



**RECENT DEVELOPMENTS: FINANCIAL MARKET TRENDS IMPACT
ON PRIVATE PENSIONS**

John Thompson

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1. For the past few years, the Committee on Financial Markets (CMF) has devoted significant attention to the impact of retirement savings on the financial markets of Member countries. While the CMF is not directly responsible for pension issues¹, it is widely known that pensions are closely linked to issues that are of direct interest to the Committee, such as institutional investment and the development of capital markets. Indeed, one of the forces that underlay the extraordinary expansion of financial markets in the 1980s and 1990s was the accumulation of institutional savings driven in large part by the goal of financing retirement. The link between pensions, institutional investors and financial markets was a major theme in the 1998 publication “Institutional Investors in the New Financial Landscape,” which originated in a special meeting between CMF delegates and outside experts in institutional investment and capital markets.

2. The linkage between funded pensions and capital markets development was considered very explicitly in the OECD Ageing Populations Study², to which the Committee contributed. The chapter on financial market implications of ageing noted that demographic trends were likely to place growing pressures on existing retirement systems. Specifically, many Members rely heavily on public pay-as-you-go (PAYG) systems in which the retirement income of retired individuals is financed through the contributions of those currently active in the work force. The Study noted that the combination of rising dependency ratios and official commitments to provide relatively generous benefits would require rises in contributions to unprecedented levels-- possibly undermining public support for such policies. In order to prevent an unsustainable pensions finance burden, the Study recommended that Members consider increased reliance on funded pensions. It was suggested that Member countries might want to develop legal and institutional frameworks that allow companies and /or individuals to set aside pools of assets to earn market-based returns in order to maximise the amount of assets during working years and subsequently to invest those assets so as to produce reliable streams of income.

3. The Study noted the close two-way linkages between funded pensions and capital markets. In the first place, funded pensions are often the main source of growth for institutional savings, which in turn invest heavily on capital markets. It was also noted that in general those countries where reliance on unfunded pensions was particularly high tended to be those where capital markets were relatively underdeveloped. The Study thus recommended that those countries carefully consider the need for capital market modernisation. Modernisation entails liberalisation of controls on cross border operations, removal of unnecessary regulations and the introduction of a full range of specific instruments, including some that are especially relevant for pension-related investment. The Study also recommended that countries review their prudential regimes for pensions to be sure that they were capable of assuming the expanded role to be assigned to market forces.

4. The push to develop funded pensions in some OECD countries occurred in the context of bullish international capital markets conditions. Between the early 1980s and 2000, financial markets were characterised by a shift from bank intermediation to intermediation by capital markets, falling interest rates on bonds, high volumes of equity issues and sharply rising equity prices. Simultaneously, institutional savings surged. Governments saw the potential to address the “funding gap” for public pensions through the capital markets while individuals saw significant opportunities to invest in order to enhance their retirement income.

5. Since early 2000, the capital markets have been undergoing a serious reversal. The major equity exchanges have lost 35-50 per cent of their value while losses have been much larger on specialised “growth” exchanges, where technology-based companies predominate. The best established of the “growth

¹ The Working Party on Private Pensions was established in 1998 to look at these issues.

² Reforms for an Ageing Society. 2000

exchanges”, NASDAQ of the United States, has lost 60 per cent of its value while similar exchanges elsewhere have suffered even larger losses. Even though rates on benchmark government bonds and the best-rated corporate issuers are now pressing against their historic lows, many segments of the corporate bond market have been severely battered. With large numbers of defaults by major companies and a number of previously investment grade companies downgraded to “junk” status, spreads on lower rated investment grade corporate bonds are widening. The spreads on non-investment grade bonds are now about 1000 basis above Treasuries, i.e. near the records in the early 1990s. Against this background, the views of market participants and other experts diverge widely over how long the correction, and how lasting its repercussions, will be.

6. This note will re-examine the relations between pension reform and financial markets in the light of developments in the past two years. An earlier version of this note was discussed at the meeting of the CMF on November 18-19. Points for discussion are found on pages 11- 12. The objective of this note is to present issues for discussion, particularly those that could be appropriate for future work. The results of the discussion may be used in formulating future projects by the CMF, the Insurance Committee and/or the Working Party on Private Pensions. Some of the questions identified may be raised with representatives of the financial services industry.

