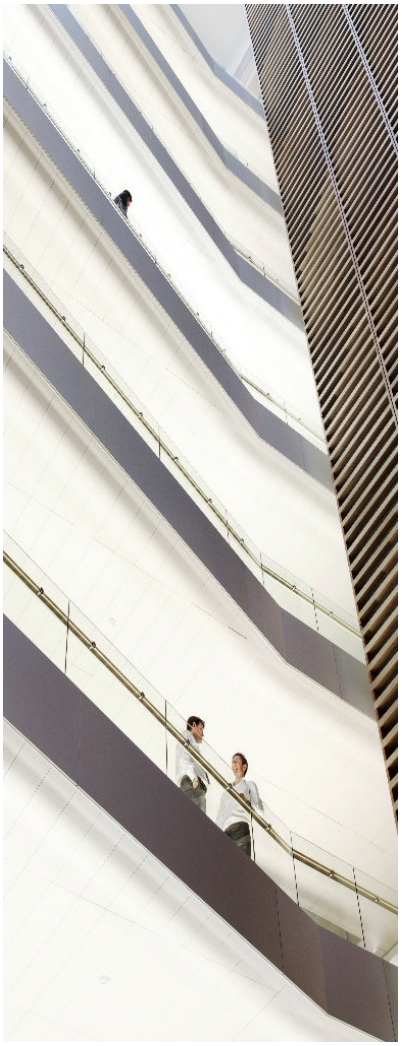
June 2017

Global Economy Watch

How does uncertainty impact economic activity?



Dear readers,

Since the financial crisis, uncertainty has been a theme that has kept most businesses busy. CEOs have responded in different ways; from buying insurance such as cyber insurance to mitigate the costs of a potential cyber attack, to stress testing their operations and finances under alternative economic scenarios.

Businesses that have invested resources in such areas are likely to be better prepared for a future that remains highly uncertain: according to our CEO Pulse Survey, 30% of business leaders expect at least one crisis to hit their business within the next year.

In this edition, we have therefore looked in more detail at the ramifications of uncertainty for economic growth. Over time, we find that uncertainty has a negative impact on three particular areas:

- Consumers, who usually cut back on spending and save more;
- Businesses, which usually cut back on production, investment and employee compensation; and
- Financial markets, which are typically more volatile with higher risk premia.

One factor that seems more predictable, however, at least in the short term, is US monetary policy. This month the Federal Reserve is expected to hike its policy rate again, continuing its very gradual unwinding of post-crisis monetary loosening.

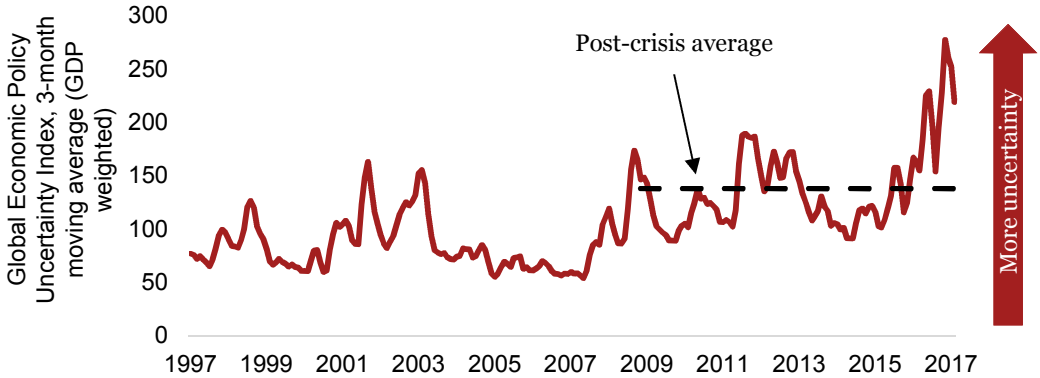
A key factor underpinning the pace of future US rate rises will be the development of the labour market and wage growth. We have therefore taken a closer look at the state of the US jobs market and find that, if current trends continue, then the so-called U-6 rate (which includes discouraged workers as well as those who are working part-time for economic reasons) could hit its pre-crisis rate at the start of 2018.

Looking beyond the US, a hung parliament in the UK may have important implications for Brexit negotiations. More generally, this could be an added source of uncertainty for UK-based businesses, so we will be monitoring developments there closely.

Kind regards,

Barret Kupelian
PwC | Senior Economist

Fig 1: In 2017, uncertainty levels have hit an all-time-high



The Economic Policy Uncertainty Index is comprised of three components. One component quantifies newspaper coverage of policy-related economic uncertainty. The second reflects the number of federal tax code provisions set to expire in future years. The third uses disagreement among economic forecasters as a proxy for uncertainty.

