LIVERPOOL INVESTMENT LETTER

October 2018

Cardiff Business School
Ysgol Busnes Caerdydd

Julian Hodge Institute of Applied Macroeconomics

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LIVERPOOL RESEARCH GROUP IN MACROECONOMICS

LIVERPOOL RESEARCH GROUP IN MACROECONOMICS

Editorial and Research Direction: Patrick Minford[†].

Senior Research Associates: Kent Matthews[†], Anupam Rastogi, Peter Stoney.

Research Associates: Vo Phuong Mai Le[†], David Meenagh[†], Francesco Perugini, Yongdeng Xu[†], Zheyi Zhu[†].

[†] Cardiff Business School

The Julian Hodge Institute was launched in autumn 1999 in a new collaboration between the Cardiff Business School of Cardiff University and Hodge. The aim of the Institute is to carry out research into the behaviour of the UK economy, and to study in particular its relationship with the other economies of Europe. The research has been particularly germane in recent years and has proved to be of significant social and political relevance as Europe has navigated the difficulties of the global financial crash, the Eurozone crisis and most recently the UK referendum on EU membership. The Liverpool Investment Letter is written by Patrick Minford, with the assistance of other members of the Group; in particular the emerging markets section is written by Anupam Rastogi, and the focus on Japan is written by Francesco Perugini. The Investment Letter is published monthly.

The Liverpool Research Group in Economics is pursuing a research programme involving the estimation and use of macroeconomic models for forecasting and policy analysis. The Group is now mainly based in Cardiff Business School, Cardiff University, and is indebted to the School and to the Hodge Foundation for their support. The Group's activities contribute to the programmes being pursued by the Julian Hodge Institute of Applied Macroeconomics. This Liverpool Investment Letter is typeset by David Meenagh and published on behalf of the group by Liverpool Macroeconomic Research Limited, which holds the copyright

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THE BUDGET ON OCTOBER 29TH

This government has been consumed by the Brexit process. This is not surprising as governments typically can only manage one big project at a time. However, with Brexit now only six months away, it is time that the government thought about fiscal policy, which has been drifting in an 'austerity fog' since the 2015 election. The Treasury has trodden water, refusing to give way on its basic austerity-set plans for spending, while maintaining the overall tax rate approximately unchanged. The result has been a rather rapid move towards surplus: in 2015/16 the PSBR was 3.8% of GDP and in 2018/19 this will have fallen to about 1.4%.

During this time the share of government revenue in GDP has remained steady at 35%. By implication government spending has fallen from nearly 39% to around 36.4% of GDP. This reduction has come virtually entirely out of current spending, as capital spending has continued at about 3% of GDP. The Treasury will have congratulated itself on managing to control spending in this way, in spite of the endless pressures from most departments to raise it.

It has now embarked on gloomy warnings of the effects of Brexit on the economy and so tax revenue. However, these are contradicted by its own world trade model when correct assumptions about EU-UK trade barriers and likely Free Trade Agreements with other countries are fed in. The Treasury gloom fulfils two purposes: to dampen departmental spending demands and to push the government towards the 'softest' of Brexits, as close as possible to the status quo.

While all this may suit the Treasury, it is bad for the economy to perpetuate this negative mindset towards change in tax and spending. Furthermore, it is politically dangerous for the survival of a free market economy, now threatened by Jeremy Corbyn's extreme socialist plans. Between now and the next election the Conservative government needs to put forward plans that inspire new faith in that economy.

A good starting point for this process would be a set of forecasts post-Brexit that build in the proper assumptions just mentioned. Opening up the UK to free trade not just with the EU should bring substantial gains, as free trade has in the past. Our calculations suggest around 4% of GDP. There is also the gain from regaining control of regulation, especially in finance, but also across the whole economy; true there may be curbs on change from the EU Brexit agreement for a time but in the long run the UK will now be able choose whatever path it likes in this respect. Finally, there are the gains from ending the financial transfer to the EU and closely limiting unskilled immigration with its high fiscal costs. Overall the boost to GDP could reach 7% or more, with better regulation particularly important in the longer term and adding much more to this, as we face a world of much faster technical change.

Table 1: Summary of Forecast

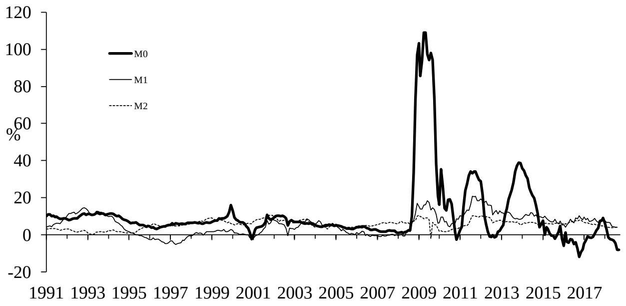
	2016	2017	2018	2019	2020	2021	2022
GDP Growth[1]	1.9	1.8	1.5	1.9	2.0	2.1	2.3
Inflation CPI	1.1	2.6	2.5	2.2	2.0	2.0	2.0
Wage Growth	2.4	2.9	2.7	2.4	1.7	2.4	2.3
Unemployment (Mill.)[2]	0.8	0.8	0.8	0.8	0.7	0.7	0.6
Exchange Rate[3]	82.1	77.4	77.4	76.2	75.4	75.5	75.2
3 Month Interest Rate	0.5	0.4	0.6	1.1	2.4	3.1	3.1
5 Year Interest Rate	0.7	0.6	1.5	2.5	3.4	2.9	2.6
Current Balance (£bn)	-90.9	-66.3	-60.3	-49.5	-39.7	-31.0	-17.9
PSBR (£bn)	45.1	39.4	30.7	21.8	5.6	-6.7	-15.1

[1]Expenditure estimate at factor cost
[2]U.K. Wholly unemployed excluding school leavers (new basis)
[3]Sterling effective exchange rate, Bank of England Index (2005 = 100)

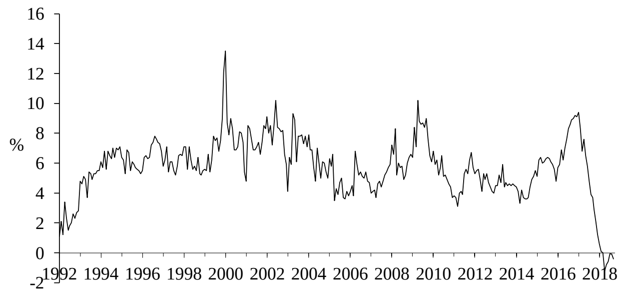
We calculated at the time of last year's Budget that with the trends now developing in the public finances plus the revenue gains from this Brexit boost to the economy, the government was in a position to reach a safe ratio of debt to GDP by the mid-2020s and still have scope for tax-cuts and spending increases of the order of £25 billion a year from 2020 and a further £40 billion a year from 2025. This total comes to around 2% of GDP. If applied intelligently to boost the competitiveness of the economy, it could raise the growth rate from 2025-2030 by a further 0.2% per annum.

It is an extraordinary thing that economists like us feel the need to encourage politicians to spend more money and cut taxes. Usually it is our role to discourage profligacy in the name of 'economy'. However, the mantra of austerity has truly taken hold in the UK, so long (now a decade) has it been necessary to subscribe to this policy to bring debt down to sustainable levels. With popular tolerance fraying and the threat of an opposition determined on largescale socialism allied with a massive spending programme, this really is the time for Conservative politicians to show some strategic intelligence and boldness in fiscal plans.