I. Pensions and pension-like products in the post-2000 downturn: Implications for market stability

7. While the turbulence in world capital markets has been felt throughout the investor community, some instruments that are closely linked to pensions, in particular defined benefit (DB) pension plans and annuities, deserve particular mention. During the bullish capital markets of the 1990s plan sponsors and insurance companies in some OECD countries moved into assets such as equities and corporate bonds that performed well through 2000, but fared rather badly in the past 2-½ years. This may be partly due to liberalisation of rules governing pension plan investments. There is some risk that the repercussions of funding gaps in institutions with fixed pension or pension-like liabilities can aggravate the current downturn in markets.

8. Under DB plans, the sponsoring employer agrees to provide a pension to employees that is usually calculated as a specified percentage of the employee's final salary or of the average salary over a specified number of years. Benefits may be indexed to inflation. In order to meet this obligation the employer creates a pension fund, i.e. a dedicated pool of assets funded by contributions from the employer, the employee, or both. These assets are invested in order to enable the scheme to meet its pension obligations. The investment risks are borne by the plan sponsor. DB plans can be contrasted to defined contribution (DC) plans where the investment risks are borne by the plan members. Pension plans are normally subject to legally mandated prudential requirements for adequate funding and to investment regulations while the governance structure for the pension scheme may also be specified by law. The OECD also released in mid October new guidelines for the governance of pension funds.

9. While payments under the DB plan are expected to be funded from the assets in the fund, the employer normally makes periodic contributions to the fund and retains significant obligations should the plan be “under-funded”. The accounting rules for defined benefit pensions also require that a net pension liability be included on the balance sheet of the firm and that an annual cost calculation be included on the income statement. Moreover, firms are sometimes required to disclose potential pension liabilities. In the United States, for example, firms have been required to disclose marked to market values of pension assets and liabilities in their annual financial statements for over a decade.

10. In the United States, the corporate sector was aware of the potential risk from under-funded pensions, having experienced a similar though less severe market downturns at the turn of the previous

decade. Then, as capital markets boomed in the 1990s, pension plans sought to provide rising benefits by increasing exposure to asset classes, such as equity while corporate bonds, with potentially higher returns but that were vulnerable to deterioration in credit market conditions. Additionally, many companies enjoyed “funding holidays”, during which it was possible to reduce or entirely avoid contributions to pension plans due to the strong performance of pension fund portfolios. As a new phase of bear markets emerged in 2000, DB plans suffered drastic falls in funding levels. In addition to the complexities of managing investment risk in depressed markets, DB plans have been faced with another major challenge, the impact of rising life expectancy on their liabilities.

11. One reflection of these concerns is the trend for companies to shift their pension plans from DB to DC in order to lessen such vulnerability. Such a trend has recently emerged also in the United Kingdom, where many DB plans have been closed to new employees. The new stakeholder plans in the UK are also defined contribution, the employer's role being limited to selecting a provider and making regular contributions as determined in the plan rules. Countries that have recently established private pension systems have also relied almost exclusively on defined contribution arrangements. The private pension plans established in Hungary, Italy, Mexico, Poland, Portugal, and Spain are with a few exceptions, defined contribution.

12. Despite the long-term shift from DB to DC, a large number of companies in some OECD countries continue to maintain DB plans. In the United States, companies offering DB pensions plans tend to be established “old economy” firms in traditional industries with large numbers of retired employees. Meanwhile, in some OECD countries, like Germany or the Netherlands, DB plans are still the norm and there have been only marginal shifts towards DC schemes.

13. There are numerous signs that under-funded pensions are already a problem for the corporate sector. According to analysis by United States investment banks, approximately two thirds of the 360 companies in the S&P 500 with DB plans had under-funded plans as of the end of 2001. It seems inevitable that in view of the poor performance of equity markets and of many segments of the corporate bond market, in 2002, the number of companies with funding problems will rise. The situation of widespread funding gaps is not unprecedented. Similar situations occurred in previous market downturns. Moreover, many companies entered the present downturn with sizeable “overfunding”. Nevertheless, under some reasonable assumptions, projected funding gaps can interact with other adverse developments to have a strongly negative effect the financial position of some companies. Some major United States companies already have funding gaps that represent sizeable shares of their market capitalisation and/or cash flow. Thus, there are many cases in which the investment performance of the company’s DB pension fund has more impact on the financial strength of the company than the operating performance of the company.

14. The situation in the United Kingdom is similar to that in the United States, but vulnerabilities may be even greater since the share of equities in the portfolios of British pension funds is considerably higher than in the United States. One earlier reaction to these pressures was a move by a few isolated companies to minimise vulnerability by shifting the pension portfolio to bonds so as to remove any possible funding gap. One highly publicised case was Boots. One analyst recently estimated that 80 of the largest 100 companies in the FTSE index had pension deficits amounting to STG 50 billion, approximately equal to their annual profits³.

