THE ASSET SALE AND PURCHASE PROGRAMME (ASAPP)

The Pension Fund Connection: QE, Infrastructure and Credit

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Risks transferred, pensions insured

Summary

- A £50 billion Asset Sale and Purchase Programme (ASAPP), in place of another £50 billion round of old QE buying Gilts, would:
  - Lower defined benefit pension fund deficits by more than £40 billion on a structural basis, easing the burden on sponsors, against raising them by £40 billion
  - Avoid Financial Repression as real yields would not be pushed even more negative
  - Develop infrastructure as an asset class for pension funds, a core aim of the Government
  - Help banks repair their balance sheets, a requirement under BASEL III
  - Encourage banks to start lending again, increasing the amount of credit available to businesses
- Through ASAPP, £50 billion of infrastructure, Housing Association and PFI loans held by UK banks would be sold by them at par and then purchased by pension funds at the real, lower market value

The Context

- As the UK economy weakens, more stimulus is being debated
- QE in its current form has run its course, with Gilt yields at extraordinarily low levels
- QE is now detrimental to defined benefit pension funds and their sponsors – reducing investment in the economy
- The debate is moving on to credit easing, to address the stressed part of the economy – the banking system
- This note discusses how an ASAPP could be done, connecting pension funds, infrastructure and credit

Estimated impact of falling Gilt yields on pension funds to date

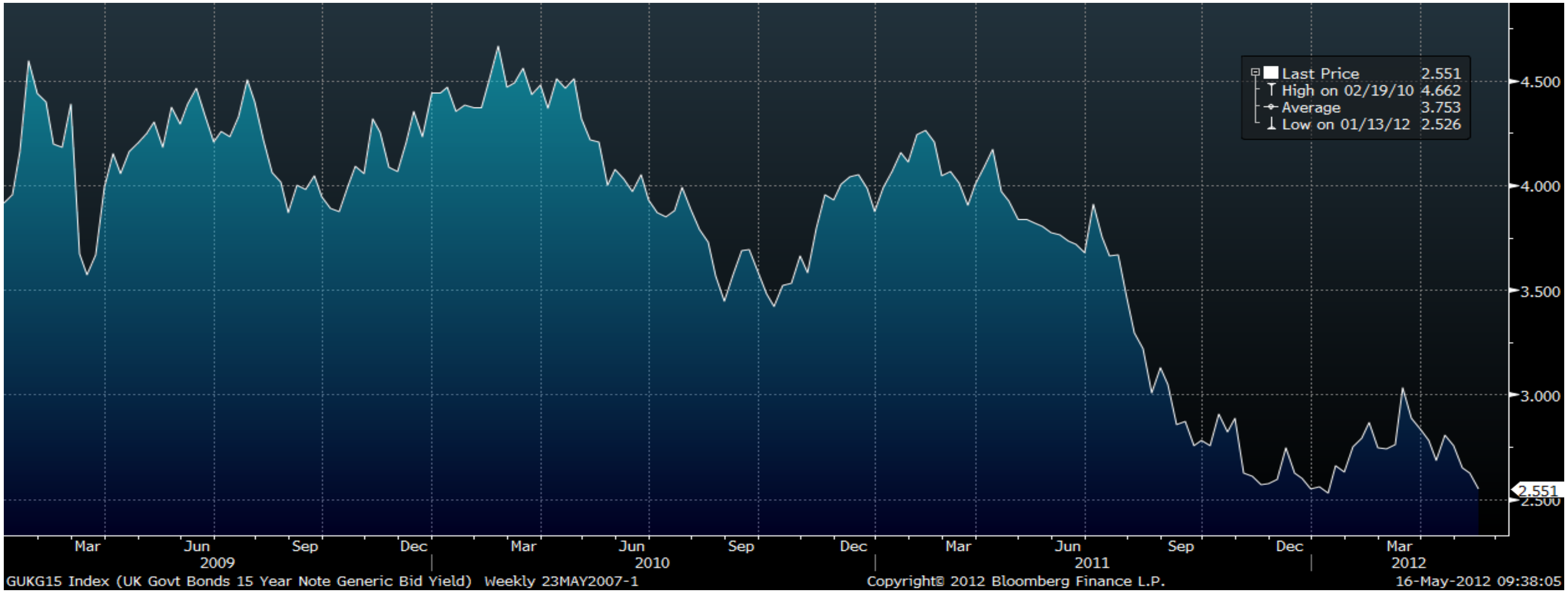
- Pension schemes have about:
  - £1.4 trillion of liabilities with a duration of 20 years[1]
  - £1 trillion of assets with 50% in bonds[2] (£500 billion) with a duration of about 15 years[3]
- So for a 1 basis point fall in Gilt yields there is a c.£2 billion increase in deficits:
  - Defined Benefits (“DB”) liabilities rise4 by £2.8 billion:
    - Size (£1.4 trillion) x duration (20yrs) x yield change (1bp) x = £2.8 billion
  - The value of DB bond assets rise by £0.8 billion:
    - Size (£500 billion) x duration (15yrs) x yield change (1bp) x = £0.8 billion

