Goldman Sachs

1. Convenient Lies, Inconvenient Truths, and "Monetary Methadone"

Good Morning, and thank you for inviting me back again this year.

My friends at Goldman Sachs told me that the audience here liked the early morning slot to be a little bit provocative, even controversial.

2. Slide L&G Results Summary

That rules out simply doing a re-run of L&G's last set of results...they are satisfyingly uncontroversial...described as "dull but worthy"...with strong and continued upward growth in sales, cash, EPS and DPS with modest surprises on the upside...rises in both the stock and flow of business...and the momentum continues in 2013.

3. Slide Macro Trends

We have largely avoided complexity...ours is a simple business in a complex world. We have positioned our business to be driven more by macro trends that are undeniably happening now – like ageing populations, increasingly homogenous asset markets and greater use of digital – and less by macroeconomic growth.

However there is plenty going on in the wider world that <u>is</u> controversial. We are in an uncharted macro-economic experiment. Politicians, central bankers and regulators have tough problems to solve and difficult decisions to take. Industry participants like us have to formulate our responses too, and this is tough as we are living in a world which is only partly rational – and largely political and therefore harder to predict.

4. Slide Economic Austerity leads to Political unemployment

This shows you why. The consensus response to the credit crisis was to loosen monetary policy and tighten fiscal policy, massively. Cutting government spending was necessary, austerity measures were unavoidable

but some were also "the right thing to do". This was an "inconvenient truth", and this slide shows you the effects on unemployment in one small sector of the labour market – national leaders.

"Fear and loathing" among the international political classes...where the politicians fear, and the voters loathe...is one reason why we are operating in a world of inconvenient truths, convenient lies, and monetary methadone – or QE.

The other reason is that there is no roadmap that covers where we are now and what to do next...and no obvious Keynes or Bevan to tell us. I daresay Mervyn King, Ben Bernanke or Christine Lagarde might write a textbook on it in the future, but by then we will have moved on.

5. Slide UK Employment at New Highs

This slide gives one example why the early response to the credit crisis was the right one: employment better than expected in the UK...partly the result of monetary easing...but equally the bulk of the extra jobs filled by a mobile, international labour force.

The same is true in other economies where we have seen employment performing better than expected...these are not necessarily traditional jobs, but are being filled by part-time workers, pensioners, and economic migrants.

These things all contribute to political pressure, particularly where we have very high youth unemployment and rising inequality.

6. Slide L&G: A Simple Business in a complex world

Here is a snapshot of how we at L&G see the world.

There are broadly three categories of economy:

 Club A, or Western Flat, countries, where underlying economies are reasonable if unspectacular, but where the national authorities have control of interest rates and monetary policy and their own currency. So for example the US, Canada, and the UK. Club A also includes Germany, if you assume that is where the real power in the EU lies, and some of Northern Europe.

Club A has been able to implement super-loose monetary policy and made some efforts at deleveraging and re-balancing the books. Japan has recently joined this club in a spectacular fashion...and while Prime Minister Abe is the most popular Japanese premier ever, we need to reflect on the sustainability of the policy in a complex environment with myriad corporate cross-holdings and the worst demographics in the world.

QE has produced asset price inflation, FX depreciation, real wage declines, a small wealth effect on consumption, but no real economic growth. Politicians and officials keep promising 3% real GDP growth...but it is not happening.

The inconvenient truth for Club A is that even though they were able to revive the patient by a massive injection of monetary methadone, they might now be hooked on the drug.

 Club B, or Western Slump, countries, where the underlying economies are weak and there is no local control of rates or currency. This is the Southern and peripheral part of the Eurozone: Spain, Cyprus, Greece, Portugal, Ireland, perhaps Italy and France. They have been joined by Argentina, and Brazil is not where we thought it would be.

The really inconvenient truth for these countries is that attempts to restore fiscal control, where unemployment rates are unacceptably high and there is capital flight, could easily tip into social unrest as inequality becomes intolerably wide. The monetary methadone hasn't worked...the transmission mechanisms for money and credit have not generated productivity growth, and there is a risk of painful deflation.

That is one reason why I still worry about the possibility of a Eurozone break-up, and why we have little capital investment in those countries.

 Club C, or Emerging Market Growth countries, where there is decent high single-digit growth, where the authorities can exercise control, and which have sailed through the early aftermath of the credit crisis. So India...some parts of the Middle-East and Africa and obviously China.

