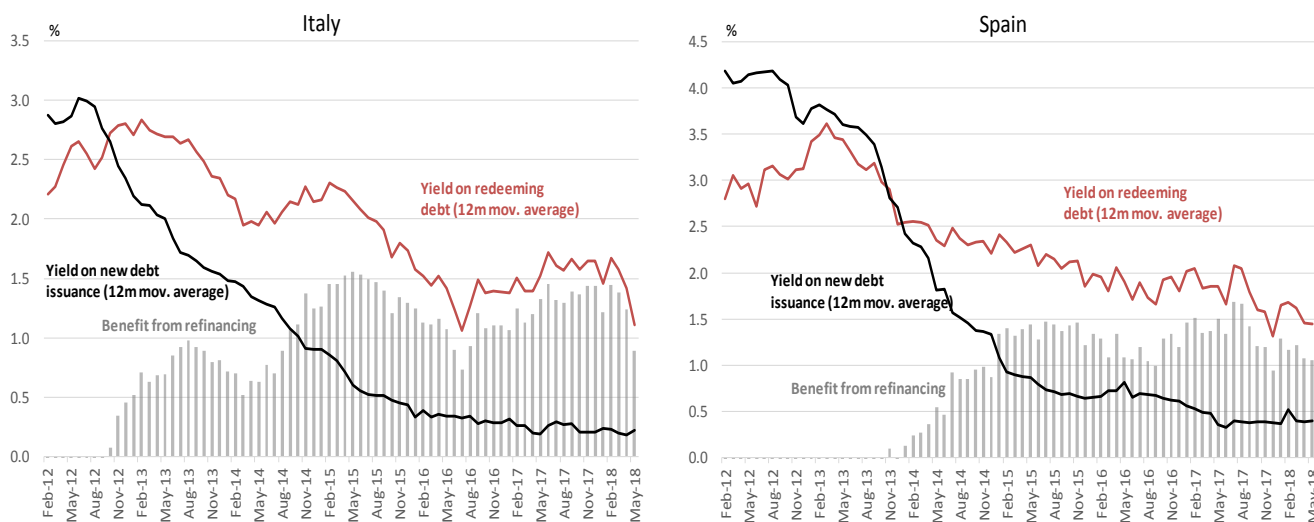
	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18
Euro area	21.4	28.6	26.4	25.5	26.5	20.1	22.0	27.3	28.8	18.1	17.6	12.3	16.3	19.0	19.3	16.3	12.9	14.2	13.8	15.3	13.7	18.5	17.9	15.8	16.4	11.6	15.8	19.2	11.7	13.2	10.7	15.1
Germany	24.8	33.4	28.7	27.3	25.2	24.3	20.7	28.7	27.6	23.1	24.6	13.1	14.7	17.0	16.3	17.5	18.3	15.0	14.3	13.2	15.2	18.8	17.9	13.7	20.0	17.0	21.4	21.0	16.7	12.9	19.2	19.9
France	29.1	29.1	26.0	29.0	36.6	35.3	30.4	29.1	31.2	30.6	30.2	27.9	27.2	29.1	28.6	25.6	28.8	18.7	17.6	20.9	22.1	16.5	15.4	19.7	16.7	11.2	12.9	13.8	13.1	19.7	18.6	19.0
Italy	24.3	29.1	30.0	33.4	34.5	33.0	34.9	36.6	32.0	38.4	31.0	29.2	26.2	26.0	32.5	18.6	18.2	22.3	22.4	17.4	15.7	12.7	10.9	16.6	7.4	18.9	14.5	20.5	21.3	19.0	8.8	15.1
Spain	31.0	30.9	28.8	30.9	30.7	31.1	30.5	30.5	32.0	21.4	21.8	14.7	21.5	22.0	24.2	17.3	17.4	18.3	18.4	16.5	23.1	15.9	13.9	18.8	20.0	12.5	13.5	17.5	9.5	11.3	11.7	10.8
Netherlands	29.1	23.3	30.4	31.0	25.9	29.5	34.3	31.6	42.4	37.1	33.4	23.6	28.9	22.0	25.0	29.5	28.9	21.2	22.8	20.7	25.4	28.4	29.1	25.5	31.1	30.4	26.6	33.4	28.9	24.8	25.7	20.9
Greece	49.3	46.1	59.4	58.9	59.4	50.2	48.7	51.0	49.3	57.2	54.0	50.0	49.0	50.5	44.5	49.8	48.6	56.8	54.2	56.2	52.4	53.9	45.1	49.0	57.2	58.3	50.7	48.9	39.7	46.2	39.5	36.9
Portugal	37.1	41.9	39.5	36.3	44.4	40.0	32.7	34.7	37.9	40.8	41.8	41.0	37.1	31.8	31.9	32.5	28.4	37.2	30.7	23.0	25.2	20.6	21.7	23.9	25.0	27.6	27.8	34.9	27.3	23.8	22.6	25.0
Ireland	48.0	46.3	44.6	48.8	45.1	45.4	44.4	44.0	43.0	45.1	43.8	40.7	41.6	40.7	40.1	39.6	38.2	40.5	39.7	36.7	36.3	35.7	36.6	39.1	35.6	34.8	39.6	38.8	40.5	41.1	41.1	44.3
Slovenia	48.3	46.0	44.8	47.2	44.0	34.7	37.6	37.2	42.0	34.2	26.8	24.7	27.6	20.7	27.2	27.3	34.1	32.7	25.6	30.5	26.6	32.1	34.1	28.8	32.6	25.3	29.7	21.3	23.7	26.8	26.2	26.2
UK	33.4	36.2	32.4	35.1	40.7	40.6	50.2	44.6	34.9	43.8	34.6	31.1	32.7	26.7	16.1	13.3	10.1	12.3	13.0	11.1	8.8	6.7	6.1	6.5	7.1	12.0	11.3	9.4	10.7	11.9	17.8	12.1
US	20.6	22.1	22.6	22.6	27.3	27.0	27.4	23.4	25.9	23.8	18.5	17.7	17.8	19.9	19.4	18.3	17.8	21.9	23.6	22.9	23.2	22.5	24.2	24.1	22.9	24.2	19.4	19.9	20.7	21.1	13.7	13.3

Source: Jefferies International

Rising borrowing costs and scope for fiscal easing

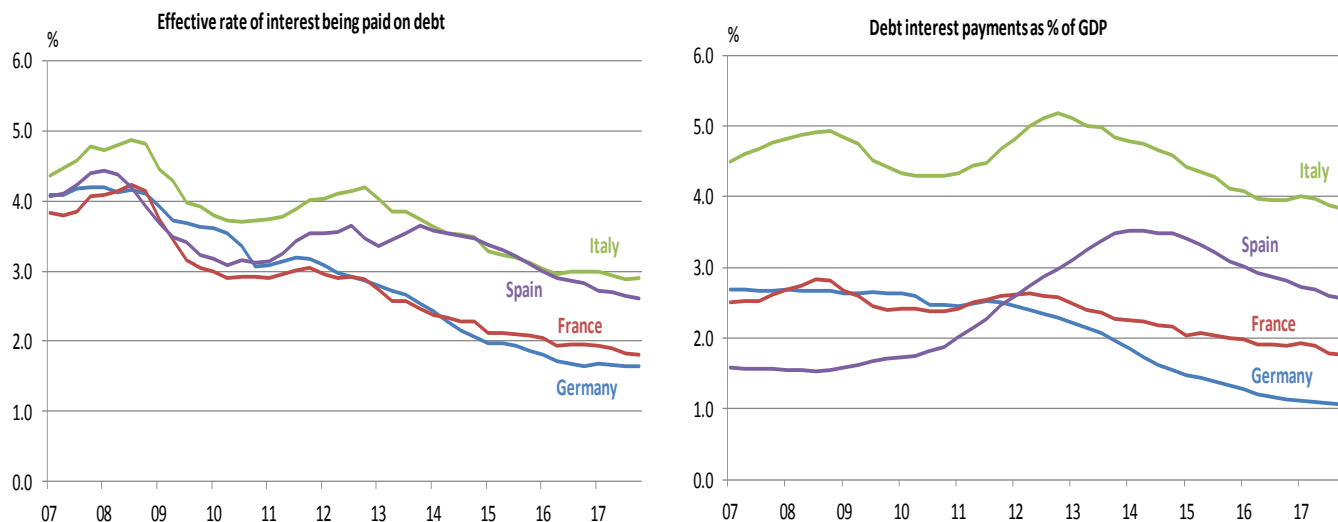
In the era of QE, fiscal policy sometimes feels like an almost irrelevant topic to cover. The markets may go through periods of extreme volatility with bond yields moving up and down, but overall, euro area governments continue to issue debt at lower interest rates than the interest rates at which they issued debt it in the past, and the benefits from refinancing remains substantial (see charts below). Eventually, these dynamics will turn, but Italy and Spain for instance would need to see their aggregate issuance costs rise by about 100bp from the current level for debt service costs to start rising.

