Through the Economist's Crystal ball – Difficult Times Lie Ahead

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David Hume Institute

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The President (P. G. Scott, F.I.A.): The Institute and Faculty has made a commitment to deliver more engaging thought-leadership events for our members and stakeholders. Part of that commitment is our undertaking to organise two lecturers a year, one in Scotland and one in London. The overall aim is to provide useful resources for our members and the people that we work with; to advance the work that we do on subjects of relevance, and inform debate.

This autumn lecture builds upon the success of the last two lectures, Dr Martin Weale, a member of the Monetary Policy Committee; and Scotland's Chief Medical Officer, Sir Harry Burns.

I am delighted to welcome Professor Jeremy Peat O.B.E. We are honoured that he has agreed to speak to us. Jeremy trained as an economist at Bristol University and University College, London. He worked as an economist for various U.K. government departments, including HM Treasury and eight years at the Scottish Office. He has been Group Chief Economist at the Royal Bank of Scotland; he is Chairman of the BBC Pension Trust; a Member of the Competition Commission; and Fellow of both the Royal Society of Edinburgh and the Chartered Institute of Bankers in Scotland. In 2005 he was made the Director of the David Hume Institute.

The David Hume Institute aims to stimulate and influence thinking in key public policy areas. It focuses on economic issues, including the interaction between the economy and the law.

The Institute and Faculty took corporate membership of the David Hume Institute earlier in the year.

Jeremy is very qualified to speak to us with authority. He will provide his thoughts on the long term expectations for our economy in the context of global and domestic changes, and the implications for businesses, individuals and society; what we should expect as we emerge from recession, and some thoughts about how things will undoubtedly change.

Professor J. Peat, O.B.E.: I feel deeply honoured to have been asked to deliver your annual lecture.

I thought I would just start by expanding a little more about my career, and my journey as an economist. I like to think that I have been through four stages of economic life. My first career was as a development economist. I joined the Ministry of Overseas Development and worked for them in Bangkok in the Vietnam war years, covering the whole of South East Asia and then later spent 3½ years in Botswana, which was actually an escape from the early years of Thatcher and a wonderful time, too.

I like to think of this period as my social conscious period as an economist. It was longer than my period as a bank economist, which is a thought that I want you to hold. The bank economist is what a lot of people may know I did. But development economist was longer and, in many ways, better.

My second period as an economist was as a bumbling bureaucrat. That is the time that I was in the civil service, including 11 months at the Treasury. That I think is an important time line. It is long enough to understand but not long enough to be captured by the Treasury.

I spent those years at the Treasury and, very interestingly, at the Scottish Office.

My third phase was 12 years at the Royal Bank of Scotland; 10 years very good; two years a bit dodgy at the end. But I got out in 2005. I personally believe that, at that stage, it was still a highly respectable and reputable organisation.

After that I took on what I consider to be my free-wheeling phase when I do whatever I like, which is quite a nice state of the world. I have had liberty to wander hither and thither: the Competition Commission; six years on the Board of the BBC; writing a column for the Herald and other pieces; on the Board of Scottish Enterprise; Chairman of the Board of the Zoo, which I joined for fun but it turned out to be traumatic. So in those seven years I have been analysing, I have been investigating and, I suppose, I have done a bit of pontificating as well.

Those four phases have come together in developing some of the thoughts that I am going to put before you.

The broad flow of this lecture will be, so far as it can be, forward looking, but I think one has to have something of the past and the present in order to get the basis for that.

Our economy domestically and internationally has, for many years, exhibited a tendency to positive growth of output. We have grown on a regular basis, coupled with a distinct tendency to be cyclical but with relatively short downturns alongside longer and more substantial upturns.

In the decade spanning the turn from the 20^{th} century to the 21^{st} century economic performance was exceptional. This was what the Governor of the Bank of England likes to call the "nice" decade. N for non-accelerating; I for inflation; C for consistent; and E for expansion.

Inflation was under control and expansion was major; a very "nice" decade. In part, this period of success was due to improved policy management – monetary policy in particular. But it was not going to be "nice" forever because it was also related to massively increased credit for governments, households and consumers. The rate of expansion was unsustainable. Tears before bedtime were inevitable.

I am not going to dwell on the banking catastrophes because that would take another whole lecture. I just will note that the traumas that flowed through the banking and wider financial sector also had a major impact on domestic and global economies. They came together with the impact of excessive credit and unsustainable growth to create something of a perfect economic storm. And what followed, what we are still in, was no ordinary recession. This is different.

That is demonstrated, as I will show, by the depth of the recession and its duration – severe compared to predecessors.

Just a caveat: recession formally is denoted by two consecutive quarters of negative growth. A recessionary period to me is a much longer one which covers the whole phase of the downswing, before you get back to where you started. So bear with me if I use the word "recession" a little loosely at times.

But it is still not clear when the U.K. is actually going to emerge from this enduring recessionary period, nor how long it will take for our economy to recover lost ground. We are by no means back to the past peak. Even when output does turn from negative to positive – and it will – our economy is going to be very different from that ten-year "nice" decade.

Growth will have to be slower to be sustainable and the overall context is changing. We will face also the effects of demographic change – and they are major – and the cost, which is by no means insignificant, of reducing and containing greenhouse gas emissions. In addition, there will be the cost of dealing with the economic and wider social effects of this long and deep recession.