Therefore, every 1 basis point yield drop increases DB deficits by about £2 billion (assuming no other asset price moves)

1) Source, PPF Purple Book 2011, adjusted for current market conditions
2) Source, PPF Purple Book 2011, adjusted for current market conditions
3) Durations differ because the first is the duration of pension fund liabilities, the second the duration of the Gilts held by pension funds
4) The price of Gilts moves inversely to its yield

15 year UK Gilt yields since 2009

- Long dated Gilts are already stretched by the quantity of demand from pension funds and recent "safe haven" buying



- If another £50 billion is spent buying Gilts, assuming the same effects as the BoE analysis on bonds markets of QE1, pension fund deficits would rise £40 billion (ignoring any equity effects)

How would ASAPP benefit pension funds, banks and the economy?

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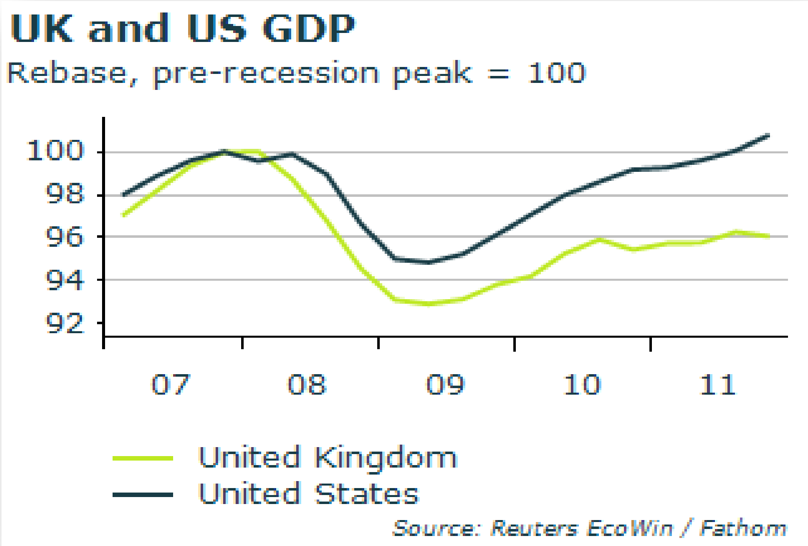
- Do not buy any more Gilts – this just increases deficits
  - Pension funds have not fully hedged their liabilities so deficits would rise further with falling Gilt yields
- PIC estimates that up to £100 billion will move from corporate sponsors to plug their pension deficits over the next three years, diverting money away from vital investment *
- Long dated Gilts are already stretched by the quantity of demand from pension funds, and recent "safe haven" buying and this has been exacerbated by QE buying more Gilts and driving down yields further
- Instead, address the stressed area of economy – the financial system:
  - Buy long dated stressed and orphan assets (e.g. infrastructure) off banks' balance sheets
  - This allows banks to be more certain of the value of their assets, making it easier to lend
  - Sell those assets to Pension funds which need long-dated, stable bond–like cash flows
- Future QE needs to actually "Ease Credit"

* See Pension Corporation press release : Pension fund trustees to receive up to £100 billion in deficit payments from sponsors, 15 May 2012, at www.pensioncorporation.com/news-media/press

