LIVERPOOL INVESTMENT LETTER

May 2015

Cardiff Business School
Cardiff University

Julian Hodge Institute of Applied Macroeconomics

LIVERPOOL RESEARCH GROUP IN MACROECONOMICS

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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

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INVESTMENT OUTLOOK AND THE ELECTION

There is much wailing and gnashing of teeth over the uncertainties surrounding the election result. On the one hand many fear a Labour minority government supported by the SNP. On the other a continued Conservative coalition of some sort scares the euro-phile mainstream press, CBI et al. with the prospect of a referendum on the EU.

Both sets of fears are badly exaggerated.

A Labour minority government will be unable to pass much of the left-wing agenda Miliband has at various times threatened. It has potential trouble at several levels. First, if he feels he has a chance of forming a new government later after another election he will wish to attract votes; left-wing policies such as rent controls will be attacked strongly as making it difficult for the very people it is designed to help (e.g. to find rented accommodation).

Second, Miliband has to get a majority for each of these controversial policies; and this seems highly doubtful or would require a big expenditure of political capital. Yet this needs to be hoarded for mere survival.

Third, Miliband is likely to face a sterling crisis fairly early, if not at once. He will wish to prove his orthodoxy in financial matters by pressing ahead with his fiscal plan, and not alarming business whose tax revenues he will need.

In short if Labour does govern it will not have the sort of strength that allowed Attlee to upend the way the UK was organised — or for that matter that Mrs. Thatcher enjoyed, allowing her to bring in a wide-ranging set of free market reforms. Labour will be constantly on the edge of collapse and desperately seeking day-to-day survival by keeping out of controversy. While no doubt the SNP will goad it into left-wing policies, it will not be able to supply the votes to bring them about; furthermore Labour will not wish to be seen as sharing the SNP's far-left agenda, for fear of losing the floating voters who might in future give it power.

Now turn to the vexed question of the Conservatives and 'Brexit'. Those wishing to stay in the EU as it now is fear that Brexit will mean severing all ties with the EU and going into an aggressively hostile relationship. However this is by no means what is intended; rather it would be a renegotiation replacing our EU membership with a new bilateral UK-EU treaty, preserving the good aspects of the existing relationship. It would feel quite like the old membership but without the long list of sticking points that have soured relations for so long.

It is routine to point to the threat of Brexit to inward investment. But while indeed investment in industries that have been favoured by Brussels protectionism will fall off, investment in industries benefiting from the fall in costs from ending this protectionism will expand. These industries will be ending the 'trade diversion' that favoured EU markets, and expanding in world markets outside the EU. There will be major opportunities in these markets which investors will wish to exploit.

Table 1: Summary of Forecast

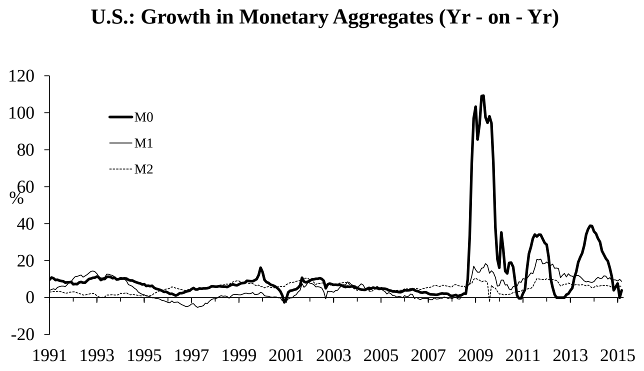
	2012	2013	2014	2015	2016	2017	2018
GDP Growth[1]	0.7	1.7	2.8	3.0	2.5	2.4	2.4
Inflation CPI	2.1	1.9	1.6	0.6	1.6	1.7	2.0
RPIX	3.2	3.1	2.4	1.6	2.4	2.5	2.7
Unemployment (Mill.)							
Ann. Avg.[2]	1.6	1.4	1.0	0.8	0.7	0.7	0.6
4th Qtr.	1.6	1.3	0.9	0.7	0.7	0.7	0.6
Exchange Rate[3]	83.0	81.6	87.1	90.7	90.8	90.7	90.3
3 Month Interest Rate	0.9	0.6	0.6	0.6	1.0	1.6	2.1
5 Year Interest Rate	0.9	1.3	1.8	1.8	2.2	2.5	2.5
Current Balance (£bn)	–53.2	–65.9	–84.2	–77.8	–78.2	–78.8	–79.5
PSBR (£bn)	110.6	92.5	97.8	80.2	71.3	57.7	47.4

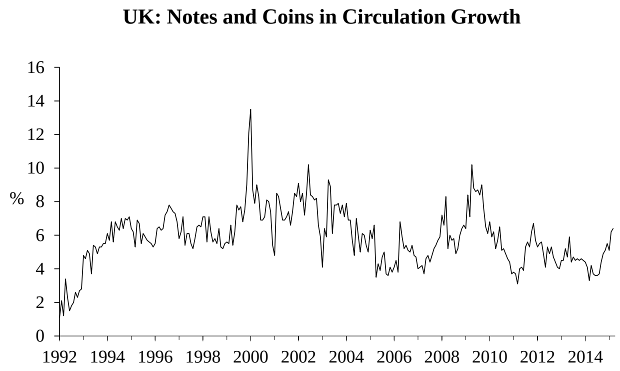
[1]Expenditure estimate at factor cost
[2]U.K. Wholly unemployed excluding school leavers (new basis)
[3]Sterling effective exchange rate, Bank of England Index (2005 = 100)

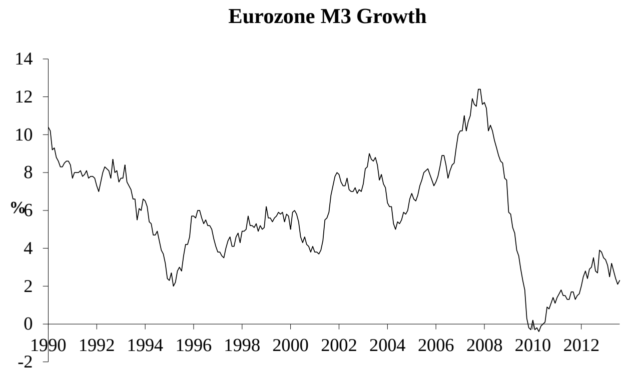
Another factor that should calm nerves after the election is the UK recovery and the world background of stable recovery with low commodity prices. We have argued before that there will be a long upswing in the world economy, lasting another 20–25 years, as low commodity prices stimulate investment and consumption in developed commodity-using economies.

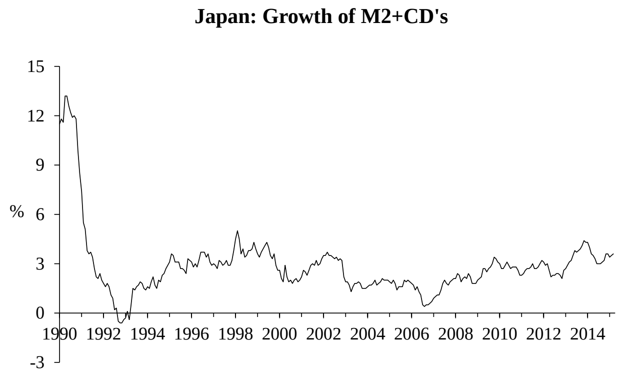
The official GDP figures for the first quarter of 2015 have been disappointing, at 0.3% growth. However, they are as so often at variance with other indicators, notably the purchasing managers' indices (PMIs); as a result they, like earlier weak GDP estimates, will be revised upwards. There are particular discrepancies between the construction GDP estimate, down 1.6%, and the construction PMI which remains strong. This usually occurs with recession figures, that over time they get revised greatly upwards. The reason for this is that in recessions patterns of business are forced to change because of the pressures for survival; the ONS statisticians only find out these new patterns long afterwards and hence inadequately sample the new places where business has shifted to. This gives the estimates a downward bias. You might well ask why the statisticians do not aim off for this. But to do so would require putting forward judgements that would by definition be hard to justify with concrete data; with the GDP figures being highly politicised they simply cannot go beyond the figures they actually have.

No such reasons hold us back; and so we have kept in our forecasts the figures we think will in due course probably emerge as revised. Our view remains that the UK is continuing with a reasonably robust recovery, even if it is not as strong as in previous recessions.