We have a lot to deal with and there will be widespread implications for all households and all businesses.

I would just add that those of us who were born in the 1940s, 50s or even the early parts of the 60s, will count ourselves lucky, I suggest, as compared to the generations that follow. This is going to be a very difficult period even when we get out of the hole that we are in now.

I want to start off by using a few charts to illustrate the position, and I must immediately acknowledge that the charts were provided by Prof David Bell of Stirling University.

Chart 1 shows long-term trends in GDP growth. You can see that long, continuing upward movement from 1955 onwards. We have been accustomed to that. There is a little downward hook

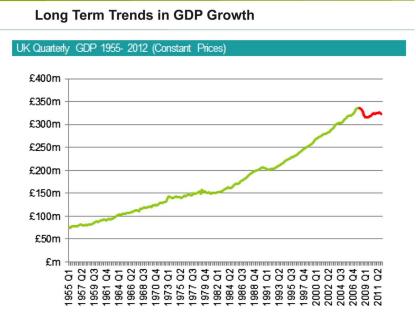


Chart 1. UK quarterly GDP 1955-2012 (Constant Prices)

at the end which shows the recent difficult period. That may look minimal but that is a far more significant downward hook than any other in the whole of that period from 1955.

I mentioned that our recession was different from others. The graphs in chart 2 compare our recession with the previous periods from the 1930s onwards.

It is now 50 months since the recession started in 2008. We have yet to see a return to a sustained upward path, and output now is still 5% below the pre-recessionary peak.

If you look at the chart, you will see that for the normal recessions, and I am excluding the Great Depression at the moment, in the latter part of the last century recovery was underway within 30 months, and after 50 months output was markedly above the level at the outset of the recession. So we are deeper this time; this recession is also longer.

That even compares with the great depression of the 1930s. In those days recovery was underway within three years and a new peak in output was attained in 45 months. So our latest downturn is markedly more enduring.

This is a very severe episode. It is atypical. The only thing that I can contrast it with in my experience is the Japanese "lost decade", which actually lasted very much longer than a decade. It is different from anything that we in the West have experienced in the modern era, and this different experience emerged because of different factors. It may hence require different policies, and certainly will result in different post-recession outcomes.

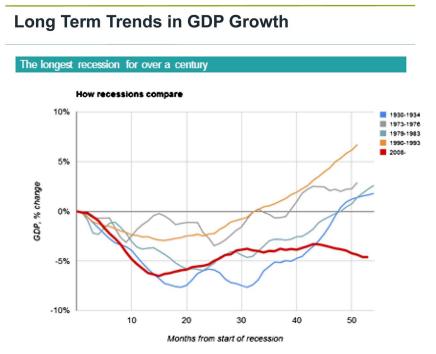


Chart 2. The longest recession for over a century

I just want to touch for a little while upon debt: the extent to which our debt across the economy has accelerated since the mid-1990s. I want to start by making sure we distinguish properly between debt and deficit. Debt is a stock measure, and deficit is a flow showing the difference between expenditure and revenue in any one period. Both can be shown helpfully as a percentage of GDP, and of course a continuing series of high annual deficits will, as happened in the run-up to and during this recession, result in a sharp increase in the total stock of debt.

So what is good and bad for government debt and government deficits? One possible yardstick is the measures used. The Maastricht criteria, supposedly to limit the countries allowed to enter the Eurozone. That opted for a maximum deficit in any one year of 3% and a maximum debt as a stock compared to GDP of 60%.

I would just note, while I am on the topic of the Maastricht Criteria, that Italy had a stock of debt that was about 120% of GDP but the Founding Fathers wanted Italy to be a member of the Eurozone so that excess over 60% was defined as small and temporary. Italy entered and, after that, you could not stop Greece or anyone else coming in. In that one political fudge were sown the inevitable seeds of the Euro crisis that we are still suffering from.

At the back end of the 1990s and the early years of this century, U.K. government deficits tended to be low and constrained. Total public sector debt was well contained at below 40% of GDP, not 60%. But the pick up from 2008 to now has been sharp as annual deficits rose dramatically to above 3%. You can see from the blue line on Chart 3 how the move from below 40% to well above 60% has taken place.

That was in part related to the recession itself. One of the key challenges for U.K. policymakers, and indeed for the Office of Budget Responsibility, which is their arm's length adviser,- is to distinguish

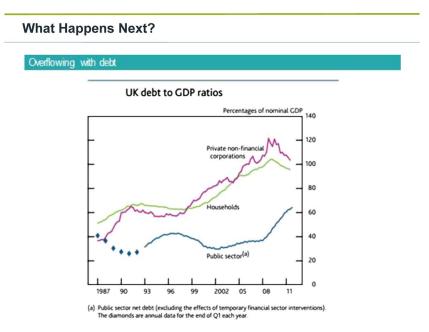


Chart 3. Overflowing with diet

between an increase in the government's structural deficit, which must be constrained, contained and reduced, and any increase in the cyclical deficit, which is, in large part, a natural working of economic forecasting forces. These are the natural stabilisers that Keynes always referred to.

What happens is that corporate and personal tax revenues tend to rise and fall in line with the cycle, while welfare related and some other benefits, including unemployment costs, rise and fall counter-cyclically.

