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Developments in British Pensions

By

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*The views expressed in this paper are those of the author and do not necessarily represent the views of DSS.

CONTENT

Part One History

1 To understand pensions in Britain it is essential to understand Social Security.* The two are inextricably linked. Receipt of Social Security benefits in Britain is conditional on the recipient being in particular circumstances. These circumstances might include having a low income, having a child in the family, being incapacitated or being an unemployed or old worker. The twin conditions of having worked and having achieved a particular age generally entitle a person to a pension. This may be from more than one source but receipt of a pension in itself does not preclude the pensioner from receiving any other Social Security benefits to which their particular circumstances entitle them.

Origins of Social Security

2 Eight hundred years ago Britain, a relatively small off shore island, was comprised largely of small self-contained farming communities. Few towns had populations of more than 1000. Trade, both internal and external was fairly limited. Society was largely a well-ordered hierarchy. Within small village communities money was little used. Poor people were required to supply labour services to their local lord and could not leave the village without his permission. Outside the village money transactions would be more common. The local lord might sell surplus produce from the village, or "Manor", over which he presided at the local market town and use the proceeds to buy things not produced in the village and to pay taxes to his overlord who in turn paid taxes to the local nobleman or the king.

3 Each man in the village typically had rights to farm part of a field and access to shared land to graze his animals. Self-sufficiency was expected and any help in times of hardship would come from family or neighbours who had a common interest in an implicit mutual support system. Help from outside the village would depend on the relationship of the Lord of the Manor with his overlord. Crop failure in a village could mean starvation.

4 Within the subsistence agricultural system existing in the villages life was short and frequently hard. Resistance to disease was low and the population was dramatically cut by bubonic plague on more than one occasion. In the towns craftsmen in particular industries formed themselves together into self regulatory organisations called guilds which limited entry to the trade, controlled wages and sometimes set minimum quality standards for the output of members. Although the arrangements in both countryside and town left the overwhelming majority of the population living close to subsistence levels, some individuals were in a position to accumulate spare resource. Given that society was relatively stable and by and large law abiding the foundations for the growth of widespread capitalism were in place.

5 In a predominantly agrarian society if capitalism was to have a big impact it had to apply to agriculture. The vehicle in Britain was the wool trade. Sheep are relatively easy to rear on hills and dales, which are not much use for other forms of agriculture. Small numbers of sheep had been reared primarily for local consumption for centuries. In the 13th and 14th centuries rising demand for wool in Europe made it profitable to start rearing sheep on land which had previously been used for arable crops. Land holdings were consolidated increasingly frequently as time passed. Wool merchants purchased wool from land owners and as time passed started employing local workers to turn it into cloth rather than export raw wool to Flanders and import the made up material*. Many villagers ceased being small landholders and became wage earners.

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* Readers familiar with the American usage of the term "Social Security" to mean state pensions should be aware that British usage is quite different. In Britain Social Security denotes the full range of state support for citizens including pensions, means tested benefits covering both living expenses and housing costs, child support and help for the disabled.

* In a year when WTO members are girding up their loins for another World Trade Round it is relevant to note the importance of trade barriers. The first regular English excise system was established in 1275 when duties were levied on the <u>export</u> of wool, wool fells and leather. The excise rate was 6s 8d

6 By the end of the 15th century the wool trade had expanded to such extent that instead of a farmer, or his family, turning his own wool into cloth the majority of the trade was in the hands of capitalist merchants. This implied that the economic interdependence within the village was substantially reduced, money rather than labour services became the principle medium of exchange and if a labourer could find no work he would have to steal, starve or beg. Hanging, branding and whipping were regarded as suitable punishments in the early 16th century. These seem very harsh viewed from a modern prospective but probably seemed much more reasonable in times when starvation was a constant threat.

7 In 1536 a law was passed making it necessary for parishes, the smallest administrative districts into which the country was divided, to provide for the poor. Able-bodied people who were willing to work were to be provided with work. Able bodied people who were not willing to work were to be punished. People unable to work were to be supported and children were to be given an apprenticeship. In those days an apprentice was provided with food and accommodation and possibly skill training by his master in exchange for the apprentice's labour. The 1536 legislation was probably ineffective because contributions to pay for the promised benefits were voluntary. However, the attempt to categorise people into those who should or should not be expected to work and a requirement that work should be undertaken by those who can survives in political rhetoric and Social Security regulations to this day.

8 The 1536 Act, though probably rather ineffective, demonstrated the King's desire to intervene. It set a precedent followed by Governments ever since. During the rest of the 16th century a number of changes were introduced and these were codified in the 1601 Poor Law which remained the basis of most support for the poor until 1948. Apart from requiring local authorities to offer rather similar services to those laid down in the 1536 Act the 1601 Poor Law gave the authorities powers to collect the money to pay for their activities from householders in the parish.

9 The most significant subsequent changes were acts of 1782 and 1834. The former permitted parishes to combine to provide services efficiently and the latter forced the 15,000 parishes in England and Wales to combine into 600 Poor Law unions. The introduction of supplements to the wages of the low paid was permitted by the 1782 Act. This followed an increase in the price of wheat during war with France. Benefits to supplement wages, introduced by the 1782 Act, are now common in Europe and North America e.g. the British Working Families Tax Credit, the French housing benefit system and the USA Earned Income Tax Credit.

10 In 1948 the basis for provision was changed by the introduction of a National Insurance system under which contributions by employers, employees and the state covered the insured worker against the risks of unemployment, sickness and longevity. Since the level of insurance based benefits have never been high enough to provide for all the necessities of life, the means tested provisions of the old Poor Law as amended were carried over and operated by the National Assistance Board. The range and generosity of benefits expanded gradually as time passed.

Pensions History

11 The relevance of the above short history of Social Security to pensions provision in Britain is that for over 400 years the Government has required that some form of provision should be made for the infirm elderly. This provision was never generous and for much of the period would have involved moving into publicly provided accommodation that frequently would have been of appallingly low standard ensuring that entry meant stigma for the

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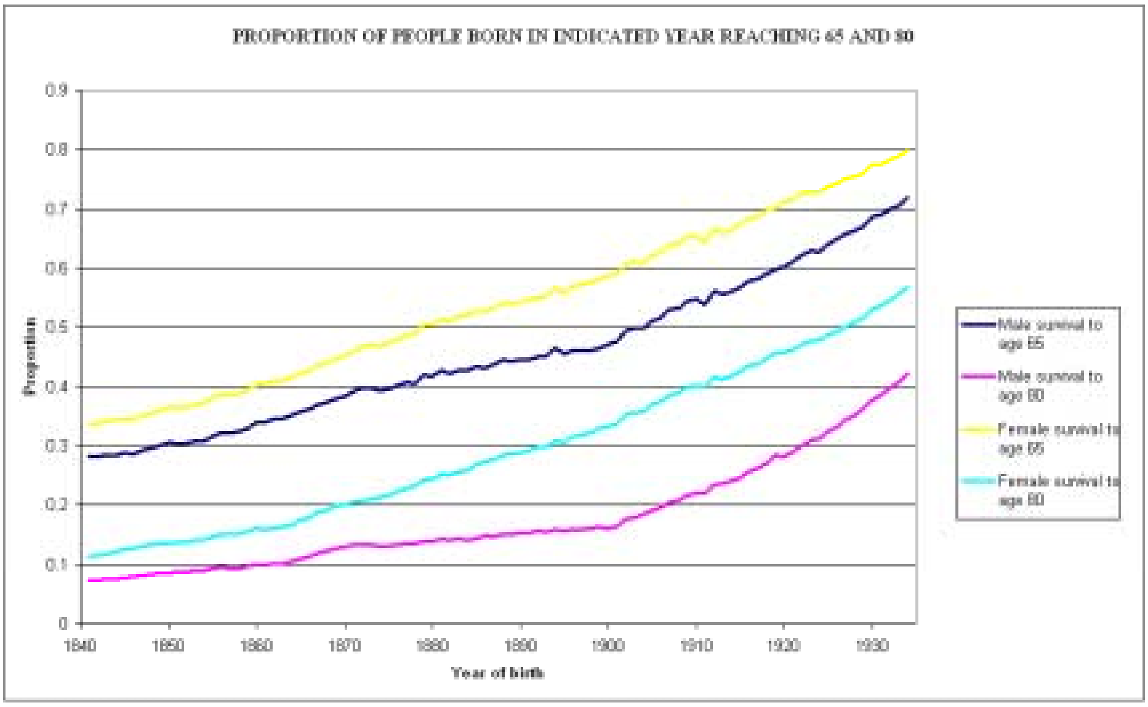
per sack of wool. The unintended consequence of this revenue raising activity was to change the economics of the wool trade in favour of domestic production of cloth. The reaction to this change in competitiveness was inevitably slow in feudal times. The volume of exports of unprocessed wool only started falling nearly 100 years later in the 1360's.

individual. Nevertheless, with the state offering a rudimentary back up if support from the family was not available, the imperative to introduce state pensions separate from Poor Law provision was low.

12 Apart from the fact that the provisions of the Poor Law automatically covered frail older people the relative lack of numbers in the population of older people would have made special provision for them something of a non-problem. Regular reliable censuses only started in Britain in the 19th century so a detailed history of demography is not available but the figures we do have illustrate the point.

13 The chart below shows for each year of birth since 1841 the proportion of the birth cohort by sex being recorded as alive at 65 and 80 in later years. Since the figures are based on census information they should give a pretty accurate picture being distorted only by possible errors in correction for migration. Taking the proportion of the male population reaching age 65 the chart shows that of those born in 1840 less than 30% attained the age of 65 whilst for those born in the 1930s getting on for ¾ reached the age of 65. Amongst cohorts born less than a century apart there has been almost a tripling in the proportion of men reaching pension age.



14 The chart covers a period when there was massive improvement in public health, housing, water, and sewerage and also there were some medical advances so it is reasonable to assume that the proportion of people in earlier cohorts reaching old age would have been lower. It was thus the case in the early days in the development of social security that there were proportionately few older people around. Most of these were likely to have living descendants, there were well over 10 people of working age per pensioner well into the beginning of the 20th century. Special provision for pensioners would not have seemed an important issue before relatively recent times.

15 Perhaps prompted by German initiatives a few years earlier, the first state pension in Britain was introduced in 1908 by the Old Age Pensions Act. This provided a pension of 5 shillings a week, about 20% of manual male earnings, to poor people over 70 who had led industrious lives in the previous 10 years. In subsequent decades coverage was expanded and a contributory element was introduced which exempted contributors from means testing.

A Basic State Pension (BSP) is still paid today at a rate roughly equivalent to 20% of the wages of the average production worker, OECD definition. Nowadays a man will have to have worked and paid National Insurance contributions, or been exempted from work, for around 44 years to qualify for a full pension. It is not means tested for anyone; a person will be paid the pension in respect of their or their spouse's contribution record.

16 Today BSP is paid out of the National Insurance Fund (NIF) established in 1948. This followed the work of a war time committee under the chairmanship of Sir William Beverage and was introduced by the immediate post war Labour government. The Fund was intended to provide insurance against longevity, disability, unemployment, ill health and industrial injuries. For people with memories of desperately hard times in the inter-war years it was immensely popular. For the first time the overwhelming majority of the population acquired an unambiguous entitlement to subsistence levels of support without means testing or the lingering stigma associated with means testing.

17 The Fund and the benefits it provided were arguably too popular for its own good. Whilst the authors prepared costings on a reasonable set of assumptions, for example 8% unemployment was assumed, a level not actually reached until after the first oil crisis of 1973, a meaningful reserve never appeared. The authors of the report had assumed it would take a lifetime's work and contributions to acquire entitlement to full BSP but the popular clamour for immediate access to the promised benefits led to reduction of the qualifying conditions. Consequently, by the end of the 1950s most people retired with entitlement to a full BSP.

18 In 1948 it was still assumed that the place of a woman was in the home. Women had extensively staffed the wartime factories and farms but in the post war period it was expected that women would be dependent on their husbands. A married man's BSP was enhanced by 60% for his non-working spouse. She inherited 100% of his unenhanced pension on his death. Working women had two options. If they were married they could choose to contribute to NIF at a nominal rate and rely on their husband's contribution for their benefits. If they were single they contributed a slightly lower rate than men but obtained the same benefits; this option was also available to married women who thought it was appropriate to themselves. In subsequent decades the right of married women to contribute at a nominal rate was gradually phased out, by converting the nominal into a substantive charge that ultimately was set at the same rate as for men.

19 1961 saw the introduction of the State Graduated Pension (GRAD). People on moderate to high earnings were required to pay extra National Insurance contributions and in exchange for every £7.10s 0d for a man or £9.0s 0d for a woman one unit of GRAD per week was purchased. The weekly unit paid in retirement was equal to one three hundredth of the purchase price for a man and one three hundred and sixtieth of the purchase for a woman, recognising the fact that women retired earlier than men and lived longer.

20 The implicit nominal rate of return within GRAD was around 4%. By the end of 1961 inflation was running at 4.4% per annum so before anyone had paid a year's worth of contributions GRAD was not a very attractive proposition. With the benefit of hindsight GRAD looks like a simple excuse to increase taxes. Contributions to the fund were paid years in advance of receipt of inflation devalued pensions. In defence of the people who invented GRAD it should be noted that in 1959 and 60 inflation had been running at low or negative levels. With memories of the inter-war depression still fresh in the minds of senior policy makers a nominal return of around 4% may have looked reasonable. Whatever the motivations of the people who introduced it, in practice a pension scheme fixed in purely nominal terms proved pretty poor value for contributors once inflation headed into double figures a dozen years after its introduction. The real value of a unit of GRAD has been increased in recent years.

21 By the 1970s there were widespread calls for better state pension provision. There were a number of factors militating for this change. Good employer sponsored pensions, generally salary related, were becoming increasingly available, indeed, were almost universal

in the public sector, but were not available to all workers. Women were increasingly taking up employment. Even the best employer sponsored pensions were unlikely to deliver women good pensions because with time out of the work force for child rearing many women did not achieve the necessary years for a full pension in the employers scheme. Many European countries had established generous and apparently successful pay-as-you-go salary related schemes in the 1950s and 1960s. Finally, the inadequacies of GRAD had raised public consciousness of the need to do something better.