Government new borrowing costs and yield on redeeming debt



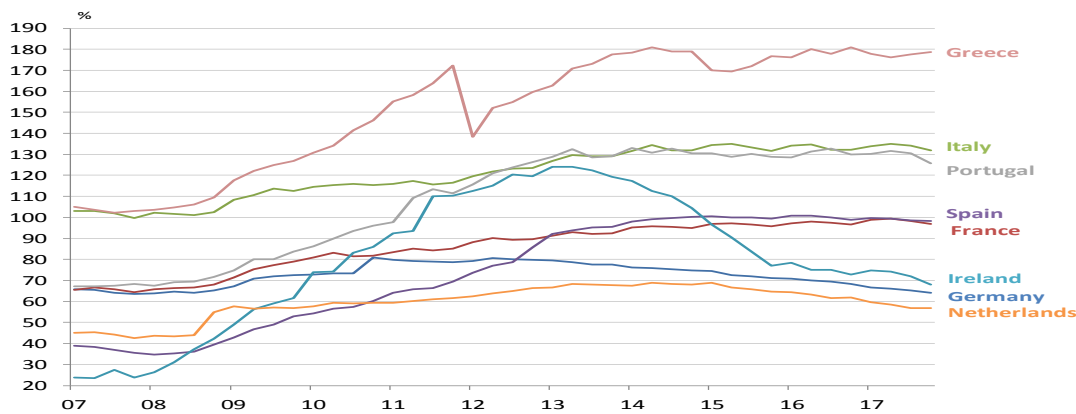
Source: ECB and Jefferies International

Debt interest costs



Source: Eurostat and Jefferies International

Debt/GDP ratios



Source: Eurostat and Jefferies International

But of course, while every euro area country has seen a fall in government borrowing costs, as the chart above highlights, this obviously hasn't translated into a synchronised decline in Debt/GDP ratios. And that is because debt dynamics are less reliant on what happens to government bond yields than is sometimes believed. As a way of illustrating this point, the table below looks at how government revenues and expenditure (including debt interest payments) have changed in the past decade. Unsurprisingly, of the larger countries, Germany has seen the largest decline in debt interest payments over the past 10 years. However, let's assume that over the recent years the rate of interest that Italy pays on its debt had fallen by the same exact amount as in Germany, so instead of paying an aggregate borrowing rate of 2.9%, Italy would be paying a rate of 2.2%. Translating that back to debt interest payments, that would mean an annual debt service cost of €50.3bn as opposed to the €65.6bn that the Italian Treasury paid-out in 2017. This difference of €15bn is certainly not immaterial, but total government expenditure in Italy in 2017 amounted to €840bn, so €15bn is just 1.8% of total government expenditure.

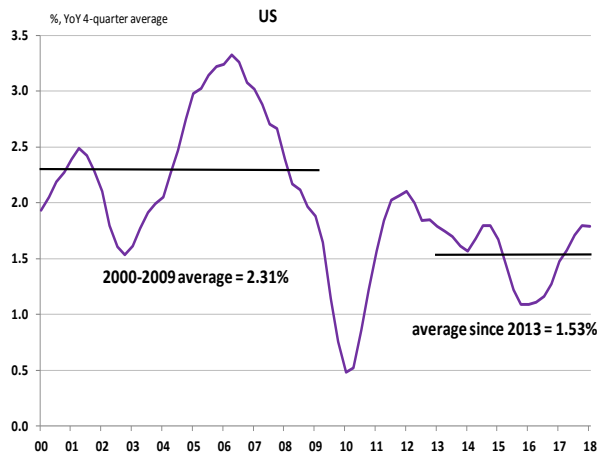
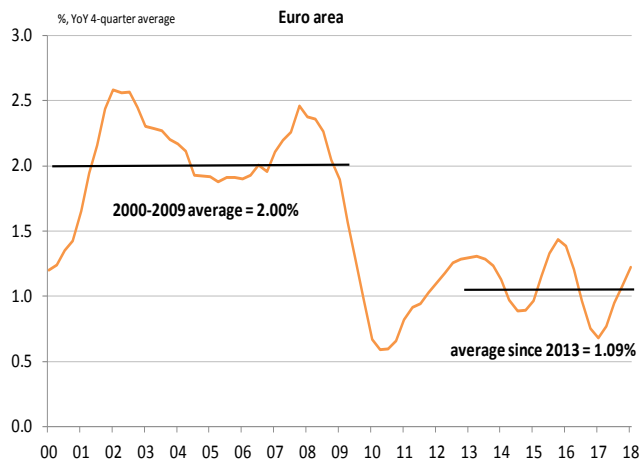
Composition of fiscal adjustment since 2008: government tax revenues, expenditure, debt interest payments and GDP

	Change in annual tax revenues, expenditure, debt interest payments & nominal GDP since the start of 2008							
	Current level of nominal GDP (euro, bn)	Current level of debt interest payments (euro, bn)	Change in			Change in nominal GDP (euro, bn)	Change in nominal GDP (%)	
			Change in tax revenues (euro, bn)	gov't expenditure excluding Debt Interest Payments (euro, bn)	Change in Debt Interest Payments (euro, bn)			
Germany	3263	34	390	359	-33	750	30	
France	2288	40	258	273	-11	342	18	
Italy	1717	66	91	105	-11	107	7	
Spain	1164	30	5	76	13	83	8	
Netherlands	733	7	59	53	-5	120	20	
Belgium	438	11	58	63	-3	94	27	
Austria	369	7	44	42	-2	85	30	
Finland	224	2	24	31	0	37	20	
Ireland	296	6	4	7	4	99	50	
Greece	178	6	-3	-13	-5	-55	-24	
Portugal	193	7	11	6	2	18	10	
Euro area	11169	220	982	1038	-49	1766	19	

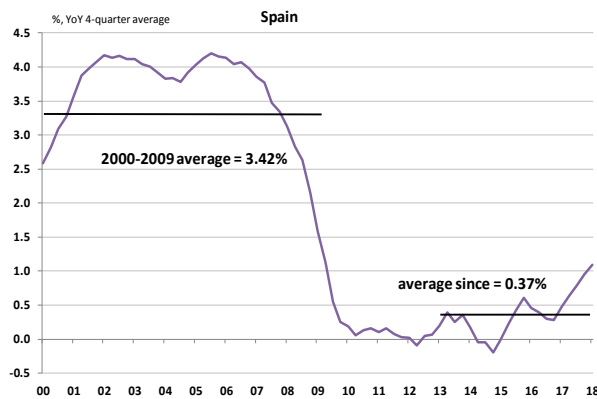
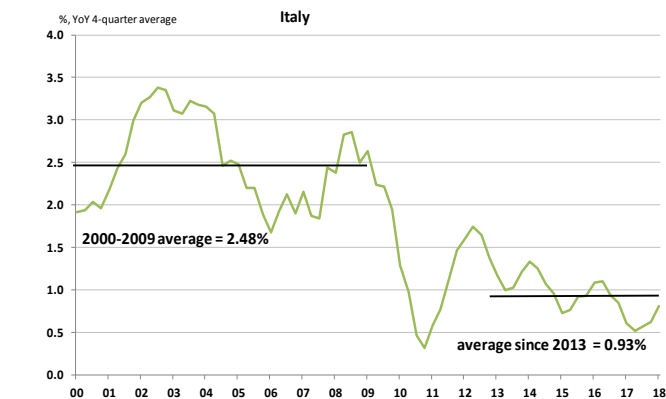
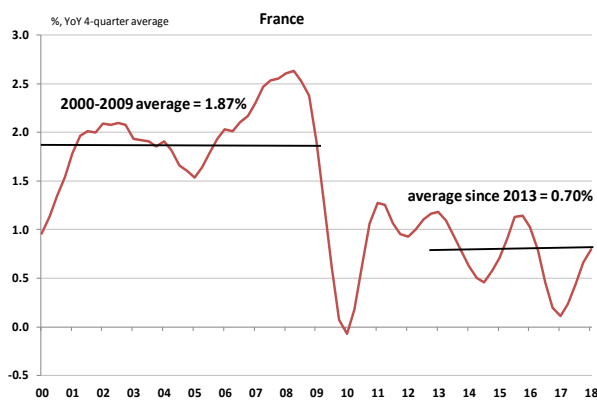
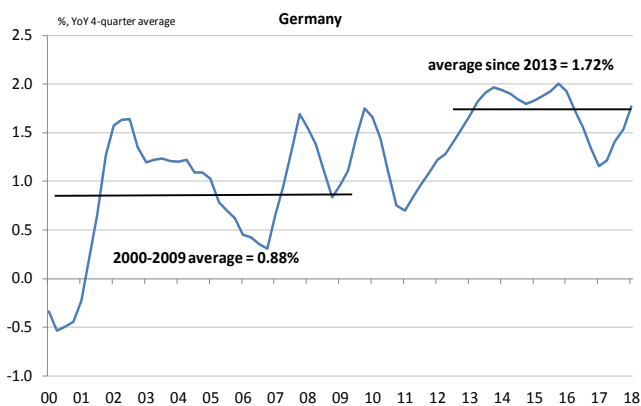
Source: Eurostat and Jefferies International

The other key piece of data in the table is the final column, which highlights the wide variation in nominal GDP growth between the euro area countries. Poor debt dynamics are not actually fundamentally a story about interest rates that are 0.5% higher or lower, or budget deficits that are 0.5% higher or lower, but rather about what happens to the denominator in the Debt/GDP ratio. Persistently weak real GDP growth is a well-documented challenge in parts of the euro area; but this has been compounded by falling inflation which has dented nominal GDP growth across most parts of the euro area.

GDP deflators: Euro area and the US



Country GDP deflations



Source: Eurostat and Jefferies International

As a final reference, the table below highlights the current fiscal position of the euro area governments, and offers a calculation in terms of what borrowing costs are required to stabilise Debt/GDP ratios under the assumption of 2% nominal GDP growth. So in Germany for instance, which is running a primary surplus of over 2% of GDP and where Debt/GDP ratio is 64%, in a world of 2% nominal GDP growth, borrowing costs would have to breach 5% to push up the country's Debt/GDP ratio. In France, the same calculation implies a borrowing rate of 1.25%; in Italy a rate 3.25%. Ultimately, however, as highlighted earlier, these calculations are driven by what happens to nominal GDP growth – and that should be the real focus for the markets in the coming years.

