

LIVERPOOL INVESTMENT LETTER

October 2016



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, Bruce Webb[†], John Wilmot.

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

[†] 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 Julian Hodge Bank. 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. This research has been given especial relevance by the ongoing discussions on the extra powers regularly requested by the European Union and also by the recent crisis in the eurozone.

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 Jane 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 Bruce Webb 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

October 2016

CONTENTS

	Page
Ending the Policy Uncertainty Over Brexit	3
<p>The UK government has decided on a clean Brexit. This should bring policy uncertainty towards an end. The main issue left is how determinedly the UK moves towards unilateral free trade regardless of the EU's or other countries' demands that could distract it into retaining trade barriers in retaliation. The optimal Brexit policies are unilateral free trade, reducing prices and creating competition, UK based regulation designed for a competitive economy, and regaining control of unskilled immigration.</p>	
Focus on Japan	6
Market Developments Summary and Portfolio Recommendations	8
Indicators and Market Analysis	
Foreign Exchange	10
Government Bond Markets	11
Major Equity Markets	12
Emerging Equity Markets	13
Commodity Markets	18
UK Forecast Detail	19
World Forecast Detail	21

ENDING THE POLICY UNCERTAINTY OVER BREXIT

Now that we have had Theresa May's opening speech to the Conservative Party Conference, it is clear that the government has finally made up its mind to leave the EU straightforwardly: that is, to leave the Single Market, the Customs Union and all other EU budget and legal mechanisms. The repeal of the European Communities 1972 Act will end all UK dependence on EU law and other authority.

There has been much lobbying by manufacturing industry and the City for an 'EU-Lite' whereby the UK would be like Norway in the European Economic Area. But this would have clashed with the referendum vote, since it implies that the UK accepts free migration from the EU, is subject to virtually all the Single Market regulations, and pays much a still large budget contribution. Not merely inconsistent with the vote, it would also impose all the same costs of EU protectionism, regulations and budget: this makes it highly suboptimal economically.

The question now is exactly what trading relationship the UK will have with the EU, after it becomes a sovereign nation outside the EU. It is possible that once it is quite clear the UK is going, many of the threats made by, for example, Eastern Europe to veto a trade deal that does not include free migration will melt away and a business-like attitude will take over. This might lead to a free trade arrangement in which neither side levies tariffs on the other.

However, no-one can know what the EU and its 27 countries can agree on. It is possible that no agreement can be reached in which case both sides may keep their tariffs. Non-tariff barriers are not an issue because neither side is likely to levy anti-dumping duties and product regulations are exactly satisfied by both sides. In fact the average tariff is low at around 2–3% depending on how it is weighted (cars have a 10% tariff and trucks 24%; these are probably the most awkward.) If no agreement can be reached the optimal policy for the UK is simply to adopt unilaterally zero tariffs, since this will lower consumer prices and so help the economy. However this action may be delayed to 'encourage' the EU to come to a zero tariff deal.

As for the rest of the world the UK government has clearly in mind the pursuit of free trade deals far and wide. Again, the optimal policy is simply to go to unilateral free trade on Brexit, since this immediately brings down consumer prices. As a country we do not care what other countries levy in the way of tariffs and other barriers because all these do is switch demand between us as a source of the product and other countries as the source: total demand is unchanged or close to unchanged, which means that the world prices of our products remain the same. We therefore sell the same in total but simply divert it to other markets.

Table 1: Summary of Forecast

	2014	2015	2016	2017	2018	2019	2020
GDP Growth ¹	2.9	2.2	2.3	2.5	2.7	2.8	3.2
Inflation CPI	1.7	0.2	1.2	1.9	3.1	3.0	2.1
Wage Growth	1.2	2.4	2.9	3.9	6.2	6.2	4.6
Unemployment (Mill.) ²	1.1	0.8	0.7	0.8	0.8	0.7	0.7
Exchange Rate ³	87.1	91.6	80.4	76.4	75.1	74.6	74.4
3 Month Interest Rate	0.6	0.6	0.4	1.0	2.5	3.5	3.0
5 Year Interest Rate	1.8	1.3	0.9	1.2	1.5	2.5	3.0
Current Balance (£bn)	-99.9	-103.7	-89.0	-77.7	-65.1	-43.2	-32.6
PSBR (£bn)	83.3	71.2	69.0	54.7	38.7	28.3	13.0

¹Expenditure estimate at factor cost

²U.K. Wholly unemployed excluding school leavers (new basis)

³Sterling effective exchange rate, Bank of England Index (2005 = 100)

If successful, trade agreements across the world would get us close to (optimal) unilateral free trade, while also 'opening up' many other markets. The latter gives us no benefits for the reason above, but the gain comes for getting rid of our own trade barriers. The only worry about this generalised search for free trade agreements is that it becomes bogged down in demands from other countries for more than free trade, as exemplified by the US TTIP, which asks for a wide range of rights for US corporations in other countries, most notoriously for 'corporate courts' above the law of the land. Such demands, rather similar to the EU intrusion just voted down, would be inadmissible and would derail the movement to unilateral free trade.

Hence our advice to Liam Fox is to do a few 'easy' and undemanding free trade deals and then simply default to unilateral free trade for everyone else.

A last question concerns the City which has made much noise about possible loss of 'EU passporting rights'. A number of City firms are concerned about what the EU might do in the way of financial protectionism, which is not so actively policed by the WTO. Euro-bond clearing has been mentioned as something that might be denied to the City. Then we have 'passporting' and 'equivalence', where it is argued that the EU might deny UK retail firms the financial passport and argue that there was not UK 'equivalence' of regulations so that wholesale firms too could not sell into EU financial centres. All these actions are discriminative policies with respect to financial trade which operates no differently in theory from any other sort of trade! All the arguments about EU protection as self-harm with no long run effect on UK output of these financial services apply here too just as above to goods trade. Again there would be some short run transition costs all round to UK and EU firms which add to the discouragement to the EU to undertake such actions. But the long run (and hence the key and dominant) costs are for the EU and nil for the UK.

There is however more to the matter in this case from the EU's viewpoint which should discourage it from going down this route. The EU generally prizes capital mobility into and out of the EU: as an objective it is enshrined in the

Maastricht Treaty. The reason lies in the management of monetary union. The gains from monetary union come from the reduction in currency and financial barriers to trade and investment. Plainly capital mobility makes these as low as possible. This is an additional reason we are unlikely to see such financial protectionism.

We see from this that all the vigorous City pushing of these issues as reasons for staying with the EEA-status quo option is simply the prosecution of vested interests; it has nothing to do with the UK's national interest. We may also note in passing that the City, like other service industries in the UK, will gain massively from the lower cost base created by a full Brexit through lower prices and taxation; getting a 'deal' for the Single Market at the expense of a full Brexit with no deal would cost them dearly.

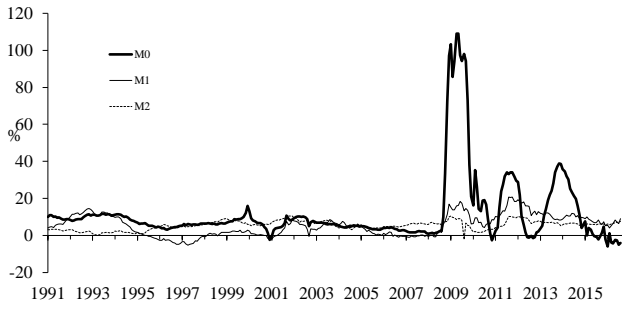
Yet a further reason is that such behaviour against the conduct expected of members of the Basel club of central bankers, the Bank for International Settlements, which is the issuer of international regulations that central banks are supposed to follow uniformly. Each central bank and associated financial regulator is supposed to adhere to a 'level playing field' across the main world markets. The reason for this is that if financial crisis hits, central banks have to cooperate over banks' cross-border assets and liabilities. Protectionism of one country's banks interferes

with this cooperation. Therefore the ideal of free capital mobility and common non-discriminatory regulations is striven for. In effect the BIS acts as an adjunct of the WTO for financial affairs — and indeed the Governor of the Bank of England, Mark Carney is chair of the Financial Stability Board, the arm of the BIS charged with overseeing actions by the world's central banks to promote financial stability.

