

# LIVERPOOL INVESTMENT LETTER

June 2015



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.

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## REFLECTIONS POST-ELECTION

The removal of electoral uncertainty has given the UK economy a substantial boost. There is now the prospect of five years of centre-right reforming government, with the reduction of public spending at its heart. This reduction alone will raise public sector productivity and lead to necessary reform; the public sector is largely incapable of improving performance until resources are reduced. This has always been the Treasury's mantra and it seems to have been demonstrated by the reaction to the cuts so far. For example the police have improved front-line services in spite of large cuts; it seems to have prompted the use of auxiliaries, which are a good innovation. The Department of Defence has been a byword for waste for decades; it may be that now it finally has to sink inter-service rivalries to survive.

Commentators are now wheeling out the EU referendum as the next concern. However this will turn crucially on how the EU reacts to UK demands for reform. If it rejects them outright, as seems most likely, then the majority of UK businesses will turn against the EU and will welcome an Out vote; with business in favour popular opinion will produce an Out result. If the EU accepted them, then the case to leave would be much weakened; it would be difficult to argue against the case for giving the new reformed set-up a chance to work.

The other uncertainty about which there is much muttering is the lack of productivity growth in recent years. Yet with wages growing so weakly and falling in real terms there has been little pressure to reduce labour use. This will change steadily as the economy's resources get tight.

The outlook for the UK economy shines by comparison with that of eurozone economies. Yet even there it may well be that the austerity policies pursued on the continent begin to pay dividends as demand recovers.

World growth is running in the 3–4% range which is below the heady rates of the 2000s but looks as if it will sustain

**Table 1: Summary of Forecast**

	2012	2013	2014	2015	2016	2017	2018
GDP Growth <sup>1</sup>	0.7	1.7	2.8	3.0	2.5	2.4	2.4
Inflation	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. <sup>2</sup>	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 <sup>3</sup>	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	88.6	84.0	79.6	58.7	39.1

<sup>1</sup>Expenditure estimate at factor cost

<sup>2</sup>U.K. Wholly unemployed excluding school leavers (new basis)

<sup>3</sup>Sterling effective exchange rate, Bank of England Index (2005 = 100)

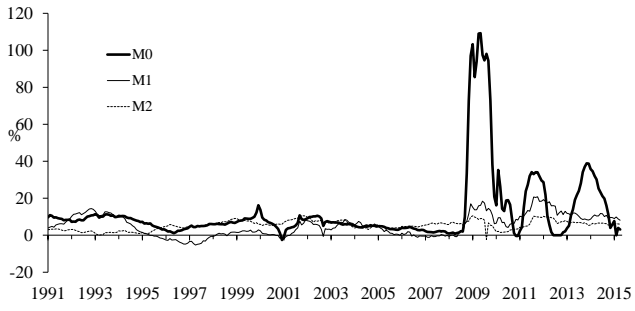
weak raw material prices for a decade at least. This should allow a long upswing to take a grip on the world economy.

Overall, it is hard not to be optimistic about the business cycle outlook over the next decade. Looking back, we increasingly can see that the 'trend' of world output before the crisis was simply unsustainable. The spiralling prices of raw materials should already have told us that. Also the rising bad debts in certain sectors, led by real estate, should have told us the same. The post-crisis economy is discovering which sectors can flourish in the new slower-growing world.

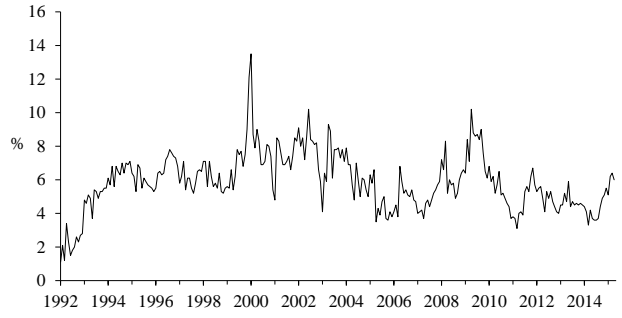
Can one make any sense of the argument that the world is entering a 'flatlining' period of stagnation? Will real interest rates remain low or even negative? Will nominal interest rates remain stuck at the zero bound? We do not think so. The US is likely to raise interest rates later this year. The UK can hardly fail to follow soon after. Credit growth is weak because of bank regulation; but non-bank credit will surely expand fast and bypass the regulators, precipitating the need to stop the creation of money by governments.

We think it will therefore not be too long before monetary policy returns to a more recognisable form and that the next boom in credit materialises as the new threat to stability.

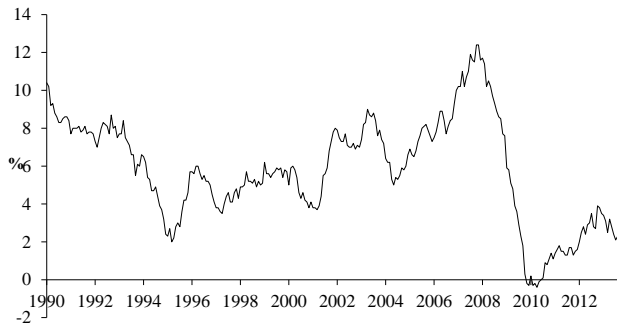
**U.S.: Growth in Monetary Aggregates (Yr - on - Yr)**



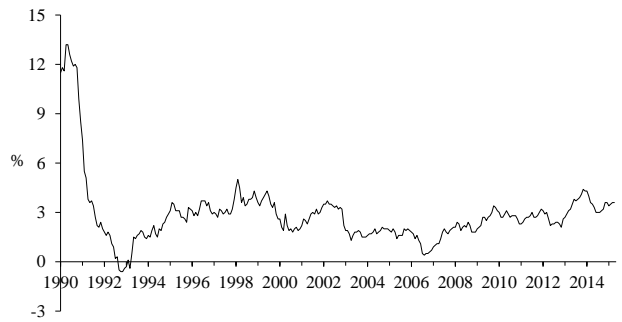
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**Eurozone M3 Growth**



**Japan: Growth of M2+CD's**



## FOCUS ON JAPAN

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Francesco Perugini

### Assessing progress in structural reforms (Part 1)

Almost two and a half years have passed since the government of Japan announced its ambitious strategy — the “Japan Revitalization Strategy (Japan is Back)” — to revive the economy from a state of low growth. The programme, designed to be the “third arrow” of “Abenomics” after Japan’s Prime Minister, Shinzo Abe, involves growth-enhancing structural reforms aimed at securing a pick-up in trend growth. While the first two arrows, monetary and fiscal policy, have been used most extensively by the Abe government and had some reasonable effects, progress on the implementation of growth-enhancing structural reforms has been more gradual.

The third arrow was regarded as the most important of the three, because conventional economics sees the first two arrows as aimed at creating the growth and inflationary expectations that allow policymakers the leeway to undertake deep reforms to rules and regulations deemed antagonistic to innovation and self-sustaining growth.

The growth strategy was made public in June 2013 but it went through various amendments in response to the deluge of criticisms from mainstream observers as well as due to changing priorities as Japanese experts’ understanding of resilience evolved. A main revision was made in June 2014, but it was more in presentation than in substance. The ten main areas of reform are summarised in the chart below (taken from the latest OECD Economic Survey on Japan). Among them are previously taboo subjects, such as enabling mergers and acquisitions, controversial labour reforms, the reduction or elimination of zombie industries and companies and efforts to improve the low corporate profitability that has long hampered progress in the economy.

