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De Koning, Kees

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Pension Savings and Economic Growth Drs Kees de Koning

1. Introduction

Pension savers have had a rough time over the last decade. In the U.K. the real rate of return was a negative 0.1% over the period 2001-2010 and -1.1% over the period 2007-2010, according to the OECD Pension Outlook 2012. The same report indicates that what started as a financial crisis in 2008 amplified by a stock market crash and a banking rescue program absorbing 4% of GDP of the G20 group of countries, became an economic crisis in 2009 when real GDP growth turned negative to the tune of -3.8% across the OECD countries and unemployment rates rose on average by 44% from 5.9% to 8.5% of the labour forces in the same countries. This was followed by a fiscal crisis. In the years 2006 – 2007 the average OECD countries' budget deficits were 1.2% of GDP. In 2009 the average shot up to 8.3% of GDP and over 10% for Greece, Iceland, Ireland, Portugal, Spain, but also for the U.K. and the U.S.

Regretfully pension savers suffer from financial crises through share and bond prices, they suffer from economic crises when the output of individuals and companies is reduced and real estate prices and company profits are under pressure. They also suffer from fiscal crises as doubts about government bond markets lead to investment losses or in the case of quantitative easing programmes lead to income and value losses.

This article does not focus on moving retirement dates till later, neither on extending the coverage of private pensions, but on the question of the macro economic links between funded pension savings and economic growth. The key in understanding what happens in economies is that risks taken by private savers in mortgage lending, in funding government debt and in buying company shares are risks which lock in all savers together for very long periods of time. Such risks can be transferred between savers, but collectively the savers cannot -in the short run- get out of the risks. In the short run, risks can only be liquidated at enormous costs to the savers, a highly inefficient method to protect long term savers, but also inefficient in the proper functioning of the capitalist economic growth system. If –in the short run- savers collectively try to exit the risks via the financial markets, the economies and the fiscal status of governments move into crises modes. As matters currently stand pension savers lose out from all three crises: a financial, an economic and a fiscal crisis. What is needed, are risk management methods, like economic easing, which help eliminate the gap between short and long term objectives of savers. A dream too far? Perhaps not.

2. The 2008 Financial Crisis

The financial crisis of 2008 was caused by banks underwriting and distributing doubtful debtors claims from the US home mortgage markets. The size of the sub-prime mortgage market was US\$ 1.2 trillion out of a total mortgage market of US\$ 10 trillion. Why sub-prime? The acceptance criteria for these mortgages had been loosened. 37% were interest only mortgages. 38% of these mortgages required no down payment i.e. 100% of home property value funded by the lenders. 43% of borrowers did not have to provide any proof of income and 80% of borrowers were enticed with a low start up interest period of two years, after which a major hike in the applicable interest rates took place. Of course, the buyers who bought these CDO packages thought they had the strong positive opinion of the U.S. credit rating agencies. Regretfully these opinions turned out to be fundamentally flawed. One bank went under: Lehman Brothers. Repossessions became common place and the U.S. S&P/ Case Shiller home price index dropped from an index value of 170 by the end of 2007 till 130 a year later. The effects of such reckless lending practises were spread around the world, through the international banks who bought those CDO's, to the government in the US which had to provide a major rescue package to the home mortgage markets, by helping out individuals as well as Fannie Mae and Freddy Mac. It also had a major impact on the building trade in the US and on the stock markets around the world. In other words the financial, economic and fiscal crises were interwoven. The origin of the 2008 crisis can be found in imprudent lending practices by turning savings into assets –homes- by giving home loans to people who – on a large scale- could not afford to pay back such loans. Once the savings conversion had taken place the risks were packaged and sold around the world. When the imprudence came to light in 2008, suddenly a large number of homes were repossessed and such numbers could not quickly be turned back into

cash, without the savers –this time to be found around the world- taking large losses on cash flows and on U.S. house values. As indicated in the OECD report, the ripple effects were enormous, much larger than the original size of the sub prime mortgage market of US\$ 1.2 trillion.

