

US rate rise impacts, G7 growth rankings and the ongoing crisis in Greece



Dear readers,

Before the end of this year, the Federal Reserve is expected to raise interest rates for the first time in almost a decade. This will be an important event not just for the US, but for the global economy. We have analysed the potential impact on US households and businesses if interest rates rise to 3.75% by the end of 2020, in line with US policymakers' expectations. We conclude that this impact will be relatively limited as households and businesses have restructured and brought down their dependency on debt. Instead, based on research in our [May edition of the Global Economy Watch \(GEW\)](#), we think that the biggest impact of the Fed's rate rise may be felt outside the US, particularly in emerging markets.

With interest rates on our mind, we have also explored why businesses have been hoarding their cash at a time when the returns on it have been so low. We suggest that there are three reasons why they have done so: caution, a low growth environment and the anticipation of higher interest rates. Interest rates are likely to rise soon, and we anticipate that the pick-up in growth which will lead to this will also see businesses start to invest more. This may be the signal that businesses have been waiting for to start to spend some of their cash. The years of cash hoarding can't last forever.

As we enter the second half of 2015, it looks as if the UK and US are caught in a battle for the title of 'fastest growing G7 economy'. We expect the UK to come out on top for the second year in a row, with growth of around 2.6%. While in the US, economic growth is projected to be around 2.3% after a disappointing start to the year.

Finally, I couldn't write this letter without mentioning Greece. Its future in the Eurozone is beginning to look more stable, with the announcement of a deal that could lead to another bailout. However, there are still some steps to take before a Greek exit can be completely ruled out. In the now less likely event that this does occur, our expectation would be that the wider Eurozone would come through a Greek exit relatively unharmed with economic growth remaining positive both this year and next (see our [March edition of the GEW](#)).

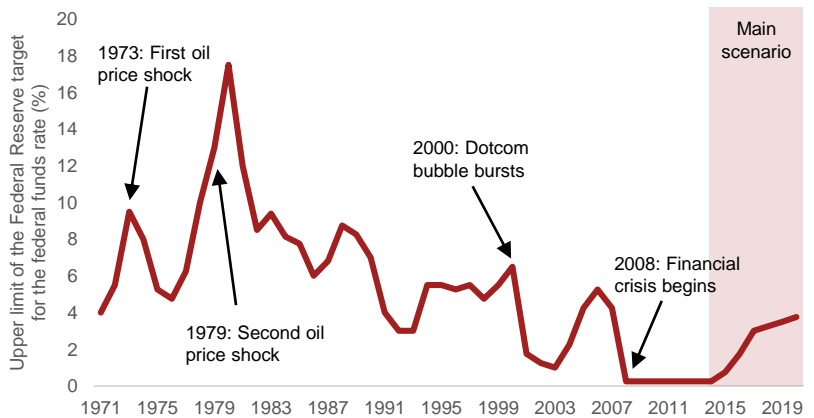


Kind regards,

Richard Boxshall

PwC | Senior Economist

Fig 1: The US policy rate is expected to rise to around 3.75% by the end of 2020



Note: Chart shows the interest rate at the end of December of the year on the axis
Sources: PwC analysis, Federal Reserve, Datastream

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Economic update: who will top the G7 economic growth league table?

Can anyone catch the US?

Since 1980, the US has topped the G7 economic growth league table on 12 occasions, far more than any other country in the group (see Figure 2). It has also been the only G7 economy that has never ended up at the bottom of the growth league table in any year.

As far as competition is concerned, the closest rival to the US is Japan, which topped the rankings as the fastest growing economy on seven occasions. However, six of these occasions occurred back in the 1980s before the beginning of Japan's 'lost decade'. Canada and Germany have also had their share of strong years, but not as consistently as the US (though the latter may be flattered by relatively high population growth boosted by immigration – something also seen more recently in the UK).

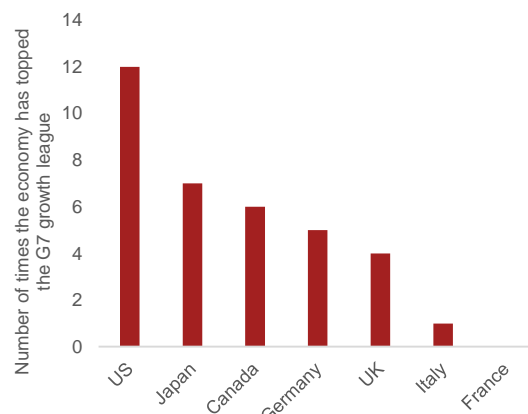
Who will top the table in 2015?