U.S.: Growth in Monetary Aggregates (Yr - on - Yr)
M0
M1
M2
%
120
100
80
60
40
20
0
-20
1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015


UK: Notes and Coins in Circulation Growth
%
16
14
12
10
8
6
4
2
0
1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014


Eurozone M3 Growth
%
14
12
10
8
6
4
2
0
-2
1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012


Japan: Growth of M2+CD's
%
15
12
9
6
3
0
-3
1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014

FOCUS ON JAPAN

Francesco Perugini

Two Decades of Low Productivity

A new report from McKinsey Global Institute, which came out only two months ago, is pointing to the problem of productivity slowdown in the Japanese economy which Prime Minister Shinzo Abe is trying to address with the third arrow of his economic policy: the structural reform agenda (the first arrow is a jolt of fiscal stimulus for the economy, the second an unprecedented monetary boost through massive quantitative easing).

The reports review the course of the past two decades, during which Japan has lost much of its competitive edge. For much of this period, productivity growth in both labour and capital has been stalled below 2%, and has steadily eroded in almost every sector of the economy, including its signature advanced manufacturing industries. Because of these past trends, today there is a substantial and widening productivity gap between Japan and other leading advanced economies (see Exhibit E2 and Exhibit E3 below taken from the report). For instance, Japan's labour productivity lags 32% behind Germany's and 29% behind that in the US. Only in real estate did Japan show higher productivity than the US. Moreover, capital productivity has similarly eroded: the return on investment generated by listed non-financial companies in Japan is 23 percentage points below the performance of equivalent US corporations.

The report also says that the Japanese economy continues to operate below its potential in many sectors due to lack of competition because highly indebted firms and even uncompetitive divisions of large conglomerates have often been kept alive in the interest of stability. As banks continue to roll over bad loans, and corporate headquarters continue to allocate funds to underperforming units, resources are diverted that could be put to better use elsewhere and the process of creative destruction is impeded. In addition, regulatory barriers make it difficult for new competitors to challenge incumbents in certain sectors.

A continuation of current trends would have profound consequences, but Japan can change course, says the report. Accordingly, with its working-age population shrinking, Japan could only boost annual GDP growth to approximately 3% if it can successfully double its rate of productivity growth.

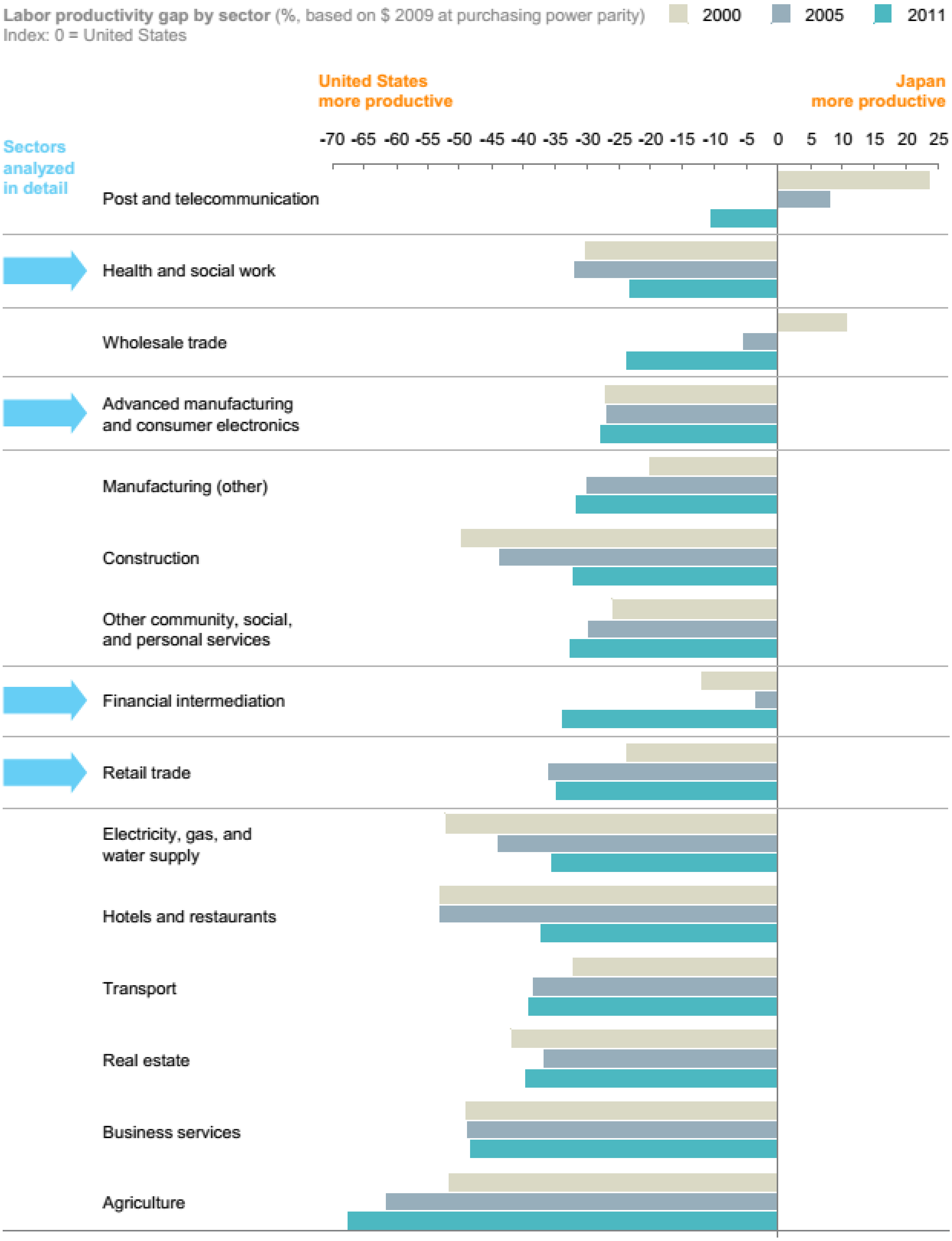
Many of the efforts to boost productivity can be concentrated into four sectors, which capture around one-third of the productivity potential: these are advanced manufacturing, retail, financial services, and health care. The report suggest some measures to be taken in order to achieve this target. Public policy changes can create the right conditions for growth, but most of the outcome is in the hands of the private sector. Reigniting the Japanese economy will depend on their willingness to invest and take risks. A major private-sector initiative to accelerate productivity growth can constitute a "fourth arrow" of economic stimulus that complements the Abenomics agenda. "Japan can reach 50% to 70% of its productivity goal by adopting practices that are already in use around the world, while most of the remaining improvement can be captured by deploying new technologies".

Authors of the report recognized Prime Minister Shinzo Abe's efforts to improve Japan's competitiveness through his proposed reforms, but they say he has made little headway in what will be a years' long battle against vested interests in many industries. They suggest deregulating individual sectors of the economy as well as more general reforms. Specific measures they advance are: better use of women and older workers; improved access to financing for entrepreneurs, and a more aggressive approach to tackling global markets by making company management more global in nature.

The point is that today Japan is still afflicted by a two-speed economy: export-oriented manufacturing industries (including steel, automotive, consumer electronics, and machine tools) set the global standard, but these stand in sharp contrast to low-performing, domestically oriented manufacturing and service sectors that are protected from both international and local competition by tariffs and regulation. Unless Mr. Abe pushes forward with his structural reform agenda, productivity in the economy is bound to remain low. Economists and international observers have been recommending radical steps for the past two decades. These have included: ending subsidies for unproductive firms and allowing them to exit the market, removing laws and regulations that prevent more productive companies from entering markets or introducing innovative products, and creating incentives for competition and innovation.

What this report is telling us once again is that Japan is not regaining the dynamism it might have been acquiring before the 'bursting of the asset bubble' at the end of the 1980s. Then it seemed as if it had the confidence to reform itself, deregulate the service sector, so vital for growth in a mature economy, and introduce competition, unleashing productivity growth. The collapse of asset prices however heralded a policy era in which all reform ideas were forgotten and politics awarded a veto to all parts of society, crushed as they were by the general collapse. If even Mr. Abe cannot revive the opening up of the Japanese economy, then we probably should assume Japan will continue to stagnate, with minimal productivity growth, sine die. The policies of monetary and fiscal stimulus, so endlessly resorted to, will just make no difference, except possibly to the rate of inflation.