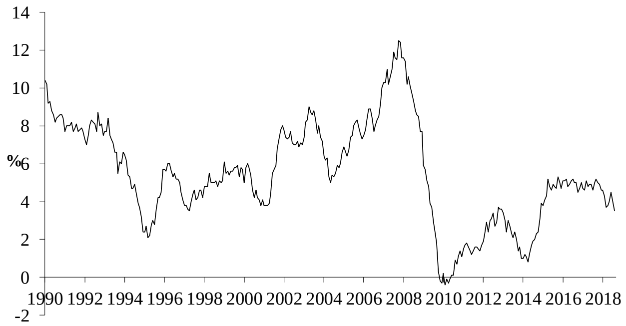
U.S.: Growth in Monetary Aggregates (Yr - on - Yr)



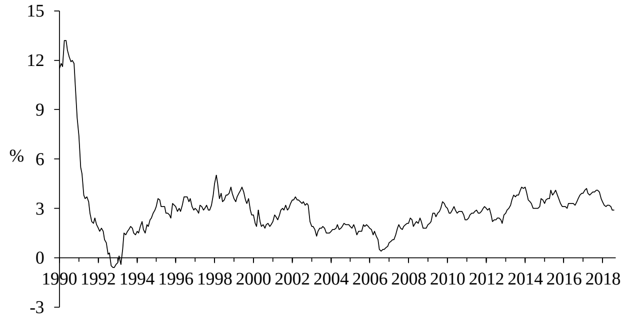
UK: Notes and Coins in Circulation Growth



Eurozone M3 Growth



Japan: Growth of M2+CD's



FOCUS ON JAPAN

Francesco Perugini

Abe wins 3rd term as president of ruling LDP

Last month Japan's Prime Minister Shinzo Abe was re-elected president of the ruling Liberal Democratic Party (LDP) for a third consecutive term, defeating former LDP Secretary General Shigeru Ishiba. A total of 810 votes were cast in the LDP presidential poll, half by Diet lawmakers and half by rank-and-file party members. After securing the support of five LDP factions, led respectively by Hiroyuki Hosoda, Taro Aso, Fumio Kishida, Toshihiro Nikai and Nobuteru Ishihara, Abe won 329 of the 405 votes from LDP lawmakers, against 73 votes for Ishiba. But outside Tokyo Abe's appeal is less entrenched, with rank-and-file party votes in regional areas giving Ishiba 45% of votes and Abe 55%, which should cause Abe to direct more public spending to neglected areas of the country, some of which have suffered greatly from natural disasters this year.

It was the first LDP presidential election in six years in which different candidates competed for the post, as Abe was unopposed in the election three years ago. It was also the first since 2003 in which an incumbent prime minister was challenged for the party leadership.

At a press conference later on the same day, Abe said he intends to reshuffle his Cabinet and the LDP executive line-up. He also reaffirmed his intention to take on amending the Constitution, something that has never been carried out in more than 70 years. He also vowed to tackle the national challenges of the falling birth rate and aging population by carrying out social security reforms based on his policy achievements in the past six years as prime minister and LDP president. "I will put all my strength and soul into fulfilling my duty," Abe said after his victory.

Abe's decision to enter the LDP presidential race defied expert predictions from earlier this year. Some analysts had tipped the prime minister would resign by June after two separate cronyism scandals saw his public approval rating plummet to an all-time low, raising questions over the damage Abe could bring to the LDP's chances in the upper house elections next summer.

Far from resigning, and with a solid majority in parliament and no general election due, Abe's historic win puts him on track to become Japan's longest serving prime minister since the birth of Japan's parliamentary system in the 1880s. His third consecutive term will be the last, as LDP rules bar a fourth term. That puts Abe in a position to focus on the kind of legacy he will leave behind and how to pursue his vision of Japan over the next three years in power.

During the two-week campaign period, Ishiba brought to the surface intra-party tensions over the current political style of economic policy and party management. Abe and Ishiba butted heads over "Abenomics," which Ishiba criticized for neglecting small- to medium-sized businesses in rural areas. He argued that rural areas never seem to get richer despite big cities prospering. While calling for a review of Abenomics, Ishiba said the revenue from large companies does not trickle down to the agriculture, forestry, and fisheries sectors and urged more support for developing small business in rural areas.

Meanwhile, a key component of Abenomics is pushing forward a 10% sales tax hike, scheduled in October next year, to help reform Japan's buckling social security system in the face of an aging population and mounting national debt. With social security expenses expected to double by 2040, young people and future generations could face overwhelming premiums and an unfair share of the tax burden. Ishiba proposed a new national council on social security to open public discussion rather than having the Abe administration push back consumption tax rises to avoid talking about what to do next.

The factor behind Abe's victory is that since Abe was elected Prime Minister in 2012 the economy has gradually improved. Abenomics, a macroeconomic package based upon the "three arrows" of monetary easing, fiscal stimulus and structural reforms, has produced the country's longest period of growth since the bubble economy that collapsed in 1990. Today Japan has full employment — the employment rate has soared from 64% to 70% — with wages rising ahead of the inflation rate, booming business investment and an unprecedentedly profitable corporate sector — profit margins in the non-manufacturing sector, which in Japan's case is almost entirely domestic, are roughly double the peak reached in 2005–2006. Moreover, every shop and restaurant in Tokyo seems to have a "positions vacant" sign, and many are scrapping 24-hour opening to save labour. Yamato Transport, the country's largest logistics company, is raising prices for the first time in 27 years in a deliberate attempt to cut volumes to a level its network can handle. Rather than cutting costs, chief executives spend their time working out how to hire and retain staff.

However, although Abe may have ended the long period of deflationary stagnation known as Japan's "lost decades", serious challenges remain. Consumer spending is still weak, and structural reforms have been sorely lacking. Moreover, smaller businesses and some areas of the country are not feeling the benefits of the recovery.

During his final three-year term, Abe should implement policy measures designed to ramp up potential growth capacity, such as labour market reforms and deregulation. In its early days, his government promoted growth strategies with greater vigour, but that initial energy has waned. Once growth potential increases, it will become easier to set the course toward an exit from the Bank of Japan’s ultra-loose monetary policy, which Abe mentioned earlier in September as being part of his policy agenda. With a strong party mandate in hand, he is in a position to be bolder in reform; but it remains to be seen how he will use this position.

MARKET DEVELOPMENTS

The US economy is blazing the way forward with stronger growth on the back of lower taxes and less regulation. Trump's trade policies have produced a renegotiated NAFTA and will in time produce better trade policies from China and the EU. Oil prices have risen recently but not from lack of capacity, rather from political turmoil in the Middle East and a temporary shortage of pipeline capacity for oil from fracking. Otherwise commodity prices remain low. With the Fed tightening money at last world growth should remain restrained to below 4%, which looks sustainable for some years ahead, underpinning share prices.

Table 1: Market Developments

	Market Levels Sep 5	Market Levels Oct 5	Prediction for Sep/Oct 2019 Previous Letter	Prediction for Sep/Oct 2019 Current View
Share Indices				
UK (FT 100)	7383	7319	10654	9961
US (S&P 500)	2889	2886	3306	3359
Germany (DAX 30)	12040	12112	20261	19452
Japan (Tokyo New)	1705	1793	2408	2477
Bond Yields (government)				
UK	1.26	1.53	2.50	2.50
US	2.85	3.16	3.00	3.00
Germany	0.27	0.46	0.80	0.80
Japan	0.09	0.17	0.10	0.10
UK Index Linked	–1.54	–1.43	–1.00	–1.00
Exchange Rates				
UK ($ per £)	1.30	1.31	1.30	1.30
UK (trade weighted)	77.31	78.62	76.0	76.0
US (trade weighted)	101.99	100.90	102.5	102.5
Euro per $	0.86	0.87	0.86	0.86
Euro per £	1.11	1.14	1.12	1.12
Japan (Yen per $)	111.58	113.75	112.0	112.0
Short Term Interest Rates (3-month deposits)				
UK	0.80	0.80	1.00	1.00
US	2.34	2.47	2.50	2.50
Euro	–0.35	–0.36	–0.10	–0.10
Japan	0.00	–0.05	0.10	0.10

Table 2: Prospective Yields [1]

Equities: Contribution to £ yield of:

	Dividend Yield	Real Growth	Inflation	Changing Dividend Yield	Currency	Total
UK	3.60	1.9	2.2	32.00		39.70
US	1.99	2.4	2.1	11.90	0.59	18.98
Germany	3.30	1.8	1.8	57.00	1.60	65.50
Japan	1.90	1.1	1.1	36.00	2.11	41.21
UK indexed[2]	–1.43		2.2	1.00		1.78
Hong Kong[3]	2.60	6.0	2.1	–12.00	0.59	–0.71
Malaysia	3.30	5.4	2.1	48.00	0.59	59.39
Singapore	3.50	2.9	2.1	11.00	0.59	20.09
India	1.40	8.1	2.1	23.00	0.59	35.19
Korea	1.10	2.0	2.1	–31.00	0.59	–25.21
Indonesia	2.20	5.5	2.1	26.00	0.59	36.39
Taiwan	2.80	2.5	2.1	12.00	0.59	19.99
Thailand	3.20	3.4	2.1	22.00	0.59	31.29

Bonds: Contribution to £ yield of: –

	Redemption Yield	Changing Nominal Rates	Currency	Total
UK	1.53	–9.70		–8.17
US	3.16	1.60	0.59	5.35
Germany	0.46	–3.40	1.60	–1.34
Japan	0.17	0.70	2.11	2.98

Deposits: Contribution to £ yield of:

	Deposit Yield	Currency	Total
UK	0.80		0.80
US	2.47	0.59	3.06
Euro	–0.36	1.60	1.24
Japan	–0.05	2.11	2.06

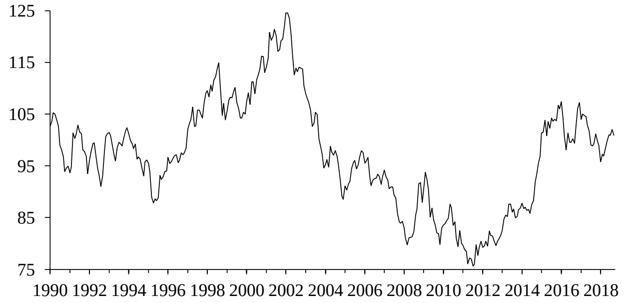
[1] Yields in terms of €s or $s can be computed by adjusting the £-based yields for the expected currency change.
[2] UK index linked bonds All Stocks
[3] Output based on China.