Based on our current projections, the UK is expected to top the table this year, although at this stage it is still too early to call with any great confidence. UK economic growth is expected to be around 2.6% while GDP growth in the US, the UK's biggest rival for first place, is projected to be around 2.3%. If the UK does come out on top, it will be the second year in a row that it has been the fastest growing G7 economy.

Perhaps the biggest risk to another UK success relates to spillover effects from the macroeconomic and political uncertainty in the Eurozone. This could have an adverse impact on UK exports to the bloc, which would pull down growth. However, the strong dollar is also expected to act as a drag on US exports, while domestic demand growth remains relatively strong in the UK.¹

¹We will provide a much more detailed review of the UK's economic prospects in our next UK Economic Outlook report, which is scheduled for release on 21 July.

Fig 2: It would take at least 6 years before anyone could displace the US from the top of the rankings



Source: PwC analysis, IMF

Why are businesses hoarding cash?

Since the beginning of the financial crisis, businesses in many countries have increased their cash holdings. Figure 3 looks at non-financial corporations (NFCs) holdings of cash as a percentage of GDP in the US, the UK and the three largest Eurozone countries for which data were available. Our analysis shows that, since the financial crisis, NFCs relative cash holdings have increased in all of the economies in our sample with the exception of Spain. Specifically, the largest increase was recorded in France (9.5 percentage points) while the smallest increase was recorded in Germany (0.4 percentage points).

Why does this matter?

Before the financial crisis, a small return could be made on cash. But recent low interest rates have meant this is no longer possible. Instead of hoarding this cash, businesses could do one of two things with it:

- **Invest:** Investing in new capital, research and development or staff training could provide a

long-term benefit to the economy through increased labour productivity.

- **Return it to investors:** Giving money back to investors could boost consumption if they choose to spend it, or business activity if they invest in organisations looking to expand.

Either way, these macroeconomic benefits are not being realised while businesses are holding this cash. Businesses and investors could make more of a return on this asset.

Why are businesses doing this?

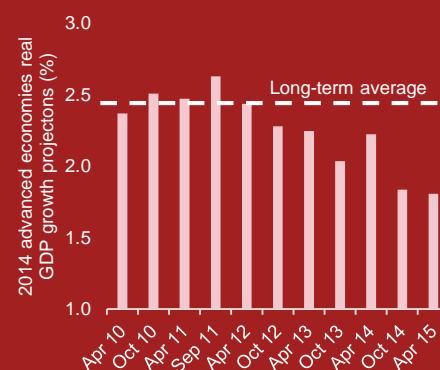
Building up excess cash reserves seems to go against the economic theory that all agents are profit maximising. Nevertheless, businesses have decided to hold cash. We suggest there are three reasons why they have done so:

- **Caution:** The financial crisis was a source of great pain and uncertainty for many businesses. As a result, business leaders have become more cautious. Businesses have held on to liquid assets (e.g. cash) because they protect against a liquidity squeeze and provide a buffer against adverse economic shocks. This means that businesses have increased their probability of surviving another economic downturn.

- **Low growth environment:** The recent economic downturn has rumbled on for longer than initially expected. For example, Figure 4 shows how the 2014 advanced economies GDP growth rate that was expected in 2010-11 did not materialise. Also, since 2009 some economies have had a negative output gap, meaning output has been below its potential level. This means that companies haven't had to invest their cash due to spare capacity existing in the economy. However, the cash that companies have saved means that, when they want to undertake large-scale investment projects, they will be able to do so.