The cyclical deficit goes up in bad times, and that should be a temporary move because in the good times the cyclical deficit should return to whence it came. It is important to be sure that you are cutting structural rather than cyclical deficit in the way you deal with fiscal policy.

Whilst public sector debt rose, as shown in chart 3, primarily during the recession, corporate and household debt rose steadily and substantially much earlier, from the latter part of the 1990s.

At the time this trend was underway for households, there was limited concern. The stock of debt was rising, it was argued, but the ratio of household debt repayments to incomes looked sustainable, even as that debt rose. That was because we had sustained low interest rates. Inflation was controlled. We had cracked it and low interest rates were with us forever.

In this continuing low inflation environment a higher level of debt could readily be serviced by households. Given the low interest rates, the ratio of repayments to incomes had not really risen. Banks, given this change in the environment, adjusted their risk analysis and were more willing to finance household debt, whether it be mortgages, personal loans, credit cards or whatever, and households became increasingly willing to take on debt, not least because of the major rise in house prices, which led to a perception of greater wealth, which for many was just temporary. But that justified to them greater debt.

The trend was unsustainable and eventually households and businesses had to set to work rapidly to reduce debt burdens. Both household demand and corporate investment fell away very sharply. That ratcheted down economic output. Remember, households are two thirds of our economy.

Chart 3 shows, for both households and corporates, the debt to GDP ratios rose from about 60% to over 100%. The extent of the reduction since the peaks has been quite limited. We have a long way to go to get back to previous levels and to what I would call stable equilibrium.

Given that, I note for the future, it is difficult to see how household demand, or indeed business investment, can be seen as significant sources of economic invigoration in the near future. It is easy to understand why many businesses are still reluctant to step up their credit and their investment.

So, what happens next? I think the challenge ahead is steadily to return all elements of debt to more appropriate and sustainable levels while at the same time securing an exit from recession. That is easy to say, is it not? We have got to get debt back to sustainable levels but we have got to get out of recession. We have to secure some growth of output.

If there is any good news around it is that we are still in a position where the absolute scale of our stock of public sector debt is still orders of magnitude lower than in Greece, Spain or Italy. Just above 60% is nothing compared to their stock of debt to GDP ratios. And we still retain the

capability to get our deficit under better control and avoid growth of the stock of debt to anything like the levels that they have achieved.

Another advantage that we have, or at least a perceived advantage, over those Eurozone countries that are struggling so much is that we have a flexible exchange rate. In theory, sterling can depreciate as we struggle and we can get more competitive, export more, reduce imports and provide recovery through that route.

Maybe this combination of a relatively low, compared to some other countries, stock of government debt and a flexible exchange rate helps to explain why our credit rating has not suffered as others have.

Of course, a depreciating exchange rate brings with it risks of importing inflation, but I believe we remain in a low-inflation environment. It is not something that causes me angst at the moment. I do not see how we can expect sterling to depreciate against the euro given their troubles; and many of our key competitors, and most of our markets, are located within the Eurozone.

Even competitive companies in Scotland, as in the rest of the U.K, are continuing to find it difficult to discover healthy export markets as the global economy struggles and the competition is intense. There is no sign of export-led recovery on the basis of the data that I am looking at.

So whatever happens on the exchange rate front, even if we do get some depreciation, domestic policy action is required, the domestic economy has to contribute towards the recovery.

But I do not doubt that policymakers in the U.K., George Osborne and his ilk, face a complex balancing act in determining how speedily to get back to normal deficit levels en route to sustainable debt levels.

There is no absolute right answer to this, but we know that if they are seen as moving too slowly, then the markets will show their disappointment and mark-up long-term interest rates which will exert a drag effect throughout the economy.

If they move too fast, then they risk dampening such demand as does exist, both directly via lower net public expenditure, and indirectly via the effect of that reduction in households and businesses through tax hikes, cuts in public expenditure and cuts in public sector employment.

We have already seen from what I have said earlier that household demand and private investment are constrained because businesses and consumers are getting debt back to acceptable levels. I have suggested that an export-led recovery remains a hope rather than a fact or even a realistic expectation.

If we added to that backcloth too rapid, too dramatic, a cutback in demand from the public sector, then the prospects of any early recovery would be minimal. We have to get this right.

It is also not just a matter of how fast you cut the deficit but how you do it, how you can get the balance of tax increases and public expenditure cuts so as to limit the impact on demand, and also to look to the longer term. Post-recession, we are going to need all the skills that we can develop; we are going to need infrastructure and we have to maintain our capability for competitiveness while

going through this squeeze on public finances. It is one heck of a job and I do not envy the Chancellor or his successors.

We have to look to some recovery in household demand, some recovery in business investment, some support for exports and not too big a dampener from the public sector.

We do not know when we are going to emerge from recession. Perhaps we will get a pickup in the third quarter. The last two quarters have been negative so we are formally in recession. Perhaps Q3 will be positive due to an Olympic effect. But if so, will it be sustained or is that just a one quarter wonder?

I always get worried when I hear Conservative politicians from former eras talking about green shoots, as John Major did recently. I think he was just busy promoting a book. But I worry about green shoots. I would much prefer to see a fully flourishing plant before I was of the view that this recovery is underway.