Maximum borrowing costs consistent with stable Debt/GDP dynamics assuming 2% nominal GDP growth

Latest Fiscal Indicators					Primary balance (as % of GDP) required to stabilise Debt/GDP ratio										
					at 2% nominal GDP growth										
					and with borrowing costs of:										
					0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%
Country	Debt/GDP (%)	Budget Deficit (% of GDP)	Primary Balance (% of GDP)	Average Nominal GDP growth since 2000 (%)											
Germany	64	1.3	2.3	2.6	-1.3	-1.0	-0.6	-0.3	0.0	0.3	0.6	1.0	1.3	1.6	1.9
France	97	-2.6	-0.8	2.7	-1.9	-1.5	-1.0	-0.5	0.0	0.5	1.0	1.5	1.9	2.4	2.9
Italy	132	-2.3	1.5	2.2	-2.6	-2.0	-1.3	-0.7	0.0	0.7	1.3	2.0	2.6	3.3	4.0
Spain	98	-3.1	-0.5	3.9	-2.0	-1.5	-1.0	-0.5	0.0	0.5	1.0	1.5	2.0	2.5	3.0
Netherlands	57	1.1	2.1	3.2	-1.1	-0.9	-0.6	-0.3	0.0	0.3	0.6	0.9	1.1	1.4	1.7
Belgium	103	-1.0	1.4	3.3	-2.1	-1.5	-1.0	-0.5	0.0	0.5	1.0	1.5	2.1	2.6	3.1
Austria	78	-0.7	1.1	3.4	-1.6	-1.2	-0.8	-0.4	0.0	0.4	0.8	1.2	1.6	2.0	2.4
Ireland	68	-0.3	1.6	7.1	-1.4	-1.0	-0.7	-0.3	0.0	0.3	0.7	1.0	1.4	1.7	2.0
Finland	61	-0.6	0.4	3.2	-1.2	-0.9	-0.6	-0.3	0.0	0.3	0.6	0.9	1.2	1.5	1.8
Portugal	126	-3.0	0.9	2.8	-2.5	-1.9	-1.3	-0.6	0.0	0.6	1.3	1.9	2.5	3.1	3.8
Greece	179	0.8	4.0	1.8	-3.6	-2.7	-1.8	-0.9	0.0	0.9	1.8	2.7	3.6	4.5	5.4

Primary surplus (+) / deficit (-) required to stabilise Italian Debt/GDP ratio under different assumptions for nominal GDP growth and government borrowing costs

Nominal GDP Growth	Long-term borrowing costs							
	0%	1%	2%	3%	4%	5%	6%	7%
0%	0.0	1.3	2.6	4.0	5.3	6.6	7.9	9.2
1%	-1.3	0.0	1.3	2.6	4.0	5.3	6.6	7.9
2%	-2.6	-1.3	0.0	1.3	2.6	4.0	5.3	6.6
3%	-4.0	-2.6	-1.3	0.0	1.3	2.6	4.0	5.3
4%	-5.3	-4.0	-2.6	-1.3	0.0	1.3	2.6	4.0
5%	-6.6	-5.3	-4.0	-2.6	-1.3	0.0	1.3	2.6
6%	-7.9	-6.6	-5.3	-4.0	-2.6	-1.3	0.0	1.3
7%	-9.2	-7.9	-6.6	-5.3	-4.0	-2.6	-1.3	0.0

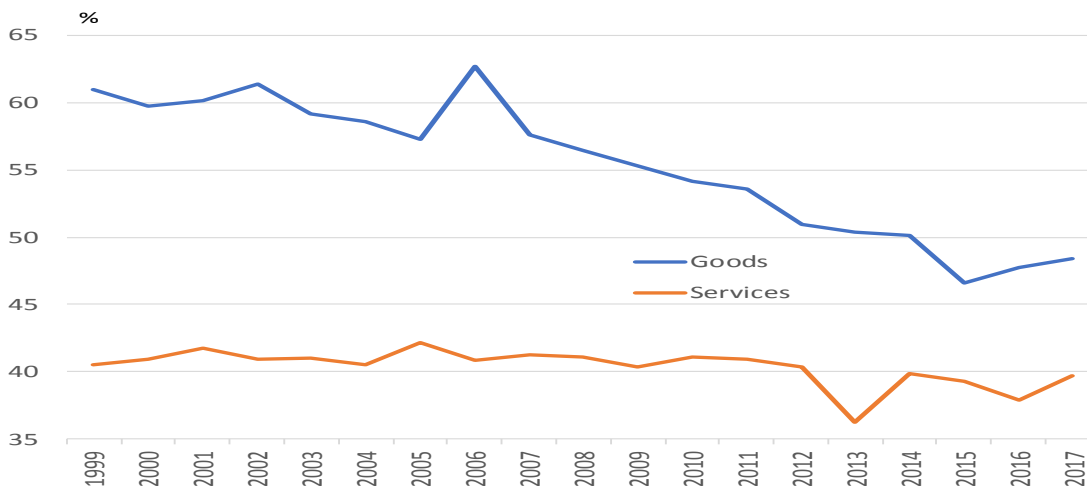
Source: Jefferies International

The EU and a no-trade deal: trade, the budget and opinion polls

Looking at Brexit from the EU's perspective, it's easy to build a logical argument that UK needs to leave the EU next March. There may be public declarations from officials that the UK can still change its mind, but the reality is that it is not in the EU's interest for the UK to change direction now (more on that later).

When looking at the economic ties that bind the EU and the UK, it is pretty easy to argue that it is in both side's strongest interest to find a way to avoid a no-deal outcome. Nearly 50% of UK goods exports head to the rest of the EU; while in 2017, the EU exported £260bn worth of goods into the UK – there is strong mutual dependency between the regions, and anything that physically disrupts the physical movement of trucks across borders will be politically and economically damaging to both sides.

Share of UK's exports in goods and services going to the EU



Source: ONS and Jefferies International

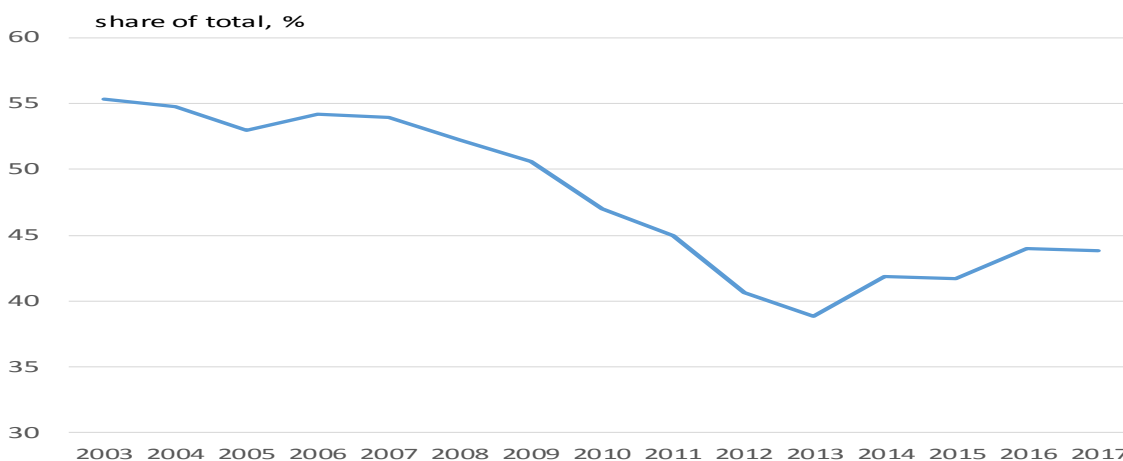
Similarly, a no-deal scenario that potentially erects unnecessary and cumbersome regularity hurdles will put at risk £110bn of services the UK exports to the EU and the £82bn of services it imports from the EU each year (these are the latest figures for 2017; the breakdown of 2016 data is presented below). Incidentally, both the EU and the UK have done relatively well in recent years in improving their trade linkages with non-EU countries (for instance we recently wrote about the German current account surplus rising in recent years against the US and China, and falling against other EU countries). Still, geographic proximity and established supply chains continue to drive trade, and after the UK leaves the EU, it would overnight become the EU's second largest trading partner after the US, accounting for almost 17% of extra-EU export of goods. Again, it's pretty obvious that anything that sabotages the EU-UK trade relationship, especially at a time when global trade is already facing disruptions from the US administration, would be an own goal.

UK's exports of services by country & type of service (2016 data)

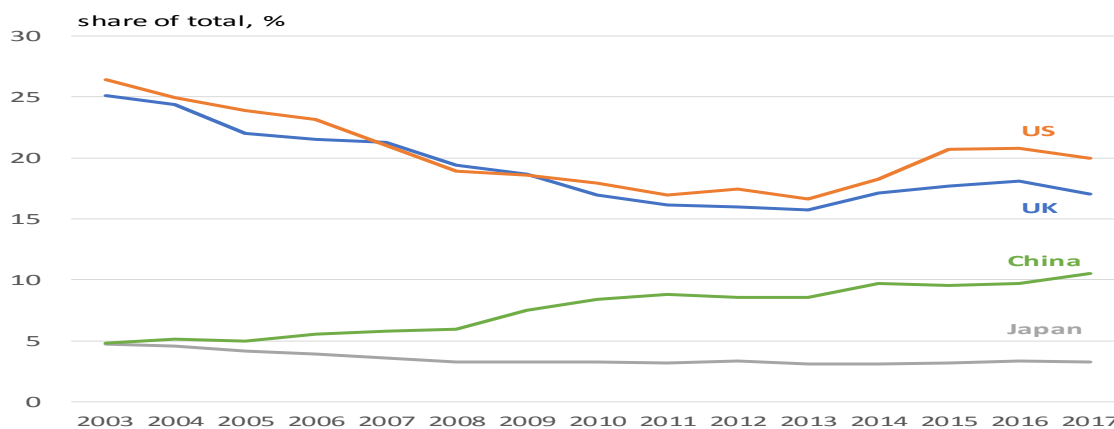
£, bn	Type of service										Total Services
	Transportation	Travel	Construction	Insurance & Pension	Financial	Intellectual Property	Telecoms & other IT	Other business services	Personal, cultural & recreational	Government	
Germany	0.8	1.8	0.1	0.2	5.4	1.3	1.9	3.9	0.2	0.1	16.1
France	0.9	1.6	0.1	0.2	6.3	0.5	1.5	2.4	0.2	0.1	13.8
Italy	0.4	3.1	0.1	0.1	1.8	0.2	0.5	0.9	0.1	0.0	7.2
Spain	0.4	1.2	0.1	0.1	1.7	0.2	0.6	0.6	0.1	0.0	4.9
NL	0.7	1.1	0.2	0.2	4.3	0.5	1.0	3.7	0.1	0.0	12.4
Sweden	0.2	0.9	0.0	0.1	1.1	0.4	0.4	2.9	0.0	0.0	6.2
Ireland	0.7	1.3	0.2	0.2	1.3	0.6	0.7	4.2	0.1	0.0	9.4
EU27 Total	5.6	14.8	0.8	1.7	27.0	4.9	8.4	23.7	1.0	0.5	90.4
US	4.3	4.2	0.2	2.1	14.6	3.5	4.1	17.6	1.3	0.1	52.1
Switzerland	0.4	0.9	0.0	0.1	1.8	0.6	1.0	7.0	0.1	0.0	12.4
Japan	0.6	0.3	0.0	0.1	4.6	0.2	0.2	1.1	0.2	0.1	7.4
China & Hong Kong	1.1	1.7	0.1	0.0	0.9	0.2	0.4	1.2	0.1	0.1	5.8
Total	26.0	30.8	1.8	17.6	61.4	12.6	19.0	66.1	3.6	2.6	245.4