22 The State Earnings Related Pension Scheme (SERPS) which commenced in 1978 addressed all of these problems. The initial legislation provided that membership should be compulsory for all workers who earned more than the lower limit for contributing to the National Insurance Fund, around 20% of male manual earnings. People who belonged to a good occupational scheme were allowed to “contract out” of SERPS and in exchange for lower National Insurance contributions their employers were required to provide certain guarantees within the occupational pension scheme. Such people remained nominal members of the SERPS scheme. Their entitlement was to be calculated as if they were full members and, on retirement, they were to be paid a top up SERPS pension from the state to cover any difference between their nominal entitlement to SERPS and their entitlement to the guaranteed element of pension from their employers scheme. Annual acquisition of SERPS rights was initially to be $1/20^{th}$ of one quarter of the difference between the lower and upper earnings limits for National Insurance contributions. Pension received was to be averaged over the best 20 years of working lives so a “full” entitlement would be obtained for 20 years contribution. In calculating the entitlement all individual year's entitlements were to be uprated in line with the growth of average earnings to the point at retirement when the calculation of pension payment was to be made.

23 SERPS solved all the issues that were then considered problems amongst the future pensions of the currently employed. Basing it on the best 20 years eliminated the major problem associated with child rearing for women[*]. The 20 best years rule was also beneficial to men who had their active working life curtailed by disability, industrial injury, redundancy or other misfortune. Another female friendly aspect was that spouses were to inherit 100% of their deceased partner's SERPS pension. This inheritance would be received without any reduction in their own entitlement, though unlike the case with BSP, there was no automatic enhancement to a man’s SERPS entitlement if his wife had not acquired her own SERPS rights.

24 SERPS comprehensively addressed the inflation problem, which plagued GRAD, by earnings uprating annual acquisition of rights to the point of retirement in line with the growth in average earnings, and thereafter uprating the pension payment in line with prices. It complemented employer provided pensions by providing a comprehensive government backed guarantee of inflation proofing which employer schemes could not provide through private sector financial instruments. Employer pensions contracted out of SERPS had to provide limited price inflation protection. For that part of the pension deemed to be the SERPS equivalent the nominal SERPS pension was to be fully inflation protected and the state would pay the difference between the nominal SERPS and the guaranteed minimum which the employer was required to pay.

25 For all its virtues SERPS came to be seen as flawed in the 1980s. Its problems were:

(i) It was projected to become rather expensive in the second quarter of the 21st century and since it was a pay-as-you-go scheme there was a potential increasing tax burden for future generations of workers.

(ii) It did nothing to help existing pensioners or those due to retire in the near future.

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[*] In recent years researchers have identified the fact that women returning after child birth often have a lower earnings trajectory than women who do not have time out of the work force for children but this was not a major issue in the early 1970s when SERPS was being planned.

(iii) Averaging over the best 20 years meant that generous benefits to mothers, and various classes of early retired people would not come substantially on stream until well into the 21st century.

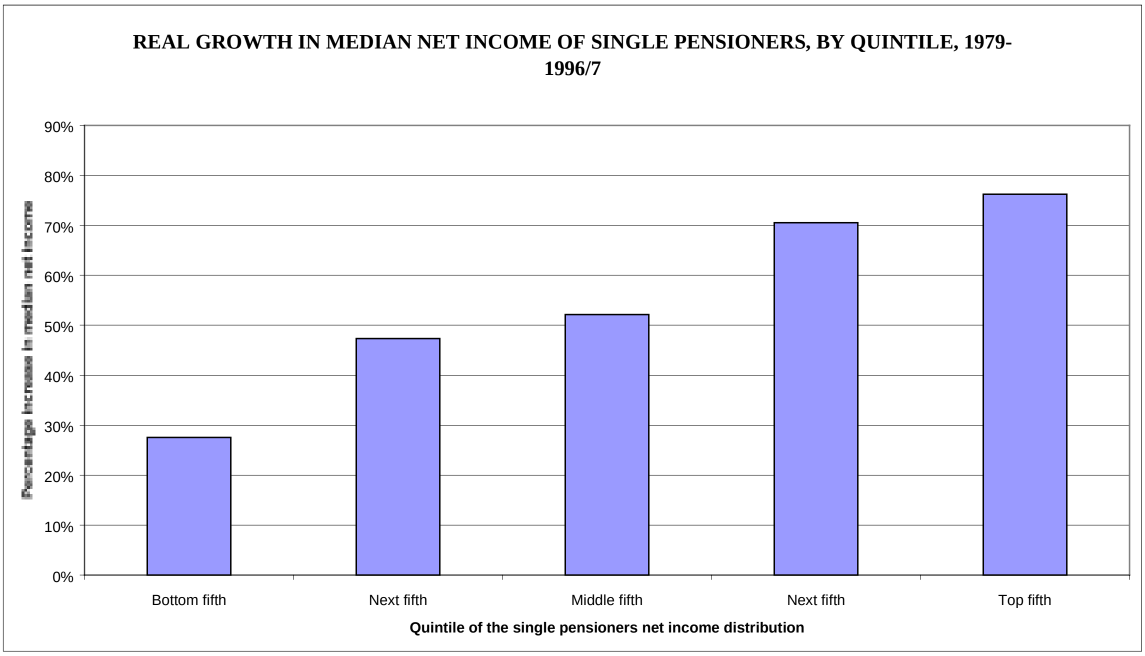
(iv) Many of the beneficiaries seemed likely to be people on middle incomes who potentially have perfectly reasonable alternative opportunities for pension saving.

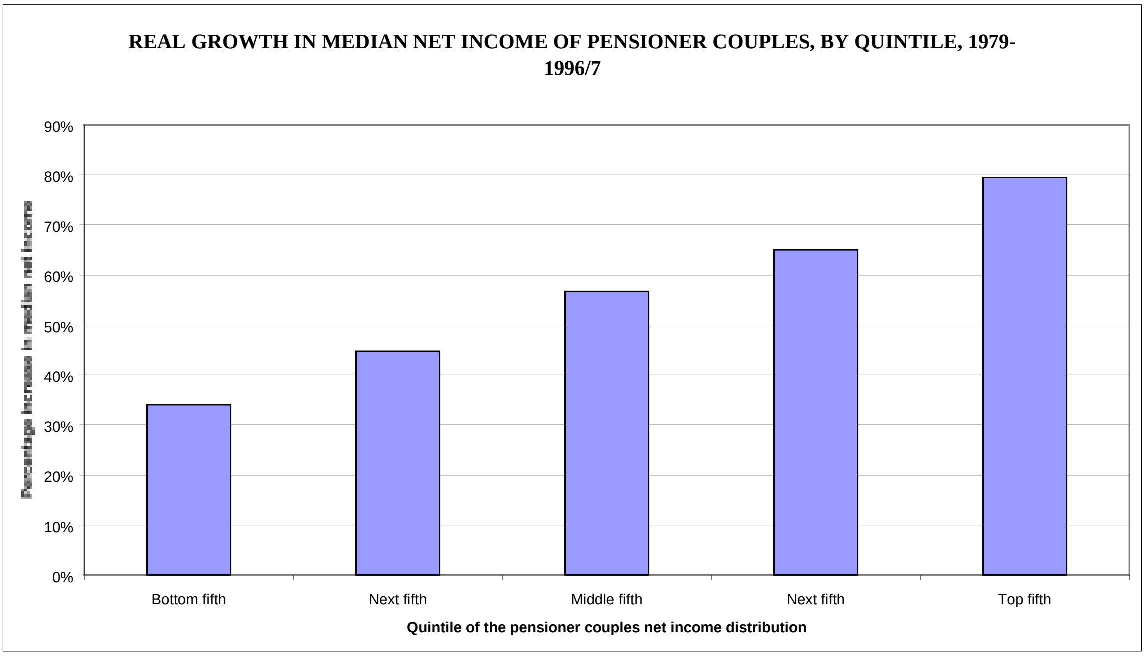
(v) In 1990, the “Barber” judgement, a ruling of the European Court, made different pension ages for men and women in employer schemes illegal. This made continuance of the links between SERPS and employer schemes virtually impossible because SERPS was originally based on retirement ages of 65 for men and 60 for women.

26 Following the introduction of the universal BSP in 1948 problems similar to some of those in SERPS had emerged and been addressed by substantially reducing the contribution period for a full BSP. This sort of action might have alleviated some of the problems with SERPS but for a scheme which was becoming judged as unaffordable cutting contribution periods was a non starter. For the group of current pensioners coming to be seen as the main problem, elderly widows, there would generally have been no feasible way of giving them an enhanced earnings related pension when they didn’t have an earnings related pension in the first place. Changes involving reduced costs were probably inevitable. Hence the last 15 years have seen projected expenditure on SERPS fall to around one quarter of earlier projected levels. Changes have included: increasing the number of qualifying years for a “full” pension from 20 to a normal lifetimes work; reducing the acquired pension from one quarter to one fifth of the individual's average earnings between the upper and lower limits; cutting inheritance from 100% to 50%; and breaking the links supporting employers' occupational pension provision. Virtually all of these changes have been applied to future acquisition of SERPS entitlement only. Entitlements already gained at the time of the change have not been cut except that if the 20-year rule had remained in place people with home responsibilities would have gained benefit for such service.

27 Whilst the long-term promises under SERPS were being scaled down the Government addressed what was seen as a much higher priority, namely provision for elderly pensioners. Around a quarter of pensioners depended on means tested benefits and if their living standards were to be improved, means tested benefits had to be increased. This was duly done in the 1980s and 1990s. For example between April 1987 and April 2000 the basic rate of means tested benefit (ignoring housing costs) for a pensioner couple increased from £65.35 to £121.95 an increase of 86.6%. Over the same period prices increased 67.1% whilst earnings increased by 106.4%. Older pensioners got bigger increases.

28 Cuts in SERPS have been seen as benign because real growth in the average of pensioner incomes has been much greater than the real growth in average earnings. In the period 1979 to 1996/7 real average earnings increased by 36%. The incomes of pensioners on various deciles of the income distribution are plotted below. Only the bottom income groups amongst pensioner failed to beat the real growth in average earnings.





29 During the last 20 years whilst SERPS has been cut means tested benefits for pensioners have been increased. Means tested benefits have the significant merit of being the cheapest way, in public expenditure terms, of getting resources to the poorest members of society. Unfortunately, they have two significant disadvantages. First, their existence is likely to have significant incentive effects on people's behaviour. Second, people for whom they are intended may not take advantage of the potential state largess. In the case of pensions both of these disadvantages are manifest. The gap between Basic State Pension and the level of means tested benefits was becoming sufficiently wide by the end of the 1990s to provide a significant disincentive to the low paid to make personal pension provision. Perhaps more important in political terms, increases in the level of means tested benefits provoked complaints from people with incomes near the cut off level that they were effectively getting no reward for savings made during their working lives because people who had made

no provision for their old age received from the state the same amount of money as some people were receiving from their life long savings.

30 Take up of means tested benefits by pensioners has been well below 100% of the potential caseload. Estimates based on sample surveys suggest several hundred thousand entitled pensioners do not claim their means tested benefits. Reasons for non-claiming are difficult to pin down precisely, for obvious reasons. However, they can be grouped into three main classes. First, people may be ignorant of their entitlement or think that the process of claiming is too complicated. Second, people may be aware of their entitlement but think that the amount is not worth claiming. Third, people may be dissuaded from claiming by a perceived stigma associated with claims. The latter effect may be particularly important with very old pensioners who may in their youth have had tales recounted by relatives of the harsh conditions existing in residential care facilities provided under the old Poor Law.

31 The Government is planning a comprehensive assault on all of these problems with the most comprehensive review of pension provision for low-income pensioners and potential low-income pensioners since 1601. The new State Second Pension (S2P) will massively boost the rate at which the low paid acquire pension rights whilst the new Pensioner Credit will ensure that virtually all pensioners will see some reward for their savings. Details of S2P are presented later.

32 The Pensioner Credit involves a major innovation for means tested benefits for people who are not working (as noted above, means tested top ups for workers first emerged nearly 220 years ago). The Credit works by withdrawing means tested benefits above the level of BSP by only 40% of the amount by which a person's income is above the BSP. Since most men and an increasing proportion of women are expected to retire with a more or less complete BSP the credit will ensure that virtually everyone will gain by at least 60% of the income from their savings for their old age. Although this tapering of means tested benefits for non-workers is a first for Britain, similar arrangements already exist elsewhere in the world. For example, in Canada the tax credit for pensioners works in a rather similar way to reward people for their savings whilst providing basic subsistence for those without any other means of support.

33 This short survey of the origins of the British pensions system has illustrated that the development process has been one of continuity and change. The main element of continuity has been that for several hundred years the state has accepted a responsibility to care for those of its citizens who are unable to care for themselves. The second continuous theme has been the problem of financing provisions. The 1532 legislation was largely ineffective because it was expected to be financed by voluntary donations. 450 years later an important reason for scaling back SERPS was that the burden on future taxpayers was considered likely to be unacceptable. Change has been thrust on the system by external circumstances, largely developments in the economy. The more rapid rate of change in the second half of the 20th century arose because of ever growing affluence, which would not be shared by the elderly without state intervention, and changing female participation in the Labour market and associated changes in fertility. The final cause of the quickening pace of change has been increasing longevity. These socio-economic changes do not seem to be fully worked out yet so it will not be surprising if in 25 years further changes in the social security system have taken place to accommodate evolving patterns in the economy and society.

History of Private Pensions

(i) Occupational Pensions

34 The British state has never required an individual to make provision for his or her own retirement. Employers have not been required to provide occupational pensions and individuals have not been forced to make personal provision other than acquiring rights in the state scheme by paying National Insurance contributions. Mass membership of pensions schemes as we now know them is a 20th century phenomenon and this year, 2001, will be the first year in Britain when all employers, other than the smallest, will be required to make

available private pension schemes for all employees. Even now membership will not be compulsory though it is expected that take up will be high.

35 Although wide spread availability of pension schemes is a relatively recent phenomenon the notion that loyal service should be rewarded with a severance payment was common military practice for thousands of years. The implicit bargain was that the soldier provided loyal service to his Lord and, if he survived, would expect to be rewarded after the campaign.