The Abe administration has been promoting efforts and achievements on the reform strategy (<http://www.japan.go.jp/abenomics/index.html>) since its launch. However, economists and international observers have been critical. They say the third arrow is neither strong enough to create a short-term stock rally nor a solution to Japan’s long-term structural problems. “Although Abe proposes bold deregulation in agricultural, medical and labour markets, where politicians with vested interests have long blocked significant reforms, many of the key details remain unclear, in particular how to implement the reforms”, said Hiroshi Watanabe, senior economist at SMBC Nikko Securities Inc..

Analysts are also disappointed about the progress made so far. For instance, Richard Katz, a long time observer of the

Japanese economy, said that structural reform has been more talk than action. “We have seen serious reforms in Japan before: the change in the Large-Scale Retail Store Law, the “Big Bang” financial reforms, the clean-up of nonperforming loans, the telecom reforms, so, we know Japan can reform. But nothing Abe has done looks anything like those”, Katz said in a recent interview.

International organizations are talking along the same lines. For instance, the OECD, in its recent report “Economic Survey on Japan”, reviewed the country’s economic situation and updated the assessment it made a year before about the implementation of structural reforms. The report stressed that so far the structural reforms have lagged the first two arrows of monetary and fiscal stimulus, therefore more is required to boost growth in the face of a rapidly ageing population and very high government debt.

The IMF shares a similar view. At the end of the recent visit to the country, the IMF staff while monitoring economic development said that Abenomics has lifted Japan out of the doldrums but its arrows need to be reinforced for the reform programme to live up to its promise of being a “once in a lifetime” regime shift. In particular, the report said that more vigorous structural reforms, backed by further efforts to raise wages and investment, will be essential to lift growth, facilitate fiscal consolidation, and unburden monetary policy.

### The main reform areas

The Abe structural reform agenda is based on ten principal areas which can be grouped into three distinctive blocks: a) improving the dynamism of the business sector (points 1–5 in the chart below); b) increasing and improving the quality of the labour supply (6–8); and c) strengthening product market competition (9–10). In what follows we are going to look at the progress made in each of the 10 areas.

#### 1) Changing corporate governance

One of the higher profile elements has been the improvement of corporate governance. These reforms have been driven in large part by pressure from the foreign business community to address what it perceives as a weak corporate governance regime in Japan — compared to international standards, Japan’s corporate governance quality has improved since the early 1990s but it is still the second lowest in the G7 after Italy.

Efforts to reform corporate governance in Japan have traditionally been met with strong opposition from the business community, particularly the country’s most powerful business lobby Keidanren (Japan Business Federation). Despite that, over the last two years the Abe

government has made some progress on this issue. Two Codes have been introduced. The first one — the Stewardship Code — was introduced in February 2014. This sets several principles for institutional investors such as the public disclosure of investment policies, monitoring the companies in which they invest, and policies to use voting rights and announce the results.

In conjunction to this, the government also launched the JPX Nikkei Index 400 which selects the 400 companies with the highest return on equity and profit over the past three years. The JPX Nikkei Index 400 is intended to showcase the nation's best shares to institutional investors and shame executives of companies that were not picked into improving capital efficiency to make the cut. Following this, many Japanese companies started to improve their corporate governance and accounting practices to increase their chances of being among the 400 companies. The index has performed well since its inception and the outlook for further strong performance is helped by the fact that the Government Pension Investment Fund (GPIF) has been moving equity mandate benchmarks to the JPX-Nikkei Index 400.

More recently, on 13 May 2015, the Tokyo Stock Exchange (TSE) announced that it had finished revising its listing and related regulations to implement a second Code, the Governance Code, that would come into force on 1 June 2015. The Governance Code seeks 'growth-oriented governance', and its primary purpose is 'to stimulate healthy corporate entrepreneurship, support sustainable corporate growth and increase corporate value over the mid- to long-term'. In practice, the Governance Code urges companies to engage with their outside shareholders, take on at least two independent board directors, and reconsider their cross shareholdings and anti-takeover measures. They can choose not to follow that advice, but will have to explain in detail why they are continuing to adopt policies the government is actively discouraging.

Economists and financial managers remain critical of the reform. Some argue that because Japanese firms have historically been reluctant to bring in outsiders who may criticize how a firm is managed or fail to understand the business well enough to be able to make key decisions, the reform will not succeed — according to Chris Rowley, professor of human resource management at London's Cass Business School, about 2,000 independent directors need to be hired by June for the companies that still do not have outsiders on their boards to meet the new requirements.

For instance, Corinna Arnold, who manages the Japan stewardship fund at RWC, the UK asset manager, is "extremely heartened" by such developments, but she is sceptical about the immediate impact of the changes. This is despite the fact that a number of groups, including Hitachi, the engineering and electronics company, Canon, the camera and printer maker, and Toyota, the carmaker, have added independent directors to their boards or

promised to do so in the past 12 months. "Change is slow. Adding external directors to boards is all well and good but I pity the poor soul sitting on the board as an independent director as they will not have much of an opportunity to change the course of a company".

David Smith, head of corporate governance at the Asia arm of Aberdeen Asset Management, Europe's largest listed fund house, says: "For a long time investors shook their heads with frustration when it came to Japan and corporate governance. We are encouraged by the recent changes, but I do not think anyone would say Japan Inc. has changed overnight".

The government hopes that with these measures companies will stop hoarding cash and start either investing or returning money to the shareholders through higher dividends. According to the Flow of Funds Accounts, currency and deposits held by the private nonfinancial corporations amounted to ¥231 trillion (or 47% of GDP) by the end 2014 compared with around 35% in the 1990s. This suggests that capital is not efficiently used, which slows down not only company growth, but also the rest of the economy. The reason might be partly related to the Japanese corporate culture of risk avoidance. In general, company boards are made up of internally promoted officials. This has the advantage that the board is very familiar with the company. However, the members might be very slow in adapting to changing global markets. Moreover, cross-shareholding is widespread. These shares are not held for the purpose of maximizing shareholders' value but for maintaining corporate relationships. Also banks tend to have shares in companies to which they provide loans. Both these practices might reduce risk taking and reduce corporate profitability.

A recent study conducted by economists at the IMF showed that having multiple independent directors in the board is an important determinant in lowering companies' cash holdings. The data used in the analysis suggests that although the level of cash holdings varies among companies with zero or a very low share of independent directors, it is rare for companies with high shares of independent directors to have extremely high cash holdings. At the same time, very high cash holdings tend to be associated with relatively low shares of independent directors. According to this study, Japan's excessive corporate savings might be holding back growth, by preventing a more efficient use of resources.

Some results have been achieved by the government. In 2010, only 48.2% of the 1,672 firms listed in the first section of the TSE had outside directors. In 2014, the figure had jumped to 74.4% of 1,816 listed companies, according to the Tokyo-based Japan Association of Corporate Directors (JACD). But although more companies are appointing outside directors, the number of firms that have two or more of them still remains low. In 2014, 34.7% of firms had two or more outside directors, up from 26% in

2010. In addition, among the Nikkei 225 firms only 22.6% of board members were outside directors in 2014 — a sharp contrast to 84% in the US, 62% in France and 60% in England, according to a report compiled by consulting firm Spencer Stuart.