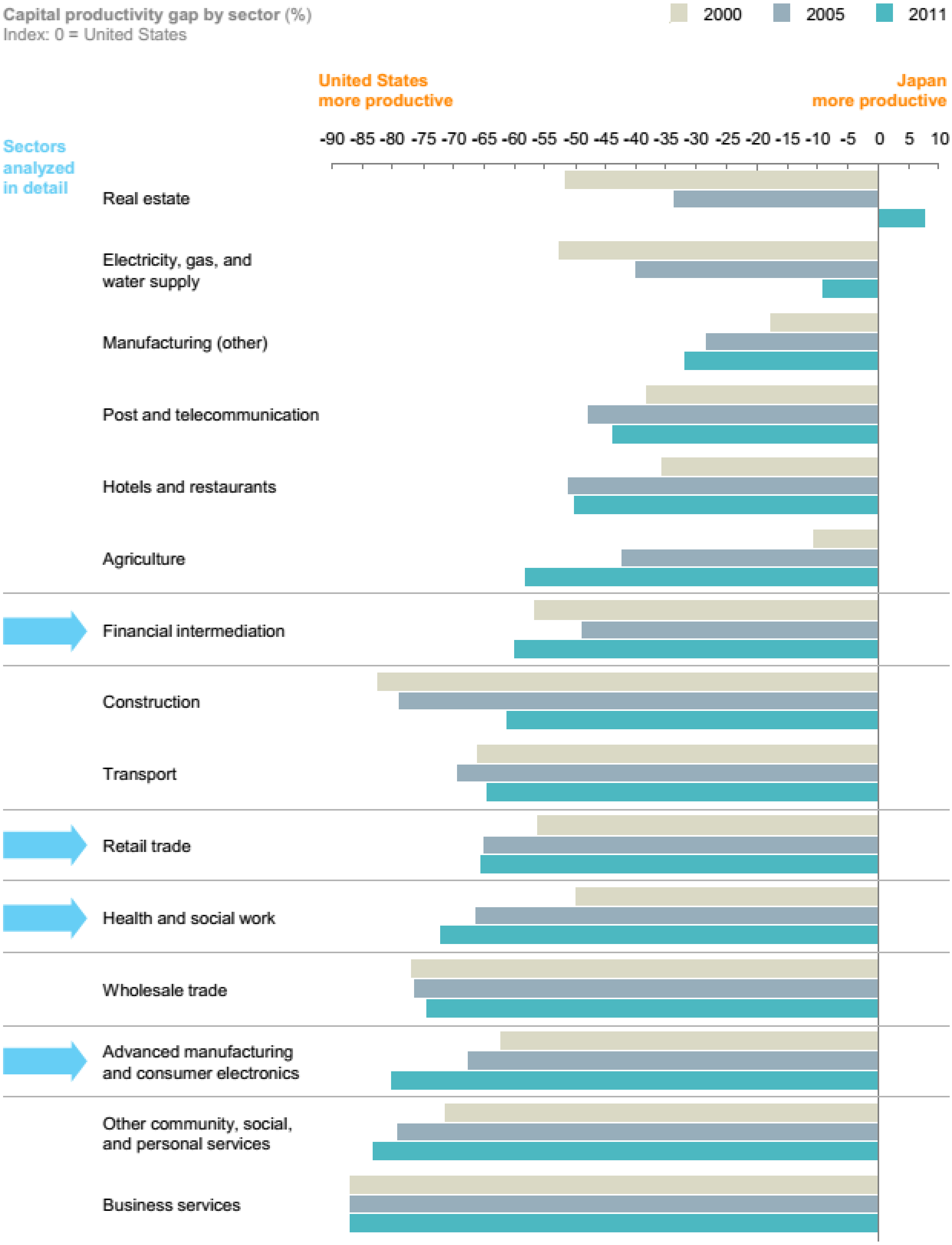
Japan's labor productivity gap with the United States has been widening across most industries



NOTE: Education, public administration, and domestic employees not included.

SOURCE: World Input-Output Database; World Bank; McKinsey Global Institute analysis

Japanese sectors are also falling behind US sectors in capital productivity



NOTE: Education, public administration, and domestic employees not included.

SOURCE: World Input-Output Database; World Bank; McKinsey Global Institute analysis

MARKET DEVELOPMENTS

The generally good world outlook for growth looking well ahead remains the prop under equities. For now the low inflation figures created by falling commodity prices will keep interest rates down. But wages are starting to rise more strongly in the UK. As labour shortages develop, productivity will start to rise and with it wages. The threat of renewed inflation will force interest rates up, if only a little. This is what underlies our hostility to buying bonds.

Table 1: Market Developments

	Market Levels		Prediction for Apr/May 2016	
	Mar 27	May 1	Previous Letter	Current View
Share Indices				
UK (FT 100)	6895	6961	9964	9891
US (S&P 500)	2056	2086	2658	2724
Germany (DAX 30)	11844	11454	16452	15910
Japan (Tokyo New)	1569	1593	2140	2173
Bond Yields (government				
UK	1.71	1.95	2.00	2.20
US	1.98	2.09	2.10	2.10
Germany	0.22	0.37	1.50	1.50
Japan	0.33	0.33	0.70	0.70
UK Index Linked	–0.97	–0.88	0.10	0.10
Exchange Rates				
UK ($ per £)	1.48	1.54	1.56	1.50
UK (trade weighted)	89.2	91.3	82.3	90.6
US (trade weighted)	102.5	100.4	85.51	100.0
Euro per $	0.92	0.89	0.79	0.91
Euro per £	1.36	1.37	1.23	1.37
Japan (Yen per $)	119.0	119.7	98.0	120.5
Short Term Interest Rates (3-month deposits)				
UK	0.56	0.57	1.10	1.10
US	0.27	0.28	0.70	1.10
Euro	0.01	–0.01	0.50	0.10
Japan	0.10	0.09	0.70	0.20

Table 2: Prospective Yields [1]

Equities: Contribution to £ yield of:

	Dividend Yield	Real Growth	Inflation	Changing Dividend Yield	Currency	Total
UK	3.40	2.5	1.6	38.00		45.50
US	1.90	3.0	1.6	26.00	2.39	34.89
Germany	2.60	1.4	1.5	36.00	0.47	41.97
Japan	1.70	1.4	2.0	33.00	1.72	39.82
UK indexed[2]	–0.88		1.6	1.00		1.72
Hong Kong[3]	2.60	6.8	1.6	2.00	2.39	15.39
Malaysia	3.30	5.5	1.6	58.00	2.39	70.79
Singapore	3.50	4.5	1.6	36.00	2.39	47.99
India	1.40	8.0	1.6	31.00	2.39	44.39
Korea	1.10	3.0	1.6	–12.00	2.39	–3.91
Indonesia	2.20	6.1	1.6	41.00	2.39	53.29
Taiwan	2.80	3.4	1.6	29.00	2.39	39.19
Thailand	3.20	4.1	1.6	38.00	2.39	49.29

Bonds: Contribution to £ yield of:

	Redemption Yield	Changing Nominal Rates	Currency	Total
UK	1.95	–2.50		–0.55
US	2.09	–0.10	2.39	4.38
Germany	0.37	–11.30	0.47	–10.46
Japan	0.33	–3.70	1.72	–1.65

Deposits: Contribution to £ yield of:

	Deposit Yield	Currency	Total
UK	0.57		0.57
US	0.28	2.39	2.67
Euro	–0.01	0.47	0.46
Japan	0.09	1.72	1.81

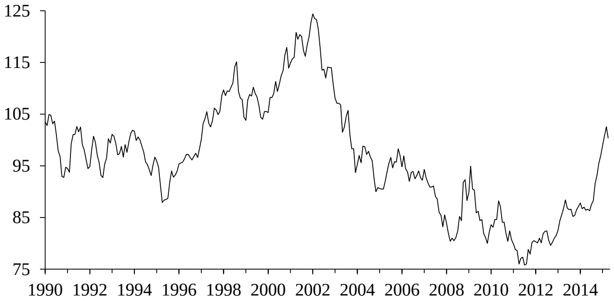
[1] Yields in terms of €s or $s can be computed by adjusting the £-based yields for the expected currency change.
[2] UK index linked bonds All Stocks
[3] Output based on China.