36 Early occupational pensions provided first by the state and then by large joint stock companies provided a similar bargain. After a lifetime of loyal service surviving employers received a reward in the form of a pension. The two conditions of loyalty, however that was judged, and survival were important. Leaving the job or dying extinguished the pension rights unless there were provisions for widows and orphans. Because the pension rights could be lost if the employer terminated the employment the existence of a pension provided a big inducement for workers to perform in a way which satisfied employers. Pensions may be an early example of an efficiency wage. In large organisations where performance was difficult to monitor the promise of a pension may have encouraged productivity. The existence of pensions would also have had an effect in reducing embezzlement by employees. The potentially dishonest employee would be deterred by the potential loss of pension if caught whilst the existence of the pension which provided insurance against longevity would reduce the incentive to maximise assets during the working life. Apart from the pure economics of pensions there was a growth of paternalism in the 19th century and this would undoubtedly have contributed somewhat to the growth of pension schemes. By the end of the 19th century pensions were common for white-collar workers in government, the finance industry and other large organisations.

37 However, at the end of the 19th century the overwhelming majority of the workforce were manual labourers who did not work in government or finance so the penetration of pension schemes across the workforce was limited to only around 1 in 20 workers. For the majority of the workforce all that was available was personal savings, protection provided by a mutual self help organisation or the Poor Law. For manual workers who survived into old age living standards must have been very low. Given life expectancy in the 19th century there may not have been huge numbers of people impoverished by old age.

38 The mass availability of pensions is primarily a 20th century phenomenon, in particular a development of the second half of the 20th century. Government and financial services, industries that were amongst the pioneers of pension provision, had expanded massively since the 19th century and still provided pensions. Large employers that had previously provided pension schemes for white-collar workers only started making provision for blue-collar workers. By the 1960s around 60% of the workforce were members of pension schemes. This percentage has varied since then but is now around 50%.

(ii) Personal Pensions

39 Defined contribution personal pensions first became available in the 1950s and certain tax reliefs were granted to people saving in Retirement Annuity Contracts. The market for personal pensions expanded dramatically following the 1986 Social Security Act which. This, for the first time, permitted people to reduce their contributions to the National Insurance fund and simultaneously their acquisition of SERPS rights in exchange for contributing to an appropriate personal pension which on rather modest assumed returns to the investment would yield the pension equivalent SERPS. That is to say, the reduction in contributions to the National Insurance Fund was designed to produce a pension at least as good as the SERPS pension that was foregone. Within a few years up to 6 million people were contributing to these pensions. Unfortunately, the regulatory regime for these pensions proved to be not restrictive enough and a large number of people invested in a pension vehicle which was not ideally suited to their circumstances. A particular problem was that many pensions had a lump sum annual charge levied by the provider, which for small

contributions could more than swallow the annual profits in the fund leaving the potential pensioner with a diminishing pension fund.

40 Problems of personal pensions have been comprehensively addressed by the introduction of Stakeholder Pensions in April 2001. Compared with personal pensions introduced under the 1986 Act the key feature of Stakeholder Pensions is a maximum management charge of 1% of the fund per annum. This seems likely to be below any normal return on the investments, which should ensure that except in exceptionally poor years the pension fund should grow with the passage of time. All but the very smallest employers will be required to make available to their employees either membership of an Occupational Pension scheme or the opportunity to contribute to a Stakeholder Pension. There are already a number of products on the market offering charges even below the 1% cap and it seems likely that Stakeholders Pensions will be extremely popular.

Part Two British Pension Arrangements for 2004

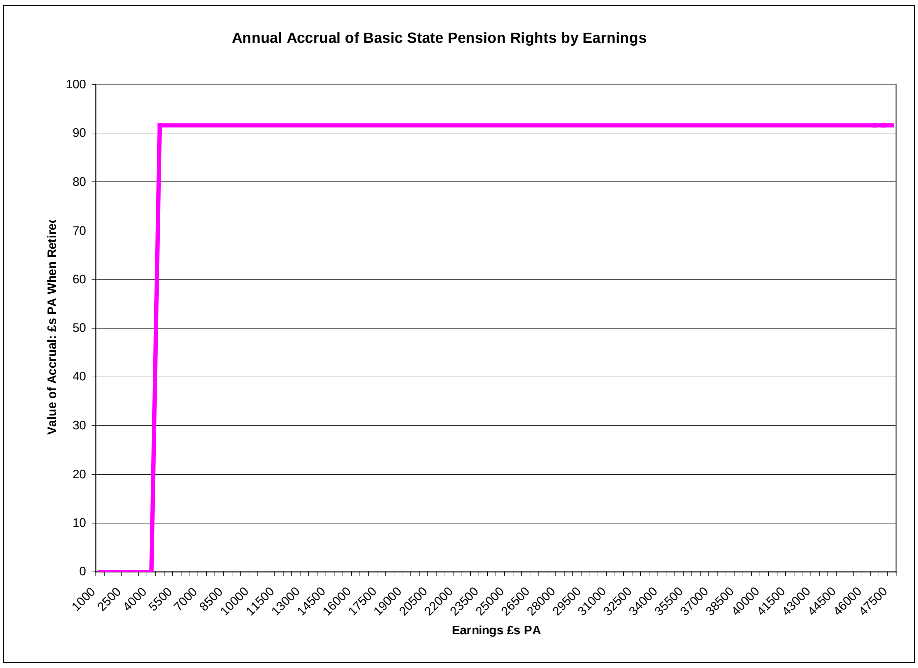
41 The above sections on the history of pensions in Britain have shown how the extremely complicated system which currently exists has evolved over time, reflecting changes in both economic and demographic circumstances. This section of the paper gives rather more precise details of arrangements. The first subsection exemplifies the acquisition of pension rights in the pre-retirement phase of life. The second subsection describes arrangements for the retired, in particular the inter-reaction of the various provisions. The year 2004 is illustrated because this is the year when all current proposals are likely to be on stream.

Acquisition of Pension Rights

42 In 2004 people will be able to acquire rights to Basic State Pension and State Second Pension or a private pension may supplement or replace S2P. Because SERPS rights will still be available to be acquired pending the introduction of State Second Pension and to illustrate the considerable advantages to the low paid of S2P over SERPS both S2P and SERPS are illustrated below. However, the reader should bear in mind that S2P is a replacement for SERPS. Whilst people will normally build up entitlements to BSP and a further pension, SERPS and S2P will not be on offer at the same time.

Basic State Pension

43 BSP is a flat rate pension to which full entitlement is available in exchange for 44 years worth of annual contributions or credits.



44 The chart illustrates the fact that anybody who pays National Insurance contributions on earnings equivalent to 52 times the lower earnings limit will acquire annual entitlement to about £94.50 worth of inflation proofed pension on retirement. There is a condition requiring a contributor to have contributed for at least a quarter of a full working life before reaching retirement age to gain any entitlement. The amount of pension right acquired in one year equates to around 0.5% of APW earnings though this is a result of the interplay of political debates in the past rather than any explicit design parameter in the BSP system.

Credits

45 A comprehensive system of credits towards BSP exists for people deemed unable to make contributions on earnings for good reason. People who may receive credits towards their Basic State Pension include:

The unemployed who are available for and actively seeking work;
People off work due to sickness or disablement;
People who are entitled to various maternity or disability benefits;
People entitled to in work means tested top ups;
People under 19;
Men aged 60-64 who are not working.

Home Responsibility Protection

People who:

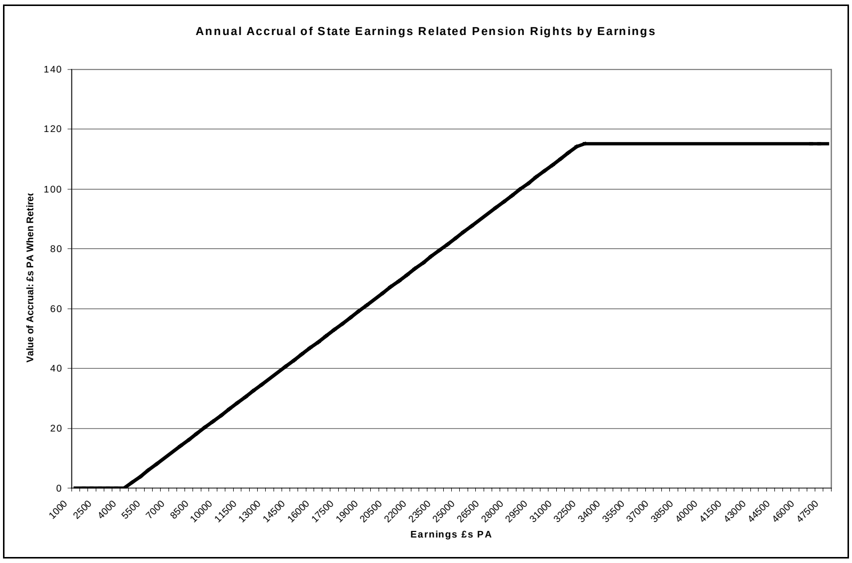
get child benefit for a child under 16;
spend their time looking after someone who is disabled:

will have the number of years for which they need to contribute to get a full BSP reduced by the number of years in which they have home responsibilities.

46 The rather low earnings threshold to ensure a full year's entitlement is earned along with the rather comprehensive arrangements for those for whom paid work in the market place may not be considered appropriate should ensure that most of the population in future will retire with a full or nearly full Basic State Pension entitlement.

47 Basic State Pension is the only State Pension for which both employees and the self employed qualify by paying the appropriate National Insurance contributions. Employees can also accumulate entitlement to SERPS or State Second Pension both of which are earnings related. Although S2P will have replaced SERPS by 2004 both schemes are exemplified below, first, because SERPS is the current option at the time of writing and, second, to illustrate the extra generosity of S2P in endowing pension rights on the lower paid members of the work force.

SERPS and S2P



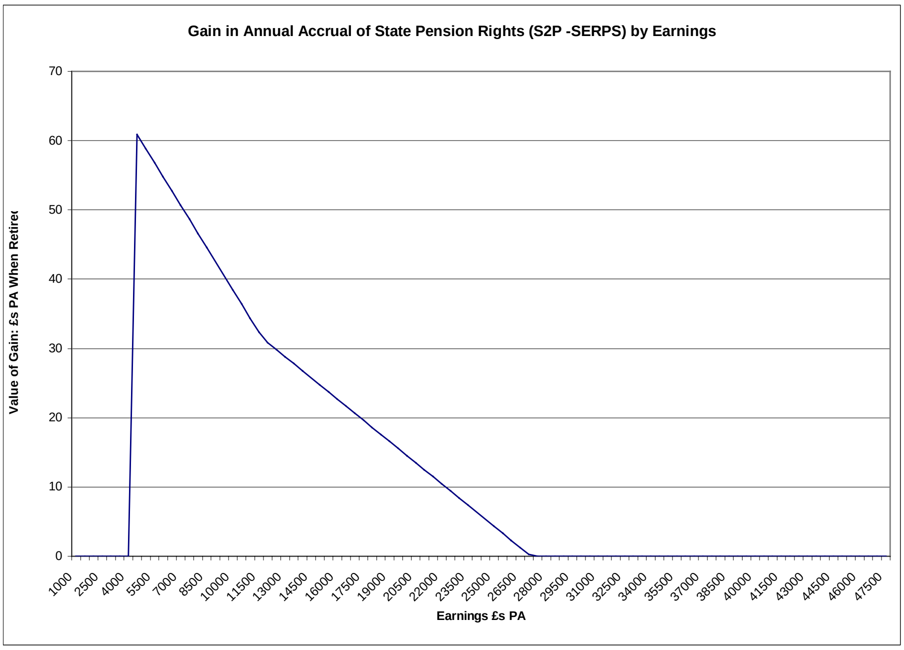
48 It can be seen that SERPS entitlement is a simple linear function of earnings between the lower and upper limits for contributions to the National Insurance Fund, the limits are at the kinks in the curve. The aim is to provide a pension of 20% of lifetime average relevant earnings where a lifetime is considered to be 49 years, so in any one year pension rights acquired equate to 1/49 of 20% of earnings between the upper and lower limits.

49 As originally devised a full SERPS pension could be acquired as a result of 20 years relevant contributions. No special provisions were made for those, such as mothers, who were likely to have less than a full working life as the relatively short period of work required to achieve a full SERPS pension removed the need for special treatment for particular groups. Each years acquisition of pension entitlement is increased in line with average earnings until the point of retirement.

50 A very complicated transition path from the original 20 year 25% target rate to the current 49 year 20% target rate has been organised. Though the modifying legislation provided for Home Responsibility Protection to be introduced within the SERPS scheme the appropriate regulations were never laid because S2P was seen as a more appropriate vehicle for targeting resources on the low paid.

State Second Pension (S2P)

51 S2P is broadly similar to SERPS but with a massive enhancement in pension entitlements for the low paid. S2P endows everyone earning above the lower earnings limit with an annual pension entitlement equivalent to 1/49th (representing 1/49th of a lifetimes work) of 40% of the difference between the lower earnings limit and about £11,750. Between £11,750 and £27,125 the fraction is 10% and above £27,125 up to the Upper Earnings Limit for contributions 20%. This implies that anyone earning below £27,125 a year acquires more pension rights than under SERPS with very spectacular proportionate gains for the lowest paid qualifiers. At £27,125 and above acquisition of pension rights is exactly the same as under SERPS.



Home Responsibility Protection

52 People who are unable to work for a variety of reasons such as caring for a young child or a disabled person or someone or being disabled themselves will be credited with entitlement as if they were earning £11,750. This Home Responsibility Protection (HRP) in S2P should be more effective in delivering help to the potentially lowest income pensioners than the 20 year rule in SERPS because under the original SERPS rules there was no enhancement of pension for low paid workers whilst under S2P pension will be acquired by those given HRP at a higher rate than a person on average earnings would have acquired pension rights under SERPS. S2P enhances the prospect that anybody that spends most of their working life in full time employment on good wages will retire with a state pension; BSP plus S2P, above the level of means tested income. This should give people the confidence to make further savings either in a pension or other vehicle; content in the knowledge they will see some reward for their savings when they retire.

