The Eurozone Crisis



Background

Since the beginning of August 2011, it has been clear to the markets that the previously agreed bailout for Greece was going to be insufficient to stop Greece defaulting on its debt obligations. Whilst a complete bailout could be afforded by the Eurozone countries, they could not afford to also bail out Spain and Italy, should either of these countries require help in meeting their sovereign debt obligations. Italy in particular has been highlighted most recently due to its cost of borrowing having risen significantly - this raises serious concerns for 2012 when Italy needs to refinance some £300bn of debt - borrowing at the rates implied by markets today would not be sustainable for Italy.

Withdrawing from the Euro for either Greece or Italy will be particularly painful for the entire global economy (see the appendix to this note). Whilst there are still certain market and financial options open in theory to address the situation, the politics makes using these tools extremely difficult. For example, the likes of Germany and France would not be prepared to allow a change in rules so that Greece or Italy could issue debt that they are jointly and severally liable for, even though in the case of Italy this may bring borrowing costs down to sustainable levels. As another example, German citizens are unwilling to further bail out Greece due to its reluctance and ineffectiveness at implementing austerity measures that have been imposed on Germany several years previously (such as increasing the state retirement age).

Europe is a key area for world trade and whilst the fiscal position in aggregate looks favourable compared to the UK and the US, the current uncertainty is causing negative sentiment and inhibiting growth. This comes at a time when growth rates in some emerging markets are falling, partly as a result of central bank intervention to address over heating and inflation, and when the economic recovery in the US has all but stopped.

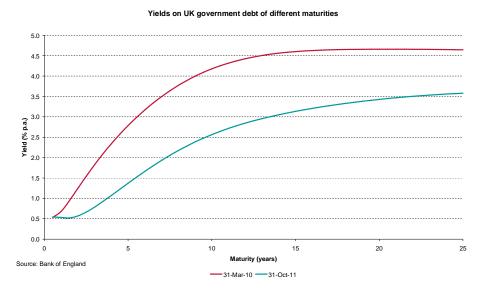
Many are now fearing that there will be another recession and / or a prolonged period of low global economic growth. This is in contrast to the sort of recovery that often follows recessions that was expected following the banking crisis of 2008. Indeed, many European banks are still in crisis due to their exposure to sovereign debt of these troubled countries, putting a further squeeze on credit which impacts growth.

The UK

What does this mean for conditions in the UK? During the beginning of 2010, the UK was warned over its coveted AAA rating for borrowing due to large debt relative to its GDP, a large structural deficit (the annual budget requires additional borrowing) and an unclear plan of how the debt and deficit would be reduced. The austerity measures introduced since the new coalition government came to power have not necessarily been popular with all parts of the

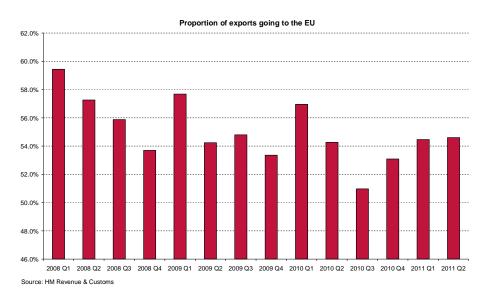
public and their success or otherwise cannot be judged for some time. However, if the rate at which the UK government can now borrow is anything to go by, the market has given the UK's plan an overwhelming thumbs up, as illustrated by the chart below. This is of course more than just a resounding endorsement of the UK government's finances, it is also a reflection of investors' flight to safety away from risky assets, such as equities.

Chart 1



However, the UK is not an isolated area unaffected by other parts of the world. The situation in Europe is especially relevant to the UK given the amount of trade the UK does with Europe - should economic conditions deteriorate in Europe, they will also deteriorate in the UK. The following chart shows what proportion of UK exports go to the EU.

Chart 2



Whilst this might be slightly overstated due to some exports going to Europe en route only, it shows that the UK economy is heavily dependent on conditions in Europe. The next largest destination is the US, with 13% of UK exports for 2011 to date (to end August). The largest destination for exports outside of Europe and the US is India, being responsible for 1.5% of exports to date for 2011.

Resolving the crisis

As can be seen from the above, it is very much in the UK's (and the global economy's) interests for Europe, and the Eurozone in particular, to address its issues. Dominating headlines has been the impact of austerity measures as indebted countries attempt to repair their balance sheets - from violent demonstrations on the streets of Greece to fights in Italian parliament.