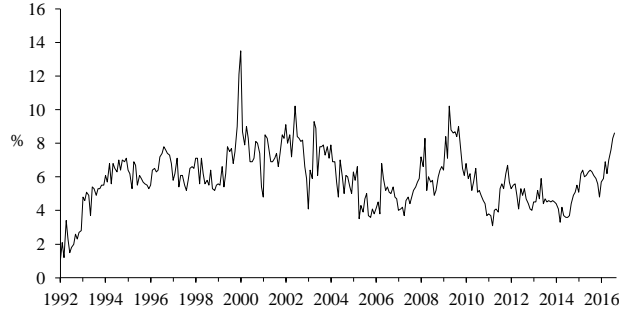
However, suppose that after all some EU protection against the City did occur and that had the effects in diverting financial product demand away from City firms to their competitors in the EU, would they affect UK financial product output? No! By the same arguments as above for goods, there would simply be a redistribution of UK exports from the EU to the rest of the world where they would replace EU exports. One could go on with more examples. The essential point is that in countries doing it protectionism is self-harm arising either from intellectual confusion (associated with 'mercantilist' ideas) or from the lobbying of vested interest.

Summing up, the UK has now reached the cross roads where it has decided to leave the EU cleanly. Now it must make sure that this path leads to unilateral free trade and not to some half-hearted UK protectionist substitute for the EU's damaging protectionism.

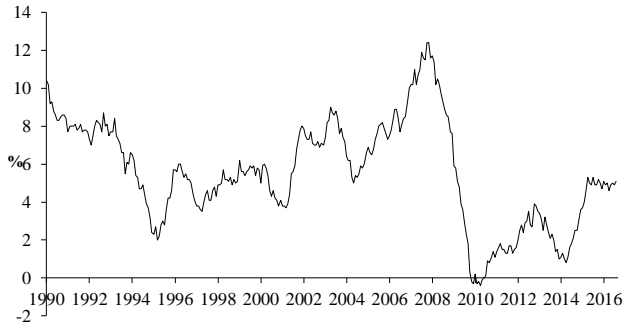
U.S.: Growth in Monetary Aggregates (Yr - on - Yr)



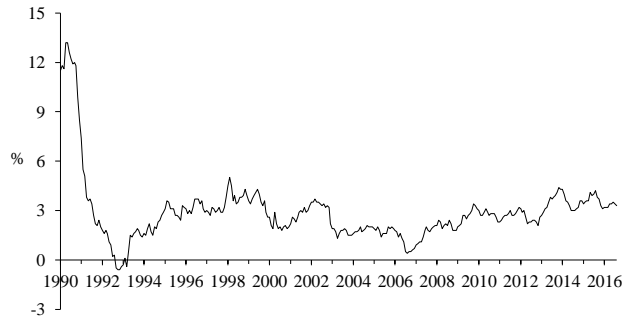
UK: Notes and Coins in Circulation Growth



Eurozone M3 Growth



Japan: Growth of M2+CD's



FOCUS ON JAPAN

Francesco Perugini

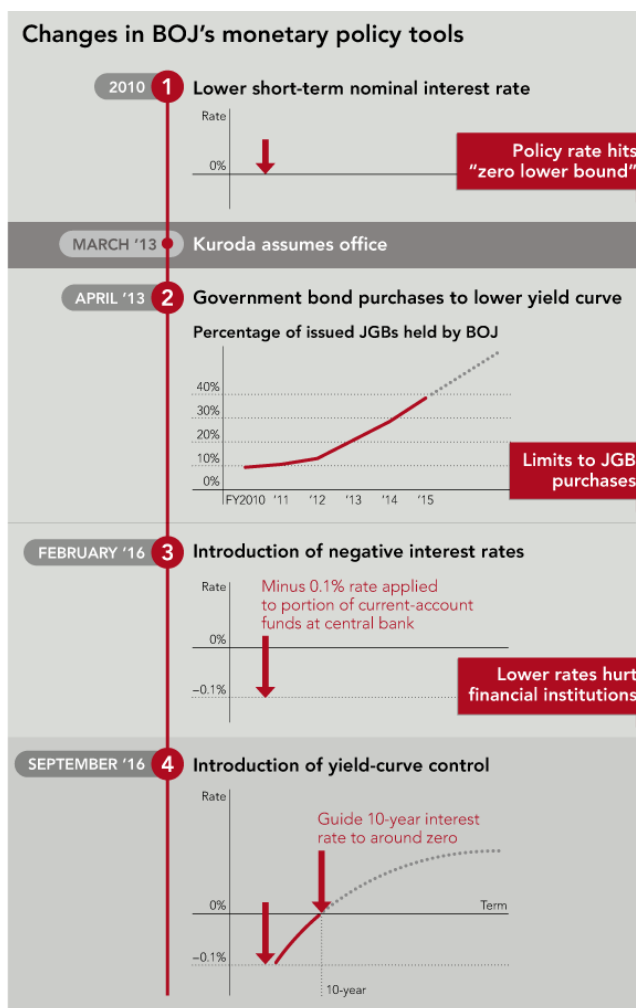
Bank of Japan Changes Monetary Policy Framework

The Bank of Japan (BOJ) announced its latest policy change at its September meeting. They have decided to adopt a target for long-term interest rates in an effort to meet their 2% inflation goal as soon as possible. BOJ officials say they will abandon their base money target — an annual increase of ¥80 trillion — and instead set what they call “yield curve control”. That involves central-bank purchases of long-term government bonds to keep 10-year Japanese government bonds (JGBs) around current levels of 0%. BOJ policymakers also noted that the pace of increase in the monetary base may fluctuate in the short run depending on market conditions. In addition, in the short term, the BOJ will still apply a negative interest rate of minus 0.1% to some of the current accounts held by financial institutions at the central bank.

According to some economists, the decision to introduce a new policy framework was made partly out of necessity. They see the shift as a tacit admission by the BOJ that it has reached the limits of its JGBs purchases — the BOJ now owns more than a third of outstanding JGBs, with the pace of its buying draining the market of supply. “It was obvious that the central bank was going to run out of JGBs to buy,” said Shuichi Ohsaki, chief Japan rates strategist at Bank of America Merrill Lynch.

Others instead believe that a key reason for BOJ’s paradigm change is to help Japanese banks and other financial services firms withstand the impact of negative short-term interest rates. Negative interest rates have pulled down bond yields all along the yield curve, and have resulted in a relatively flat yield curve. But the big problem is that bank profits take a real hit when yield curves are flat. Banks are much more profitable when yield curves are steep. And the last thing that Prime Minister Shinzo Abe and Kuroda need is weak banks. By anchoring the 10-year yield at “around 0%” and keeping it from sinking deeper into negative territory, the BOJ is attempting to steepen the yield curve and that should boost Japanese banks’ margins — banks rely on deposits for 60% of their funding, so the small spread between deposit rates and lending rates has sent lending growth to its lowest level since 2013. Also, this targeting of bond yields may allow the BOJ to take short-term interest rates further into negative territory.

However, as noted by George Magnus, former Chief Economist at UBS Investment Bank, “we should remember that the fundamentals are the really important driver here. Unless the BOJ or the government can engineer a sustainable rise in real GDP growth and inflation, investors will simply buy longer-dated bonds again, and the yield curve will get flatter — the opposite of what the BOJ intends”.



What matters to central bank watchers now is that the BOJ has repeatedly come up with unconventional and at times unpredictable tools to try and achieve the seemingly impossible. When the central bank was left with no more room to cut nominal short-term interest rates after hitting the “zero lower bound,” it resorted to aggressive government bond purchases to push down interest rates across all periods. When bond purchases were said to be reaching their limit, the BOJ brought in negative interest rates. That was something observers thought it would not be able to do because it would appear to undercut its asset purchasing program. Kuroda had also made it clear in speeches that he did not intend to adopt such measures. This time around, the BOJ is challenging monetary theory head on. For instance, “it is puzzling that the BOJ retained its ¥80 trillion quantity target for JGB purchases, as one of these two targets is redundant” said former Fed Governor Ben Bernanke.