Private Pensions

53 Some form of pension saving beyond that implied by membership of the BSP scheme is required of all employees in Britain with earnings above the lower earnings limit for contributing to National Insurance Fund. The default option is SERPS/S2P but employees may either “contract out” of S2P or have a private pension in addition to S2P and/or have non pension saving which they intend to draw down in retirement.

Contracting Out

54 People may have their and their employer’s National Insurance charges reduced if they subscribe to a pension scheme which is intended to, or has the potential to, provide broadly similar entitlements to those which the contracting out individual would have gained under SERPS.

55 So far as the individual is concerned he pays less to the Government now and receives less from the Government in future. So far as the general taxpayer is concerned the effects are different. The National Insurance Fund is operated on a pay-as-you-go basis with contributions broadly being expected to cover out-goings on a year by year basis. Consequently, if one set of contributors, eg people who are

contracted out, pay reduced contributions the general rate of contributions has to be increased to ensure that the inflow matches the outflow in the relatively short term. Contracting out thus has little effect on the Government's fiscal stance in the short term. It merely redistributes the burden of taxation between taxpayers, if contributions to the National Insurance Fund are regarded as a particular form of taxation.

56 The effect in the long term is quite different. People who contract out of SERPS unambiguously reduce their entitlement to state pension when retired and thus reduce the implicit burden on future generations of taxpayers. The existence of contracting out is one of the reasons why the future burden of paying state pensions in Britain seems less of a problem than in some other countries. Roughly two thirds of the employed workforce paying National Insurance Contributions is currently contracted out. These are mainly amongst full time and better paid workers.

57 Private pensions in Britain are almost invariably backed by pension funds, the assets of which are kept separate from the rest of the assets of the employer. The pension funds assets are normally held in a special trust fund or by an insurance company. There are few regulations regarding investment strategy except that (i) the pension fund may commit only a very small proportion of its resource to the employer's business and (ii) under the Minimum Funding Regulations the fund is required to have an investment portfolio which broadly matches its liabilities. Both of these restrictions have their critics. The small business lobby tends to criticise the restriction on self-investment. Large pension funds tend to criticise the minimum funding requirement on the ground that it inhibits investment flexibility and forces an unwelcome bias towards investing in low yielding government bonds.

58 The regulation of pension fund investments is and always will be a very difficult issue. On the one hand a relatively light regulatory touch has led to a wonderful performance by most pension fund managers; real returns on funds approaching 10% per annum were achieved for a number of successive years in the 1990s.

Pension Fund Investment Performance – Percentages

Rounding: nearest 0.1%

Period	(Years)	Return on median fund
1997-98	2	14.0
1996-98	3	12.9
1995-98	4	14.6
1994-98	5	10.4
1993-98	6	13.3
1992-98	7	14.3
1991-98	8	14.8
1990-98	9	11.7

Figures apply to all funded schemes
Source: Pensions Pocket Book in association with *Bacon and Woodrow* (2000 edition), p13

On the other hand, the Government has a twofold interest in the funds. First, via tax relief on contributions it is a major contributor to the funds. Second, it has a clear vested interest in ensuring, so far as possible, that the relevant funds are available to pay pensions when people retire. The Government is essentially faced with a constrained optimisation problem and is seeking to provide a unique solution to fit tens of thousands of different pension schemes. A recent Government sponsored report has recommended major changes to the Minimum Funding Requirement.

59 The total value of assets in pension schemes is over a trillion pounds or, in very round terms more or less equivalent to GDP. Recent estimates of the distribution of pension fund assets are:

The Distribution of Pension Funds Assets (at 31st March) – Percentages

Rounding: nearest 1%

	UK Equity	Overseas Equity	Overseas Bonds	UK Fixed Interest	Index Linked	Cash and Others	Property
1986	54	21	0	15	2	4	4
1987	58	22	0	11	2	4	3
1988	59	16	0	13	2	7	3
1989	59	19	1	8	2	7	4
1990	56	24	3	4	2	8	3
1991	58	22	5	4	2	6	3
1992	58	24	5	4	2	5	2
1993	59	23	5	4	3	4	2
1994	57	25	4	5	3	4	2
1995	56	21	5	7	4	4	3
1996	54	23	5	7	4	5	2
1997	54	21	4	8	4	7	2
1998	55	19	4	9	4	7	2
1999	55	18	4	11	4	6	2

Source: CAPS *Pension Fund Investment Performance General Report*

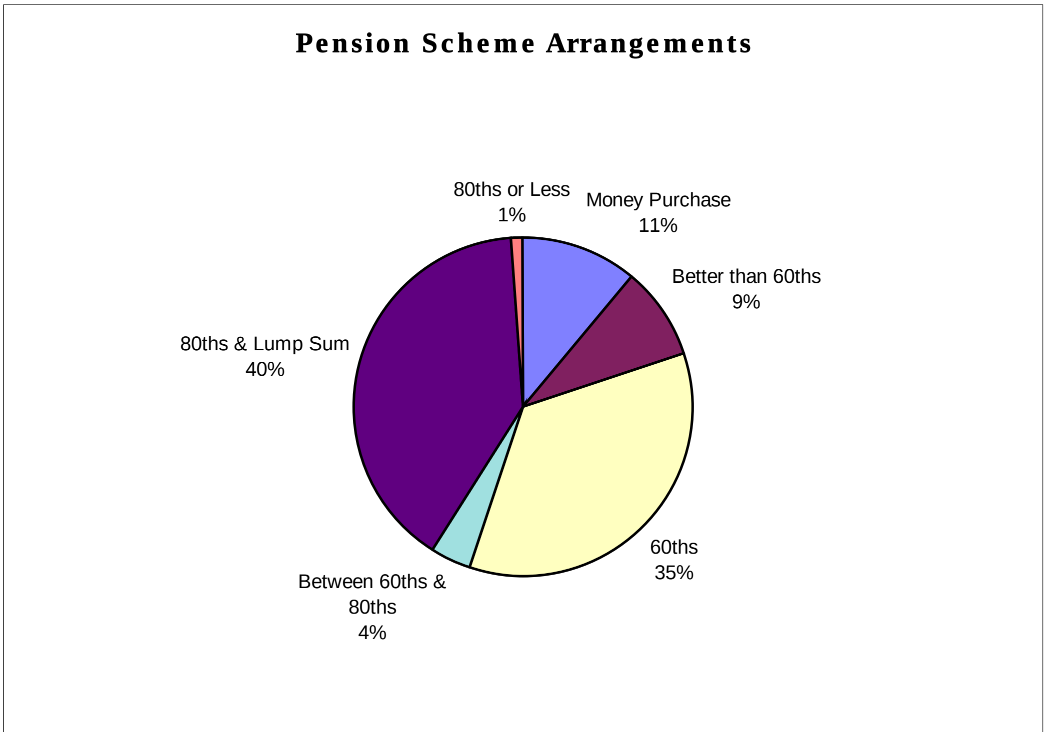
Acquisition of Rights in Occupational Pension Schemes

60 In 1995, the latest years for which detailed figures are available, around 89% of Occupation Pension Schemes provided a pension in retirement related to the level of earnings when working. Such schemes are known as defined benefit, (DB) schemes. The remaining occupational pension schemes provide a pension in retirement related entirely to the value of contributions to the scheme whilst working. Such schemes are known as money purchase (MP) schemes.

61 In a money purchase scheme the acquisition of pensions rights at retirement is entirely dependant on the amount of money contributed, the investment returns on the fund that is being accumulated and the cost of annuatisation at the point of retirement. Neither the level of investment return nor the cost of annuitisation is known with any precision in advance. The risk of high or low investment returns is born by the employees. Real returns to British stock market investments over the last 50 years have averaged around 5.8% to 5.9% though it goes without saying in some years that there have been wide dispersions around this average. As previously mentioned the 1990s saw a run of years when real returns were in double figures. Conversely, in 2000 real returns were negative. The cost of annuatisation of the pension fund at the point of retirement tends to vary inversely with real interest rates which makes the process of predicting accrual of pension rights from a MP scheme even more difficult. Published analysis of MP schemes tends to concentrate on determining the appropriate proportion of earnings to contribute to the scheme to achieve a given replacement rate in retirement assuming certain levels of investment returns. This sort of exercise usually shows that a worker needs to contribute between 10% and 20% of earnings to attain a gross (before taxation) replacement rate of around 50%.

62 Acquisition of rights within a DB scheme are much easier to describe because benefits in a DB scheme are related to some measure of earnings whilst

working. Typically in Britain, a pension is calculated on the basis of 1/60ths or 1/80ths of earnings for each year of work. Earnings taken into account are normally the earnings in a year or in a number of years close to the time of retirement. In addition to an annual pension the retiree may also or alternatively receive a tax free lump sum valued at up to ¼ of the discounted value of the expected lifetime pension. For a forty year working period fractions of 1/60ths and 1/80ths, if in the latter case the lump sum is paid in addition to the 1/80ths, produce a pension equivalent to around two thirds of relevant earnings which is the maximum payable from a pension fund granted relief from income tax and corporation tax on the contributions.* The distribution of benefits from occupational pension schemes in 1995 is shown in the chart below.

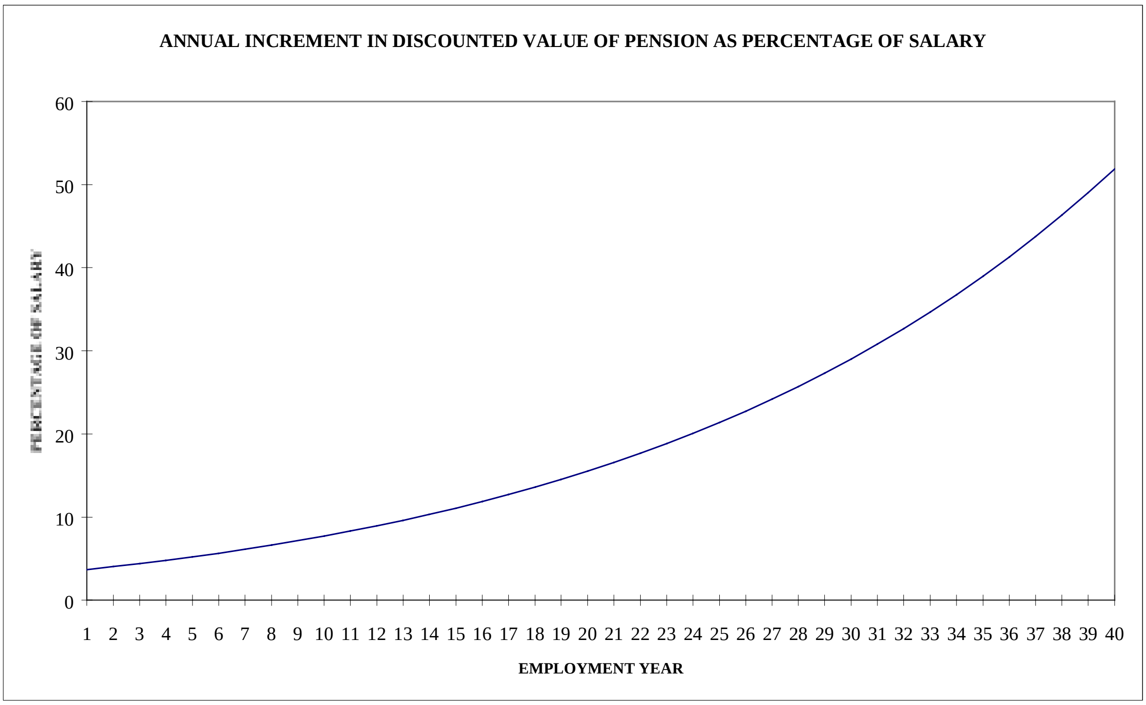


63 The principle risk to a worker in a DB scheme is that he may not stay with his employer until the expected age of retirement or achieve the salary progression he anticipated when he started. The importance of these risks is not really known. Government regulation now requires the pension rights of early leavers to either be preserved in real terms or transferred to a new employer. Many employers offer enhanced pensions to early retirees particularly those that retire on grounds of ill health. Studies of redundancies in Britain and America have shown workers retiring early with generous pensions. Such studies have not really identified the underlying behavioural relationship between the trade off between leisure and work of such retirees because it is incredibly difficult to pin down whether the worker was

* Income tax is payable on pensions in payment. By exempting contributions to approved pensions from income tax double payment of tax on the same earnings is avoided. Tax is charged on the income received from the pension but not the lump sum. Within the fund income is taxed but not the capital gains. Overall the tax treatment of pensions funds is from the point of view of the individual probably broadly neutral with respect to the decision whether to take income now or take it as a pension. The benefit to the government is sacrificing taxation income when the support ratio is high in exchange for an improved net fiscal contribution from pensioners when the support ratio will be lower. (This result holds even if pension saving displaces other saving for retirement 100%. This is because withdrawals from a pension saving vehicle are taxed on the capital draw down whereas in other savings vehicles taxation is only levied on the investment return).

effectively sacked and then compensated or given a meaningful choice between work and non work.

64 Proper understanding of the underlying behavioural responses of workers to choices on offer would be valuable because the financial arithmetic of defined benefit pension schemes is complicated.