So, if these indebted countries reduce their spending will it resolve the issue? Unfortunately not. A government or country needs to balance spending with revenues. The difference can be used to pay debt or invested elsewhere if a surplus, whilst any deficit needs to be financed by borrowing. So, reducing spending is only one part of the equation and all governments' budget reducing plans have to rely on an increase in tax receipts, which will only occur if there is growth. Unfortunately, because reducing spending reduces demand in the economy, it will also reduce tax receipts and therefore there has to be greater growth from the private sector.

Clearly there is a balance to be struck here but finding that balance is difficult, particularly in an environment where uncertainty makes consumers unwilling to spend and companies unwilling to invest.

The above paints a bleak picture and is why many are predicting a prolonged period of low economic growth.

What does this mean for companies?

The Avon Pension Fund is particularly exposed to the general health of companies through its investments in equities and corporate bonds, despite the fact that exposure to any one company is limited by holding highly diversified portfolios. During the financial crisis of 2008 equity prices and the prices of corporate bonds fell significantly and many companies feared they would collapse, indeed many did.

This crisis has been caused by government indebtedness rather than the indebtedness of banks, consumers and companies (although there is still overhang for each from the crisis). However, companies also rely on demand from consumers to purchase their products and services - does this current crisis mean that there will be also be an increase in defaults and bankruptcies within the private sector? The simple answer is yes, but the extent to which this

will occur is debatable. Since the 2008 crisis, companies (especially large global companies to which the Fund will be exposed to through equities and corporate bonds) have been reducing their leverage, cutting waste and generally getting leaner. This has made them much more resilient to the current downturn and, in contrast to daily negative news regarding sovereign debt, reported earning and profits have generally met or exceeded expectations (not in all cases of course).

An example of the contrast to 2008 is the impact on corporate bond prices. The graph below shows corporate bond yields from the end of 2006 to the end of October 2011. It is true that the extra return from corporate bonds over government bonds has increased - a sign of risk aversion and concern of credit - but unlike 2008 the actual borrowing costs for companies in general has decreased.

Chart 3



The above suggests that there is not a significant increase in concern over the credit worthiness of companies. However, this in contrast to the impact on equities, which have seen significant falls over the past few months. It was mentioned earlier that earnings of companies had appeared to hold up well. The following shows the ratio of the price of UK equities to earnings. An increase in this measure means that equities appear to be more expensive relative to previously and vice versa.

FTSE All Share Price Earnings Ratio



Source: Thomson Reuters

The chart above shows that the ratio has fallen, suggesting that equities have become relatively "cheaper" than they previously were. However, an increase in price is not the only way for the ratio to increase. The fact that it has recently fallen suggests that market believes there is a risk to either the current level of earnings of companies, or that the assumption for growth in earnings has reduced. This is consistent with the picture painted at the beginning of this note regarding concerns over the impact on consumer demand from the current market concerns.

Are there any prospects for growth?

Reading the commentary above, one can be forgiven for thinking the economy and markets are only going to get worse. This is not true. It has already been stated that the finances of the Eurozone on aggregate are reasonable compared to other countries. At the beginning of the year, sentiment of the Eurozone was positive. Strong growth in Germany and France was providing a reasonable growth rate for Europe as a whole. Growth in Germany in particular was driven by growth in their emerging market exports.

It was accepted that the UK and US would feel the pinch of austerity and households continuing to deleverage, yet both were seen to be recovering and the prospect of a "double-dip" recession looked more remote. Whilst the possibility of recession has no doubt increased, there are positive signs in some sectors and regions. Companies, having cut costs, will have to invest and hire to deal with even moderate growth, which will feed through to other parts of the economy as more people in work will demand more goods and services.

The emerging market growth story is also an important factor. Whilst growth may have slowed and there are concerns over inflation, many countries have much healthier balance

sheets than their developed counterparts and so are not burdened to the same extent by debt. These countries cover huge populations (such as India and China) and a rapidly growing middle class will increase demand for goods and services that will ultimately benefit the world economy.

This dichotomy of prospects can be seen in the volatility of equity markets. Values have fallen overall in previous months but when, for example, there are indications that European politicians are working effectively to resolve their problems, the subsequent rises in equity markets are significant (albeit to a level still significantly below the peaks reached in 2011).

Can the Fund protect itself from the current economic concerns?

