LIVERPOOL INVESTMENT LETTER

August 2018

Cardiff Business School

Ysgol Busnes Caerdydd

Julian Hodge Institute of Applied Macroeconomics

supported by

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

ISSN 0951-9262

Disclaimer

The Liverpool Investment Letter is a publication intended to provide information to investors and investment managers acting on their own initiative. No responsibility can be taken by Liverpool Macroeconomic Research Limited for decisions made by our readers. Whilst every attempt is made to ensure the accuracy of the contents, no guarantee of such accuracy is given.

LIVERPOOL INVESTMENT LETTER

August 2018

CONTENTS

	Page
The Public Finances Tell the Tale of the Steadily Improving Economy	3
The economy is growing steadily after a brief slowdown in the first quarter induced by a weather-related fall in construction. It is also rebalancing towards net exports as the Brexit devaluation has taken effect. Claims that Brexit has held down demand are not consistent with being so close to full employment. Once Brexit has occurred the capital stock will react and any deferred investment will be made up. The Brexit negotiations are currently in a cul-de-sac, with the Chequers proposals satisfying neither UK public opinion nor the EU. The UK could default to free trade under WTO rules or more likely there could be a move to a Canada-plus trade deal with the EU.	
Focus on Japan	6
Market Developments	8
Summary and Portfolio Recommendations	
Indicators and Market Analysis	
Foreign Exchange	10
Government Bond Markets	11
Major Equity Markets	12
Emerging Equity Markets	13
Commodity Markets	17
UK Forecast Detail	18
World Forecast Detail	20

THE PUBLIC FINANCES TELL THE TALE OF THE STEADILY IMPROVING ECONOMY

It is now ten years since the financial crisis struck, gaining ferocity in September 2008 with the collapse of Lehman. Recession began in 2008 with a fall in GDP of 0.5%, followed by a fall of 4.2% in 2009. It took three slow years to get GDP back to its pre-crisis 2007 level. By 2017 GDP had grown by an accumulated 11.2% above that level.

This recovery from the Great Recession has been accompanied by an 'austerity' programme conducted first by the Coalition government of 2010 and since the 2015 election by the Conservative government. Public debt as a percentage of GDP, excluding the Bank of England's monetary operations and also the various bank bailouts, peaked at 81% in 2015 and is now down to 76%. Public Sector Borrowing fell in the 2017/18 financial year to £39.4 billion, or 1.9% of GDP. This borrowing rate would lower the debt/GDP percentage by about 1 percentage point a year, as GDP growth would more than offset the effect of new borrowing. But on present minimalist Treasury policies the PSBR is also falling steadily as a percent of GDP. It follows that the UK is now moving, slowly but encouragingly, towards a target safe debt percentage of around 60%.

The latest PSBR figures up to end-June are more encouraging still. Compared with the same period last year borrowing over April–June was £5.4 billion lower, at £16.8 billion. This suggests that we are well on track for our previous full year forecast of £35 billion for 2018/19. This compares with the OBR Budget forecast of £39.5 billion. However, with employment still growing and inflation at around 2%, incomes will be growing steadily during this financial year and revenue has a strong response to such steady growth. Income tax and VAT both grow about 1.5–2 times as fast as money GDP. We have revised our forecast downwards to £30 billion. On unchanged policies our forecasts now suggest that the UK will reach the 60% public debt to GDP target within five years.

Other indicators suggest the economy is picking up steam again after the weak, weather-affected, first quarter. Best estimates of GDP growth for Q2 are around 0.4%, while the Purchasing Manager Indices are pointing to 0.5% in Q3. The latest PMIs for June are well above the neutral no-growth level of 50: manufacturing 54.4, services 55.1, and construction 53.1, continuing to recover from its weather-related level of 47 in March.

Meanwhile, retail sales in the three months to June surged by 2.1% on the previous quarter; they were up 2.8% on a year earlier, establishing that consumer spending is rising rather strongly again. Unemployment continued to fall, to 4.2% from 4.5% a year ago, and employment to rise, to 75.7% from 74.9% a year ago, defying the labour market's increasing tightness. Total weekly hours have risen 0.3% over the past year but are no longer rising each quarter; this suggests that productivity (per hour) may at last be recouping some of its past sluggishness as the labour market tightens.

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)

The economy is also rebalancing away from its excessive balance of payments deficits on current account. The quarterly deficit peaked at 6.7% of GDP in 2015 and averaged 5.9% of GDP in 2016. By Q4 2017 it had fallen to 3.8% of GDP. Most of this has been due to trade, with some coming from net foreign income. It is plainly due to the Brexit devaluation which has stimulated net exports at the expense of consumption demand.

For an economy so long in the tooth in its recovery from the shock of the Great Recession this is a good picture as we move into the age of applied AI and robotics, which supposedly threaten jobs but promise large gains in productivity. A strong labour market and a budget in good shape is a good background from which to cope with this promise and threat. Jobs can be relocated instead of lost for long periods and demand can be supported by fiscal expansion. As we have explained before, the opening of the economy to free trade and better regulation via Brexit should boost productivity and further strengthen the budget.

This is also a time to move monetary policy away from its 'emergency loose' settings before they trigger more serious distortions in asset markets and the economy; savers and small firms must once again be treated normally by the markets for borrowing, and the government and large firms must stop having their privileged access to ultra-cheap money. Besides if this is not done we will have lost the monetary policy tools to sustain the economy when the going gets difficult again.

