Cardiff Business School
Cardiff University

Julian Hodge Bank

Quarterly Economic Bulletin

Julian Hodge Institute of Applied Macroeconomics

November 2012

LIVERPOOL MACROECONOMICS RESEARCH LIMITED

Foreword

The latest GDP figures provide some much needed encouragement, but whilst the last quarter's results were very positive, over the last two years we have seen little or no growth. There are, of course, many reasons for the lack of growth. Some factors fall outside our control, the uncertainty regarding the Eurozone being the most significant. There are factors, however, that are more within our control. The original financial crisis in 2008 brought in its wake a near freezing of credit, a position that has only marginally improved since. Given that banks have had four years to improve their balance sheets and that the economy, whilst unexciting, is at least stable, it seems strange that there should need to be any focus on the availability of credit. The public also hold the simple view that, as the banks have been the recipients of massive amounts of taxpayers money there should be no reason why they aren't lending. The government too continues to bemoan the sector's inability to provide a credit stimulus to the economy, and the FSA have stated that banks should not blame regulation for the lack of lending. However, much as the FSA may wish that regulation does not have an impact on lending, the reality is that it does. That of course does not mean that the regulation is wholly inappropriate, merely that there are consequences in applying that regulation. Taking a very simplistic example, RBS held notoriously low levels of capital, said to be 2%, supporting assets of £2tn. In order to bring up that capital ratio to a more realistic 10% means either raising £160bn in equity, at a time when there are few potential investors in banks, or bringing lending down by £1.6tn. The latter figure is more than UK GDP. In reality RBS have, so far, reduced their balance sheet by £700bn, a major step in turning it back into a solvent bank. As RBS themselves point out, this amounts to twice the total Greek debt, a massive figure to take out of the economy. As we explore in this bulletin, the only answer to this is realistic, rather than inappropriate, regulation.

As we start to think about Christmas it would be nice to watch Dickens' 'A Christmas Carol' safe in the knowledge that the unreformed Mr Scrooge belonged to a different, long gone, era. Sadly this is not the case as the lack of credit is having a disturbing effect elsewhere in the economy. Anyone watching commercial television advertisements has witnessed the growth of payday and other short term lending. Individuals typically borrow say £200 and pay back £250 twenty-eight days later. That cost of £50 represents an APR of 1737%. The most widely advertised lender has a typical APR of 4214%. These contrast with typical loan rates of 8% to 25% APR. The popularity of payday loans reflects the desperation of the more vulnerable in society. These lenders are not covered by the bulk of banking regulations, they are covered merely by the consumer credit act, and there are no restrictions on the rates they can charge, nor are there legal limits on rolling over loans. In other words there is nothing to stop a £200 loan being rolled over for a year resulting in a total repayment required of approximately £3,474, or around £8,428 with the most widely known brand. Although the OFT have reviewed the sector, and a number of MPs promoted an early day motion in 2010, there has been no real attempt to address the issue. If there is a case for regulation in the financial sector this is surely it.

Paul Budd
Julian Hodge Bank
Director, Commercial Lending

Julian Hodge Institute of Applied Macroeconomics

In May 1999, Cardiff Business School and Julian Hodge Bank announced a major new initiative, the establishment of the Julian Hodge Institute of Applied Macroeconomics. 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 institute's director since it was founded has been Professor Patrick Minford, of Cardiff Business School, who is also the Economic Adviser to Julian Hodge Bank. The institute's staff of researchers are mainly based in the school. Recent research has included studies of whether the UK should join the euro and of the economic costs and benefits from UK membership of the European Union. Some other topics have been the UK's inflation and exchange rate behaviour and the relationship between growth and taxation. The institute also carries on the work of the Liverpool Research Group in Macroeconomics which Professor Minford founded and which has been based mainly in Cardiff for a number of years, producing forecasts and policy analysis of the UK and other major economies.

Contents

"By this regulative overkill we are both curbing the growth of our major industry and curbing the growth of SMEs who depend heavily on bank credit. In so doing we curb productivity growth."

Patrick Minford, Economic Adviser to Julian Hodge Bank

SIGNS OF REVIVAL?

Third quarter GDP bounced back with a vengeance, rising 1% over the second quarter. But all it was doing was cancelling out the falls in the previous three quarters, leaving GDP the same as a year before and only 0.6% up over the last two years. But who really believes these numbers? In past recessions and early recovery periods there have been big revisions upwards well after the event. This is because in these periods people become more adventurous in the buying habits, whether people or firms. Necessity in the form of falling real incomes drives invention in getting value. Because this economic activity goes through new channels it is not picked up by the statisticians until much later when the newer surveys include these channels with proper weight.

A specific figure that looks doubtful is construction. According to the ONS it has fallen by no less than 11.4% in the past three quarters and is 11.2% down over the past year. This sort of drop does not tally at all well with the index of construction purchasing managers which at 49.5 is now only just under 50, the level that indicates unchanging output.

Yet another puzzle is that employment, whether measured by total hours worked or by employment, is healthily up on a year ago. Both are up about 2%. If we believe the output figures then productivity has dropped by 2% over the same period. Yet employment in the public sector has fallen by 6.5% over the past year and 10% over the past two years; public service may have suffered a bit but probably not much, so public sector productivity must have risen. Meanwhile private sector employment is up 4.7% on the last two years and 3.6% in the past year. With private output flat this is suggesting private sector productivity may have fallen by similar percentages — a puzzle indeed.

Overall, resolving these puzzles points to modest growth in output over the past two years. This is still disappointing for a recovery period but at least there is some growth.

The main candidates for the disappointing state of growth remain first the effects of high commodity prices on incomes and sectoral demand, with commodity-intensive sectors disproportionately hit. The second factor is the state of the banking sector in the UK, hit badly by the original crisis and then the euro-zone crisis, and further battered by manic over-regulation, as bureaucrats try to prove their enthusiasm to remedy their past casualness. Now the Bank and government have produced the Funding for Lending Scheme and rumour has it that the regulators at the FSA are going easy on the demands for new bank capital for risky lending to SMEs. Alas, these moves come little and late; it remains to be seen if they can undo the damage. For the Coalition government to revive growth requires a volte-face on regulation and a willingness to return generally to a 'Thatcherite' agenda of reform and deregulation. The social-reform agenda of the Coalition — competition in schools and hospitals, and the reform of welfare — is welcome; but will not revive growth. However, there are signs of new policy initiatives.

Table 1: Summary of Forecast

		2010	2011	2012	2013	2014	2015	2016
GDP Growth[1]		2.1	0.7	0.8	2.0	2.3	2.5	2.6
Inflation	CPI	4.1	3.9	2.8	2.3	2.0	2.0	2.0
	RPIX	4.8	5.3	3.5	2.9	2.7	2.7	2.7
Unemployment (Mill.)								
	Ann. Avg.[2]	1.5	1.5	1.5	1.3	1.2	1.2	1.2
	4th Qtr.	1.5	1.6	1.5	1.3	1.2	1.1	1.1
Exchange Rate[3]		80.4	79.9	81.7	81.5	81.0	80.7	80.5
3 Month Interest Rate		0.7	0.9	1.2	1.4	2.1	2.5	2.5
5 Year Interest Rate		2.4	2.0	1.6	2.4	2.6	2.8	2.8
Current Balance (£bn)		–48.6	–29.0	–31.6	–32.5	–32.3	–32.2	–32.0
PSBR (£bn)		110.3	120.1	107.6	97.1	58.0	36.3	20.3

[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)

These have been side benefits of the poor GDP figures and all the popular talk of 'double dip recession'. Several policy changes have been forced on the coalition as it has had to focus on ways of delivering growth, at the expense of its previous priorities of the green agenda, anti-banker populism with manic reregulation, and infrastructure decisions designed to make non-economic points (such as HS2 and the denial of the third Heathrow runway). Mr. Osborne has taken charge of the new direction and we now have:

- The new Funding for Lending Programme under which for extra lending the costs will be cut. Also urgent consideration of how business lending can be boosted — perhaps by creating a new business bank, perhaps, who knows, by spinning off parts of the two behemoth banks under government control as new banks, designed to boost competition and lending on the high street.

- A review of airport provision, opening up the issue of runways from 2015.

- A new labour regulation reduction for SMEs based on much of the Beecroft Report.

- A new Cabinet in which the balance has tilted towards ministers who want to deregulate more actively.

- A programme to liberalise planning decisions.

How far these measures will make a difference remains to be seen. But with the help as well of a calming of the euro-zone crisis by the ECB's announcement of direct purchases

of weak governments' bonds when their yields are threatened by crisis (OMT: Outright Monetary Transactions), we may now see an easing of the great credit freeze-up, which may well be the key factor holding back the recovery.

We still have poor news on the progress of public borrowing. However, there has undoubtedly been a large cutback in public sector employment (allowing for reclassification this is around 600,000 since 2010, or about 10% of the total). Benefit payments have been boosted by indexation to the soaring RPI. But cutting benefit packages as growth strengthens will become easier politically and with employment improving payments should gradually fall back automatically. Also with profits having grown substantially the big corporate tax-gathering season in 2013 Q1 should be a lot stronger. With retail sales finally rising in volume terms at around 3% we should see better VAT receipts.

Now that the government has finally come around to a pro-business agenda, the achievements in other areas are starting to come into focus.

First is the austerity programme.

Second is the reform of the NHS, it is to be hoped finally embedding the 'internal market' started by Mrs. Thatcher.

Third is the strengthening of the new independent schools programme started by Tony Blair; and the associated attempts to raise standards of teaching and examination.

Last but not least, there is the withdrawal of benefits from middle income households under the various attempts to reform the benefit system. The previous tax credit system had begun to pervert the incentives of the better off. Unfortunately there is not in practice much that can be done about the effect of the benefit system on the least well off; pressures to get into the labour market can be increased, people can be pushed into cheaper housing, huge payments to dysfunctional families can be curbed. But in the end political commitment to help the poor ensures that incentives at the bottom are weak. The key is to stop the system before it reaches up to pollute incentives for the middle classes; this is politically possible and economically desirable, even if it produces points just below middle income where marginal withdrawal rates get very high; generally these have little effect on middle class people.

Monetary policy against this background may be able to get back to some normality in the UK. It is clear that growth is gradually returning in line with improving market fundamentals. If lending improves — due to the latest moves — this will help the process along. As this proceeds it will become increasingly dangerous to leave the vast reservoir of bank liquidity created by QE, let alone to add to it. QE, having so far had the effect mainly of making government borrowing extremely cheap and depressing returns to savers, could start to pose a serious inflationary threat. We could move from credit famine to credit binge rapidly. So the Bank needs to move in good time to withdraw this threat; these things cannot be left until the moment the binge is underway.

The decision by the Fed to go for QE3, printing $40 billion a month to buy mortgage-backed securities until unemployment comes down, is an astonishing decision which seems to forget the basic tenet of macroeconomics: that monetary ease cannot create employment except when applied temporarily as an attempt to counteract a negative shock. The Fed risks an even worse inflationary threat than here in the UK since its commitment is so bare-faced and open-ended.

Summing up the situation in the US and the UK, we have a slow recovery and weak growth; bank credit seems to be frozen. We have a huge regulatory reaction to the past crisis which, with the euro-zone crisis, may well account for this freeze-up. QE seems to have lowered the cost of government funding but not apparently the terms of credit to smaller firms, while it has added massively to bank reserves. It would have been better to tackle the credit problem at its root in the excess regulation; and keep some control on the reserves injection. As it is, both governments are beginning to understand the regulative issues and trying to ease up on them; The US is directing QE directly into the credit market, the UK is subsidising banks' marginal lending costs. There is a desperation now engulfing monetary policy which looks dangerous — much like the desperation that engulfed the Heath government's policies in 1971, with every lever being pulled to target unemployment.

This desperation needs to be curbed. Interest rates should start to rise and QE be stopped and then reversed. The unfreezing of credit should be done by easing of capital and liquidity regulations, on top of the new Funding for Lending scheme.

The state of the world economy

If we look further afield we see similarly patchy growth across the West. The reasons are similar, the one exception being the euro-zone crisis which is a mess created by the EU's overweening elite. That crisis will be with us for a decade, as this elite will not give way and its client 'peripheral' countries will not leave, terrified of the unknown.

The emerging market countries are slowing a little this year, in the wake of inflation and monetary tightening in the past couple of years. But they are now easing money again and growth will resume. It remains the case that world growth is limited still by scarcity of raw materials and, within that limited growth, the lion's share is going to

be taken by the emerging markets where productivity growth is strongest.