Table 3: Portfolio(%)

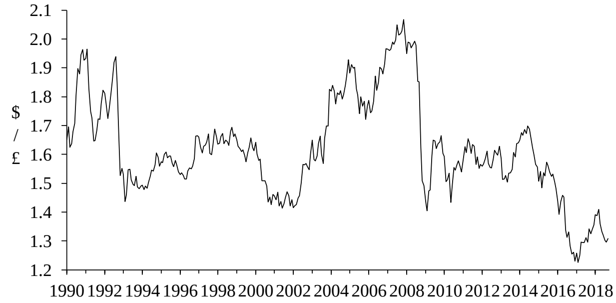
	Sterling Based Investor		Dollar Based Investor		Euro Based Investor	
	September Letter	Current View	September Letter	Current View	September Letter	Current View
UK Deposits (Cash)	5	5	5	5	1	1
US Deposits	-	-	-	-	-	-
Euro Deposits	-	-	-	-	-	-
Japanese Deposits	-	-	-	-	-	-
UK Bonds	-	-	-	-	-	-
US Bonds	-	-	-	-	-	-
German Bonds	-	-	-	-	-	-
Japanese Bonds	-	-	-	-	-	-
UK Shares	19	19	14	14	17	17
US Shares	14	14	19	19	16	16
German Shares	14	14	14	14	21	21
Japanese Shares	9	9	9	9	11	11
Hong Kong/Chinese Shares	4	4	4	4	4	4
Singaporean Shares	4	4	4	4	4	4
Indian Shares	4	4	4	4	4	4
Thai Shares	3	3	3	3	3	3
South Korean Shares	4	4	4	4	4	4
Taiwanese Shares	4	4	4	4	3	3
Brazilian Shares	4	4	4	4	3	3
Chilean Shares	4	4	4	4	3	3
Mexican Shares	4	4	4	4	3	3
Peruvian shares	4	4	4	4	3	3
Other:						
Index-linked bonds (UK)	-	-	-	-	-	-

INDICATORS AND MARKET ANALYSIS
FOREIGN EXCHANGE MARKETS

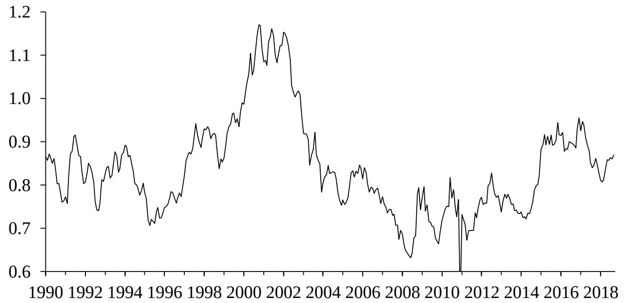
US : Trade Weighted Index
(Bank of England 1990 = 100)



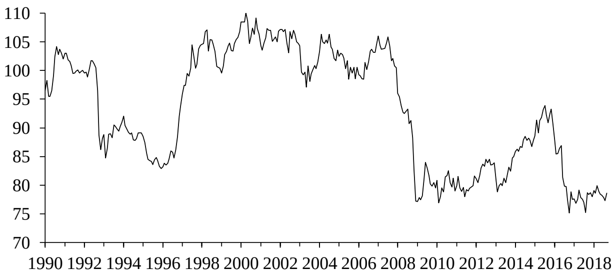
UK: Dollars Per Pound Sterling



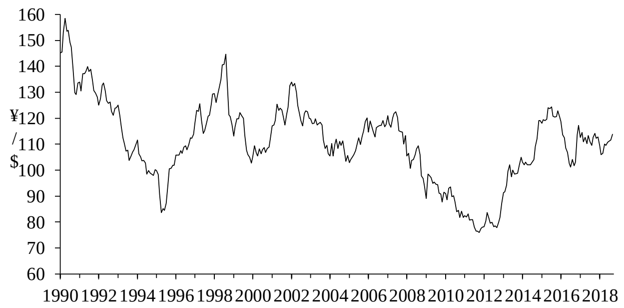
Euro per US dollar



UK: Trade-Weighted Index
(Bank of England 1990 = 100)



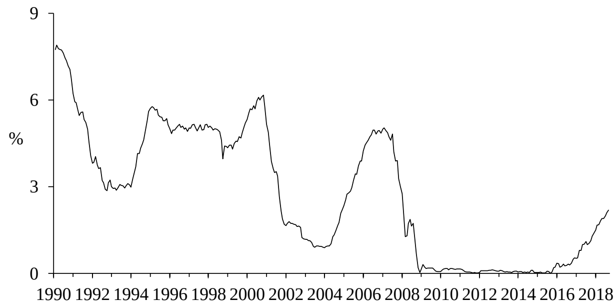
Japan : Yen Per U.S. Dollar



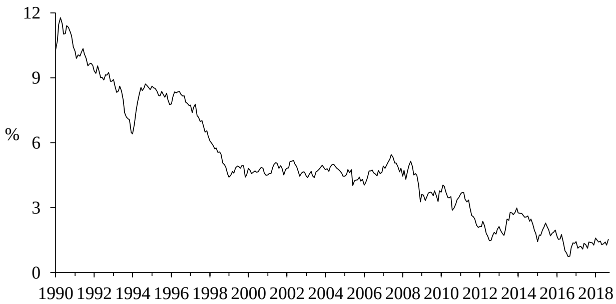
GOVERNMENT BOND MARKETS

U.S.: Yield on Long-Term Government Bonds

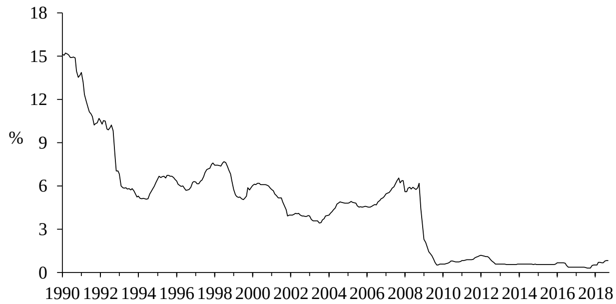
U.S. : 3-Month Treasury Bill



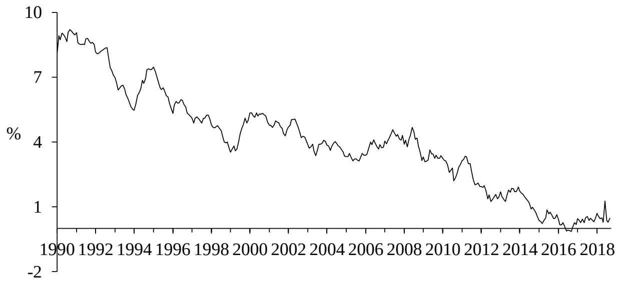
U.K.: Yield on Long-Term Government Bonds



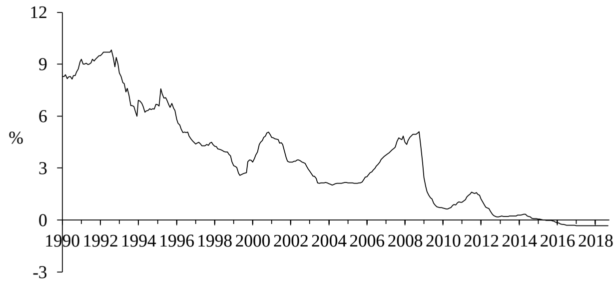
U.K. : 3-Month Certificate of Deposit Rate