I am convinced that we need some flexibility on the fiscal front; some measures to instil confidence and encourage a gentle pickup in demand. What we do not need is something that is heavy footed and intransigent in the way fiscal policy is managed.

I am glad that we have the Office of Budget Responsibility. I am glad that Robert Chote is there with his colleagues because this is an arm's length view; and I am glad that they will be looking at what is happening on cyclical compared to structural deficits. I hope we can then see the Government and the Chancellor with the economic and political skills to manage the economic policy balancing trick.

But let me carry on with the post-recession period now. What happens after that? There are various reasons, I would suggest, why the economy, post-recession, will differ markedly from that to which we became accustomed in the "nice" era. We are not going back to those times.

For a start, policymakers as well as households and businesses, will be ultra-cautious so far as debt levels are concerned. They have been bitten; they are shy. There will be built in resistance to structural deficits exceeding very specifically stated levels, and severe constraints on all debt to GDP ratios, and households and banks will all be far more cautious. They will work to continue to reduce their debt levels.

Remember from the chart that you can still see on the screen how far they have to go, so they will continue to be cautious. I hope businesses will start to borrow more and invest more. But the demand for credit from business remains low, and banks will only wish to lend to the most efficient of businesses with clear views as to where market growth can be expected and how companies can achieve enhanced competitiveness in those areas. I think it is a question of demand for credit as much as supply of credit that is the problem so far as businesses are concerned.

I must praise Scottish Enterprise for the emphasis that they have placed on high growth firms because I think this shows one way forward of picking on proven winners and trying to encourage them to develop and encouraging others to enter that high-growth field.

There is going to be ultra-caution from governments, from households and from businesses. There is also going to be an issue that the trend growth rate will be revisited. The trend growth rate is the

level that the economy is assumed to grow, or be able to grow, on a continuing basis without undue stresses and strains emerging. It is in large part related to how fast you think productivity is improving.

Trend growth in the "nice" days was marked up to maybe $2\frac{1}{2}$ % or even 3%, and policy was adjusted to allow for that rate of growth, to encourage that rate of growth. Post-recession, I think we will be lucky if they think trend growth is $1\frac{1}{2}$ %, and monetary and fiscal policy will therefore tend to be much tighter, other things remaining equal, than before the recession, and there is no risk of irrational exuberance breaking out again so far as policymakers are concerned.

It will be the time for the natural pessimist to rule the roost, and $1\frac{1}{2}$ % will be good enough, and policy will not allow going much faster than that. It will also be assumed that this lower trend growth rate applied during the recessionary period from 2008 to now and beyond.

That will imply that the extent of catch-up to get back to where we should have been will be significantly less than if we applied a trend growth rate of $2\frac{1}{2}$ % or 3%. So we will recover to a lower base, and policy will be aimed at our growing much more slowly thereafter; very different times in the expected pace of growth.

One implication of all of this – and I will come back to this at times – is for the public finances. The first years of the Scottish Parliament were characterised by annual growth rates in the funds available – rapid annual growth rates. Those days have passed and we should not expect them to come back in the near future.

Even when the U.K. or an independent Scottish economy is set on a stable recovery path, there will still be constraints.

I hosted Bob Black, the former auditor-general, at the David Hume Institute last week. He emphasised the necessity for tough decisions on public finances continuing for the foreseeable future. What he said was: whether the outcome is more devolution or complete independence, we will be facing the same challenges in our public services as we do today.

The next challenge for the future I want to touch on is demographics. I probably do not need to remind actuaries in the audience of the fact of the changes that are underway, and those dealing with pension funds and the like have long been aware that life expectancy is steadily increasing.

When I was chairing the BBC pension trust, at one stage I thought I had discovered that the life expectancy for people in my age group was growing faster than I was ageing. I thought this was a Doctor Who moment. It was wonderful. It did not endure, but there we go.

When we accompany the massive increase in male and female longevity with the reducing birth rate, the end product is a rapid increase in the share of the population beyond normal working age. You can see in charts 4 and 5 these projections of the change in the share of the population since 1971 up to about 2030 by age group.

You can see that the share of the total population accounted for by the 65-plus, is expected to increase by six percentage points, while the shares of all those in the 20 to 64 age group falls away, and that of nought to 19 plummet. These are U.K. data.

The Demographic Challenge

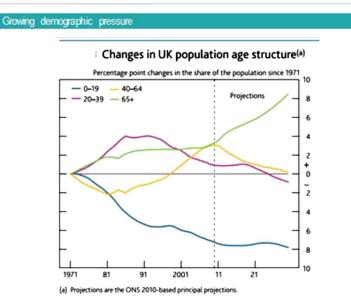


Chart 4. Growing demographic pressure

The Demographic Challenge

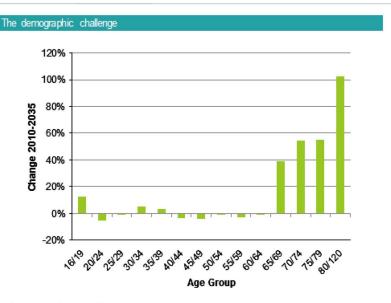


Chart 5. The demographic challenge

Treasury data that I saw last week showed that it is, if anything, even worse in Scotland. The ratio of those aged 65-plus to those in the standard working age group of 16 to 65 will be some 4 percentage points higher in Scotland by the 2030s than for the U.K. as a whole. The impact of this demographic change on the economy and on the public finances will be of substance.