Sources: PwC analysis, Economic Policy Uncertainty, Baker, Bloom & Davis

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Economic update: When will US wages take off?

The US labour market is gradually getting tighter. In May, the unemployment rate stood at 4.3%—the last time such a low rate was recorded was in May 2001, before the financial crisis. While wage growth has recovered somewhat, in April it stood 0.9 percentage points below its August 2007 peak of 4.5%. So why hasn't US wage growth picked up as expected?

Headline unemployment has fallen to pre-crisis levels, but underemployment has not

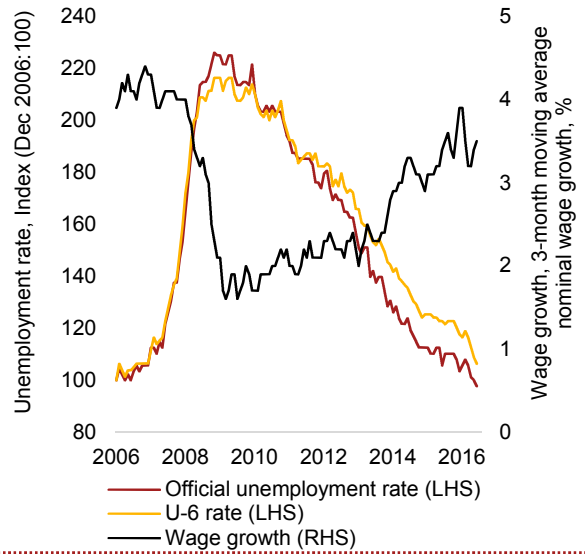
The devil lies in the details. First, the official headline unemployment rate doesn't capture the full picture of the US labour market. In particular, it doesn't take into account workers who are working part-time but would like to work more hours, or those who are discouraged and have given up looking for work. The U-6 rate, which takes into account both these categories, is still higher than its pre-crisis level and so shows that there is some slack present in the labour market. Figure 2 shows how the official unemployment rate has recovered while the U-6 rate remains 0.5 percentage points higher than pre crisis levels.

Second, compared to previous crises, the US recovery has been relatively job rich and wage poor. Employees remain under-utilised and research shows a larger than normal proportion of new jobs have been low-skill, temporary employment – in part fuelled by the rise of the 'gig economy'. Third, as we investigate in more detail below, labour's bargaining power was diminished as a result of the financial crisis.

Labour market slack is on track to dissipate by Q2 2018

Until this slack is removed from the labour market, wages are unlikely to increase significantly. Our analysis shows that if U-6 unemployment continues to decrease at its current rate, it will fall below pre-crisis levels in January 2018. At this point we'd expect to see wage growth more similar to pre-crisis levels. Policy measures that target skills development and labour retraining, which could boost productivity and wages, could support this process.

Fig 2: US unemployment has recovered to pre-crisis levels, but underemployment and wage growth have not



Sources: PwC analysis, U.S. Bureau of Labor Statistics, Federal Reserve Bank of Atlanta

What explains labour's shrinking share of income?

Wage growth is not keeping up with productivity growth

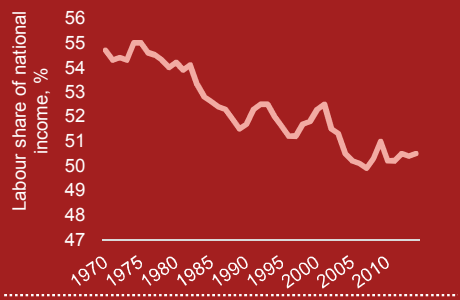
Labour's share of output remained relatively stable in the post-war period, however, since the 1970s it has fallen across most major economies. For example, Figure 3 shows how labour's share as a proportion of economic output has decreased in advanced economies from around 55% in 1975 to around 50% in 2014. Intuitively, a falling labour share implies that wage growth has not kept pace with productivity growth. This means that the gains from productivity growth have been accruing to the owners of capital more than to workers. So what is driving this trend and how does it impact business?

Technological change has made capital goods more attractive

Over the past three decades, information communication technology (ICT) in particular has advanced rapidly and its cost has fallen sharply. For example, computer software today costs on average less than 1% of what it cost in 1980.

A cheaper cost of ICT capital relative to labour means that the former becomes a more attractive input to the production process, encouraging mechanisation and automation of factories and some kinds of office work. Looking ahead, innovations like artificial intelligence, robotics and the rise of smart devices could displace human workers in an increasing range of occupations[1].