## 2) Reform the GPIF

Making the GPIF (Government Pension Investment Fund) — the world's largest pension fund with ¥130 trillion of assets at the end of last September — more aggressive in its investments has been another goal of Prime Minister Shinzo Abe's plan to reinvigorate capital markets. Abe's idea is to get the pension fund to take on incremental risk, and not leave its money sitting in Japanese government bonds where it is yielding no interest, and not helping the real economy.

Indeed, the GPIF has historically taken a very risk-averse approach to investment, maintaining structural overweight positions in defensive assets such as bonds and cash. Over the past, it has invested as much as two-thirds of its assets in bonds, mostly Japanese bonds. Finally, last October, encouraged by Abe, the GPIF announced a radical change in its portfolio. Under the new rules, the GPIF will cut its allocation to domestic bonds from 60% to 35%, while increasing domestic stocks from 12% to 25%. International bonds will climb from 11% to 15%, and international stocks will rise from 12% to 25%.

Three other big Japanese pension funds — the Pension Fund Association for Local Government Officials, the Federation of National Public Service Personnel Mutual Aid Association and the Promotion and Mutual Aid Corporation for Private Schools of Japan — whose combined assets account for another ¥50 trillion — last March have adopted the GPIF's "model portfolio" weightings. These three big public pension funds had previous targets for domestic bonds that ranged between 64% and 80% of their portfolios.

The reallocation to riskier assets by GPIF is almost complete after the acceleration registered in the fourth quarter of 2014 — according to recent estimates by economists at Morgan Stanley, the GPIF's weighting in equities has now risen to around 23% against the target of 25% versus around 12% one year ago. It is undoubtable that this has generated some of the most significant flows pushing up Japanese equity prices and weakening the Yen. The Topix Index has outperformed MSCI World Ex Japan by 14.9% since the new targets were announced last October. The GPIF sold around ¥2.3 trillion in the last quarter to buy foreign assets — this is 50% larger than Japan's Current Account Surplus of ¥1.5 trillion in the same quarter.

While there has been positive effects on the markets, economists have warned about the potential drawbacks of this policy. The Japanese public pension systems are

structured in such a way that contributions from the paying population are immediately channelled into payments to existing pensioners, rather than being saved for the contributors' own future payouts. The GPIF dates back to the time when finances were sufficiently robust to build up a pile of ballast. However, as the number of contributors has decreased in line with the declining birthrate and beneficiaries are living longer thanks to better health care, the pension system has dipped into this pool to cover shortfalls — in 2013 the money the fund pays out to pensioners was ¥4 trillion or 3.1% of the funds' total assets greater than the money it takes in from pension contributors. This is expected to continue and, if left unattended, could deplete the pool.

Indeed, based on latest statistics by the National Institute of Population and Social Security Research, the ratio of people aged 65 or older to those aged 15 to 64 was about 11 in 1960. This means roughly 11 people were covering one pensioner's income. The ratio is expected to shrink to about 2 in 2020, and then to less than 2 in 2050, weighing increasingly heavily on pension finances.

Due to the pension shortfall, once the GPIF reaches its new target weightings the equity buying pressure will turn to equity selling. Shannon McConaghy, from Horseman Capital Management in London, estimates the asset sell down required to cover the pension shortfall from March 2015 to March 2019 will be ¥28.7 trillion. If the GPIF sticks to the 25% targeted asset weighting towards domestic equities then it will have to sell down ¥7.2 trillion of domestic equities (25% of ¥28.7 trillion) by March 2019. This amount is similar to the total equity purchases by the GPIF over the last three years.

Higher return on riskier assets can mitigate the fund's deteriorating finances and help improve its ability to pay pensioners. However, since stocks are riskier and more volatile, critics warn that market volatility could harm the fund's balance sheet. So they argue the reform should strengthen internal control and risk management.

## 3) Promotion of venture business

Venture capital backed firms, which are important in promoting innovation, play a relatively minor role in Japan. The level of capital investment in Japan (0.02% of GDP) is slightly below the OECD median and far behind leading countries such as Israel, the US and Canada. According to the Tokyo-based Venture Enterprise Center Japanese venture capital investments came to ¥0.148 trillion last year, a small fraction of the ¥5.9 trillion spent by venture capitalists in the US. Moreover, the number of firms receiving venture capital has fallen sharply from nearly 4000 in FY2000 to 1000 in FY2013.

The government adopted some measures to promote venture capital. Some of these include: the tax system for business angels is being made more user-friendly by



streamlining application procedures; measures to promote crowd-funding were promulgated in May 2014; firms that invest in venture capital funds which manage or provide technical support to venture capital backed businesses will be designated as “Specified Investment Businesses”, making them eligible for financial support from public financial institutions; up to 80% of investment by firms in venture capital funds can be counted as loss reserves and deductible expenses.

The reform has made conditions more favourable for potential entrepreneurs. For one thing, there is an increasing number of serial entrepreneurs, who start new businesses after launching other businesses or leaving large companies. This has improved the quality of business owners. Also, the number of students and others in their 20s who have started new businesses has increased. One

reason for the uptrend is the many new business competitions. In addition to cash awards, many such competitions recently have given the winners opportunities to gain advice from mentors about corporate management.

However, the reform is still incomplete. The OECD recommends policies to expand the role of venture capital. In particular, policies aimed at: i) encouraging entrepreneurship by implementing entrepreneurial education in schools; ii) reducing the stigma attached to failure to promote second chances; iii) enhancing the role of venture capital firms and business angels, which together currently account for about one third of venture capital investment in Japan; and iv) promoting a more active M&A market to encourage venture capital investment by allowing investors to realize their gains.