The Issue of Investment

It is frequently asserted by Remainers that 'investment has been hit by Brexit uncertainty'. Could it be true that with no Brexit at all we would have had an investment boom? If we compare the situation with the US where there is now an investment boom on the back of Trump's tax cuts and

widespread deregulation, plus the shale oil bonanza, it is hard to believe. In any case, as we have seen, it could not have affected demand for GDP as that is at a maximum, given existing capacity and available labour. Had there improbably been such a boom, it would have led to a tightening of monetary policy as that by the Fed, to head off excess demand. So whatever 'Brexit uncertainty' has done, its effect on demand would have been nullified by monetary policy.

Could it have reduced the supply of GDP? Suppose for argument's sake investment had been cut by 5% by Brexit as some argue. What effect would this have on capital capacity? Capital is around 5 times GDP, and investment is around 15% of GDP; this implies that annual investment is about 3% of the capital stock. So a 5% fall in investment would reduce the capital stock by about 0.15%. Given that there is currently excess capital capacity, this would have virtually no effect on supply. All the numbers above can be argued about but no plausible adjustment would change this point.

It follows that Brexit cannot have had any non-trivial effect on GDP during this period.

But, of course, in the long run investment is part of the necessary process of growth in productivity. Once Brexit has occurred capital plans will be adjusted to meet the post-Brexit needs of the economy. Any delays due to previous uncertainty will be made up by acceleration later. The level of planned capital will be the same in the long run for any given Brexit outcome.

What matters therefore is the sort of Brexit we have. If it is one that goes to free trade and improves regulation, besides ending the subsidy of EU unskilled immigration, then the gains are considerable: they raise the marginal product of capital and so will raise capital and the investment path compared with no Brexit.

Of course. if it is a 'soft Brexit', continuing the status quo, these gains will not materialise and investment will not rise compared with no Brexit.

The State of Brexit Negotiations

This brings us to the astonishing developments in the Brexit negotiations, where Mrs. May finally threw off all subterfuge and pushed through the Chequers proposals under which the UK effectively stays in the Single Market for goods. This volte-face from her Mansion House speech is described by her with her typical respect for the English language as an 'evolution'.

These proposals cannot, even if agreed to by the EU in their present form, get through the House of Commons because of massive Brexiteer opposition both in the Commons and in the country. Furthermore, the EU will anyway insist on further 'evolution'. They may also be vetoed by the European Parliament.

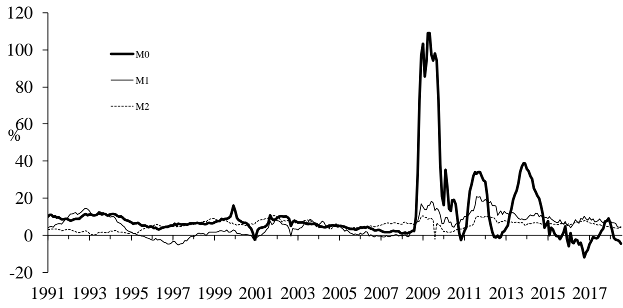
What then is likely to happen as we approach the end-March 2019 deadline for the end of Article 50 and our departure from the EU? It is possible that the talks with the EU on trade could break down totally, so that the final Withdrawal Agreement provides for no transition period and an immediate move to trade on WTO rules. The Agreement would then simply deal with all non-trade matters, where apparently both sides say that '80% is agreed'.

This route of WTO-based trade will achieve for the UK the gains available from Brexit, and indeed by avoiding the transition arrangements would bring them forward. The agri-food and manufacturing associations such as the CBI and the NFU, representing some 11% of the economy, claim this would lead to barriers from customs and standards' compatibility. But any such barriers would be illegal under WTO rules, since UK-EU standards are now identical, and customs procedures must be seamless as they are already. These industries need to get ready for the new world outside the EU and stop their endless lobbying to avoid it by such means as the Chequers proposals.

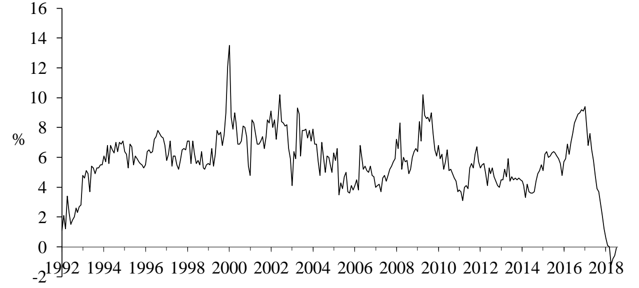
However, trade on WTO rules and no transition would be extremely difficult for the EU, as we have explained before: the tariff burden would fall on EU exporters and importers, there would be an immediate financial crisis for the Commission in the current budget period with the loss of the UK contribution, and world competition with EU sales in the UK would begin with no delay from transition. For this reason, it is likely that the EU would restart negotiations on trade after the false start of the Chequers proposals on the basis of the Canada+ concept which would allow tariff-free UK-EU trade in goods to continue.

We may well therefore find that the Withdrawal Agreement contains a commitment to negotiate a Canada+ trade deal on goods, together with the 'equivalence' Chequers proposals for the City that appear to be getting a near-welcome from the EU; and that it preserves the transition period on the basis that this deal will be translated into detail during this time. This would be an outcome that finally might well be agreed with some goodwill on both sides by both the UK and the European Parliaments.