Source: ONS and Jefferies International

How much does the EU trade within the region: goods trade within the EU as share of total EU28 goods exports

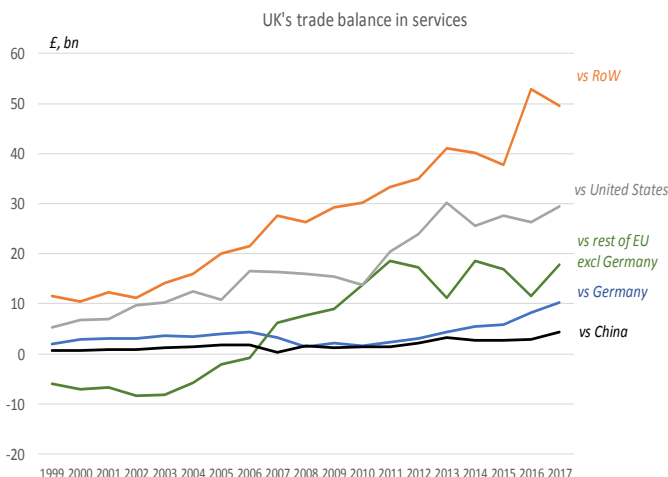
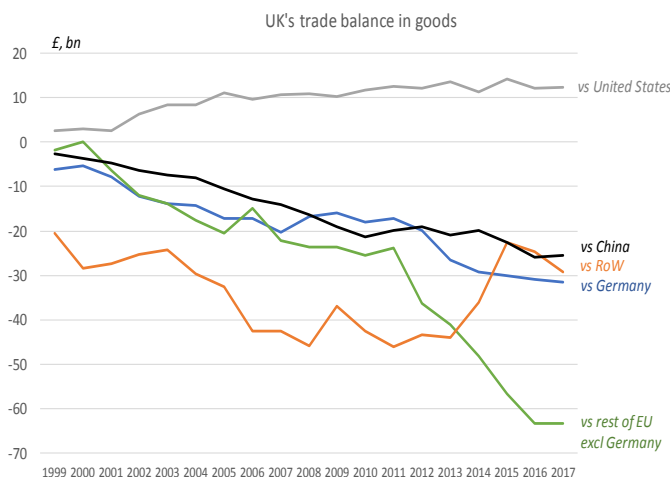


EU ex UK goods exports to the rest of the world



Source: European Commission and Jefferies International

UK's trade balance in goods and in services



Source: ONS and Jefferies International

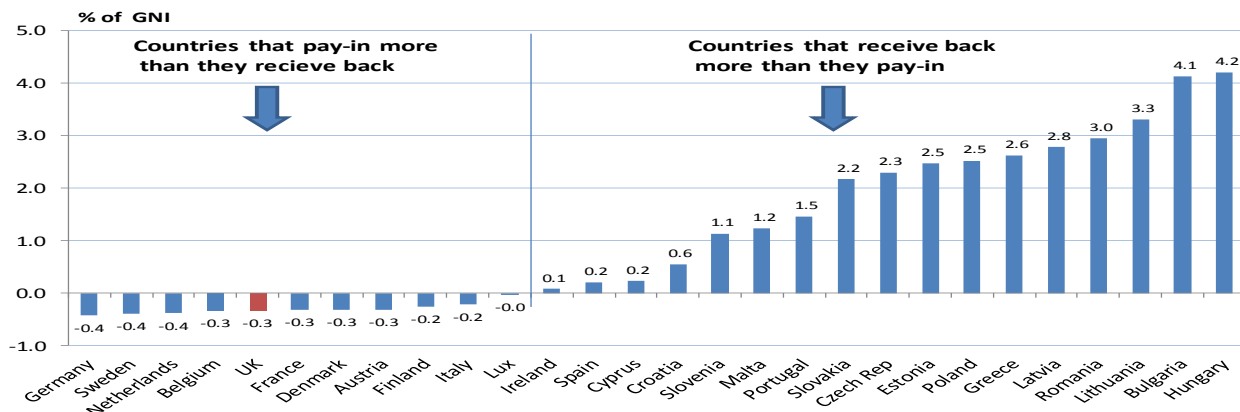
Importance of UK for trade in goods



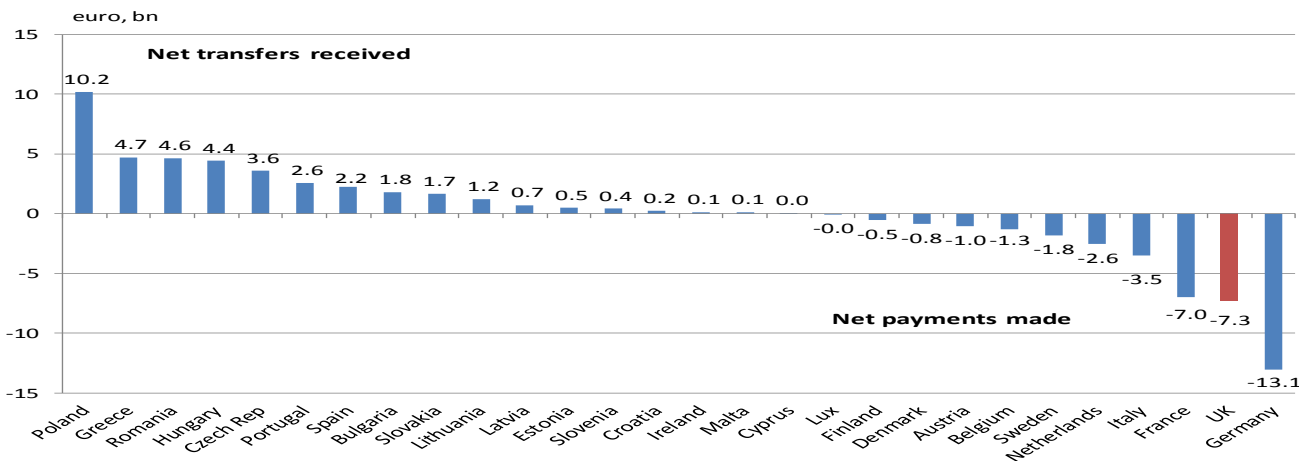
Source: ONS and Jefferies International

In terms of the other obvious downside of a no-deal scenario for the EU, it is the not insignificant matter of the UK's money. The £39bn divorce settlement that has been provisionally agreed would presumably be scrapped, with the matter being tied up in courts for years. More immediately, the UK would stop contributing to the EU budget, and the hole (the UK's net contribution has averaged €7bn per year over the past 5 years) would need to be filled somehow. In practice that means that either the net recipient countries (Poland, Greece, Romania, Hungary, Czech Republic, Portugal) have to take a hit in terms of the benefit received. Or, the net payee countries (Germany, France, Italy, Netherlands, Sweden) have to start contributing more into the budget so that the net recipients don't end up losing out. In terms of the two scenarios, for Poland, that could mean receiving (in net terms) €1.9bn per year less from the EU Budget; or alternatively, Germany paying €3bn per year more into the EU Budget. This will not be a make-or-break factor in the negotiations, but it is a consideration.

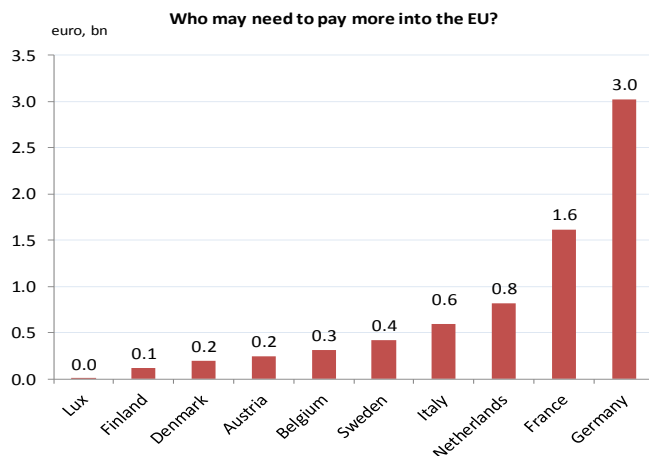
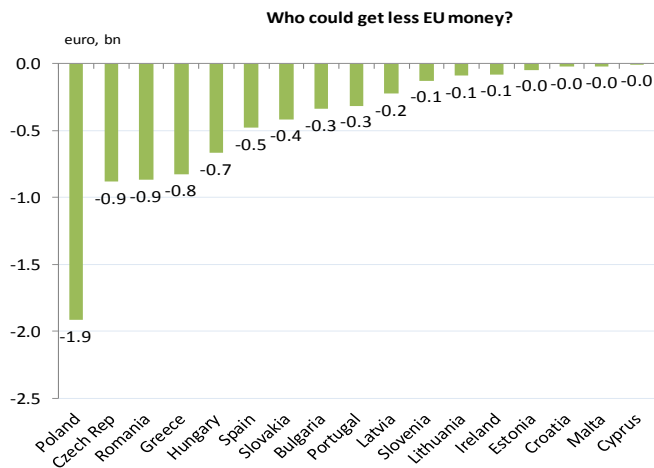
Net contributions to the EU budget as share of Gross National Income (5-year average based on 2013-2017 data)



Average annual net contributions made and received in cash terms over the past five years



What happens to EU budget transfers if UK's net contributions stop completely: how much less net recipients may get or how much more net payees may have to contribute