Reform	Objective	Actions taken
1. Enhance corporate governance: Aiming for sustainable growth in corporate value.	Sustained growth in corporate value through enhanced corporate governance as well as improved management and strengthened fundamentals supported by financial institutions.	The JPX-Nikkei Index 400 was launched in January 2014, followed by a Stewardship Code in February. A draft corporate governance code would require listed firms to have at least two outside directors on a “comply or explain basis”.
2. Reforms for management of public and quasi-public funds.	Steadily implement reforms for management of public and quasi-public funds, based on the recommendations presented by the expert panel.	The Government Pension Investment Fund decided in 2014 to increase the share of equities in its portfolio and reinforce its governance structure.
3. Promotion of venture business: Creating an entrepreneur-friendly environment.	A ‘Venture ecosystem’ (virtuous cycle of venture funding and business creation), leading to globally competitive companies.	The tax system for business angels was made more user-friendly and measures to promote crowd-funding were promulgated in 2014.
4. Corporate tax reform: Bettering the business environment for all companies.	Strengthen Japan’s competitiveness as a global business location by reforming the corporate tax rate to a globally competitive level.	The FY 2015 tax reform will reduce the combined corporate income tax rate from 34.6% to 31.3% in FY 2016.
5. Stimulate innovation through science and technology and a “Robot Revolution”: Japan as a technology frontier.	Promote innovation of science and technology and develop infrastructure that links innovative technology with new business.	The budget for science and technology, which had been managed by a number of ministries, was centralised in the Council for Science, Technology and Innovation to promote effective R&D.
6. Enhancing women’s participation and advancement.	Provide a working environment conducive to women with/ caring for children and improve the business environment to enhance women’s career advancement at workplaces.	An additional 0.4 million childcare places are being added to eliminate waiting lists, together with another 0.3 million places in after-school care for school-age children. These measures have contributed to a 3.9% rise in female employment since late 2012.
7. Enable flexible working practices: Improving the talent pool.	Develop more creative working practices where performance is evaluated over number of hours worked. Spread and promote model cases of “diversified regular employment” focusing on job duties, etc. Develop a transparent and globally recognised labour dispute resolution system.	Subsidies to maintain jobs are being shifted to promoting labour mobility. Measures against overwork will be reinforced and the government will review flex-time and discretionary working-hour systems. The government will propose a system to evaluate high-level professionals based on performance rather than working hours.
8. Attract talent from overseas: A society where foreign workers play an active role.	Create an environment where skilled professionals from overseas can play an active role. Conduct a drastic review of the Technical Intern Training System for foreign workers in Japan.	Foreign trainees, who are allowed to stay in Japan for three years, will be allowed an additional two years.
9. Aggressive agricultural policy.	Aim to double the income of farmers and farming communities by making agriculture a growth industry. Draw on corporate experience while accelerating private- sector participation in agriculture.	The production quotas for table rice are being phased out over a five-year period by FY 2018. Reforms to agricultural co-operatives are planned.
10. Healthcare industry and high quality services: A stronger healthcare industry and improved services.	Secure a sustainable social security system and revitalize the healthcare industry by establishing a structure to provide efficient and high quality services as well as streamlining insurance benefits coverage.	A new health insurance scheme will be introduced to give patients faster access to new treatments that are yet to be covered by public health insurance. A new institution to manage R&D in healthcare was created.

Source: Government of Japan.

## MARKET DEVELOPMENTS

The outlook continues to favour equities. The super low yield on bonds have persisted for an astonishingly long time; but in spite of talk about ‘secular stagnation’ they are unlikely to last much longer. Once non-banks have

managed to bypass bank regulation on credit flows the era of low yields will start to fuel massive credit growth; that will be the end of low yields.

**Table 1: Market Developments**

	Market Levels		Prediction for May/June 2016	
	May 1	May 29	Previous Letter View	Current View
<b>Share Indices</b>				
UK (FT 100)	6961	6984	9891	9925
US (S&P 500)	2086	2107	2724	2752
Germany (DAX 30)	11454	11414	15910	15854
Japan (Tokyo New)	1593	1674	2173	2283
<b>Bond Yields (government)</b>				
UK	1.95	1.92	2.00	2.20
US	2.09	2.11	2.10	2.10
Germany	0.37	0.49	1.50	1.50
Japan	0.33	0.4	0.70	0.70
UK Index Linked	-0.88	-0.88	0.10	0.10
<b>Exchange Rates</b>				
UK (\$ per £)	1.54	1.53	1.56	1.50
UK (trade weighted)	91.3	91.8	82.3	90.6
US (trade weighted)	100.4	103.7	85.51	100.0
Euro per \$	0.89	0.91	0.79	0.91
Euro per £	1.37	1.39	1.23	1.37
Japan (Yen per \$)	119.7	124.1	98.0	120.5
<b>Short Term Interest Rates (3-month deposits)</b>				
UK	0.57	0.58	1.10	1.30
US	0.28	0.28	0.70	1.10
Euro	-0.01	-0.01	0.50	0.10
Japan	0.09	0.10	0.70	0.20

**Table 2: Prospective Yields<sup>1</sup>**

<b>Equities: Contribution to £ yield of:</b>						
	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	1.70	34.20
Germany	2.60	1.4	1.5	36.00	1.92	43.42
Japan	1.70	1.4	2.0	33.00	4.55	42.65
UK indexed <sup>2</sup>	-0.88		1.6	1.00		1.72
Hong Kong <sup>3</sup>	2.60	6.8	1.6	2.00	1.70	14.70
Malaysia	3.30	5.5	1.6	58.00	1.70	70.10
Singapore	3.50	4.5	1.6	36.00	1.70	47.30
India	1.40	8.0	1.6	31.00	1.70	43.70
Korea	1.10	3.0	1.6	-12.00	1.70	-4.60
Indonesia	2.20	6.1	1.6	41.00	1.70	52.60
Taiwan	2.80	3.4	1.6	29.00	1.70	38.50
Thailand	3.20	4.1	1.6	38.00	1.70	48.60
<b>Bonds: Contribution to £ yield of:</b>						
	Redemption Yield	Changing Nominal Rates	Currency	Total		
UK	1.92	-2.80				-0.88
US	2.11	0.10	1.70			3.91
Germany	0.49	-10.10	1.92			-7.69
Japan	0.40	-3.00	4.55			1.95
<b>Deposits: Contribution to £ yield of:</b>						
	Deposit Yield	Currency	Total			
UK	0.57		0.57			
US	0.28	1.70	1.98			
Euro	-0.01	1.92	1.91			
Japan	0.10	4.55	4.65			

<sup>1</sup> Yields in terms of €s or \$s can be computed by adjusting the £-based yields for the expected currency change.

<sup>2</sup> UK index linked bonds All Stocks

<sup>3</sup> Output based on China.

**Table 3: Portfolio(%)**

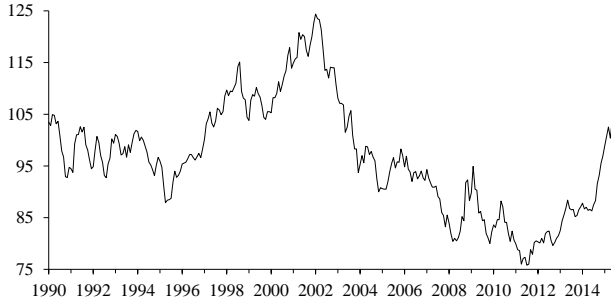
	Sterling Based Investor		Dollar Based Investor		Euro Based Investor	
	May Letter	Current View	May Letter	Current View	May Letter	Current View
UK Deposits (Cash)	5	5	5	5	1	1
US Deposits	-	-	-	-	-	-
Euro Deposits	-	-	-	-	-	-
Japanese Deposits	-	-	-	-	-	-
UK Bonds	-	-	-	-	-	-
US Bonds	-	-	-	-	-	-
German 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

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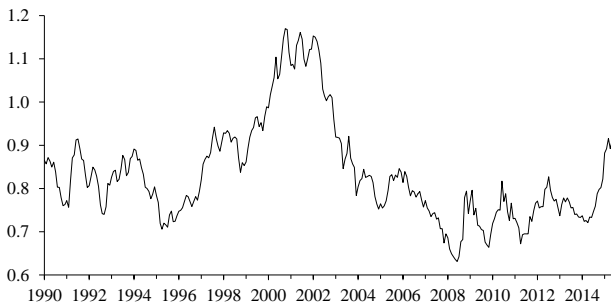
**US : Trade Weighted Index  
(Bank of England 1990 = 100)**