This picture of reasonable world growth but tilted towards emerging markets remains a difficult background for western policymakers. It implies that the constraints on growth are coming, not from fiscal or monetary policy, but from underlying 'supply-side' factors that can only be shifted by reforming supply-side policies.

The Phoney Debate on Plan A

The cry from Labour and the left is for fiscal stimulus — Plan B — in which it is argued that abandoning the plan to get the fiscal deficit down and get debt to stabilise relative to GDP will magically both stimulate GDP and reduce the deficit. The difficulty is that any multiplier on GDP of fiscal stimulus wears off fairly quickly, while the effect on the deficit remains permanently. This is true even if there is no worsening of fiscal credibility; if that goes, the multiplier can go negative, and the deficit get worse.

In fact George Osborne has already stretched Plan A by rightly refusing to 'make good' the worsening of the deficit due to weak growth — thus allowing the 'automatic stabilisers' to work. He has also permitted higher infrastructure expenditure, which is temporary and also should bring in future returns for the Treasury. He has therefore allowed the year when the finances reach a sustainable debt/GDP ratio to be delayed, probably now until 2020. But what he cannot do is allow the 'direction of travel' to come into doubt. For credibility there has to be in place a plan that will achieve this under available information; in this sense Plan A must always be maintained.

Nevertheless the latest statistics on GDP, employment and unemployment, business surveys and most recently public sector borrowing have created an unending debate between supporters of Plan A and those who want to see 'Plan A abandoned' in favour of extra spending on infrastructure. Yet as we have seen there is no real controversy here. The truth is that worthwhile infrastructure projects with a good long-term return are always welcome. Traditionally they are entered in the public accounts 'below the line', so recognising that they are a) temporary and b) to some degree self-financing in the 'intertemporal government budget constraint' (i.e. the dynamics of debt now versus taxes later).

What Plan A rules out is permanent extra spending and capital spending with no proper return. It therefore cannot be 'general stimulus' which often in practice seems to be what left-wing politicians are demanding. As for infrastructure spending it would probably be going on anyway under existing plans. The main difficulty at present with infrastructure spending is that the coalition government cannot agree on what is necessary — witness disputes over HS2 (clearly about to be dropped as the white elephant it is) and the third runway at Heathrow.

The fallacies of current monetary policy

Recent announcements from the Bank of England have been of further Quantitative Easing, now to reach a cumulative £375 billion, which with continued near-zero interest rates is aimed at stimulating UK growth. Yet macroeconomic theory and the models we have that fit the facts suggest that monetary policy moves lose effects on output once they are well-anticipated and long standing. Instead, if they affect anything, they affect prices.

In the present context, it seems that they are not affecting anything since as fast as QE money is printed it winds up in the Bank of England as bankers' balances. Banks are unwilling to make extra loans except to non-risky borrowers (i.e. some large companies) who have no demand for it, enjoying surplus cash and with low investment plans. When it comes to SMEs the new capital regulations force large costs on banks if they lend.

But while QE has not affected bank lending and therefore has failed to increase the money supply, and by implication has not reduced the cost of credit, it has succeeded in reducing the returns to savers. This has happened two ways. First, QE has added massively to demand for gilts, taking by now nearly 40% of available gilts, even after the large increase in public issue to meet its borrowing; this demand from the Bank must have driven down the yield to persuade institutions that would normally require gilts for their balance sheet ratios to part company with them. Secondly, QE has driven down the banks' cost of funds and hence its offers of returns to savers.

This distortion of the savings market is further encouraged by the very low Bank Rate. Banks can obtain funds from the Bank at this rate, and their bankers' balances also attract a rate related to this. Thus this is the rate at which the massive QE is available to the banks as a funding source. Yet the banks will not lend it to extra (i.e. SME) borrowers because of other regulatory costs. Hence what this QE and low Bank Rate do is to depress what they offer to savers, and build up bank profit margins on existing business.

So we now have a monetary policy that is not boosting output via increased lending and lower lending rates, but is depressing returns to savers, and with it the cost of funds to the government. As I have noted in previous SMPC comments, this is essentially what 'financial repression' does in developing countries via controls designed to force savings resources cheaply to government. Here the repression is occurring through the new controls on banking, combined with the massive printing of (government-backed) money.

The Treasury has begun to realise that its new banking regulations are causing these effects and its latest gambit has been the new Funding for Lending Scheme, under which 'extra lending' is rewarded by the government/Bank with a subsidy to the cost of bank funds. There is no reason to believe this bureaucratic scheme will work to expand lending, as opposed to expanding 'extra lending' as lending that would have occurred anyway will be diverted into the scheme.

Unfortunately the only way to reverse the malign effects of the new bank regulation is to reverse the regulations themselves. Furthermore, to force the banks to compete and not to continue as an effective cartel, with only a few players, the government should force the break-up of RBS and Lloyds into several competing units; it should not hang on to its stakes in their present form and build up their profits for a share sale. It would be better to have less capital return and a growing economy with a healthy credit supply.

Alas, in the present political climate both in and outside the coalition, these actions are not likely. So the economy is stuck with a distorted savings market, a controlled credit supply, and an impotent monetary policy.

Our recommendations for monetary policy are first for bank regulations to be greatly eased and the banks broken up. Of this there are some signs: as we have said, the Funding for Lending scheme is designed to lower the costs of bank funds for extra lending and in addition it is reported that the Bank is permitting the banks not to raise any extra capital against this extra lending.

Our second is that interest rates should be raised and QE reversed to remove the distortion from the savings market.

Policies for growth

It is a blinding glimpse of the obvious but the key requirement for this government to stimulate growth again is to bravely emphasise its change of tack on business and build on this with new measures. As part of this there should be no more carping on about bonuses and high pay, and instead a return to the old Thatcherite rhetoric celebrating entrepreneurs and their rewards. The government needs to liberalise regulations in the labour market, as suggested in Adrian Beecroft's Report, and it needs to cut marginal tax rates on business and businessmen, much as was begun by Mr. Osborne in his budget. Thus we need much more, and much less apologetically.

Then other 'rebranded' parts of the government's agenda need to be modified clearly, in the way that now seems to be happening as we noted above — unfortunately this government has wobbled on these issues before and could do so again. We need sense on greenery, we need agreement to new airport capacity, and we need the abandonment of grand but uneconomic projects like HS2.

The brutal truth is that governments who want growth need to do things that may well prove unpopular with general opinion unless they are clearly explained and promoted with the sort of bravery shown by Margaret Thatcher on such matters.

THE UK ECONOMY

Vo Phuong Mai Le

The economy recovered from recession. According to the Office for National Statistics output expanded by 1.0% in Q3 after declining 0.4% in Q2. This sharp rebound reflects the effects of Olympics and the Diamond Jubilee.

Industrial output increased 1.1% in Q3 after falling 0.7% in Q2. The increase reflected the expansion in service and manufacturing sectors.

Manufacturing output rose by 1.0% in Q3 after falling 0.8% in Q2. It contradicts the Markit/CIPS survey that indicated a contraction in manufacturing production in September for the sixth consecutive month: the index decreased to 48.4 from 49.6.

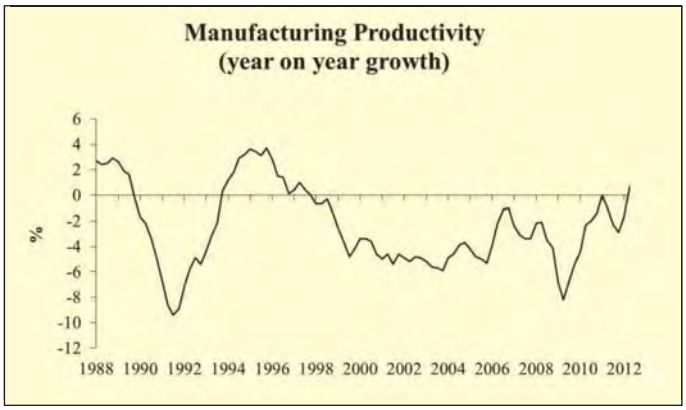
Service sector output increased 1.3% in Q3 after falling 0.1% in the previous quarter. The Markit/CIPS survey of purchasing managers index also shows an expansion. In September it was 52.2, down from 53.7 in August, above the 50 mark for the twenty-first successive month.

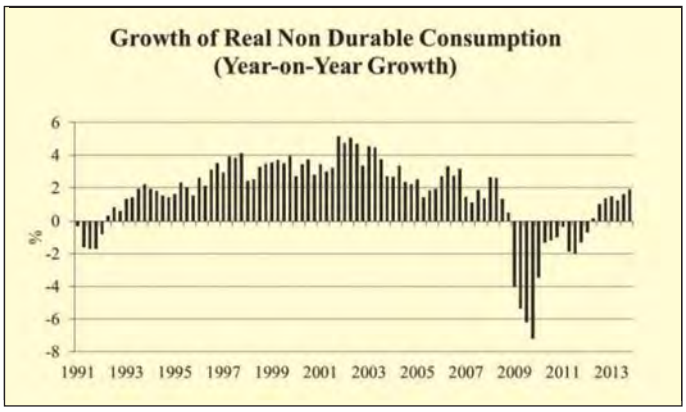
The construction sector fell by 2.5% following –3.0% in Q2. According to the Markit/CIPS survey, construction sector activity contracted due to weakness in housing activity. The index was 49.5 in September compared to 49 in August. This does not appear to be consistent with such a sharp contraction.

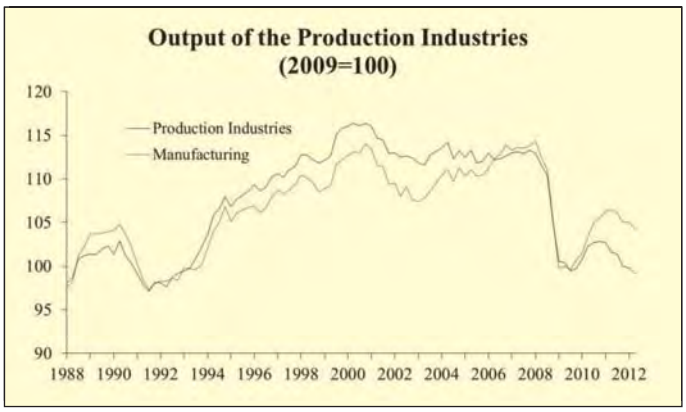
According to the latest data from the ONS, domestic expenditure components, private consumption, gross fixed capital formation and net trade contributed negatively to growth in Q2. Household final consumption expenditure decreased by 0.2% in Q2 compared to a fall of 0.3% in Q1. Investment fell by 2.7% in Q2 after increasing 3.2% in the previous quarter. It subtracted 0.2 percentage points from GDP growth. Exports fell (–1.1% in Q2 compared to –1.6% in Q2) and imports rose (1.4% in Q2 compared to –0.1% in Q1) resulting in a negative contribution of –0.9 percentage points to quarterly growth.

Cost and prices

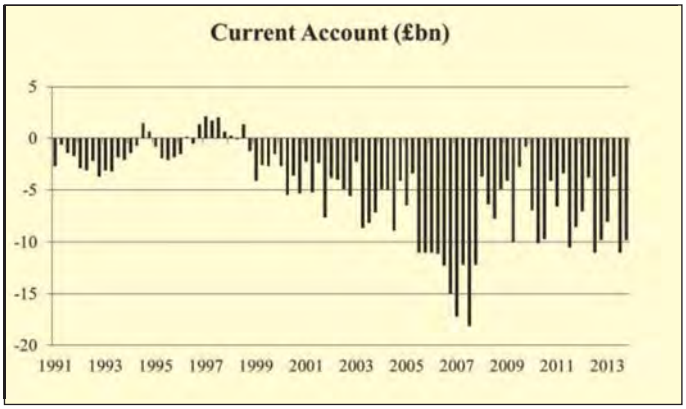
CPI year-on-year inflation was 2.5% in August, down from 2.6% in July. The largest downward pressures came from furniture, household equipment and maintenance, housing and household services and clothing and footwear. RPI growth decreased from 3.2% in July to 2.9% in August.







CPI inflation continued to remain above its 2% target. The Bank of England however expect inflation to continue to fall in the near term as the earlier rises in energy prices start to fade. Households' and companies' short-term inflation expectations have declined. The long-term expectation remains well anchored. Annual factory gate inflation was 2.2% in August compared with 1.8% in July. Input price annual inflation was 1.4% in August compared to a fall of 2.4% in the previous month. Weak labour market conditions continued to keep wage growth moderate. For the 3 month period to July average earnings growth including bonuses was 1.5% on a year earlier.