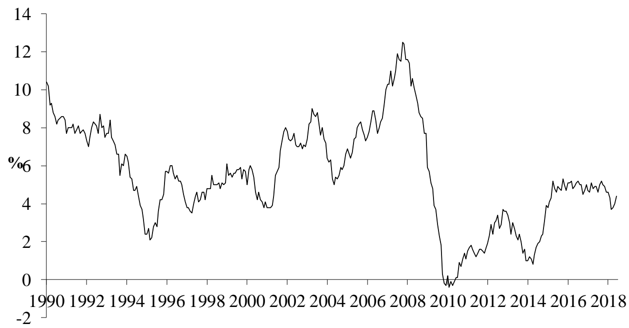
U.S.: Growth in Monetary Aggregates (Yr - on - Yr)



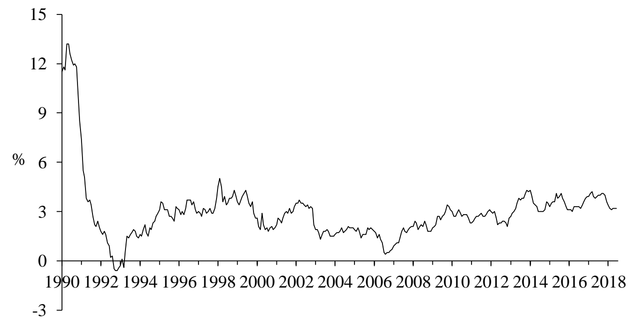
UK: Notes and Coins in Circulation Growth



Eurozone M3 Growth



Japan: Growth of M2+CD's



FOCUS ON JAPAN

Francesco Perugini

Japanese monetary policy: pursuing an unattainable inflation target at the expense of massive distortions to the market in savings and loans

At the end of last month, the Bank of Japan (BOJ) offered to buy an unlimited amount of bonds with five to 10 years left until maturity from financial institutions at a yield of 0.100%, seeking to tame a yield increase spurred by speculation it may adjust its ultra-loose monetary policy. The yield on the benchmark 10-year government bond, which the BOJ has pledged to guide close to zero percent as part of monetary easing, had risen as high as 0.105%. This is only the sixth time that the BOJ has offered to buy an unlimited amount of bonds since the introduction of the yield curve control policy, and the first instance where it has had to conduct two such operations in one week.

Observers said the BOJ is holding preliminary discussions on making changes to interest-rate targets and stock-buying techniques, with a focus on ways to make the massive stimulus program more sustainable. "Whatever explanation the BOJ makes, if it makes policy adjustments that will lead to higher rates, that will make market players aware that the BOJ is in the phase of withdrawal from its massive stimulus," said Takafumi Yamawaki, head of currency and fixed income research at J.P. Morgan Securities. However, other market players remained sceptical of a major policy change at the next BOJ meeting, or over the coming few months. They expect the BOJ to stop short of making immediate policy changes and to say instead that it will study ways to reduce side-effects of its prolonged easing, such as hits to banks' profits. "Perhaps the BOJ wanted to send a stronger message by offering to buy at a lower yield today, rather than at the same level as before, but this doesn't have any implications on what it plans to do in the near term," said Shinichiro Kadota, senior forex and rates strategist at Barclays.

Indeed, there were no major policy changes coming out at the last BOJ policy board meeting, held at the end of July. The BOJ decided to maintain the short-term interest rate target at minus 0.1% and a pledge to guide 10-year government bond yields around zero percent by a 7-2 vote. But BOJ added language in its policy statement to say that long-term interest rates may fluctuate depending on economic and price developments and that it would conduct its bond-buying program flexibly. "Speculation and perhaps fear prior to the BOJ decision was that policy tweaks could include allowing interest rates to go higher. But the actual outcome showed the BOJ maintaining its short- and long-term yield targets and also its JGB buying amount under new guidance," said Naomi Muguruma, senior market economist at Mitsubishi UFJ Morgan Stanley Securities. "It has become clear that the tweaks do not involve policy exits or interest rate hikes. JGBs are thus being bought back as a result", he added.

The BOJ has introduced aggressive and unconventional measures to pull its economy away from deflation since 2013. Quantitative and qualitative easing has been unprecedentedly large and has broadened to include purchases of private sector assets, such as equity ETFs, as well as government bonds. Since April 2016, the easing has been bolstered by yield curve control, which has in effect fixed interest rates from the overnight rate to the 10-year government bond yield at very close to zero. This amounts to a promise from the central bank to purchase any amount of government debt that is needed to keep long term bond yields at zero, even if inflation begins to rise. The BOJ pledged to buy around ¥80 trillion yen in JGBs per annum in order to keep benchmark yields stable at around 0%. However, over the past year, BOJ purchases have been well below this level, at about ¥44 trillion, increasing speculation the BOJ may soon abandon its nominal annual purchase target altogether — the BOJ reduced purchases of bonds due in more than 25 years by 7.6% percent last quarter from the previous three months.

However, even with large-scale purchases of bonds and stocks, Japanese inflationary pressures remain close to non-existent, with inflation just 0.2% in the year to June when fresh food and energy price movements are excluded, well below the 2% level targeted by the BOJ. Moreover, if the BOJ continues to stimulate the economy by keeping borrowing cheap it will distort the saving market and will continue to make life difficult for banks. "By keeping the yield curve artificially flat, the BOJ is reducing the profitability of the banking sector, with possibly severe long term consequences …it is also distorting the JGB market to such a level that it no longer carries economic information," saying Jonathan Allum, SMBC Nikko strategist. "If any evidence emerges of excessive side effects, policy changes should be considered,", echoed the chairman of Japanese Bankers Association, Koji Fujiwara.

It is time for monetary policy in Japan to be reassessed. With interest rates at the zero bound at all points in the yield structure, money has become a superior asset to bonds, since bonds have yield risk while money does not. This implies that the demand for money is essentially infinite since it can potentially replace all bond holdings. The problem that Japan faces from this policy is that printing more money will not stimulate demand or prices; furthermore, the savings market is highly distorted, with negative real interest rates. Increasingly both the US and soon the UK are trying to tackle this problem by raising interest rates gradually: at some point they should exceed the rate of inflation. Long

term rates on US bonds are now over 3% and so now do so but they need to rise further.