65 The chart shows that in a final year's salary scheme that during the years of employment the value of pension rights increases exponentially as the years of employment increase*. The upswing in the chart arises from three causes:

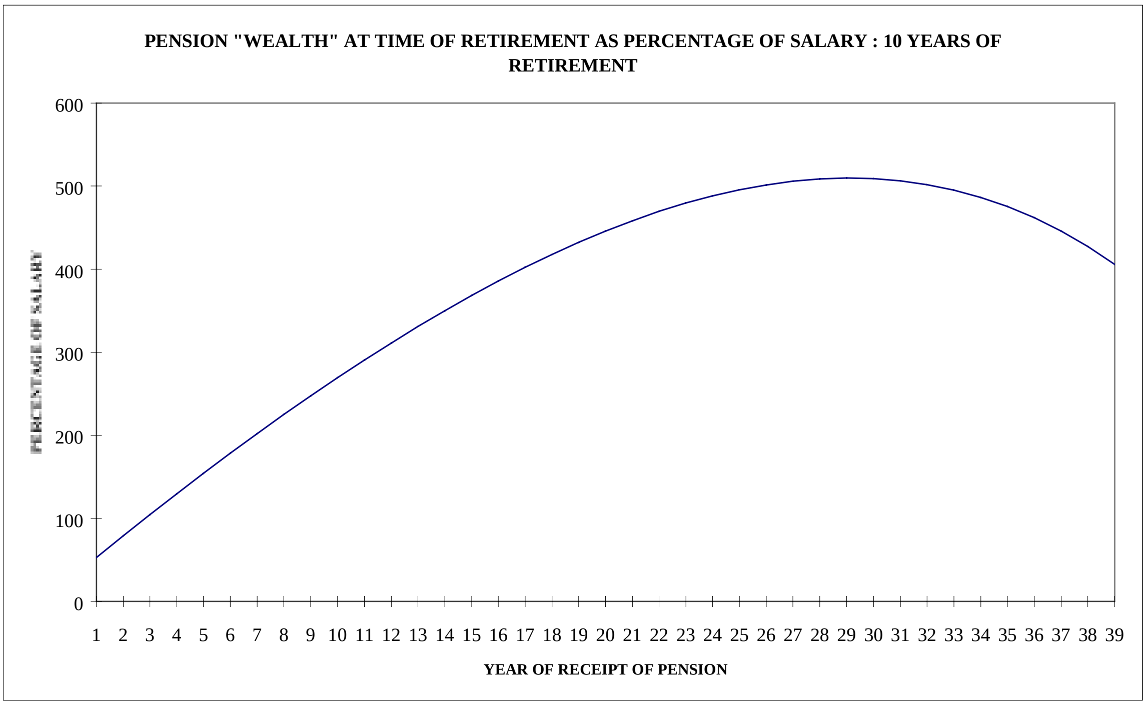
* For this and the next three charts the following stylised working life assumptions have been made. Annual salary growth 1.5%, Discount rate 4%, pension fraction 1/80th. Worker lives 20 years after fixed retirement date except where stated.

1. For each year's work the worker acquires an extra year's entitlement to the appropriate fraction of salary

2. Each year the salary is increased the value of the previous years membership is increased by the same amount.

3. For each year closer to retirement the worker gets the number of years discount of the salary is reduced by one.

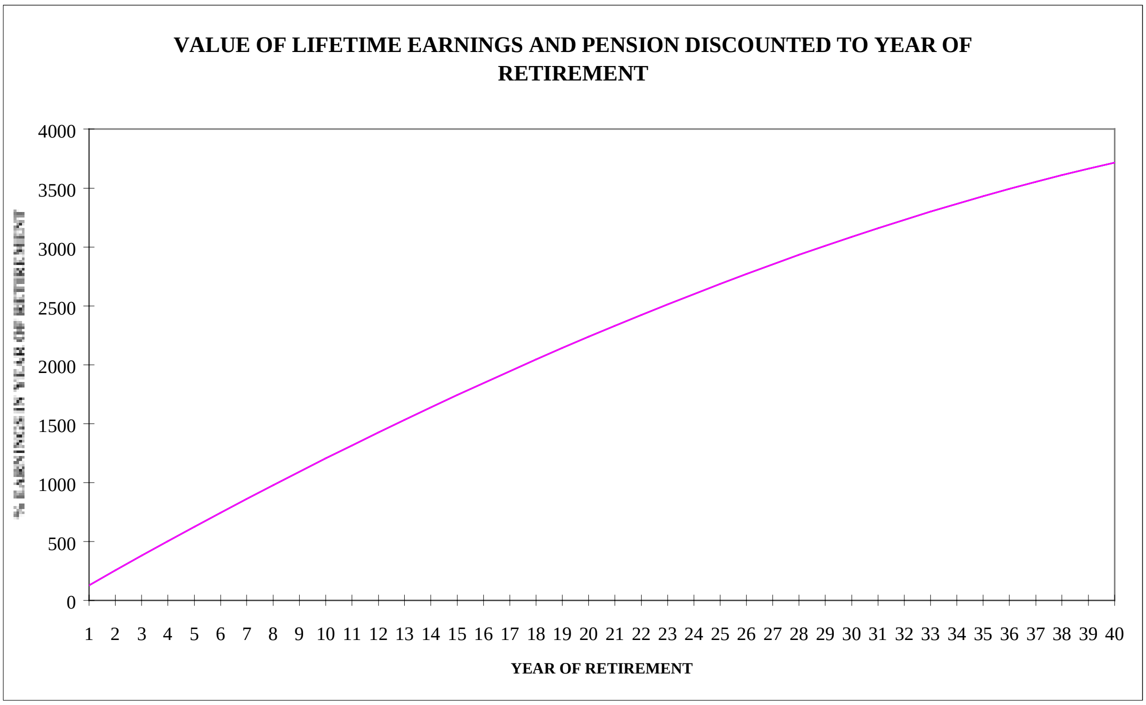
66 This pattern of accumulation of pension rights has predictable values on the “pension wealth” of an individual.



67 This chart* shows the values of the pension as a proportion of salary assuming the person retires at the end of their 1st, 2nd, 3rd etc year of work with an income based on the pension earned to that point. The retiree receives that pension throughout the remainder of their normal working life and throughout the remainder of their life until death ten years after the normal retirement age. This suggests the worker whose prime interest was in maximising receipt of pension should retire well before the normal retirement age. However, if a long period of life beyond retirement age is assumed the hump moves rightward on the chart. This is because the greater value of the higher pension that arises from working longer spread over the longer period of retirement more than offsets the pension value of drawing the pension before normal retirement age. For anyone who expects to live 20 years beyond retirement age pension wealth is maximised, on these assumptions, by retiring three years early. For anyone who expects to live 30 years beyond normal retirement age pension wealth is maximised by working beyond normal retirement age.

* The chart is provided to illustrate the value of pension “wealth” rather than the choices facing an individual. It is almost inconceivable that an employer would start paying a pension to a young worker with few years of service. On the other hand it is not uncommon for people over 50 to be made redundant and then be paid an immediate pension.

68 The arithmetic underlining the above charts has caused many people to express concern about the employment effects on older workers of DB pension schemes. Fortunately for DB schemes these charts, which will be very familiar to Anglo Saxon readers, do not tell the whole story. From the view point of the worker the correct decision variable will normally not be the maximum value of pension wealth but maximum value of lifetime earnings.



69 The chart illustrates the rather obvious point that if annual pension is less than earnings the way to maximise lifetime income is to work as long as possible. The other decision variable for the worker is the replacement rate which gives a good indication of the opportunity cost of the work leisure trade off. In calculating this there are colossal difficulties for the workers. The instantaneous replacement rate at the point of retirement is fairly obvious but missing out on salary growth in the final years of employment will mean a lifetime replacement rate substantially lower than the instantaneous replacement rate.

70 For the employer too the decision process is different to that illustrated in the chart in paragraph 66 above showing the annual increment in discounted value of pension as a percentage of salary. It is self evident that it will never be cheaper for an employer to retire on pension a long service worker and replace him with a new recruit on a similar salary. The cost of salary plus pension contributions of the new worker plus the cost of the pension of the retired worked will always be higher than the cost of continuing to employ the long service worker. This applies even without taking into account any enhancement of the long service workers pension that may be required to ensure industrial harmony when his service is severed.

71 Similarly at the point of recruitment the arithmetic underlying the chart showing the annual increment in discounted value of pensioner percentage of salary is not relevant. This is because two of the three factors that drive up the pension cost of a long service worker are not applicable at the point of recruitment. Neither the increase in the value of previous years contributions nor the reduction in the discounting period on previous years contributions apply at the point of recruitment.

72 This chart shows the relevant pension related decision variable for the employer at the point of recruitment. The upward trend in the chart arises solely from the reduced period discounting for one years pension entitlement because older the workers get their pension earlier than younger workers. Given that it is rather unlikely that an employer would choose between two different workers with vastly different levels of experience the difference in pension costs at the time of recruitment are likely to be much smaller than the differences between the pension costs of persons 1 and 40 years from retirement shown on the chart. In summary, the often quoted suggestion that defined benefit pension schemes reduce the employability of older workers is somewhat overplayed.

Non Pension Benefits for People of Retirement Age

73 Apart from pensions Britain provides a wide range of benefits for people contingent on their age, their health and their incomes. Age and health related benefits are briefly reviewed in this section, income related benefits are reviewed below. Central government provides help with the cost of disabilities, the amount of help varying with the degree of disability, help for the bereaved, help for those who care for the disabled, lump sums at Christmas and to cover the cost of heating in winter and free television licences. Local Authorities have some discretion in the provision of services but these may include free or subsidised access to public transport, help with cost of adapting housing for special needs, caring services and subsidised meals. There is variation between local authorities both in provision of these services and the extent to which they are purely contingent on age and health or, in addition to age and health contingency, conditional on having low incomes. Comprehensive medical care is free to people of pension age in general. The health related exception is that payment of state pension is reduced for people who spend a long time in a hospital.

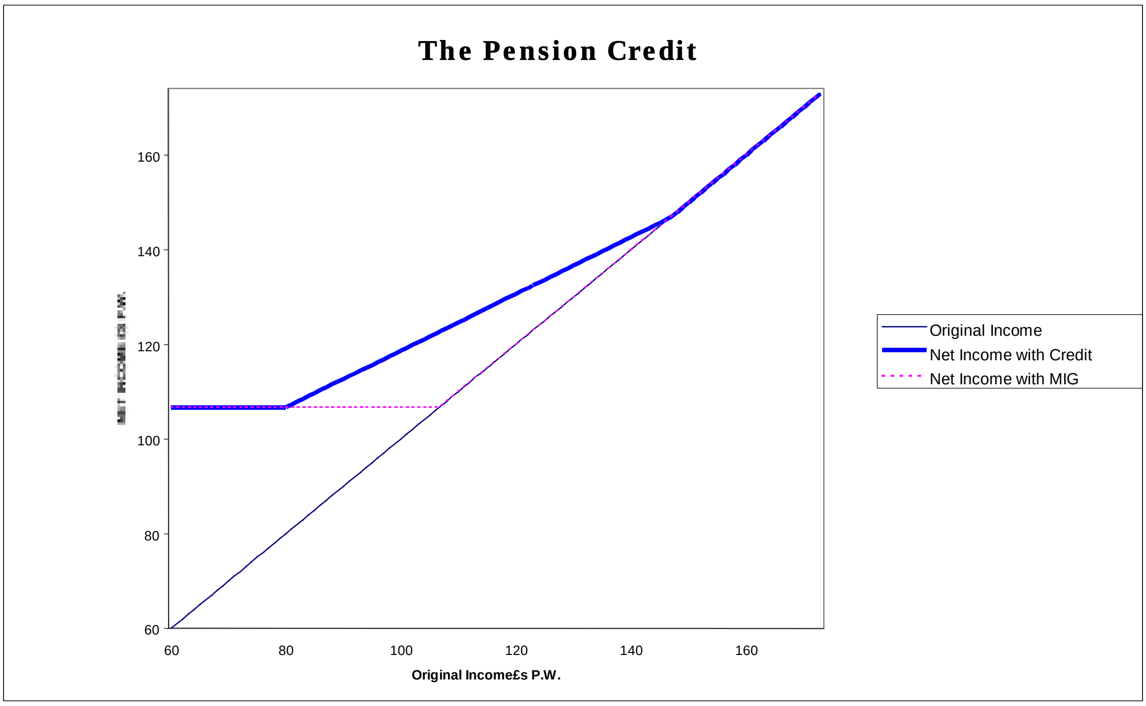
Means Tested Benefits for Pensioners

74 The basic means tested benefits for pensioners is the minimum income guarantee, MIG, which for a single person will be set by 2004 at a rate at roughly

equivalent to 60% of national median equivalised disposable income after housing costs. Cutting through the jargon this means that every pensioner is guaranteed a minimum income equivalent to 60% of the after housing costs disposable income of a household in the middle of the income distribution adjusted for the size of the household where the adjustment assumes modest economies of scale in the living costs of households as the number of people in the household expands.

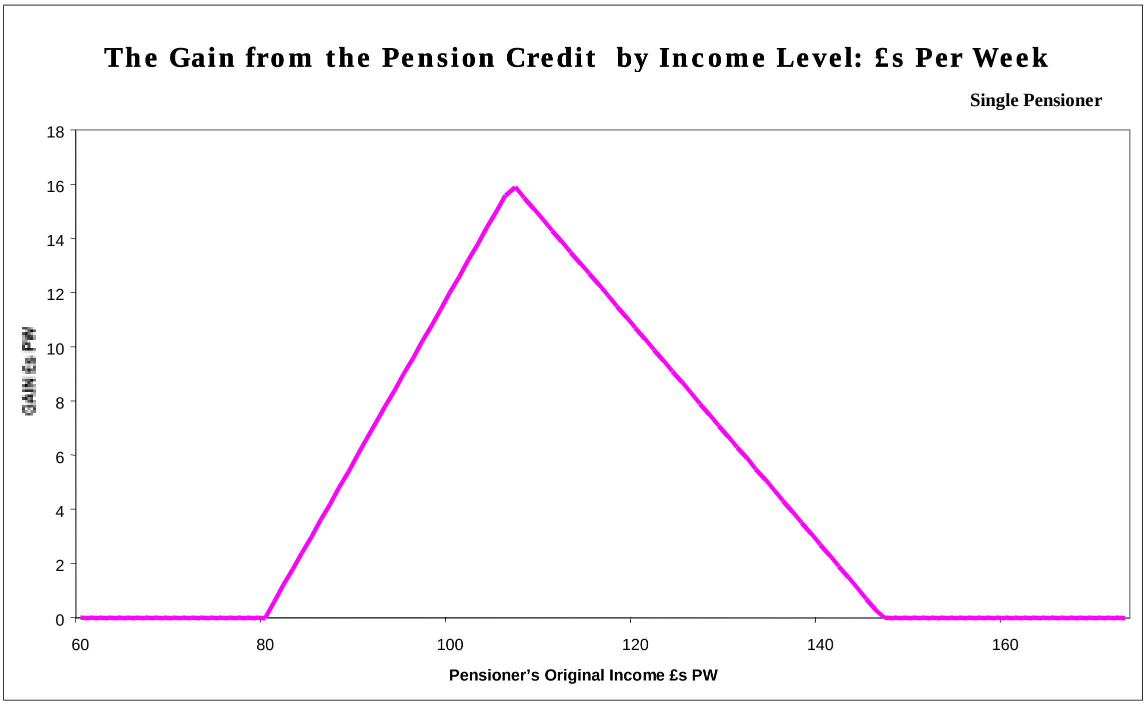
75 The Minimum Income Guarantee is paid to all legal residents. It is paid in full to people with zero incomes. For a single person payment of Minimum Income Guarantee equals the level of the guaranteed payment less 100% of the claimant's income. The rate is higher for couples. In addition to the minimum income guarantee low income pensioners receive Housing Benefit equivalent to 100% of their rent and Council Tax Benefit which pays 100% of their local taxation.