Labour market

Despite the weak economic activity, labour market conditions showed signs of improvement. The employment rate rose from 70.6% in Q1 to 71.0 in Q2. It is the highest rate since March to May 2009. The unemployment rate declined to 8.0%.

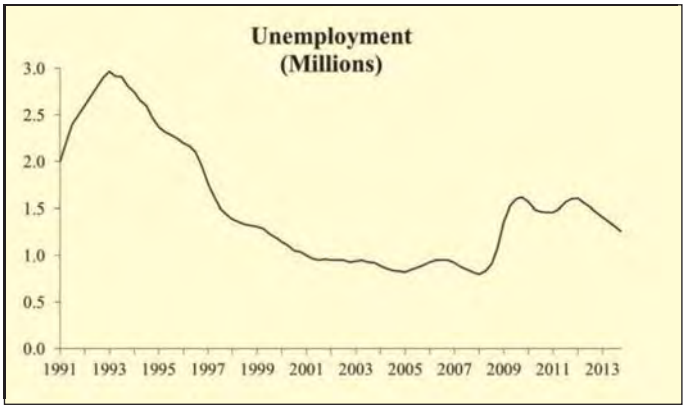
Trade

The current account deficit was £20.8 billion in Q2, up from a deficit of £15.4 billion in Q1. The total trade deficit in goods and services widened to £10.1 billion in Q2 from £8.1 billion in Q1. The income deficit widened to £5.2 billion compared with £1.9 billion in Q1.

Monetary and fiscal developments

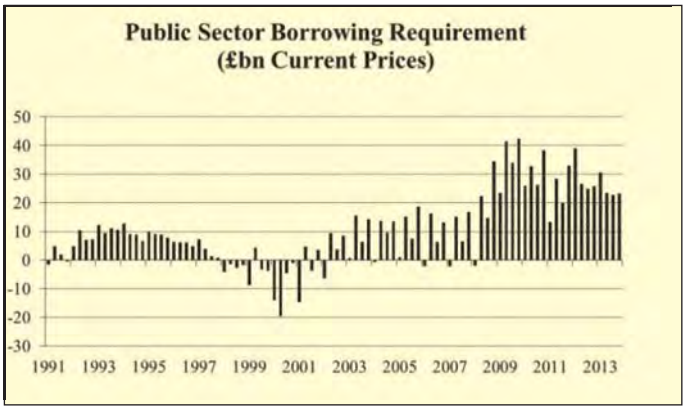
Notes and coins in circulation grew 5.0% in September on a year earlier, compared to 5.1% in August. The year-on-year growth rate of broad money — M4, including bank and Building Society deposits held by households and firms — was 4.1% in August, up from 3.9% in July. Excluding lending to 'intermediate financial companies,' M4 rose 1.0% in August, down from 1.4% in July. This reflected the continuously tight lending conditions and ineffectiveness of quantitative easing.

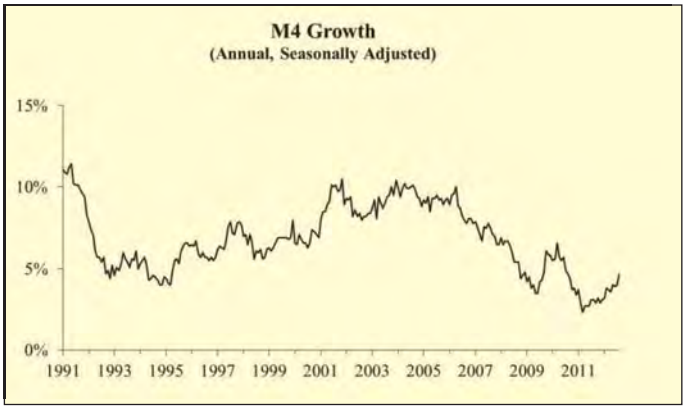
The Bank of England maintained its official lending rate at 0.5% at the Monetary Policy Committee meeting in October. It also decided to continue with its programme of asset purchases totalling £375 billion, financed by the issuance of central bank reserves. At its July meeting the Committee agreed on the Funding for Lending Scheme to ease liquidity constraints in the banking system. This programme suggests a first admission by the authorities that bank regulation is holding back lending. It is also reported that the FSA has told the banks that Funding for Lending will be exempt from a need for additional capital, i.e. will be treated as risk-free for capital requirements.



In the fiscal year to August 2012 the public sector current budget — government income minus spending on current costs — was in deficit to the amount of £55.1 billion,

compared to a deficit of £42.3 billion in the same period of 2011/2012. Public net borrowing excluding financial intervention was £31 billion in the fiscal year to August 2012, down by £17.4 billion from that the same period last year. At the end of August public sector net debt was £1039.5 billion, or 66.1% of GDP. This is compared to 62.7% of GDP at the end of August 2011.





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]
2009	1.3	2.8	1.1	80.6	89.3	–0.4	2.0	–0.2
2010	4.1	2.4	0.7	80.4	91.2	–3.8	4.8	–0.3
2011	3.9	2.0	0.9	79.9	92.4	–2.5	5.3	–0.4
2012	2.8	1.6	1.2	81.7	95.4	–1.6	3.5	–0.5
2013	2.3	2.4	1.4	81.5	95.7	–0.7	2.9	0.4
2014	2.0	2.6	2.1	81.0	95.6	0.2	2.7	0.6
2011:1	4.5	2.6	0.8	80.8	93.3	–2.9	5.3	0.2
2011:2	3.7	2.3	0.9	79.4	91.8	–2.8	5.2	–0.1
2011:3	3.7	1.6	0.9	79.2	91.5	–2.7	5.3	–0.7
2011:4	3.6	1.3	1.1	80.2	93.0	–1.5	5.3	–0.9
2012:1	2.6	1.1	1.1	81.1	94.3	–2.0	3.8	–1.1
2012:2	3.1	1.6	1.0	82.3	96.1	–1.9	3.6	–0.5
2012:3	2.9	1.8	1.4	81.9	95.7	–1.3	3.3	–0.3
2012:4	2.7	1.9	1.4	81.6	95.6	–1.0	3.2	–0.1
2013:1	2.4	2.1	1.4	81.5	95.5	–0.9	3.0	0.1
2013:2	2.3	2.4	1.4	81.3	95.4	–0.8	2.9	0.4
2013:3	2.2	2.6	1.4	81.7	96.0	–0.7	2.8	0.6
2013:4	2.1	2.6	1.6	81.4	95.9	–0.5	2.8	0.6

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)
2009	227.3	0.0	4.6	1.53	141.3
2010	232.4	2.3	4.6	1.50	138.8
2011	237.9	2.3	4.7	1.53	136.6
2012	243.2	2.1	4.6	1.53	135.6
2013	251.7	3.5	4.0	1.34	137.3
2014	262.8	4.4	3.7	1.24	140.6
2011:1	237.6	2.9	4.5	1.46	138.0
2011:2	237.2	2.6	4.6	1.50	136.8
2011:3	238.2	2.1	4.8	1.57	136.1
2011:4	238.8	1.6	4.8	1.60	135.4
2012:1	239.8	0.5	4.8	1.61	135.1
2012:2	242.1	2.1	4.7	1.56	135.4
2012:3	244.3	2.6	4.5	1.51	135.7
2012:4	246.7	3.3	4.4	1.46	136.3
2013:1	247.9	3.4	4.2	1.41	136.4
2013:2	250.6	3.5	4.1	1.36	137.0
2013:3	252.9	3.5	3.9	1.31	137.6
2013:4	255.6	3.6	3.8	1.26	138.3

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
2009	140.8	674466.5	405440.7	218144.6	178391.0	–33226.3	94283.5
2010	143.8	688577.5	406544.7	238231.9	181470.9	–39127.8	98542.3
2011	144.7	693085.7	400020.3	240745.2	180361.1	–30475.0	97565.8
2012	145.9	698805.6	401772.6	254854.4	182833.9	–32881.9	107764.8
2013	148.8	712538.5	407982.4	260043.9	187329.0	–33205.7	109610.1
2014	152.1	728596.4	417155.4	265696.3	191131.8	–33153.8	112235.9
2009/08	–4.3		–3.7	–13.4	0.9		–5.0
2010/09	2.1		0.3	9.2	1.7		4.6
2011/10	0.7		–1.6	1.1	–0.6		–0.9
2012/11	0.8		0.4	6.1	1.5		11.1
2013/12	2.0		1.5	2.1	2.5		1.7
2014/13	2.3		2.2	2.2	2.0		2.4
2011:1	144.5	172985.8	100710.9	55274.0	47260.2	–6814.0	23445.3
2011:2	144.4	172880.5	100098.9	58650.3	43772.3	–7894.5	21746.5
2011:3	145.2	173866.2	99417.2	64048.0	44431.3	–8082.7	25947.6
2011:4	144.8	173353.2	99793.3	62772.8	44897.4	–7683.8	26426.5
2012:1	144.3	172790.5	100021.7	62533.0	45654.3	–7956.4	27462.2
2012:2	144.0	172361.5	100252.8	61076.7	45598.3	–8306.1	26258.6
2012:3	147.8	176935.9	100386.7	66094.5	45669.6	–8309.4	26902.2
2012:4	147.6	176717.7	101111.5	65150.2	45911.6	–8310.0	27141.8
2013:1	148.0	177154.1	101483.0	62722.2	48586.9	–8307.4	27326.9
2013:2	148.5	177778.4	101479.0	66229.2	45693.1	–8302.0	27320.6
2013:3	149.1	178446.3	101989.4	65774.3	46384.9	–8301.7	27401.8
2013:4	149.6	179159.7	103031.0	65318.2	46664.1	–8294.5	27560.8

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)
2009	10.3	1247.8	128.3	32.4	–26.1
2010	8.3	1335.1	110.3	36.6	–48.6
2011	7.3	1394.9	120.1	43.0	–29.0
2012	7.4	1463.3	107.6	48.1	–31.6
2013	6.4	1524.1	97.1	51.6	–32.5
2014	3.6	1591.8	58.0	56.8	–32.3
2011:1	3.9	338.3	13.2	9.7	–6.6
2011:2	8.4	337.4	28.4	10.0	–3.4
2011:3	5.7	349.7	19.8	10.4	–10.5
2011:4	9.3	352.3	32.9	11.0	–8.5
2012:1	5.6	355.5	39.0	11.5	–7.0
2012:2	7.5	355.2	26.5	11.6	–3.8
2012:3	6.8	367.1	24.9	12.0	–11.0
2012:4	7.0	369.2	25.7	12.2	–9.8
2013:1	8.2	371.8	30.5	12.3	–8.0
2013:2	6.2	375.5	23.4	12.5	–3.7
2013:3	6.0	378.9	22.6	12.7	–11.0
2013:4	6.1	382.5	23.1	13.0	–9.8

1 GDP at market prices (Financial Year)

THE WORLD ECONOMY

Global recovery continued but it still remained weak. The euro zone crisis and weak labour and housing markets in advanced economies continued to influence global growth negatively. The OECD countries' quarterly GDP grew by 0.2% in Q2, down from 0.5% in Q1. Growth in the emerging countries remained solid. However, its growth pace slowed down because of the effects of policy tightening in the past and weaker external demand. The Purchasing Managers' Index (PMI) for global all-industry output increased to 51.7 in July, up from 50.3 in June.

Inflationary pressures continue to subside. Annual headline inflation in the OECD countries decreased to 1.9% in July. This easing reflected lower growth in energy and food prices. Excluding food and energy, the annual inflation rate was 1.8% in July, unchanged from the previous month. In some emerging countries, inflation rates declined in June.

US

The pace of the US recovery has slowed. Real GDP increased by 0.3% quarter-on-quarter in Q2, down from 0.5% in Q1. This slowdown reflected lower consumption (0.4% quarter-on-quarter in Q2, compared with an increase of 0.6% in Q1) and fixed investment growth (0.9% quarter-on-quarter in Q2 compared with 1.9% in Q1). Government spending and change in inventories continued to contribute negatively to the quarter growth. The former subtracted 0.3 percentage points from the growth rate in Q2, while the latter subtracted 0.11 percentage points from growth. All negative contributions were offset by a stronger net trade growth. It added 0.6 percentage points to the quarter's growth, as exports increased by more than imports.

Labour market conditions continued to recover, but remained weak. Non-farm payroll employment rose 114,000 in September, with figures for both August and July being revised upwards (142,000 from 93,000 and 181,000 from 141,000 respectively). The unemployment rate decreased below 8% to 7.8% for the time since January 2009. This fall reflected a decline in the number of unemployed and not a decline in the participation rate (63.6% in September compared to 63.5% in August). The high unemployment rate is still limiting wage growth. In September average hourly earnings rose 2.0% year-on-year, up from 1.7% in August.