Fig 3: Labour's share of income in advanced economies has been falling since the 1980s



Source: IMF

There is already increasing evidence that the rise of technology has had a disproportionate effect on certain group of countries, industries and segments of the workforce[2]. Specifically:

- In advanced economies the share of labour as a proportion of income has fallen to a greater extent compared to some emerging markets (although China, by far the largest emerging economy, has also experienced a modest decrease in its labour share of income)
- The manufacturing, transport and mining sectors have been disproportionately affected by a decrease in the labour share of income. However, the opposite trend has been observed in the real estate, agriculture and accommodation sectors.
- Similarly, in low and medium skill occupations wage growth has not kept up with productivity gains leading to a decrease in the labour-income capital ratio. The opposite trend has been observed in high skill occupations.

Research shows that technological change explains the majority of change in the labour share of income[3]. The remainder is explained by financial integration—particularly with emerging markets— and integration of global value chains with more jobs being outsourced overseas (although some of our research points to an increase in reshoring in the UK in recent years[1]).

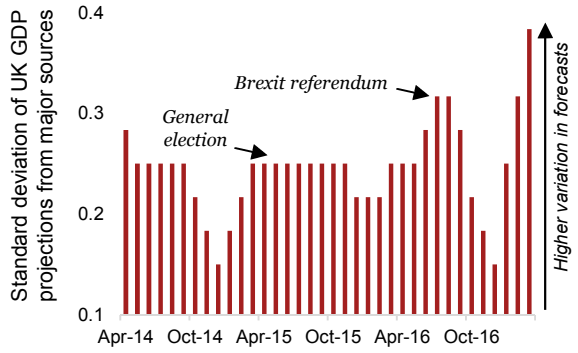
What does this mean for businesses and policymakers?

To successfully adapt to the effects of relatively cheaper information technology, (particularly in sectors where there is a high degree of substitutability with labour) businesses need to be better at procuring, managing and maintaining their ICT assets. Policymakers can assist in this by creating conditions which encourage widespread investment in up-to-date technologies, and investing in digital skills training to support the utilisation of new technological infrastructures.

[1] See our analysis here for more details: *http://www.pwc.co.uk/economic-services/ukeo/pwcukeo-section-4-automation-march-2017-v2.pdf* [2] OECD, The Labour Share in G20 Economies, 2015. [3] Hutchinson and Persyn, 2012

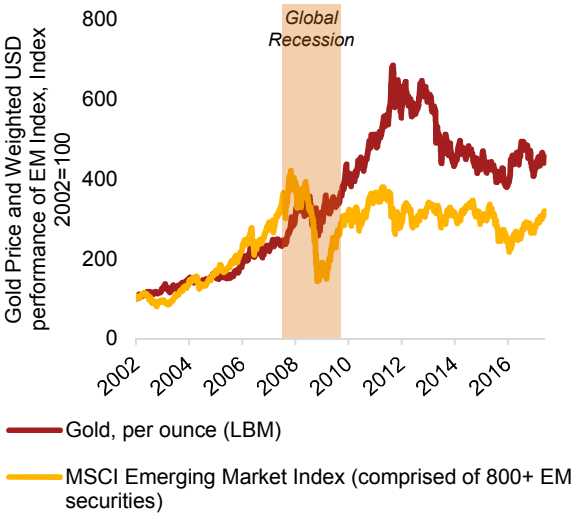
What does uncertainty mean for businesses?

Fig 4: Forecasts of UK GDP growth are becoming increasingly uncertain



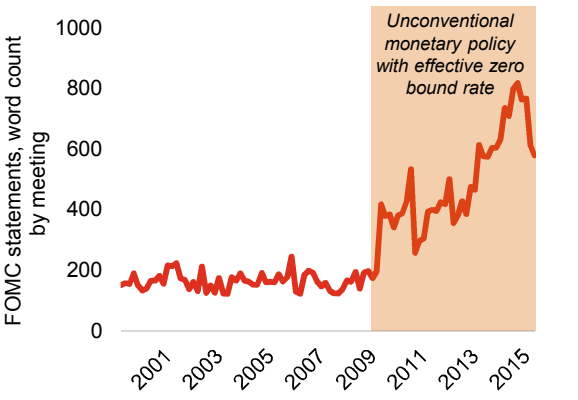
Sources: PwC analysis, Consensus

Fig 5: There is a reversal of flows from riskier to safer asset classes at times of high uncertainty



Sources: PwC analysis, Datastream

Fig 6: The Federal Reserve's statements have become increasingly descriptive



Sources: PwC analysis, Federal Reserve Board

Businesses around the world are concerned about uncertainty

Uncertainty continues to be on the mind of CEOs. Our latest annual global CEO survey shows that "uncertain economic growth" is considered the biggest threat to businesses[1]. In conjunction with this, in our 2016 CEO Pulse Survey around 30% of business leaders expect at least one crisis to hit their business within the next three years.