For Japan, interest rates need also to rise and the inflation target, which is infeasible, needs to be abandoned in favour of price stability which has been approximately what Japan has enjoyed for a long time now as an equilibrium. With interest rates higher real rates will rise and the savings market distortions can be eliminated.

MARKET DEVELOPMENTS

Trump's tariff wars appear to be producing some movement in the commercial policies of both China and the EU. This comes on top of movement over N Korea and NATO spending. This movement is good for the longer term world economy. Meanwhile world growth remains towards the top of the 3–4% range, which is healthy enough. Raw material markets remain slack with plenty of capacity available- a good basis for continued growth.

Table 1: Market Developments

	Market Levels		Prediction for Jul/Aug 2019	
	Jun 30	**Aug 3**	**Previous Letter**	**Current View**
Share Indices				
UK (FT 100)	7637	7659	10623	10654
US (S&P 500)	2718	2840	3164	3306
Germany (DAX 30)	12306	12616	19763	20261
Japan (Tokyo New)	1731	1743	2392	2408
Bond Yields (government				
UK	1.31	1.39	2.30	2.30
US	2.83	2.99	3.00	3.00
Germany	0.26	0.37	0.80	0.80
Japan	0.02	0.09	0.10	0.10
UK Index Linked	−1.59	−1.61	−1.00	−1.00
Exchange Rates				
UK ($ per £)	1.32	1.30	1.30	1.30
UK (trade weighted)	78.04	77.80	76.0	76.0
US (trade weighted)	101.44	100.91	102.5	102.5
Euro per $	0.86	0.86	0.86	0.86
Euro per £	1.13	1.12	1.12	1.12
Japan (Yen per $)	110.77	111.17	112.0	112.0
Short Term Interest Rates (3-month deposits)				
UK	0.65	0.80	0.60	0.60
US	2.38	2.34	2.50	2.50
Euro	−0.41	−0.34	−0.10	−0.10
Japan	0.05	0.10	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	2.0	35.20		42.70
US	1.99	2.4	2.1	11.90	0.14	18.53
Germany	3.30	1.8	1.8	57.00	0.46	64.36
Japan	1.90	1.1	1.1	36.00	−0.61	39.49
UK indexed[2]	−1.61		2.1	1.00		1.40
Hong Kong[3]	2.60	6.0	2.1	−12.00	0.14	−1.16
Malaysia	3.30	5.4	2.1	48.00	0.14	59.94
Singapore	3.50	2.9	2.1	11.00	0.14	19.64
India	1.40	8.1	2.1	23.00	0.14	34.74
Korea	1.10	2.0	2.1	−31.00	0.14	−25.66
Indonesia	2.20	5.5	2.1	26.00	0.14	35.94
Taiwan	2.80	2.5	2.1	12.00	0.14	19.54
Thailand	3.20	3.4	2.1	22.00	0.14	30.84

Bonds: Contribution to £ yield of:

	Redemption Yield	Changing Nominal Rates	Currency	Total
UK	1.39	−9.10		−7.71
US	2.99	−0.10	0.14	3.03
Germany	0.37	−4.40	0.46	−3.47
Japan	0.09	−0.10	−0.61	−0.62

Deposits: Contribution to £ yield of:

	Deposit Yield	Currency	Total
UK	0.80		0.80
US	2.34	0.14	2.48
Euro	−0.34	0.46	0.12
Japan	0.10	−0.61	−0.51

[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.

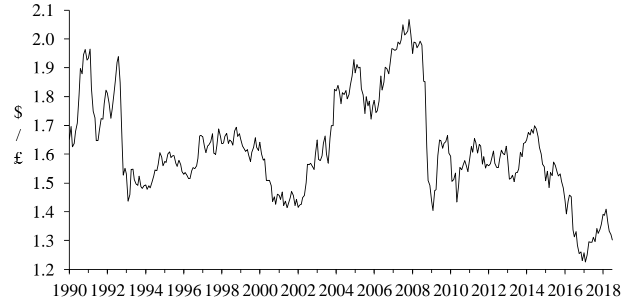
Table 3: Portfolio(%)

	Sterling Based Investor		Dollar Based Investor		Euro Based Investor	
	July Letter	Current View	July Letter	Current View	July 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)	-	-	-	-	-	-

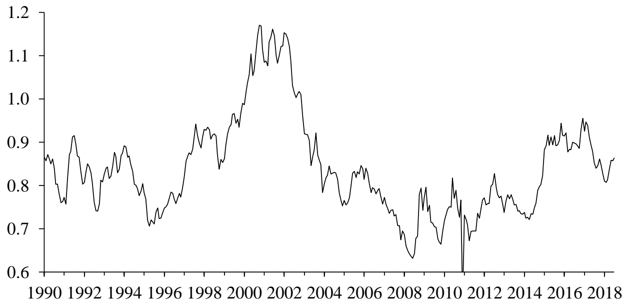
INDICATORS AND MARKET ANALYSIS FOREIGN EXCHANGE MARKETS