15. While the United States and the United Kingdom have some of the largest DB pension markets in the OECD, the problem is not absent elsewhere. Other countries, (e.g., the Netherlands) have large DB pension schemes. In some other countries, such as Germany, many corporations fund their pensions

³ Schroder Salomon Smith Barney. “UK Defined Benefit Pensions: The Trustees Nightmare”, October 2002.

through “book reserves,” which may represent a similar source of vulnerability. Some countries with DC regimes have guaranteed minimum returns, meaning that the investment risk is not fully transferred to the plan member.

16. While a recovery in capital markets would lessen the shortfall, there is some risk that the situation may grow worse, even if there is no further decline in markets. Companies have considerable discretion in reporting pension liabilities by varying the actuarial assumptions, discount rates or the rate of return assumptions in their calculations. As a result, the reported level of pension liabilities may significantly understate the potential dimensions of the problem. For example current low equity prices or bond yields could be “averaged” using pre-2000 performance data. However, should current unfavourable conditions persist, firms would be obliged to adjust their assumptions. Thus, the funding gap combined with very low interest rates has the potential to intensify strains on vulnerable balance sheets.

17. While accounting practices enable companies to postpone recognition of pension gaps, pension deficits are likely to widen unless a marked recovery in bond and credit markets occurs relatively soon. Meanwhile if interest rates remain near their present low levels for an extended time, the discount rate assumption used in actuarial projections will have to be lowered, implying higher present values of future pension liabilities. According to the study of the pension situation in the United Kingdom mentioned above, it was estimated that pension gaps could rise sharply after 2005.

18. Both accounting rules for reporting pension liabilities and regulatory provisions concerning funding are subjects of controversy. In the United Kingdom, under the Minimum Funding Requirement (MFR), firms were required to make good deficits in funding over a relatively short period of time. The MFR faced much criticism when it was introduced in the mid-1990s, because it forced firms to aggressively accelerate the funding of their plan liabilities. When combined with the effects of the falling stock market and declining interest rates over the last few years, the MFR proved unsustainable. The government this year redesigned the rules to extend amortisation periods over which underfunding shortfalls could be made up. Simultaneously, a new accounting standard (FRS 17) in the United Kingdom replaced a reporting rule, which had permitted the reporting of based under which pension assets and liabilities were calculated on smoothed long term actuarial assumptions with a new fair value based reporting standard. Unlike the old rule, FRS 17 requires, for example, the recognition of investment losses (or gains) immediately without the use of smoothing techniques. While FRS 17 may introduce greater transparency to firm balance sheets, it also serves to introduce greater volatility, arguably giving undue prominence to long term pension liabilities. In the current market environment, this requirement is expected to cause firms to report even wider gaps in pension funding than would otherwise have been reported.

19. Vulnerability to under-funded pensions is drawing heightened attention from investors, equity analysts and rating agencies. Thus, rating agencies cited large prospective pension shortfalls in their recent downgradings of the debt of Ford Motor Company and General Motors. If underfunding persists, many companies will have to raise contributions thus diminishing their free cash flows. Some rating agencies have indicated that they would closely scrutinise practices used in reporting pension liabilities (along with other non-reported liabilities such as unexpensed options) when analysing credit standings of companies. Given the current mistrust of published financial data by investors, any company that is suspected of having a hidden unfunded pension gap might be punished by the markets.

20. There is evidence that, somewhat analogously to the corporate sector, insurance companies in the bullish conditions before 2000, assumed large amounts of retirement-related obligations that have created a similar vulnerability. One significant vulnerability stems from **annuities**. (There are other vulnerabilities of insurance companies at this time, but these are less directly linked to retirement income.) Fixed annuities are contracts under which a life insurance company agrees to provide a guaranteed lifetime income to the

beneficiary from the point at which the annuity begins. The simplest annuities provide for nominal payments, but insurance companies may also offer inflation-indexed annuities. Insurance companies sometimes also offer annuities that guarantee a minimum payment, while enabling the beneficiary to share investment profits above a specified minimum from a defined pool of assets.

21. Most pension reforms aim at replacing an earlier system under which the state assumed the responsibility for providing retirement benefits, to one in which the individuals or sponsoring companies using market mechanisms, assume that responsibility. A functioning annuity market can play a key role in this process of reform. Annuities enable the beneficiary to transform the savings accumulated in a pension plan during working years into a reliable stream of retirement income. Additionally, by pooling mortality risk, they enable the beneficiary to run down assets below the point at which it would be necessary if all retirement income had to be supplied from an individual's own assets.