Statistics that measure the levels of uncertainty in an economy corroborate these views. For example, the Economic Uncertainty Index (EPU), which tracks policy-related uncertainty, peaked at an all-time high at the beginning of this year, at a level which was significantly higher compared to the financial crisis in 2008. Similarly, Figure 4 shows that the variation in forecasts of UK economic growth has been gradually increasing over time, making it increasingly difficult for businesses there to plan ahead with confidence. Given the recent UK election result and subsequent hung parliament, UK-based businesses will also have to deal with additional political uncertainty as this situation develops.

How does uncertainty affect the economy?

Uncertainty has a cross cutting impact across all sectors of the economy as it affects households, businesses and financial markets. The key effects are summarised below:

- *Households:* Uncertainty could (at least temporarily) reduce consumer spending to safeguard against potential future falls in income. Typically, this is also associated with an increase in precautionary household savings. In the US, for example, household savings increased by around 5 percentage points during the financial crisis, from 3% to 8% of personal disposable income.
- *Businesses:* Uncertainty could push businesses to cut back on production, investment and employee compensation. In particular, large capital projects which tend to have a high degree of irreversibility may be particularly sensitive to high levels of uncertainty.

  There is also some evidence that uncertainty has encouraged US corporates to increase their cash holdings to around $2 trillion. However, there may be other reasons which explain this trend, including the nature of current US tax rules and structural factors such as the growth of the technology sector, which tends to generate more cash compared to other more traditional businesses.
- *Financial markets:* In uncertain situations, investors require a higher rate of return on their capital through higher risk premia. This means that the cost of credit could increase at times when perhaps the central bank decreases its policy rate, which is the usual action taken when the economy slows down. At times of uncertainty, capital also tends to flow from riskier to safer asset classes. For example, Figure 5 shows the flow of capital from emerging market equities to gold during the 2007-2009 global recession. In this period, the price of gold increased by 29%, while the MSCI Emerging Market Equity Index dropped by 63%.

All of the above have significant cumulative impacts on the economy. The IMF[2] estimates that a one standard deviation increase in uncertainty is associated with a 0.4-1.3 percentage point decrease in output growth.

What does this mean for business?

The first implication for business is that *known* uncertainties can be planned for and mitigated against. This can be done either by buying insurance or by using other sophisticated methods like financial instruments to insure against these risks (by hedging FX risk for example).

Secondly, businesses can enhance their preparation for *unknown* uncertainties by simulating hypothetical events and assessing their effects on the balance sheet as well as day-to-day operations. For example, in financial services this is done through scenario planning and stress testing, techniques which are increasingly being used in the non-financial services sector. The learnings from these exercises can then be used to safeguard against some future *uncertain* events.

Policymakers have an important role to play

Finally, policymakers can also influence levels of uncertainty in an economy. An example is the US Federal Reserve which, since the financial crisis, has been lengthening its analysis with the aim of increasing transparency on monetary policy decisions. Statements now include more detailed analysis of current economic conditions, the economic outlook and individual FOMC member's interest rate predictions. It's important that policy makers mitigate market uncertainty by putting in place a coherent, transparent and well-communicated strategy.

In conclusion, the current political and economic climate has created an elevated level of uncertainty. Policymakers have a role to play as they can reduce levels of uncertainty by ensuring any future changes to the regulatory environment are as gradual and predictable as possible, while retaining the flexibility to act quickly if a major crisis does strike.

1 See *pwc.com/ceosurvey*. The latest survey was carried out in the final quarter of 2016.
2 IMF World Economic Outlook, October 2012.