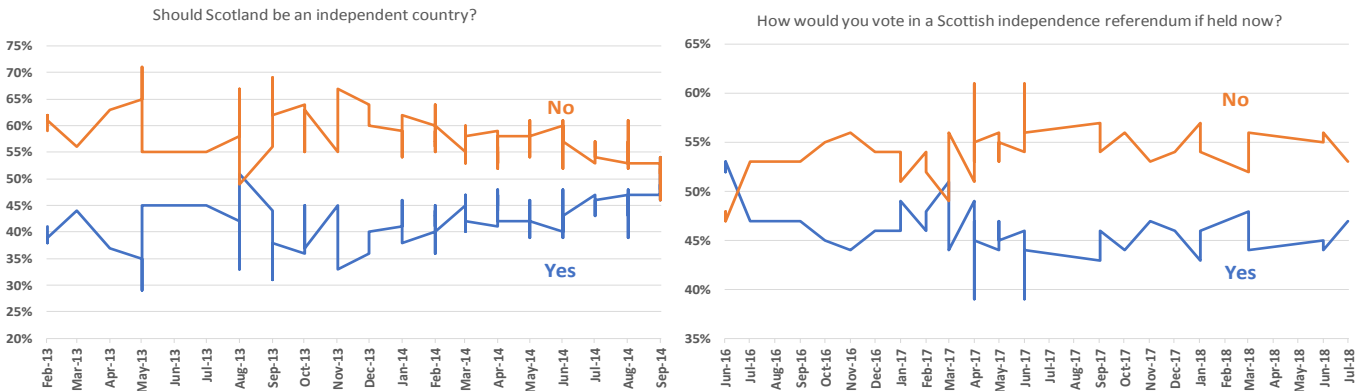
Source: European Commission and Jefferies International

Jefferies Fixed Income

Finally, when the EU negotiators decide how much to compromise to get a deal done with the UK, they must ask themselves whether there is in fact a credible alternative to offering something that the UK Parliament will accept? Public opinion on Brexit really has not changed in the UK that much in the last two years – yes, maybe the numbers now show a 52/48 split in favour of Remain as opposed to Leave (see second chart below), but these are marginal changes, and that should make the EU extremely wary. Just as with the 2014 Scottish Referendum (or the Independence Referendum in Quebec), opinions on fundamental issues of sovereignty take decades, as opposed to years, to shift. Four years on, the polling in Scotland still suggest around 45% of the population would vote for independence. And in the same vein, another Brexit Referendum, even if it produced the opposite result, will not settle the issue long-term.

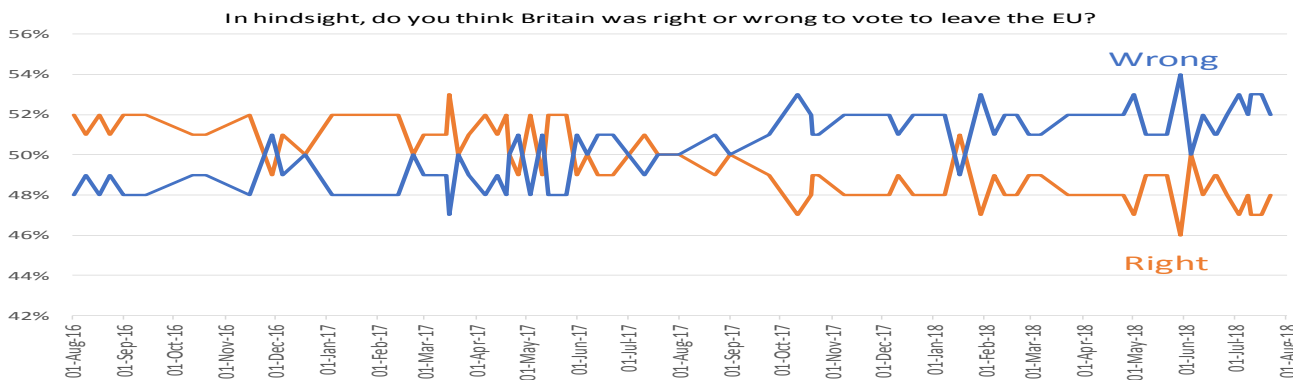
Under another government and after another recession, the issues of migration, the UK’s net contribution to the EU budget, and ‘regaining sovereignty’ will almost certainly resurface, and ten years down the line (or perhaps much sooner) the two sides may find themselves in the same situation as today. Is that the road the EU really wants to take; or does it compromise and accommodate the UK’s EU departure to solve the problem once and for all? We should know the answer to these questions in a matter of weeks, but at the moment, a no-deal Brexit scenario still doesn’t seem like the end destination for the UK in April 2019.

Views on Scottish independence (excluding “don’t knows”)



Source: WhatScotlandThinks.com

Views on Brexit (excluding “don’t knows”)

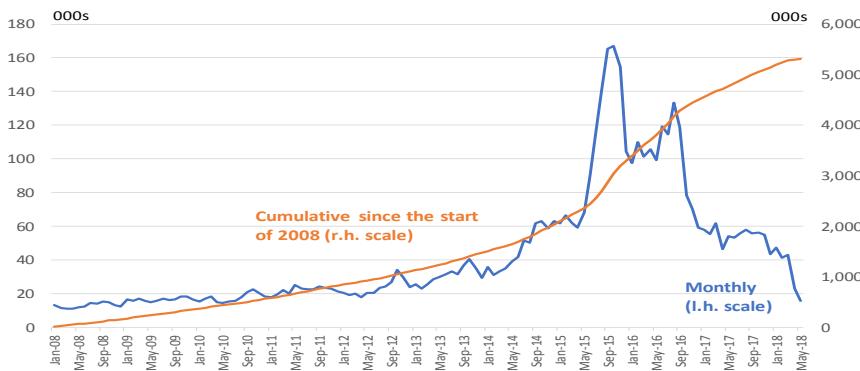


Source: YouGov, result of 79 polls 1 August 2016 - 23 July 2018

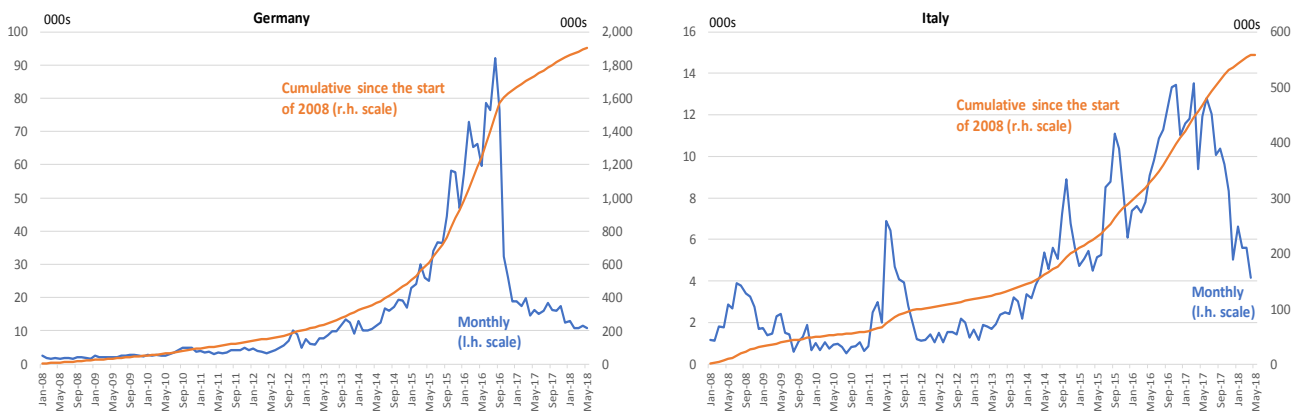
Migration and Europe’s population dynamics

The discussions in Europe over how to handle the issue of asylum seekers is obviously separate from the broader conversation about the appropriate levels of migration, or the UK-specific focus on restricting the free movement of labour from the EU. But there is clearly a common thread in these discussions, and the politicians across Europe are simply not being honest with their voters. Whether it’s a popular view with the average person or not, the EU needs foreign workers to support its rapidly ageing population, and the fixation on migration is missing the bigger picture.

Monthly asylum applicants across the whole of the EU



Monthly asylum applicants in Germany and in Italy



Source: Eurostat and Jefferies International

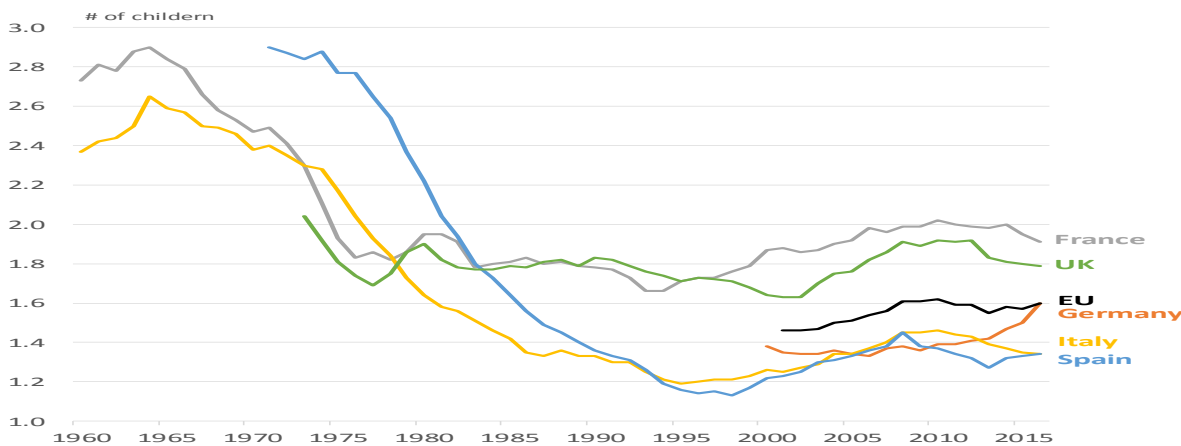
The recently published four-hundred page Ageing Report from the European Commission (see [here](#)) certainly makes this point in a great level of detail. Much lower fertility rates (see chart on the next page) means that there are only a handful of countries in the EU with even mildly positive demographic trends. For example, depending on what time horizon one looks beyond, by 2030, Germany, Italy and Spain are expected to see their working age population shrink by around 6%. And by 2060, of the bigger countries, Italy and Germany are in particular trouble – with working age numbers expected to be close to 20% lower than their current levels. Add into this mix Greece, Portugal, the Baltic states and the Eastern European countries, and the EU-wide numbers look almost unbelievably poor, especially if one considers the ex-UK picture.