76 100% withdrawal of minimum income guarantee as income increases provides people with low income from pensions or personal savings with no reward for their savings. It also leaves people whose income is marginally above the minimum income guarantee level with a very small reward for their savings. The Pension Credit is being introduced to address this problem.



77 Income above the level of basic state pension will be offset against the minimum income guarantee at a rate of only 40%. Since most people have complete or nearly complete entitlement to basic state pension and at least some non-pension income the pension credit will ensure that the overwhelming majority of pensioners will in future receive a reward consistent with the benefits of at least 60% of their savings. In a world of rational analysts where everyone is endowed with perfect foresight the effects on the incentive to save towards ones retirement are uncertain. For people who predict their incomes to be below the MIG; compared with the incentives under the 100% taper of the MIG there is a reduction in the marginal deduction rate on their income from savings which increases the incentive to save. On the other hand, for people with incomes above this level the higher prospective marginal deduction rate under the PC reduces the incentive to save. For people who project their income to be a bit above the level of the MIG both the income and substitution effects of the Pensioner Credit reduce the incentive to save more.

78 However, we do not live in a world where every individual behaves like a "rational economic man". The rewards to savers from the pensioner credit can be quite generous.



79 Above all, where pensions are concerned there is far from perfect foresight. Given that the Pension Credit will ensure that virtually everybody gains from their pension savings and the government is promising a handsome reward to savers with otherwise potentially low incomes it seems probable that the Pension Credit will lead, in conjunction with Stakeholder Pensions, to a substantial increase in the number of people who make private provision for their futures.

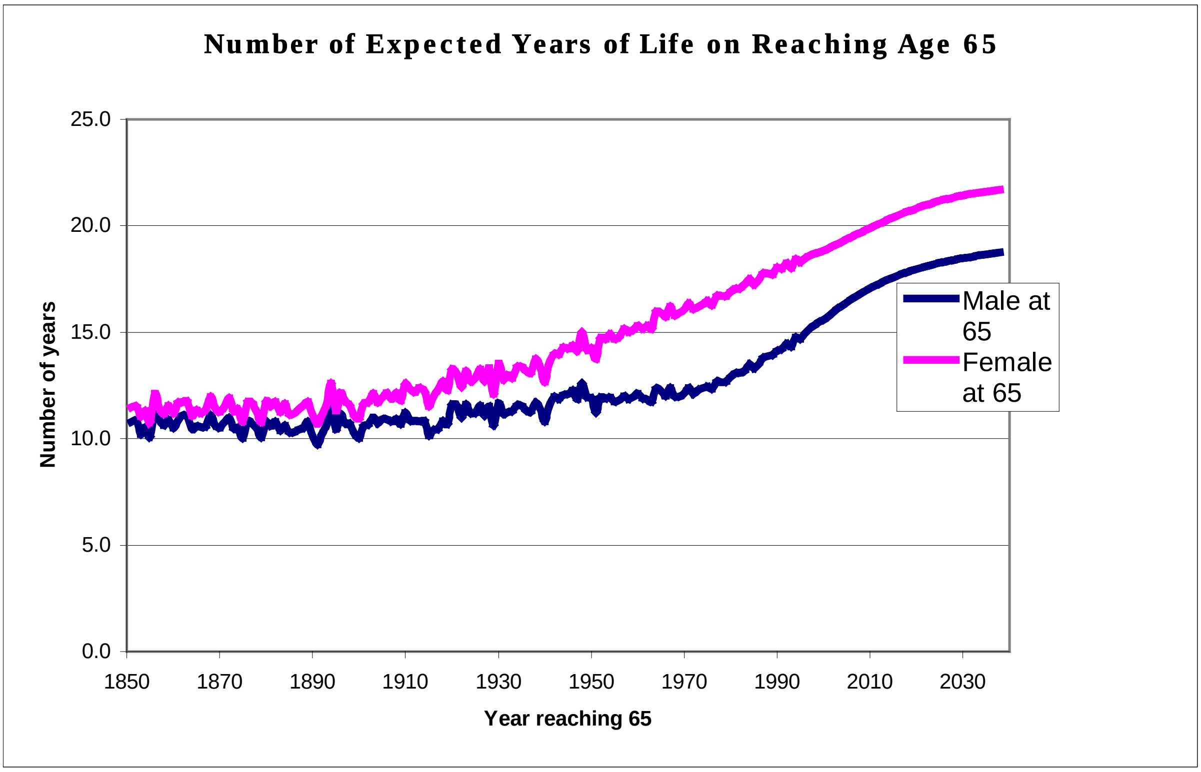
Part 3 Long Term Sustainability of British Pensions

80 Before considering any estimation of the long term sustainability of pension schemes it should be noted that this is an area where there are more questions than answers. The uncertainties include longevity, fertility, investment returns, taxable capacity, effective retirement age and acceptability of various levels of pensioner incomes relative to the incomes of the rest of the population. There is a colossal literature on some of these topics whilst others have generated almost no interest. The common thread related to all of them is considerable uncertainty. In considering projections of future pensions it is important to realise that in most cases we are looking at a presentation of a plausible scenario rather than a statistically based forecast with calculable margins of error.

Demography

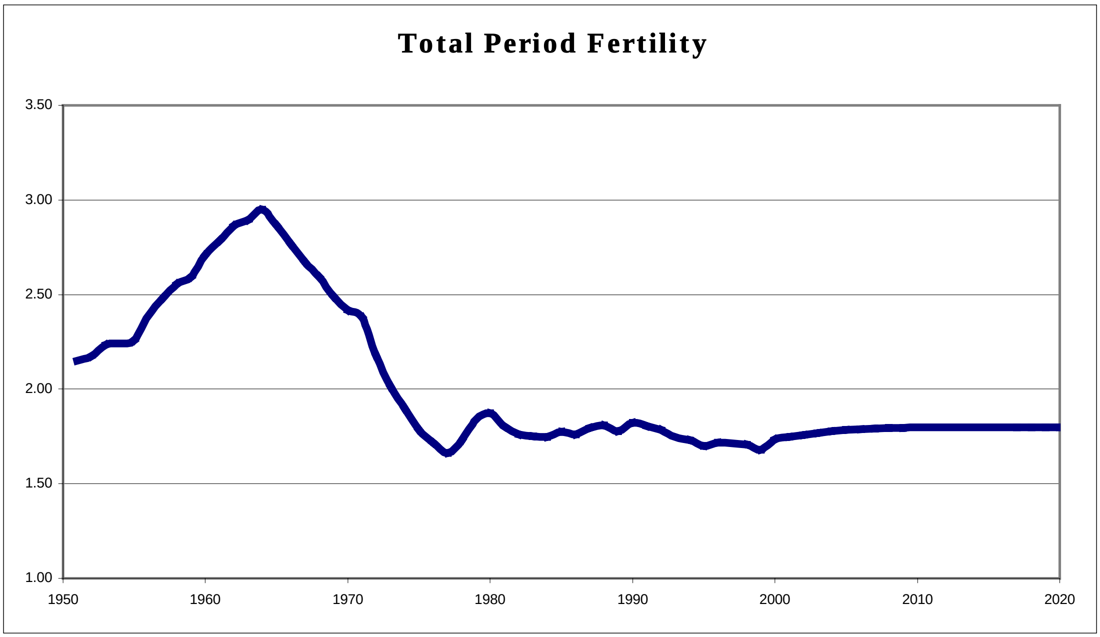
81 It is possible to reasonably confidently ascribe past increases in longevity primarily to improving standards of public health and improved nutrition. Medicine and improved working conditions have also played their part. It would be possible to build a statistical model that would fit the past perfectly if enough trend and dummy variables were included. Such a model would be useless for the future because we would not know what structural changes along these lines would happen in future. The main actuarial tool for predicting future longevity is to

extrapolate trend changes from the past into the future. Unsurprisingly, in view of the complications, this is incredibly difficult. No one has yet been able to build an extrapolative model of British longevity using historic data which reliably predicts patterns of longevity far into the future when the estimated model is tested against data from the post estimation period. Similar difficulties have been experienced in many other countries.



82 Current central estimates for Britain are presented in the chart above. These show extrapolation of the trend in recent years followed by a gentle tailing off in the improvement. Uncertainties go both ways. Affluence and the increasing obesity that it seems to be bringing, could curtail the improvement. Health consciousness and medical breakthroughs could curtail the tailing off of the improvement.

83 Fertility is another relevant issue where there is little real understanding of the driving forces. Economic models of the type pioneered by Gary Becker are not easily amenable to incorporation of changing tastes or contraceptive technology. Simple time series analysis does not take account of developments in the economy. Contemporaneous cross national comparisons seem to refute evidence produced by within country time series data. For fuller discussion of the problems the reader could look in “New Perspectives on Fertility in Britain” Office of Population Census and Surveys 1993. For purposes of this paper it is sufficient to note that this is an issue where there is considerable uncertainty.

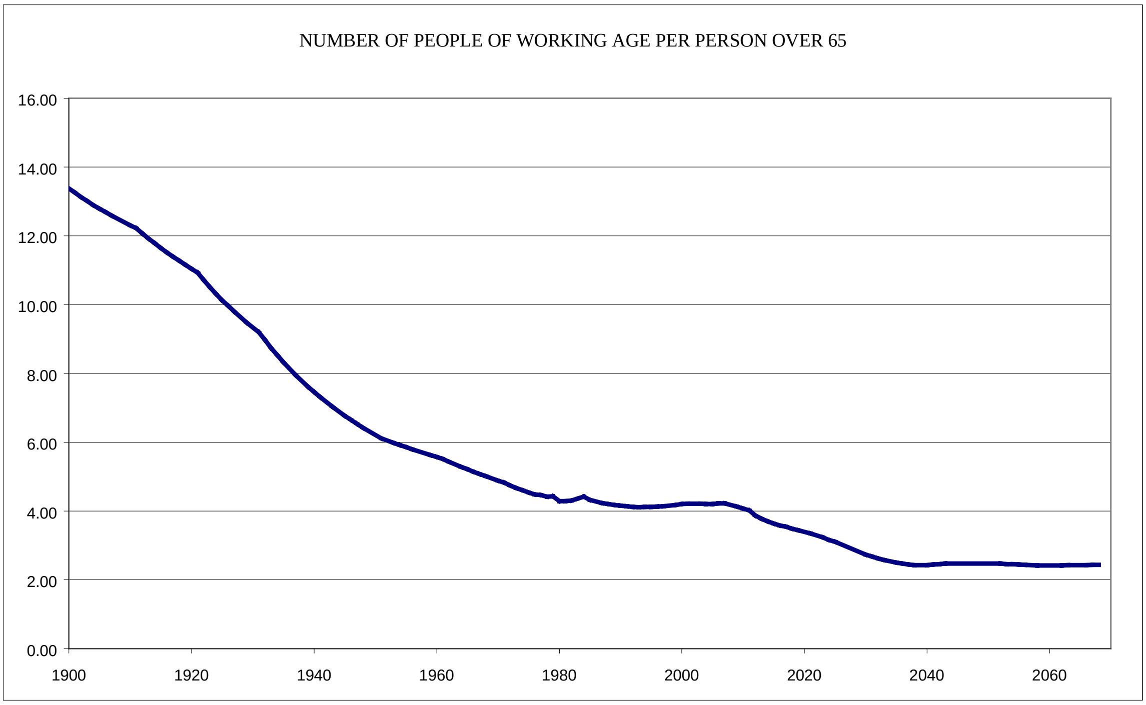


84 The chart shows the average number of births per female since 1950. It suggests that there was a major change in behaviour in the early 1960s prior to which fertility seemed to increase with affluence and since when the relationship has gone into reverse. The steepening of the decline in the mid-1970s and the down turn in 1980 could both be associated with recession caused by the oil crises of 1973 and 1979. But with or without this mental smoothing of the line there has been a pretty dramatic change since the early 1960s.

85 Cross section evidence from the Family Expenditure Survey, an annual sample survey of household income and expenditure shows a major change in the relationship between household income and number of children. In the early 1960's the number of children in household went up almost lineally with household income. Nowadays, low income families tend to have the most children. Noting that there has been a colossal increase in the proportion of women working full time in the labour market and a decline in the proportion of working men one possible explanation, consistent with the within country data, is that the cause decline in the birth rate is simply a response to the rising opportunity costs of establishing stable relationships and having children. Increasing real wages have allowed, for the first time ever, substantial numbers of women to set up home on their own independent of their parents or a supporting spouse. This increases the opportunity cost to a woman of establishing a stable relationship. 50 years ago a typical woman would be faced with the choice of parents or husband, possibly both if she chose a low paid man. In recent years increasing numbers of women have had the opportunity of independence and naturally some have taken it.

86 Even if a woman has opted for a stable relationship the opportunity cost of procreation is still higher than it used to be if she has to take time off from a well paid job and or if the requirements of childcare reduces her promotion prospects.