The housing market remains weak, but there are some signs of improvement. House prices, home sales and housing starts rose. The S&P/Case–Shiller Home Price Indices showed that national house prices rose 6.9% in the second quarter. Sales of existing homes rose 7.8% month-on-month in August. The inventory of unsold homes decreased. It would take 6.1 months to sell existing inventory, compared to 6.4 months in July. It is the lowest level since March 2012. Housing starts rose 2.3% in August.

USA

	2008	2009	2010	2011	2012	2013
Real GDP Growth (% p.a.)	0.0	−2.6	2.6	1.7	2.5	2.6
Inflation (% p.a.)	3.8	-0.3	1.8	3.1	2.0	2.0
Nominal Short Int. Rate	1.5	0.2	0.1	0.3	0.5	0.7
Real Short Int. Rate	1.8	−1.6	−1.8	−1.7	−1.5	−1.3
Nominal Long Int. Rate	3.7	3.2	3.1	3.2	4.0	4.0
Real Long Int. Rate	2.2	1.3	1.1	1.2	2.0	2.0
Real Ex. Rate (1996=100)[1]	80.1	88.7	81.7	81.8	82.0	82.1
Nominal Ex. Rate[2]	86.07	85.98	83.73	78.08	80.20	80.50

[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 of the real exchange rate.
[2] The series for the USA is a trade weighted index (1990=100)

Annual CPI inflation declined to 1.4% from 1.7% in both May and June. It is the lowest rate since November 2010. A decrease in energy prices contributed to this decline in the inflation rate. Excluding food and energy annual CPI inflation declined to 2.1% in July from 2.2% in June. The decline in core inflation is explained by all components except for medical care commodities and services. Given the subsiding inflation pressure, at the August meeting the Federal Open Market Committee decided keep the target range for the federal funds rate at 0% to 0.25% and continued to expect that economic conditions would allow the federal funds rate to remain low at least until late 2014. It decided to launch a third round of quantitative easing. This new program is set to buy mortgage-backed securities on a monthly basis of $85 billion with $40 billion of additional purchases and $45 billion corresponding to the reinvestment of maturing MBS and Agencies' holdings. The highly accommodative monetary policy is expected to be extended for a considerable time after the economic recovery strengthens to end-2014 to mid-2015.

Japan

The Japanese economic recovery slowed down. Real GDP rose 0.2% in Q2 after rising 1.3% in Q1. This reflected smaller contributions from internal and external demand. Domestic demand declined by 0.2% in Q2 after rising by 1.2% in Q1. This is explained by a slower increase in private consumption (0.1% from 1.2% in Q1), public investment (1.8% compared to 3.6% in Q1) and government consumption (0.2% compared to 1.1% in Q1). Private consumption rose more slowly due to the fading effects of the subsidies on environmentally-friendly durable goods. A slowdown in demand from both emerging Asia and the EU resulted in a negative contribution of net trade, as imports growth (1.6% in Q2 compared to 2.2% in Q1) dominated the rise in exports (1.2% compared to 3.4% in Q1).

Economic activity deteriorated in Q3 according to the headline leading business condition indices (91.8 in July down from 93.2 in June) and the Economy Watchers Survey (declining to 43.6 in August from 44.2 in July).

The labour market's improvement came to an end. The ratio of effective job offers to applicants was 0.83 in August, unchanged from July. The unemployment rate marginally decreased by 0.1 percentage points to 4.2%, but this was completely due to the decline in the labour force (–0.3% in August). Employment remained unchanged in August after a decline of 0.1% in July. The Economy Watchers Survey index for future employment conditions declined sharply to 47 in September, signalling that a decline in employment is likely.

In the absence of inflation pressures, at its October meeting the Bank of Japan decided to keep its policy rate at around 0 to 0.1%. In addition, it decided to expand its Asset Purchase Programme by ¥10 trillion (equivalent to 2% of GDP) to ¥80 billion. It removed the minimum bidding yield (currently 0.1% per annum) for outright purchases of Japanese Government bonds and corporate bonds to ensure its smooth bond-buying operations. This expansion was carried out to ease the upward pressure on the yen due to the Federal Reserve's third quantitative easing.

Germany

The economic recovery continued. Real GDP rose 0.3% in Q2 following 0.5% in the previous quarter. The main contribution to growth came from net trade (adding 0.3 percentage points to GDP growth after adding 0.7 percentage points in Q1) as a rise in exports (2.5% in Q2 compared to 1.2% in Q1) dominated the rise in imports (2.1% in Q2 compared to a fall of 0.2% in Q1). In addition, domestic consumption rose. Government consumption rose 0.2%, unchanged from Q1. Private consumption increased 0.4% in Q2 after rising 0.1% in the previous quarter. Foreign trade and domestic consumption offset the weakness of investment (–0.9% in Q2, the same as in the previous quarter).

Recent data show mixed signals about economic activity. The IFO business climate index continued to fall for the fifth successive month in September, at 101.4 from 102.3 in

Japan: Annual Growth Rates of Real GNP and Consumer Prices

Japan

	2008	2009	2010	2011	2012	2013
Real GDP Growth (% p.a.)	–1.2	–6.3	4.3	–0.7	2.1	1.6
Inflation (% p.a.)	1.4	–1.4	–1.0	–0.3	–0.2	0.0
Nominal Short Int. Rate	0.4	0.1	0.1	0.4	0.4	0.4
Real Short Int. Rate	1.8	1.1	0.5	0.4	0.4	0.4
Nominal Long Int. Rate	1.5	1.3	1.1	1.2	1.5	1.5
Real Long Int. Rate	2.0	1.4	1.1	1.1	1.3	1.5
Real Ex. Rate (1996=100)[1]	87.9	89.0	80.2	79.8	79.7	80.0
Nominal Ex. Rate	103.40	93.54	87.48	79.36	81.00	81.00

[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 of the real exchange rate.

Germany: Annual Growth Rates of Real GNP and Consumer Prices

Germany

	2008	2009	2010	2011	2012	2013
Real GDP Growth (% p.a.)	1.0	–4.7	3.6	3.0	1.1	2.0
Inflation (% p.a.)	2.6	0.4	1.1	2.3	1.8	1.7
Nominal Short Int. Rate	3.9	0.7	0.4	1.5	2.5	2.5
Real Short Int. Rate	3.5	–0.4	–1.3	–0.3	0.8	0.5
Nominal Long Int. Rate	4.4	4.0	3.8	3.8	4.0	4.0
Real Long Int. Rate	3.0	2.3	1.9	1.8	2.0	2.0
Real Ex. Rate (1996=100)[1]	105.1	105.8	99.3	99.0	99.1	99.0
Nominal Ex. Rate	0.68	0.72	0.75	0.72	0.78	0.79

[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 of the real exchange rate.

August. The ZEW current conditions index dropped to 12.6 in September from 18.2 in August. On the other hand, the future looks brighter. Investors were boosted by the ECB's bond-buying program. The ZEW expectation index rose to –18.2 in September from –25.5 in August.

The labour market remained healthy. The unemployment rate was unchanged at 6.8% in September. It has been at this level since December 2011. Employment rose 1.0% year-on-year in August.

France

The economy recovery stalled for the second consecutive quarter. Real GDP was flat after 0.0% in Q1. Total domestic demand excluding inventories contributed 0.1 percentage points to the quarter's growth after a neutral contribution in Q1. Private consumption decreased 0.1% in Q2 after increasing 0.1% in Q1, while investment increased 0.5% after a fall of 0.8% in Q1. Foreign trade contributed negatively to GDP growth once again. It subtracted 0.4 percentage points in Q2 compared to –0.1 percentage points in Q1, as imports growth (1.7% in Q2 after 0.7% in Q1) dominated the rise in exports (0.2% in Q2 after 0.1% in Q1).

The recent surveys show a gloomy future. The INSEE business climate continued its downward tendency. It decreased to 86 in September from 87 in August. The consumer confidence index lost 2 points between July (87 points) and September (85 points). The composite PMI index showed a contraction in the combined output of the manufacturing and service sector. It fell to 43.2 in September from 48.0 in August, reaching a 42-month low.

Annual CPI inflation in August was 2.1%, up from 1.9% in July. Most of this rise reflected the upward pressures from the price of energy. The core inflation rate was 1.3% in August, down from 1.5% in July.

Italy

The recession deepens. Economic activity continued to shrink for the 4th consecutive quarter as austerity measures and the euro zone crisis intensified. Real GDP declined 0.7% in Q2 after falling 0.8% in the previous quarter. The breakdown in GDP components is not available, but according to ISTAT, activity contracted in agriculture, industry and services. Industrial production decreased 7.3% in July following –7.9% in June.

The economic outlook looks poor. The unemployment rate stood at the record high level of 10.7% in August. Consumer confidence was at 92.30 September, marginally up from a record low of 92.0 in August. The business confidence index stood at 88.3 in September, up from 87.3 in August, far from its average of 100.5. Weak tax revenues and high unemployment would make it very difficult to cut the budget deficit to 0.1% of GDP in 2014.

France: Annual Growth Rates of Real GNP and Consumer Prices

France

	2008	2009	2010	2011	2012	2013
Real GDP Growth (% p.a.)	0.1	–2.5	1.5	1.7	1.0	1.2
Inflation (% p.a.)	2.8	0.1	1.5	2.1	1.6	1.6
Nominal Short Int. Rate	3.9	0.7	0.4	1.5	2.5	2.5
Real Short Int. Rate	3.8	–0.8	–1.4	–0.3	0.9	0.5
Nominal Long Int. Rate	4.4	4.0	3.8	3.8	4.0	4.0
Real Long Int. Rate	3.0	2.2	1.9	1.8	2.0	2.0
Real Ex. Rate (1996=100)[1]	106.4	104.3	101.7	102.0	102.0	102.1
Nominal Ex. Rate	0.68	0.72	0.75	0.72	0.78	0.79

[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 of the real exchange rate.

Italy: Annual Growth Rates of Real GNP and Consumer Prices

Italy

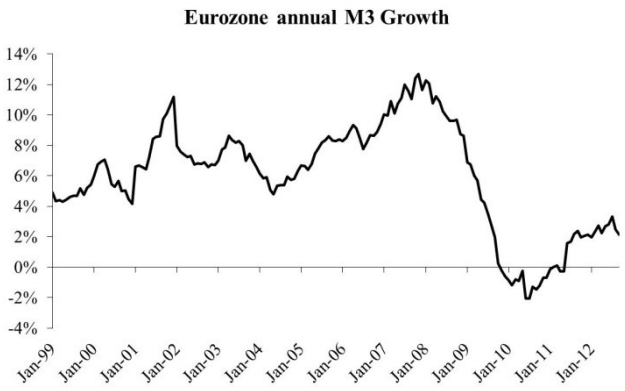
	2008	2009	2010	2011	2012	2013
Real GDP Growth (% p.a.)	–1.3	–5.1	0.9	0.5	0.1	0.3
Inflation (% p.a.)	3.4	0.8	1.5	2.8	2.7	2.8
Nominal Short Int. Rate	3.9	0.7	0.4	1.5	2.5	2.5
Real Short Int. Rate	3.1	–0.8	–1.4	–0.3	–0.3	0.0
Nominal Long Int. Rate	4.4	4.0	3.8	3.8	4.0	4.0
Real Long Int. Rate	2.8	2.2	1.9	1.8	2.0	2.2
Real Ex. Rate (1996=100)[1]	106.6	105.4	100.5	100.8	101.0	101.1
Nominal Ex. Rate	0.68	0.72	0.75	0.72	0.78	0.79

[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 of the real exchange rate.

Euro-zone monetary developments

The Harmonised Index of Consumer Prices (HICP) inflation rate was 2.6% in August, up from 2.4% in July. The increase is due to renewed increases in euro-denominated energy prices. The Governing Council of the ECB expects inflation rates to decline to below 2% in the course of next year. The modest growth in the euro zone and well-anchored long-term inflation expectations mean that pressures on prices remain modest. At the meeting of the Governing Council, on the 6th September, the key policy rate was unchanged at 1%. To deal with the sovereign crisis and to preserve the single currency the Governing Council decided to launch the Outright Monetary Transactions programme in secondary markets for sovereign bonds in the euro area; this will buy these bonds when their yields threaten the euro's stability — on condition that the country is obeying conditions imposed by the EU.