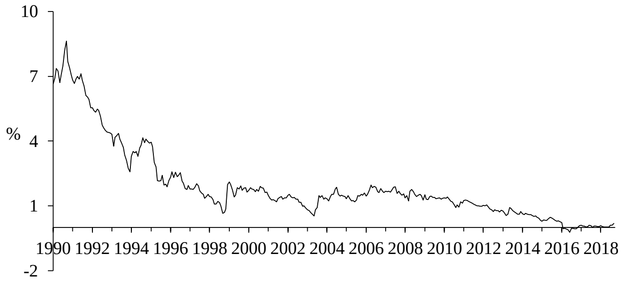
Germany: Yield on Public Authority Bonds



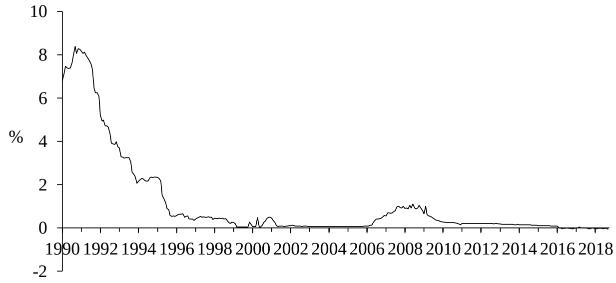
Germany : 3-Month Interbank Deposit Rate



Japan: Yield on Long-Term Government Bonds

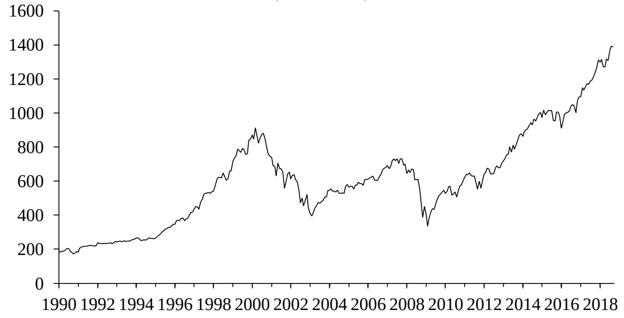


Japan : 3-Month Money Market Rate

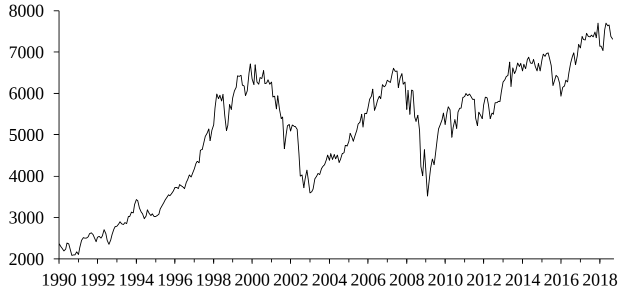


MAJOR EQUITY MARKETS

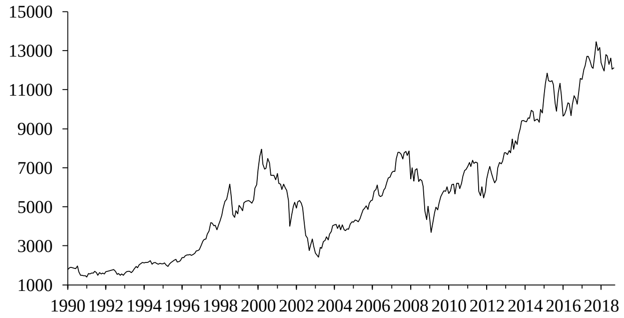
U.S. : S & P 400 Industrial
(1985=100)



U.K. : FTSE-100 Index
(10 April 1962=100)



Germany : DAX 30



Japan : Tokyo S.E. New
(1985=100)

EMERGING MARKETS

Anupam Rastogi

India

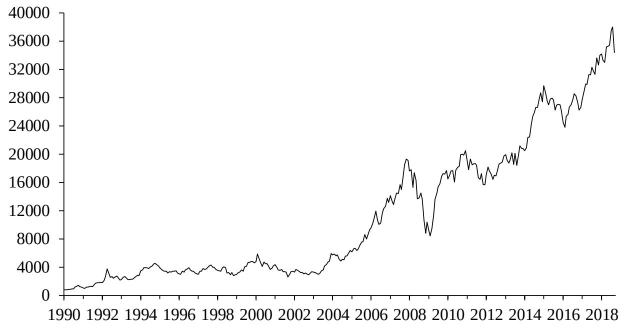
India's GDP growth of 8.2% for the April–June quarter is unlikely to sustain in the coming quarters. The last quarters' statistic was largely owing to the base effects. The economy is facing the headwinds of a weaker rupee and rising oil prices. These two elements are exerting an upward pressure on inflation and downward pressure on growth. However, gradual support to growth is coming from strengthening bank balance sheets as more companies exit bankruptcy and the stabilization of the Goods & Services tax with full implementation of E-Way bill. This is providing a conducive environment for the investment to pick up. We expect the Indian economy to expand by an annual rate of 7.4% in the current fiscal and 7.6% next year. High crude oil prices are going to impinge growth in 2019–20.

India's retail inflation fell below the Reserve Bank of India's (RBI) medium-term target of 4% in August. Consumer price inflation rose 3.69% from a year earlier, down from July's 4.17%. Inflation is expected to average 4.1% in the near term, but rise to 5% by the middle of 2019. The Monetary Policy Committee has kept interest rate on hold at 6.5% at the October 5 policy meeting. Their decision was unexpected. As the central bank did not raise the interest rates in line with the international tightening of monetary stance as the US Federal Reserve is raising rates, the Indian rupee slid to 74 to US dollar.

The Indian government will maintain the formula of the Minimum Support Price to agricultural produce. The scheme gives a 50% guaranteed return over cost of the cultivation in the coming Rabi season (winter season produce). Oil prices are expected to remain tight in the near future. To provide relief to consumers, the government has reduced levy on diesel and petrol. India has agreed to adhere to US sanctions on stopping oil imports from Iran and the depreciating rupee has added to the inflationary impact of the rise in oil prices.

India's trade deficit widened to $17.4 billion in August compared to more than $18 billion in July, driven by higher global prices of crude oil and steady capital outflows. Current Account Deficit (CAD) came in at $15.8 bn or 2.4% of the Gross Domestic Product (GDP) in first quarter of the current fiscal year, which dragged the rupee lower. The rupee has fallen more than 13% against the dollar this year to hit an all-time low of 74.25 in the first week of October. The battered rupee will hover near 72 to the US dollar as it copes with current account deficits and turmoil in the bond market. The disorder in the bond market was led by withdrawal by foreign funds from the Indian bond market leading to fall in liquidity. This hardened the interest rates and risk perception has increased.

India: BSE Sensitive



Rainfall in India's annual monsoon season was below average and lower than forecasted, with one-fourth of the regions (including key crop-growing northern states) receiving less rain than needed. Rainfall was 91% of the long-term average at the end of the Jul–Sep 2018 monsoon season. The stock market reacted sharply to this news. Indian benchmark indices had their worst September since the Lehman Brothers crisis unfolded in 2008. The Sensex ended the month of September with a loss of 6.26%. Foreign portfolio investors (FPIs) have now turned net sellers in the equity markets, selling shares worth US$ 1.4bn in September. Indian stock markets have corrected about 10% from their peak and are going to stabilize now as valuation has reached its long-term average. Some uncertainty related to the outcome of 2019 general election has sneaked in as opposition is trying to draw attention of people towards rising petrol and diesel prices which have hit an all-time high in India.

	16–17	**17–18**	**18–19**	**19–20**	**20-21**
GDP (%p.a.)	7.1	6.7	7.4	7.6	8.1
WPI (%p.a.)	4.5	3.5	4.5	4.7	4.2
Current A/c(US$ bill.)	-24.0	-26.0	-49.0	-44.0	-44.0
Rs./$(nom.)	68.2	65.0	70.2	71.5	72.5

China

Disappointing retail sales and expected muted response to the on-line sales conducted by Alibaba on every November 11 suggests that in China consumption growth is under threat. We expect the Chinese economy to grow about 6.5% in 2018 and 6% in 2019. The trade war with the U.S. is likely to hit the labour-intensive export sector, while sectors like autos will struggle as tax breaks expire. Fixed-asset investment outside rural households rose 5.3% in the January–August period from a year earlier, according to the National Bureau of Statistics. The rate was the most sluggish since 1992, when the investment data was first made available.