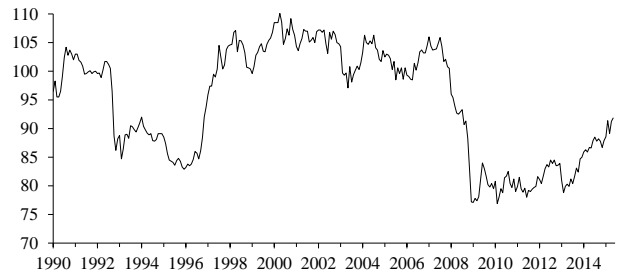
**UK: Dollars Per Pound Sterling**



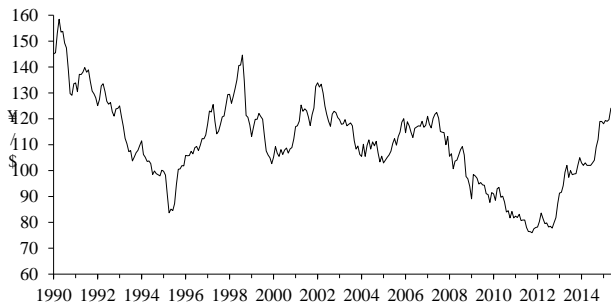
**Euro per US dollar**



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



**Japan : Yen Per U.S. Dollar**

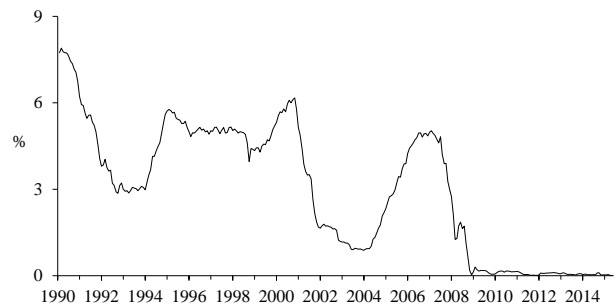


# GOVERNMENT BOND MARKETS

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



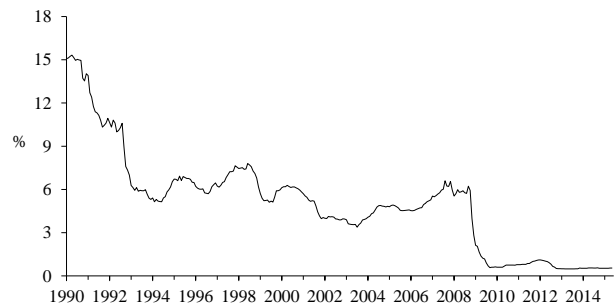
**U.S. : 3-Month Treasury Bill**



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



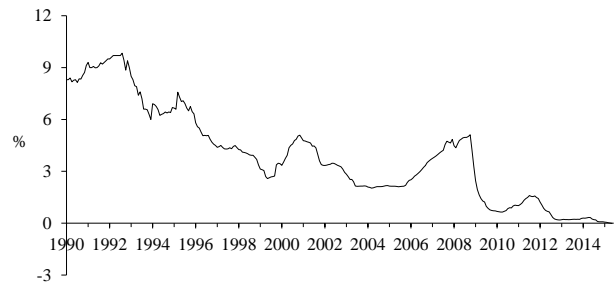
**U.K. : 3-Month Interbank Rate**



**Germany: Yield on Public Authority Bonds**



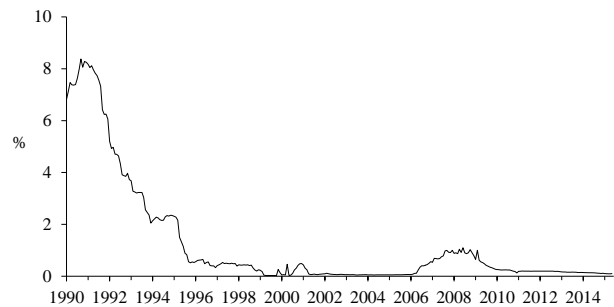
**Germany : 3-Month Interbank Deposit Rate**



**Japan: Yield on Long-Term Government Bonds**



**Japan : 3 Month Money Market Rate**



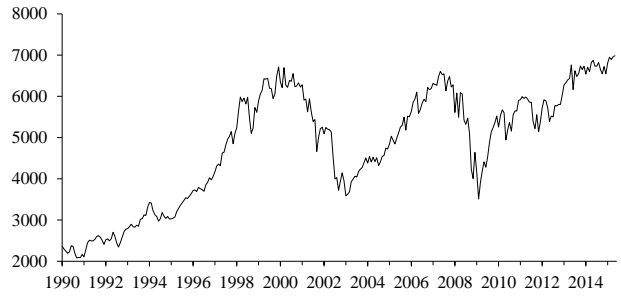
# MAJOR EQUITY MARKETS

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



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



**Germany : DAX 30**



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



## EMERGING MARKETS

Anupam Rastogi

### India

India's economy grew 7.5% year on year in the January to March quarter and 7.3% in the fiscal year 2014-15 which ends in March. Growth in India outstripped that of its Asian rival China, which recorded 7% expansion over the same period. The economy is expected to grow 7.5% in the current financial year 2015-16, outpacing China and making India the fastest-growing large economy in the world. The figure for the last quarter was greeted with suspicion as other economic indicators do not match this growth rate. Activity has been sluggish, with industrial production up just 2.1% in the year ended on March 31st. Exports in April fell for the fifth month in a row. Purchasing managers' index readings have been subdued, and non-oil imports have pointed to weak capital spending.

The country's consumer inflation rate declined to 4.87% in April from 5.25% a month earlier, thanks to a slower rise in food prices. The reading was the lowest in five months. India's central bank is expected to cut interest rate again at its policy meeting on June 2 in an attempt to kick-start an economy that has been showing signs of decelerating and inflation has been falling faster than expected by the bank. We expect RBI to lower the repurchase rate by 0.25 percentage point to 7.25%. Helped by a sharp fall in inflation earlier on the back of plummeting global commodity prices, the RBI cut the main rate in two surprise moves since January.

India's exports fell for the fifth month in a row in April. Exports fell 13.96% from a year earlier to \$22.05 billion, according to the Ministry of Commerce and Industry. Imports also fell as lower global oil prices helped cut the country's import bill. Imports in April fell 7.48% to \$33.05 billion resulting in the trade deficit of \$10.99 billion compared to \$10.09 billion a year earlier. It was, however narrower than March's \$11.79 billion.

The new government under the premiership completed one year in the last week of May and its report card is not bad. In the last one year, India got more foreign direct investment, the government deregulated diesel prices, GDP growth is higher, government is paying subsidy directly, licenses of Coal and Telecom have been auctioned. There was no scandal. But, it failed to pass the Goods and Services bill and the Land Acquisition bill. Both the bills are crucial for long-term growth of the country.

In its first year, Mr. Modi's government made numerous changes to attract foreign investment in sectors such as insurance and defence, eased bureaucratic hurdles to

India: BSE Sensitive



business and promised to ramp-up infrastructure spending. But none of the policy announcements was as far reaching as many investors and economists had been expecting. The government is facing stiff political opposition. When Mr. Modi's party was in opposition, they had opposed these bills and now they are being paid by the same token. However, indications are that the government has made deals with some regional parties and may see these legislations through in the coming parliamentary session.

The easing of land acquisition for infrastructure and industrial development and unifying India into a single marketplace for tax purposes would give solid push to the economic development of the country.

Modi's government is labelled as government for rich and anti-poor. For the poor, his administration has helped open millions of bank accounts and created new pension and insurance programs. Being political savvy, his government is spending lot more time on advertising its pro-poor policies.