Projections: June 2017

	Share of 2016 world GDP		Real GDP growth			Inflation		
	PPP	MER	2017p	2018p	2019-2023p	2017p	2018p	2019-2023p
Global (Market Exchange Rates)		100%	2.9	3.0	3.0	2.7	2.7	2.5
Global (PPP rates)	100%		3.4	3.5	3.5	3.1	3.0	2.9
G7	31.5%	46.4%	1.8	1.8	1.9	2.0	2.2	1.8
E7	36.2%	25.9%	5.1	5.1	5.0	3.6	3.9	3.3
United States	15.8%	24.5%	2.2	2.4	2.3	2.3	2.5	2.0
China	17.3%	15.2%	6.5	6.1	5.7	1.8	2.5	2.8
Japan	4.2%	5.6%	1.0	0.7	0.8	1.3	1.5	1.5
United Kingdom	2.4%	3.9%	1.5	1.4	2.0	2.8	2.8	2.3
Eurozone	12.0%	15.8%	1.6	1.5	1.5	1.4	1.5	1.4
France	2.3%	3.3%	1.5	1.4	1.6	1.2	1.3	1.2
Germany	3.4%	4.6%	1.5	1.5	1.4	1.8	1.9	1.7
Greece	0.3%	0.3%	1.6	2.0	1.6	0.8	1.2	1.1
Ireland	0.3%	0.4%	3.6	3.2	2.6	1.0	1.2	1.5
Italy	1.9%	2.5%	1.0	0.9	1.2	1.1	1.2	1.4
Netherlands	0.7%	1.0%	1.6	1.7	1.8	1.5	1.5	1.3
Portugal	0.3%	0.3%	1.4	1.2	1.1	1.0	1.0	1.4
Spain	1.4%	1.6%	2.3	2.1	2.0	1.3	1.5	1.2
Poland	0.9%	0.6%	3.2	3.4	3.5	1.7	1.7	2.4
Russia	3.3%	1.8%	1.1	1.4	1.5	4.7	4.5	4.0
Turkey	1.4%	1.0%	2.6	3.1	3.4	9.6	8.0	7.0
Australia	1.0%	1.7%	2.7	2.8	2.7	2.5	2.2	2.5
India	7.0%	2.8%	7.3	7.4	6.5	5.0	4.9	5.0
Indonesia	2.5%	1.2%	5.1	5.3	5.4	4.5	4.4	5.1
South Korea	1.6%	1.9%	2.6	2.8	3.3	1.6	2.8	3.3
Argentina	0.8%	0.9%	2.3	2.6	2.5	25.0	-	-
Brazil	2.8%	2.4%	0.4	1.5	3.0	5.0	4.5	4.5
Canada	1.4%	2.1%	2.0	2.1	2.2	2.1	2.1	2.0
Mexico	2.0%	1.6%	1.5	2.0	3.0	4.0	3.5	3.0
South Africa	0.6%	0.4%	0.9	1.5	3.0	6.2	5.8	5.5
Nigeria	1.0%	0.7%	0.8	1.8	4.2	15.8	14.1	12.0
Saudi Arabia	1.5%	0.9%	0.8	1.5	3.5	3.5	4.4	2.5

Sources: *PwC analysis, National statistical authorities, Datastream and IMF. All inflation indicators relate to the Consumer Price Index (CPI). Argentina has recently launched a new CPI measure, which only contains data from April 2016. Therefore we only project inflation for 2017, and will provide 2018 and 2019-2023 projections once a longer series is available. 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	1.00% (March 2017)	Further gradual tightening over the year	13 – 14 June
European Central Bank	0.00% (March 2016)	No rate rise for the foreseeable future	20 July
Bank of England	0.25% (August 2016)	No change in rates expected in the short-term	14 June

Barret Kupelian
T: + 44 (0) 20 7213 1579
E: barret.g.kupelian@pwc.com

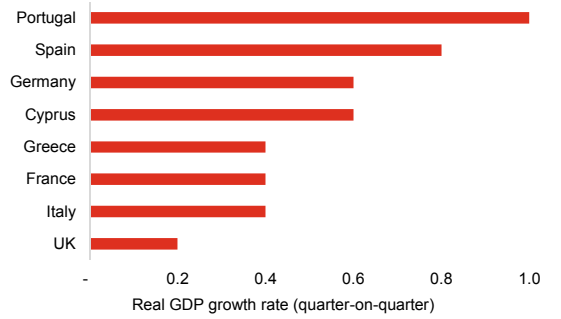
James Loughridge
T: +44 (0) 780 266 0106
E: james.r.loughridge@pwc.com

Chart of the month

The latest data shows that the Eurozone grew by 0.6% quarter-on-quarter in the first quarter of this year.

Moreover, economic activity has become more broadly based across the Eurozone with the ECB describing growth as "solid and broad" now, as opposed to "fragile and uneven" in 2013.

The Eurozone grew by 0.6% in Q1 this year with the bailout economies and some CEE economies growing the fastest



Source: Eurostat

We help you understand how big economic, demographic, social, and environmental changes affect your organisation by setting out scenarios that identify growth opportunities and risks on a global, regional, national and local level. We help make strategic and tactical operational, pricing and investment decisions to support business value creation. We work together with you to achieve sustainable growth. Do get in contact with one of the team if you would like to discuss any of these topics.