Now all eyes are on the new policy framework and whether it will be the magic bullet that enables the BOJ to reach the 2% inflation target. “The central bank faces clear doubts over whether it has the tools to boost the real economy and

deliver on the inflation target,” ratings agency Fitch Ratings said in a recent report. Indeed, since Kuroda took office early in March 2013, he has failed to create even moderate levels of inflation. Consumer prices, excluding fresh food, fell 0.5% over the year to July. Kuroda argued the failure to hit the inflation target so far is because of three shocks: falling oil prices since summer 2014, weakness in demand after raising Japan’s consumption tax in April 2014, and a slowdown in emerging markets from summer 2015. Those shocks pushed down actual inflation, and because Japanese consumers are used to sluggish prices, their expectations of future inflation followed actual prices down. That has dampened their wage demands and created a self-fulfilling prophecy. Kuroda has acknowledged it is taking more time than expected for to beat deflation and suggested that the BOJ may need to do more to push up prices.

It’s a far cry from the fanfare that greeted Kuroda, now 71, in 2013. Japan was so eager for him to take the helm that stocks soared and the yen slid when his predecessor decided to quit weeks early. With less than 19 months to go, he faces the prospect, like Masaaki Shirakawa before him, of failing to reach his inflation goal. No BOJ governor has been tapped for a second five-year term since the 1960s, and the die-hard reflationists who had backed Kuroda’s appointment by Prime Minister Shinzo Abe are now shifting against him. “I think that’s a bad sign,” said Yuji Shimanaka, chief economist at Mitsubishi UFJ Morgan Stanley Securities Co. in Tokyo. “This is tightening — I’m very disappointed.”

MARKET DEVELOPMENTS

Brexit properly carried out — as unilateral free trade, UK business-friendly regulation and restored control over unskilled immigration — proffers the biggest supply side reform since the Thatcher era. It will unleash stronger growth in employment and productivity. Furthermore it will

rebalance the economy, raising inflation towards its target and eliminating the current account deficit on the balance of payments. It improves the prospects for UK equities. To the extent that it leads to wider free trade globally it will also improve the world trading environment.

Table 1: Market Developments

	Market Levels		Prediction for Sep/Oct 2017	
	Sep 2	Oct 3	Previous Letter View	Current View
Share Indices				
UK (FT 100)	6895	6984	11273	11418
US (S&P 500)	2180	2161	2681	2658
Germany (DAX 30)	10683	10511	16548	16282
Japan (Tokyo New)	1341	1331	1888	1874
Bond Yields (government)				
UK	0.73	0.74	1.20	1.20
US	1.61	1.62	2.80	2.80
Germany	-0.11	-0.16	0.70	0.70
Japan	-0.04	-0.07	0.10	0.10
UK Index Linked	-1.76	-1.87	0.10	0.10
Exchange Rates				
UK (\$ per £)	1.33	1.28	1.40	1.40
UK (trade weighted)	79.76	77.52	77.30	77.30
US (trade weighted)	99.83	99.36	102.0	102.0
Euro per \$	0.90	0.89	0.93	0.93
Euro per £	1.19	1.14	1.30	1.30
Japan (Yen per \$)	104.2	101.6	112.0	112.0
Short Term Interest Rates (3-month deposits)				
UK	0.37	0.39	1.00	1.00
US	0.85	0.85	1.30	1.30
Euro	-0.34	-0.36	-0.20	-0.20
Japan	-0.25	-0.25	0.00	0.00

Table 2: Prospective Yields¹

Equities: Contribution to £ yield of:						
	Dividend Yield	Real Growth	Inflation	Changing Dividend Yield	Currency	Total
UK	3.40	2.6	1.9	59.00		66.90
US	1.90	2.5	1.5	19.00	-9.06	15.84
Germany	2.60	1.8	1.1	52.00	-13.78	43.72
Japan	1.70	1.2	0.6	39.00	-20.21	22.29
UK indexed ²	-1.39		1.5	2.00		2.03
Hong Kong ³	2.60	6.0	1.5	-5.00	-9.06	-3.96
Malaysia	3.30	5.4	1.5	55.00	-9.06	56.14
Singapore	3.50	3.4	1.5	23.00	-9.06	22.34
India	1.40	7.5	1.5	24.00	-9.06	25.34
Korea	1.10	3.0	1.5	-19.00	-9.06	-22.46
Indonesia	2.20	5.3	1.5	31.00	-9.06	30.94
Taiwan	2.80	3.4	1.5	14.00	-9.06	12.64
Thailand	3.20	4.0	1.5	35.00	-9.06	34.64
Bonds: Contribution to £ yield of:						
	Redemption Yield	Changing Nominal Rates	Currency	Total		
UK	0.74	-4.60				-3.86
US	1.62	-11.80	-9.06			-19.24
Germany	-0.16	-8.60	-13.78			-22.54
Japan	-0.07	-1.70	-20.21			-21.98
Deposits: Contribution to £ yield of:						
	Deposit Yield	Currency	Total			
UK	0.39		0.39			
US	0.85	-9.06	-8.21			
Euro	-0.36	-13.78	-14.14			
Japan	-0.25	-20.21	-20.46			

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.

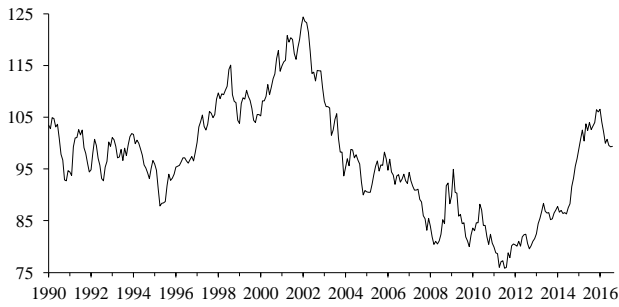
Table 3: Portfolio(%)

	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

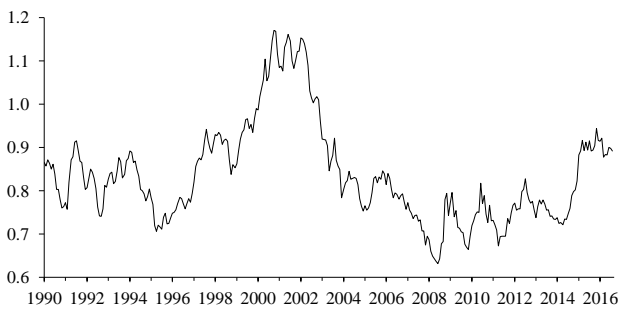
**US : Trade Weighted Index
(Bank of England 1990 = 100)**