The monetary expansion remained subdued. Broad money (M3) growth year-on-year increased to 3.8% in July, up from 3.2% in June. The year-on-year growth rate of loans to the private sector was weak, at 0.5% in July compared to 0.3% in June. The banking and sovereign crisis continue to suppress the growth in lending and money supply.



WORLD FORECAST DETAIL

Growth Of Real GNP

	2008	2009	2010	2011	2012	2013
U.S.A.	0.0	–2.6	2.6	1.7	2.5	2.6
U.K.	–1.1	–4.3	2.1	0.7	0.8	2.0
Japan	–1.2	–6.3	4.3	–0.7	2.1	1.6
Germany	1.0	–4.7	3.6	3.0	1.1	2.0
France	0.1	–2.5	1.5	1.7	1.0	1.2
Italy	–1.3	–5.1	0.9	0.5	0.1	0.3

Growth Of Consumer Prices

	2008	2009	2010	2011	2012	2013
U.S.A.	3.8	–0.3	1.8	3.1	2.0	2.0
U.K.	3.3	1.3	4.1	3.9	2.8	2.3
Japan	1.4	–1.4	–1.0	–0.3	–0.2	0.0
Germany	2.6	0.4	1.1	2.3	1.8	1.7
France	2.8	0.1	1.5	2.1	1.6	1.6
Italy	3.4	0.8	1.5	2.8	2.7	2.8

Real Short-Term Interest Rates

	2008	2009	2010	2011	2012	2013
U.S.A.	1.8	–1.6	–1.8	–1.7	–1.5	–1.3
U.K.	4.2	–0.4	–3.8	–2.5	–1.6	–0.7
Japan	1.8	1.1	0.5	0.4	0.4	0.4
Germany	3.5	–0.4	–1.3	–0.3	0.8	0.5
France	3.8	–0.8	–1.4	–0.3	0.9	0.5
Italy	3.1	–0.8	–1.4	–0.3	–0.3	0.0

Nominal Short-Term Interest Rates

	2008	2009	2010	2011	2012	2013
U.S.A.	1.5	0.2	0.1	0.3	0.5	0.7
U.K.	5.5	1.1	0.7	0.9	1.2	1.4
Japan	0.4	0.1	0.1	0.4	0.4	0.4
Germany	3.9	0.7	0.4	1.5	2.5	2.5
France	3.9	0.7	0.4	1.5	2.5	2.5
Italy	3.9	0.7	0.4	1.5	2.5	2.5

Real Long-Term Interest Rates

	2008	2009	2010	2011	2012	2013
U.S.A.	2.2	1.3	1.1	1.2	2.0	2.0
U.K.	1.4	–0.2	–0.3	–0.4	–0.5	0.4
Japan	2.0	1.4	1.1	1.1	1.3	1.5
Germany	3.0	2.3	1.9	1.8	2.0	2.0
France	3.0	2.2	1.9	1.8	2.0	2.0
Italy	2.8	2.2	1.9	1.8	2.0	2.2

Nominal Long-Term Interest Rates

	2008	2009	2010	2011	2012	2013
U.S.A.	3.7	3.2	3.1	3.2	4.0	4.0
U.K.	4.3	2.8	2.4	2.0	1.6	2.4
Japan	1.5	1.3	1.1	1.2	1.5	1.5
Germany	4.4	4.0	3.8	3.8	4.0	4.0
France	4.4	4.0	3.8	3.8	4.0	4.0
Italy	4.4	4.0	3.8	3.8	4.0	4.0

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

	2008	2009	2010	2011	2012	2013
U.S.A.	80.1	88.7	81.7	81.8	82.0	82.1
U.K.	87.6	77.5	77.3	76.8	79.6	78.4
Japan	87.9	89.0	80.2	79.8	79.7	80.0
Germany	105.1	105.8	99.3	99.0	99.1	99.0
France	106.4	104.3	101.7	102.0	102.0	102.1
Italy	106.6	105.4	100.5	100.8	101.0	101.1

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

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

	2008	2009	2010	2011	2012	2013
U.S.A.[1]	86.07	85.98	83.73	78.08	80.20	80.50
U.K.	1.85	1.57	1.55	1.61	1.58	1.58
Japan	103.40	93.54	87.48	79.36	81.00	81.00
Eurozone	0.68	0.72	0.75	0.72	0.78	0.79

[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

FOCUS ON JAPAN: THE OUTLOOK FOR DOMESTIC BUYING OF JGB AND JAPANESE FISCAL DEBT

Francesco Perugini

Introduction

One of the oddest things in the current world financial market scene is the behaviour of Japanese Government Bonds (JGBs): JGBs are issued by a government which is the most indebted among industrialized economies and at the same time is able to finance its debt at the lowest yield level in the world.

For decades, observers and investors have been expecting the interest rate on the JGB to rise, but this has yet to materialize. However the conditions that have kept the JGB market stable are rapidly changing. The household savings rate has steadily decreased over the last two decades due to population ageing and it is expected to become negative. Portfolio preferences for public debt among corporate and financial lenders are expected to shift toward riskier assets. And the current account, which mirrors foreign net saving, could well go into deficit.

These events will reduce inflows of capital into the government bond market in the coming years. Then to finance its deficit, the Japanese government may need to attract more foreign investors and raise JGB yields. As a result, without promoting growth or initiating a serious fiscal adjustment, weaker domestic capacity to absorb JGBs would put further pressure on Japanese fiscal consolidation.

Overview of Japan's fiscal situation

Japan has experienced a sustained period of fiscal deficits that have led to a dramatic increase in public debt over the past two decades. Gross government debt to GDP ratio more than tripled since 1990 to become by far the highest of any major economy (Chart 1).

Rising public debt resulted from persistently low growth. In real terms, output growth was just 28% between 1990 and 2007 while, over the same period, other developed economies enjoyed greater economic expansion (real output growth over the period was 37% in Germany, 39% in France, and 63% in the UK). Moreover, the contraction experienced during the recent crisis and following the March 2011 earthquake reduced Japanese real output to its 2006 level. Stagnating output reflects the confluence of demand as well as supply side problems. Demand problems have been associated with inefficient and inadequate fiscal and monetary policy adjustments after the asset and land prices fall, while supply side issues indicate a trend decline in total factor productivity, a shrinking labour force, and highly regulatory business environment as the main causes of the Japanese "lost decades".[1]

Chart 1 - General Government Gross Debt (source: OECD)

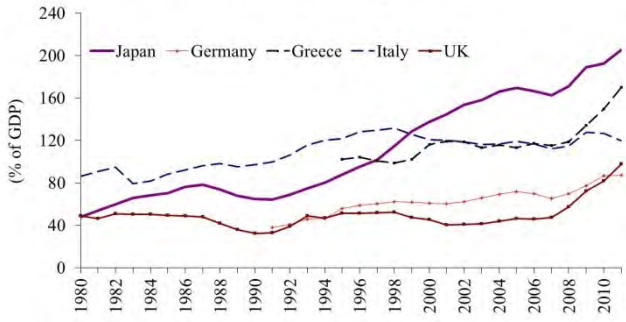


Chart 2 - Government Revenue breakdown (FY) (source: MOF)

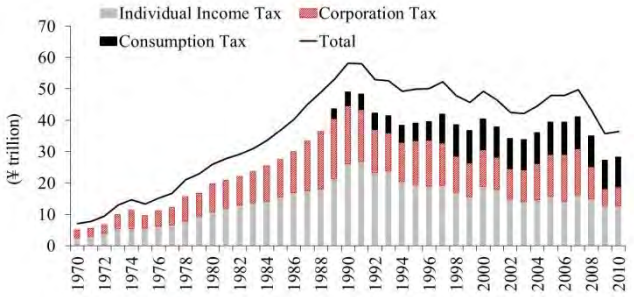
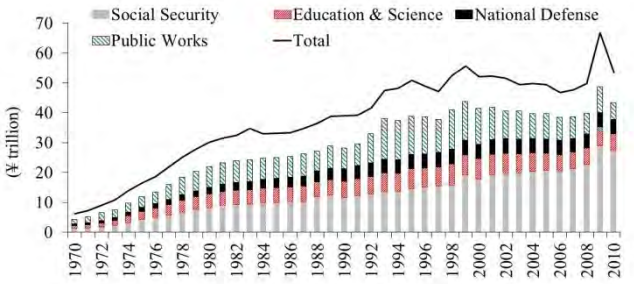


Chart 3 - Government Expenditure breakdown (FY) (source: MOF)



At the same time low economic growth has spurred public spending and depressed tax revenues perpetuating a cycle of adverse debt dynamics. Tax revenues started to decline immediately after the collapse of asset and land prices in the early 1990s, and continued to weaken until 2003 (Chart 2). They rose up to 2007 by about 20% and, since then, have slowed as a result of lower economic growth.

[1] For an analysis, see the April 2004 and the December 2011 issues of the Quarterly Economic Bulletin.

The fall in tax revenue can be mainly attributed to a gradual fall in individual income and corporate income taxes, while revenues from the consumption tax after having increased up to the end of the 1990s, remained steady throughout the 2000s.

Government expenditures grew especially throughout the 1990s (Chart 3). From 2000 to 2008, they were mostly under control, apparently capped and on a slight decreasing trend, despite still rising social security spending. Any restraint was again called off in 2009, in response to sharp output declines in the global financial crisis, and in 2011 following the reconstruction spending for the earthquake. Two major sources of expenditures are public works and social security.

Increasing public works spending during the 1990s reflects a series of inefficient economic stimuli by the government, who believed in the use of traditional discretionary countercyclical Keynesian fiscal policy to support aggregate demand.[2] Massive fiscal expansions were also implemented recently in response to these recent shocks, the global financial crisis and to the March 2011 earthquake.

Social security expenditure has been the largest rising expenditure budget item since 1990s as the ageing of the population has accelerated.[3] In 1990 it represented about 17% of the budget but rose to over 31% of total expenditure in the latest approved budget for FY 2012. Most importantly, while social security payments rose for most the 1990s, social security insurance revenue remained stable since the end of the 1990s (Chart 4).

The historical details of the public budget are shown on Chart 5. Until the 1990s fiscal spending grew in line with tax revenue, and the Japanese government debt to GDP ratio was lower than in other major economies. The fiscal deficit then started to expand and the gap began to widen. In the early 2000s, especially under the Koizumi (2001–2006) and Abe (2006–2007) administrations, the worsening of the fiscal deficit lost momentum. As a result, the amount of government bonds issuance for budget purposes fell to ¥25.4 trillion (4.9% of GDP) in FY2007 from ¥37.5 trillion (7.5% of GDP) in FY1999. However, the severe global recession that began in 2008 totally changed fiscal

Chart 4 - Social Security Balance (FY)
(source: NIPSSR)

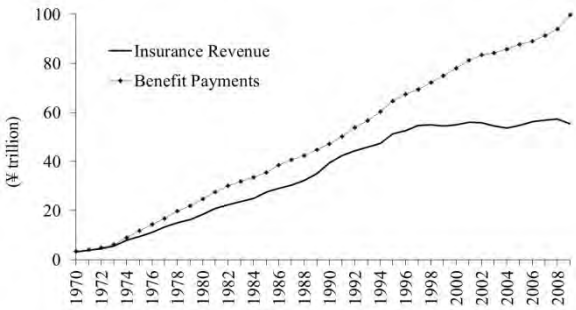
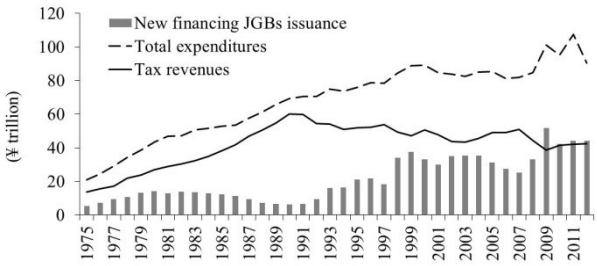
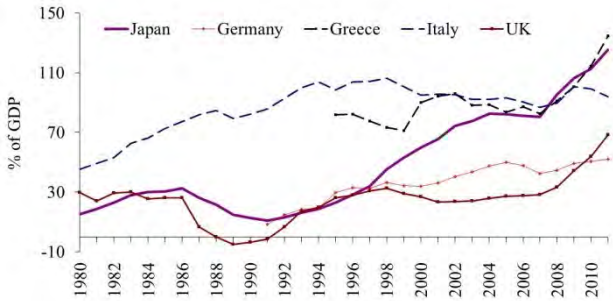


Chart 5 - General Account of the Central Government
(source: MOF)



The final budget for FY 1975–2009; the revised budget for FY 2010; the initial budget for FY 2012

Chart 6 - General Government Net Debt
(source: OECD)



conditions. With the additional fiscal stimulus packages and the plunge in tax revenue, JGB issuance surged again, peaking in 2009 at about ¥52 trillion, and since then it has exceeded tax revenues.