Table 3: Portfolio(%)

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

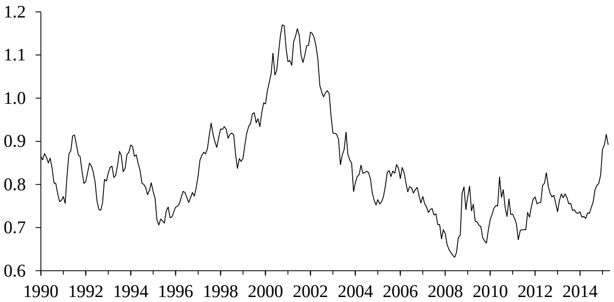
INDICATORS AND MARKET ANALYSIS
FOREIGN EXCHANGE MARKETS

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

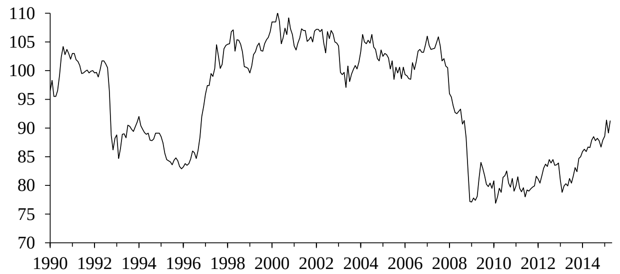


UK: Dollars Per Pound Sterling

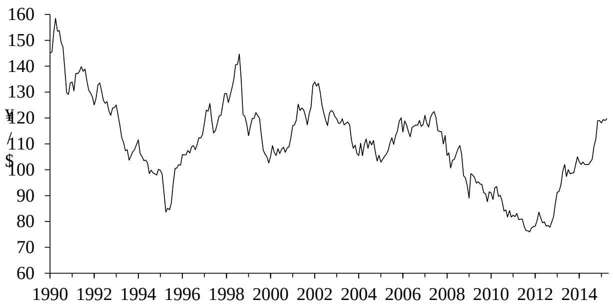
Euro per US dollar



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

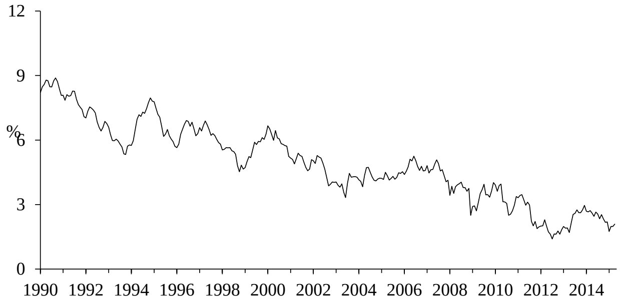


Japan : Yen Per U.S. Dollar

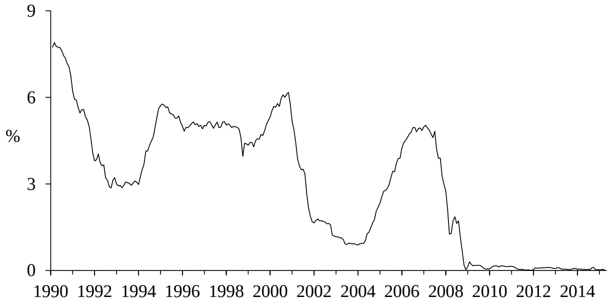


GOVERNMENT BOND MARKETS

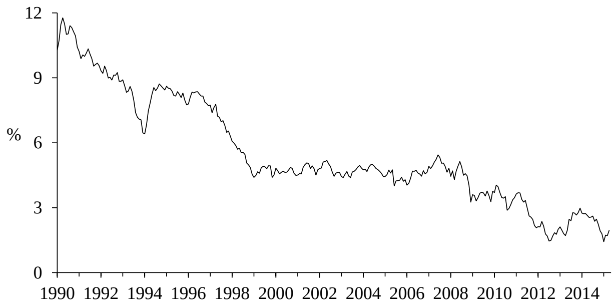
U.S.: Yield on Long-Term Government Bonds



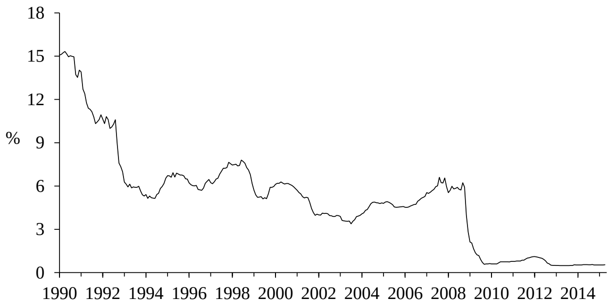
U.S. : 3-Month Treasury Bill



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

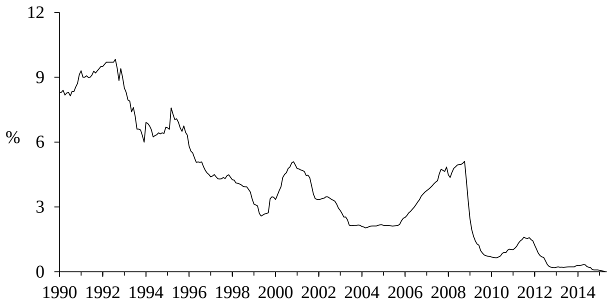


U.K. : 3-Month Interbank Rate

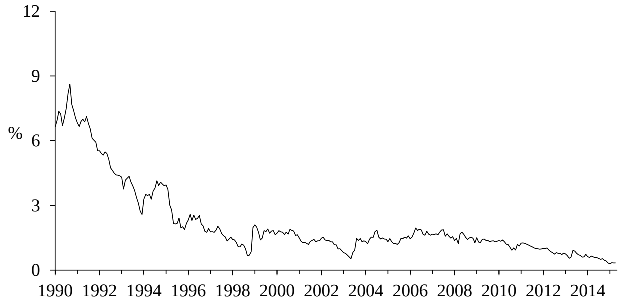


Germany: Yield on Public Authority Bonds

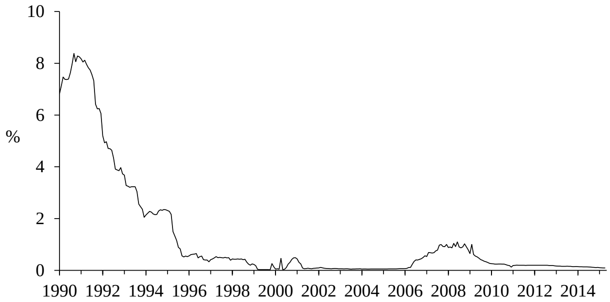
Germany : 3-Month Interbank Deposit Rate



Japan: Yield on Long-Term Government Bonds

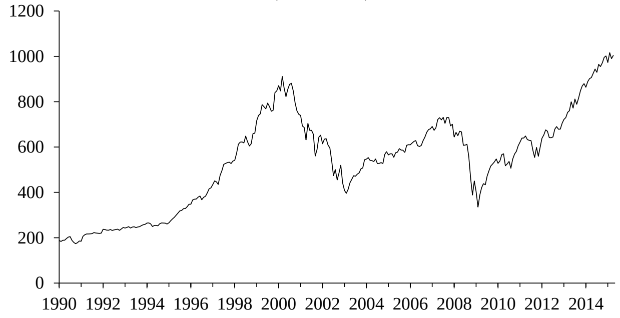


Japan : 3 Month Money Market Rate

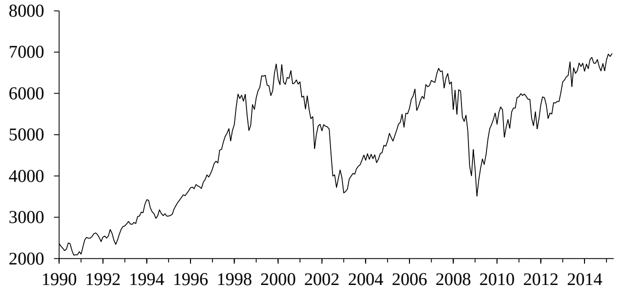


MAJOR EQUITY MARKETS

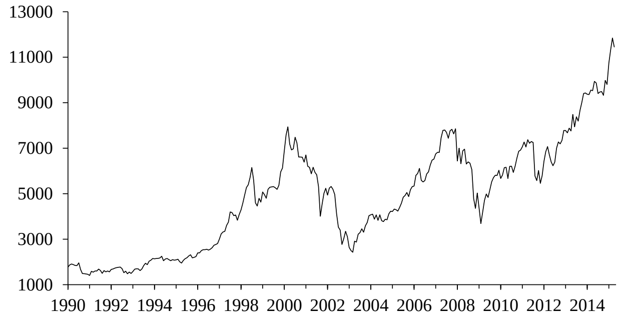
U.S. : S & P 400 Industrial
(1985=100)