Just as an illustration, the US pension fund industry was equally affected. The DB schemes lost 30% of their asset values in 2008 or around US\$ 1 trillion. Probably the DC schemes, which have the larger share of the US pension markets, did not do much better. At the end of 2008 the size of the US private pension fund industry stood at US\$ 8.2 trillion and in individual retirement accounts another \$3.6 trillion was accumulated. Another effect was on US companies which underwrote the investment risks in their DB pension schemes. Due to the drop in financial markets and the effect of the Pension Protection Act of 2008, US companies had to double their pension deficit contribution from US\$ 45 billion in 2008 till US\$ 90 billion in 2009, a doubling in contributions in times of recession.

Last but not least, the derivatives markets accelerated market movements in the financial market place by trading heavily in credit derivatives. Combined with the stock market crash and the bank failures the derivative trades further enhanced the negative impact on financial markets in the world. It became a multiple of the actual loss on these mortgages. Together individuals, banks, life insurance companies and pension funds lost in savings terms and governments and companies lost in income terms. Banks exposed to higher credit losses will reduce lending levels, especially when house prices drop and economic growth stagnates. All in all these events turned into having a major multiplier effect.

3. Risks to Savers

3.1 Mortgage Lending Crisis

In the 2008 crisis, worldwide savings found their way into funding homes in the U.S.: a money conversion into fixed assets. Through imprudent practices these assets did not yield the expected cash flows and the loss to savers were compounded by the subsequent steep drop in U.S. house prices. Savers suffered both a cash-flow and a value loss. What is striking is that while some individuals or some banks, pension funds or asset managers might not have been individually affected, the collective of savers could not have avoided such losses. What did take place was a savers swap, between the original fund providers and the ultimate holders of the risks. The risks were embedded in the cash-into-asset conversion process. In normal circumstances it takes families often 20 to 30 years to earn enough to pay back their mortgages. Once the savings were converted into brick and mortar, the reverse process cannot be speeded up into a shorter time span than some 20 or 30 years. The collective of savers entered into a similarly long term cash to asset conversion process. Once the cash flows out of these assets became doubtful or non existent, the negative impact occurred. Trying to get out of such a process rapidly is not possible without the collective of savers suffering heavy losses, both in cash flows and in valuation losses. The U.S. case is a prime example thereof. Many individuals lost their homes and the home prices dropped steeply in 2008. The U.S. Government lost heavily both through supporting individuals and Fannie Mae and Freddie Mac as well as through a reduced tax income. Companies lost out as building firms and related services suffered heavily through the sudden overhang of many repossessed homes, for which new buyers were needed, but could not be found. Companies also lost out through their Defined Benefit pension schemes which needed large amounts of cash injections due to share and bond market falls. Banks around the world were exposed and some were rescued by governments. Pension funds suffered as well. The result was that even those individuals not personally involved, suffered indirectly through involvement in the savings markets. The risks could not be laid off for the collective of savers.

3.2 The Case of Spain

Take the case of Spain. The cause of its current crisis has very little to do with the Euro as a currency or with the Spanish government acting imprudently, but all to do with some banks turning savings into 800 000 homes which could not be sold to potential buyers. What other European governments might have done to help manage these risks from spreading to the Spanish economy and Spanish government is setting up a

second home acquisition scheme for their own nationals rather than to lend Euro 100 billion to the Spanish government for channelling these funds to the Spanish banks. The latter injection equates to Euro 125 000 for each unsold home. The problem could have been solved much more effectively by supporting their nationals- Mr Smith, Herr Schmidt, Hr Schmidt, Meneer Smit and Monsieur Forgeron- in buying homes in Spain from the Spanish population with the help of about 20% of the amount i.e. Euro 25 000 per home. If the lending is also executed by German, British, French, Dutch, Swiss, Austrian and Scandinavian banks than the inward capital movement into Spain will help solve the real estate crisis, part of the banking crisis and a substantial part of the government debt crisis. Give potential foreign buyers a subsidy of Euro 25 000 for their Spanish property; the latter should be of a minimal value of Euro 150 000, which equates to properties of 120 sq meters in the Spanish Mediterranean Coastal provinces. Such potential buyers should themselves put in an amount minimally equal to the governments' injection. The remainder amount should be up to the foreign bank's credit judgment. The buyers should also agree not to sell the properties for a minimum of five years. The sellers should be either the Spanish banks or Spanish families moving home. The Bank of Spain could supervise the scheme. Of course the scheme would be stopped as and when the supply of homes comes nearer to the full utilisation levels.