Working age population projections to 2060 (those aged 15-64)

in thousands	2016				% change 2016 to 2030	2035						% change 2016 to 2060	in thousands
	2016	2020	2025	2030		2035	2040	2045	2050	2055	2060		
Germany	54,149	54,172	52,794	50,709	-6.4	49,126	48,792	48,388	47,413	45,987	44,876	-17.1	Germany
France	41,809	41,775	41,806	41,593	-0.5	41,516	41,457	41,884	42,375	43,033	43,694	4.5	France
Italy	39,049	38,719	38,096	36,796	-5.8	35,104	33,493	32,425	31,842	31,427	31,008	-20.6	Italy
Spain	30,659	30,314	29,803	28,875	-5.8	27,762	26,627	25,702	25,684	26,382	27,260	-11.1	Spain
Netherlands	11,122	11,247	11,258	11,141	0.2	11,034	11,091	11,276	11,407	11,415	11,324	1.8	Netherlands
Belgium	7,320	7,401	7,493	7,539	3.0	7,606	7,705	7,803	7,871	7,917	7,952	8.6	Belgium
Greece	6,904	6,667	6,377	6,050	-12.4	5,640	5,228	4,842	4,569	4,445	4,357	-36.9	Greece
Portugal	6,724	6,572	6,355	6,065	-9.8	5,755	5,395	5,070	4,862	4,732	4,587	-31.8	Portugal
Austria	5,866	6,024	6,100	6,077	3.6	6,054	6,101	6,145	6,084	5,972	5,826	-0.7	Austria
Finland	3,463	3,425	3,406	3,382	-2.3	3,366	3,383	3,360	3,314	3,269	3,213	-7.2	Finland
Ireland	3,018	3,085	3,177	3,255	7.8	3,287	3,268	3,221	3,196	3,248	3,366	11.5	Ireland
Slovakia	3,799	3,696	3,597	3,521	-7.3	3,451	3,325	3,148	2,983	2,846	2,750	-27.6	Slovakia
Slovenia	1,372	1,330	1,297	1,268	-7.6	1,237	1,201	1,154	1,116	1,096	1,098	-20.0	Slovenia
Lithuania	1,897	1,752	1,556	1,387	-26.9	1,267	1,177	1,107	1,046	986	942	-50.4	Lithuania
Latvia	1,272	1,197	1,102	1,015	-20.2	960	905	851	794	742	721	-43.3	Latvia
Estonia	851	833	819	802	-5.7	788	767	743	713	680	665	-21.8	Estonia
Poland	26,075	25,017	23,957	23,271	-10.8	22,737	21,868	20,594	19,160	18,014	17,214	-34.0	Poland
Romania	13,193	12,563	11,862	11,356	-13.9	10,598	9,983	9,379	9,003	8,610	8,480	-35.7	Romania
Hungary	6,588	6,364	6,191	6,081	-7.7	5,926	5,711	5,454	5,325	5,201	5,065	-23.1	Hungary
Czech Rep	6,968	6,789	6,742	6,675	-4.2	6,604	6,362	6,044	5,833	5,674	5,607	-19.5	Czech Rep
Bulgaria	4,663	4,412	4,153	3,929	-15.7	3,712	3,466	3,219	3,023	2,844	2,751	-41.0	Bulgaria
Euro area	220,550	219,529	216,402	210,879	-4.4	205,398	201,394	198,614	196,763	195,650	195,087	-11.5	Euro area
UK	42,225	42,959	43,882	44,314	4.9	44,581	45,214	45,975	46,314	46,418	46,390	9.9	UK
EU ex UK	290,697	287,478	282,347	275,374	-5.3	268,285	262,255	256,943	252,854	249,716	247,841	-14.7	EU ex UK

Source: European Commission and Jefferies International

Total fertility rate (mean number of children born to a woman during her lifetime)



Source: Eurostat and Jefferies International

Once these poor working age population projections are combined with the expectations of more pensioners living for longer, it pushes up the so-called ‘cost of ageing’ estimates – which means an increased burden on the working to support those in retirement. Some of these effects have been mitigated through pushing out retirement ages (see table on the next page) and cutting pension entitlements, but there are few countries that have really got on top of these issues (Greece being a notable exception).

Jefferies Fixed Income

GLOBAL FIXED INCOME

Total costs of ageing as % of GDP (combined costs related to pensions, health care, long-term care)

% of GDP					% pt change 2016 to 2030							% pt change 2016 to 2060	% of GDP
	2016	2020	2025	2030		2035	2040	2045	2050	2055	2060		
Germany	24	24	25	26	2.1	26	27	27	27	28	28	4.1	Germany
France	31	31	31	31	0.5	32	32	31	30	30	29	-2.0	France
Italy	28	28	29	29	1.4	31	32	32	31	30	29	1.0	Italy
Spain	24	24	24	25	0.6	25	26	27	27	26	25	0.9	Spain
Netherlands	24	23	23	24	0.8	26	27	27	27	27	27	2.9	Netherlands
Belgium	28	28	29	30	2.1	30	31	31	32	32	32	4.6	Belgium
Greece	26	22	21	20	-5.5	21	21	21	21	21	21	-5.3	Greece
Portugal	25	25	26	26	0.8	27	27	28	27	27	26	0.7	Portugal
Austria	28	28	29	29	0.9	30	31	31	31	32	32	3.5	Austria
Finland	30	30	31	32	2.3	32	32	31	31	31	31	1.7	Finland
Ireland	15	15	16	17	1.4	17	18	19	19	20	20	4.8	Ireland
Slovakia	19	19	19	19	-0.1	19	19	20	21	22	22	3.3	Slovakia
Slovenia	22	22	23	24	2.1	25	27	28	29	29	29	6.9	Slovenia
Lithuania	16	16	16	17	0.7	17	17	17	17	17	17	0.7	Lithuania
Latvia	16	16	16	16	-0.3	16	16	16	16	16	16	-0.3	Latvia
Estonia	19	19	18	18	-1.0	18	19	19	19	19	19	-0.2	Estonia
Poland	20	20	20	20	0.1	20	21	21	22	22	22	1.8	Poland
Romania	15	14	14	14	-0.9	15	16	17	17	18	18	2.5	Romania
Hungary	19	18	18	18	-1.2	18	19	21	21	21	22	2.9	Hungary
Czech Rep	18	18	19	20	1.4	20	21	22	24	25	25	7.0	Czech Rep
Bulgaria	18	18	18	18	0.0	19	19	20	21	22	22	3.3	Bulgaria
Euro area	26	26	26	27	1.0	28	28	28	28	28	28	1.6	Euro area
UK	23	23	23	24	1.0	24	25	25	25	25	26	3.4	UK
EU ex UK	25	25	26	26	0.7	27	27	27	27	27	27	1.6	EU ex UK

Source: European Commission and Jefferies International

Statutory retirement ages, early retirement (in brackets)

	MALE				FEMALE			
	2016	2030	2050	2070	2016	2030	2050	2070
BE	65 (62)	67 (63)	67 (63)	67 (63)	65 (62)	67 (63)	67 (63)	67 (63)
BG	63.8 (62.8)	65 (64)	65 (64)	65 (64)	60.8 (59.8)	63.3 (62.3)	65 (64)	65 (64)
CZ	63.1 (60)	65 (60)	65 (60)	65 (60)	60.5 (57.5)	64.7 (60)	65 (60)	65 (60)
DK*	65 (61.5)	68 (65)	71.5 (68.5)	74 (71)	65 (61.5)	68 (65)	71.5 (68.5)	74 (71)
DE	65.5 (63)	67 (63)	67 (63)	67 (63)	65.5 (63)	67 (63)	67 (63)	67 (63)
EE	63 (60)	65 (62)	65 (62)	65 (62)	63 (60)	65 (62)	65 (62)	65 (62)
IE	65.4 (65.4)	68 (68)	68 (68)	68 (68)	65.4 (65.4)	68 (68)	68 (68)	68 (68)
EL*	67 (62)	68.7 (63.7)	70.5 (65.5)	72.6 (67.6)	67 (62)	68.7 (63.7)	70.5 (65.5)	72.6 (67.6)
ES	65.3 (63)	67 (63)	67 (63)	67 (63)	65.3 (63)	67 (63)	67 (63)	67 (63)
FR	66.3 (61.3)	67 (62)	67 (62)	67 (62)	66.3 (61.3)	67 (62)	67 (62)	67 (62)
HR	65 (60)	65 (60)	67 (62)	67 (62)	61.5 (56.5)	65 (60)	67 (62)	67 (62)
IT*	66.6 (63.6)	67.9 (64.9)	69.6 (66.6)	71.1 (68.1)	66.6 (63.6)	67.9 (64.9)	69.6 (66.6)	71.1 (68.1)
CY*	65 (65)	66 (66)	68 (68)	70 (70)	65 (65)	66 (66)	68 (68)	70 (70)
LV	62.8 (60.8)	65 (63)	65 (63)	65 (63)	62.8 (60.8)	65 (63)	65 (63)	65 (63)
LT	63.3 (58.3)	65 (60)	65 (60)	65 (60)	61.7 (56.7)	65 (60)	65 (60)	65 (60)
LU	65 (57)	65 (57)	65 (57)	65 (57)	65 (57)	65 (57)	65 (57)	65 (57)
HU	63.1 (63.1)	65 (65)	65 (65)	65 (65)	63.1 (63.1)	65 (65)	65 (65)	65 (65)
MT	62 (61)	65 (61)	65 (61)	65 (61)	62 (61)	65 (61)	65 (61)	65 (61)
NL*	65.5 (65.5)	68 (68)	70.5 (70.5)	72.5 (72.5)	65.5 (65.5)	68 (68)	70.5 (70.5)	72.5 (72.5)
AT	65 (60)	65 (60)	65 (60)	65 (60)	60 (55)	63.5 (60)	65 (60)	65 (60)
PL	65 (65)	65 (65)	65 (65)	65 (65)	60 (60)	60 (60)	60 (60)	60 (60)
PT*	66.2 (60)	67.2 (60)	68.3 (60)	69.3 (60)	66.2 (60)	67.2 (60)	68.3 (60)	69.3 (60)
RO	64.8 (59.8)	65 (60)	65 (60)	65 (60)	60.4 (55.4)	63 (58)	63 (58)	63 (58)
SI	65 (59.3)	65 (60)	65 (60)	65 (60)	63 (59)	65 (60)	65 (60)	65 (60)
SK*	62 (60)	64.2 (62.2)	66.8 (64.8)	69.1 (67.1)	60.2 (58.2)	64.2 (62.2)	66.8 (64.8)	69.1 (67.1)
FI*	66 (63)	67.1 (64.1)	69.2 (66.2)	71 (68)	66 (63)	67.1 (64.1)	69.2 (66.2)	71 (68)
SE	67 (61)	67 (61)	67 (61)	67 (61)	67 (61)	67 (61)	67 (61)	67 (61)
UK	65.4 (65.4)	66 (66)	67.3 (67.3)	68 (68)	63.1 (63.1)	66 (66)	67.3 (67.3)	68 (68)
NO	67 (62)	67 (62)	67 (62)	67 (62)	67 (62)	67 (62)	67 (62)	67 (62)