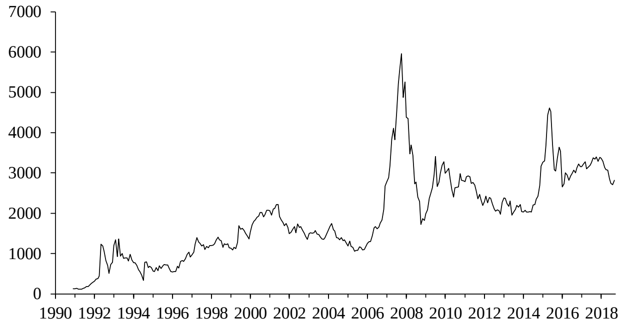
The consumer-price index rose 2.3% in August from a year earlier, compared with a 2.1% gain in July due to higher food and fuel costs. Inflation is likely to pick up as the impact of the U.S. trade war is felt on daily consumption items. For example, the price of pork serves as a crucial barometer of the trade war's impact on inflation as the Chinese staple has high weightage in the CPI. The government's target is to keep inflation under 3% this year.

China's trade surplus with the U.S. hit $31 billion in August, up from $28 billion in July. A combination of factors, including a weaker Chinese yuan and exporters' frontloading of shipments in anticipation of more tariffs, contributed to the expansion of trade surplus. Over the first eight months of the year, China's surplus with the US rose nearly 15%. Globally, China reported a trade surplus of $27.91 billion in August, narrowing from a surplus of $28.05 billion a month earlier. This indicates that globally China's exports are not rising.

In July, China retaliated against American tariffs by imposing a 25% duty on $50 billion worth of imports from the U.S., including soybeans. The US imposed a long-threatened 10% tariff on $200 billion of Chinese imports, effective third week of September. More than half of Chinese imports now face punitive taxes. Beijing, in turn, has levied up to 25% tariff against $60 billion worth of additional U.S. goods now. Barring a deal, U.S. tariffs will rise to 25% at the end of the year, and tariffs on an additional $267 billion Chinese goods could be announced.

The trade war between China and the US is all set to escalate into a new cold war, and the confrontation will press Beijing and Washington to form their own alliances. The US is using tariffs as a tool to pressurize Beijing to alter its state-led economic model and "unfair" trade practices. At the heart of US policy is the issue of China's state-owned enterprises — they are implementing China's Made in China 2025 strategies, they are in the vanguard of expanding Chinese influence in Asia and Africa, and they are the main beneficiaries of technology "transfers" from the US and EU. Official policy enhances Chinese state-owned sector — even though doing this hurts the private sector in China. At present, the brunt of the trade war is being felt by the private exporters. As China's GDP output is about two-thirds of the

China: SSE Composite Index



US in nominal dollar terms and accounts for approximately 15% of the world economy; policy makers in China feel that China is strong enough to challenge the US-led international system. Chinese administration has accused the Trump administration of being a trade bully and abandoning important communication channels.

The central parity rate of the Chinese currency renminbi, or the yuan, weakened 131 basis points to 6.8571 against the U.S. dollar. China isn't likely to let the yuan weaken much further. We are likely to witness the Chinese yuan trading at 6.95 to the U.S. dollar by the end of the year. In September, China's central bank stepped up its intervention in the market to prevent the yuan from depreciating too rapidly.

Going forward, there are very strong headwinds coming from political and industrial arena. The developments are likely to make Trump's policy towards international trade popular in the US as well as in other countries. A top-secret probe has revealed a unit of China's People's Liberation Army inserted microchips not much bigger than a grain of rice on motherboards to gain access to computers used by U.S. companies, including Amazon and Apple according to a Bloomberg investigative report. The hardware hack affected products from businesses with ties to the U.S. Navy and the Central Intelligence Agency. It is widely believed that Chinese operatives have poisoned the technical supply chain of major US companies. The hardware mole will covertly modify the servers used by big tech firms, bypass software security checks, and, essentially, give the Chinese government a complete backdoor into these companies' networks. Essentially, one cannot trust its hardware and there is no way to check for this in software. This caused ripples across Asia, with shares in a number of Chinese hardware companies slipping. The allegations will dampen demand of Chinese-manufactured goods in the long-term.

A Chinese warship came to the USS Decatur as it sailed past a disputed reef in the South China Sea in the first week of October. This military incident is of a kind that plunged U.S.-China relations into a crisis back in 2001 when a Chinese warplane collided with an American EP-3 spy plane near Hainan Island.

	16	**17**	**18**	**19**	**20**
GDP (%p.a.)	6.5	6.9	6.3	5.5	5.5
Inflation (%p.a.)	2.0	1.6	2.2	2.3	2.3
Trade Balance(US$ bill.)	510	400	300	300	300
Rmb/$(nom.)	6.7	6.6	6.8	7.1	7.3

South Korea

South Korea's economy as a whole is forecast to expand by 2.6% this year, following 3.1% growth in 2017. Despite the planned spending increase, the government expects the country's fiscal health to remain sound in 2019 due to larger-than-expected tax revenues this year. Government debt is expected to edge down to 39.4% of gross domestic product next year from an estimated 39.5% this year. In the January–June period, real GDP increased 2.8% compared with the same period of last year, missing this year's growth outlook of 2.9% estimated by the Bank of Korea (BOK) and the government.

South Korean inflation slowed to 1.4% in August, giving enough elbow space to the central bank for the time being. The central bank's annual inflation target is 2%. The bank expects inflation to gradually pick up to hit its 2% target next year.

Exports remained robust, driven by demand for memory chips and other goods. South Korea's trade surplus increased to $6.9 billion in August of 2018 from $6.6 billion in the same month of 2017. In August, exports grew by 8.7% year-on-year to a record high of $51.2 billion. In the first eight months of 2018, the trade surplus narrowed sharply to $49.2 billion.

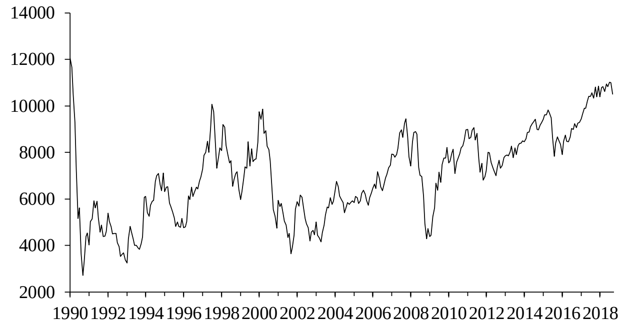
The appreciating dollar has pushed the won to below the 1,315 level. As the central bank does not feel the need to defend the won and the inflationary expectations are low, the currency would remain at this level in the near future.

South Korean Finance Minister Kim Dong-yeon expressed optimism about signing a revised U.S. free-trade pact into law, though lawmakers in Seoul have threatened to block the deal if Washington imposes new tariffs on Korean autos and auto parts. The first trade deal that the Trump administration successfully renegotiated in March was signed by the U.S. and South Korean governments in the last week of September. The deal needs approval from each legislature before taking effect. The deal, however, is potentially at risk because Mr. Trump has threatened to place tariffs of up to 25% on imported vehicles and car parts on national-security grounds to protect the domestic auto industry. Lawmakers in Seoul have warned they won't ratify the deal if the U.S. slaps new tariffs on Korean autos and auto parts.

Under the new deal, each American auto exporter will be able to send 50,000 vehicles annually to South Korea that meet U.S. safety standards, rather than Korean safety standards. This is a doubling of the quota. But it is meaningless as U.S. automakers currently are stretched to sell 25,000 cars per year in South Korea. The deal also extends, until 2041, a 25% U.S. import tariff on South Korean trucks. The import tariff had been due to phase out by 2021, leaving U.S. truck manufacturers more exposed to South Korean competition in the US.

Korea: Composite Index

Taiwan: Weighted TAIEX Price Index



The Bloomberg report which alleged that Chinese spies infiltrated servers used by Apple, Amazon and other companies by planting a tiny chip on motherboards assembled in China. This type of gear is a prime target of the latest round of U.S. tariffs. The Trump administration's wider goal is to pull manufacturing supply chains out of China. This may affect South Korean companies in short term as trade flows get affected but good for the Korean economy as it capitalizes on vacuum left by Chinese companies.