Maybe we can offset some of that by in-migration but it will be difficult for Scotland to have a different migration policy from the rest of the U.K. while part of the U.K. As Robert Wright from Strathclyde University is quoted as saying in the Herald just last week, there is a difference in political view about migration north and south of the border. While the coalition government is less keen on any increase in numbers than our administration might be, it is going to be slightly difficult for an increase to take place of any scale.

Also, I would argue that if you had an in-migration of young people for a limited period that may just delay the demographic time-bomb rather than actually defuse it.

There can be also mitigation of the impact by changes in working age and pension age, and that is taking place and that will have to continue to take place. But it is not easy. The stresses that that change provokes are clear to us all.

We will also face rising costs for the public finances. Sir Harry Burns will no doubt have said to you last year that the increase in the old age group is not necessarily an indication of an increase in healthy retirement years. It is, sadly, an increase in unhealthy retirement years, with all the costs that that involves.

So, a massive increase in costs for the elderly alongside a reduced number of people of working age paying taxes, is a very nasty, toxic cocktail to add on to the problems that I have already described.

The public finances will be constrained post-recession because there will be a necessity to further reduce debt and contain deficits because actual and trend GDP growth will be slower and because of the marked impact of demographic change.

That is not all. There is just one more factor of substance to introduce which is dealing with climate change and the broader environmental challenge.

There is no chance for a full discussion here. I would mention that I do not see how we can base our expectations of lowering significantly greenhouse gas emissions in energy generation, transport, housing and infrastructure generally, without significant financial costs being involved. Sure, we can have technological change that reduces the extent of those costs, but there will be significant financial costs and they will fall on some combination of households, businesses and the public finances.

If the costs fall on the public finances, that is another direct hit on those finances, another addition to the squeeze. If they fall on households and businesses, then the result is slower growth and, indirectly, that puts more pressure on the public finances.

I could also add that Scotland remains a highly unequal society and future governments may decide that the public will is there to work to reduce inequalities and that would mean a rebalancing of priorities away from growth towards equity, particularly if it is felt that during this extended recessionary period we have been through that the inequalities have been extended and have caused more angst. That again will cause squeeze.

I would also like to see more expenditure on some policies which will bring great benefits in equity and efficiency in later times – like 'early years' investment, which I think is a critical requirement. It is going to be very difficult to persuade any government to put substantial resources into policies which will take 10 or more years to begin to pay off at a time when the public finances are so squeezed. It is difficult.

I am drawing towards some conclusions. I have always believed in the old adage that there are two types of economists: those who do not know and those who do not know that they do not know. I always try to beware of falling into the latter category. So let me try to be careful. I do not know when we will leave recession. I do not know with any degree of certainty what our economy will look like post-recession.

But I do hope that I have begun to identify some of the factors that will lead to it being very different from the "nice" decade and previous eras.

So what do I think about life in the next decade? I think that we are going to have a continuation of low interest rates. I do not see any inflation challenge. I do foresee tight fiscal policy, and tight fiscal policy can be accompanied by continuing loose monetary policy, low interest rates.

I do not see the Monetary Policy Committee moving to increase interest rates or reversing quantitative easing in anything but a very slow and cautious manner, even when growth is reinstalled. I think the base rate should stay right where it is for some time and that the new norm for the base rate and for bond yields is likely to be well below the old.

I do not see any boom years in prospect for the equity markets. Global growth is not going to go back to past peaks, and even China now is beginning to struggle. These are difficult times globally as well as domestically. Corporate profitability will be constrained. Equity markets will be subdued.

The combination of a relatively low return on assets and a low discount rate for your liabilities will place continuing pressures on pension funds. I am glad I am not a chair of a pension trust any more. Likewise, the housing market is not going to recover to its old norm. It may recover some lost ground gently. We are not going back to anything like year-on-year double digit increases; so household wealth will disappoint.

Income growth will be subdued in the low inflation environment and, given the tight story I am talking about, household wealth is not getting back to where it was. We will see the times when people leave working age and start taking pensions steadily drifting upwards, both because of the pressure on the public finances and also because individuals will face much more limited pension pots than prior generations and will not have accumulated housing wealth – no windfall gains for them from the housing market.

But most of all, I think we are going to face decades of tough decision-making on the public finances. I repeat decades of tough decision-making. And we do need to work towards a rational, transparent and informed approach to decision making on all public finance matters. That applies, if we are in an independent Scotland or one subject to further fiscal devolution or something more akin to the status quo.

There is no escape from the tough times, and there is no escape from the need for tough choices. Constitutional change will reduce neither the immediate financial pressure nor the need for rational, transparent and informed decision-making going forward.

I know that this is contentious ground, and I am deliberately trying to avoid any political slant on what I say. I would like to cite therefore a recent submission, to the Finance Committee at Holyrood, by the Royal Society of Edinburgh, which I was party to but which was not my sole responsibility.

Some of the comments and proposals we came up with were as follows. We stressed the need for a strategic approach to be taken to ensure that spending decisions support the Scottish Government's key objective of achieving sustainable economic growth. That has to be at the core of what you are doing the whole time.