Overall the market- and consumer-driven policies of the government would help the economy to grow faster in the years to come. India's liberalization process will be much different from China's. China rode a wave of economic liberalization and a revolution in information and communication technologies to transform its manufacturing sector. India does not have a special advantage to transform its manufacturing sector and have an export-led growth. Weak demand in developed economies is a hurdle to export-led growth.

Foreign institutional investors have pulled around \$2 billion out of Indian stocks and bonds in May, compared with a net investment of \$15 billion in the first four months of the year. India's benchmark S&P BSE Sensex is among the worst-performing major Asian indexes this year, with a gain of just 0.5%. Japan's Nikkei 225 and Hong Kong's

Hang Seng Index are up more than 16% so far this year. But, on the last trading day of May, the market saw unprecedented activity on the back of a falling China market and a weak US market. This may be a harbinger of a stock market rally, especially if the central bank eases its monetary stance.

	13-14	14-15	15-16	16-17	17-18
GDP (%p.a.)	6.9	7.3	7.8	8.0	8.5
WPI (%p.a.)	7.0	6.0	4.8	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

In the first quarter of 2015, China's gross domestic product expanded by 7.0% year-over-year, its slowest pace in six years. China's value-added industrial output was up 5.9% in April from a year earlier compared to a 5.6% pace in March. Retail sales climbed 10% in April from a year earlier, slowing from a 10.2% rise in March. There was a moderate growth in property investment, rising 6% over a year ago in the first four months of the year. China showed signs of a slight improvement in its key industrial sector in April after an unusually weak performance in March, an upturn reflecting government efforts to give the sluggish economy a boost.

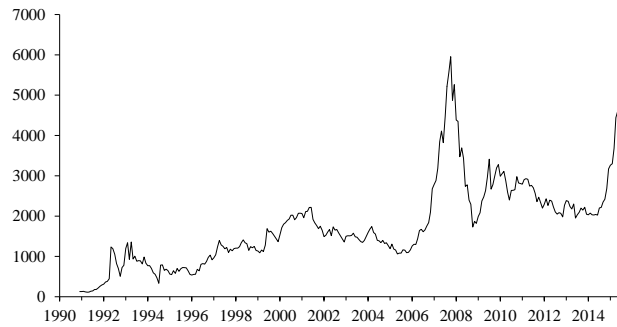
People's Bank of China cut interest rates for the third time in six months amid a worse-than-expected economic slowdown, as authorities scrambled to ease the heavy debt burdens of companies and governments. The last cut reduced the benchmark lending and deposit rates by 0.25 percentage points. Two earlier rate cuts, along with reductions to the reserves banks have to hold with the central bank, have had mixed results.

China's consumer-price index rose 1.5% in April from a year earlier, up modestly from a 1.4% rise in March. This was well below Beijing's goal of keeping inflation below 3% this year. China's producer price index fell 4.6% year-over-year in April, unchanged from the 4.6% decline in March.

Exports fell 6% compared with last April, and imports plunged 16%, both lower than expectations. Some of the blame for the bad export numbers falls to Europe, which bought 10% less from China in April compared with last year. Exports to the U.S., China's biggest customer, were up a sluggish 3% last month, but for the year are up a relatively healthy 9%. Oil and iron ore, two of China's biggest imports, are both substantially cheaper than a year ago.

China is on its way to making the yuan a reserve currency. It received a vote of confidence from the International Monetary Fund, which declared that it was 'no longer undervalued'. The IMF has shifted its stance after more

China: SSE Composite Index



than a decade of criticizing Beijing's tight management of the yuan. The yuan is allowed to trade within a band that extends 2% above and below the rate set by PBOC. The yuan is traded around 6.2 to a US dollar now.

China is keen that the yuan should be included this year in the International Monetary Fund's Special Drawing Rights — a collection of global currencies that forms a special reserve asset. To facilitate the process, the People's Bank of China has stepped up its approvals for foreign investors to trade in the country's interbank bond market. The central bank has allowed 32 foreign institutional investors this year to trade in the \$6.1 trillion interbank bond market, which is used by a wide range of investors in addition to banks. At present, the current percentage of foreign ownership of domestic Chinese government bonds is one of the lowest in emerging markets, totalling 2.4% of outstanding government bonds at the end of last year, compared with 59% in Mexico and 34% in Brazil.

Further, China's foreign-exchange regulator has issued rules aimed at making it easier for companies to convert and freely use the yuan. China's yuan has become the main currency for payments between China and the rest of the Asia-Pacific region, more than tripling in use over the past three years and outstripping the Japanese yen, the US dollar and the Hong Kong dollar in the process, according to data from the clearing system, SWIFT. Singapore, Taiwan and South Korea are now using the yuan for the majority of their payments with China, while the recent induction of clearing centres in Malaysia, Thailand and Australia should help the trend further.

Furthermore, China is finalizing plans that would allow individuals to invest directly in overseas financial assets. This move would enable Chinese individuals to buy overseas stocks, bonds and real estate directly rather than pick from a handful of government-approved foreign mutual funds as they are now obliged to do. Easing controls on outbound financial investment will help the yuan meet International Monetary Fund requirements. The IMF will decide this year whether to endorse the yuan.



Chinese equities have rocketed around 50% this year following three benchmark rate cuts in six months. China’s previously underweight status made it a ripe target for new inflows. The speed at which many stocks have risen to dizzying valuations prompted widespread concerns that the market is in a bubble and the decline in prices in the last two trading days of May lead to a broader correction that some say is long overdue.

	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	1.3	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

Korean policymakers are awaiting more economic data through the second quarter to better assess the state of the economy after a moderate recovery in the first quarter.

The economic indicators are mixed. Exports declined in April due to slow global demand and the won’s strength against the euro and yen weighs on shipments overseas. However, domestic demand shrunk 8.0% in April from a year earlier, the worst fall in two years, as demand for Korean-made cars, ships, electronics goods and petroleum products declined around the world. The International Monetary Fund forecast the economy to grow 3.1% for 2015 — slower than its April forecast of 3.3% — due to weaker exports and other reasons. South Korea’s economy grew 3.3% in 2014.

The Bank of Korea is still gauging the effect of its surprise March policy rate cut to a record low of 1.75%. For the time being the bank is unlikely to cut rates.

Korea’s market looks cheaper than its peers on relative terms, attracting fund managers who have been underweight on the country. The prospect of higher dividend payouts and stock splits by Korean companies is also encouraging some investors. The benchmark KOSPI Composite Index is up 12% this year and hit 2190 in May which was 6% higher than the record high reached in May 2011. Foreign buyers have helped fuel the gain, buying a net \$6.8 billion in Korean stocks this year, more than in all of 2013 or 2014.

	13	14	15	16	17
GDP (%p.a.)	3.0	3.3	3.1	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

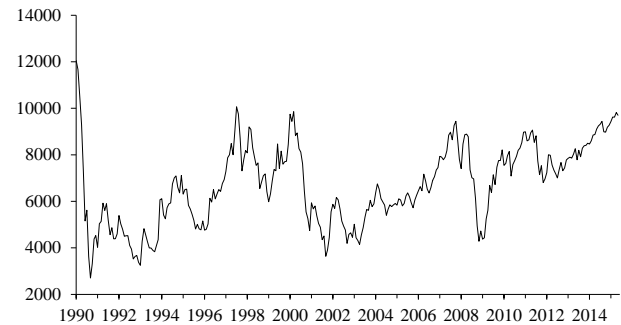
### Taiwan

Taiwan has lowered its GDP growth forecast to 3.28% in 2015, down half a percentage point from a February projection, the reason being that exports are squeezed by

**Korea: Composite Index**



**Taiwan: Weighted TAIEX Price Index**



increased competition from mainland China. The economy expanded 3.37% in the three months through March from a year earlier.