	16	**17**	**18**	**19**	**20**
GDP (%p.a.)	2.8	3.1	2.6	2.8	2.9
Inflation (%p.a.)	1.0	1.9	1.7	2.0	1.9
Current A/c(US$ bill.)	88.0	88.0	86.0	80.0	78.0
Won/$(nom.)	1160	1100	1250	1350	1350

Taiwan

Taiwan's economy grew 3.1% in the first quarter and 3.3% in the second quarter. Economic growth in the first half of the year was more brisk than originally projected as manufacturers tried to beat the tariff deadline of the US government.

Taiwan's consumer price inflation slowed to 1.53% in August from 1.75% in July. Excluding fruits, vegetables and energy, core inflation stood at 1.36% in August. The wholesale price inflation also remained subdued.

Taiwan's exports rose almost 2% in August from a year earlier, marking the sixth consecutive month of year-on-year increase, on the back of worldwide demand amid global economic growth. The Ministry of Finance data showed that Taiwan's exports totalled $28.3 billion in August, up 1.9% from a year earlier, but down 0.2% from a month earlier. Meanwhile, imports rose 7.9% year-on-year in August to $23.77 billion, with a trade surplus of $4.53 billion. In the first eight months of this year, imports grew by 11.7% year-on-year. The US dollar is trading at NT$30.7 as the USD appreciated against all developing countries.

The revelations made by the Bloomberg report would affect Taiwanese companies in the same way as the Korean companies in short term but would be good for the Taiwanese companies as they capitalize on new supply chain developed by the US companies.

	16	**17**	**18**	**19**	**20**
GDP (%p.a.)	1.4	2.6	3.0	2.6	2.3
Inflation (%p.a.)	1.0	0.6	1.5	1.3	1.2
Current A/c(US$ bill.)	64.0	68.0	68.0	70.0	71.0
NT$/$(nom.)	32.5	31.0	29.8	31.0	31.0

Brazil

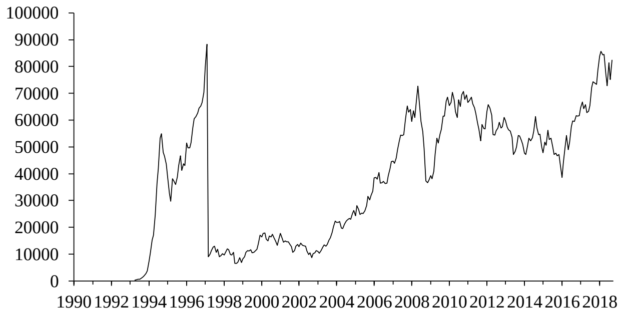
The Brazilian economy is rudderless. The uncertainty about the elections on October 7 has gripped all aspects of the economy. All indicators point to the activity remaining sluggish in the near term. Gross domestic product grew a disappointing 1% in the second quarter from a year earlier, hurt by a 10-day truckers strike at the end of May. There are chances that truckers may go on strike once again. The outlook for economic growth in 2019 is not bright either. We expect economy to expand 2% only after growing 0.5% in 2018.

The consumer price index (IPCA) rose 4.19% year-on-year following a 4.48% increase in July. Inflation has remained under control and below the 4.50% midpoint of this year's targeted range. Stripped of volatile items such as energy costs and food prices, however, core inflation has remained low due to weak demand and high unemployment.

The central bank's deliberations show that they are concerned about uncertainty and are closely tracking inflation expectations. In their meeting in mid-September, the central bank left its benchmark interest rate unchanged amid sluggish economic growth, slow inflation, a political uncertainty and a weak currency. The bank kept the Selic rate at record low of 6.5% for the fourth meeting in a row. The rate was last trimmed, from 6.75%, in March, the last of 12 consecutive cuts starting in October 2016 with the Selic at 14.25%.

The country recorded a $4.4 billion current-account deficit in July, compared with a $435 million surplus posted in June. July's deficit was wider than the $3.4 billion deficit posted in the same month a year ago. The 12-month deficit is now

Brazil: Bovespa



$15 billion, or 0.76% of gross domestic product, compared with $13.9 billion, or 0.7% of GDP, as of June. Foreign direct investment fell to $3.9 billion in July, down from $6.5 billion in June. By the end of 2018, the current-account deficit is forecast to widen to $18 billion.

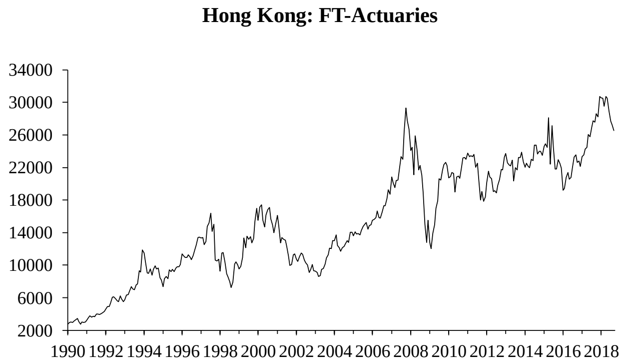
The Brazilian real has depreciated 21% against the dollar since January as global trade tensions sent emerging-market currencies into a tailspin. The Brazilian real's slide to near all-time lows has had only limited impact on inflation and exports. The real's slide is also due to political turbulence ahead of Brazil's October presidential elections, as the economic proposals from candidates leading the polls fall short of soothing market's fears of a deep fiscal crisis in the near future. Brazil's currency closed at a record low of 4.2 to the US dollar amid uncertainty and unpredictability surrounding the elections.

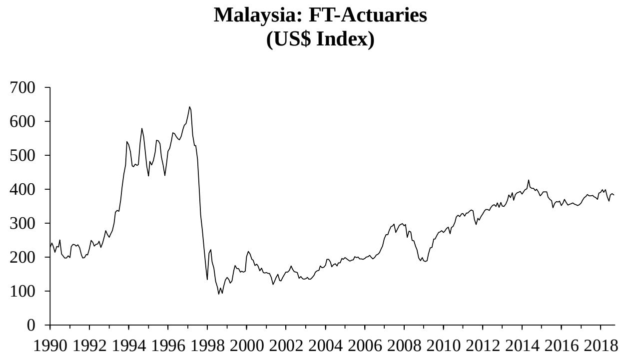
The tension has been elevated after the right-wing candidate, and leader in the polls, Jair Bolsonaro survived an assassination attempt in mid-September. The former President Luiz Inácio Lula da Silva, a popular left-wing leader, who is in jail for corruption, has been ordered out of the race by Brazil's electoral court. He anointed his ticket mate, former São Paulo Mayor Fernando Haddad.

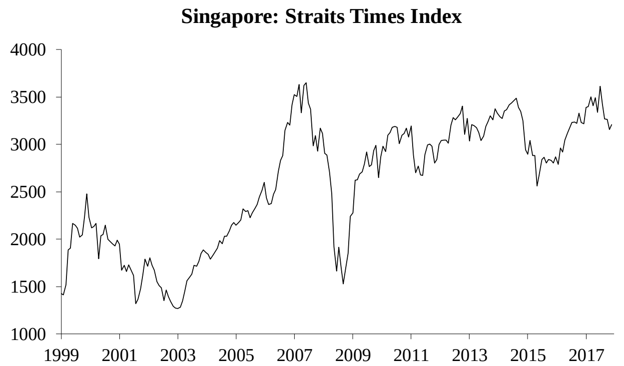
Brazil held the first round of the presidential election on October 7. The election was won by Jair Bolsonaro, a far-right "dictatorship nostalgist,". His main rival was a representative of the far left. Centrist candidates don't stand a chance, and this probably means that Brazil's many staggering problems don't stand a chance of being fixed. The reforms the country needs require consensus, and the controversial top presidential contenders seem unlikely to achieve it. Recent bullishness in the currency and stock market is due to expectations of a win of Jair Bolsonaro in the end.