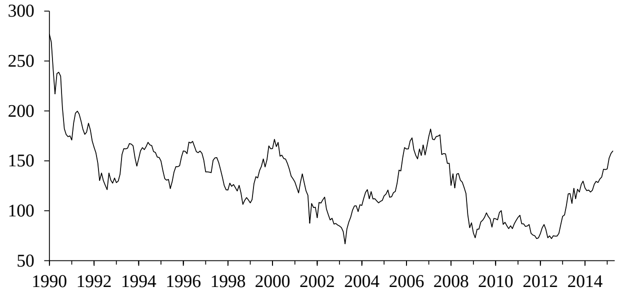
U.K. : FTSE-100 Index
(10 April 1962=100)



Germany : DAX 30



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



EMERGING MARKETS

Anupam Rastogi

India

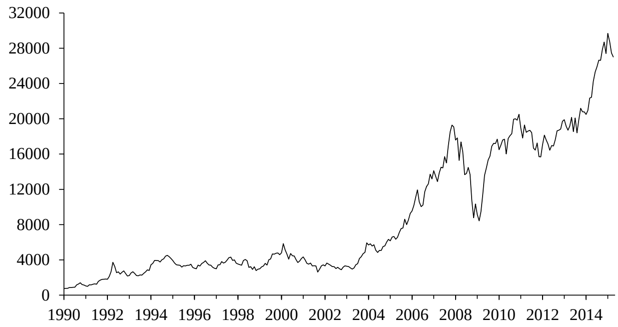
There are some concerns being raised that the government may not be able to meet expectations. Though, positive news is trickling down slowly, investors are not buying all what the government is articulating. There is a tug-of-war between Prime Minister Modi and his political opponents to prove who cares more about India's poor which will likely intensify and could shape the pace of Mr. Modi's efforts to overhaul Asia's third-largest economy.

The central bank expects the macroeconomic environment to improve this year. It predicted that India's GDP would expand 7.8% or less in the current fiscal year. That is up from 7.5% last year but still below the official government forecast that the economy will grow between 8.1% and 8.5% this year. Industrial production is rising gradually and rose 3.3% from a year earlier in February. The IMF expects India to expand by 7.5% in in 2015 and 2016.

Wholesale price inflation index is negative 2% in line with the global inflation. But domestic price inflation, consumer price inflation, is 5.2%. This is lower than the RBI's target of 6% for the current fiscal year. The central bank has cut rates twice this year and could cut rates further if it sees more signs that inflation is easing. However, India's central bank left its key lending rate unchanged in its bi-annual monetary policy announcement in April as there is doubt about a normal monsoon this year. This may not impact inflation much as India's biggest grain-producing states are more productive than ever and don't depend on the monsoon anymore.

Indian Prime Minister Narendra Modi sought to convince German industry that India is a reliable place to do business on his first visit to Germany as India's leader. He insisted that he was committed to introducing a "predictable" business environment in India. PM Modi's highly optical campaign of 'Make in India' is bearing fruits. Airbus Group aims to increase its sourcing of aerospace parts from Indian companies to $2 billion in the next five years.

India: BSE Sensitive



The country received an estimated $23bn in capital expenditure on inward investment projects last year, capturing 9% of market share in Asia-Pacific. Compared to this, China received FDI of $75bn and a 30% market share. But India is on an upswing. The country saw a 47% increase in the number of projects, at 641, while China's project numbers grew only 4%.

A World Bank report estimated that India received $70.39 billion in remittances in 2014. This is more than all the remittances received by the Philippines, Mexico and Pakistan combined.

Moody's Investors Service changed its ratings outlook on India to positive from stable, citing the "increasing probability that actions by policy makers will enhance the country's economic strength." All three of the big agencies currently assign Indian debt their lowest investment-grade ratings.

India's government has upset global fund managers, after finance minister Arun Jaitley revealed that tax demands on foreign investors are intended to raise as much as Rs400bn ($6.4bn). Institutional investors think this could seriously dent the markets.

	13-14	**14-15**	**15-16**	**16-17**	**17-18**
GDP (%p.a.)	6.9	7.4	8.0	8.0	8.0
WPI (%p.a.)	7.0	6.0	5.0	4.0	4.0
Current A/c(US$ bill.)	-50.0	-34.0	-30.0	-32.0	-35.0
Rs./$(nom.)	60.0	62.0	63.5	64.0	65.0

China

The IMF expects China's slowdown to continue with growth of 6.8% this year and 6.3% in 2016. But, China hopes that GDP will expand approximately 7% in 2015. It has raised doubt about the trustworthiness of China's own statistics. Some economists believe that true growth rate is below 4%. The weak reading in the HSBC China Manufacturing Purchasing Managers' Index which came in to 49.2 suggests that the Chinese economy is slowing. But, a boom in services, China generated over 13m new urban jobs last year, a record that makes slower growth tolerable. In our opinion, China is well on its path of restructuring its economy. With loosening control over interest rates and the flow of capital across China's borders, fiscal reforms and administrative reforms, it should be able to steer the economy to a sustainable growth rate of 5% a year in the current decade.

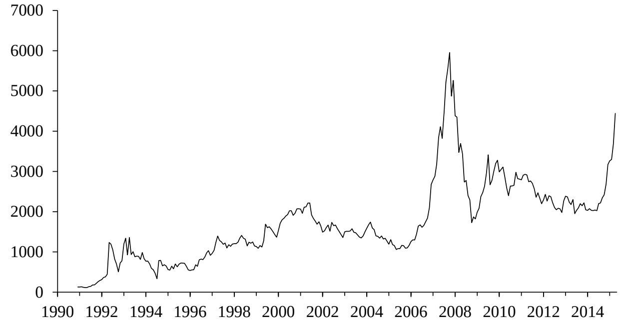
The consumer price index gained 1.4% year over year in March. The moderate rise was helped by a slight easing of food prices after the Chinese Lunar New Year holiday.

China's central bank is introducing its own version of quantitative easing. It is similar to the European variety of QE and not that of the US type. The new easing measures are aimed at smoothing the implementation of a local-government debt restructuring. The aim is to encourage banks to buy new bonds issued by local governments of longer duration and paying lower coupon rate. These bonds replace loans owed by local government financing vehicles, off-balance-sheet platforms set up by towns and provinces to get around restrictions on direct borrowing. The first wave of refinancing is under way, with an initial tranche of bonds worth 1 trillion yuan ($160 billion). Not surprisingly, banks are hardly keen to make the swap. Now the PBOC looks set to take up the burden itself. The PBOC would swap long-term loans for local government bonds now held by banks. This would give the banks added liquidity, and allow them to lend the money back into the real economy at a higher rate.

China's central bank is considering extraordinary measures to boost credit flows to heavily indebted local governments, as Beijing struggles to recapitalize the provinces after years of unsustainable borrowing and investment.

China's exports slumped in March, while imports fell for the fifth month in a row — further evidence of weak demand both at home and abroad. The drop in imports of 12.7% was in line with expectations and partly reflected the steep decline in global commodities prices. But the 15% year-on-year slide in exports during the month came as a surprise.

China: SSE Composite Index



The yuan had been weakening slightly against the U.S. dollar until recently, it has continued to strengthen against many other major currencies, including the euro and Japanese yen. In terms of the real effective exchange-rate the yuan has appreciated about 14% since mid-2014. It seems that the central bank has been supporting exporters by selling dollars for yuan to defend the band. This partly explains the shrinkage in the PBOC's currency reserves to $3.73 trillion from $4 trillion in June of last year.