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

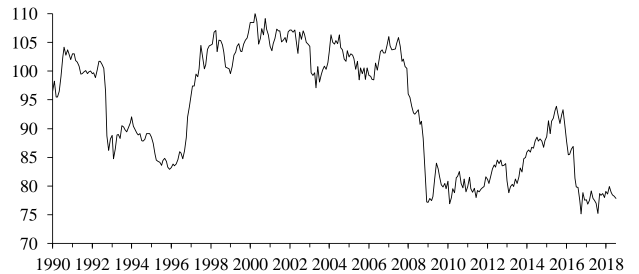
UK: Dollars Per Pound Sterling



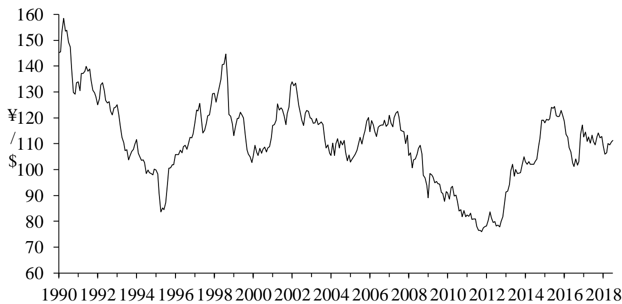
Euro per US dollar



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



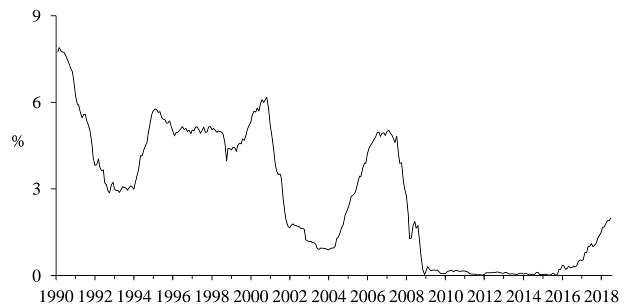
Japan : Yen Per U.S. Dollar



GOVERNMENT BOND MARKETS

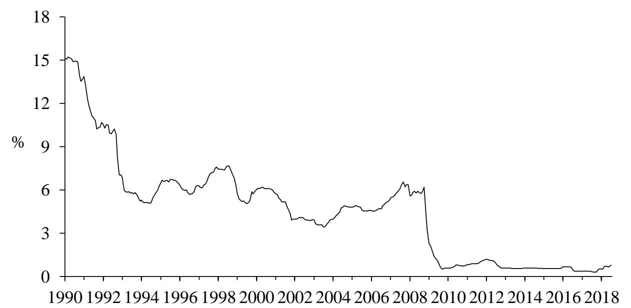
U.S.: Yield on Long-Term Government Bonds

U.S. : 3-Month Treasury Bill

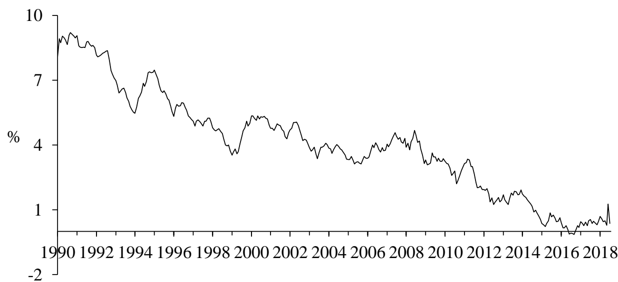


U.K.: Yield on Long-Term Government Bonds

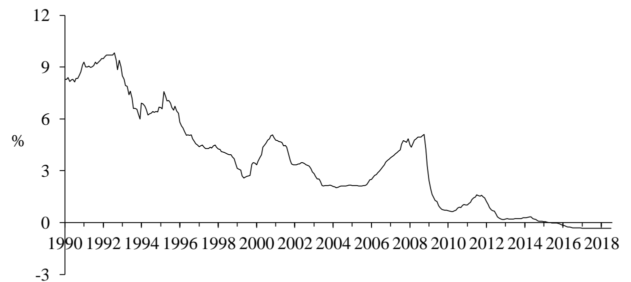
U.K. : 3-Month Certificate of Deposit Rate



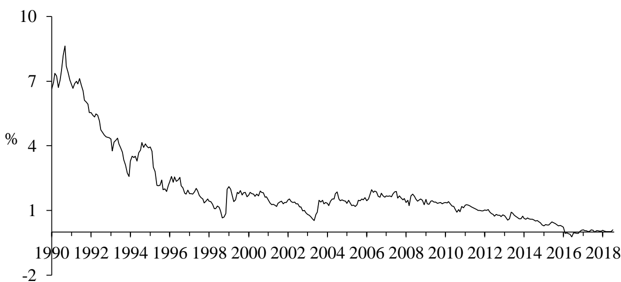
Germany: Yield on Public Authority Bonds



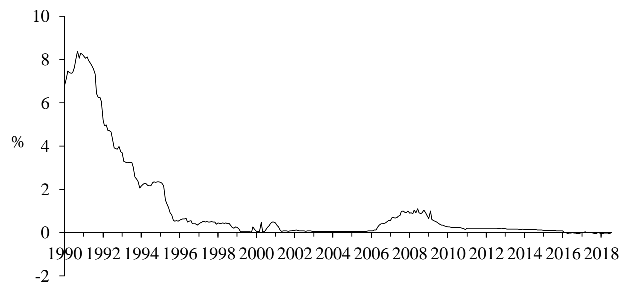
Germany : 3-Month Interbank Deposit Rate