22. Under DB plans, a sponsor may purchase a group annuity contract to provide income for retired employees. Alternatively, an individual beneficiary of a DC plan may purchase an annuity using funds accumulated in a personal pension account during working years in order to assure a steady retirement income. Such annuities may be optional or mandatory parts of DC pension plans.

23. Although fixed income annuities tend to have relatively small funding mismatches, insurance companies sought aggressively to expand this line of business in response to flagging demand for traditional life insurance products partly by increasing guarantees. Actuarial assumptions sometimes underestimated longevity.

24. In addition to the direct exposure to market developments through fixed annuities, life insurers provided other guarantees through variable-annuity products. Although these products transfer most of the investment risk to the policyholder, guarantees offered by the insurers can be a source of additional exposure. When customers purchase annuities, the funds are placed in investment accounts comprised of stocks, bonds, or both. Falling stock prices have driven down the value of those accounts and driven up insurers' deferred-acquisition costs. They also have increased the risks associated with enhanced benefits attached to the annuities known as guaranteed minimum death benefits (GMDBs). GMDBs provide beneficiaries a pre-determined minimum payment to protect against a sharp drop in the value of the underlying investment account. The likelihood that insurers will have to pay on GMDBs increased substantially. It is estimated that on average in the United States account balances are about 40 percent below guaranteed levels. Some life insurance companies have protected themselves from GMDB risks by purchasing a large amount of reinsurance, but this has not been universal practice.

25. In brief, both the corporate sector, through DB pensions, and life insurance companies, partly through annuities, now face pressure on their balance sheets due to bearish capital markets. The situation would certainly improve if markets were to recover, but at this point it is not possible to rule out a prolonged slump or a weak recovery, possibly with downward price pressures – a development that could have severe negative implications for vulnerable institutions.

26. CMF delegates agreed that there is significant vulnerability due to pension gaps and that these problems could accelerate the present downturn. Moreover, further declines in interest rates could aggravate the problem. However, it was pointed out that the situation was not unprecedented. In the early 1990s a similar problem was present. Furthermore, many companies entered the current cycle with significant "over funding." Thus the length and severity of the downturn will be important factors influencing the pension funding gap.

27. Some CMF delegates felt that there may be "procyclicality" in pension fund regulation. When market values decline pension funds are obliged to sell assets, thus fostering further price declines.

However, it was not clear what the proper reaction should be on the part of governments. If government were to order pension fund regulators to ease regulations or to lengthen the time periods over which funding shortfalls may be averaged, it might be extremely difficult to provide effective prudential oversight. A certain degree of independence for the supervisors is necessary.

II. Longer term prospects: The Capacity of Capital Markets to Provide Reliable Retirement Income

28. The preceding section concentrated on the potential for pension and pension-like products to destabilise financial markets in the context of the post 2000 downturn. This section will consider whether the downturn will lead governments to modify their fundamental decision to encourage a shift toward funded pensions.

29. Most of the impetus to shift to funded pension plans built up during the boom conditions of the two preceding decades. In the 1980s and 1990s, countries introduced significant structural changes to facilitate the development of capital markets. At the same time, capital markets assumed a rising role in financial intermediation, not only in countries (e.g. United States and United Kingdom) where capital market intermediation was already strong, but also in traditional bank-dominated countries (e.g. Germany and Italy.) Thus, over the past decade Germany launched a series of legislative initiatives to promote its domestic capital markets.

30. One of the driving forces behind capital market reform was the perceived need to support funded pensions. In the 1990s, awareness grew of the increasing strain on existing public pension systems that is likely to emerge in coming decades as a result of relatively generous commitments by governments to prospective retirees and rising dependency ratios stemming from ageing populations. Many countries began considering the need to move from unsustainable PAYG public pension schemes to funded pensions, and some pension reforms were initiated.

31. Recent events have led many observers to reconsider important assumptions that underlay the push toward funded pensions. In the first place, the sharp decline in capital markets and the great uncertainties concerning the timing and pace of future recovery highlighted some of the risks that are inherent in private funded pensions. On the simplest level, the fact that institutions, such as corporate pension funds and insurance companies, which have access to the best professional advice, made costly miscalculations and may face funding problems indicates that the uncertainties inherent in capital markets are huge and that the prospect of shifting most of the funding burden to individuals will have to be considered very carefully. Since many analysts had predicated their forecasts of growth of capital markets on large inflows related to funded pensions, the prospects for these markets now seem less certain.

32. Additionally, the market context of the past two decades may well prove to be non-recurring. Since the early 1980s, most OECD countries have experienced significant disinflation, which has produced very high returns to bond investors with less volatility than equities. However, with inflation at very low levels, further gains from bonds now appear limited. If economies were to slip into actual deflation, a new set of problems would emerge. At the same time, over very long periods, unanticipated inflation has proven especially devastating to real income from bonds.