The consequences: The Spanish property markets will turn around pretty quickly; a place in the sun is still a dream for many Northern Europeans. The Spanish banks will be relieved from their property overhang on which no cash flow is received while their borrowings still carry interest costs. The Spanish people who sell and move to other properties will usually have more cash available as 50% of homes are owned in Spain without a mortgage. European governments usually operate either capital gains taxes or income taxes on second properties, so they will get their money back in due course. Last but not least the capital inflows into Spain and the strengthening of the banking sector plus the additional tourist incomes will help the Spanish economy to turn around as well. This comes all at a fraction of the costs of the Euro 100 billion. Spanish government bond yields will come down as well. The example is just one of the ways in which understanding the causes of the risks to savers can help devise sound solutions. The "perceived risk" outlook for Spain will fundamentally change by implementing this scheme.

3.3 Government Bonds and Company Shares

If one looks at the two other major investment categories: government bonds and company shares, it is striking how close these categories resemble fixed assets. For instance outstanding government bond levels can never be repaid in any normal economic manner. It would undermine the fabric of an economy. This means that once savings are converted into government bonds, the nature of such bond holdings are for extremely long periods, as governments keep on borrowing over and above outstanding debt levels. Short term bonds are basically as risky as long term government bonds as the collective of savers can not get out of the risks any time soon. Buying into government bonds represents a cash flow into asset conversion, not based on brick and mortar but based on the future level of tax payments. The reverse process, if applied at anything else than an extremely slow pace, will undermine an economy.

The same applies to company shares. Once issued, the only way to get some money back is by companies deciding to buy back some of the shares. Otherwise the cash flow risks and the risks to the value of the savings are held by the collective of savers. Again for both categories savers swaps may and often will take place, but the risks remain with the collective of savers. For shares to be turned back into cash flows would mean closure of companies and full scale liquidation.

For all these three investment categories the risks are extremely long term, and a reverse conversion process is practically impossible, hence the conclusion that the collective of savers cannot get out of such risks other than by taking substantial losses in the short term.

3.4 Real Sector versus Financial Markets

In the real sector of an economy, a risk to an entrepreneur finishes once the good or service has been sold to the markets when a price has been agreed and cash flow changes hands. For savers, once savings have been

converted into real estate, government bonds or company shares, the collective savers are in these assets for very long periods of times. Individual savers can exit during these periods by finding other savers to take over their risks, but the collective savers cannot get out of such risks. The price quoted for these assets in financial and in real estate markets is a dual price. These prices reflect the risks to both cash flows and to future values. Predicting cash flows can normally be done quite accurately over short periods of time. However future values of shares, government bonds and homes are based on assessments by the markets on “perceived risks”. “Perceived risk” assessments are not based on what will happen, but on what might happen. Such “perceived risk” assessments can easily be wrong. This leads to erroneous price fixing in the financial and real estate markets. Financial markets exuberance and despondency are known phenomena. They are based on the herd effects of following others. When such herd effects are guided by despondency and wrong prices, than this leads to savers wanting to protect their principal values of such savings and get out of the share, bond or real estate markets and back into cash. Such rushed demand for mass conversion out of long term assets can only be achieved by collectively accepting mass losses, which are in no way linked to the true value of these assets, being the net present value of future cash flows out of these assets. Such financial losses as expressed in real estate price crashes, stock market crashes and even government bond market crashes affect the banking sectors as they are unable to request their borrowers to repay their mortgage loans quicker. The borrowers, who are simultaneously savers in their homes, sometimes see their savings eroded and enter negative equity situations. Companies see their sales drop. Governments see their incomes drop. The wrong prices, based on the wrong “perceived risks”, lead to the wrong economic outcome with huge losses on savings and subsequent economic recessions.

The key economic dilemma is how to bridge the gap between the short and the long term objectives of savers. The savings into asset conversions (homes, government bonds and shares) tie in the collective of savers for very long periods. The desire to get out of such risks in the short run when “perceived risks” take a turn for the worst, leads to financial market pressures and prices which are irrational from the long term perspective. The financial markets pull the real economies into recessions, by the very elements the OECD report mentions: cash flows and values. The possible solutions lie in governments defining risk management strategies, which help to limit the negative effects of perceived risks and thereby help those who have put money aside for future consumption, to make a positive return over inflation. Without private savings, governments could not exist, even if it was only for funding debts created in the past. Without private savings homes could not be bought and without private savings companies would neither have shares issued to outside savers nor have bond and loans available to operate.