Japan: Yield on Long-Term Government Bonds

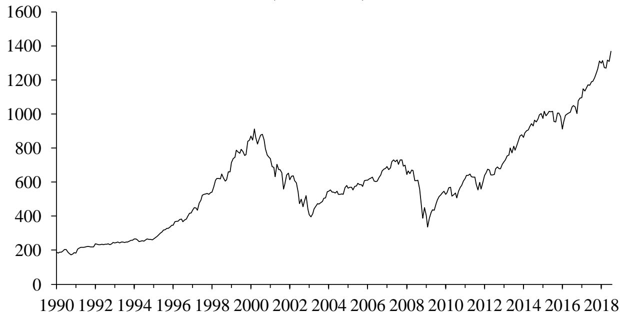


Japan : 3-Month Money Market Rate

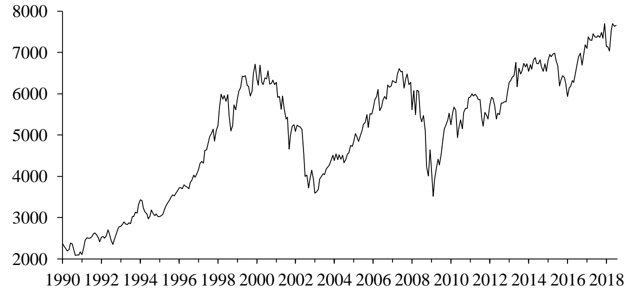


MAJOR EQUITY MARKETS

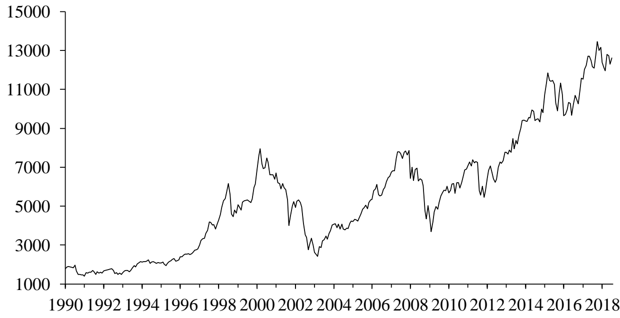
U.S. : S & P 400 Industrial
(1985=100)



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



Germany : DAX 30



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

EMERGING MARKETS

Anupam Rastogi

India

The Indian economy which is over $2 trillion now, has surpassed France's economy to become the world's sixth-largest economy. It is expected to grow 7.6% in the fiscal year ending in March 2019 and approximately 8% next year. India will remain the fastest-growing major economy this year supported by increased government spending ahead of next year's general election, but rising oil prices pose the biggest downside risk. Along with the national integrated indirect tax structure, reform measures related to bankruptcy (Insolvency and Bankruptcy Code) and the housing sector (Real Estate Regulatory Authority) will help in taking the GDP growth beyond 8% in coming years. The reformed tax structure of GST will also bring down inflation.

India's central bank has raised interest rates by 25 basis points for the second time in a row to rein in inflation and stem capital outflows. With inflation running well above the central bank's medium-term target of 4%, the central bank's hand was forced.

The latest Reuters consensus was for India retail inflation to average 4.9% in the year ending March 2019, up from 4.7% predicted just three months ago.

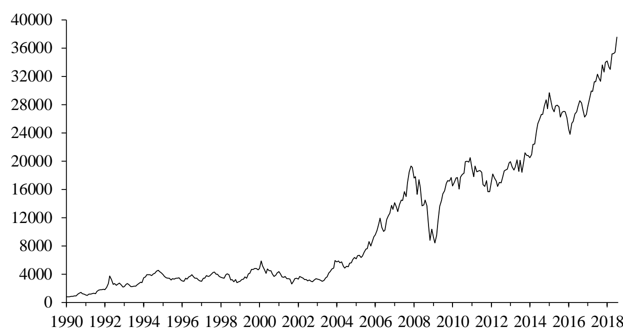
Slowing exports and increase in imports (an average annual increase of 1.6% from 2014–15 to 2017–18) has pushed the trade deficit from $137 billion in 2014–15 to $162 billion in 2017–18, the highest since 2012-13. India's trade openness — the sum of exports and imports to GDP — was 27% in 2016, according to the IMF database, compared to an all-time high of 43% in 2012.

India's foreign exchange reserves are likely to drop below the $400 billion mark for the first time since November as the central bank is defending rupee not to fall below Rs 70 to a US dollar. The rupee has lost about 7% against the dollar so far this year.

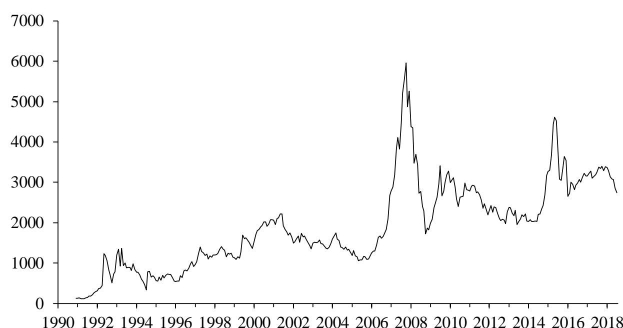
FIIs pulled out a massive $7 billion from the Indian financial markets during the first half of 2018 — the steepest outflow so far. The capital outflows were largely concentrated in the Indian debt markets, accounting for nearly 86% of the total outflows. In the equities segment, exchange-traded funds (ETFs) witnessed higher outflows. But, Indian shares surged to a series of all-time highs in the last week of July, fuelled by soaring profits and the country's relative isolation from global trade. The country's benchmark S&P BSE Sensex has achieved year-to-date growth of 8.4%.

Per-share earnings for companies in MSCI's India index should rise 28% in 2018, far outpacing the roughly 15% growth for emerging markets in Asia as a whole.