China's new investment bank will focus on large infrastructure projects, filling a gap left by other lending institutions. The proposed Asian Infrastructure Investment Bank will target "big-scale infrastructure projects" only, such as toll roads, power plants, seaports and airports according to the Chinese government.

Non-Chinese companies are increasingly using the renminbi as an international currency and expect to more than double the volume of transactions in the next five years, according to a survey of 150 senior executives from multinational companies. The survey found that more than half of non-Chinese companies had used the renminbi for payments outside mainland China, mainly to benefit from lower transaction and funding costs.

	13	**14**	**15**	**16**	**17**
GDP (%p.a.)	7.7	7.4	6.8	6.5	6.0
Inflation (%p.a.)	3.5	2.0	1.0	1.5	2.0
Trade Balance(US$ bill.)	260	382	350	320	300
Rmb/$(nom.)	6.2	6.2	6.3	6.3	6.2

South Korea

Gross domestic product grew a seasonally adjusted 0.8% in the first three months from the previous quarter, following a 0.3% rise in the last quarter of 2014. The Bank of Korea has reduced its growth forecast for this year to 3.1% from 3.4%, because of slow public spending after tax revenues fell short of government expectations. The IMF expected the Korean economy to expand 3.3% and 3.5% in 2015 and 2016 respectively.

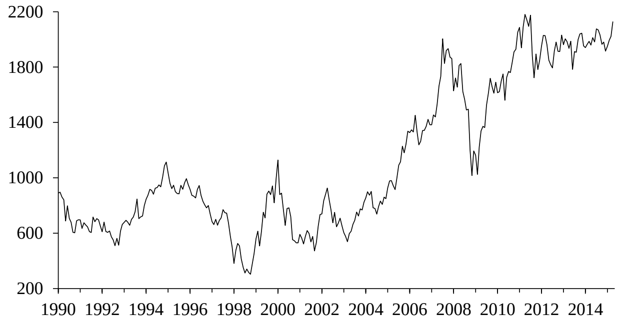
Consumer price inflation fell to 0.4% in March and would have slipped below zero without the impact of a recent tobacco tax increase. The Bank of Korea has also lowered its inflation forecast for this year from 1.9% to 0.9%. We expect another interest rate cut could follow in the coming months. The central bank reduced a 0.25 percentage-point rate cut in March, taking the policy rate to a record low of 1.75%.

South Korea's exports are slipping just as Japan's are picking up, as a weak yen has made Japanese goods more competitive globally. The trade data also showed imports plunged 15.3% from a year earlier in March, following a revised 19.7% decrease in February. The sharper drop in imports than in exports created a trade surplus of $8.39 billion in March, widening further from the previous month's revised $7.71 billion. The trade balance has been in the black since February 2012.

Since June 2014 through February, the won has depreciated 9% against the U.S. dollar but not as much as the Japanese yen. Foreign investors bought a net Won4.6tn worth of Korean shares in April alone, as ample global liquidity boosted their risk appetite for emerging market assets.

	13	**14**	**15**	**16**	**17**
GDP (%p.a.)	3.0	3.3	3.3	3.0	3.0
Inflation (%p.a.)	1.3	2.0	2.0	2.0	2.1
Current A/c(US$ bill.)	71.0	80.0	80.0	84.0	88.0
Won/$(nom.)	1100	1080	1120	1100	1100

Korea: Composite Index



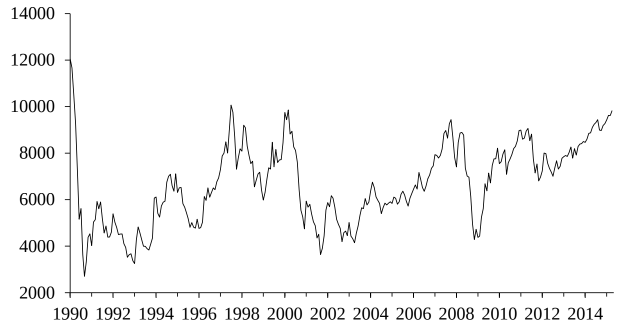
Taiwan

Taiwan's gross domestic product is set to grow 3.8% in 2015 and 4.1% in 2016, according to the International Monetary Fund. The country's consumer prices will remain subdued and grow 0.7% and 1.3%, while unemployment is to remain stable at 4% for both years.

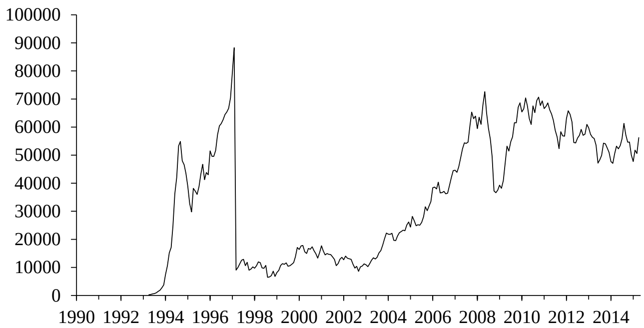
Notwithstanding China's eagerness to have a strong Asian Infrastructure Investment Bank, China rejected Taiwan's bid to become a founding member of the bank because China does not like the title the island uses.

The Taiwan dollar appreciated in the recent past and could strengthen to 30.3 if stock inflows continue.

Taiwan: Weighted TAIEX Price Index



Brazil: Bovespa



	13	**14**	**15**	**16**	**17**
GDP (%p.a.)	2.1	3.7	3.8	4.0	34.0
Inflation (%p.a.)	1.2	1.5	1.5	1.6	1.6
Current A/c(US$ bill.)	50.6	57.4	60.0	64.0	68.0
NT$/$(nom.)	30.0	31.0	32.0	31.0	31.5

Brazil

According to the Brazilian government the economy will contract 0.9% in 2015 and grow 1.3% in 2016. After years of stimulus, Brazil's economic growth posted 0.1% growth in GDP in 2014.

The government forecast an inflation rate of 8.2% for 2015, and of 5.6% for 2016. Inflation has surged above the central bank's 4.5% target and expected to remain so for some time. Reacting to this news and eagerness to maintain the credit rating, the country's central bank raised the benchmark Selic rate by an expected 50 basis points to 13.25 per cent — the highest level since January 2009.

We expect the central bank to raise the Selic rate by 25 basis points at its next meeting in June, and another 50 basis point increase is not ruled out. The bank's decision would depend on inflation data, the performance of Brazil's currency and the progress made by the government on the fiscal front.

The government maintained its target of achieving a primary surplus of 1.2% of gross domestic product this year and of 2% in 2016. The primary surplus is revenue minus noninterest spending, and is a measure of the government's ability to save. The country's nominal deficit, which includes interest payments, is expected to fall to 5.2% of GDP at the end 2015, from 7.3% of GDP in 2014.

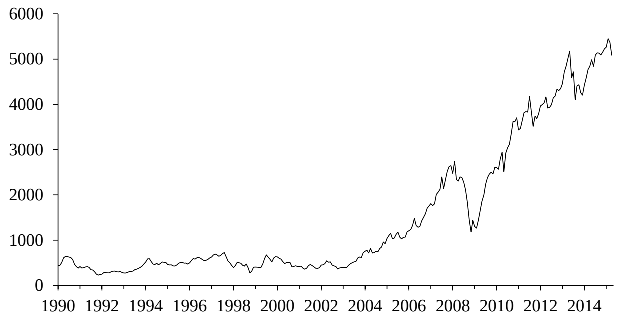
Brazilian Finance Minister Joaquim Levy has told the law makers that it is necessary to revert years of growing debt, something achievable by delivering primary surpluses, in order to preserve investment grade. The policy makers have run out of quick fixes for the country's economic problems and the government has no room for mistakes as it implements new policies to get its budget in order and spur growth. Due to Mr. Levy's efforts in maintaining a tight fist, Standard & Poor's Ratings Services left its ratings for Brazil in investment-grade territory with a stable outlook.