The monetary methadone wasn't really needed in Club C, but the inconvenient truth here is that China's economy is changing fast. Domestic demand patterns are changing, with implications for capital flows and trade as we get closer to the limits of conventional globalisation. Even China is suffering from the negative impact of their lavish infrastructure spending binge in 2009. For those countries in the western world that cannot rely on 7-8% real growth, this is a reminder that such investment needs to be carefully made with a focus on economic return. This sends out strong and potentially disruptive signals for markets, although it is difficult from a European standpoint to see 7.5% GDP growth as a hard landing.

So let's look more closely at some of the challenges that have arisen as a result of super-loose monetary policy and fiscal austerity. Here I am thinking mainly about Club A and B countries, particularly the UK.

7. Slide Welfare Expectations

First, fiscal policy. The inconvenient truth is that austerity in the UK hasn't actually done much to deleverage the national balance sheet. The deficit is still at £120bn or 7.5% of GDP. It sounds harsh, but austerity as an economic solution is a convenient lie.

Expectations of welfare remain unrealistically high: the chart on the left is from the US, and shows the decreasing potential of current taxation to meet obligatory government expenditure...never mind funding discretionary items. The same applies, broadly in the UK.

The political decisions on spending may have felt hard, but low growth and falling real wages reduce the tax take and the "automatic stabilisers" mean welfare costs can't, and haven't, come down. The chart on the right shows this in the UK…austerity has in fact meant a 19% rise in total government expenditure between 2007 and 2012.

Constrained capital expenditure means inbuilt supply side problems haven't been tackled by government. We have supply-demand imbalances with poor supply and overpricing in..... housing, energy, transport and even education. More people are spending more of their reduced incomes on fuel, food, transport and housing. Lack of policy clarity means we can't really be confident that the issues are being methodically or effectively addressed.

However....it is in this supply side that part of the solution can be found, and financial institutions have a part to play...so I will come back to this.

8. Slide - Long term demographic trends are favourable to L&G

This is not going to get any easier for governments. Demographic change is a challenge on its own to welfare budgets...but demographic change <u>plus</u> a sense of entitlement makes them completely unaffordable. This slide shows the rising age profile in all parts of the world except Africa...

9. Slide - Falling UK dependency ratio

...and this slide shows the impact on dependency ratios as fewer young people support more old people...in the UK and other developed economies.

Note this is before we start thinking about the fact that student loans in the US

are now over \$1trillion – a potentially looming sub-prime crisis on its own account.

Demographic change is another inconvenient truth that politicians will have to address: the welfare "settlement" will effectively have to be renegotiated. In the UK, we had a post-War welfare system based on the Beveridge Report of 1942...this was humane if not particularly generous, and aimed at tackling the five giants of Want, Disease, Ignorance, Squalor and Idleness. However, Beveridge said that policies of social security "must be achieved by cooperation between the State and the individual", with in effect a very hefty contributory element. Moreover, he said the state "should not stifle incentive, opportunity, responsibility; in establishing a national minimum, it should leave room and encouragement for voluntary action by each individual to provide more than that minimum for himself and his family".

This gradually changed into a significantly non-contributory system which critics say is based on entitlement and redistribution of wealth and so has moved away from the Beveridge principles.

The UK government has made some tentative steps towards a renegotiation of the terms of welfare...pensions auto-enrolment is a transfer of risk and responsibility from the state to the individual, and so far it has been a great success. Andrew Dilnot has sparked a serious policy debate about how to share the risks of old-age care costs between individuals, private sector providers and government.

More fundamentally, after 70 years it is time, at least in the UK, to update our approach to welfare....to move on from William Beveridge and Nye Bevan...titans of the left in the 1940's ... Two years out from a general election it is too early to know if the job will fall Liam Byrne and Ed Balls or to others from other parties, whose names don't even begin with a "B". But the time to start thinking about it is now, as borrowing will continue to rise post 2015.

These are difficult debates that require real honesty and real vision...but again in this risk-sharing area institutional investors and the insurance industry has a role to play.

10. Slide Sovereign debt is an asset bubble

Now let's look at monetary policy. I have no doubt that radical, unorthodox and experimental medicine was necessary in 2009. But the scale has been daunting: QE in the UK and US has led to the bloating of both central bank balance sheets to over 20% of GDP and the Fed is still buying \$85bn of securities per month. Furthermore, this could be dwarfed by the Bank of Japan who are set to raise their balance sheet to almost 3 times that achieved in the UK and US by the end of next year.

Here you see the results. Record low interest rates and a vast boost to liquidity. The treatment saved the patient's life but leaves behind a reliance on continued heavy doses of QE – the monetary methadone.

Monetary policy is being used to boost and manipulate asset prices.