33. During the past two decades, equities scored spectacular gains as corporate profits rose rapidly and market capitalisation in many countries rose sharply due to privatisation. Some analysts argued that the removal of market imperfections, the development of institutional savings and the empowerment of investors had made the equity market operate more efficiently and removed earlier instability, thus justifying higher valuations, through a narrowing of the “equity premium.” Additionally, under the “new

economy” hypothesis, business cycles seemed to be smoother than in the past. Fewer investors appear willing to accept these arguments now than in the late 1990s.

34. The corrections of the past two and one half years have called attention to the excesses and sharp swings that often characterise equity markets. Thus, while it is possible that over long periods investments in capital markets will produce adequate average returns to assure retirement income, short-term volatility may be too great to provide reliable income streams. Equities markets have been observed to experience “bear markets” that have lasted a decade or more and therefore may not be reliable in providing regular income streams.

35. To some degree the vulnerabilities identified in bonds and equities can be resolved by portfolio diversification and professional management. However, whatever the particular portfolio that may be selected to fund pensions, a major remaining factor determining whether a DC pension will produce adequate retirement income for any individual is the date of that individual’s retirement. If retirement occurs at a time when equity markets are booming and inflation is declining, the pension income may be more than adequate. If on the other hand, it occurs when the equity markets are declining and/or inflation reduces real income from fixed income assets, the standard of living power may fall during retirement.⁴ Electorates may find it unacceptable that their retirement income will be exposed to the risk of retiring at an inopportune time, and thus may demand that governments step in to “smooth out” such inequities.

36. While post-2000 events have highlighted the risks of relying more heavily on funded pensions, the considerations that originally led governments to begin reducing reliance on PAYG systems appear as convincing as before.

37. The policy objective of reducing the government’s financing burden under PAYG pensions could in principle be achieved either in the growth of 1) corporate DB pensions or 2) corporate or individual DC plans. As a practical matter, however, the latter outcome is more likely. In those countries where DB plans were prevalent, companies were already moving away from DB plans, and the downturn after 2000 will almost certainly accelerate this trend. It is not certain whether governments could slow this trend by improving the regulatory or tax framework for DB pensions. It is worth noting that those governments that did not already have funded pensions have in nearly all cases considered introducing DC pensions. On balance, the most likely trend is for the responsibility for retirement income to move away from government and the corporate sector to individuals through DC plans.

38. It is increasingly plain that reformed pension systems will be challenged to deal with market uncertainty. There may be some possibility to offer “pooled risk” DC plans under which plan members agree to accept “intergenerational smoothing”. Alternatively, there may be some possibility for the financial services industry, especially the insurance industry, to develop products that achieve the same end. The insurance industry, which specialises in pooling, re-packaging pricing and measuring risk may have a particularly important role in developing products that enable investors to such as longevity risk, volatility risk or inflation risk. To some degree, insurance companies may be able moderate the risk that an individual will not have an adequate retirement income due to retiring at a time when capital market conditions are unfavourable through “intergenerational smoothing.” In order to be able to respond to potential demand effectively, however, it will first be necessary to deal with any solvency problems overhanging the industry. Second, insurance companies need to access to liquid fixed income markets

⁴ For example analysis by a US investment House shows that retirees having identical asset allocations and expenditure patters differ drastically between the retirement years of 1973 and 1975. In the former case the sum triples while in the latter case, all retirement savings are spent within 22 years. Vanguard Investments. Autumn 2002 . “Coping with a Bear in Retirement”.

offering a good match for their liabilities. In particular, inflation-indexed government bonds may be necessary to offer real annuities.

39. CMF delegates agreed that pressures to move to funded pensions were likely to lessen in the present market environment. Nevertheless, it was agreed that reforms were still necessary. It was also observed that public retirement programmes provided a “safety net” under which individuals receive a minimum adequate income. It is important to maintain this basic safety net in order to allow individuals to take more risks with their pension assets as they see fit.

III. Funded Pensions and Financial Market Infrastructure

40. The growth of funded pensions is a great potential spur to the modernisation of capital markets. On the other hand, funded pensions can only be effective if the capital market reaches a necessary level of sophistication and where institutions and instruments that are appropriate for retirement related products are present.

41. One potential challenge for pension-related investments stems from the absence of sufficient quantities of suitable assets that enable institutions to match long-term assets and liabilities. In this context, the scarcity of suitable fixed income assets in most major markets has received considerable attention. In order to provide a useful long-term asset to match pension liabilities, there should be a large supply of long-term high-quality paper that is highly liquid as well.