	13	**14**	**15**	**16**	**17**
GDP (%p.a.)	2.5	0.1	-1.0	1.0	1.2
Inflation (%p.a.)	5.9	6.5	7.9	6.5	6.0
Current A/c(US$ bill.)	-75.0	-70.0	-70.0	-70.0	-80.0
Real/$(nom.)	2.3	2.4	2.8	2.8	2.8

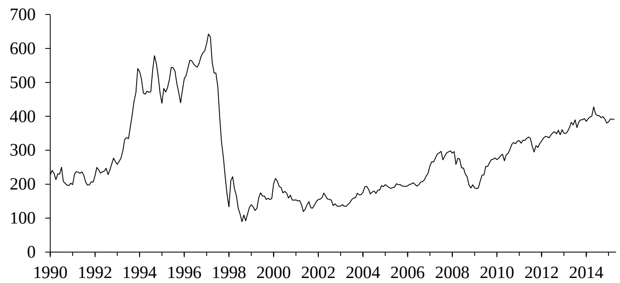
Other Emerging Markets

Hong Kong: FT-Actuaries

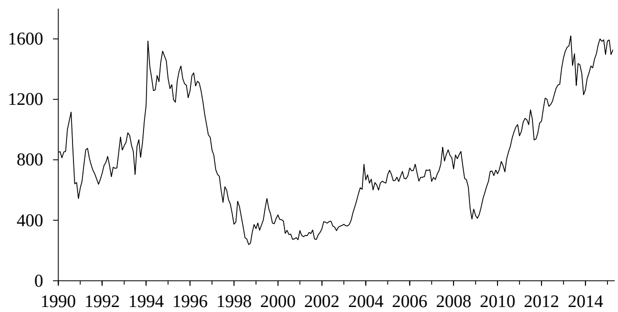
Indonesia: Jakarta Composite



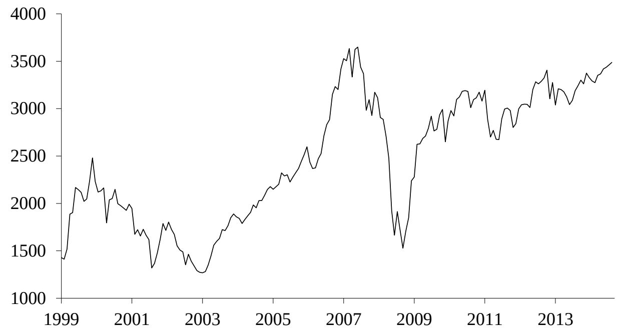
Malaysia: FT-Actuaries (US$ Index)



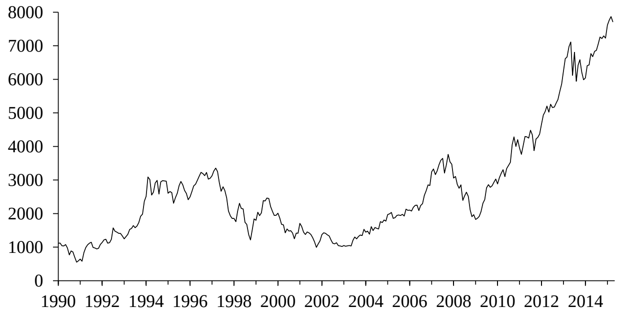
Thailand: Composite Index



Singapore: Straits Times Index

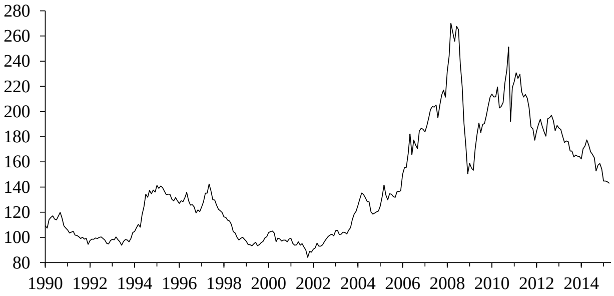


Philippines: Manila Composite

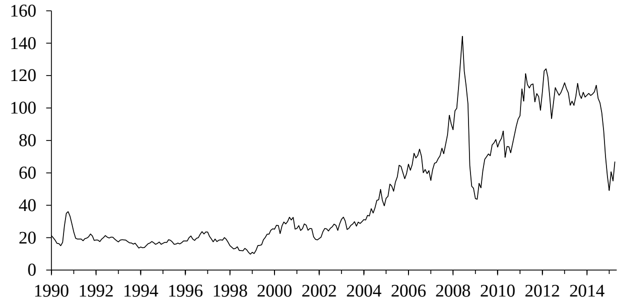


COMMODITY MARKETS

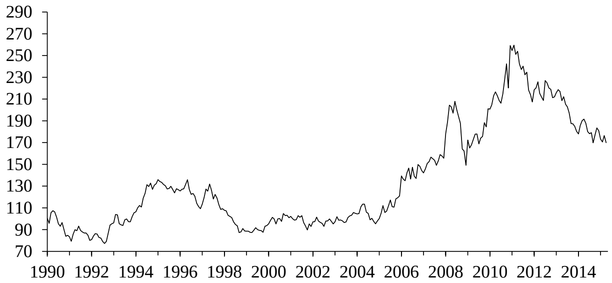
Commodity Price Index (Dollar)
(Economist, 2000=100)



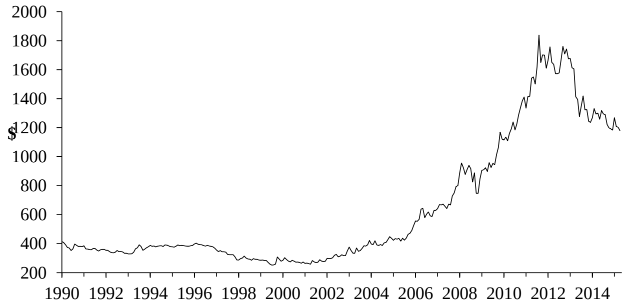
Oil Price: North Sea Brent (in Dollars)



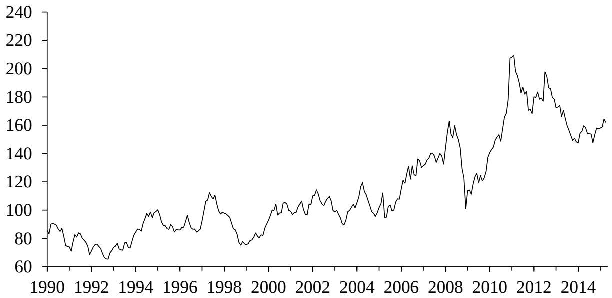
Commodity Price Index (Sterling)
(Economist, 2000=100)



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]
2013	1.9	1.3	0.6	81.6	85.6	-1.3	3.1	-0.2
2014	1.6	1.8	0.6	87.1	92.0	-1.0	2.4	0.2
2015	0.6	1.8	0.6	90.7	95.6	-1.0	1.6	-0.1
2016	1.6	2.2	1.0	90.8	95.8	-0.7	2.4	0.3
2017	1.7	2.5	1.6	90.7	95.8	-0.4	2.5	0.4
2018	2.0	2.5	2.1	90.3	95.8	0.0	2.7	0.2
2013:1	1.9	1.0	0.6	80.5	84.1	-1.1	3.3	-0.8
2013:2	1.7	0.9	0.5	80.7	84.2	-1.5	3.1	-0.9
2013:3	2.1	1.5	0.5	81.4	85.3	-1.4	3.2	-0.2
2013:4	1.9	1.7	0.5	83.7	88.7	-1.1	2.7	0.4
2014:1	1.7	1.8	0.6	85.7	90.6	-1.2	2.7	0.7
2014:2	1.8	1.9	0.6	87.1	91.6	-1.0	2.6	1.0
2014:3	1.6	1.9	0.6	88.2	93.0	-0.7	2.5	1.2
2014:4	1.3	1.4	0.5	87.5	92.9	-1.0	2.0	0.6
2015:1	0.1	1.8	0.5	91.0	95.4	-1.1	1.3	0.7
2015:2	0.5	1.6	0.6	90.6	95.4	-1.1	1.6	0.3
2015:3	0.8	1.8	0.7	90.8	96.0	-0.9	1.8	0.3
2015:4	1.0	2.0	0.8	90.5	95.7	-0.9	1.9	0.3