Unfortunately there are side effects, including asset bubbles in sovereigns...in credit...in equity and in property and a general mis-pricing of risk as investors stretch for yield.

11. Slide S&P 500 v Shanghai

Here we see it in equities – the contrast between US equities which have risen on the back of QE...and Chinese equities which have gone the other way. This is a topsy-turvy world where improved economic performance risks pushing markets down, on the basis that QE may be withdrawn, while poor economic numbers and the prospect of prolonged QE continues to move asset prices up.

As a result there is a high level of dependency on the Bernanke, Abe and Draghi puts, and markets have epileptic fits with huge reactions if the medicine is to be tapered or withdrawn. Ben Bernanke's recent comments, for example, generated a classic "butterfly wing" effect.

This is going to become a political issue. For politicians, it is a convenient lie – including one they tell themselves - that asset bubbles create a happy electorate. This is simply untrue over anything other than the short term. This is what is happening right now with housing in the UK, and it is being stoked by the government which is directing money into house purchases while not enough houses are being built.

The truth is again inconvenient: it is that inflating asset bubbles is not a productive way to create sustainable growth or real wealth. There is no shortage of liquidity in the world...but too much of it is sitting on corporate balance sheets, for example Apple's \$130bn, and the UK's £750bn corporate cash pile. This is, in effect, money that has been "crowded out" by QE, and prevented from being deployed in a useful way.

Moreover, when asset prices grow faster than the real economy, those without unencumbered assets (the majority) see their purchasing power diminishing. QE, like many drugs has numerous undesired side effects, it has crowded out private sector investment, punished savers, created captive creditors, and caused inequality, both the traditional "horizontal" inequality where those with assets gain, those without lose, and "vertical" or intergenerational inequality, as those with assets tend to be the older generations.

The second inconvenient truth is that when asset bubbles burst, the landing is unlikely to be soft: it may indeed be somewhere between a hard landing and a complete, cartoon-like, splatter...the character goes over the cliff...then the grand piano lands on top of them.

So while Ben Bernanke, Mervyn King and their counterparts administered the first life-saving dose, their successors will face the challenge of weaning the patient off the methadone.

My economist colleagues at L&G – and our market leading ALM team for that matter – have thought long and hard about this. There are three questions:

- is it possible to taper off?
- Is there the will to do so?
- And if so, how and when would you do it?

12. Slide – 3 scenarios for QE

First, is it possible to wean the patient off QE?

It varies from economy to economy, but the optimists would say that QE has prevented demand running below supply (the negative output gap), while enabling economies to avoid deflation and damage to the supply side. Once private sector deleveraging is complete, QE can be slowly withdrawn. Interest rates should gradually rise once the output gap closes and this would be a sign of strength. Inflation remains steady throughout.

The less optimistic view is that QE engineered asset price inflation is finally about to feed back into rising incomes and GDP. There will be an illusion of recovery, but it will be credit driven once again. Exceptionally low interest rates mean debt-servicing costs are quite manageable. Lending conditions are thawing and this will encourage another round of leveraging. There is less economic slack than realized as the last credit boom led to a misallocation of resources. Central banks will fall well behind the curve. After a few quarters of decent global GDP growth 3-4% range, inflation will rise. Raising base rates to combat inflation would cause another recession and reveal the structural nature of public sector deficits. Central Banks will tolerate a modest inflation overshoot without publicly admitting the policy, but there is a tail risk of high inflation.

The pessimists say that there is still too much debt. Deleveraging is self-defeating and inherently deflationary. QE only serves to raise asset prices and has minimal impact on the real economy. Any attempt to stop QE will lead to lower asset prices and even weaker growth. Central banks will be relatively

quick to revert back to more QE on any sign that growth is disappointing. There could be a deflation scare, but probably not outright deflation. Ongoing financial repression will keep yields low until confidence in policy-making is lost and / or there is some form of social breakdown due to ever widening income inequality.

The second question is whether the political will exists to taper off.

Here we are back in the territory of inconvenient truths, convenient lies, irrationality and the threat of loss of office and unemployment for political leaders. It would seem that only a political leader not concerned about reelection, in a "Western flat" economy could lead. That would mean President Obama, who is in his second term...or just possibly Angela Merkel straight after an election in September, assuming she has control of the Bundestag.

It would be much harder in the UK where the temptation to dodge inconvenient truths is likely to remain in place until the next election, two years away.