- **Anticipation of higher interest rates:** Businesses know that the years of low interest

Fig 4: 2014 advanced economies GDP growth was lower than early projections



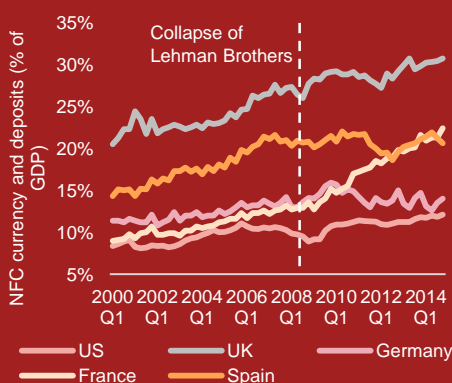
Source: IMF

rates and cheap finance will not last forever. Building up cash has been a way of preparing for an interest rate rise. These reserves can be used to pay future higher debt costs, or to offset some of the need for future borrowing. As a result, tighter monetary policy is expected to have a more limited impact on businesses and allow them to devise growth strategies without the burden of higher debt costs hanging over them.

Businesses getting ready to pounce?

The shrinking output gap in most of the economies we have looked at means that businesses and government will need to invest to increase the productive capacity of the economy. This means that companies might start to run down some of their large cash reserves quite soon. Businesses have been patient and cautious, but this can't go on forever.

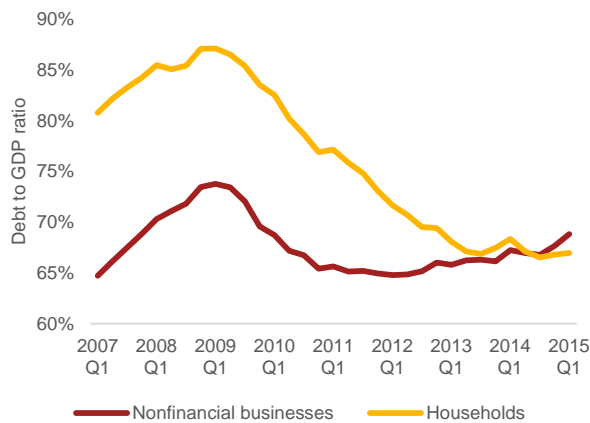
Fig 3: Many businesses have been hoarding cash since the financial crisis



Sources: PwC analysis, Federal Reserve, Eurostat

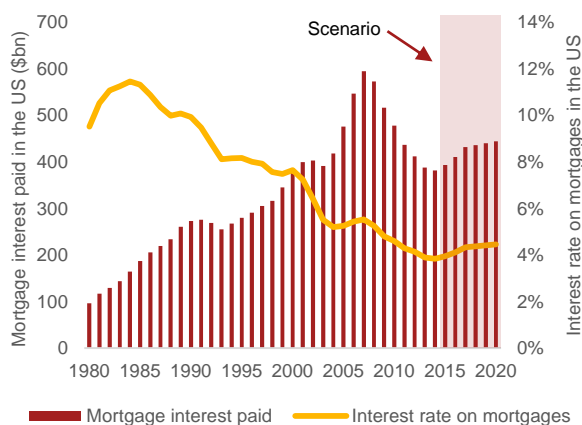
Fed ready to raise rates – what will be the impact on the US and global economies?

Fig 5: US households and businesses have restructured their finances so are less exposed to rising debt costs



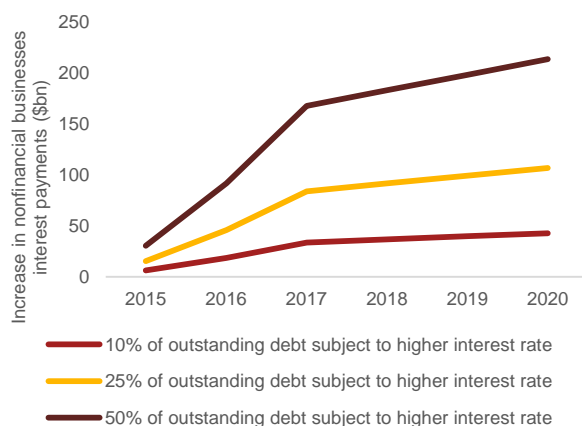
Sources: PwC analysis, Federal Reserve, Federal Reserve Bank of New York, US BEA, Datastream

Fig 6: Even with a rate rise, mortgage interest payments in 2020 could be 25% below their 2007 peak



Note: Data is for the end of the calendar year
Sources: PwC analysis, US BEA

Fig 7: The average annual additional cost to businesses of a rate rise could be between 0.2%-0.8% of GDP



Sources: PwC analysis, Federal Reserve

Watch out for the Fed policy action later in the year

One of the biggest economic events of 2015 is likely to be the Fed hiking up its policy rate later in the year. Assuming this happens, this will be particularly important because what the Fed does matters for the global economy, not just the US. It will also be a symbolic event as the policy rate hasn't increased for almost a decade.