We called for a treasury function which would be created within the Scottish Government and tasked with undertaking full cost benefit analysis and opportunity cost assessment of all policy options.

If there were some question about public exposure of that analysis, then we suggested that an independent body akin in status to the Office of Budget Responsibility at U.K. level should be set up as a vehicle through which these discussions can take place, believing that that will greatly enhance public debate and understanding of the realities and implications of budget cuts and be able to answer the numerous questions put forward in the public arena such as what the protection of funding for some flagship projects means for the funding of other areas.

We also saw real benefits from informed input from the likes of the Institute of Fiscal Studies, which we need to be as rigorous and vigorous in Scotland as it is at U.K. level. We thought that that would actually place the Finance Committee at Holyrood, in a much stronger position to fulfil its remit of examining the Government's spending plans and also generally facilitate more informed, high-quality debate on draft budgets by MSPs.

In his speech last week, Bob Black called for a standing commission on resources and performance, independent of government and informing Parliament, and also for a safe place in which policy can be discussed without the limitations imposed by party politics.

There is a great deal of consistency between what Bob is saying and what that RSE submission is saying. The latter was framed in the context of the 2013–14 budget, but I would argue that, given the expectation of public finance pressure going forward, both the RSE suggestions and Bob Black's are most distinctly pertinent in the longer term context and merit serious attention.

I believe fundamentally in transparency. I do not believe in hiding in smoke filled rooms. I believe in evidence-based policy-making. I believe that in these challenging years that are ahead of us, transparency and evidence-based and analysis-based policy-making and decision-making on public policies and the public finances arising from that work will be ever more critical.

We must know where we wish to head. We must make the best fist we can in moving in that agreed direction in these difficult times. Post-recession life will not be easy for anyone in the private sector or the public sector. But more open discussion of the issues can help and we can move to the best world that is feasible under the circumstances. Thank you very much.

The President: Thank you very much Jeremy for that stimulating, slightly depressing but I think very realistic, view of the profoundly different economic climate, post-recession – whenever we will be able to use the word "post-recession".

I now throw the meeting open to the audience.

Mr J. S. R. Ritchie, F.F.A.: How do you think the Eurozone Crisis is likely to play out, and influence your prognosis for the U.K. and Scottish economies?

Professor Peat: The real, dramatic problem of the Eurozone crisis is Greece. Spain, Portugal, Ireland, and even probably Italy, can work their way through. They will go through even tougher times than we go through but they can make it to the end.

Greece is so dissimilar from the other economies that there will be real difficulties in retaining Greece in the Eurozone because of the traumas that they would have to go through. We already see they are severe and are leading to civil strife.

What Greece needs is a good, substantial devaluation. It cannot do that while it remains in. I do not see any way that it could be achieved.

The way I see policies developing, the effort is being made to secure the future of the zone for the other countries I have referred to and get to a position where there is confidence that the zone will survive with the core plus some of the peripheral members, and then permit Greece to exit gracefully, but not to go now at a time when it could lead to a view that the others would follow.

The efforts that have been made by the European Central Bank, with a degree of support from Germany now, which is absolutely critical, will lead to that conclusion.

Frankly, the only other option I can see is Germany popping out the top, Germany moving out and restoring the Deutschmark on a much stronger basis than the Euro because it is so out of kilter with a number of countries.

I remember when I used to visit Germany that the Germans said that not all Germans believe in God but all Germans believe in the Bundesbank. A lot of them would like the Bundesbank back. Politically that is not going to happen. But I cannot see Greece staying and that being consistent with getting through this crisis.

Mr P. M. Shelley, F.I.A.: You talked about how important it was for measures to instil confidence and wondered where you would start with instilling confidence.

Professor Peat: Confidence is critical. What I might do is make a one-year reduction in VAT and this should get people to believe that there are ways in which taxes can go down as well as up. I would then try to encourage people not to spend excessively, not to get their debt levels back up, but just to be a little bit more comfortable and a little bit of easing on their spending.

I would expect that such a VAT reduction would create a pickup in demand and help kick-start the economy.

Something has to kick-start it and I do not know what else does it. Business investment is not going to do it. Exports are not going to do it. The consumer has to come through at some stage. Just something that gives consumers a little bit more hope may be about all that can be achieved.

Confidence is critical and I think we do face problems. The way in which the Government has operated has not always let them be seen as wholly efficient over the last period. There is no easy answer to your question.

Mr R. S. Clarkson, F.F.A.: As a Scottish actuary, our motto used to be *ad finem fidelis* which I would translate as faithful to the long-term goal. One thing which you said is that the trend economic growth rate might be nearer $1\frac{1}{2}$ %. I have my doubts that can be achieved.

I would be interested if you have any comments on our education status in the U.K. You will know the comments made by the CBI. Compared to what I have seen in developing countries, Singapore, China and Korea, I think we are slipping behind.

To kick-start, confidence is a fragile thing. If you go back to 1985 a Conservative Chancellor took away life assurance premium relief. At the moment if you invest in venture capital trusts you can get 30% tax relief. These are very specialist vehicles.

Might there not be a case for thinking of some radical way of encouraging long-term savings from the population into something other than gilts, which pension funds are forced into by accounting rules, or the housing stock, which I agree has perhaps been a little unfortunate in past decades?