Some observers have argued that although the Japanese government has accumulated large debts, it also owns a large amount of financial assets, mostly in the social security system. Hence, taking this into account the general government net debt is only around 125% of GDP (Chart 6). However, since the financial assets held by the social security system are earmarked for an unusually high level of future obligations (mainly on pensions), Japan's debt situation is more serious than the net debt figure would suggest.

[2] A number of explanations have been put forward to justify the low impact of fiscal policy on economic activity. For instance, it has been argued that the potential growth rate somehow declined in the 1990s, and that the "clear water" content of the stimulus package was actually modest. Others instead claim that the government fiscal package went primarily to finance wasteful and low productivity public works projects, mostly in the agriculture sector and on road construction and subsidized politically important but inefficient firms and declining industries because of vested interests. Others contend that most of the public investment funds remained unused because of poor project implementation or that the rise in public debt increased uncertainty given the looming demographic burden which led to precautionary behaviour on the part of households and firms.

[3] The share of those aged 65 and older has nearly doubled over the last two decades, to 23%, compared with 13% for the US and 16% for Europe.

Chart 7 - Net Financial Assets and Liabilities by Sectors (source: BOJ)

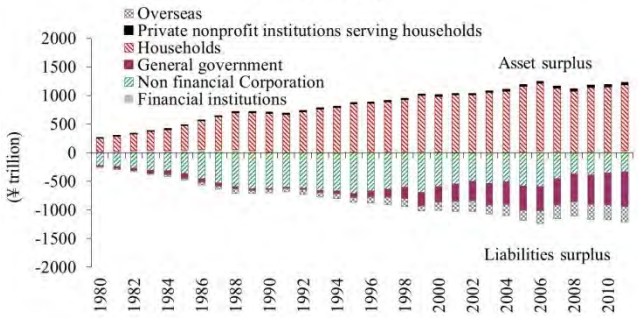


Chart 8 - Assets Composition of non financial Sectors (source: BOJ)

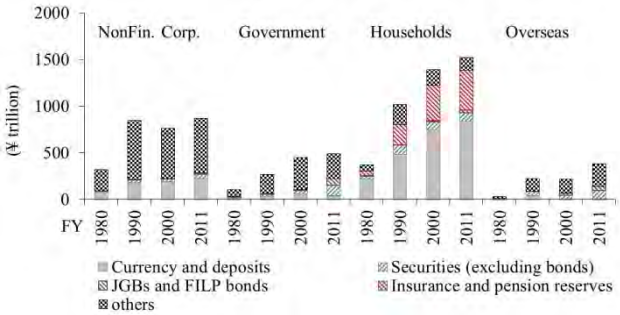


Chart 9 - Liabilities Composition of non financial Sectors (source: BOJ)

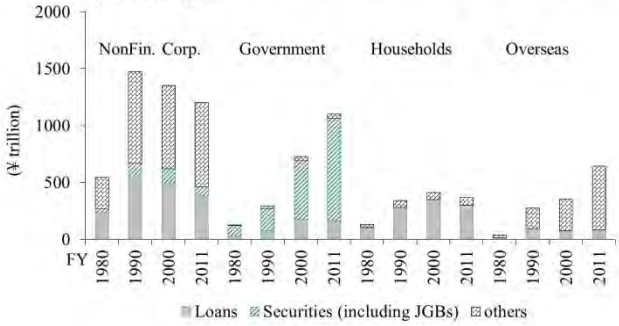


Chart 10 - Assets Composition of financial Sectors (source: BOJ)

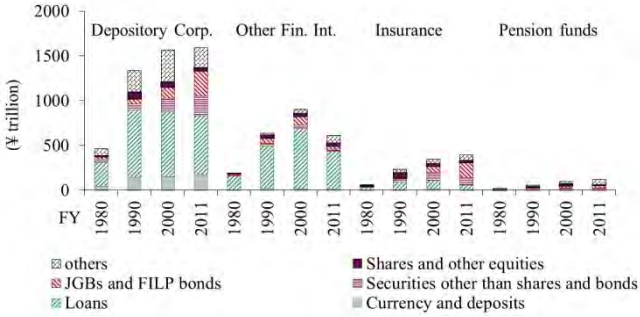
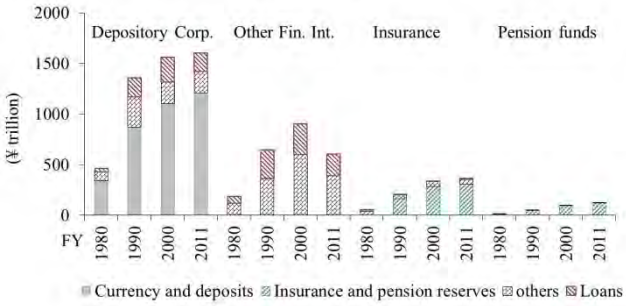


Chart 11 - Liabilities Composition of financial Sectors (source: BOJ)



The budget deficit from the flow of fund perspective

To analyse and discuss Japan's public debt sustainability and reconstruction it is extremely important to see not only government budget figures but also the flow of money in the overall economy. The government is no more than one of the sectors that make up the country's overall economy, so the ultimate fate of the budget deficits largely depends on the macroeconomic situation facing the country. Chart 7 shows the balance sheet evolution for main economic sectors since the 1980s, taken from the Flow of Funds Accounts statistics compiled by the BOJ.

It is evident that since the 1980s households have been the main provider of funds to other sectors of the economy and that the large amount of funds they hold has allowed the Japanese government to finance its deficit without difficulty throughout the years. At the end of fiscal year 2011 (March 2012) households asset surplus (assets exceed debts) stood at ¥1,150 trillion (about 245% of GDP).

The persistent rise in the private sector's asset surplus, mainly due to an increase in currency and deposits (Chart 8), mirrors the surplus of debt (assets are outweighed by liabilities) by the public sector, the non-financial corporation and the foreign sector. However, while fund raising by the general government through the issuance of JGB has increased at a rapid pace, fund raising by non-financial corporations, through borrowing from financial institutions and issuing of securities, has continued to decline (Chart 9). Reflecting such financial developments, on the depository corporations' assets side, holdings of JGB have increased (Chart 10), while on the liabilities side, deposits have also increased (Chart 11). As a result, the size of their balance sheets reached ¥1,586 trillion at the end of March 2012.[4]

Another way of looking at financial developments is to examine flow variables, that is the difference between the amounts of funds invested and raised. This is because the asset/liabilities surplus in stock terms for each sector is a result of the saving surplus over investment. This is called the financial surplus or deficit (the change in financial assets less the change in financial liabilities).

[4] Depository corporations includes Banks, the Japan Post Bank and Collectively Managed Trusts.

Chart 12 shows the financial surplus/deficit since 1980 as a percentage of GDP for main sectors of the economy. There are some noticeable trends. First, the financial surplus of households has declined steadily since the beginning of the 1990s; second, the financial position of non-financial corporations turned from deficit to surplus at the end of the 1990s; and third, the financial deficits of the general government have increased due to budget deficit expansion. Finally, the overall balance of the financial surplus/deficit in these sectors manifests itself in the financial deficit of the overseas sector.

What this reveals is an economy with an unconventional direction of funds flow. Unlike in the "classical" economy, both households and corporations have been attempting to save, rather than spend, money. And an additional player in the form of the government has taken on the normal role of the corporate sector — borrowing the cash that the private sector wishes to save.

What has caused these trends? The decline in the financial surplus of households reflects the secular downward movement of the savings rate.[5] Japan was long famous for having the highest household saving rate among the industrial countries. In the early 1980s, Japanese households were saving about 16% of their after-tax incomes. During this period, sharply rising incomes allowed Japanese households to increase their consumption rapidly while adding significant amounts to their savings. Although the saving rate came down gradually in the 1980s, it was still 12% in 1990. However it was with the economic stagnation that started in 1990–91 that households had to devote a rising share of their incomes to maintaining their level of consumer spending over the following decades. Although they had experienced large declines in share prices and house values, they had such large amounts of liquid savings in postal savings accounts and in banks that they did not feel the need to increase saving in order to rebuild assets. The saving rate fell below 10% by 2000 and then reached 5.8% in 2009.

A variety of forces can explain the continuing decline, including the introduction of a long-term care insurance program and the improvement of public old-age pension benefits; the stagnation in income growth, caused by an acceleration of corporate restructuring and rising unemployment; and the increasing availability of consumer credit. However, there is a strong consensus among economists over the ageing of the Japanese populations as the main reason (Chart 13). This view is consistent with the life-cycle theory, which assumes that while a rational household may save some of the income in youth, they may spend their savings after their retirement. Indeed the Japanese demographic structure is changing, with a higher number of retirees relative to the workers who are in their prime saving years. Recent surveys also tell us that younger Japanese are more interested in current consumption and less concerned about the future than previous generations

[5] Horioka (2006), Edison (2005).

Chart 12 - Financial surplus/deficit by sector (source: BOJ)

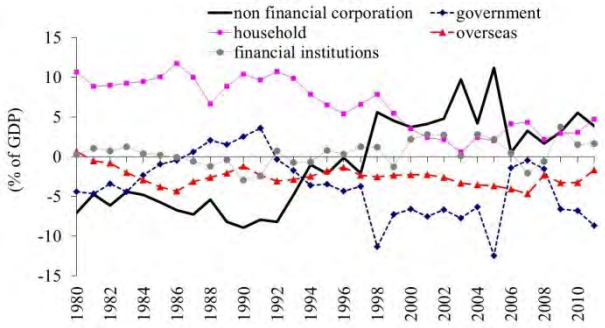


Chart 13 - Household Saving rate and Demographics (source: MOF, NIPSSR)

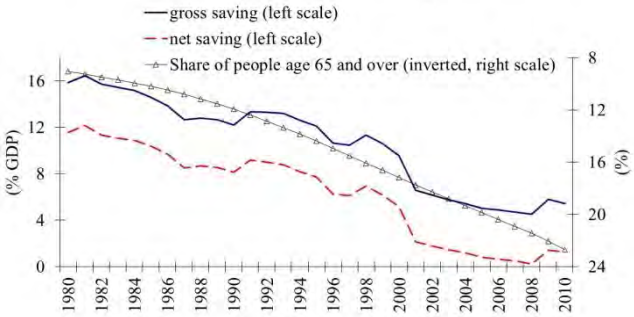
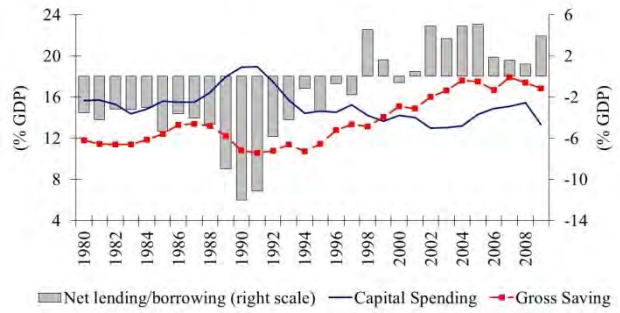


Chart 14 - Nonfinancial Corporate Sector (source: MOF)



were — presumably related to more extensive social security than before.

The saving behaviour (financial surplus/deficit) of the non-financial corporate sector is shown in more detail in Chart 14, which plots the trends in gross corporate savings, capital spending and the difference between these two variables, that is excess savings or net lending/borrowing. It can be seen that Japanese firms have swung from being a large net borrower of funds from other sectors of the economy during the 1980s to a net lender of funds from the second half of the 1990s. With economic stagnation and slow growth expectations, investment in capital has dropped substantially and remained weak up to the middle of 2000 while gross saving has trended upwards until 2007 and almost doubled the level of the 1990. This change reflects a sustained drive towards restructuring after the excessive indebtedness built during the 1980s which prompted cuts in labour costs and employment. Corporate

restructuring and lower interest and/or dividend payments generated a strong rise in profitability, that is earnings after interest and tax.[6] Japanese firms may have also increased saving to repay debt and reduce dependence on external financing.

The historical trend in the financial surplus/deficit of financial institutions is shown in Chart 15 which, as for non-financial corporations, is further decomposed to emphasize the steady increases in savings since the early 1990s. From 1990 to 2004 savings as a percentage of GDP rose from 1% to almost 4% and then remained around 3% since then. This upward trend reflects higher undistributed profits, especially among public financial institutions, and lower capital spending. Domestic private banks, instead, have been severely affected by credit costs and losses on large equity holdings following the asset and land prices fall of the early 90s. Excluding losses from financial operations and provisions against bad loans — as the national accounts statistics do — Japanese domestic banks' profits have been on a modest upward trend since the early 90s, as a reflection of administrative cost-cutting efforts, particularly in the personnel area.