Source: European Commission

Jefferies Fixed Income

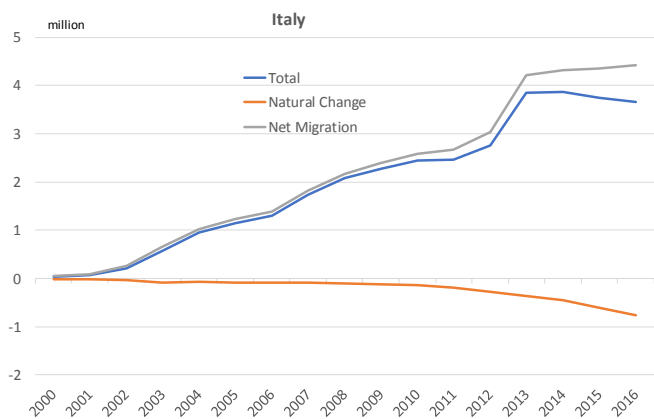
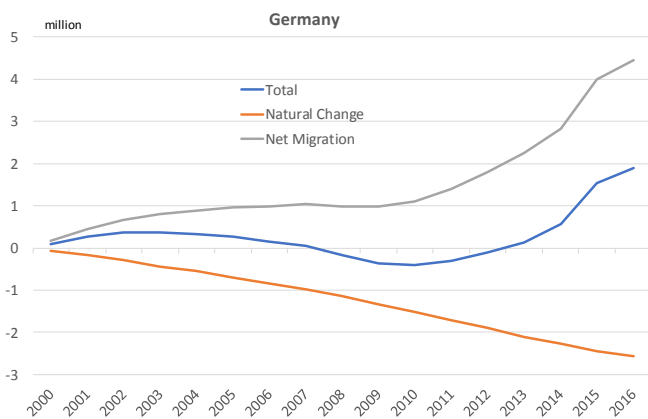
Refocusing on migration, the table below highlights that almost 90% of EU’s total population increase since 2000 has been due to migration as opposed to the natural change in population, and Germany and Italy would have already seen their populations in decline had it not been for migration (see charts on the next page). Few politicians draw attention to these statistics, but these are the facts.

Drivers of population change since 2000

Drivers of population growth 2000-2016				
	Natural Change	Net Migration	Total Change in Population	Latest Population Estimate
Germany	-2,573,222	4,460,937	1,887,715	82,521,653
France	4,427,462	1,786,284	6,213,746	66,989,083
Italy	-757,195	4,423,116	3,665,921	60,589,445
Spain	1,131,150	4,926,692	6,057,842	46,528,024
Netherlands	794,303	423,254	1,217,557	17,081,507
Belgium	290,961	772,309	1,063,270	11,351,727
Greece	-81,740	74,306	-7,434	10,768,193
Portugal	-79,860	140,411	60,551	10,309,573
Austria	33,012	737,667	770,679	8,772,865
Finland	131,032	200,963	331,995	5,503,297
Ireland	636,492	370,326	1,006,818	4,784,383
Poland	65,886	-211,765	-145,879	37,972,964
Hungary	-619,224	220,947	-398,277	9,797,561
Romania	-792,738	-2,018,397	-2,811,135	19,644,350
UK	2,886,197	4,137,130	7,023,327	65,808,573
EU ex UK	1,900,462	16,914,300	18,814,762	445,714,098

Source: Eurostat and Jefferies International

Drivers of population change since 2000: cumulative change by category



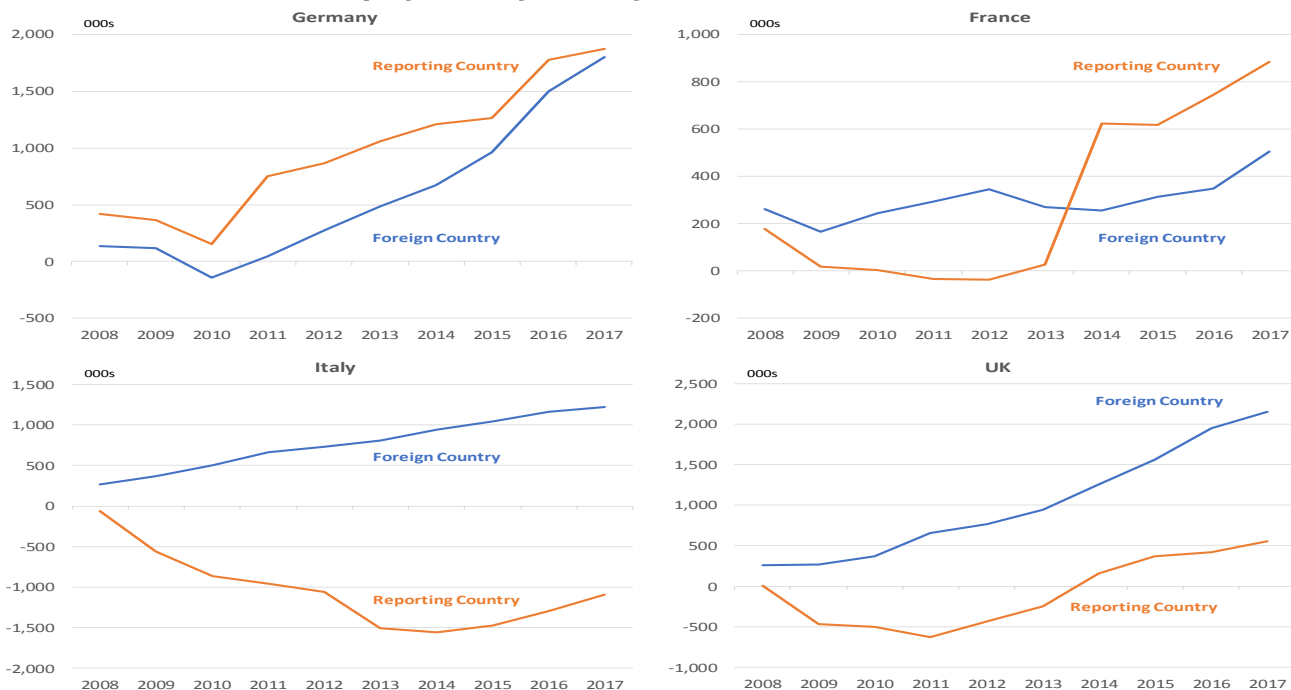
Source: Eurostat and Jefferies International

Finally, the charts below highlight employment growth split between foreign-born and indigenous workers, and help provide some additional insight into the political climate in parts of Europe at the moment. It is striking for instance that in the UK and in Italy in the first five or so years after the Great Recession employment growth was mainly driven by foreign born workers. Whether this depressed job prospects and wages of native

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workers was always going to be hard to prove or disprove empirically (the Bank of England for instance argued that the effect was minimal), but the negative characterisation stuck and was used as part of the pro-Brexit arguments. Migration has long been, and remains, a thorny issue, and it will take a brave politician to put their head above the parapet and forcefully argue that it is a necessity for Europe. But just because a discussion around migration is difficult, doesn't mean it shouldn't be taking place.

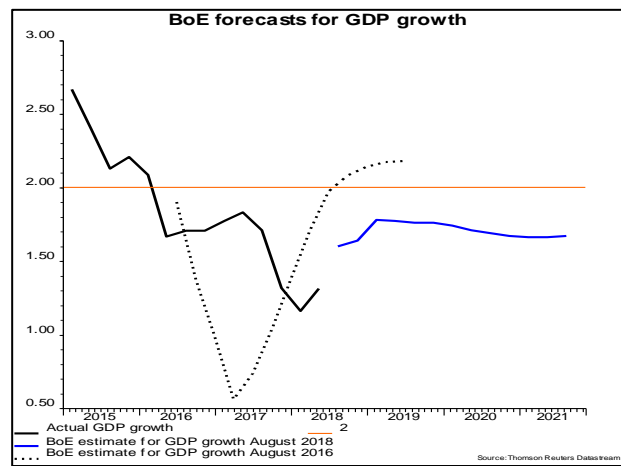
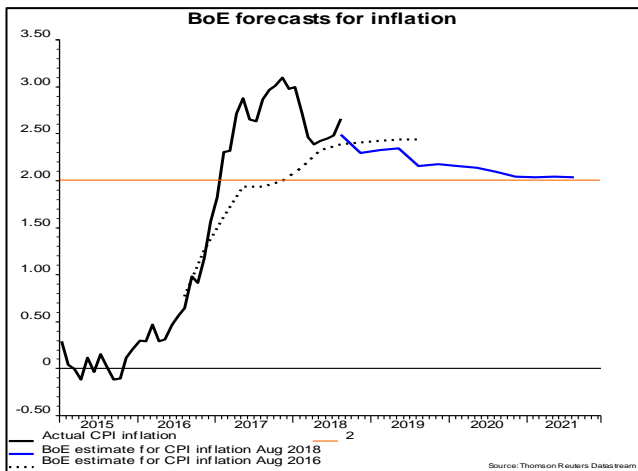
Cumulative increase in employment by country of birth



Source: Eurostat and Jefferies International

Where will UK Bank Rate be in 3 years' time?