Another important aspect of this is the increasing politicisation and mandate drift of some central banks. Mark Carney in the UK is likely to have a broader, more growth-oriented mandate than Mervyn King, and who knows what the approach Ben Bernanke's successor will take. Indeed, those central bankers that remain true to their principles such as Ex-Governors Shirakawa and Weber can find themselves heading for the exit just as easily as elected politicians.

13. Slide – The QE Glide Path

The third question is how a tapering off might be achieved. Senior Fed officials have already indicated they see the following potential road-map for the US:

- a combination of nudges and scaling back

However, there is a detailed debate to be had about whether this is the right order of events...and the ultimate exit may be markedly different from what is envisaged. And we can be sure that the whole exercise will be conducted in a turbulent political atmosphere, due to the electoral effects and due to the fact that QE provides remittances to government treasuries: precisely what George Osborne has done to help "improve" deficit figures in the UK.

So timing will be crucial: the best estimates of my economist colleagues suggest that this series of nudges will take place mainly in 2015...though market expectations may run ahead of this.

Now, to bring this debate closer to home, I'll turn to Legal & General's responses as a firm, made against this difficult backdrop of high politics and unorthodox economics. I'll do this under two broad headings:

- The local response: or consequences for Asset Liability management, and;
- The policy response: "leaning in" to the policy agenda...what can we do to support sensible policymaking?

14. Slide – L&G Balance Sheet management

In terms of our own ALM approach, we start from the high-level view that since 2008-9, a banking crisis has been transformed into a sovereign crisis. This has been addressed essentially by governments and central banks deploying fiat money. Given the uncertainty about the timing and effects of QE tapering, and the instability of asset bubbles, our priority has been to reduce market risk on our own balance sheet.

We have de-risked significantly from banks: these now account for 8% versus 24% of our exposure in 2008, and we are have moved up the curve, with only 3%in subordinated debt. What banks currently need is more equity...but this is likely to be prohibitively expensive. Absent more equity in bank balance sheets, we feel that there is a risk still – particularly if tapering off QE happens

too quickly and creates renewed banking problems which governments cannot step in to solve by the same means.

We have effectively reduced to close to nil our exposure to Club B, Western Slump countries, and avoided chasing yield, particularly, funding trades, risky cyclical assets. So while we have increased equity exposures...and have been right to do so based on market performance over the year to date... our positions are hedged.

15. Slide - Investment Discipline

We are also reducing exposures to "unrewarded risk"...and have put in place increasingly rigorous disciplines to assess and actively manage our appetite for risk.

16. Slide – Policy Goals and Approaches

Turning to policy responses, these entail finding ways for long-term institutions to deploy the surplus liquidity created by QE productively, while also helping governments get a genuine grip on the fiscal deficits via better risk-sharing.

This means facilitating long-term investment, by long-term institutions, to drive productivity and real economic growth, as opposed to inflating bubbles. This points to investment in infrastructure and real assets, and equities.

17. Slide Direct Investments - Housing

Housing and Infrastructure is an obvious asset class for long-term investors: good infrastructure gives us short-term and long-term employment as well as long-term productivity growth. It also addresses some of the supply imbalances that I mentioned earlier...in energy, housing, transport, and health. We at Legal & general are pushing ahead with these in housing...

18.Slide Transport and Infrastructure

...and transport...and energy...as well as social infrastructure including schools.

19. Slide – Global battle for connectivity

It is important here to remember the digital as well as the physical infrastructure. Despite being present at the creation of the internet, investment in European connectivity is falling behind...the slide shows a worryingly widening connectivity gap.

This matters for our industry. Financial services is beginning to move out of the digital dark ages – the Masai warrior can do his banking by mobile phone from the Serengeti.

As one of Europe's largest investment platforms, L&G intends to be at the forefront. We and our customers need optimal digital infrastructure, digital speed in providing millisectond pricing, executing fund trades and straight through digital processing.

Having for many years been crowded out of infrastructure funding by banks, the long-term institutions should now be able to re-enter this market. While banks, with their maturity transformation model, can efficiently borrow short and lend out to, say five years, it is our sector that is best placed to "borrow long, lend long", particularly where there is the security of a physical asset.

This is not "shadow banking", it is "long banking".

It is what we used to do, several decades ago. In the last couple of years, L&G has done £3bn of this sort of infrastructure investment, there is potential to do many times that amount.

20. Slide – Quixote Projects

Not all infrastructure products are investible, even by the longest of the "long banking" institutions – and here the decision to promote the project – often a grandiose "Quixote Project" - is usually found to be political rather than

economic. UK Quixote projects as we see them would include High Speed Rail 2 and the Thames estuary airport. Quixote infrastructure also includes offshore windmills. This is not just to make the metaphor work, but for different reasons to do with the distorting effect of tax subsidies and the lack of clarity on energy policy.