Who holds the public debt?

The huge asset holdings of domestic funds, a reflection of the long-running financial surplus, have allowed the Japanese government to finance its budget deficit without difficulty. The supply of JGBs has been absorbed mainly by domestic investors who now hold more than 95% of the outstanding stock, amounting to ¥761 trillion at the end of FY 2011 (March 2012).

Chart 16 shows an intense preference for JGBs among both individual and institutional investors. Among institutional investors the public sector, the banking system and the insurance companies play important roles. Public sector holdings of JGBs are substantial: the public pensions (GPIF), the Fiscal Loan Fund and the BOJ together hold over ¥145 trillion, that is almost 20% of outstanding JGBs.[7]

The banking system (including the Japan Post Bank, Securities Investment Trust and Securities Companies) holds over ¥310 trillion in JGBs, that is about 41% of the total. Its JGB holding has increased over the years thanks to a decline in the loan–deposit ratio from over 110% in March 1998 to 74% in March 2012. In general, the amount

Chart 15 - Financial Institutions Sector (source: MOF)

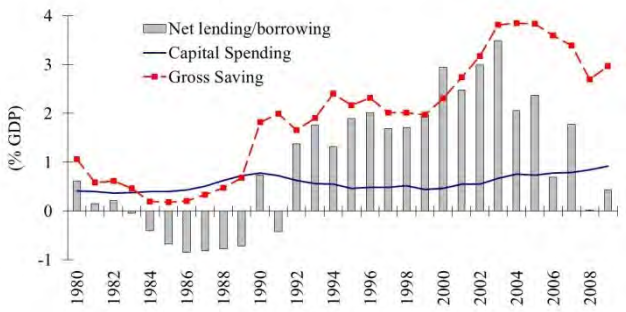
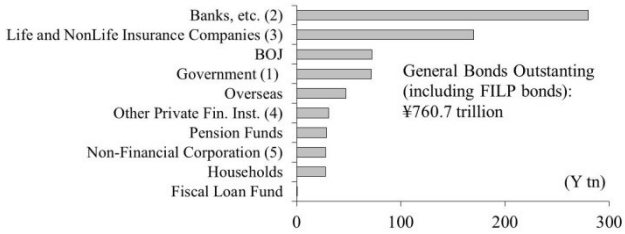


Chart 16 - Breakdown of JGB Holders (March 2012) (source: BOJ)



(1) ex public pension; (2) includes Japan Post Bank; (3) includes Japan Post Insurance; (4) includes Securities Investment trusts and Securities Companies; (5) including Private Nonprofit institutions serving households

Chart 17 - Loan-Deposit ratio of Domestic Bank (source: BOJ)

of JGBs held by domestic banks has an inverse correlation with their loans outstanding (Chart 17); when economic activity is depressed, the correspondingly lower risk appetite in the economy results in an increase in bank deposits and, with loan demand also depressed by the economy, banks purchase more JGBs. In addition, banks may have found the JGBs attractive because the investment does not involve currency risk, which has been historically high for foreign bonds, and because JGBs also helped to meet capital adequacy requirements (they are assigned zero weights in calculating the risk-weighted assets that determines the minimum amount of capital banks must hold).

Japan's insurance companies (including Japan Post Insurance) are one of the main conduits through which the country's enormous pool of private excess savings flow into JGBs. Their holdings of government bonds have increased since the end of the 1990s and reached over

[6] Interest dropped from 12% of GDP in 1991 to less than 2% in 2009, while dividend payouts have persisted between 1–2% of GDP in periods of stress as well as in boom years.

[7] In October 2007 former Prime Minister Junichiro Koizumi initiated the privatization process of the Japan Post Group which will be completed by 2017. The Group consists of five companies: Japan Post Service, Japan Post Network, Japan Post Insurance and Japan Post Bank. The latter runs the postal saving system, the largest holders of personal savings in the world and, as of March 2012, it holds ¥144 trillion of JGB, that is 19% of the total amount outstanding, while the Japan Post Insurance holds Y64 trillion of JGB (8.4%). For calculation purposes, these two entities have not been considered public and are included among "Banks" and "Life and Non Life Insurance Companies" respectively.

¥170 trillion in March 2012, that is more than 22% of the total amount outstanding. Two factors contributed to such portfolio shifts. First, life insurance companies have to decrease their risky-asset portfolio shares and increase liquid asset holdings in preparing for future increases in life insurance payouts. They attempt to match the timing of payouts and the maturities of the JGBs they hold. As a result, the average maturity of their JGB holdings has become substantially longer. Secondly, new accounting regulations from the mid-2000s forced life insurance companies to evaluate their assets in economic/fair value terms. As a consequence, they had to increase their holdings of safe/liquid assets, and hence their holdings of JGBs.

Among individual investors, households and corporate have been major JGB buyers. Although their direct holdings are limited, households hold a large amount of JGB indirectly through bank deposits and the postal saving system, while banks absorbed surplus funds from non-financial companies in the form of debt repayment and then used the proceeds to invest in the JGB market.[8] As of March 2012, household direct holdings amounted to almost ¥28 trillion, 3.6% of the total, while the corporate sector held ¥27 trillion (3.5%).

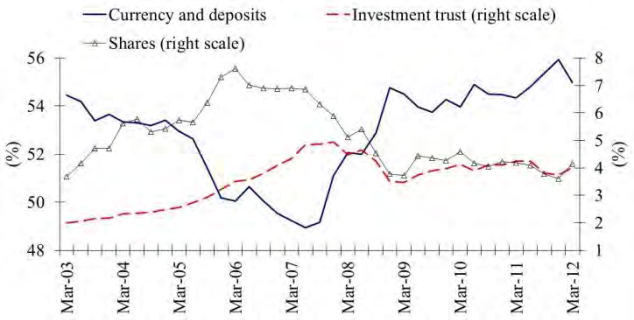
Foreign investors have steadily increased their appetite for JGBs during last decade. After peaking in September 2008, investment in the JGB market contracted during the financial crisis but then resumed and reached ¥47 trillion on March 2012, 6.2% of the total amount outstanding. However, the foreign share is still low by international standards. For instance, in the UK foreign investors represent 32% of the total, in the US 45%, in Germany 56% and in Italy 45%. One explanation is that foreigners are concerned that the Japanese government cannot make meaningful progress in fiscal consolidation. This view is supported by the fact that most of the purchases are of the short-term maturities.

Will the government be able to finance future debt?

Economists and financial analysts are wondering if the government is able to continue financing its debt — in other words, whether it has liquidity problem. To answer this question we need to look at the portfolio choices of domestic JGB investors.

First of all, recent research contends that the role of the household sector in providing funds to the JGB market is likely to decline. Households' financial assets are very large, even in an international perspective (Japan ranks next to the US on both an aggregate and a per capita basis). But recently it has fallen in size because of stagnant labour income and population ageing. Total financial assets after peaking in June 2007 at ¥1,601 trillion have declined in

Chart 18 - Household Assets Share (source: BOJ)



March 2012 to ¥1,518 trillion. The asset surplus, i.e., assets less liabilities, has shrunk by ¥69 trillion over the same period.

A recent study reveals that given the pace of asset decline and of JGB increase from the budget deficits, JGBs outstanding will exceed household assets in few years and at that time Japan would be insolvent as a nation.[9] Other simulation results show that, despite keeping the saving rate constant, domestic financing of the public debt could become more difficult between 2015 and 2020 as, by that time, gross public debt will exceed gross households' financial assets.[10] Moreover, academics and observers indicate that Japanese households' home bias is expected to fall in the near future as a result of ongoing globalization of financial markets and the growing amount of financial information and products available to them.[11] Chart 18 shows that before the global financial crisis, households were moving out from cash and deposits toward riskier assets, such as investment trusts and shares.

Since households holds over ¥780 trillion deposits and over ¥420 trillion are invested in Insurance and pension reserves, a shift in behaviour could significantly reduce the availability of funds to financial institutions and have a significant impact on the JGB market.

The role of the corporate sector in financing public debt may also become more limited in the future. If the economic environment improves, the corporate sector may find alternative and more lucrative ways to invest their large surpluses. They might stop paying down their debt and, as investment opportunities arise, they might increase their borrowing from banks which in turn could reduce their purchase of JGBs. Or, continued economic stagnation and political uncertainty may convince more Japanese manufacturing firms to shift their production abroad, a trend that accelerated before the global financial crisis as can be seen from the recent increase in direct investment income (Chart 19).[12] Corporations then might draw down

[8] If indirect channels are taken into account, households finance at least 63% of the total amount JGB outstanding, that is over ¥480 trillion.

[9] Hoshi and Ito, (2012).

[10] Tokuoka (2010).

[11] Horioka (2010).

[12] Japanese firms do 30% of their manufacturing overseas, twice as much as in the early 1990s.

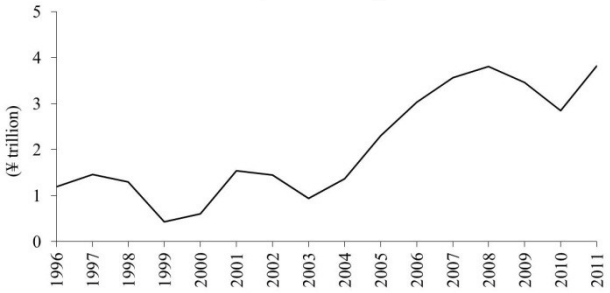
their savings to invest abroad. Simulation results from economists at the IMF show that if corporate surpluses come down to zero from 6% of GDP in 2010, banks' net government security purchases could fall by 2–4% of GDP.[13]

Domestic banks could also find it difficult to build up JGB holdings. So far, a growing deposit-lending gap has enabled Japanese banks to markedly increase their JGB investments, but this gap could narrow in the years to come as estimated by economists at Goldman Sachs. They predict a reduction in household's bank deposits, as a reflection of population ageing, partially offset by a rise in corporate deposits and a fall in corporate loans, amid weak economic growth. Assuming a constant JGB build-up, they also estimate that by 2016 the gap will be of the same size as bank JGB holdings. At that point, they say, it will be more difficult for banks to increase JGBs in their portfolio.

There is also the prospect of a decline in home bias.[14] In the current global financial turmoil, institutional investors may have temporarily sought safety in domestic assets including JGBs. Appetite for risky foreign assets could return once financial market conditions recover. Similarly, a sudden increase in the perceived risk of JGBs could produce potential losses in financial institutions' portfolios, especially among smaller banks which have increased the proportion of government debt in their portfolios, and determine a readjustment of their balance sheet composition.[15] According to a recent study conducted by economists at the BOJ, a 100 basis points increase in JGB yields is estimated to cause about ¥4.7 trillion yen of losses for Japanese banks collectively. This is about 11.7% of the Tier I capital and about twice as much as the income before tax for fiscal year 2010.

The absorption capacity of public financial institutions, the Japan Post Bank, the Japan Post insurance, and the public pension fund (GPIF), is expected to shrink as demographic trends put more pressure on the liabilities side of their balance sheets. The Japan Post Bank, which runs the postal saving system, the largest holders of personal savings in the world with over ¥175 trillion of deposits, is planning to diversify its holdings in an effort to reduce the risks of over-concentration in JGBs — as of March 2012, the Japan Post has ¥144 trillion in JGB, that is 19% of the total amount outstanding or 74% of its assets. Similarly, the GPIF, the largest pension fund in the world, has no longer

Chart 19 - Direct Investment Income (source: BOJ)



an obligation to purchase JGBs, and is now looking to expand its investment in risky assets with higher returns to cover bigger payouts (the GPIF holds ¥71 trillion of JGB, almost 64% of its assets).[16] The Japan Post Insurance invests two thirds of its assets in JGB, that is ¥64 trillion (8.4% of the JGB total amount outstanding). However, it is planning to trim its investment in JGBs in the near future to seek higher returns by buying more corporate and regional bonds. Overall, given the large asset size of these financial institutions, even a small shift away from JGBs could have unsettling implications for the market.

Among private financial institution, insurance companies and pension funds have remained stable buyers of JGB over the last decade but as population aging continues, total insurance and pension payments will begin to exceed the inflows of new insurance contract payments and contributions to pension funds. So while they might have an incentive to sell their JGB holdings in the long term, they are expected to provide strong support to the Japanese government over the immediate future.