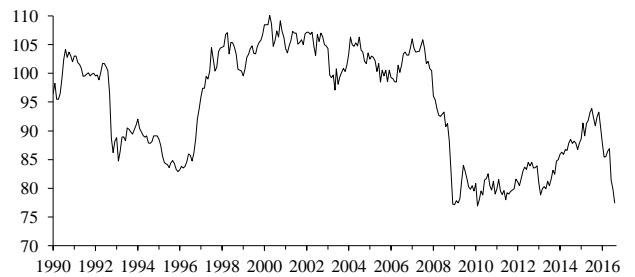
UK: Dollars Per Pound Sterling



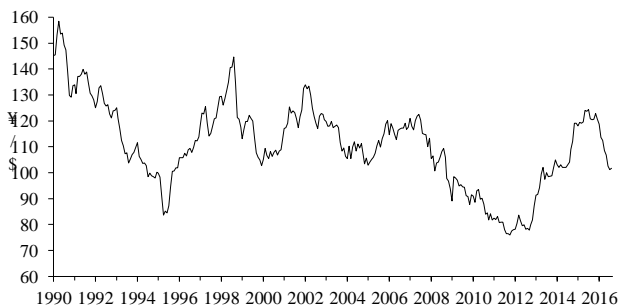
Euro per US dollar



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



Japan : Yen Per U.S. Dollar

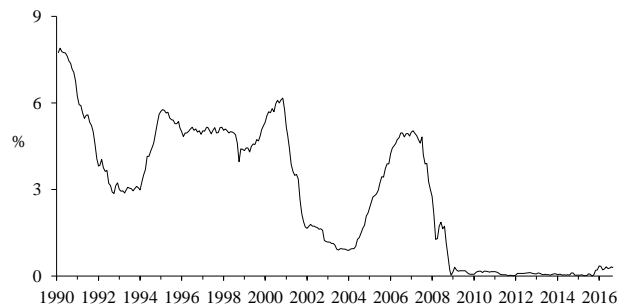


GOVERNMENT BOND MARKETS

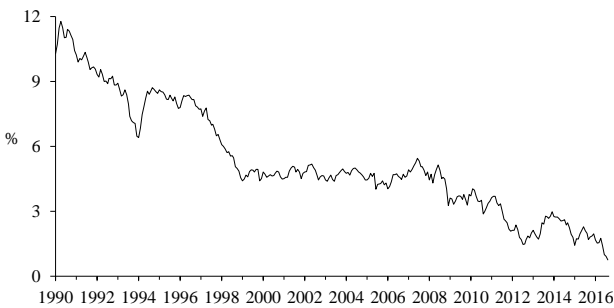
U.S.: Yield on Long-Term Government Bonds



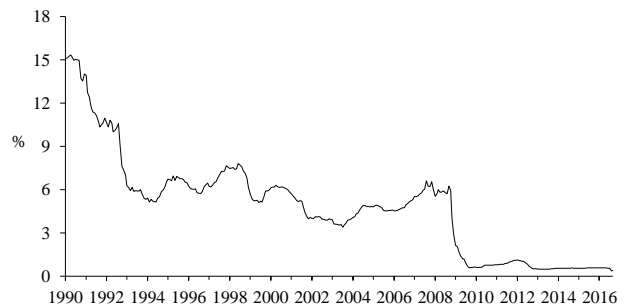
U.S. : 3-Month Treasury Bill



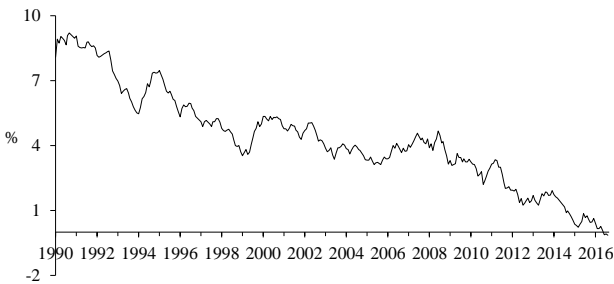
U.K.: Yield on Long-Term Government Bonds



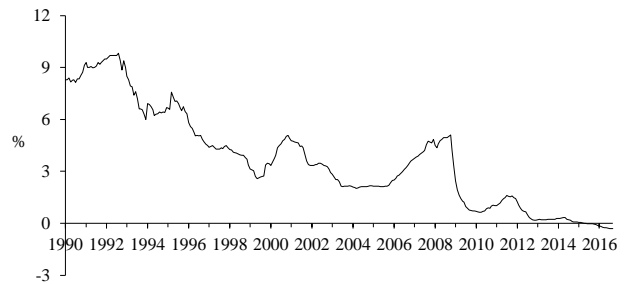
U.K. : 3-Month Interbank Rate



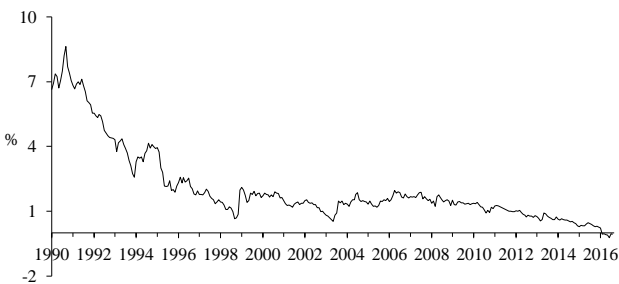
Germany: Yield on Public Authority Bonds



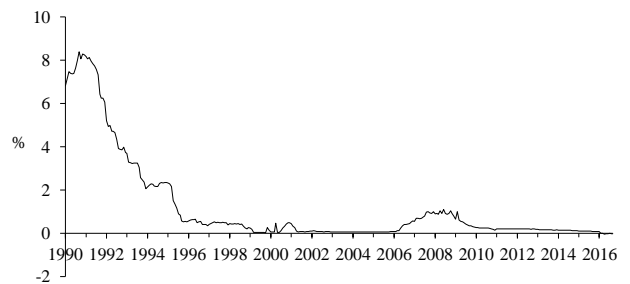
Germany : 3-Month Interbank Deposit Rate



Japan: Yield on Long-Term Government Bonds

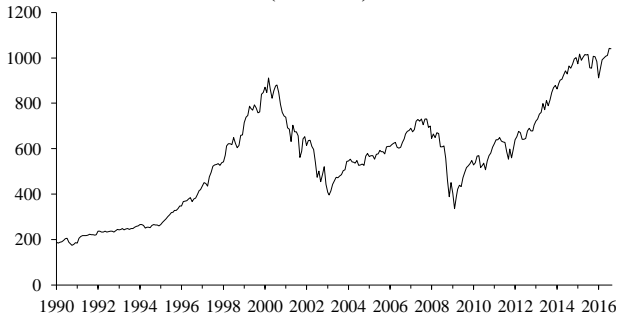


Japan : 3 Month Money Market Rate

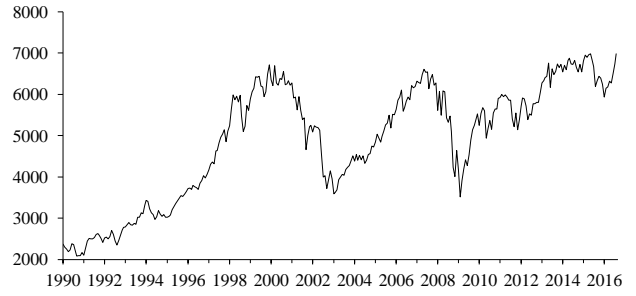


MAJOR EQUITY MARKETS

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



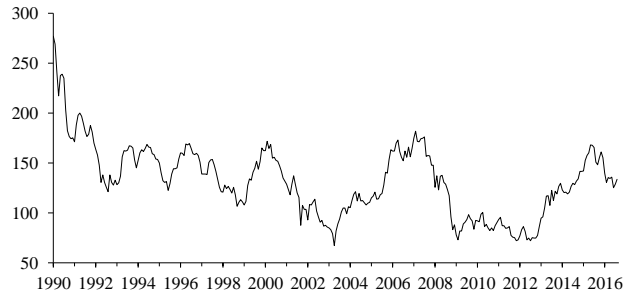
**U.K. : FTSE-100 Index
(10 April 1962=100)**



Germany : DAX 30



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



EMERGING MARKETS

Anupam Rastogi

India

For the first half of 2016, India's growth averaged 7.5% and the economy is forecast to grow by 7.7% in the year that ends next March, keeping our earlier forecast unchanged for the current fiscal year and the next year. The rebound in agriculture sector growth of about 4% this year will have positive feedback for a year or so. The Asian Development Bank has said that India's growth prospects have been buoyed due to the enactment of "long-awaited structural reform." The implementation of the Goods and Services tax is moving at a remarkable pace. The growth is mostly driven by consumer spending. The economic growth is healthy and it is free from any 'steroids'.

Investment growth is tepid as most Indian manufacturers are producing below capacity and are saddled with debt taken when economic activity was stronger. Banks have tightened lending as they are digesting a rising pile of bad loans. Private investment has picked up only in some sectors such as automobiles and pharmaceuticals. Heavy investment in segments such as steel, cement, power generation and other infrastructure sectors is to come in a year or two.