42. With stronger fiscal positions, the supply of government debt stagnated in the late 1990s. There was a time when it appeared that the overall supply of debt might contract significantly, but this now appears less likely. True, there have been instances when issuance of government paper might diminish or disappear. Thus, Australia has invited comments on a proposal that, if enacted, would result in a cessation of new issues of government securities due to its stronger fiscal position. In other cases, by contrast, governments have indicated that even if public funding requirements do not require debt issuance, the authorities will continue issuance in order to assure that the fixed income market operates effectively. Canada, Hong Kong and Singapore would fall into this category. In any event, some governments stopped issuing the 30-year bonds, which were very useful as long-term assets and also served as benchmark for other long-term assets.

43. In the United States, there is a large stock of “agency paper”, which is perceived as having a high degree of government support, to complement government paper, but such assets not available in most markets. Some assets, such as mortgage bonds or mortgage backed securities are found in some European markets, but supply is not growing rapidly. Overall, most countries in continental Europe have a relatively low volume of non-governmental high quality bonds and fixed income markets are extremely thin in Asia. (The one exception is the Japanese government bond market.) Meanwhile, a general downgrading of corporate credit has led to a shrinking list of corporate issuers whose debt was rated AA or better. In the case of the United Kingdom, for example, one of the explanations advanced for the high share of equity investments by British pension funds is the absence of appropriate fixed income assets, (i.e. sterling-denominated, high-grade liquid bonds with relatively long maturities).

44. Historically, inflation has been a serious risk inherent in bond investment. One proposed remedy has been an inflation-indexed government bond to enable investors to protect themselves from inflation. Inflation indexed government bonds have also been proposed as the ultimate benchmark “risk-free asset” to serve as a means of pricing other assets. Some OECD governments now issue such bonds but the size of the market is not sufficient to meet the need of pension funds. Meanwhile some governments, such as Canada, have found that demand for inflation indexed securities has not been as strong as expected. In

particular, little secondary trading takes place as most investors purchase these assets with a “buy and hold” strategy in mind.

45. Some newer markets have a somewhat different policy. Thus in some central European transition economies, funded pensions have been launched which have encountered scarcities of equity. In Poland for example pension funds have tended to invest about 60 per cent of assets in government securities and 30 per cent in equities. Even this relatively small allocation has tended to push up equity prices in the face of limited domestic supply.

46. To some degree, the institutional investor community can work with intermediaries to create synthetic securities that meet the demand of investors for fixed income products. Thus in the example given above, even if there is an insufficient supply of sterling-denominated long-term assets to satisfy the demand for fixed income assets of some British institutions, similar assets can be purchased in other currencies and the currency risk removed by derivatives. Similarly, investment banks can create derivative securities with reduced credit risk through securitization and credit derivatives. The swap market is seen as another source of a “derived benchmark” yield curve.

47. Pension reform implies that a rising share of assets will be entrusted to the asset management sector. The major participants in this sector are investment institutions, pension funds and insurance companies. While pension reform usually impacts pension funds most directly, other institutional investors are also affected. As mentioned above, insurance companies offer many products that play a key role in supporting retirement income (especially annuities) and are also active in fund management. CIS are well suited to providing investment income and are often used in combination with annuities or DC pension plans.

48. In order to foster the emergence of an investment management industry that is capable of innovating and providing the full range of retirement products, the legislative and regulatory framework for institutional investors may have to be reassessed. Many institutions offer products that are close substitutes for products offered by other institutions. For example, CIS and variable annuities have close similarities and both can be used in retirement plans. These products often play crucial roles in providing retirement income. Therefore, it is important to create a level regulatory playing field among products and sectors in each country. On the international level, different product specifications under national retirement schemes also can lead to market segmentation and insufficient depth in markets. Differences in national systems to supervise institutional investors or different tax regulations may make products tailored to the needs of one country unsuitable to consumers in other markets. The need to avoid the fragmentation of the investment management sector is seen as a particularly high priority in Europe. Thus, market participants are engaged in efforts to determine whether additional changes in national tax, regulations as well as EU Directives are needed to achieve an integrated European funds management market.⁵ Efforts to ease such frictions may be helpful outside Europe as well.