Whilst equities have fallen recently, they are likely to remain volatile in the current climate and could fall significantly further. The Fund could therefore sell its equities and retain cash, for example, to protect the capital value of the Fund. However, this would significantly affect the expected return of the Fund. Also, given the value of the equities has already fallen, the Fund would want to benefit from an increase in equity values which could occur if sentiment improves.

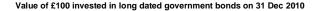
A temporary strategy of selling equities now to purchase them later is extremely risky as the price in the future could be significantly higher and timing can be crucial - a strategy of selling low and buying high is not advisable!

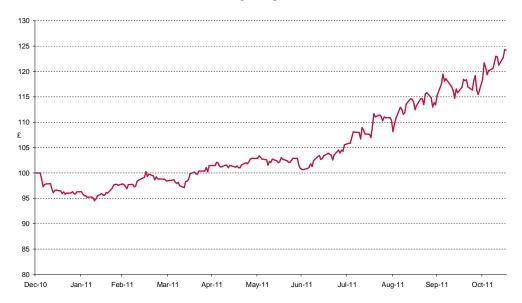
The Fund has already protected itself to some extent by diversifying away from equities. There is a 10% strategic allocation to each of property and fund of hedge funds, both have protected value relative to equities over the past few months.

There are specific contracts or strategies that the Fund could use to protect it from further falls in equity markets but still allow the Fund to benefit from price increases. For example, the Fund could purchase a **put option**. This would give the Fund the right to sell equities at a level specified in the put option, thus protecting the Fund from any falls below this level However, such strategies are currently extremely expensive given current market volatility and therefore further falls would have to be even greater than the cost of implementing the strategies for the strategy to be profitable.

The impact on and prospect fo UK government bonds

The chart earlier showed the fall in government bond yields. This corresponds to an increase in government bond prices and the chart on the following page shows that there has been a particularly sharp rise over the past few months.





Given this recent, sharp increase in bond values, are the Fund's UK government bond holdings now in danger of falling in value? Should yields return quickly to previous levels then there would be a sharp fall in values. However, there is a general expectation that interest rates and government bond yields will remain low for a prolonged period of time, especially given the current economic uncertainty.

Whilst the prospects for a sharp fall may not be a central scenario, current bond yields mean that the return from government bonds will be low unless there is a further fall in bond yields from the already historically low levels. For example, chart 1 shows a yield of 2.5% if lending to the government for 10 years - that is, your return from a government bond that matures in 10 years would be 2.5% p.a.

Should the Fund consider selling its UK government bonds for an investment that is expected to provide a better return? The reasons for such a move are clear - that there is a risk of rising yields (falling prices), and the low expected return. However, there are also reasons to maintain the investment: the change in the value of UK government bonds provides a match to the change in the value placed on the Fund's liabilities, although this matching is quite limited given the small allocation to UK government bonds. The bonds also provide diversification from the Fund's growth assets, as they have tended to rise in price at times when equity markets have fallen.

One possible compromise is to make a switch on a tactical basis to corporate bonds. Chart 3 shows that whilst corporate bond yields have also fallen, they have not fallen by as much as government bond yields. The Fund made a profit of approximately £4m from making a switch (of 2% of the total Fund assets) from government bonds to corporate bonds and subsequently

reversing that switch in 2008/2009, although the difference in corporate bond and government bond yields was larger than it currently is.

Prolonged low economic growth

Whilst the Fund may be able to withstand this equity market volatility in the short term, it also needs growth in the long term to be able to meet its obligations and pay members their benefits.

If there is to be a period of low economic growth, which as explained earlier is a real possibility, should the Fund look to other asset classes to generate the required returns? The following is a list of asset classes that may provide an attractive risk adjusted return profile in these circumstances, although any decision on whether to invest in these opportunities would need to be considered in the context of the Fund's overall investment strategy.

- Corporate bonds: we have noted earlier that the fall in corporate bond yields has not been as great as the fall in government bond yields (see chart 3) and therefore they may appear relatively more attractive than government bonds given the comments of the relatively healthy state of private sector companies (at least compared with 3 years ago).
- Overseas infrastructure: many parts of the world are still growing and developing their
 infrastructure. The governments of these countries rely on private investment as well
 as public funding and therefore returns can be attractive, particularly for long term,
 stable investors. This is perhaps in contrast to UK infrastructure, where austerity
 means that there will be fewer projects and those that are undertaken may have a
 much lower expected return than available elsewhere.
- Residential property: a housing shortage and difficulties in obtaining mortgages have meant that rents on residential properties have generally held up well. Investment opportunities that allow individuals to purchase, or work towards purchasing their own home, have also become popular.
- Secured loans: whilst generally of a lower credit rating than the Fund's current investment grade corporate bonds, the relatively healthy condition of companies as discussed above may make current prices and yields on these loans look attractive.
- Income equity investing: whilst a number of companies will be affected by a reduction
 in demand, some have resilient or non-cyclical earnings, particularly global leaders.
 This approach focuses more on returns from income generation than capital returns.
 Given the recent fall in equity prices, some of these companies look relatively more
 attractive as an investment.