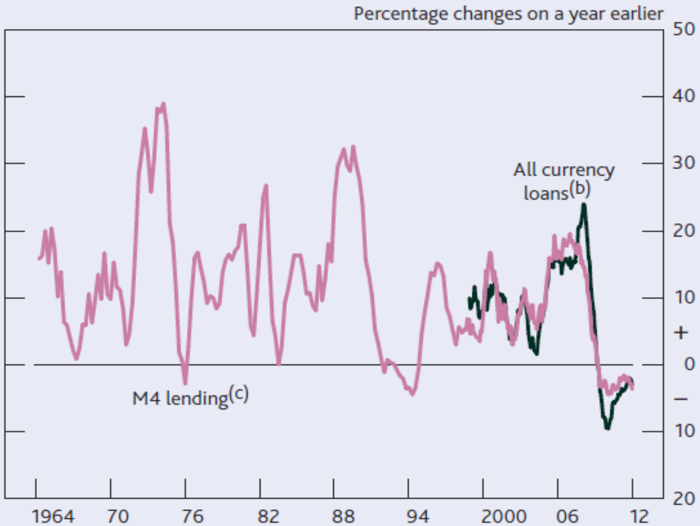
Credit Easing has help the US economy to recover

- Not only has the US run its own QE programme, it has also recognised that the banks are at the heart of a healthy economy
- Policy there has, in addition to QE buying government bonds, also focussed on removing overpriced assets from the system and helping banks to lend again
- The US TARP (Troubled Asset Relief Programme) authorised $700billion to be spent cleaning up the banks
- A distinction has been made between bashing the bankers and bashing the banks, which is counterproductive – one of the reasons US GDP has recovered more quickly than UK GDP



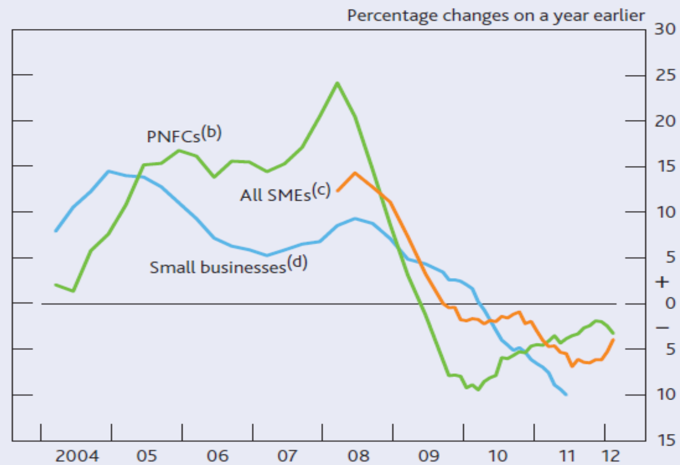
But UK Banks are not yet lending

Chart A Lending to UK businesses[a]



(a) Lending by UK monetary financial institutions to PNFCs. Rate of growth in the stock of lending. Seasonally adjusted.
(b) Data cover lending (loans) in both sterling and foreign currency, excluding the effects of securitisations and loan transfers, expressed in sterling terms. For more details see **Table 1**.
(c) M4 lending to PNFCs excluding the effects of securitisations and loan transfers. Data cover sterling lending (loans and securities) only. For more details see **Table 1**. Growth rates prior to September 1998 are provided on a quarterly frequency and monthly thereafter.

Chart B Lending to small and medium-sized enterprises[a]



Sources: Bank of England, BBA, BIS and Bank calculations.

(a) Rate of growth in the stock of lending. Non seasonally adjusted. Growth rates prior to September 2009 are presented on a quarterly frequency and monthly thereafter.
(b) For more details see footnote (b) to **Chart A**.
(c) Source: monthly BIS survey and Bank calculations. Lending by four UK lenders to enterprises with annual bank account debit turnover less than £25 million. Data cover lending in both sterling and foreign currency, expressed in sterling terms.
(d) Source: BBA. Lending by seven UK lenders to commercial businesses with an annual bank account debit turnover of up to £1 million. Sterling only. This survey terminated at June 2011. Available at www.bba.org.uk/statistics/small-business.

Charts from the Bank of England's "Trends in Lending" report, April 2012, P.7

- Banks need to delever and sell down existing loans before they can increase their lending

Why banks have not sold their infrastructure and Housing Association loans

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- These loans were issued at par; a typical loan has a yield of Libor +50, duration of 8 years
- The market now demands a yield of Libor +300
- Market value is now 80% of what it was at purchase
  - Price move is duration x yield shift or 8 x (50-300) = - 20
- Banks do not value these loans at market value but at par, therefore, a sale to the market would cause a loss of 20% immediately and cause a hit to bank capital
  - Not career enhancing
- However, banks cannot now fund these loans at levels near the coupon (50 basis points), so they will run negative carry on them and spread the loss over time
- This is inhibiting banks' ability to lend because they have a long-term capital drain

The UK answer should the Asset sale and purchase programme (ASAPP)