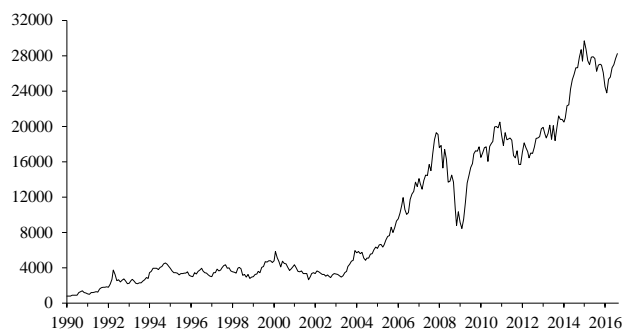
Consumer price inflation would remain contained at 5% and there is a scope of reducing the bank rate by the central bank. The new Reserve Bank of India governor Urjit Patel, under the advice of newly formed Monetary Policy Committee, cut the repo rate by 25 basis point to 6.25 percent in his maiden monetary policy announcement on October 4. He said that the stance of monetary policy would remain accommodative.

After declining for a year and a half, India's exports are showing early signs of a turn around. India, an investor-darling since the election of Prime Minister Narendra Modi in 2014, has risen sharply up the World Economic Forum's Global Competitiveness index for the second year running.

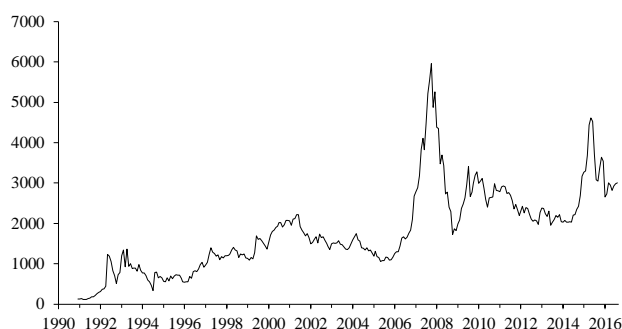
India has always enjoyed the moral high ground on the terrorism issue, the BJP government has shown the courage to assert it forthrightly in a restrained manner by eliminating terrorist proxies. Pakistan's retaliation, which shall come, has a long shadow on the markets.

Indian shares have been on a roll in 2016, benefiting from the global rush of money into emerging markets. The benchmark S&P BSE Sensex is less than 3% below its all-time closing high set in January 2015. But, India is vulnerable to any reversal in the global search for yield and rate increases by the U.S. Federal Reserve could trigger outflow of money from Indian markets.

India: BSE Sensitive



China: SSE Composite Index



According to a poll done by the Pew Foundation, about two-thirds of Indians are satisfied with the direction of the country, up from less than a third in 2013. An even higher proportion is happy about the state of the Indian economy and has favourable view of Narendra Modi, the prime minister.

	14-15	15-16	16-17	17-18	18-19
GDP (%p.a.)	7.3	7.6	7.7	8.0	8.0
WPI (%p.a.)	6.0	5.2	4.5	4.0	4.0
Current A/c(US\$ bill.)	-34.0	-24.0	-24.0	-26.0	-28.0
Rs./\$(nom.)	62.0	66.5	67.5	69.0	70.0

China

State spending has boosted China's industrial sector in September as well. The leadership seems to have tackled economic headwinds this year. But it is the calm which has come at a cost. China's economy grew by 6.7% in the second quarter. Beijing has set the GDP growth target for this year at 6.5% to 7% and it will achieve that. The government is helping to sustain the economic activity with spending on public projects. In September alone, projects worth more than 1 trillion yuan (\$149.25 billion) were launched. China's official manufacturing purchasing managers index was unchanged at 50.4 in September compared with August.

China benchmark consumer-inflation measure remains well below Beijing's targeted ceiling of 3% this year. The Consumer-price index increased just 1.3% in August, making more room for monetary easing. The growth in prices has eased from July's 1.8% pace. China's producer-price index also declined 0.8% in the last month from a year earlier.

Chinese exports fell again in August as weak demand and global uncertainty continued to weigh on the economy and imports rose for the first time in nearly two years. Exports slid 2.8% in August over year-earlier levels, following a decline of 4.4% in July. Imports in August increased by 1.5% from a year earlier, reversing a 12.5% slump in July.

The outflow of China's capital is going on but at a slow speed. China's outflows this year are more than \$400 billion, which is reflected both in a \$190 billion decline in the country's foreign-exchange reserves and a weaker yuan, down about 3% this year against the dollar and more than 6% against a basket of currencies. China's reserves, the world's largest, fell by \$15.89 billion over last month, to \$3.185 trillion.

China's central bank is playing a role reversal now. It is now propping up the yuan, not keeping it down. China's current account surplus was just 3% of GDP last year. The failure of reforms will keep the currency from appreciation. The yuan's internationalization is remarkable but the hype about the currency's inevitable rise to dominance is vastly exaggerated. The yuan has gained a lot in a short period. It plays a significant role in the denomination and settlement of cross-border trade and financial transactions.

China Premier Li Keqiang has pledged to keep the yuan exchange rate "basically stable" at a reasonable and balanced level. China's renminbi has formally become a reserve currency on October 2, the 67th anniversary of Communist party rule in China, reaching a milestone on its international acceptance. For China, the yuan, as a member of this elite group, serves a dual agenda — reducing the global dominance of the US dollar while also overcoming domestic opposition to currency reforms at home.

China's opening of its debt market in May allowed international investors to buy onshore bonds through agent banks appointed by the government. Deutsche Bank, one of the designated banks, plans to double its allocation in 2017. China's bond market is the world's third-largest behind the US and Japan. Outstanding onshore bonds are currently worth about \$7.5tn, roughly the same as the rest of the entire emerging-market debt universe. The US bond markets are worth \$35tn and Japan's \$11tn.

Korea: Composite Index



	14	15	16	17	18
GDP (%p.a.)	7.4	6.9	6.6	6.0	5.8
Inflation (%p.a.)	2.0	1.4	2.0	2.0	2.0
Trade Balance(US\$ bill.)	382	550	420	400	380
Rmb/\$(nom.)	6.2	6.4	6.6	6.7	6.8

South Korea

The finance ministry has cut this year's economic growth forecast to 2.8% from an earlier estimate of 3.1%. The economy expanded 2.6% in 2015, slowing from 3.3% in 2014. South Korea's GDP growth rate remains below 1% for the third consecutive quarter. Its GDP growth rate was 0.7% in Q4, 2015 and 0.5% in Q1, 2016. It rebounded to 1.2% in the third quarter of last year but had remained below 1% for the five preceding quarters. The cut in interest rates to a record low of 1.25% in June, in a bid to spur growth by the central bank has not produced desired results.

Nikkei-Markit's purchasing managers index fell to 47.6 in September from 48.6 last month.

That is the lowest since 46.1 in June 2015. It also remains under the threshold of 50 that separates expansion from contraction. Industrial production had its biggest monthly drop in 20 months in August as the output contracted by a seasonally adjusted 2.4% month-on-month from July's revised 1.3% expansion.

Korea's consumer price index rose 0.4% on-year in August, compared to 0.7% gain in July. The burden of household debt is keeping inflation well below the annual 2% target.

South Korea plans to increase government spending in 2017 to spur growth as higher expected tax revenues from consumer spending and a housing boom fills the treasury. According to the budget proposal, the Ministry of Strategy and Finance has called for a 3.7% total spending rise for 2017 to 400.7 trillion won (\$356.2 billion). Revenue is expected to grow by 6% to 414.5 trillion won. The government aims to trim the fiscal deficit to 28 trillion won, or 1.7% of gross domestic product, from 37 trillion won, or 2.3% of GDP in 2016. The Ministry hopes that the budget will remain "as expansionary as possible without

undermining fiscal health". Korea's overall government debt is expected to edge up to 40.4% of GDP in 2017 from an estimated 40.1% this year. The ministry expects the ratio to peak at 40.9% in 2018 before falling to 40.7% in 2019 and 2020.