We look forward to discussing this report.

Appendix

Greek default within the euro is the only real option

By Robert Jenkins

FT, 8th November 2011

It was a possibility feared but unspoken – until last week. Suddenly a Greek exit from the euro was on the table. "Are you in or are you out?" Many Europeans no longer care. They should. Their leaders do. Here is why.

Greece will restructure. It can do so "within the euro" or it can do so "outside the euro". The difference is crucial. If you already understand the distinction, stop reading here. If not, you may soon wish you had. For here is how an exit of Greece from the eurozone would play out:

- 1: The Greek cabinet decides an exit. Rumours begin to circulate. Greek citizens withdraw their euro deposits while they are still euros and not drachmas; supplies of banknotes run short; businesses shift their euro balances abroad. Foreign lenders to Greek businesses cancel credit lines. Banks close their doors.
- 2. Following an emergency cabinet meeting, the Greek government announces the new drachma. Capital controls are imposed and border patrols dispatched to enforce them. Public sector debt is redenominated in local currency. The value of the drachma plunges. Greek inflation soars.
- 3. Disputes erupt over private sector debt (for example a German bank's loan to the Greek subsidiary of a multinational such as BMW). Is the obligation still a euro loan or is it now drachma-denominated? If it is a drachma loan then the German bank has a problem a drachma asset worth a fraction of its euro book value. If, on the other hand, the obligation remains in euros then both bank and company have a problem as the Greek borrower now has a euro loan which it must service from depreciating drachma income.
- 4. Contagion commences. Portuguese citizens worry that it might happen there. Portuguese depositors begin to withdraw euros for fear they will soon be escudos. Companies in Portugal transfer funds abroad as a precaution. Banks close. Soon, similar scenes occur in Ireland with echoes elsewhere along the Mediterranean. Banks cease dealings with their "peripheral" counterparts.
- 5. Confusion mounts over the magnitude of European bank exposure to the private sector of the periphery. Trading with and between Europe's banks stops. Bank stocks crater and haven assets rise. In response to an inward flood of capital Switzerland imposes punitive negative interest rates on non-resident deposits.
- 6. Bank lending across the EU ceases. Economic activity halts.

I could go on but you get the point. It is not a pretty picture. Let me just add the fact that European banking exposure to the private sector (corporations and households) of the

"peripherals" is a multiple of that to the public sector (government debt) of the area. These numbers are not secret. They have appeared in the Financial Times.

The associated risks are what used to be called cross-border risks – a term well known to US bankers of a certain age who once recklessly lent dollars and pesos to the Mexican public and private sector – only to discover that sovereign risk involved not only the risk that the sovereign might not pay but also that the private sector might be prevented by law or currency changes from doing so.

Banks in Europe can be forgiven for making this mistake. The advent of the eurozone was to have abolished the notion of cross-border risk, n'est-ce pas? Was not a Munich bank lending to BMW Athens now akin to a New York bank lending to General Motors in San Francisco? That was the idea. Seemed sound, right? It is, if the eurozone hangs together.

A number of senior officials understood this early on. Others have taken time for the implications to sink in – so focused has been everyone's attention on sovereign bond-related exposures. This explains the slow but predictable shift in rhetoric: from no default to "orderly default", from default to "default within the euro" and more recently, "we will defend the euro at all costs".

Yes, the European leadership has grasped the gory details. They must now share them with their constituents. The peoples of northern Europe need to understand that their interests lie not in hounding the Greeks out but in keeping them in.

And referendum or no, the Greek government must explain the consequences that a Greek exit from the euro would have for the Greek economy and its citizens. A Greek default within the euro is manageable and will be managed. Greek default outside the euro involves risks to a different order of magnitude.

This issue has been the elephant in the room – visible for all to see should anyone care to look. For a long time no one cared to. No one wanted to. Now they must.

Robert Jenkins is an external member of the interim financial policy committee of the Bank of England. He writes in a private capacity

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