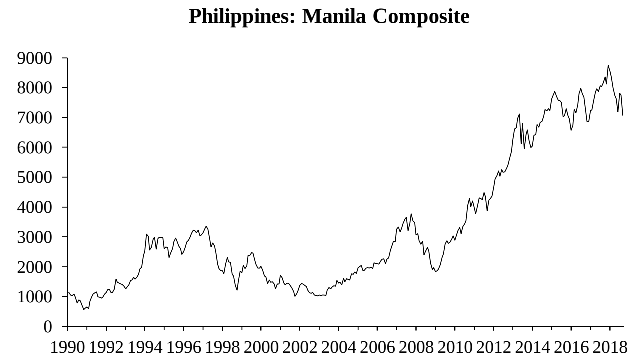
	16	**17**	**18**	**19**	**20**
GDP (%p.a.)	-3.5	1.0	0.5	2.0	2.5
Inflation (%p.a.)	6.3	3.0	4.4	4.5	4.2
Current A/c(US$ bill.)	-28.0	-4.0	-18.0	-16.0	-16.0
Real/$(nom.)	3.5	3.2	4.0	4.2	4.2

Other Emerging Markets



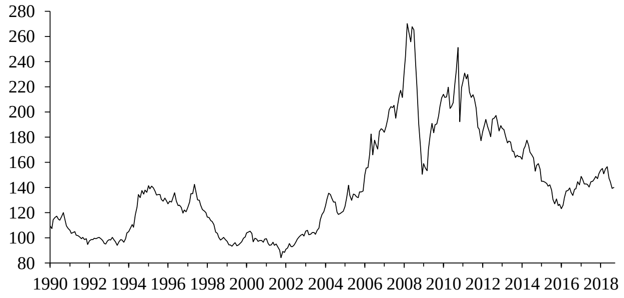




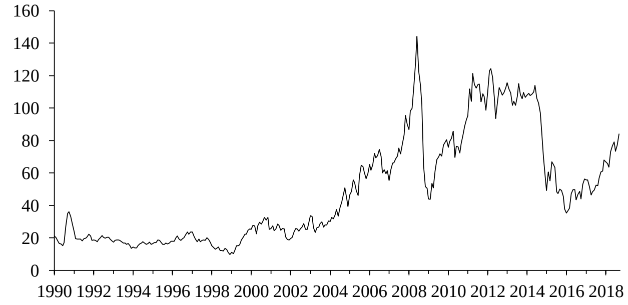


COMMODITY MARKETS

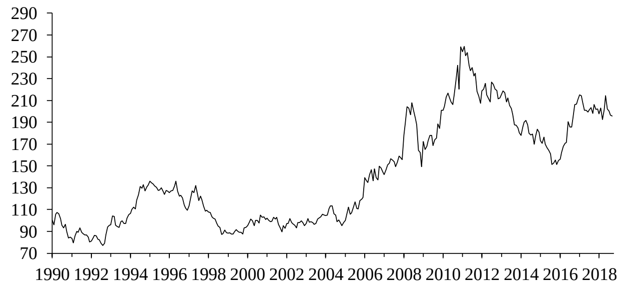
Commodity Price Index (Dollar)
(Economist, 2000=100)



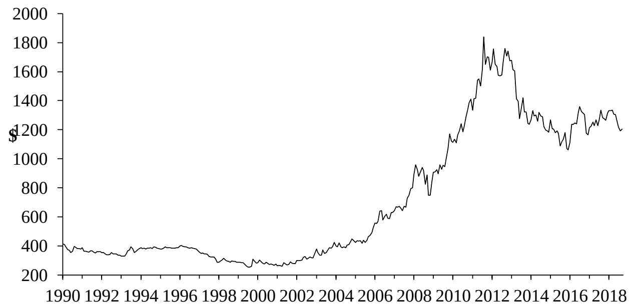
Oil Price: North Sea Brent (in Dollars)



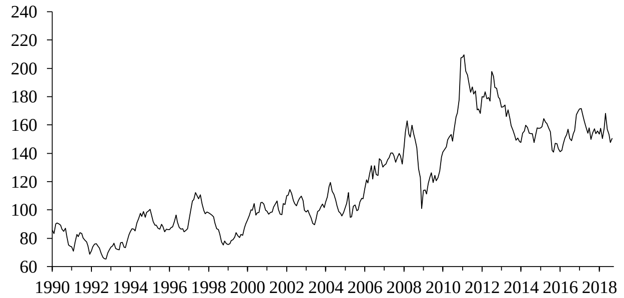
Commodity Price Index (Sterling)
(Economist, 2000=100)



Gold Price (in Dollars)



Commodity Price Index (Euro)
(Economist)



UK FORECAST DETAIL

Prices, Wages, Interest Rates and Exchange Rate Forecast (Seasonally Adjusted)

	Inflation %[1] (CPI)	Short Dated (5 Year) Interest Rates	3 Month Int. Rates	Nominal Exchange Rate (2005=100) [2]	Real Exchange Rate[3]	Real 3 Month Int. Rates %[4]	Inflation (RPIX)	Real Short Dated Rate of Interest[5]
2017	2.6	0.6	0.4	77.4	75.5	-1.6	3.8	-1.5
2018	2.5	1.5	0.6	77.4	75.8	-1.5	3.5	-0.5
2019	2.2	2.5	1.1	76.2	74.9	-1.0	2.9	0.5
2020	2.0	3.4	2.4	75.4	74.3	0.4	2.6	1.4
2021	2.0	2.9	3.1	75.5	74.9	1.0	2.5	0.9
2022	2.0	2.6	3.1	75.2	74.8	1.1	2.6	0.7
2017:1	2.2	0.6	0.3	76.8	75.0	-1.7	3.3	-1.5
2017:2	2.6	0.4	0.4	78.2	76.4	-1.5	3.8	-1.7
2017:3	2.7	0.6	0.3	76.7	74.5	-1.5	4.0	-1.5
2017:4	2.8	0.8	0.4	77.9	76.0	-1.7	4.1	-1.3
2018:1	2.5	1.0	0.5	79.2	78.0	-1.6	3.6	-1.0
2018:2	2.6	1.5	0.5	77.0	75.4	-1.7	3.6	-0.5
2018:3	2.5	1.8	0.8	77.1	75.4	-1.4	3.5	-0.2
2018:4	2.5	1.8	0.8	76.2	74.4	-1.4	3.4	-0.2
2019:1	2.2	2.5	0.8	76.6	75.4	-1.3	2.9	0.5
2019:2	2.2	2.5	1.0	76.5	75.4	-1.1	2.9	0.5
2019:3	2.2	2.5	1.0	75.9	74.4	-1.0	2.8	0.5
2019:4	2.2	2.5	1.5	75.7	74.3	-0.5	2.9	0.5

1 Consumer's Expenditure Deflator
2 Sterling Effective Exchange Rate Bank of England
3 Ratio of UK to other OECD consumer prices adjusted for nominal exchange rate
4 Treasury Bill Rate less one year forecast of inflation
5 Short Dated 5 Year Interest Rate less average of predicted 5 year ahead inflation rate

Labour Market and Supply Factors (Seasonally Adjusted)

	Average Earnings (1990=100)[1]	Wage Growth[2]	Unemployment (New Basis) Percent[3]	Millions	Real Wage Rate[4] (1990=100)
2017	259.1	2.9	2.2	0.8	141.7
2018	265.8	2.7	2.2	0.8	142.2
2019	272.3	2.4	2.1	0.8	142.5
2020	276.9	1.7	1.9	0.7	142.7
2021	283.4	2.4	1.9	0.7	142.3
2022	289.8	2.3	1.5	0.6	142.9
2017:1	258.1	2.1	0.8	142.2	190.2
2017:2	257.3	2.3	0.8	141.6	192.2
2017:3	260.2	2.2	0.8	142.7	194.0
2017:4	260.9	2.3	0.8	142.2	196.0
2018:1	264.6	2.3	0.8	142.8	196.1
2018:2	264.3	2.1	0.8	141.8	199.6
2018:3	267.0	2.1	0.8	142.9	201.3
2018:4	267.3	2.1	0.8	142.2	203.1
2019:1	269.7	2.0	0.7	142.3	203.0
2019:2	271.9	2.0	0.7	142.7	204.9
2019:3	272.8	2.0	0.7	142.9	206.7
2019:4	274.8	1.9	0.7	143.0	208.5

1 Whole Economy
2 Average Earnings
3 Wholly unemployed excluding school leavers as%age of employed and unemployed, self employed and HM Forces
4 Wage rate deflated by CPI

Estimates and Projections of the Gross Domestic Product[1] (£ Million 1990 Prices)