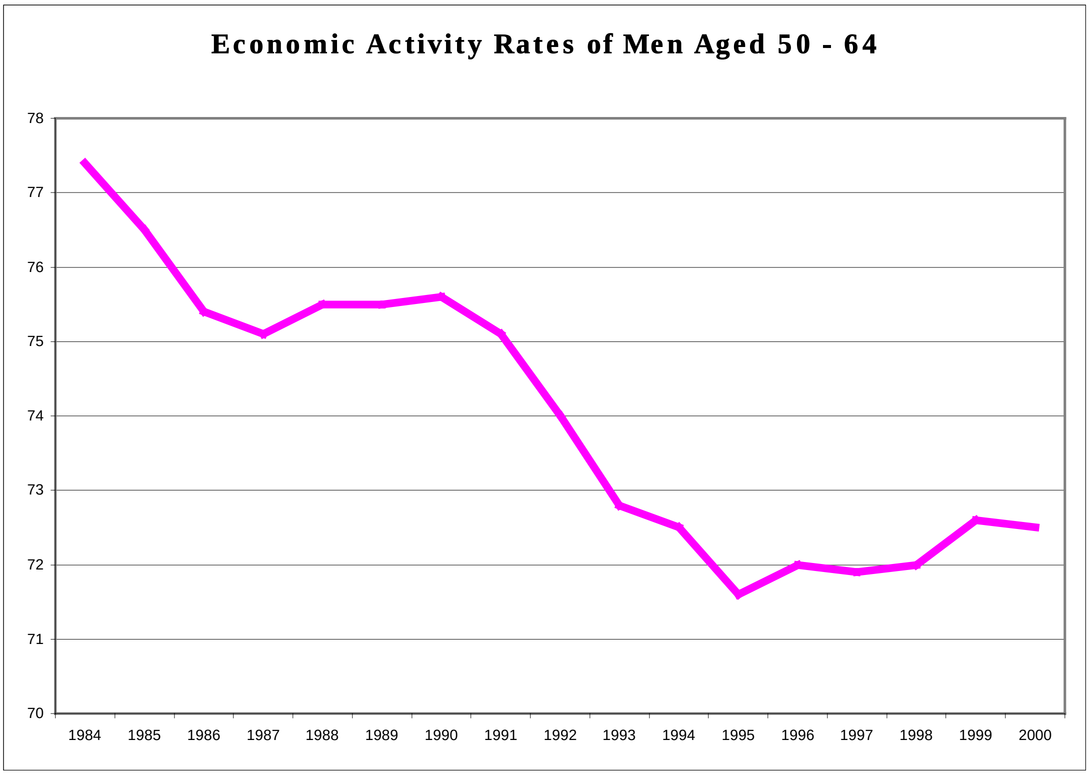
87 The extremely speculative remarks in the proceeding sentences suggest that future fertility could go either upwards or downwards. Until the early 1960s increasing affluence was associated with increasing procreation. This trend could reassert itself. Declining fertility in recent years associated with increased participation in the labour market by women could work in the opposite direction as increasing numbers of females get better education improving their employment prospects and thus increasing the opportunity cost of both establishing a stable relationship and procreation. The example of Sweden underlines the uncertainties. Swedish women have a higher labour force attachment than British women, they are paid more in relation to Swedish men than their British counterparts yet they have more children.



88 The chart shows the number of people of working age per person over 65. These figures are probably very reliable for the next couple of decades because we are largely doing arithmetic with people who are already here. By the end of the period charted we are speculating on labour market effects on the reproductive behaviour of people as yet unborn. There is more time for changing patterns of longevity to emerge so uncertainties associated with the projections become much greater into the medium to long term future.

89 The chart shows the actual and predicted number of people of working age per pensioner from 1900 to 2066. The fall in the 20th Century is attributable to the effects of increasing longevity and falling birth rates. The fall in the first quarter of the 21st Century is due partly to projected increases in longevity and partly due to the adjustment to the current low fertility rate. The relative constancy of the ratio from around 2035 reflects full adjustment to the current low level of fertility and the minimal further increases in longevity projected into the very long term. Currently about ¾ of people of working age are in employment. If this ratio persists into the future the number of workers per pensioner will be about 1.8.

90 Economic activity rates are difficult to forecast with any precision. On the one hand women are increasingly getting jobs. Between Spring 1984 and Spring 2000 there was a 17¼% increase in the percentage of women of working age in jobs to 69.2%. On the other hand over the same period the percentage of men in jobs fluctuated cyclically and by Spring 2000 was less than 1% point higher than in Spring 1984 in spite of unemployment in Spring 2000 being over 1½ million lower than Spring 1984, a fall of 61% in the number of the unemployed. Of particular concern has been the falling activity rate of older men.



91 What seems to happening is reductions in the economic activity rate of older males during economic recessions with stabilisation or even small upturn in periods of economic recovery.

92 Obvious reasons for this decline in a labour market participation by older workers include affluence, workforce choice, employer choice and the effect of the benefit system. Affluence could be important because the more wealth a worker has the greater will be his relative propensity to choose leisure rather than work. Workforce preference may arise if it is felt more equitable when a firm is downsizing to encourage older workers, potentially with an occupational pension, to terminate their employment rather than younger workers who may have family responsibilities. Employer choice arises in part because they will respect the workers sense of equity to ensure industrial harmony, in part because re-training costs may be amortised over a longer period with younger workers than older workers and in part because an occupational pension scheme may allow the cost of resizing to be spread over a long period. The Social Security Benefit System may have an effect in deterring the unemployed from seeking work because fear of losing benefits has been shown to be a reason for people not taking jobs with uncertain prospects. A number of initiatives under the New Deal for the Disabled and New Deal for the Unemployed should ensure this latter cause is a minor problem in future but fear of losing a benefit on taking a job has probably been instrumental in ratcheting up the economic inactivity rate of older males in the past.

Financial Projections

93 Spending on state pensions currently equates to around 4% of GDP.

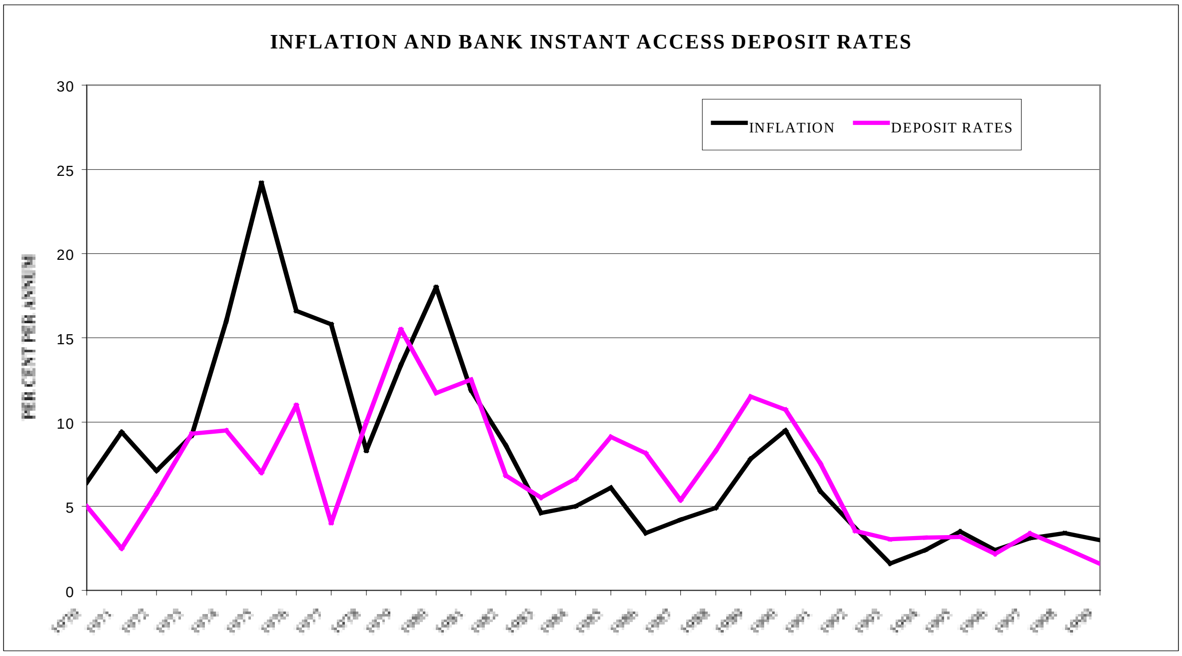
State Pensions as a Percentage of Projected GDP	
Year	
1999-2000	4.0%
2000-01	4.1%
2010-11	4.3%
2020-21	3.9%
2030-31	3.8%
2040-41	3.6%
2050-51	3.5%
2060-61	3.3%

94 The pattern of broad constancy for a quarter of a century followed by falling proportionate costs reflects two things. First, State Pensions are uprated in line with prices not earnings so they are in long term decline as a share of GDP. Second the maturation of SERPS and S2P. The lack of trend in the early decades arises because increasing entitlements to SERPS and or S2P offset the long-term decline in value. By the 2030s S2P and SERPS are as mature as they are ever going to be.

95 Non pension benefits from central government for the elderly currently comprise rather over 2½% of GDP so total central government expenditure on elderly incomes equals around 7% of GDP. (Note: This figures excludes provision of healthcare, most publicly provided residential care and most services provided directly by local authorities.) Private pensions equate to about 4% of GDP, so total Pensioner Incomes, excluding the imputed value of owner occupied housing and the large range of benefits in kind and special tax treatments, cost very roughly 11% of GDP.

Inflation – The Pensioners Friend?

All of today's pensioners will have experienced a period of very high inflation during their working lives. They will also have experienced interest rates on their bank deposits which have tended to vary with inflation.

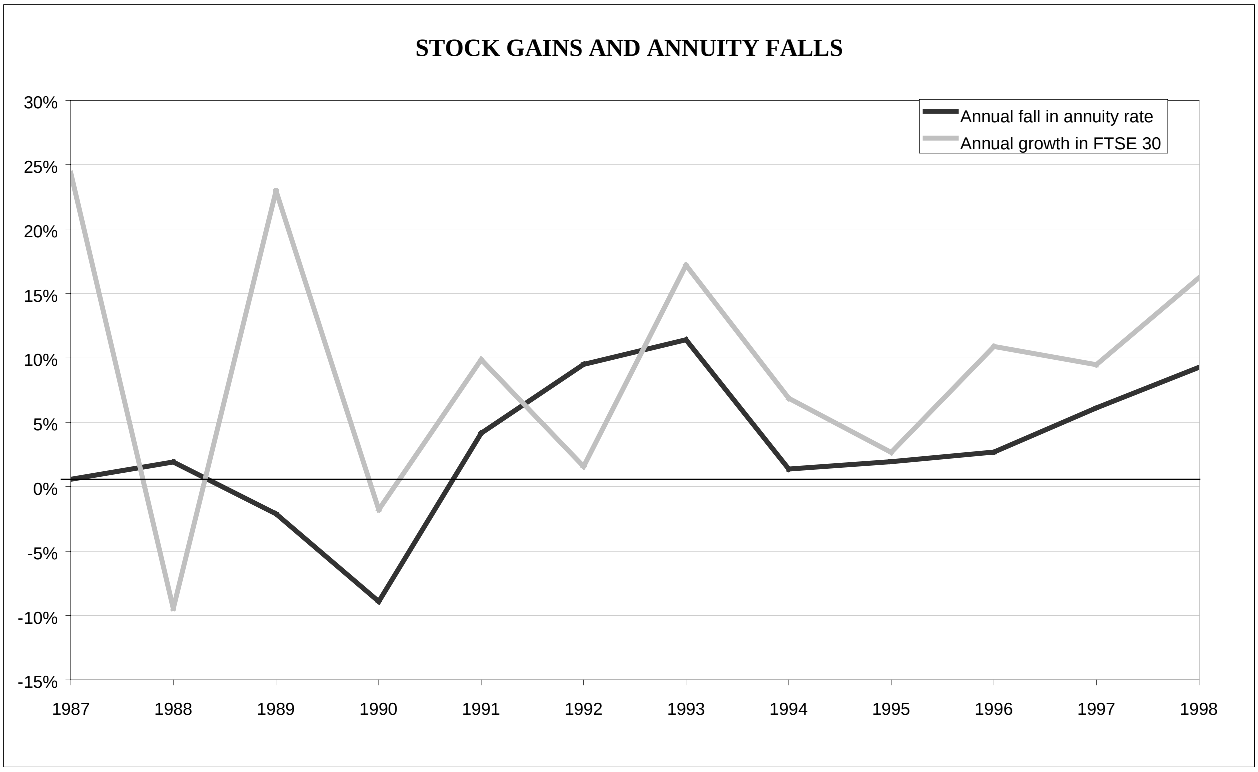


The chart shows annual average rates of inflation since 1970 and the Bank of England's estimate of average annual rates of interest on instant access deposit accounts in banks. Instant access deposit accounts being the typical home for savings of unsophisticated investors. Rates of interest in time deposits are higher and would probably be a more normal home for the savings of people with moderate incomes and some degree of financial sophistication but the pattern of interest rates on time deposits follows a similar general pattern to that on instant access accounts. The chart shows that for most of the period the return on deposits has been lower than the corresponding rate of inflation. Additionally since income taxes levied on the nominal earnings on a bank account there have been very few years when savers in these accounts have seen a positive real after tax return on their savings.

In spite of the long term poor real rate of return to such savings and the double figure negative returns in some years in the 70s it is probably true to say that dissatisfaction with returns on such savings vehicles has grown appreciably in the last 8 years or so when nominal returns have been at a relatively low level compared with nominal rates available since the first oil crisis of 1973. Because real returns have not been particularly low in recent years compared with earlier years it is tempting to conclude that pensioners may prefer the implicit annuitisation of their savings provided by high levels of inflation, when compared with the need to run down the nominal value of their savings when inflation is lower in order to withdraw the same real spending power which was provided by merely spending the interest on savings in times of higher inflation. In short, pensioners' reactions to low inflation and interest rates suggest they suffer from money illusion.