4. Perceived risks and pension funds

Before continuing, one has to make clear, how pension assets and liabilities should be defined, rather than using current perceptions. A pension fund liabilities are all the funds, saved by individuals and sometimes by companies on behalf of individuals, and collected by the fund in the form of contributions. Such liabilities are used to buy financial assets. These assets are used to fulfil the promises on future payouts on individual pensions. The latter promise also involves an asset conversion process from financial assets back into cash pay outs. Actuaries base their predictions on assessing longevity risk together with the adequacy level of the assets to pay out the promised pensions, the so called coverage ratio. The latter has to be based on some indication of applied interest rates. It is here where the problems start. By lack of a better evaluation method the day-to-day yield is often used as the benchmark for valuing the asset portfolio of bonds and so is the day-to-day price for shares. Sometimes a rolling three months average is used, but never are any long term yield yardsticks used that come close to reflecting the long term nature of saving up for a pension pot. If perceived risks assessments in financial and real estate markets can get their predictions wrong, than pension funds, as very long term saving institutions, can never asses their coverage ratios correctly.

What would be best for pension funds, but also for economies, is for governments to start managing such risks. For the U.S. in 2008 the problems were created by misjudging cash flows originating from the subprime sector of the domestic home markets. For Spain their problems started by some banks converting savings into 800000 homes for which there were no buyers. A possible risk management method to help solve Spain’s home risk crisis was suggested above.

Government bonds yields can also be influenced by short term rather than long term savers actions. This leads to yield gaps between these two types of actions; an overshooting or undershooting of government bond yields. At the moment Spain and Italy suffer from overshooting and countries like Germany and Holland from undershooting. The U.K. and the U.S. also suffer from undershooting, however for different reasons. The next section will focus on the UK situation.

5. The current UK situation

According to the Pension Protection Fund, in the month of May 2012, the 6432 remaining final salary private sector funds saw their collective deficit grow with UK£ 95 billion or 50% over the previous month. Over the last year till May the total deficit is now 13 times higher than 12 months ago at £ 312 billion. Total assets were £1031 billion and total liabilities £ 1343 billion. 5503 schemes were in deficit and 929 in surplus. On top of the £ 1 trillion in DB schemes, the UK has another £900 billion in DC schemes saved up as per end 2011 according to TheCityUK.

One has to add another savings element to these totals. It is common in the U.K. to buy an annuity from life insurance companies on or near the date of retirement. The life insurance companies in the U.K. are responsible for another £ 1.7 trillion in invested savings assets.

The efforts and government decisions to postpone the retirement age and to widen the level of contributors to pension schemes help in the very long run but do not take away the miserable investment results over the past 13 years. The outlook remains poor, unless the U.K economy gets a boost and unless the Bank of England changes its policy towards the long term yield curve of U.K. government bonds.

For the U.K. the key element for pension funds, but also for life insurance companies and banks is the negative real return on government bonds and indirectly the negative returns on shares as the economy is stalling. One cannot hope for economic growth or for a decent pension if long term savings are not rewarded with positive real interest rates. For U.K. banks, their costs of funds exceed the returns on 10 year U.K. government bonds, so holding these government bonds -supposed to be the safest asset- is a loss making operation, undermining the whole equity structure of U.K. banks. For life insurance companies it means lowering the value of the annuity pay out for people who have saved all their working life for a pension. For the savers it means that saving is not profitable, so they stop saving, while all economic agents need such savings.

All pension savers are taxpayers, but not all taxpayers save for a pension. The current yield of 1.78% on 10 year bonds compares with the long term average yield of 6.1%. The current yield has been artificially doctored by the Bank of England (the Bank) by buying up £ 325 billion out about £1trillion of U.K. government debt. The undershoot has occurred as a consequence of the Bank using an instrument – quantitative easing which lowers long term yields on gilts- for short term purposes. In this case it was not that the financial markets got their pricing wrong, but government action by the Bank that brought down the yield. Managing the gap between the short and long term actions by savers requires market intervention by the Bank in the gilts markets. It is a contradiction in terms in using the long term gilts markets for supplying short term liquidity to the banking sector. Funding for lending programmes can do the same job without any interference in the gilts markets.