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)
2013	238.6	1.1	4.2	1.4	132.1
2014	241.6	1.3	3.0	1.0	131.6
2015	244.3	1.1	2.2	0.8	132.3
2016	249.6	2.2	2.0	0.7	133.0
2017	255.3	2.3	1.9	0.7	133.7
2018	261.5	2.4	1.7	0.6	134.3
2013:1	236.8	0.6	4.6	1.5	132.0
2013:2	240.7	2.3	4.4	1.5	133.7
2013:3	239.0	0.8	4.1	1.4	132.0
2013:4	238.0	1.1	3.7	1.3	130.5
2014:1	241.4	1.9	3.4	1.2	132.4
2014:2	240.4	-0.1	3.1	1.1	131.2
2014:3	241.5	1.0	2.8	1.0	131.3
2014:4	243.0	2.1	2.6	0.9	131.6
2015:1	241.9	0.2	2.3	0.8	132.5
2015:2	243.2	1.2	2.2	0.8	132.0
2015:3	245.1	1.5	2.2	0.8	132.2
2015:4	246.9	1.6	2.1	0.7	132.4

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
2013	149.7	716792.3	422942.6	280112.3	186839.5	-43986.8	129115.4
2014	153.9	737015.5	427963.1	304158.8	190713.6	-49433.4	136386.5
2015	158.6	759446.8	437481.6	357841	150973.8	-45651	141195.8
2016	162.6	778767.5	447600.9	375822.1	146080.3	-45648.1	145089.6
2017	166.5	797138.6	458510.3	387601.8	145469.9	-45657.5	148789
2018	170.4	815994.3	469801.9	399325	145135.3	-45677.8	152592.5
2013/12	1.7		0.8	6.9	-0.8		6.5
2014/13	2.8		1.2	9.2	2.1		6.0
2015/14	3.0		2.2	17.7	-20.8		3.6
2016/15	2.5		2.3	5.0	-3.2		2.8
2017/16	2.4		2.4	3.1	-0.2		2.6
2018/17	2.4		2.5	3.0	-0.2		2.6
2013:1	148.3	177519.5	105980.9	63263.4	48156.3	-9136.5	30744.6
2013:2	149.2	178660.4	105506.8	65944.1	45724.2	-8941.9	29572.8
2013:3	150.3	179940.8	105672.5	73909.9	46393.6	-13073.1	32962.1
2013:4	150.9	180671.6	105782.4	76994.9	46565.5	-12835.3	35835.9
2014:1	152.2	182265.5	106436.3	74892.1	48266.6	-12641.4	34688.1
2014:2	153.5	183784.4	106421.7	75257.3	46811.9	-12072.8	32633.8
2014:3	154.5	184921.4	106888.2	77659.4	47749.3	-13346.2	34029.3
2014:4	155.4	186044.2	108216.9	76350.0	47885.7	-11373.0	35035.4
2015:1	157.1	188026.1	108559.6	90141.6	35840.1	-11418.3	35096.4
2015:2	158.9	190221.2	109098.3	87719.3	40006.7	-11415.5	35186.4
2015:3	159.0	190338.1	109639.8	91421.5	36024.5	-11410.3	35337.0
2015:4	159.4	190861.4	110183.9	88558.6	39102.5	-11407.0	35576.0

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)
2013	6.0	1550.9	92.5	47.1	-65.9
2014	6.1	1615.2	97.8	51.9	-84.2
2015	4.8	1679.3	80.2	53.9	-77.8
2016	4.1	1752.9	71.3	57.3	-78.2
2017	3.2	1827.5	57.7	61.8	-78.8
2018	2.5	1909.1	47.4	64.9	-79.5
2013:1	3.5	373.6	13.3	11.9	-14.1
2013:2	8.0	374.9	30.0	11.2	-8.4
2013:3	5.0	385.5	19.3	11.5	-22.2
2013:4	8.3	394.8	32.7	11.9	-21.1
2014:1	2.7	395.7	10.6	12.4	-17.7
2014:2	7.8	396.7	31.0	12.8	-21.0
2014:3	4.9	402.8	19.6	13.0	-23.8
2014:4	7.1	408.3	29.2	13.1	-21.8
2015:1	4.4	407.4	18.0	13.0	-16.0
2015:2	6.0	415.2	24.7	13.2	-19.9
2015:3	4.2	418.5	17.6	13.4	-20.2
2015:4	5.5	422.4	23.3	13.7	-21.7

1 GDP at market prices (Financial Year)

WORLD FORECAST DETAIL

Growth Of Real GNP

	2011	2012	2013	2014	2015	2016
U.S.A.	1.6	2.3	2.2	2.3	3.0	3.0
U.K.	1.6	0.7	1.7	2.8	3.0	3.5
Japan	–0.4	1.7	1.6	0.3	1.2	1.7
Germany	3.6	0.4	0.1	1.4	1.7	1.8
France	2.1	0.4	0.4	0.4	0.8	1.3
Italy	0.6	–2.3	–1.9	–0.3	0.4	1.0

Real Short-Term Interest Rates

	2011	2012	2013	2014	2015	2016
U.S.A.	–1.5	–1.5	–1.5	–1.6	–1.4	–0.5
U.K.	–2.4	–1.1	–1.3	–1.0	–1.0	–0.7
Japan	–0.9	–1.3	–1.6	–1.6	–1.7	–1.8
Germany	0.1	–0.7	–1.2	–1.4	–1.4	–1.8
France	0.6	0.0	–0.6	–0.9	–1.3	–1.7
Italy	0.4	0.0	–0.6	–1.0	–1.4	–1.7

Real Long-Term Interest Rates

	2011	2012	2013	2014	2015	2016
U.S.A.	0.0	–0.1	1.1	0.3	0.2	0.8
U.K.	0.2	–0.8	–0.2	0.2	–0.1	0.3
Japan	–0.8	–1.1	–1.3	–1.6	–1.6	–1.5
Germany	0.0	–0.3	–0.9	–1.4	–1.7	–1.4
France	0.2	–0.1	–0.7	–1.3	–1.6	–1.4
Italy	0.1	–0.2	–0.7	–1.3	–1.6	–1.4

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

	2011	2012	2013	2014	2015	2016
U.S.A.	79.8	81.6	82.1	83.0	83.2	83.0
U.K.	88.7	92.4	81.6	87.1	90.7	90.8
Japan	80.6	79.6	63.5	61.1	60.7	60.4
Germany	100.1	96.7	99.0	100.5	100.2	100.5
France	102.9	99.5	100.7	101.7	101.4	101.7
Italy	107.2	105.2	106.9	107.8	107.0	107.3

[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.

Growth Of Consumer Prices

	2011	2012	2013	2014	2015	2016
U.S.A.	3.1	2.1	1.5	1.7	0.5	2.0
U.K.	3.5	2.1	1.9	1.6	0.6	1.6
Japan	–0.3	0.0	0.4	2.8	1.0	1.4
Germany	2.1	2.0	1.5	1.0	0.5	1.7
France	2.1	2.0	0.9	0.6	0.2	0.1
Italy	2.8	3.0	1.2	0.2	0.2	0.6

Nominal Short-Term Interest Rates

	2011	2012	2013	2014	2015	2016
U.S.A.	0.1	0.1	0.1	0.1	0.6	1.5
U.K.	0.9	0.9	0.6	0.6	0.6	1.0
Japan	0.2	0.2	0.2	0.1	0.2	0.2
Germany	1.4	0.6	0.2	0.2	0.1	0.1
France	1.4	0.6	0.2	0.2	0.1	0.1
Italy	1.4	0.6	0.2	0.2	0.1	0.1

Nominal Long-Term Interest Rates

	2011	2012	2013	2014	2015	2016
U.S.A.	1.9	1.8	3.0	2.2	2.2	2.8
U.K.	2.0	0.9	1.3	1.8	1.8	2.0
Japan	1.0	0.8	0.7	0.3	0.4	0.5
Germany	1.8	1.5	1.0	0.5	0.3	0.6
France	1.8	1.5	1.0	0.5	0.3	0.6
Italy	1.8	1.5	1.0	0.5	0.3	0.6

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

	2011	2012	2013	2014	2015	2016
U.S.A.[1]	78.08	80.90	86.00	89.40	100.50	100.00
U.K.	1.61	1.59	1.55	1.65	1.50	1.50
Japan	79.36	80.51	98.20	106.70	120.00	120.50
Eurozone	0.71	0.78	0.75	0.76	0.90	0.91

[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