So what will the impact of a higher interest rate be on domestic businesses and households? Our analysis assumes that the Fed's interest rate will hit the 3.75% mark by the end of 2020 (see Figure 1). This view was informed by US policymakers who expect the policy rate to hit that level in the long-term (according to information from Fed projections).

US households insulated from rate rise

In the years following the financial crisis, US households have reduced their dependency on debt (see Figure 5) and our analysis suggests that they will be largely shielded from Fed action. In the US, around 83% of mortgage debt is tied up in fixed rate agreements, so most homeowners have hedged against future rate rises for the duration of their loans. On the flip-side, the minority of mortgage holders on variable contracts will be the ones exposed to a rate hike. Assuming this is the case, we think that mortgage interest payments will be around \$60 billion higher by 2020 (see Figure 6). This equates to less than 0.5% of current US GDP. At a macro-level, and assuming real wages continue to grow, aggregate household disposable income will remain relatively unaffected by tighter monetary policy.

What does this mean for the Fed? The main channel through which a tighter monetary policy works is by raising the cost of borrowing, thus putting the brakes on household consumption, which makes up around 70% of economic activity. If this transmission mechanism is weakened, then the Fed might have to increase its rates faster than it had initially planned.

Business expenditure on higher interest payments around 1% of US GDP

So, what about businesses? There is some evidence which suggests the financial crisis changed the capital structure of companies. For example, Figure 5 shows business debt has dropped from 73% of GDP at the end of 2008 to 69% today. At face value this suggests business activity is less sensitive to the Fed's policy decisions.

The direct impact of a rate rise on US businesses largely depends on the maturity profile of their debt. Our scenario based analysis in Figure 7 suggests that, in a case where 50% of business debt is refinanced (and so subject to higher interest rates), businesses would have to pay around an additional 1% of current US GDP in interest payments each year. However, this is a relatively extreme scenario.

The bigger implication on US businesses is expected to be felt via the dollar rising, which makes local goods and services more expensive on international markets.

Emerging markets should watch out

The Fed's policies don't just have an impact on the US economy. The dollar's unique role as the world's reserve currency means that monetary policy decisions in the US have consequences for the global economy.

The expectation of higher policy rates in the US has already had an impact on the value of the dollar, which has increased by around 19% in trade-weighted terms since July 2014. This is a worrying sign for some emerging economies that have binged on cheap dollar debt to fund either large scale investment projects or consumption. In our [May 2015 Global Economy Watch](#) we looked at the vulnerability of 14 emerging markets with regards to their holdings of this debt. We found that Turkey is particularly vulnerable to a strong dollar while other large emerging markets, such as Brazil and Indonesia, are worth keeping an eye on. In short, we think the biggest impact of the Fed's monetary policy may be felt outside the US, and in particular, in emerging markets.

