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Upskilling Older Workers

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Abstract

Governments across much of the developed world are concerned to increase activity rates and employment among older workers and more generally to improve their position in the labour market. The use of education and training provision is prominent among the various policies that have been advocated for this purpose, and this paper evaluates the role that such provision might play. Training is intended to increase the human capital of its recipients by enhancing their knowledge and skills. However, if this training is to improve the labour market position of individuals, the extra human capital must be economically productive and, as with any government intervention, the benefits of the policy must be evaluated against the costs and with alternative policy options in mind.

1. Introduction

Governments across much of the developed world are concerned to increase activity rates and employment among older workers and more generally to improve their position in the labour market. A strong motivation for this concern has been perceptions of a looming pensions crisis involving an increasing proportion of the population who are pensioners needing state help to avoid poverty. A variety of policies have been advocated including the use of education and training provision. This paper evaluates the role that such provision might play. Training is designed to, and usually succeeds in, increasing the human capital of its recipients, in the sense that, to varying degrees, knowledge and skills are enhanced. However, if this training is to improve the labour market position of individuals, the extra human capital must be economically productive and, as with any government intervention, the benefits of the policy must be evaluated against the costs and with alternative policy options in mind.

Section 2 briefly outlines the nature of labour market disadvantage suffered by older workers. The literature reviewed in this section uses varying definitions of older workers, but nonetheless presents a consistent picture. This is summarised in a number of stylised facts. Section 3 discusses possible causes of this disadvantage with a particular emphasis on explanations relying on lack of skills. Section 4 considers whether better education and training might alleviate disadvantage and Section 5 concludes that contribution of additional training is likely to be limited and that therefore the case for government intervention is much weaker than is commonly assumed. It asks why such faith is put in this particular magic bullet.

2. The labour market position of older workers

This Section draws heavily from two reports: The European Commission's report *Unemployment in Europe 2006* and the OECD's report *Live Longer, Work Longer: A Synthesis Report of the Ageing and Employment Policies Project*. These two reports use different definitions of older workers and their data are for different years. The OECD statistics are for 2004 and older workers are defined as those aged 50–64. The EU statistics are for 2005 and older workers are defined as those aged 55–64. These different definitions and years make a substantial difference to employment and participation rates. Accordingly, comparisons are made only within reports.

The unemployment rate for older workers across OECD countries was 5% in 2004 compared to an unemployment rate of over 6% for prime age workers. In 2005, the corresponding figures for the EU 15 were 6.6% and 9.1%. However, a far smaller proportion of older workers are employed, reflecting substantially lower activity or participation rates. If non–participation is not entirely voluntary, the labour market position of older workers is worse than is apparent from the unemployment statistics.

Activity rates across all OECD countries (the EU 15) were just over 60% (45.5%) for older workers in 2004 (2005) compared to about 70% (70%) for all workers. These differences are likely to reflect more than voluntary withdrawal from the labour market. There are passive job seekers who do not qualify as unemployed because they did not actively seek work in the previous four weeks and older workers who are not looking for work because they do not believe there is any available. EU research (European Commission, 2003), indicates that in 2002 that about 6 per cent of the inactive would like to have worked. If this figure is similar for 2005 and such workers are reclassified as unemployed, the unemployment rate for workers aged 55–64 in the EU 15 increases to about 13%. Other evidence suggests the true unemployment rate for older workers might be higher still. The Finnish Labour Force survey showed that almost 20% of the older workers who were "retired" did not search for a job because they thought employers would not hire them or that work was not available (OECD, 2004d). A survey by the Centre for Research on the Older Workforce (CROW) found that 78 per cent of older workers in the UK were willing to consider some sort of work after they formally retired (CROW, 2004).