- Under ASAPP loans should be purchased from bank balance sheets at par and then sold to pension funds at market value
- Pension funds need these long-dated bond-like assets with a positive real yield to match liabilities, close deficits and provide a measure of inflation protection
- Banks hold around £45 billion of Private Finance Initiative* (PFI) debt (Infrastructure) and £56 billion of Housing Association^ loans and other long dated loans
- The market yield of these assets is now around Libor +300 – this is a current rate of return of approximately 6% pa Vs current Gilt yields of about 3% pa
- These are mature projects with no construction risk
- This would kick-start pension funds' investment into infrastructure
    - Pension funds have not been able to get hold of this paper as it is trapped at the banks

*source National Audit Office
^ source Tenant Services Authority, September 2011

Putting these loans in the right place – pension funds

- If pension funds move 5% of their assets out of Gilts and into infrastructure and Housing Association loans:
  - Selling 5% x £1 trillion = £50 billion of Gilts, which would push yields up by 20bp[1]
    - £1.4 trillion[2] X 20 year duration X (20bp) = £56 billion reduction in liabilities
    - £1 trillion[3] X 50% x 15 year duration[4] X (20 bp) = £15 billion fall in the value of Gilts[5]
  - Net reduction of over £40 billion of DB pension fund liabilities
- Pension funds would also benefit from having a higher yield on their assets as they had sold Gilts to buy higher yielding assets

1) Assuming the same effects as the BoE analysis on QE1
2) Source, PPF Purple Book 2011, adjusted for current market conditions
3) Source, PPF Purple Book 2011, adjusted for current market conditions
4) Durations differ because the first is the duration of pension fund liabilities, the second the duration of the Gilts held by pension funds
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ASAPP will “lose” money, does it matter?

- QE3 done as ASAPP would cause a 20% loss
  - buying loans at 100% selling them at 80% will lose money up front

- QE3 done by buying Gilts would cause a 30% loss
  - Gilt yields are about 2% now and the market’s duration is about 10 years
  - Gilts will only be sold back when the market normalises, at c.5% yields, so losses would be 10 x 3% = 30%

- Other challenges
  - If you run a TARP style plan, it might be seen as a form of bank subsidy which is where the debate is moving, there are generic issues such as:
    - The Government could make ASAPP conditional on a commensurate rise in credit lending and / or infrastructure investment by the banks, or make the banks pay in some form
    - Focussing of ASAPP and compliance with European banking law

Comparison of ASAPP Vs a new round of QE[1]

	'Old QE' Buying Gilts	ASAPP: Buying bank loans
Gilt yields	Pushed even lower	Gilt yields expected to rise
Pension fund deficits (ignoring equities)	Up due to lower Gilt yields	Deficits down by £40bn
Infrastructure investment	No impact	Kick starts opportunity for pension funds
Growth in economy	Investment down as companies plug deficits	Banks freer to lend, less money demanded from companies
Financial Repression	Yes	Virtuous circle: economic growth benefits savers and borrowers
"Financial loss"[2]	30%	20%

1) Assumes £50 bn of Gilts would be bought under a new round of old QE versus £50bn of infrastructure loans bought by pension funds and other investors under ASAPP (£35bn / £15bn split)
2) Under old QE the assumption is that Gilts will only be sold back when the market normalises, at c.5% Gilt yields, so losses will be 10 x 3% = 30%, which at current volumes is more than £100 billion

Risks transferred, pensions insured

Conclusions QE3

- QE, as done before, would push pension deficits up without any clear benefit as Gilt yields are so low
- QE as ASAPP could:
  1. Help reduce pension fund deficits
  2. Kick start investment into infrastructure assets
  3. Improve bank capital positions to encourage lending in the economy
  4. Lose less money that QE
  5. Avoid the charge of more Financial Repression

Contact

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9. Options to further boost demand through credit easing measures that utilize the government's balance sheet should be explored.

- Purchasing private-sector bonds, as undertaken by several major central banks, to support mortgage lending and financing for business. In the UK's case, the Bank of England could act as the government's agent for such purchases. The allocation of purchases within a class should be guided by nondiscretionary rules, such as allocation according to market share.
- Providing longer-term bank funding facilities against a broad range of collateral (with haircuts) to reduce funding costs and boost demand for assets eligible as collateral. Such actions would need to be complemented by regulatory policies to ensure that banks do not become dependent on such facilities.

IMF: United Kingdom—2012 Article IV Consultation 22 May 2012