India: BSE Sensitive



China: SSE Composite Index



	16–17	17–18	18–19	19–20	20-21
GDP (%p.a.)	7.1	6.5	7.6	8.1	8.2
WPI (%p.a.)	4.5	3.5	4.5	4.6	4.2
Current A/c(US$ bill.)	-24.0	-26.0	-36.0	-44.0	-46.0
Rs./$(nom.)	68.2	65.0	67.5	67.5	67.5

China

China expanded 6.7% in the second quarter down from the previous quarter's 6.8%. China's growth was to cool down a little after Beijing started tightening controls on bank lending last year to rein in surging debt. Economic activity is expected to decline further as global demand for Chinese exports weakens and lending controls weigh on construction and investment: major contributors to growth. A rough estimate is that the trade fight could shave 0.2 to 0.5 percentage points off China's GDP growth in the coming 12 months. Therefore, China may take aggressive stimulus steps to keep the economy growing. Chinese leaders want to encourage self-sustaining growth driven by domestic consumption and reduce reliance on exports and investment. But, consumer spending has risen more slowly than planned, leaving economic growth dependent on debt-supported investment. IMF has warned China not to go for excessive debt levels leading to an "abrupt adjustment".

China's consumer price index (CPI), the main gauge of inflation, grew mildly in the first six months and stayed below the annual target of 2%, well within the annual target of around 3%. An annual inflation rate of about 2% is

attributed to stable demand and slower monetary supply growth and leaves considerable room for monetary policy manoeuvring.

For the year overall, a current account surplus of $100 billion is expected. It is less than 1% of China's gross economic product. This is the smallest surplus since 1995.

Germany did not allow China to buy two strategically important industrial assets arguing that the assets are crucial to Western economic success. The state-owned bank KfW had acquired a 20% stake in German transmission system operator 50Hertz Transmission GmbH's holding company, which was targeted by State Grid Corporation of China.

The Chinese yuan is still "fairly valued" despite recent declines against the dollar according to an International Monetary Fund official. It is believed that China is letting the yuan slide primarily to combat a slackening economy. At 6.78 renminbi per dollar, the currency has lost 6.9% in three months, and isn't far off one-year lows. The sell-off in China's stocks and currency is reviving painful memories of the summer of 2015. If anything, things look more worrying this time around.

	16	17	18	19	20
GDP (%p.a.)	6.5	6.9	6.5	6.0	5.6
Inflation (%p.a.)	2.0	2.2	1.5	2.0	2.2
Trade Balance(US$ bill.)	510	400	380	350	300
Rmb/$(nom.)	6.7	6.6	6.6	6.7	6.4

South Korea

South Korea's economic expansion met expectations in the second quarter as exports held up despite global trade friction. Semiconductor shipments led the way while domestic demand showed weakness. South Korea is likely to grow 3% in the current year. This is the result of stocking up of semiconductors before the tariff war between the US and China takes an ugly turn. A job crisis is weighing on the economy, which could spill over into weak investment in business facilities.

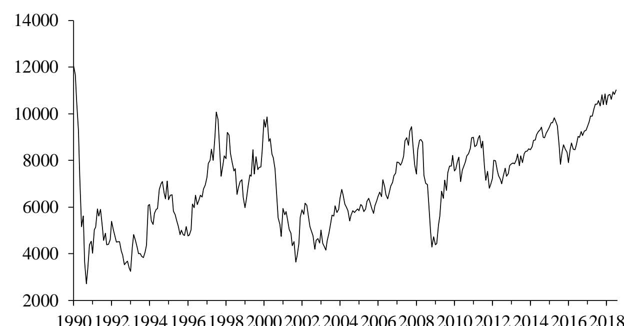
Domestic consumption may revive if the government's planned 4 trillion won ($3.52 billion) of fiscal spending takes effect. The extra spending was designed to tackle the job crisis via an expansionary fiscal policy included in the existing budget.

In the first six months of 2018, consumer prices went up 1.4%. The consumer price index rose 1.0% in 2016 and 1.9% in 2017, lagging behind an inflation target of 2%. The country's inflation will start to pick up in the second half of this year as the effect of rising oil prices feed into the inflation statistics.

South Korea posted the biggest trade surplus of industrial parts and materials in the first half of 2018. Exports account for about half of the export-driven economy. However, South Korea is expected to be a big loser in a global trade conflict because it is heavily integrated into global supply chains — importing raw materials and components from other parts of the world before combining them in their own factories into new products and then selling them abroad.

Korea: Composite Index

Taiwan: Weighted TAIEX Price Index



	16	17	18	19	20
GDP (%p.a.)	2.8	3.1	3.0	2.8	2.6
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	1100	1120	1050

Taiwan

The Taiwan Institute of Economic Research (TIER), forecast for 2018 is 2.53% in the wake of a recovery in the global economy, which has boosted global demand and pushed up prices of commodities, in particular, international crude oil. This is the result of strong showing in the country's exports in the first half of this year, when outbound sales grew 10.9% from a year earlier to US$164 billion.

Taiwan's exports are expected to grow 4.3% from a year earlier in 2018, while the country's imports are expected to rise 4.45%. Private consumption for 2018 is expected to rise 2.30% from a year earlier. This would have kept the economy humming in 2018. But, the trade war between China and the US can upset Taiwan's economic growth.

In the first half of the year, Taiwan's exports rose 10.9% from a year earlier to US$163.8 billion, and imports grew 10.8% to US$139.3 billion. The resulting trade surplus was up 11.5% at US$25.5 billion. Taiwan's foreign trade surplus

decreased in June from a year ago, as imports grew faster than exports.

The U.S. dollar breached the NT$30.70 mark against the Taiwan dollar.

As the yuan is likely to continue to depreciate against the U.S. dollar, the dollar is likely to move even higher against the Taiwan dollar.