The Bank of Korea kept its base rate unchanged for a third straight month, as it wanted to take note of the US Fed's move on the US Fed rate. Another rate cut in the final quarter is expected only after the US Fed moves to protect the economy from the rising downside risks to growth.

South Korea's exports rebounded in August for the first time in 20 months, but the other data pointed to an economy that was still struggling. Consumer sentiment remained weak as headline inflation hit a 16-month low during August. Exports expanded a stronger-than-expected 2.6% from a year earlier to \$40.13 billion in August, following the previous month's revised 10.3% drop, according to the Ministry of Trade, Industries and Energy. However, by volume, exports continued to decline, falling 3.3% on-year in August after a 1.6% drop in the prior month. The trade surplus narrowed to \$5.3 billion in August.

	14	15	16	17	18
GDP (%p.a.)	3.3	2.6	2.7	2.5	2.3
Inflation (%p.a.)	2.0	0.7	1.0	1.2	1.2
Current A/c(US\$ bill.)	80.0	90.0	88.0	88.0	86.0
Won/\$ (nom.)	1080	1180	1160	1140	1140

Taiwan

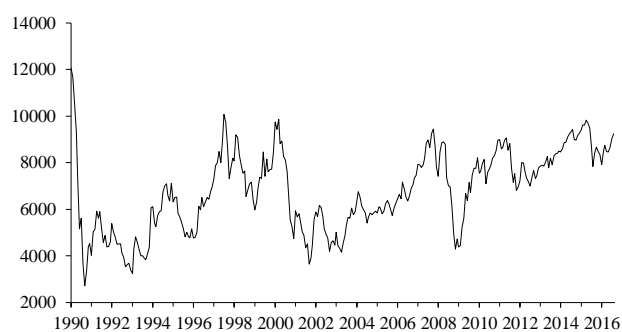
The sluggish demand in many parts of the world is holding Taiwan's economic growth to below one percent in 2016. Export orders rose 8.3% year-on-year in August. Fitch Ratings, one of the credit rating agencies, has also lowered its forecast of Taiwan's gross domestic product growth for 2016, citing the country's disappointing export performance. But factory activity in Taiwan is on the upswing. The Nikkei-Markit Taiwan manufacturing purchasing managers' index rose to 51.8 in August compared to 51 in July. A mark above 50 indicates expansion.

Taiwan's consumer price inflation rose 0.57% year-over-year in August, slower than the 1.23% climb in the previous month. We expect inflation to be 1.0% in 2016.

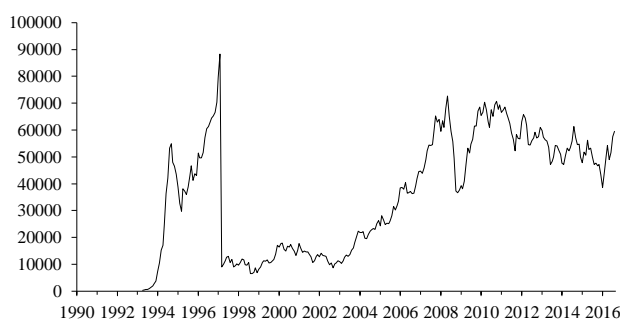
In the first eight months of this year, Taiwan's exports totalled US\$180 billion, down 6.6% from a year earlier. But the country's outbound sales in August rose 1% from a year earlier, marking the second consecutive month when exports have recorded a year-on-year increase. Imports fell 0.8% from a year earlier to US\$20.7 billion.

Taiwan recorded a trade surplus of US\$4 billion for the month of September, US\$410 million higher than in August 2015.

Taiwan: Weighted TAIEX Price Index



Brazil: Bovespa



Taiwan's President Tsai Ing-wen recently completed her 100th day in office, and many questions remain about the future direction of her government. Ms. Tsai has assembled a strong and stable cabinet of permanent bureaucrats and academics. The absence of business professionals is surprising, but she has appointed highly capable and experienced leader John Deng, the minister without portfolio, responsible for trade.

Her focus is on Southeast Asia — and to gain access to trade agreements such as the Trans-Pacific Partnership (TPP). She has created a cabinet-level agency, similar to the Office of the U.S. Trade Representative, to be run by Mr. Deng. TPP remains the ultimate goal for Taiwan.

	14	15	16	17	18
GDP (%p.a.)	3.7	0.8	0.8	1.8	2.0
Inflation (%p.a.)	1.5	0.7	1.0	1.0	1.0
Current A/c(US\$ bill.)	57.4	60.0	64.0	68.0	68.0
NT\$/\$(nom.)	31.0	32.8	32.5	32.0	32.0

Brazil

Green shoots are appearing and the economy is in the process of rebounding as the uncertainty related to impeachment process against former President Dilma Rousseff is out of the way. However, on-going investigation of Petrobras would take its toll on economic growth. Brazil's economy is expected to grow 1% next year, after an expected contraction of 3.3% in 2016. The recovery will be led by business investment on the back of rising confidence.

Consumer confidence increased in September for the fifth consecutive month as inflation slowed. Brazil's main consumer-confidence index was at 80.6 points, up from 79.3 points in August. The confidence index has a 1-to-200-point range, with 100 considered an indicator of neutral sentiment. The consumer-price index is forecast to grow 7% this year. Next year inflation is forecast to come down to 5.3%. The year-end Selic benchmark interest rate is expected at 13.75% in 2016. We expect the central bank to cut benchmark rate by 175 basis points by the year-end 2017. An expected rate increase by the US Fed could reverse the movement of U.S. capital now flowing to Brazil and delay a rate cut by the central bank. Brazil's central bank will hold its next rate-setting meeting on October 19 and we expect it to maintain status quo.

President Temer has proposed a spending cap that would limit increases in the budget to the previous year's inflation rate. The Temer administration is also preparing changes to the country's pension system, with the goal of shrinking its chronic funding gap. He faces challenges in pushing the measures through the Congress. Only time will tell how far he would get the cooperation from the Congress.

Brazil's stock market has gained around 70% in the first nine months of 2016. It is one of the best performing stock markets in the world this year.

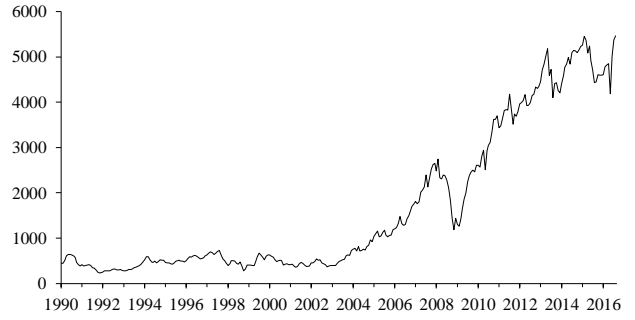
	14	15	16	17	18
GDP (%p.a.)	0.1	-3.8	-3.3	1.0	1.5
Inflation (%p.a.)	6.5	10.3	7.0	5.3	6.0
Current A/c(US\$ bill.)	-104.0	-70.0	-50.0	-40.0	-44.0
Real/\$(nom.)	2.4	3.9	3.5	3.0	3.0