Professor Peat: It is very difficult to know where to invest at the moment. Where is your secure low-risk decent return asset? It is not there any more. Encouraging people into slightly higher risk areas may be the right answer but for much of them the risk is quite serious.

I approve of the Government policy to introduce work place pensions across the private sector. This present move is something that makes sense because individuals need to be given the right encouragement to build up their pension pots. I am not sure on life-insurance relief. I will leave that to others who know better than I do. We need to encourage a reasonable degree of saving across the population.

One of the problems with the debt and wealth balances that were used to look at is that the debt tended to be in one pocket of the economy and the wealth in another. So if you did debt to wealth calculations for the whole economy, it looked okay. But if you broke it down to who had the debt and who had the wealth, you realised that that was not the case.

On education in Scotland we have an extremely well funded higher education system at the moment. We have a paucity of funding for further education, in my view. A lot of that has been used to deal with the promise to give an opportunity to all who are not in employment, education and training.

That is a very reasonable promise to give. But it does mean that the further education sector, which should be dealing in a lot of the mid level skills, is being squeezed.

Our graduate level turnout is not bad but we face the dual problems of a very high percentage of the population who do not go anywhere, who do not really participate in the economy,

which is why I want the investment in early years, and lack of emphasis on the craft skills, the middle level skills.

I think we also face a problem that employers do not make use of people with those skills. I have looked at some comparisons with other economies. People who turn out with further education skills in Scotland – and I think it applies in the rest of the U.K. – tend to go into a little box and be left in that box.

In other countries, such as Scandinavia and Germany, they are put into a job and allowed to grow and they are encouraged to grow.

We have not only to develop the right Further Education, Higher Education and school education, but also nurture people and expect them to develop and encourage folk to develop.

So I would put more money into early years. I would try to get rid of the 15% of the population that do not contribute for terrible reasons of different types. I would really look at the HE/FE balance a little bit, and would also encourage employers to do everything they can to make the most of the talent and not to treat a barman as a barman forever but someone who has the potential to be the manager in a year's time.

Ms C. L. Kingston, F.F.A.: As a current pension trustee we spend a lot of our time arguing about equity risk premiums. I was wondering if you were still to be a pension trustee what level of equity risk premium would you be arguing for and why?

Professor Peat: The time has come to dip toes further into the equity pond; it is necessary now. The catastrophic risk has tended to dissipate. We are talking about a time when well-based safe equities should be a higher percentage of portfolios going forward than was the case in the past difficult years.

Pension funds have to move in that direction. I would rather that they moved in that direction than in some of the alternative investment opportunities which kept coming our way: I did not see these as ones that I was particularly tempted by. When you got down to them, the risk was much more significant than within equities a lot of the time.

So you have to get back into equities more but cautiously. There are good performing equities out there. Certainly do not look at ones that have most of their earnings in Greece!

Mr G. M. Bagot, F.F.A.: I am interested where pension fund money or investments might be made and what advice and guidance might be given to thousands and eventually millions who will be setting up and funding their Nest pension pots. Particularly for these new, younger Nest investors such guidance is paramount.

Professor Peat: There is a great deal missing in financial education generally. There should be more emphasis on financial education for young people throughout schools than is the case.

People need to understand better, and not just to get 'parroted' advice but to get the context and to be able to think through for themselves.

People starting off on their careers now have a heck of a time ahead of them. They have to have the best possible financial advice and then accept that it is going to be a tough road for the next decade at least.

Mr P. Bruner (Sustainable Heat and Power Ltd): I believe the last Ernst and Young report that came out in 2011 specified that there is a £370 billion shortfall in the infrastructure investment needed to meet the requirements of the U.K. national infrastructure plan by 2025.

Do you have any idea about how we might, in a policy sense, encourage that scale of investment to be unlocked, and might the green investment bank have a role to play there?

Professor Peat: The infrastructure story is a very sad one at the moment. In Scotland in the 2012–13 budget there was a statement that some £250 million was being transferred from current expenditure to capital expenditure. No one knows what has happened to that. How is the Forth Bridge actually going to be funded? Do you understand how the Scottish Futures Trust works its way through this? I find it very difficult.

I actually believed in the PFI for a long time. I still do believe that if you get the right risk transfer and the right arrangements, the benefits, particularly from the operating phase, can be such as to lead to it being a much more efficient way of delivering projects.

But so much has gone wrong in PFI/PPP that it is going to be difficult to see that route progressed. It is going to be very difficult for governments, Scottish or U.K., to cut back on current expenditure in order to finance capital expenditure at this time. But that is what they have to do. They have to do that for skills and for education, just as they have to do it for infrastructure.

We have to have that continuation of infrastructure development and skills development to have any chance of being competitive globally as we go forward. But in tough times companies cut their training budgets. Governments cut their infrastructure budgets. That is the easy solution and it is the wrong solution.

Are there ways in which pension funds can be used for this infrastructure availability? About a year ago George Osborne went out to consultation on this. We hosted a seminar up at The Mound to talk about it. But nothing ever emerged.

Are there ways in which pension funds could be deployed to the low risk end of infrastructure in a way that would actually permit more infrastructure development to take place at a time of scarce finances? I think there may be. That is the type of alternative investment vehicle, properly developed, which might make some sense. Not at the risk stage but at the subsequent stage.