Projections: July 2015

	Share of 2014 world GDP		Real GDP growth				Inflation			
	PPP	MER	2014	2015p	2016p	2017-2021p	2014	2015p	2016p	2017-2021p
Global (Market Exchange Rates)		100%	2.8	2.7	3.2	3.1	2.3	1.8	2.6	2.5
Global (PPP rates)	100%		3.4	3.3	3.8	3.6				
United States	16.1%	22.5%	2.4	2.3	2.7	2.5	1.6	0.2	1.8	1.9
China	16.3%	13.4%	7.6	7.0	7.0	5.7	2.1	1.9	1.8	3.0
Japan	4.4%	6.0%	-0.1	1.1	1.7	1.3	2.7	1.4	1.5	1.9
United Kingdom	2.4%	3.8%	3.0	2.6	2.4	2.3	1.5	0.3	1.7	2.0
Eurozone	12.2%	17.4%	0.9	1.5	1.7	1.8	0.5	0.1	1.4	1.4
France	2.4%	3.7%	0.4	1.3	1.4	1.9	0.6	0.1	1.1	1.2
Germany	3.4%	5.0%	1.6	1.7	1.9	1.6	0.8	0.2	1.8	1.7
Greece	0.3%	0.3%	0.7	-1.5	0.7	2.5	-1.4	-0.8	0.3	1.4
Ireland	0.2%	0.3%	4.8	3.4	3.4	2.5	0.3	0.2	1.1	1.5
Italy	2.0%	2.8%	-0.4	0.6	1.2	1.3	0.2	-0.1	1.8	1.4
Netherlands	0.7%	1.1%	0.8	1.4	1.6	1.9	1.0	1.2	1.1	1.3
Portugal	0.3%	0.3%	0.9	1.5	1.7	1.8	-0.2	0.1	0.8	1.5
Spain	1.5%	1.8%	1.4	3.0	2.4	2.2	-0.2	-0.8	1.0	1.2
Poland	0.9%	0.7%	3.3	3.4	3.5	3.2	0.2	-0.1	1.7	2.5
Russia	3.3%	2.4%	0.2	-5.0	-0.5	1.9	7.8	15.0	8.0	4.3
Turkey	1.4%	1.0%	2.9	2.8	3.5	3.7	8.9	7.7	6.8	6.2
Australia	1.0%	1.9%	0.7	2.9	2.0	2.9	2.6	2.5	2.6	2.5
India	6.8%	2.7%	7.0	7.5	7.9	6.1	3.8	-2.2	3.9	6.0
Indonesia	2.5%	1.1%	1.2	4.9	5.0	5.4	6.4	6.8	5.8	5.1
South Korea	1.6%	1.8%	3.3	3.1	3.5	3.5	1.3	1.0	2.0	2.9
Argentina	0.9%	0.7%	0.5	0.8	1.8	2.1	-	20.0	25.0	-
Brazil	3.0%	3.0%	0.1	-0.9	0.7	3.1	6.3	8.0	6.0	4.8
Canada	1.5%	2.3%	2.4	1.4	2.2	2.2	1.9	0.9	1.9	2.1
Mexico	2.0%	1.7%	2.1	2.7	3.3	3.9	4.0	3.0	3.3	3.1
South Africa	0.7%	0.5%	1.5	1.8	2.0	3.2	6.1	4.8	5.6	5.3
Nigeria	1.0%	0.7%	6.2	4.0	4.5	6.0	8.1	10.5	10.0	7.3
Saudi Arabia	1.5%	1.0%	3.5	2.6	3.0	4.4	2.7	2.3	3.0	3.4

Sources: PwC analysis, National statistical authorities, Datastream and IMF. All inflation indicators relate to the Consumer Price Index (CPI), with the exception of the Indian indicator which refers to the Wholesale Price Index (WPI). Argentina's inflation projections use the IPCNu Index. We will provide a 2017-2021 inflation projection once a longer time series of data is available. There is not a complete series of year-on-year price growth data available for 2014 so we have not provided an estimate for annual inflation in this year. Also note that the tables above form our main scenario projections and are therefore subject to considerable uncertainties. We recommend that our clients look at a range of alternative scenarios.

Interest rate outlook of major economies

	Current rate (Last change)	Expectation	Next meeting
Federal Reserve	0-0.25% (December 2008)	Rate to start to rise later in 2015	28-29 July
European Central Bank	0.05% (September 2014)	Rate on hold until at least late 2016	16 July
Bank of England	0.5% (March 2009)	First rate rise expected in 2016	6 August



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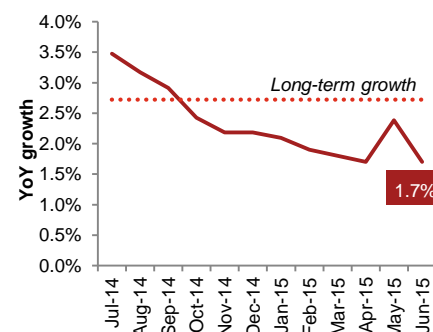


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PwC's Global Consumer Index

After a brief recovery, the GCI declined once more in June. The new data reflects less buoyant equity markets and consumer confidence in response to increasing macroeconomic uncertainty, particularly in Europe. This could deteriorate further depending on the outcome of the Greek sovereign debt crisis. There are some signs of improving industrial production in Asia, which may provide a small boost to the GCI in the medium-term.



The GCI is a monthly updated index providing an early steer on consumer spending and growth prospects in the world's 20 largest economies. For more information, please visit www.pwc.co.uk/globalconsumerindex

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