Taiwan’s high-end technology and export-driven economy received a boost from Apple Inc.’s new iPhone last year, while rising wages helped spur consumption. Exports to six key Asean countries — Indonesia, the Philippines, Malaysia, Singapore, Thailand and Brunei — were 18.7% of Taiwan’s total exports last year, up from 14.5% in 2007. But even as the percentage of total exports rose, Taiwan’s shipments to the same Asean countries fell 12.5% last year, hurt by less robust economic growth in these markets and weaker currencies as measured against the U.S. dollar.

Current President Ma Ying-jeou said that the government is trying to expand trade with other overseas markets and grooming local high-tech and service industries to ensure adequate growth. At present, Taiwan is heavily dependent on exports to China as a result of its policy of engagement with China.

Mr. Ma Ying-jeou was elected in 2008 and he launched the policy of engagement with mainland China. A general election scheduled for early next year is being seen as a test of how popular this engagement policy is among Taiwan’s 23 million people. Entering his eighth and last year in office, Mr. Ma rebuffed suggestions that his China policy is

proving divisive in Taiwan and costing his ruling Kuomintang party popular support ahead of January's presidential elections.

Beijing's rejection of Taiwan's application to join its nascent Asian Infrastructure Investment Bank has damaged the KMT's argument that closer ties are yielding results. Beijing's rejection of full universal suffrage for Hong Kong, which prompted the student-led "Umbrella Revolution" protests late last year, is also seen in Taiwan as a warning of what happens to territories that fall under Beijing's control.

	13	14	15	16	17
GDP (%p.a.)	2.1	3.7	3.3	3.5	3.6
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

Brazilian politicians have at last given way to the economic reality. They are co-operating and legislating on unemployment and pension benefits paid to workers. This has made President Dilma Rousseff a very unpopular president. Ms. Rousseff was re-elected at the end of last year, and has had to reverse several of her previous economic policies to try to correct the results of her first government.

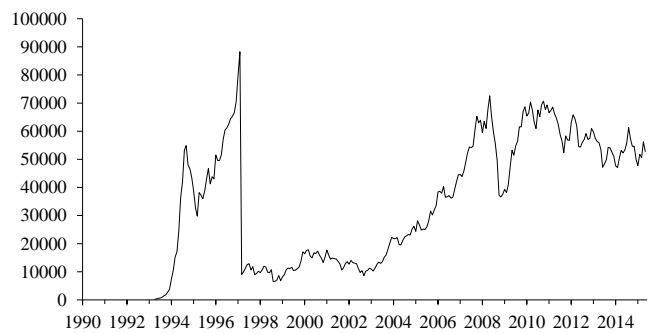
Ms Rousseff has handed the reins of economic policy to Joaquim Levy, a hawkish finance minister. The Chicago-trained economist is cutting costs to plug the hole in Brazil's fiscal accounts to safeguard the country's investment grade rating. Financial markets are no longer in a state of panic. There has even been a spate of large private equity deals.

Brazil's economy contracted 0.2% in the first quarter from the last quarter of 2014. Brazil is facing a year of weak economic growth and a likely recession amid high interest rates, high inflation, tax increases and unpopular budget cuts. Both investment and consumer spending have been falling. With inflation at an 11-year high, real wages are down and unemployment is up.

Brazil grew only 0.1% in 2014 and is expected to contract 1% this year. It may expand just 1% in 2016. Inflation is at 8.2%, and the central bank has pushed borrowing costs to 13.25% in an attempt to bring price increases down to 4.5% by December 2016.

Brazil's unemployment rate rose in April, reaching 6.4% — its highest level for four years according to the national statistics office. The figures suggest the economic downturn has taken employers past the point at which they

**Brazil: Bovespa**



can no longer avoid making expensive lay-offs. One reason would be the very high costs associated with hiring and firing in Brazil, which make employers reluctant to fire workers if they think they may have to rehire them any time soon.

Brazil's central bank signalled that higher borrowing costs might be on the way as prices continue to rise at a fast pace despite the country's sputtering economy. Inflation remains high because of the depreciation of the Brazilian real against the dollar and increases this year in government-controlled prices, including gasoline and electricity. The benchmark IPCA consumer price index is now at 8.2%, while the bank's target is 4.5%, with a two percentage-point tolerance range up or down. The bank's monetary policy committee, known as the COPOM, will meet next on June 2 and make a decision on the Selic rate. We expect an increase in the benchmark Selic rate to either 13.5% or 13.75% from 13.25%.

The Brazilian government unveiled budget cuts meant to meet fiscal austerity goals while continuing essential investments. The reviewed budget assumes the economy will contract 1.2% this year, versus a 0.1% expansion in 2014. It also assumes 8.26% inflation this year.

The Brazilian Senate approved a controversial bill meant to save taxpayer money by reducing pension payments to widows. The measure is part of a broader effort to reduce the government's high debt levels, which are threatening the country's investment-grade rating. Congress also cleared another bill that reduces unemployment benefits. Together, the bills will save some 15 billion Brazilian reais (\$4.8 billion) in taxpayer money. While the austerity efforts have been applauded by economists, they have faced strong opposition from unions and politicians even from Ms. Rousseff's Workers' Party, or PT.

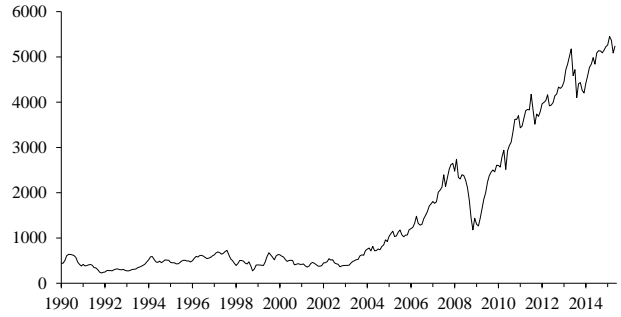
	13	14	15	16	17
GDP (%p.a.)	2.5	0.1	-1.2	1.0	1.2
Inflation (%p.a.)	5.9	6.5	7.9	6.5	6.0
Current A/c(US\$ bill.)	-75.0	-70.0	-70.0	-70.0	-80.0
Real\$/\$(nom.)	2.3	2.4	2.8	2.8	2.8

## Other Emerging Markets

**Hong Kong: FT-Actuaries**



**Indonesia: Jakarta Composite**



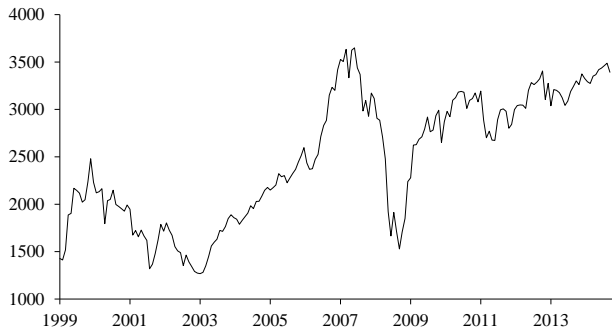
**Malaysia: FT-Actuaries  
(US\$ Index)**