We have to be innovative and persuade Government that they have got to look long-term. We must not look short term and be myopic; we have to look long-term but that is tough because that means squeezing in the short-term. Voters tend to think short-term, particularly in tough times. But we have to get the infrastructure right. So there are some ideas there that one could do.

The President: What are your views as to the effectiveness of quantitative easing in the U.K. as a monetary tool?

I struggle to understand it. I can understand if you keep short rates down in our economy then that should help stimulate a number of things but I struggle with understanding the combination of effects that you get by artificially depressing the long end.

Professor Peat: I sometimes wonder whether quantitative easing is fiscal loosening undertaken by the Bank of England because the Treasury cannot do it, and whether it is just pumping liquidity into the system, and where it actually goes.

The Bank of England have carried out stylised exercises where they have compared what would have happened with what has happened and showed that it has led to growth being a quarter of a per cent per annum better than it would have been without. There has been some positive input.

But I do not think it is leading to banks being in a much better position to lend. I do not think it changes the interest rate at which you are prepared to lend to businesses significantly. I do not see how it is feeding through to the economy.

It is doing something in some widespread manner. Through the ether it gets there without anyone actually knowing how it works. Other people have actually suggested whether there is some way in which quantitative easing could be used to direct funds towards infrastructure.

Are there ways in which it could be channelled to particular activities rather than just generally pervasively through? But it is a form of fiscal loosening.

I asked someone from the Bank of England the other day how come QE was going on? Was it not contradictory to fiscal tightening? I did not actually get an answer so that maybe was a stupid question or maybe he did not want to answer, I do not know.

I am glad that they have done it because I think we would be worse off without it. But I am not sure it has been done in a way that has maximised the benefit from the sum of funds that are involved.

Mr D. B. Martin, F.F.A.: My question touches on the answer before the last one. I realise that you do not want to be political but there is a big debate in Scotland at the moment about the funding of benefits, particularly free benefits, and the question as to whether that can continue or not.

Is it your view that the need for infrastructure costs to be paid for could be met by a reduction in benefits? That is clearly a highly political point in Scotland at present.

Professor Peat: It is my view that there should be no totems which are not discussed and considered as policy options within the climate we now find ourselves.

It is right that one should look at the cost of free prescriptions, of bus passes – I carry mine proudly around – and actually look at what the opportunity costs are of what is not funded as a result of those activities and what the benefits are from those expenditures in the context of the objective of enhancing sustainable growth.

One needs to be open and transparent in considering whether there are options to some of the universal benefits – council tax freeze, for example – where there are options there which merit consideration in order to transfer funds into early years, into infrastructure, into other areas.

That should be an open and transparent debate and one should not immediately shout that we cannot look at that. They need to be looked at, and they need to be looked at objectively and rigorously.

That is something that would be helped by having a Treasury function within the office; having an OBR function; having the IFS engaged to look rigorously and properly.

One needs government examination; one needs an arm's length organisation working with the Government, and one needs good, rigorous and well-resourced think tank type bodies actually to cast light of these issues.

One does not want immediately to slam the door and say you cannot think of that.

Mr D. Clarke (Bloomberg): You were quite emphatic about there being a low inflationary environment. In some ways it is an unfair question to look for evidence of something that is not happening, but what evidence do you have to have such strong belief that we will not have inflation going forward?

Professor Peat: Inflation can come from either domestic or external sources. The world we are in at the moment, if you look externally, has this great movement of production capacity being enhanced in China, India, Brazil and Vietnam, wherever you look, and that we have a decade or two ahead of us of low-cost production of a number of goods that can be imported.

I do not think that we are heading for another oil crisis unless the Middle East explodes, in which case there will be problems. The costs of shale gas are ridiculously low and there are other means. There is plenty of coal throughout China. I am told they have just opened eight big, deep mines in one particular area.

There is plenty of coal; there is plenty of shale gas; and I believe that the oil price probably went too high. So I do not think energy prices are going to explode. I do not think manufactured goods prices are going to explode.

Increasingly, traded services are going to be spread across the globe to these lower cost, increasingly efficient, locations. I do not think we will get imported inflation.

Domestically, I think we have all been scared stiff by what has happened. We are now in our third or fourth year of a reduction in real incomes. That is tough times, but I do not see us moving suddenly to 5% real income increases in the private or public sector in the period ahead. People will be much more worried about how to sort the pensions out.

There is so much more that is going to keep a cap on incomes. If you are not getting it imported and you are not getting incomes growing significantly above the low inflation environment we are in now, I do not see where the inflationary pressures come from.

That is why I think that for the next several years those factors will lead to inflation remaining at, or around, 2%.

The President: I should like to draw things to a conclusion and firstly say thank you very much to the audience for joining us.

May I draw out two or three key points? The phrase Jeremy used "profoundly different economic climate post-recession" are words which certainly rang in my ears. The arguments that debt will be

at significantly lower levels, GDP trend growth down, demographic changes and climate changes, each adding to the pressures, were very clear messages. Thank you Jeremy for that.

Your conclusion that rates and inflation will be low for longer is one that feels correct. But quite how long and how low is the real challenge for us. Those are very important parameters for the work that we do as actuaries.

Jeremy, thank you very much indeed. It has been a stimulating presentation and discussion.