A quantitative easing programme puts an unequal –some might go as far as say unfair- competition element in the private savings markets. The Bank can create money at 0% interest rate costs. Banks need to reward their savers and so do pension funds. They need a positive yield over their costs of funds. Hence they cannot compete with the Bank.

What should be such yield? The long term average yield has been 6.1%. In the last three years, which coincided with the Bank's QE programme, the real return has turned strongly negative. In September 2009 the positive spread of yield over inflation was still 2.15%; from January to June 2010 this difference had dropped to 0.1%; in the second half of 2010 the yield difference became a negative 0.6%; for the first half of

2011 it went to a further negative 0.95%; in the second half of 2011 it went down to minus 2.2% and it stayed negative to the tune of minus 1.5% over the first five months of 2012.

The Bank of England announced its first Quantitative Easing exercise in March 2009 with an amount to be purchased of £ 75 billion over the course of 2009. It followed it up with subsequent purchases over the next two years with additional purchases of £ 275 billion out of a total U.K. government debt of approximately £ 1 trillion.

There has been no period since 1990 that the 10 year yield on U.K. gilts was not a positive 2% or more over U.K. inflation rate in the same period, apart from the period since September 2009.

Managing financial risks is not done by creating inflation and is also not done by discouraging private sector savings. The U.K. government needs private savings to fund its past debt and current deficit coverage. U.K. companies need those savings and so do the property markets. Banks need the positive income from gilts to manage their credit risks better. Creating stability in the long term U.K. government gilt market should be a normal part of the Bank's operations. The logical target is around 2% over the inflation level, the latter currently at 2.75%, so the ten year gilt yield should be around 4.75%. The U.K. economy is seen as a safe haven economy. In these circumstances to gradually jack up yields to 4.75% should not be difficult in any way, local and foreign savers will jump at the opportunity. Buying and selling operations can help stabilise the gilt markets, but under- or overshooting is detrimental to the overall economy and to any saver in the country. It is based on a misunderstanding of the nature of short and long term savers' actions.

6. Pension Funds and Economic Growth

The traditional manner to stimulate economic growth was the Keynesian method of using private savings to fund government deficit spending in the current periods. The traditional manner has most likely reached its limitations for the U.K. and other countries as government debt levels have reached from 80 to over 100% of GDP levels. Another way in which such economic stimulus can be executed is to allow all pension funds and life insurance companies to collectively inject 2% of Britain's GDP, equalling £35 billion into the household sector this year. This amount is less than 2% of the assets held by these funds and companies. In order not to disturb financial markets, the Bank of England could advance these funds to the pension funds and life companies till new cash inflows from pension contributions, dividends and interest flows make up for this amount. Pension funds etc. could distribute such funds –preferably tax free- on an equal amount basis to all pension savers and retirees drawing a pension already- equal to reflect that new savers will have to contribute for a very long time until receiving benefits-. The recipients need to get the message from the U.K. government that it is vital to the economic health of the country to spend the additional income rather than save it. If done, the £ 35 billion will set off the demand pull injection which in the past was funded via the government's deficit creation. Once these savings injections have raised growth rates to 2% per annum, government tax revenues will have increased and out such tax revenues the pension funds etc. could be repaid for their loss of reserves. The costs to taxpayers could be set at CPI plus 2% over the period that the funds were used for creating the economic stimulus. The U.K. Government debt levels will not increase; real savings will be converted into consumption when the economy needs it and the taxpayers will return these savings when economic growth levels have reached the desired level. All sectors of the U.K. economy benefit. It will lead to lower unemployment levels, to higher company outputs and profits, to lower risks for the banking sector and to higher government revenues levels. It will also lead to improved share prices based on higher company profits. The “pension dividend” method represents a different way of managing economic risks, which could be applied not just in the U.K., but in The Netherlands and in the U.S. as well. What is also encouraging is that the pension dividend method can be started up and stopped much more easily than governments can control their extra spending once Keynesian programmes have been formulated and started up.