Alongside infrastructure, we need a much greater emphasis on long-term investment in equity. The issue of leverage was at the heart of the credit crisis. The issue of how to de-lever and how much that should be allowed to hurt lies at the heart of QE. And it is still there in some of the post-QE scenarios I outlined earlier.

So there is a need to rebuild a long-term equity culture...for example by facilitating investment by institutions and pension funds in both the equity and debt components of project financings.

However, the current regulatory system works against this. We know for example that over atwenty year period invested in equity, the return is from dividend not price appreciation, and that the risk profile is broadly similar to fixed income.

But currently the Solvency II rules have a 'one size fits all' model that reflects a capital charge of 39% of the market value of an equity holding making no allowance at all for future dividend income streams.

An A rated, 10 year corporate bond, has potentially a circa 6% charge. This means that equity would have to return 8 times as much to make investing in equity worthwhile. The relative capital charges are clearly at odds to the risk between the two asset classes, especially when considering a high dividend stock from a high rated corporate which is being used to back a 20 year liability.

This issue of long-termism and the need for institutions to generate long-term sustainable growth rather than asset bubbles is something politicians

periodically talk about. John Kay in the UK did some work on it for the Department of business...and here in Brussels it is appropriate to mention that the Commission's current Green paper on long-term investment may turn out to be the first step in a successful experiment by "Laboratoire Barnier"... and one with a lasting legacy.

It is very easy for politicians to criticise the short-termism of financial markets and institutions...when they themselves are subject to electoral cycles and no doubt tempted to take political advantage of short-term asset bubbles – housing in the UK being an obvious case.

So for this to work really effectively, what we actually need from politicians is much greater policy clarity and direction, and a regulatory system that reflects economic reality....and this can only be forged through closer engagement.....we need to invest the £750bn effectively.

21. Slide - Risk Sharing

The second way for institutions to "lean-in" to the policy agenda is by examining what role we can play in fiscal consolidation.

Remember, voters' expectations of government spending are already unrealistically high...and demographic change and rising dependency ratios will make the problem right across the developed world worse, not better, over time.

The answer – which is incidentally wholly in line with the Beveridge Report's emphasis on contribution which I mentioned earlier - lies in risk-sharing. We have this already in pensions, where auto-enrolment in Workplace DC schemes in the UK is proving hugely successful, just as it was twenty years ago in Australia. We also have this, up to a point, in employer-sponsored Group Income Protection Schemes, and in the UK the government is starting to think about risk-sharing as an approach to funding long term care costs for an ageing population.

But, even though uncertain economic times and constraints on welfare are forcing people to think more about providing for themselves, we still have a significant protection gap. This is something government needs to tackle alongside industry, developing the right policy framework, and the right approach via incentivisation and behavioural economics.

The prizes are large: in a 2010 report, Deloitte estimated that a 5% shift in the balance between public and private coverage of the addressable risk market in the UK towards private provision would save government £17bn per year.

So as an industry we have much to offer – both through investment and through risk-sharing. This is important now, and will become more important as QE is tapered-off.

22. Slide - Triangle of Austerity

I have to finish by bringing all this back to a few closing remarks about Legal & General.

As you will have gathered, we think hard about these issues. Our analysis drives our strategic approach and our actions. Last year at this conference we discussed how the Triangle of Austerity – fiscal austerity, banking austerity and regulatory austerity, was creating opportunities for us.

These are materialising as expected, and they are driving growth opportunities in protection, retirement solutions, and investments.

23.Slide - Share Price and Divi

Austerity and the post-crisis period has been an environment where it is possible to perform robustly, growing the stock and flow of business, EPS and DPS, whilst delivering a high RoE.

In the next phase, politicians and markets must abandon convenient lies, and face up to inconvenient truths, such as what is affordable in an ageing society, how investment can drive growth without asset bubbles, and how to get ourselves off the QE methadone.

24. Slide - Titans

These are very challenging but nevertheless soluble problems...the economic and political titans of the past – who were not quite as grey as they look here – managed to produce the right solutions for their times...and the titans of technology equally provided new means to deliver growth.

Today's titans may be institutions as much as individuals. There is a real need for the long-term institutions to play an even bigger role...and I am optimistic if there are positive policies coupled with real investment in the economy by corporates and sovereign Wealth Funds. I am equally confident there will be plenty of opportunities for us, our shareholders and customers, along the way.

Thank you.