	Expenditure Index	£ Million '90 prices	Non-Durable Consumption[2]	Private Sector Gross Investment Expenditure[3]	Public Authority Expenditure[4]	Net Exports[5]	AFC
2017	162.3	777336.9	443745.6	302292.1	198857.7	-65371.5	102187.0
2018	164.7	788702.9	452535.4	300001.6	200246.3	-62820.3	101237.1
2019	167.8	803486.7	458033.7	303844.4	200602.7	-55631.9	103388.8
2020	171.1	819157.6	466811.5	305454.3	201938.2	-49424.8	105622.7
2021	174.6	836277.7	476328.1	309328.2	203070.4	-44408.2	108042.3
2022	178.6	855233.2	486139.0	312409.7	204308.6	-36921.2	110703.2
2017/16	1.8		0.6	0.8	0.4	-0.7	0.6
2018/17	1.5		2.0	-0.7	0.7	-0.8	2.0
2019/18	1.9		1.2	1.3	0.2	2.1	1.2
2020/19	2.0		1.9	0.5	0.7	2.2	1.9
2021/20	2.1		2.0	1.3	0.6	2.3	2.0
2022/21	2.3		2.1	1.0	0.6	2.5	2.1
2017:1	161.5	193340.7	110460.5	76110.0	50838.0	-16948.9	27118.9
2017:2	161.9	193817.5	111360.7	74039.4	48893.4	-16008.3	24467.6
2017:3	162.6	194710.8	110910.0	75858.8	49324.8	-15656.7	25726.1
2017:4	163.3	195468.0	111014.4	76284.0	49801.5	-16757.6	24874.3
2018:1	163.6	195906.9	110726.8	75395.5	51361.5	-16549.5	25007.4
2018:2	164.3	196658.4	113112.9	76462.4	49463.3	-17119.9	25257.6
2018:3	165.0	197581.8	114100.5	74023.6	49577.5	-14658.4	25458.2
2018:4	165.8	198555.8	114595.2	74120.1	49844.0	-14492.5	25513.8
2019:1	166.7	199543.9	113052.0	76413.1	50526.0	-14820.6	25636.7
2019:2	167.3	200322.9	114121.4	76582.8	50009.7	-14624.9	25773.7
2019:3	168.2	201324.8	115127.6	74790.6	50056.5	-12733.9	25925.3
2019:4	169.0	202295.1	115732.7	76058.0	50010.4	-13452.6	26053.1

1 GDP at factor cost. Expenditure measure; seasonally adjusted
2 Consumers expenditure less expenditure on durables and housing
3 Private gross domestic capital formation plus household expenditure on durables and clothing plus private sector stock building
4 General government current and capital expenditure including stock building
5 Exports of goods and services less imports of goods and services

Financial Forecast

	PSBR/GDP %[1]	GDP[1] (£bn)	PSBR (£bn) Financial Year	Debt Interest (£bn)	Current Account (£ bn)
2017	2.0	2047.3	39.4	79.9	-66.3
2018	1.4	2131.8	30.7	82.7	-60.3
2019	1.0	2219.8	21.8	87.5	-49.5
2020	0.2	2309.9	5.6	94.6	-39.7
2021	-0.3	2406.9	-6.7	98.0	-31.0
2022	-0.6	2513.2	-15.1	99.5	-17.9
2017:1	-2.9	507.9	-14.6	20.0	-15.7
2017:2	5.0	503.8	25.3	20.0	-20.5
2017:3	2.3	510.3	11.8	19.7	-15.3
2017:4	3.2	513.3	16.5	19.9	-14.8
2018:1	-2.7	520.0	-14.3	20.2	-13.4
2018:2	1.3	525.5	6.8	20.3	-22.2
2018:3	1.5	529.4	7.7	20.7	-13.5
2018:4	1.5	535.0	7.8	20.8	-11.3
2019:1	1.6	541.9	8.5	21.0	-10.8
2019:2	1.1	547.3	5.9	21.3	-18.4
2019:3	0.9	551.2	5.1	21.3	-10.6
2019:4	0.8	557.4	4.6	22.0	-9.6

1 GDP at market prices (Financial Year)

WORLD FORECAST DETAIL

Growth Of Real GNP

	2015	2016	2017	2018	2019	2020
U.S.A.	2.9	1.5	2.3	2.7	2.4	2.5
U.K.	2.3	1.9	1.8	1.5	1.9	2.0
Japan	1.4	1.0	1.7	1.4	1.1	1.2
Germany	1.7	1.9	2.2	2.3	1.8	2.0
France	1.0	1.1	2.0	1.9	1.7	1.9
Italy	1.0	0.9	1.5	1.4	1.1	1.2

Growth Of Consumer Prices

	2015	2016	2017	2018	2019	2020
U.S.A.	0.1	1.3	2.1	2.5	2.2	2.0
U.K.	0.2	1.1	2.6	2.5	2.0	2.0
Japan	0.8	–0.1	0.5	0.9	1.1	1.2
Germany	0.3	0.5	1.8	1.7	1.8	1.9
France	0.0	0.2	1.0	1.3	1.5	1.6
Italy	0.1	–0.1	1.2	1.1	1.4	1.5

Real Short-Term Interest Rates

	2015	2016	2017	2018	2019	2020
U.S.A.	–1.1	–1.6	–0.9	–0.4	0.5	0.8
U.K.	0.0	–1.2	–1.5	–1.0	0.4	1.0
Japan	0.1	–0.4	–0.8	–1.0	–1.1	–1.1
Germany	–0.6	–2.0	–2.0	–2.0	–2.1	–2.0
France	–0.2	–1.3	–1.6	–1.7	–2.1	–1.8
Italy	0.0	–1.5	–1.4	–1.6	–2.1	–1.5

Nominal Short-Term Interest Rates

	2015	2016	2017	2018	2019	2020
U.S.A.	0.2	0.5	1.4	1.8	2.5	2.8
U.K.	0.6	0.5	0.4	0.6	1.1	2.4
Japan	0.2	0.1	0.1	0.1	0.1	0.1
Germany	–0.1	–0.3	–0.3	–0.2	–0.2	0.0
France	–0.1	–0.3	–0.3	–0.2	–0.1	0.0
Italy	–0.1	–0.3	–0.3	–0.2	–0.1	0.0

Real Long-Term Interest Rates

	2015	2016	2017	2018	2019	2020
U.S.A.	0.3	0.5	0.8	1.0	1.5	1.8
U.K.	–0.7	–1.5	–1.5	–0.5	0.5	1.4
Japan	–0.5	–1.0	–1.1	–1.3	–1.5	–1.5
Germany	–0.9	–1.7	–1.5	–1.4	–1.1	–1.0
France	–0.7	–0.9	–0.9	–0.8	–0.6	–0.5
Italy	0.4	0.1	0.3	0.4	0.6	1.3

Nominal Long-Term Interest Rates

	2015	2016	2017	2018	2019	2020
U.S.A.	2.2	2.5	2.8	3.0	3.5	3.8
U.K.	1.3	0.7	0.6	1.5	2.5	3.4
Japan	0.3	0.0	0.1	0.1	0.1	0.1
Germany	0.6	0.1	0.4	0.6	0.9	1.0
France	1.0	0.7	0.8	1.1	1.4	1.5
Italy	1.6	1.7	1.9	2.3	2.6	2.7

Index Of Real Exchange Rate(2000=100)[1]

	2015	2016	2017	2018	2019	2020
U.S.A.	93.0	94.0	94.5	94.8	95.0	95.2
U.K.	92.2	81.4	75.5	75.8	74.9	74.3
Japan	56.0	58.4	58.3	58.1	58.4	58.3
Germany	94.7	95.0	94.3	94.9	95.1	95.0
France	96.2	96.0	95.3	95.1	95.5	95.4
Italy	102.1	102.0	101.2	101.1	101.1	101.0

[1] The real exchange rate is the domestic price level relative to the foreign price level converted into domestic currency. A rise in the index implies an appreciation in the real exchange rate.

Nominal Exchange Rate
(Number of Units of Local Currency To $1)

	2015	2016	2017	2018	2019	2020
U.S.A.[1]	103.08	101.91	102.20	102.40	102.50	102.50
U.K.	1.53	1.35	1.30	1.29	1.30	1.32
Japan	121.11	108.61	112.18	114.10	112.00	112.50
Eurozone	0.90	0.90	0.88	0.85	0.86	0.85

[1] The series for the USA is a trade weighted index (1990=100); the series for the UK is $ per £

* Forecasts based on the Liverpool World Model