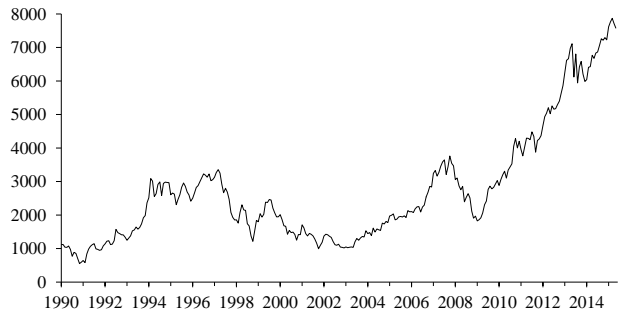
**Thailand: Composite Index**



**Singapore: Straits Times Index**



**Philippines: Manila Composite**



# COMMODITY MARKETS

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



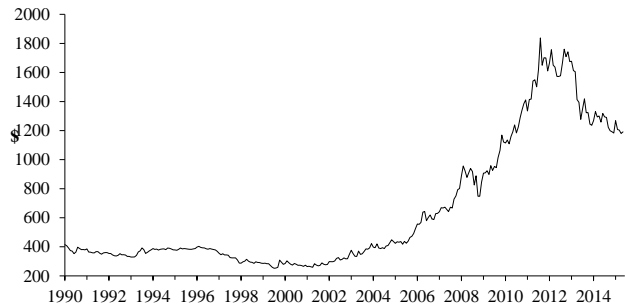
**Oil Price: North Sea Brent (in Dollars)**



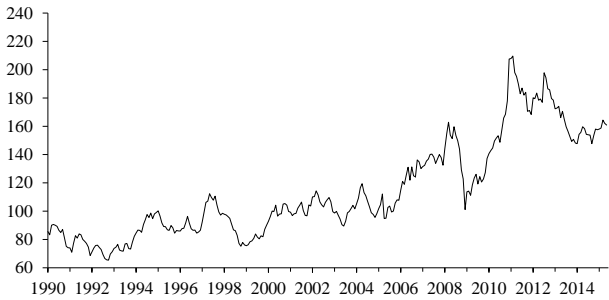
**Commodity Price Index (Sterling)**  
(Economist, 2000=100)



**Gold Price (in Dollars)**



**Commodity Price Index (Euro)**  
(Economist)



## UK FORECAST DETAIL

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

	Inflation % <sup>1</sup> (CPI)	Short Dated (5 Year) Interest Rates	3 Month Int. Rates	Nominal Exchange Rate (2005=100) <sup>2</sup>	Real Exchange Rate <sup>3</sup>	Real 3 Month Int. Rates % <sup>4</sup>	Inflation (RPIX)	Real Short Dated Rate of Interest <sup>5</sup>
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

<sup>1</sup> Consumer's Expenditure Deflator

<sup>2</sup> Sterling Effective Exchange Rate Bank of England

<sup>3</sup> Ratio of UK to other OECD consumer prices adjusted for nominal exchange rate

<sup>4</sup> Treasury Bill Rate less one year forecast of inflation

<sup>5</sup> 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) <sup>1</sup>	Wage Growth <sup>2</sup>	Unemployment (New Basis) Percent <sup>3</sup>	Millions	Real Wage Rate <sup>4</sup> (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	247.5	2.4	2.2	0.8	134.1
2016	255.3	3.2	2.0	0.7	136.1
2017	262.9	3.0	1.9	0.7	137.8
2018	270.9	3.0	1.7	0.6	139.2
2013:1	236.8	0.6	4.6	1.5	131.6
2013:2	240.7	2.3	4.4	1.5	133.3
2013:3	239.0	0.8	4.1	1.4	134.0
2013:4	238.0	1.1	3.7	1.3	134.7
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	245.7	1.8	2.3	0.8	134.6
2015:2	245.9	2.3	2.2	0.8	133.5
2015:3	247.6	2.5	2.2	0.8	133.6
2015:4	250.8	3.2	2.1	0.7	134.5

<sup>1</sup> Whole Economy

<sup>2</sup> Average Earnings

<sup>3</sup> Wholly unemployed excluding school leavers as percentage of employed and unemployed, self employed and HM Forces

<sup>4</sup> Wage rate deflated by CPI

**Estimates and Projections of the Gross Domestic Product<sup>1</sup> (£ Million 1990 Prices)**

	Expenditure Index	£ Million '90 prices	Non-Durable Consumption <sup>2</sup>	Private Sector Gross Investment Expenditure <sup>3</sup>	Public Authority Expenditure <sup>4</sup>	Net Exports <sup>5</sup>	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	759444.4	437481.6	315661.6	193150.9	-45651.0	141194.8
2016	162.6	778752.4	447600.9	324004.5	197878.0	-45648.1	145082.7
2017	166.5	797118.0	458510.3	331200.7	201835.6	-45657.5	148775.7
2018	170.4	815975.2	469801.9	338544.2	205872.3	-45677.8	152572.1
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	3.8	1.3		3.6
2016/15	2.5		2.3	2.6	2.4		2.8
2017/16	2.4		2.4	2.2	2.0		2.5
2018/17	2.4		2.5	2.2	2.0		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	188027.6	108559.6	76022.9	49960.4	-11418.3	35097.0
2015:2	158.9	190219.7	109098.3	80639.9	47084.9	-11415.5	35185.9
2015:3	159.0	190337.9	109639.8	79590.1	47855.5	-11410.3	35336.8
2015:4	159.4	190859.2	110183.9	79408.7	48250.2	-11407.0	35575.2

<sup>1</sup> GDP at factor cost. Expenditure measure; seasonally adjusted

<sup>2</sup> Consumers expenditure less expenditure on durables and housing

<sup>3</sup> Private gross domestic capital formation plus household expenditure on durables and clothing plus private sector stock building

<sup>4</sup> General government current and capital expenditure including stock building

<sup>5</sup> Exports of goods and services less imports of goods and services

**Financial Forecast**

	PSBR/GDP % <sup>1</sup>	GDP <sup>1</sup> (£bn)	PSBR (£bn)	Debt Interest (£bn)	Current Account (£ bn)
			Financial Year		
2013	6.0	1550.9	92.5	47.1	-65.9
2014	5.5	1615.2	88.6	51.8	-84.2
2015	5.0	1679.3	84.0	53.9	-77.8
2016	4.6	1752.9	79.6	57.6	-78.2
2017	3.2	1827.4	58.7	62.4	-78.8
2018	2.1	1909.0	39.1	65.4	-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	2.1	407.4	8.7	12.9	-16.0
2015:2	8.6	415.2	35.8	13.2	-19.9
2015:3	4.3	418.5	17.8	13.4	-20.2
2015:4	8.0	422.4	33.7	13.7	-21.7

<sup>1</sup> 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	2.5
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

### 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

### 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

### 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

### 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	0.2
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

### 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	2.2
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

### Index Of Real Exchange Rate(2000=100)<sup>1</sup>

	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

<sup>1</sup> 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)						
	2011	2012	2013	2014	2015	2016
U.S.A. <sup>1</sup>	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

<sup>1</sup> 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