Other Emerging Markets

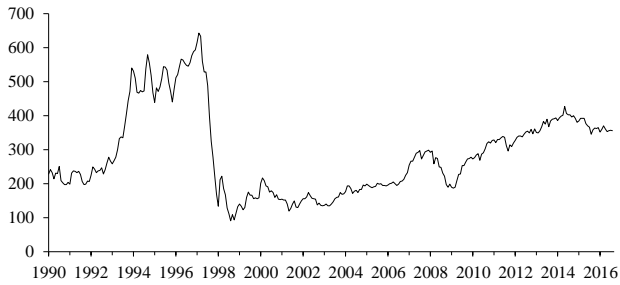
Hong Kong: FT-Actuaries



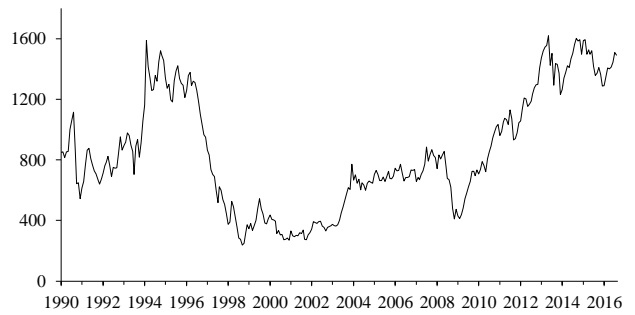
Indonesia: Jakarta Composite



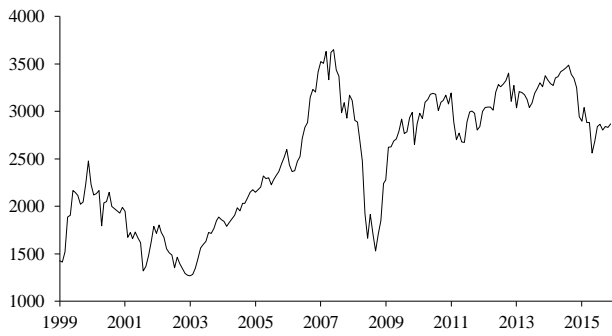
**Malaysia: FT-Actuaries
(US\$ Index)**



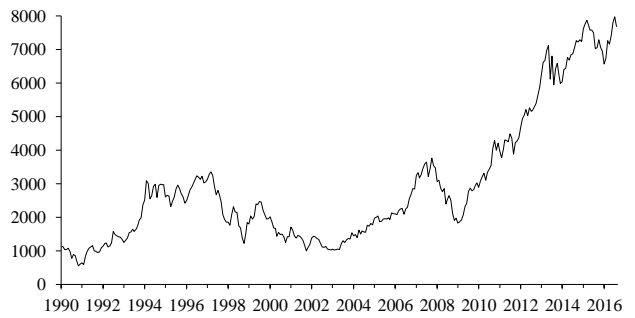
Thailand: Composite Index



Singapore: Straits Times Index

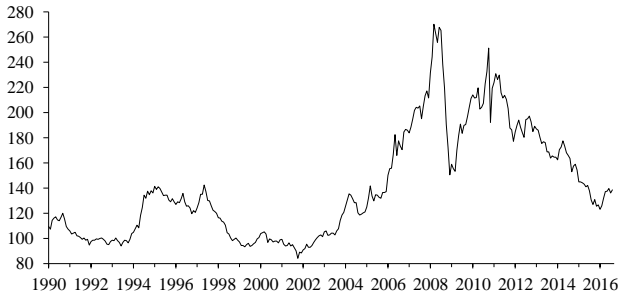


Philippines: Manila Composite

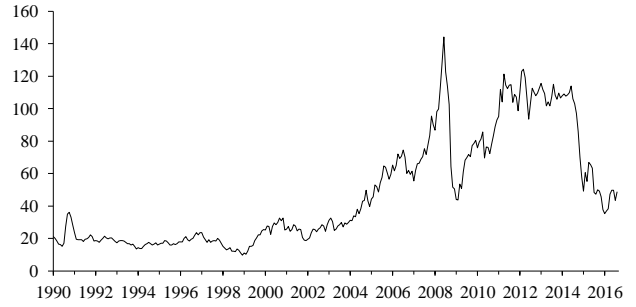


COMMODITY MARKETS

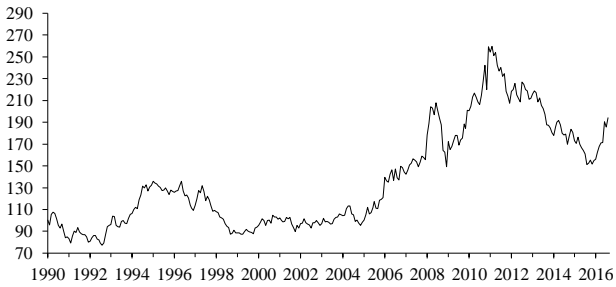
Commodity Price Index (Dollar)
(Economist, 2000=100)



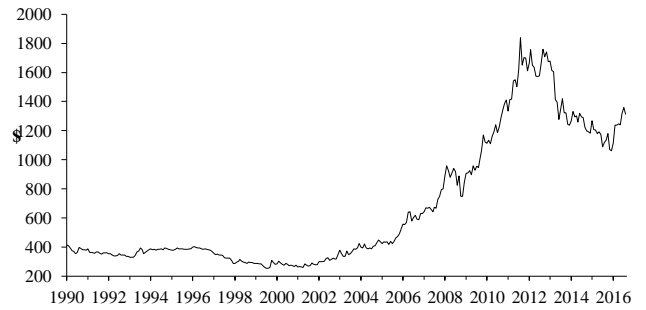
Oil Price: North Sea Brent (in Dollars)



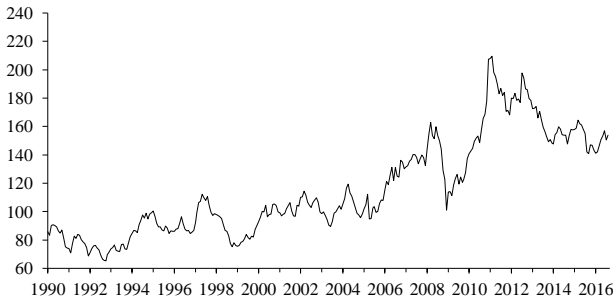
Commodity Price Index (Sterling)
(Economist, 2000=100)



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
2015	0.2	1.3	0.6	91.6	91.6	0.5	1.0	-1.0
2016	1.2	0.9	0.4	81.5	80.4	-1.5	2.1	-1.6
2017	1.9	1.2	1.0	77.9	76.4	-2.1	2.6	-1.5
2018	3.1	1.5	2.5	75.7	75.1	-0.5	3.6	-1.1
2019	3.0	2.5	3.5	74.3	74.6	1.5	3.5	0.3
2020	2.1	3.0	3.0	73.8	74.4	0.5	2.7	0.9
2015:1	0.9	1.1	0.5	89.6	90.3	0.2	1.0	0.8
2015:2	0.4	1.3	0.5	91.4	91.1	1.0	1.0	0.7
2015:3	-0.4	1.4	0.5	93.0	92.5	0.5	1.0	0.4
2015:4	0.1	1.3	0.6	92.3	92.4	0.3	1.1	0.0
2016:1	0.3	0.9	0.7	87.2	86.8	-1.1	1.4	-0.7
2016:2	1.3	0.9	0.5	81.8	81.2	-1.3	2.2	-0.9
2016:3	1.5	0.9	0.2	79.4	77.8	-1.7	2.3	-1.0
2016:4	1.8	0.9	0.2	77.6	75.9	-1.8	2.5	-1.2
2017:1	1.8	1.0	0.5	78.9	77.4	-2.5	2.5	-1.4
2017:2	1.8	1.2	1.0	78.5	77.4	-2.2	2.5	-1.5
2017:3	1.9	1.2	1.0	77.3	75.4	-2.2	2.6	-1.7
2017:4	2.1	1.2	1.5	76.7	75.4	-1.7	2.8	-1.9

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)
2015	247.1	2.4	2.3	0.8	141.1
2016	254.3	2.9	2.2	0.8	143.5
2017	264.1	3.9	2.1	0.7	146.3
2018	280.5	6.2	2.1	0.7	150.8
2019	297.8	6.2	2.0	0.7	155.6
2020	311.4	4.6	1.9	0.7	159.5
2015:1	246.5	2.4	2.4	0.8	140.7
2015:2	245.7	2.4	2.3	0.8	140.4
2015:3	248.3	3.0	2.3	0.8	142.2
2015:4	247.7	1.9	2.2	0.8	141.1
2016:1	251.5	2.0	2.2	0.8	143.1
2016:2	252.5	2.8	2.2	0.8	142.5
2016:3	254.9	2.7	2.2	0.8	143.9
2016:4	258.1	4.2	2.1	0.7	144.5
2017:1	260.5	3.6	2.1	0.7	145.7
2017:2	261.3	3.5	2.1	0.7	144.9
2017:3	264.4	3.7	2.1	0.7	146.5
2017:4	270.0	4.6	2.1	0.7	148.1