IV. Investor Protection and Investor Education

49. As argued in preceding sections it seems inescapable that in the future individuals will have to accept a larger burden for financing their own retirement. **Both governments (by favouring funded pensions) and the corporate sector by moving away from DB to DC plans are shifting the responsibility for retirement income to each individual, who will have to bear much greater exposure**

⁵ Centre for European Policy Studies (CEPS), “Pan European Asset Management: Report of a CEPS Task Force”, Brussels, 2002 (Forthcoming).

to market risk at all points of the life cycle.⁶ One corollary of the heightened responsibility now being transferred to the individual is that the authorities should seek to ensure that individuals have necessary information to accept this responsibility and that the supervisory framework in which the new retirement regime will operate is adapted to the task.

50. At the most fundamental level, the public needs to be made aware of the necessity to build adequate savings for retirement. Some OECD countries, (e.g. Japan and Korea) have strong traditions of high individual savings and in such cases the overriding challenge is to ensure that these savings are invested efficiently. In Singapore, where there is a large-scale mandatory DC pension scheme, a very large share of assets are held in cash. In other cases, such as the United States and the United Kingdom, some studies have found that there are consistent tendencies for individuals to underestimate retirement needs and therefore that most people do not save adequately for retirement. In the United States, for example, where DC pension plans are well developed, less than half of all workers have either individual or employer sponsored accounts-- partly because fact many employers do not offer plans, and also due to low participation in individual plans. Participation rates are also low in the United Kingdom.⁷

51. This tendency to undersave may be partly due to the fact that present ideas about adequate levels of retirement savings may have been formulated when the expected duration of retirement was shorter or on the basis of the experience of the most recently retired generation, which in many countries was characterised by relative high public pensions, DB private pensions and high levels of home ownership. To the degree that these characteristics are less favourable for the next generation, more cautious attitudes toward retirement planning must be adopted. The tendency to-undersave may have been partly encouraged by the boom in asset prices of the late 1990s, which encouraged savers to develop unrealistic expectations about future growth rates on their savings.

52. Individuals will require more information, education and counselling on pre-retirement planning, basic decisions at the time of retirement and during retirement. At each of these points in the life cycle, individuals require more information about the risk/return features of alternative investments. Some investors may underestimate the risk of investing in their portfolios. As discussed above, a portfolio heavily weighted toward equity will be exposed to volatility or to "bear markets" while a portfolio of bonds will have considerable risk of inflation. Many individuals with DC plans may have excessive concentrations in the securities of their own companies, possibly due to incentives in the company DC plan. While each of these risks can be avoided, many studies show that individual investors tend to be considerably more risk averse than institutions and therefore may not take full advantage of the opportunities in the market.

53. In most countries the trend is for individuals to invest through collective investment schemes (CIS), rather than direct ownership of securities. This reflects the fact that CIS enable the small investor to achieve diversification with access to professional portfolio management. In these cases, the investor is still responsible for selecting the appropriate portfolio and bears all the risk of the overall investment portfolio. However, as was argued in Section II, individuals may, in the future, use institutional investments as a means to restructure risk further, largely through products offered by the insurance industry. In a very simple case, an individual at retirement could continue to use funds accumulated in his/her own pension account in order to provide retirement income, or may purchase an annuity. The insurance industry can also assist in meeting other specific needs of retired persons such as housing upkeep and health care. There is considerable evidence that individuals already have difficulty understanding annuity products and their associated cost structures. If the financial services industry should seek to

⁶ For a summary of most of the relevant issues, see Financial Services Authority "Financing the Future: Mind the Gap." May 2002.

⁷ *ibid.* pp 15-34.

develop more complex products to manage risk, the exact risk characteristics of new instruments and the costs may be even more difficult to understand.

54. There is a need through the general educational system -- and possibly through special programmes -- to inform the public of its increased responsibility under the reformed pension regime and of the need for the individual at every stage of his/her life to save adequately and to be sure that savings are invested consistently with long term objectives. There is a general task of government to raise the general level of financial literacy of the population. Beyond this, the provision of adequate information and counselling imply obligations on the part of 1) employers 2) the financial services industry 3) government and 4) financial supervisors.

55. As noted above, employers are transferring more responsibilities for retirement income security to their employees. It is not certain to what degree governments, regulators and courts consider there to be an obligation for employers to provide counselling with DC pension plans. There may be hesitancy about placing too heavy a burden on employers, if this were to lead to reduced willingness to offer pension plans of any kind.

56. For obvious reasons, the financial services industry has made a major commitment to raising public awareness in the need for adequate financial preparation for retirement. Some of this information and counselling is provided in direct support of marketing efforts and may not give the investor a full description of investment alternatives or costs. Other advice is less directly linked to marketing. For example, in the United States many mutual fund companies offer "retirement planners" in which prospective investors are given access to courses and analytic programs (often online) in which they can input data on their own assets, obligations and their overall situation and receive advice about possible investment options investment goals. This analytic tool may be supported by personal financial counselling. In some countries, Independent Financial Advisors (IFAs) or Financial Planners provide similar services. However, these advisers usually have a greater independence from firms that are active in marketing particular products. Other investors may rely on the advice of professional such as investment advisers, lawyers or accountants.