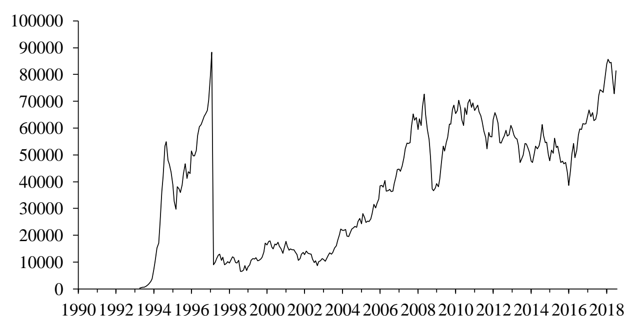
	16	17	18	19	20
GDP (%p.a.)	1.4	2.6	2.6	2.6	2.3
Inflation (%p.a.)	1.0	0.6	1.5	1.3	1.2
Current A/c(US$ bill.)	64.0	68.0	68.0	70.0	71.0
NT$/$(nom.)	32.5	31.0	29.8	31.0	31.0

Brazil

The Brazilian government and Brazil's central bank expect gross domestic product (GDP) growth this year to be 1.6%. We maintain our forecast of GDP growth rate of 1.5% in 2018 and rising to 2.5% next year.

The central bank expects inflation to rise as the economy deteriorated in the second quarter. As for consumer prices, the bank forecast inflation ending 2018 at 4.2%, up from the 3.8% forecast in March but still below the 4.5% target. We maintain our forecast of inflation rate to be 4.4% in 2018.

Brazil held the benchmark Selic rate at 6.50% at an all-time low even after inflation grew sharply. It is widely believed that the spike in inflation was caused by the trucker's strike leading to shortage of products and it would not lead to inflation spiraling out of control. However, elections are around the corner and that would keep pressure on prices.



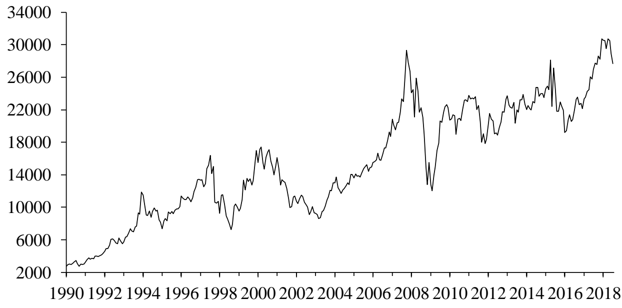
In the first half of the year, the trade balance was positive at US$ 30 billion, approximately 17% lower than the surplus of US$ 36.2 billion for the same period of 2017. The central bank expects the current-account deficit widening to $20 billion by year-end, with FDI totalling $67.5 billion.

Brazil's currency is under pressure as global investors move away from emerging markets as U.S. Federal Board raises interest rates. The Brazilian real has depreciated about 15% year to date and may depreciate further. However, the real may gain support if major parties support the right-wing candidate, Geraldo Alckmin. He is seen as a market-friendly candidate, advocating for a decrease in governmental interference in the private-sector economy, which potentially could boost Brazil's investment appeal.

	16	17	18	19	20
GDP (%p.a.)	-3.5	1.0	1.5	2.5	3.0
Inflation (%p.a.)	6.3	3.0	4.4	4.5	4.2
Current A/c(US$ bill.)	-28.0	-4.0	-20.0	-18.0	-18.5
Real/$(nom.)	3.5	3.2	3.7	3.6	3.4

Other Emerging Markets

Hong Kong: FT-Actuaries

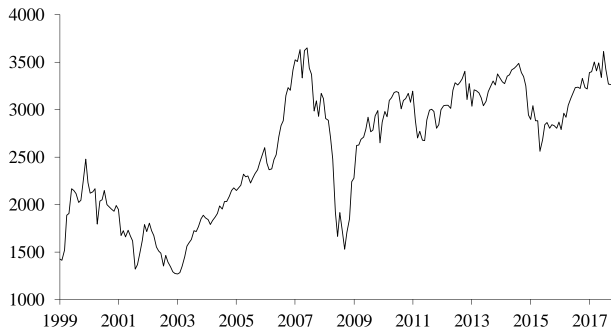


Indonesia: Jakarta Composite

Malaysia: FT-Actuaries (US$ Index)

Thailand: Composite Index

Singapore: Straits Times Index

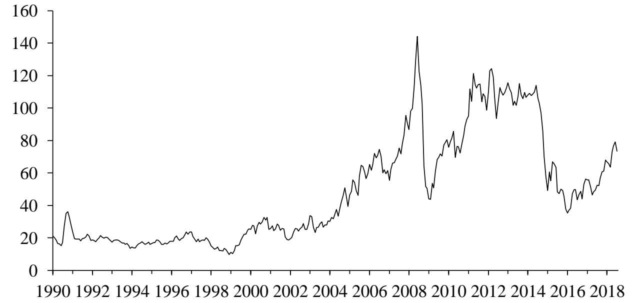


Philippines: Manila Composite

COMMODITY MARKETS

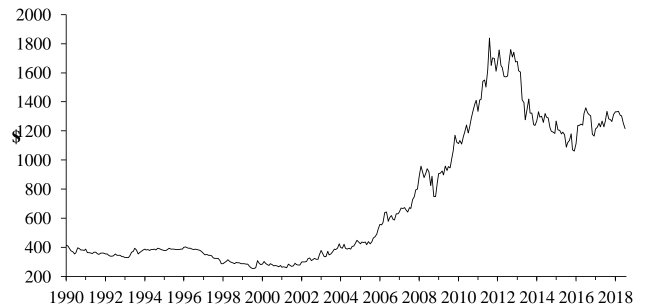
Commodity Price Index (Dollar)
(Economist, 2000=100)

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 percentage 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