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 Product¹ (£ 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
2015	156.6	749967.5	431566.6	302272.7	202850.7	-55478.9	125108.2
2016	160.2	767235.6	445899.9	312701.0	209007.0	-44482.0	145527.8
2017	164.3	786798.8	458510.3	323871.4	217609.3	-32648.1	169393.1
2018	168.8	808163.4	469801.9	338700.7	221961.4	-28471.5	184156.4
2019	173.5	831134.9	481547.0	358611.6	226400.7	-24594.0	203029.4
2020	179.1	857745.2	493585.6	380617.3	230928.7	-20309.5	220638.7
2015/14	2.2		1.6	3.8	1.1		-2.3
2016/15	2.3		3.3	3.4	3.0		16.3
2017/16	2.5		2.8	3.6	4.1		16.4
2018/17	2.7		2.5	4.6	2.0		8.7
2019/18	2.8		2.5	5.9	2.0		10.2
2020/19	3.2		2.5	6.1	2.0		8.7
2015:1	155.5	186173.7	106852.9	76506.7	50170.8	-14587	32769.7
2015:2	156.2	186957.5	107512.3	77424.8	50522.0	-11925.0	36576.6
2015:3	156.8	187777.3	108377.3	77811.9	50926.2	-14036.0	35302.1
2015:4	157.9	189059	108824.1	77033.8	51231.7	-13444.0	34586.6
2016:1	158.6	189907.1	109165.2	76956.8	51590.4	-14141.0	33664.2
2016:2	159.8	191266.2	111552.7	78034.1	52054.7	-15661.0	34714.3
2016:3	160.4	191986.6	112243.5	78658.4	52471.1	-13089.0	38297.4
2016:4	162.1	194075.7	112938.5	79051.7	52890.9	-11953.5	38851.9
2017:1	162.8	194913.8	113610.1	79526.0	53472.7	-11395.3	40299.7
2017:2	163.8	196083.3	114285.7	80639.4	54060.9	-11303.5	41599.1
2017:3	164.8	197259.8	114965.4	81445.8	54709.6	-10680.5	43180.4
2017:4	165.8	198542	115649	82260.2	55366.1	-10419.5	44313.9

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)	Debt Interest (£bn)	Current Account (£ bn)
			Financial Year		
2015	4.6	1533.1	71.2	52.0	-103.7
2016	4.3	1592.4	69.0	52.3	-89.0
2017	3.3	1669.4	54.7	58.2	-77.7
2018	2.2	1770.8	38.7	65.4	-65.1
2019	1.5	1874.6	28.3	70.3	-43.2
2020	0.7	1473.0	13.0	52.7	-32.6
2015:1	0.8	383.9	3.1	12.6	-25.8
2015:2	7.1	379.3	26.9	12.8	-20.2
2015:3	4.7	382.0	17.8	13.0	-22.6
2015:4	7.0	387.2	26.9	13.1	-35.1
2016:1	-0.1	384.6	-0.5	13.1	-33.7
2016:2	5.8	392.0	22.9	13.1	-14.0
2016:3	2.4	394.5	9.5	12.9	-13.1
2016:4	5.8	402.2	23.2	13.0	-28.2
2017:1	3.3	403.7	13.4	13.3	-23.3
2017:2	5.6	408.9	22.7	13.9	-14.1
2017:3	2.2	412.1	8.9	13.9	-13.4
2017:4	3.9	421.3	16.4	14.6	-26.8

¹ GDP at market prices (Financial Year)

WORLD FORECAST DETAIL

Growth Of Real GNP

	2013	2014	2015	2016	2017	2018
U.S.A.	1.5	2.4	2.4	2.1	2.4	2.5
U.K.	2.2	2.9	2.2	2.3	2.7	2.8
Japan	1.4	-0.1	0.5	1.0	0.8	0.8
Germany	0.3	1.6	1.7	1.8	1.5	1.6
France	0.7	0.2	1.1	1.4	1.5	1.6
Italy	-1.7	-0.3	0.8	1.1	1.3	1.5

Growth Of Consumer Prices

	2013	2014	2015	2016	2017	2018
U.S.A.	1.5	1.6	0.1	1.3	2.2	2.0
U.K.	2.3	1.7	0.2	1.2	3.1	3.0
Japan	0.4	2.7	0.8	0.2	1.8	2.0
Germany	1.5	0.9	0.3	0.5	1.6	2.0
France	0.9	0.5	0.0	0.4	1.2	1.8
Italy	1.2	0.2	0.1	0.2	1.1	1.7

Real Short-Term Interest Rates

	2013	2014	2015	2016	2017	2018
U.S.A.	-1.5	-0.1	-1.1	-1.2	-0.7	-0.5
U.K.	-0.8	-2.2	0.5	-1.5	-2.1	-0.5
Japan	-2.5	-0.6	0.0	-1.8	-2.0	-1.8
Germany	-0.6	-0.2	-0.6	-1.8	-2.2	-2.2
France	-0.2	0.1	-0.5	-1.4	-2.0	-2.0
Italy	0.1	0.0	-0.3	-1.3	-1.9	-1.9

Nominal Short-Term Interest Rates

	2013	2014	2015	2016	2017	2018
U.S.A.	0.1	0.0	0.2	1.0	1.3	1.5
U.K.	0.6	0.6	0.6	0.4	2.5	3.5
Japan	0.2	0.2	0.2	0.0	0.0	0.2
Germany	0.3	0.1	-0.1	-0.2	-0.2	-0.2
France	0.3	0.1	-0.1	-0.2	-0.2	-0.2
Italy	0.3	0.1	-0.1	-0.2	-0.2	-0.2

Real Long-Term Interest Rates

	2013	2014	2015	2016	2017	2018
U.S.A.	1.6	0.7	0.3	0.4	0.8	1.0
U.K.	-0.8	-0.7	-1.0	-1.6	-1.5	-1.1
Japan	-0.8	-1.1	-1.3	-2.0	-1.9	-1.7
Germany	0.8	-0.8	-1.0	-1.5	-1.3	-1.1
France	1.1	-0.5	-0.8	-1.3	-1.1	-0.9
Italy	1.2	-0.5	-0.7	-1.2	-1.0	-0.8

Nominal Long-Term Interest Rates

	2013	2014	2015	2016	2017	2018
U.S.A.	3.0	2.2	2.2	2.4	2.8	3.0
U.K.	1.3	1.8	1.3	0.9	1.2	1.5
Japan	0.7	0.3	0.3	0.0	0.1	0.3
Germany	1.9	0.5	0.6	0.4	0.7	0.9
France	1.9	0.5	0.6	0.4	0.7	0.9
Italy	1.9	0.5	0.6	0.4	0.7	0.9

Index Of Real Exchange Rate(2000=100)¹

	2013	2014	2015	2016	2017	2018
U.S.A.	82.1	83.9	93.0	94.0	94.5	94.8
U.K.	86.5	93.1	91.6	80.4	76.4	75.1
Japan	63.5	59.8	56.0	58.4	58.5	58.6
Germany	99.0	99.9	94.7	95.0	95.2	95.1
France	100.7	100.8	96.2	96.0	95.9	95.7
Italy	106.9	107.5	102.1	102.0	101.8	101.7

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)						
	2013	2014	2015	2016	2017	2018
U.S.A. ¹	86.00	89.40	99.94	102.10	102.00	102.20
U.K.	1.55	1.65	1.53	1.36	1.30	1.27
Japan	98.20	106.70	120.00	118.40	112.00	113.00
Eurozone	0.75	0.76	0.90	0.95	0.93	0.92

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