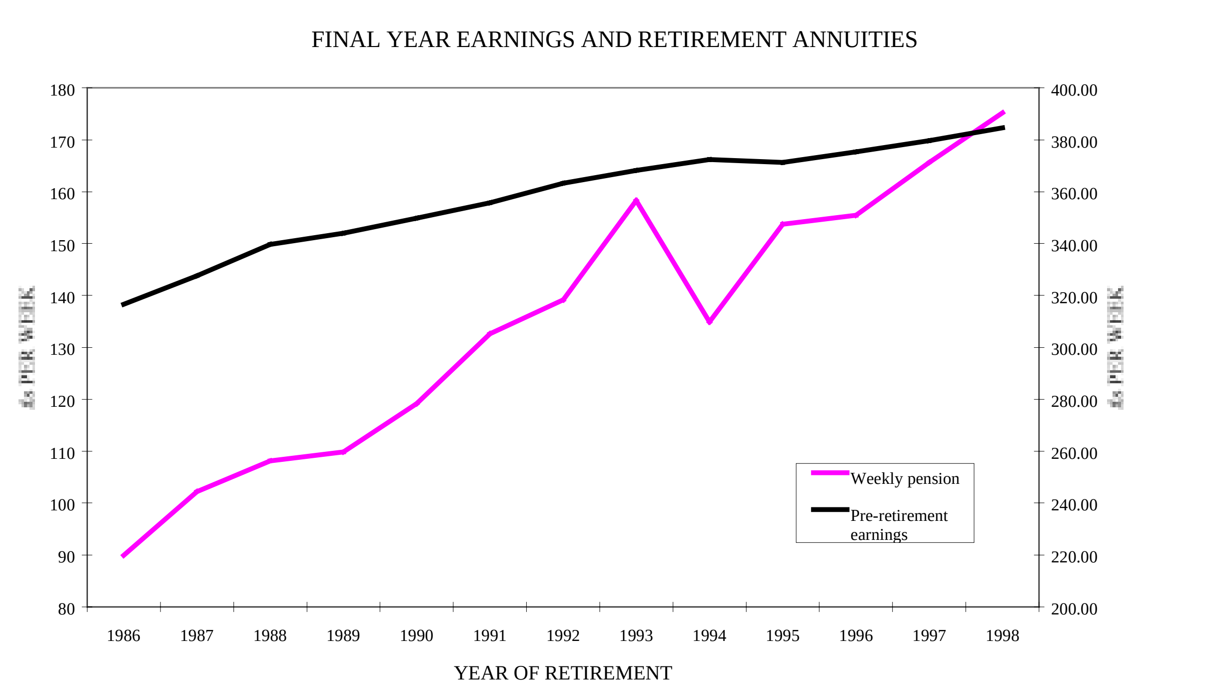
The financial services industry has been quick to cash in on dissatisfaction with low saving rates. New derivative based products are being sold to savers under banners such as "guaranteed investment accounts". A typical deal involves a five year investment period after which the investor is returned their initial deposit, less charges, plus a return equivalent to 90% of the increase in the FTSE 100, less charges and tax, or, if the FTSE 100 falls over the five year period the original money is refunded in full. Such schemes are marketed by reference to the very good returns to stock market investments in recent years and marketing literature emphasises both the guarantee and high historic returns. It would take a sophisticated investor to see that they are loosing any potential dividends on the shares, the charges are high, and the whole arrangement is a straightforward financial gamble. The scheme described is a middle of the road product, proffered by a subsidiary of the county's former largest building society (in American language savings and loan association) now demutualised and a bank. Other products are available which offer both greater rewards if the investor will take more risk and lesser reward for reduced risk. The mass marketing of derivative based "savings schemes" to unsophisticated investors seems to be a phenomenon associated with low levels of interest on deposits, probably the appropriate response of financial institutions to the apparent money illusion of savers.

Money illusion also seems to plague the market for annuities. People in Britain are required to convert 75% of their pension fund into income for life via an annuity at some stage between retirement and the age of 75. There is increasing resistance to this requirement. This is because annuity rates are said to be low.



The dark line on the chart plots the annual percentage fall in annuity rates. For example in 1993 the fact that the dark line is at around 11% shows that in 1993 a lump sum would buy an annual income around 11% less than the same lump sum would have done in 1992.

The chart shows that annuity rates have been falling continuously since 1990. The chart also shows via the light line the annual growth in the value of the 30 largest shares on the stock market. In every year on the chart since 1992 the growth in the FTSE 30 can be seen to be above the fall in annuity rates. In all but two of the years charted the growth in the stock market has more than offset the fall in annuities so, on the face of it, people that have been saving for an income in retirement have gained more on their investments whilst saving than they have lost through reduction in annuity rates.



The chart shows that for a typical worker who has accumulated a pension fund based broadly on the stock market the respective pension on retirement virtually doubled in the 13 years charted, shown on the left hand scale. This during a period when his wages were likely to have increased by less than 30%, shown on the right hand chart. (The fact that the relative difference between pre-retirement earnings and weekly pension on retirement on this chart does not match the pattern shown on the previous chart of stock gains and annuity falls results from the assumption that in the pre-retirement years the worker's investment manager adopts a conservative strategy of gradually converting from stocks to bonds in the pre-retirement years, a conservative risk averse strategy which was normal industry practise and worked reasonably well over the period.)

In spite of the fact that many people will have received a pension at a level, relative to earnings, which is above anything that historic experience would have led them to expect there is a wide spread clamour to end the requirement to annuitise personal pension funds. The main rational explanation for this campaigning is that complainants suffer from money illusion. In the not too distant past they were carefully inspecting annuity rates and anticipating they would get the higher rates which prevailed in the inflationary past and feel let down by the system. Not-withstanding the fact that the pension they will be getting is likely to offer a higher replacement rate than that available to their colleagues who retired 10 years previously and also, in low inflation times, is likely to maintain its real value better than annuities acquired in the past.

96 The share of Pensioner Incomes in GDP results from the interplay of personal decisions and government policies the latter reflecting the sum of personal desires translated through the political process. In a sense, Pensioner Incomes reflect what the nation collectively wants them to be. Since most current proposals for change involve re-distribution of resources between pensioners rather than re-working of the post-war settlement it is not unreasonable to regard the overall level of Pensioner Incomes as representing a sort of equilibrium between, on the one hand the desire to ensure pensioners a reasonable living standard, and, on the other the desire to limit the burden on tax payers. If we start from the proposition that the current position is broadly acceptable to society as a whole and note that over the next 50 years the proportion of older people is going to go up from rather over 15% to not far short of 25% of the population it seems not unreasonable to assume that the share of GDP going to Pensioner Incomes should increase roughly pro-rata or by about 50%. Noting also that the share of State Pensions in GDP is expected to fall 1% over a similar period a funding gap of some 6% or 7% of GDP emerges.

97 Should this gap be cause for concern? Since the question itself is framed by extrapolating the results of a implicit political settlement into the future the answer is obviously political. However, an analyst can point to ways of closing the gap. In terms of simple arithmetic the gap is eliminated by increasing effective retirement age by 3 years over the next 50 years. Since this is little more than the increased in life expectancy at the current retirement age over the last half century it is not unreasonable to expect that people should spend some part of their extra expected years working. Unfortunately, whilst the arithmetic may be simple ensuring that people actually work longer may not be so easy.

98 Activity amongst older males has fallen in recent years as noted above. To counter this the Government has launched the New Deals previously mentioned and is issuing a consultation document on the possible banning of age discrimination in the work place. The main players in this issue are employers rather than government. In many areas of manufacturing working practice evolved which facilitated workers continuing in employment past their prime. For example, in car factories that used to involve very hard physical work it was common for less physically demanding jobs such as final testing to be reserved for long service manual workers.

99 Difficulties may be bigger elsewhere. In many white-collar industries the organisational structure is often in the form of a pyramid. In this sort of structure the favoured career move is either up or out, an arrangement conducive to early retirement amongst those who do not make the vertical progression. Clearly if we are going to encourage workers in such environments to stay in their jobs for longer, structures will have to be re-organised to make movement across or down the pyramid easier and more acceptable. With some pressure from government and in response to reduced manpower availability this sort of re-organisation might evolve. To illustrate the fact that these remarks are not complete pie in the sky it is worth noting that in Iceland, a small but affluent OECD member, well over 90% of 55-64 year old males have participated in the labour market in recent years.

100 Another route for closing the gap is encouraging provision of private sector pensions. It is government policy to roughly double the share of GDP which goes to pensioners via the private pension route in coming decades. Assuming that in the very long run returns to pension funds must vary in line of the earnings of corporations this aspiration of government is consistent with past changes. What would be needed would be an increase in corporate earnings as a share of GDP of around ¼. Corporate earnings have varied by more than this proportion in the past so it is feasible that the change could happen again in the future. This could be particularly so against a background of increasing scarcity of labour causing a desire to deepen the capital intensity of production backed up by good availability of savings seeking an investment home.

TO FUND, OR NOT TO FUND?

Britains funded occupational pension schemes are arguably the jewel in the crown of the country's social protection system. They are long established and are delivering good pensions to increasing numbers of people. Perhaps recognising the success of the funded occupational pension system British actuaries influenced the establishment of funded pension systems in a number of diverse countries ranging from Singapore to West Germany in the immediate post war period. The enthusiasm for funded pensions displayed by the World Bank and its "Chicago boys" in the last decade of the previous century was a rediscovery of the enthusiasm shown by the British some 40 years earlier. In spite of the long lived British success story with funded pensions schemes the overwhelming majority of British academic economists are at best agnostic about the benefits of increasing the proportion of pension schemes which are funded, either at home or abroad.

*The principle argument of academic economists against funding is that since pensioners can largely only consume, in any one year, goods produced in that year the question of whether or not the pensioners income is derived through a pension fund or government transfers is largely irrelevant. The pensioner will be unaffected no matter how he acquires the money to pay for his daily bread. It is additionally argued that pension saving will not affect future output both because in well developed capital markets there is no shortage of investment funds and because contributions to pension funds may merely displace other forms of long term savings. There are also said to be some macro economic shocks, such as sustained high inflation, with which private pensions cannot cope.**

*More recently as stock market investors have exhibited "irrational exuberance" people have questioned what is driving stock markets up. At the time of writing the FTSE 100 is trading on a price earnings ratio of more than 29, at the top of its historic range and is on a dividend yield of around 2.3%, lower than it was before the crash of 1987, this precarious position existing in spite of the partial deflation of the TMT bubble. A number of commentators have speculated on the link between pension saving and stock market buoyancy but, unsurprisingly, no definitive conclusions have been reached. Such detailed modelling work as has been done suggests the impact of demography makes it is possible that a 10-15 percentage point move out of equities is possible in the UK, the US, Japan and the Netherlands over the next 50 years. This sort of result does not imply that equity markets will fall dramatically in the medium to long term but does give cause for caution.***

Notwithstanding these concerns the government plans a very substantial increase in the proportion of pensioner incomes which will come from funded pension schemes in future. The main opposition party has a similar policy. The reasons for government policy being pro-funding are the expectation that a funded pension will produce a more sustainable fiscal balance in the medium term, the desire to preserve intergenerational equity and the desire to encourage self reliance within the population.

A number of studies in recent years have looked at the sustainability of the British Government's provision for pensioners into the future. These show that if the level of government provision for individual pensioners remains stable over time the proportion of GDP spent by Government on pensioners will gradually decline because the fall in the value of pension provision relative to earnings will more than offset the increasing number of pensions in the population. On the other hand, not surprisingly, if pensioners are assumed to see their Government supplied incomes increase in line with national earnings the proportion of GDP devoted to pensioners will have to increase. Since the Government *aims to ensure that pensioners will share fairly in rising national prosperity extra resources for future pensioners will have to be found from somewhere. This raises the question of intergenerational equity. If there is no pre-funding tax rates will have to rise in future and future workers will have a higher tax burden than present workers in order to pay the pensions of the present workers. To the extent that pre-funding pensions avoids this tax increase intergenerational equity is preserved. From the view point of Government and future tax payers the question of whether or not to encourage existing workers to save for their own pensions is easily soluble. Future taxpayers are virtually in a no lose situation. If funded pensions deliver the hoped for results, future taxes will be lower than if the funding regime had not been extended. If pre-funding of pensions does not deliver any benefits future taxpayers will be no worse off than if the effort had not been made.*

The other main reason why politicians prefer to encourage people to save privately rather than acquire implicit promises from Government is to encourage independence and self-reliance in the population. Currently, while most pensioners have some savings the overwhelming majority have rather small amounts. For example, the median amount of investment income received by single pensioners in receipt of investment income in 1998/9 was £3 a week, less than 1/20th of the basic state pension. For many people contributing to a pension fund might be the first serious saving that they undertake in their life encouraging them to be more independent in old age. For people who currently save nothing of course, the argument that pension saving will displace other forms of saving is irrelevant.

There is also pressure from the European Union to increase the share of pensions that are pre-funded in order to try to maintain fiscal stability in the Union in future. Since Britain seems to have reasonably good fiscal prospects into the medium and long term EU guidance is not on its own a compelling reason for Britain to change but in conjunction with the foregoing arguments does lend weight to the view that a gradual increase in the proportion of pensions which are pre-funded would be welcome.

**The most recent restatement of the consensus of academic opinion can be found in IMF working paper WP/00/139 by Nicholas Barr of LSE bearing the title "Reforming Pensions: Myths, Truths and Policy Choices".*
***See Meryll Lynch & Co Global Securities Research and Economics Group, Debtequity Newsletter 30 October 2000 "Demographics and the Funded Pension System: Ageing Populations, Mature Pension Funds and Negative Cash Flow".*

101 The other obvious route to close the gap is increase government spending on the elderly in future. With government spending on social protection of one form or another consuming around a third of government spending increasing the share of social protection expenditure yet further could be difficult. But if worst came to worst and government was forced to increase taxation by 6% points of GDP during a period when GDP is likely to double on rather pessimistic assumptions about growth and possible, even treble if things go well, some relatively small increase in the share of GDP taken as taxation might not prove unbearable.

102 A further possibility is that if the burden of supporting pensioners seems too much society may choose to lower the target income for pensioners in relation to GDP. The target being discussed, remember, is fixed in relation to average share of GDP which effectively means that by 2060 the average pensioner is assumed by this target to need around double the current national average disposable income. Faced with possible tax increases to further enhance the living standards of pensioners society may decide than non workers should only gain part of the increase in national wealth expected in the future.

103 Overall, with changes currently in train, the British pension systems seems likely to meet the two tests of social acceptability and financial sustainability. Nothing is certain of course. A prolonged recession could cause severe difficulties to the system, which would face Government with very unattractive choices. In the absence of prolonged recession the outlook for British pensioners appears relatively rosy.