7. The Euro and government bond yields

The 17 Eurozone countries share one currency, but each country has a different inflation rate, a different rate of economic growth, a different level of unemployment, a different level of outstanding government debt and

a different state of its banking sectors. Managing the gap risks between short and long term savings intentions needs positive government actions.

This could be done as follows: Countries like Austria, Germany, Belgium, the Netherlands, Luxembourg, France and Finland could attract 10 year funds from the financial markets not for government spending but for depositing these funds as reserves at the ECB. As an example, Germany could use these powers till its borrowing yield would reach 3.9%, 2% over its current inflation level. These savings remain German savings at the ECB. For the other funding countries their inflation rate plus 2% would be the yard stick. The ECB could with these funds, subsequently buy up government debt of the other 10 countries provided that they follow the fiscal pact. In the case of Spain, which always had a very prudent central government, its inflation rate is also 1.9%, so the ECB would buy current Spanish bonds at 7% and subsequently lower yields till the Spanish yield also stands at 3.9%. As an example, ECB's interest income from Spanish bonds plus the positive difference in yield over German and other funder government bonds will be distributed over the funders pro rata of their funding contribution. In this way the costs of issuing more government debt than needed for own government expenditure of the 7 countries is fully met by the income from bonds of the 10 countries held by the ECB. If yields would undershoot the target, the ECB could sell more of its holdings of bonds of one of the 10 countries or one of the 7 countries could issue more government bonds for which the proceeds are to be deposited at the ECB. The fiscal implications are neutral in that the taxpayers in the 7 countries have no future tax obligations based on the additional borrowing levels. The 7 countries can issue more debt, but the funds are not used for domestic expenditure. Fiscal prudence stays intact. The action is aimed at maintaining financial stability across the Eurozone, rather than increasing government expenditure levels in any participating Eurozone country. The interest costs will be met by the real borrowers, the 10 nations. The fund suppliers –the 7 nations- get an extra income, while the taxpayers in the 10 countries benefit from the balancing act of the ECB. The ECB does not need to rely on money printing, but on moving real private savings within the Eurozone countries. The risks involved are minimal as the 10 countries can fund their government bond obligations, not on wrongly “perceived risks” but on actual realised risks. By lowering the overall risk level in the Eurozone countries all countries benefit. Of course, the criterion for assisting the 10 countries is that they apply the fiscal pact requirements. Executing such a balancing act has to be done on a daily basis; only the ECB is up to this task. The European Financial Stability Fund cannot operate in the required manner. The financial markets will relish this type of market stabilisation by the ECB and private sector fund flows will soon return to the higher paying Eurozone countries, making intervention unnecessary.

8. The Eurozone and Economic Growth

In order to get the economies in the 10 countries growing again, some may need some help. The European Financial Stability Fund may need to set up for these countries, which do not have sizeable funded pension savings, a similar scheme as the pension dividend injection scheme of the U.K. Such facility is an economic loan to foreign taxpayers, to be repaid as and when economic growth rates have reached their targets. Such economic loans should only carry the taxpayers' guarantees, but not the governments' ones. For Spain one could think of about 2% of GDP or Euro 35 billion, to be handed out, tax free, to all households on an equal basis, perhaps in semi annual instalments. This injection –an economic easing scheme- might need to be repeated in 2013. Repayments should start when economic growth rates have reached their desired levels. Again governments need to get the message across that spending the received monies is needed to get employment levels up as well as economic growth in the self interest of all concerned.

9. Conclusions

The conversion of savings into real estate, government bonds and company shares creates long term time risks on cash flows and values. Such risks can be managed by governments by devising appropriate risk management strategies, like a home buying programme for foreigners buying up the overhang of Spanish properties, like a bond yield management programme, a pension dividend scheme and an economic easing programme to strengthen economic growth rates. Once private financial markets conclude that risks are well managed, the other risks, such as banking risks become automatically more manageable. Fiscal austerity and

economic growth policies can go hand in hand as long as savers feel that their interests are properly looked after and rewarded. DB schemes will become less costly for companies to maintain and funded pension funds will become much more popular as their yields will increase. The losses on savings will be reduced and economic efficiency enhanced. Even accountants and actuaries can sleep better.

Drs Kees de Koning

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E-mail: keesdekoning008@hotmail.com