57. As more responsibility is transferred to the individual, governments will have to be sure that legal and regulatory frameworks adapt to the reality of widely increased participation by a broad audience of individuals with widely varying degrees of sophistication who are placing their retirement income at risk. In this context it was well to remember that until recently investment was largely undertaken by wealthy individuals who were expected to be prepared to accept significant risk or by institutional investors. Individuals who did not wish to invest under such conditions had the option of remaining outside the market. Current policies have the effect of removing this option, thereby increasing the obligation of government to make sure that markets function fairly, taking account of the fact that individuals with lesser sophistication and less experience than those previously active in the market now will be placing their retirement savings at risk. At the same time, it is important to avoid regulatory overreaction that would impede informed investors from implementing their desired investment strategy.

58. Until now, securities supervisors have been preoccupied with maintaining transparent and fair primary and secondary market conditions, while pension and insurance regulators have been concerned with solvency issues. In the new environment, supervisors may have to be more concerned with the adequacy of advice provided to unsophisticated investors who may have been forced to accept more financial responsibility than they would without the added responsibility of meeting their own retirement. This will occur at a time that the financial services industry is working to develop new and possibly complex products that help investors manage risks related to retirement income.

Some Concluding Remarks

- Funding gaps in DB pension plans, which have become rather serious with the downturn in capital markets, are a major factor overhanging capital markets. Unless markets recover soon, these gaps will become larger and may contribute to further downgradings and/or declines in equity prices. Accounting rules and prudential regulations have an important impact on funding gaps.
- By highlighting the vulnerability of retirement income to swings in capital markets, the post 2000 downturn may weaken resolve of electorates and governments to persevere with pension reform. Currently, governments are shifting to funded pension to replace public pensions and employers are shifting from DB to DC pension plans. As a result the investment risk is being shifted to individuals.
- Pension reform implies a rising demand for assets to match the long-term pension liabilities. However, long term high quality debt is in short supply in many markets and in some cases governments have announced plans to stop issuance of debt instruments that are useful in the fixed income market.
- The shift in the responsibility for providing retirement income described above means that individuals will have to assume far greater responsibility for their own income security than in the past. Of particular concern is the prospect that many unsophisticated individuals will be required to make fundamental decisions that will affect their income security during retirement.

Points for discussion

1. ***What are the overall views of delegates concerning the relations between pension and annuity liabilities and the downturn in capital markets? Is there a risk that falling real estate prices or deflation will worsen the current problem? To what degree is the underfunding of pension liabilities common in countries where DB plans are found or where DC plans offer a guaranteed return or have a minimum guaranteed benefit? Do countries where corporations rely on book reserves for pensions have comparable problems? Have insurance companies or pension funds been forced to liquidate equities to meet minimum funding requirements and how will portfolios change if bearish conditions persist? Is there a procyclicality in DB schemes under which companies experience large drops in of net pension liabilities in strong markets and rising pension liabilities as markets decline? What is the appropriate stance for pension regulators in declining markets? Should accounting and regulatory treatment of pension funding obligations be a matter of concern for capital market specialists?***
2. ***How will the unfavourable post-2000 market conditions influence the trend toward funded pensions? Can the private markets be relied on to supply adequate retirement income if pensioners face the risk of volatility and/or prolonged weakness in equity markets? Will recent market developments lessen the flow of funds into retirement products? What are the prospects for encouraging the corporate sector to retain some of the investment risk for pension s through DB plans? What are the prospects for devising alternative mechanisms to achieve some inter-generational smoothing? Does the potential volatility of capital markets highlight the role of public pensions as a “safety net” for retirement income?***

3. *Is there any scarcity of suitable assets for retirement-related investment and how can governments assist in developing markets for such assets? Should governments promote the issuance of longer term and inflation indexed bonds in order to provide assets for longer-term investment? Is the private sector capable of building the full range of products and services needed to support retirement related investments and to deal with major risks? Do serious barriers prevent the investment management industry from managing retirement income efficiently?*

4. *Does the growing importance of retirement plans under the control of individuals require enhanced efforts to improve investor protection and promote investor education? What are the roles of government employers and the financial services industry in facilitating the transition to market-based retirement systems? How pervasive is the tendency to under-save in Member countries? What additional regulatory measures might be necessary if financial institutions take a more active role in providing education and investment advice in connection with retirement related products?*