Lastly, the BOJ, which holds 9.5% of total JGB outstanding, is likely to continue playing an important role in market stability. Its decision in early 2009 to increase its monthly purchase of JGBs (currently at ¥21.6 trillion per year) has helped to stabilize market conditions, but over the medium term unwinding of monetary easing may require the BOJ to scale back the size of its JGB holdings. There is also an internal limit for BOJ public debt monetisation, the "banknote rule" which limits the balance of its bond holdings to the value of banknotes in circulation. However, for the first time, in August 2012 this limit was surpassed.

[13] Lam and Tokuoka (2011).

[14] Walker (2005).

[15] Those financial institutions specialized in small-firm lending including postal savings banks and agricultural lending, have been accumulating a large share of JGB in their balance sheet with the conviction that they will be rescued by the financial authorities if a crisis occurs (Iwaisako, 2012).

[16] Under a five-year investment plan announced in March 2010, the GPIF said it would allocate about two-thirds of its assets to domestic bonds, 11% to Japanese stocks, 8% to foreign bonds and 9% to overseas equities, with the remainder in cash.

What about the current account?

Since the total domestic financial surplus is equivalent to the current account surplus, whether private domestic saving is sufficient to cover the government deficit is highlighted by movements in the current account balance.

On a typical textbook approach, (net) national savings, — the aggregate of private savings (households, financial institutions and corporations) and government saving (less capital consumption for the total economy) — is equal to the sum of (net) national investment (less capital depreciation) and the current account, i.e. foreign savings. When net national savings are larger (smaller) than net national investment, net overseas assets accumulate (are drawn down) through the medium of current account surpluses (deficits). In other words, the excess of foreign capital flows overseas (into Japan).

Chart 20 shows that the huge fiscal deficits (negative government savings) have pushed net national savings into negative territory in 2009, even though net savings of the private sector have not decreased significantly in last 20 years. Since net domestic investment is on a downward trend and has turned negative in 2009, and given the outlook for household saving, from the standpoint of the macro balance the only way for the government to continue running fiscal deficit in the future is to borrow from abroad, that is with a positive current account.

Trends of current account main components are plotted on Chart 21.[17] The current account shows a secular surplus. Most recently, it expanded from 2002 and peaked in 2007 when it reached almost 5% of GDP. Since then it has fallen gradually to below ¥10 trillion, 1.9% of GDP.[18] Within this overall pattern, the trade balance has trended down from its late-1990s peak, contracting sharply in 2008 due to the global demand shock and posting its first annual deficit since 1980 in 2011, as imports grew on the back of nuclear power alternatives and exports were undermined by damage to domestic supply chains and the flooding in Thailand. On the other hand, increasing interest and dividend income, derived from building up a huge amount of foreign assets, have maintained the income account in surplus since the 1980s[19] and become the main driver of the current account since 2005.

Chart 20 - Breakdown of Net National Savings (source: MOF)

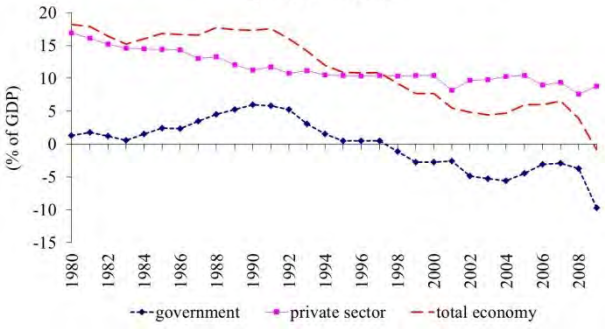
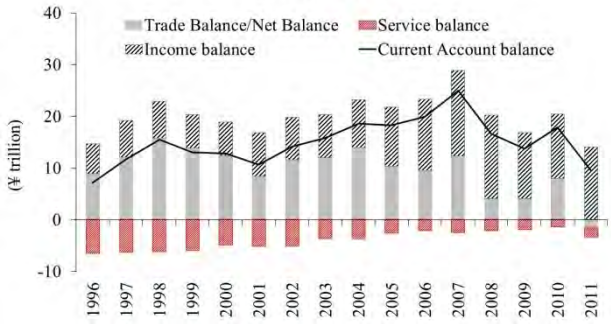


Chart 21 - Current Account structure (source: BOJ)



Swing factors in determining whether the current account will slip into deficit territory in the next few years include the strength of the yen, shifts to overseas production, electric power supply shortages, increasing demand for mineral fuels, a rise in the fuel price, changes in foreign interest rates and overseas economic trends. Several private think-tanks have run model simulations with different assumptions to examine Japan's current account outlook. These projections include the possibility that the current account will move into deficit over the medium term due to continuing deterioration of the trade balance despite the steady inflow of portfolio investment income.[20] As a result, if Japan runs a current account deficit at some point domestic demand might not be adequate to absorb the supply of new JGBs.

Outlook risks and policy implications

The above discussion shows that although the Japanese government currently has no liquidity problem at all, in the near future there are potential risks for JGB absorption and hence for deficit funding. JGB demand could slow among households because of their shrinking financial surplus, shifting behaviour or rise in risk appetite, and among foreign investors as a result of concerns about the sustainability of the public debt. If this occurs, to attract more investors JGB interest rates will have to rise, possibly

[17] The main components of the current accounts are: 1) the trade account, which includes imports and exports of traded goods; 2) the services account, which includes overseas travel and services such as transportation, communications and finance; 3) the income account, which includes cross-border income from investments (e.g., interest and dividend payments from foreign investments) and employee income; and 4) current account transfers, which include inter-government aid and contributions to international institutions.

[18] In the first six months of 2012 it shrank 45% over the corresponding period of the previous year, the largest decline posted in that period since 1985.

[19] Japan is by far the world's largest holder of net foreign assets, in excess of ¥250 trillion.

[20] See for instance Shiraishi, (2010), Kumagai et al. (2012), and Goto and Nordvig, (2012).

triggering a negative spiral in which debt service costs rise and the fiscal situation becomes even more severe.

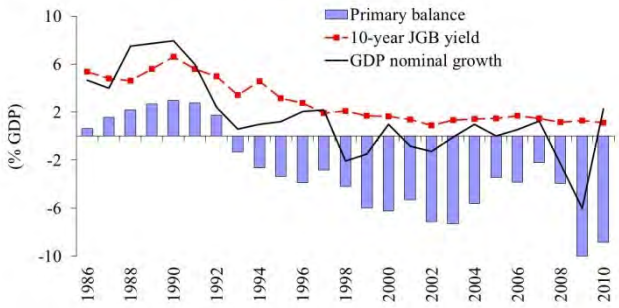
So far JGB yields have remained low despite the fiscal deterioration. This has been puzzling market participants as well as academics. Low nominal interest rate on JGBs reflects the lower potential growth rate and deeply-rooted deflation expectations. Most importantly, any fiscal risk premium on JGBs has been relatively low or absent.[21] In other words, investors do not believe a fiscal crisis will occur in the foreseeable future.

With the public debt already on an unsustainable path, a rise in the JGB rate will put further pressure on the ability of the government to pay its debts. Government solvency is generally assessed by looking at whether the debt/GDP ratio is headed for convergence in the future. Assessment is based on the primary balance (fiscal balance minus interest payments), and its relation to long-term government bond yields and nominal GDP growth. When the primary balance is in equilibrium, the only growth in the debt balance is the interest expense (debt multiplied by government bond yields). The balance therefore rises in proportion to yields. As a result, assuming equilibrium in the primary balance, whenever the gap between government bond yields and nominal GDP growth is positive the debt/GDP ratio increases. In other words, the primary balance has to be in surplus to prevent the debt/GDP ratio from rising when yields are higher than the nominal growth rate. However, since the early 1990s the JGB yield has consistently exceeded the nominal GDP growth and the primary balance has been in a stable deficit (Chart 22).

To produce a primary balance and preserve a constant debt/GDP ratio both spending cuts and revenue increases are required. And if JGB yields rise and the economy does not revitalize, a larger fiscal adjustment will be necessary.

International organizations claim that the recent consumption tax increases, which will double the tax rate to 10% by 2018, would only moderate the pace of the debt/GDP ratio increase. They suggest to Japanese policymakers that they should further increase the consumption tax rate, curb the growth of non-social security spending, and limit the growth in social security spending. Fortunately, international comparisons show that the tax burden relative to GDP is relatively low in Japan

Chart 22 - Primary balance (source: IMF, MOF)



compared with other developed countries so there should be room to raise taxes and social security contributions somewhat. However, spending cuts are extremely difficult to achieve politically, and raising tax, although feasible, is potentially destabilising. After Ryutaro Hashimoto's LDP-led coalition government raised the consumption tax rate to the current 5% in 1998, the ruling party lost the Upper House election and the economy plunged back into deep recession.

The point is that a large fiscal adjustment without growth is extremely difficult to implement. Japan should promote growth with forceful structural reforms and reduce impediments to resource reallocation especially among inefficient sectors of the economy. The list of areas which need a shake-up is as long as it is familiar. The heavily overprotected agricultural sector needs deregulating, and services from transport to power generation need to be opened up to foreign competition. Japanese productivity growth has basically ground to a halt as a result of government policies designed to protect the status quo and stifle competition. This is the reason why the BOJ has long defended its monetary policy stance and argued that alone money growth is no panacea. However, the BOJ's refusal to act more forcefully could have undermined the political will to act on the supply-side issues, as the politicians can pass the blame to monetary policy and its supposed effects in causing a chronic deflation spiral and an excessively strong yen. One way or another Japan seems currently to be stuck in a policy cul-de-sac which can only lead in the end to a fiscal crisis that forces action. A stitch in time could save nine; as the West has seen crisis is a painful context in which to resolve long-standing problems.

[21] For an analysis on the factors behind the JGB yields stability see Kuwahara (2011).

References

Edison, H., (2005), "Household Savings in Japan," in Japan—Selected Issues, *IMF Country Report* No. 05/272.

Goto Y., Nordvig J., (2012), "Stress testing the Japanese current account", *Nomura Global Fx Weekly*, Nomura, February.

Hayashi F., E.C. Prescott, (2002), "The 1990s in Japan: a Lost Decade", *Review of Economic Dynamics*, (5), pp.206-35.

Horioka, C., (2010), "The (dis)saving behavior of the aged in Japan", *Japan and the World Economy*, vol. 22(3), pages 151-158, August.

Horioka, C., (2006), "The Dissaving of the Aged Revisited: The Case of Japan," NBER Working Paper *Series*, No. 12351.

Hoshi, T., Ito, T., (2012), "Defying Gravity: How Long Will Japanese Government Bond Prices Remain High?", *NBER Working Paper Series* No.18287, August.

IMF, (1998), "World Economic Outlook: Financial Turbulence in the World", IMF.

Iwaisako, T., (2012), "Saving–Investment Balance and Fiscal Sustainability of Japan: A View from the JGB Market", *Discussion Paper 568*, Institute of Economic Research Hitotsubashi University, April.

Kumagai M., Osanai S., Masukawa C., Saito T., (2012), "Examination of risk factors: Current account balance turning negative, and Greece leaving the euro*", Japan's Economic Outlook* No. 173, Daiwa Institute of research, Daiwa, June.

Kuwahara M., (2011), "The JGB Mystery", Nomura Securities, November.

Lam W.R., Tokuoka K., (2011), "Assessing the Risks to the Japanese Government Bond (JGB) Market, WP/11/292, December.

Shiraishi, S., (2010), "Japan's current account surplus", *Macro Japan Economics*, HSBC Securities, 8 December.

Tokuoka K., (2010), "The Outlook for Financing Japan's Public Debt," *IMF Working Paper* 10/19.

Walker C., (2005), "Home Bias in Japan," in Japan—Selected Issues, *IMF Country Report* No. 05/272.

The Julian Hodge Institute of Applied Macroeconomics

The Julian Hodge Institute of Applied Macroeconomics 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 added urgency by the ongoing discussions about the UK's adoption of the Euro in place of the Pound. The new Institute has aimed to develop research relevant to this important debate.

The Institute embraces the original Liverpool Research Group in Macroeconomics, which is now based at Cardiff Business School and is pursuing a research programme involving the estimation and use of macroeconomic models for forecasting and policy analysis. It is grateful for financial support to the Jane Hodge Foundation, the Economic and Social Research Council, Esmee Fairbairn Charitable Trust, the Wincott Foundation and Cardiff Business School.

Julian Hodge Bank

Julian Hodge Bank Limited
Registered Office:
31 Windsor Place, Cardiff CF10 3UR
Registered in England No. 743437