Let's be clear. No one really knows what is going to happen to the Bank Rate in the next 3 years, particularly given all the uncertainties surrounding Brexit and what is a very unstable political situation. In a worst-case scenario, the BoE could, as Mark Carney suggested at a dinner earlier this year, be bringing out the 2016 template following what happened after the EU referendum. This would include cutting rates and potentially embarking on another round of QE. However, as Mark Carney also suggested in a No Deal/WTO scenario they could be raising rates. This could be in defence of the pound, but it is also important to recognize that we are more than two years further advanced in this economic cycle, and if we also saw a change in government with fiscal policy being eased substantially, then monetary policy could end up being very different, particularly on a 2 to 3-year view.



To help frame discussion, the table below first published in August before Salzburg, shows illustrative Bank Rate forecasts for 2021 under various Brexit scenarios. These go from No Deal/WTO, to the UK signing a Free Trade Agreement as Canada has with the EU, all the way through to the UK remaining in the European Economic Area (EEA), albeit for a period.

Where will UK Bank Rate be in 3 years' time under different scenarios for Brexit?

Possible scenarios for Bank Rate in 2021	Bank Rate	Probability
EEA "Norway"/Second referendum and UK remains in EU	3%	16.67%
EEA - "Norway minus"	2.5%	16.67%
Chequers/The Jersey option	1.75%	16.67%
Souped-up Ukraine association agreement	1.25%	16.67%
FTA "Canada"	0.75%	16.67%
No deal/WTO	0.25%	16.67%
Expected Outturn	1.6%	
Possible scenarios for Bank Rate in 2021 if No deal/WTO avoided		
EEA "Norway"/Second referendum and UK remains in EU	3%	20%
EEA - "Norway minus"	2.5%	20%
Chequers/The Jersey option	1.75%	20%
Souped-up Ukraine association agreement	1.25%	20%
FTA "Canada"	0.75%	20%
Expected Outturn	1.85%	

Source: Jefferies

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Clearly, views about what odds to place on the various Brexit scenarios could vary significantly. However, for illustrative purposes we have initially assumed the same probability for each scenario. For the sake of argument, we have assumed that the softer the Brexit the higher the Bank Rate will ultimately be. This to stress again is by no means clear, but should help frame discussion.

Attaching a 16.67% probability to each of the 6 scenarios shown here might suggest an expected Bank Rate in 2021 of almost 1.6%:

$$((16.67\%*0.25\%)+(16.67\%*0.75\%)+(16.67\%*1.25\%)+(16.67\%*1.75\%)+(16.67\%*2.5\%)+(16.67\%*3\%)).$$

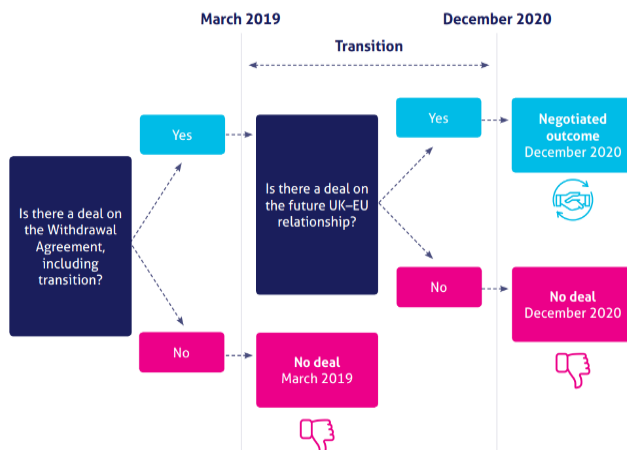
This is broadly in line with current market thinking (effectively one rate rise a year in each of the next 3 years). But, take a No Deal/WTO scenario off the table and the expected Bank Rate in 3 years' time based on these illustrative numbers rises to almost 2%:

$$((20\%*0.75\%)+(20\%*1.25\%)+(20\%*1.75\%)+(20\%*2.5\%)+(20\%*3\%)).$$

According to the LSE's Simon Hix, applying game theory to political bargaining might suggest that most weight should be placed on a basic Canada style FTA. He examined 5 possible outturns (see [here](#)).

We would place more weight than Hix on a FTA+/Canada plus option being agreed and the UK being initially parked in the EEA for what could be for a very extended period, two options consistent with the EU's position.

From our perspective, the only surprise in the EU's rejection of the UK government's Chequers plan was the timing. We had assumed that EU leaders would at least want to see Theresa May through the Tory party conference (30 September-3 October), before locking things down with the withdrawal deal at either the EU Heads of State on 18 October, or in a 2-day special session in November (penciled in for 17-18 November), before getting the withdrawal agreement signed off in December.



Source: Institute for Government analysis.

The potential outcome is not binary, it is much more complicated than that, although we still think that the least likely outcome is that the UK crashes out of the EU on 29 March with No Deal. Before that happened there could really be a constitutional crisis in the UK. Conservative MPs total 315, the DUP another 10, out of a total 650 MPs in the House of Commons. Could the government face a vote of no confidence? Students of UK political history have already drawn attention to the second half of the 1800s when minority governments held office for only a short period of time, with so much hinging on Ireland. There have again been calls for a national unity government to manage the process.

Required reading should perhaps be Nicholas Shakespeare's *"Six Minutes in May. How Churchill unexpectedly became Prime Minister."*

This examines the events of May 1940 when against all the odds, following the disastrous Norwegian campaign which he led, Churchill became PM. Then sentiment in the House of Commons turned on two key speeches resulting in Conservative MPs in full dress uniform voting against the government. As everyone knows, a No Deal/WTO scenario which resulted in significantly higher risk of recession has no majority in the House. Brexit then could end up delayed, or we could end up with a change in government or even a 2nd referendum and the UK remaining in the EU.

Meanwhile, the Constitution Unit at UCL continues to examine ways Article 50 could be extended out and importantly, how a second referendum or a People's vote could be framed. This blog is worth reading in its entirety (see [here](#)), especially given suggestions that voters should be asked to rank 3 questions on the ballot paper (Whatever the eventual Deal is, compared to No Deal and Remain), with transferable votes if none of the 3 options are ranked first in more than 50% of those casting a vote.

For illustrative purposes, the Constitution Unit gave the example opposite where 45% of the vote is in the order 1.Remain/2.Deal/3.No Deal and 35% for 1.No Deal/2.Deal/3.Remain. That leaves 20% putting Deal first, but in the example opposite the UCL researchers considered the case that far more of those putting Deal first, have No Deal next on the ballot paper, even if No Deal really did mean crashing out of the EU with no transition on 29 March. In a system of transferable votes, No Deal would win even though 45% of voters put Remain first, more than the 35% putting No Deal first. The bottom line is that a People's vote could be far from straightforward, unless there is a clear preference for one option.

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The complication of a second EU vote

Options	Preferences				First Past the Post	Alternative Vote		Condorcet		
						1 st round	2 nd round	A v. B	B v. C	A v. C
A: Remain	1	3	3	2	45%	45%	48%	45%		48%
B: Deal	2	2	1	1	20%	20%		55%	65%	
C: No Deal	3	1	2	3	35%	35%	52%		35%	52%
	45%	35%	17%	3%	Remain wins	No deal wins		Deal wins		

Note: The figures in this table are notional and for illustrative purposes only; they are not based on actual polling data.

Source: UCL Constitution Unit, please see paper for detailed explanation.

And, for those interested in the potential significant complications of a Canada plus agreement between the UK and the rest of the EU, Sussex University's experts on trade economics and trade law gave testimony to UK lawmakers recently. Their testimony starts roughly half-way through the video attached [here](#). As ever when it comes to Brexit, one has the impression of many MPs wishing they had not asked the question.

Adding to all the uncertainty is a Labour party that suggests the more disorderly Brexit, the more radical it could be if it then formed the government. Moreover, as things stand Labour will very likely vote down any deal that Theresa May secures and press for a General Election. Following Jeremy Corbyn key-note speech at the Labour party conference, any future deal would have to include remaining in the customs union and no hard border in Ireland for Labour to support it. Clearly the Labour leadership would rather that, than a People's vote that ended up with the UK remaining in the EU, even if that is not the view of many of their supporters. But, outside the single market there would still be customs checks.

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Following the EU's rebuttal of Chequers, arguably there are now four potential outcomes.

First, following a People's vote there is either a No Deal, or the UK remains in the EU. Alternatively, the UK is parked in the EEA for an extended period, or the UK accepts the Canada + option. How Canada+ respects the need for no border in the island of Ireland, or gets around the problem more generally of spot checks is anyone's guess (see [here](#) for the latest post from the highly respected UK Trade Policy Observatory at Sussex, who also question whether Chequers was actually in breach of WTO rules), but perhaps that is agreed in an extended transitional phase. Arguably, as things stand these are the only options either acceptable to the rest of the EU, or could follow from a People's vote – Parliament may be against a No Deal scenario, but we have already described how this could follow from a system of transferable voting. For the purposes of this exercise we have assumed a slightly higher Bank Rate if the UK ultimately remains in the EU than simply ends up in the EEA. We have also attached a lower probability of No Deal, given that both the Labour leadership and business will be arguing against such an outcome. It will also be something the rest of the EU and the ECB will be very keen to avoid. This leaves an expected Bank rate of 1.9% in 3 years' time, a slightly higher figure than we were thinking in pre- Salzburg.

$$((20\%*0.25\%)+(30\%*1.25\%)+(30\%*2.75\%)+(20\%*3.25\%))$$

And, when it comes to a potential people's vote we can be sure that Labour would like an additional question on the ballot; for the UK to go back and re-negotiate an improved deal with presumably a different government. Meanwhile, those Leavers who remain in Cabinet will simply be hoping to get the UK over the line on 29 March, even if it would represent a Blind Brexit, with all the details to be worked out later.

Possible scenarios for Bank Rate in 2021 after Salzburg	Bank Rate	Probability
UK remains in EU after People's vote	3.25%	20%
UK parked in EEA for an extended period	2.75%	30%
Canada +	1.25%	30%
No Deal after People's vote	0.25%	20%
Expected Outcome	1.9%	
		<i>Source: Jefferies</i>

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