Older workers also face longer spells of unemployment in all

OECD countries with the possible exception of Korea. Across all countries 55% of older workers in unemployment are long term unemployed compared to just over 40% of prime age workers (OECD 2004b, Figure 2.7). In nearly every OECD country the probability of finding a job once unemployed is lower and once inactive "typically 5% or less of older people move back into work in contrast with 10 to 20% or more rates of transition among prime age workers" (OECD 2004b, p.36). Activity and unemployment rates for older workers vary substantially from country to country. For example, within the EU–15 countries, in 2005 the employment rate for workers aged 55 to 64 was above the Stockholm target of 50% in 6 countries[1], between 50% and 35% in 5[2] and below 35% in 4.[3] Sweden had the highest rate of 69.4% whilst Italy's, at 31.4%, was the lowest. In the US and Japan employment rates[4] in 2004 for workers aged 50–65 were just over 67% and in Australia just over 57.5%.

There is some evidence to suggest that older workers receive lower wages. In the UK median gross weekly earnings for workers in their 50s were £415 in 2005 compared to £475 for workers in their 40s.[5] The Older Workers Employment Network identified a number of professions in the UK for which salaries declined substantially for people in their 50s compared to those in their 40s. For accountants the drop was 29%, in banking 25%, in internet businesses 30% and in human resources 15%. However, within organisations there is convincing evidence of seniority pay such that wages rise with age rather than decline (Lazear and Moore, 1984 and Topel, 1991). These potentially contradictory results can be reconciled by noting that older workers have to take substantial pay cuts when they move jobs. The OECD Report (2006) concludes that "relative to their previous jobs older job losers may suffer substantially greater wages losses in their new jobs than younger job losers". The Centre for Economic Performance (2001) found that workers in the UK over the age of 50 had to accept an average pay reduction of 26% when returning to work and that only 32% of them managed to maintain their previous level of pay. In the US older workers are reported to suffer large wage losses when they find new jobs as well as suffering from a lower probability of re–employment (OECD, 2005). Older workers in Japan and Korea also face steep declines in earnings when they accept a new job offer having lost their previous job (OECD, 2004f, 2004i).

Older women appear more disadvantaged in the labour market than older men. Participation rates across OECD countries in 2004 were lower at 50% as opposed to 70%, though these rates have been increasing faster for women. The less educated and less skilled of both sexes are particularly disadvantaged. More positively, employment rates have been improving for older workers. They increased in all the EU–15 countries between 2000 and 2005 with the exception of Portugal, with nine countries experiencing a 5% or greater increase. There were similar developments in many other OECD countries, where the improvement had been a continuing trend since the mid 1990s. However, prior to that, the employment rates of older workers had declined substantially from the early 1970s (Disney and Hawkes, 2003).

By way of summary a number of stylised facts can be stated:

- Under the official definition of 'unemployed', unemployment rates are lower than average for older workers. However, employment rates are also lower, reflecting lower activity rates.
- For many older workers inactivity is not voluntary and a reclassification, as unemployed, of those inactive workers who would like to work would significantly increase unemployment rates for this age group.
- There is evidence for seniority pay when a worker stays in the same job. However, when older workers find a new job they often have to accept substantially lower levels of pay than they had enjoyed with their previous employer. Overall older workers have lower earnings than workers in their 40s.
- Across many OECD countries older workers' participation and employment rates improved significantly between 2000 and 2005 continuing an upward trend started in the mid 1990s. However, this followed a substantial decline in the employment rates which had started in the early 1970s.
- The more educated tend to fare better than the less educated older workers.

3. Why are some older workers disadvantaged?

To evaluate the potential benefits from providing training to older workers it is important to identify the mechanism(s) through which some of them are losing out in the labour market. Lack of human capital is only one of a number of possibilities which also include:

- Government interventions and regulations have disadvantaged them and social security systems have encouraged them to leave the labour market because of implicit taxes on their salaries.
- Older workers choose to not work as hard since they have lower lifetime benefits from being promoted and lower lifetime costs from being fired. Organisations anticipate this and either employ fewer of them and/or pay them less.
- Labour market discrimination.

These alternative explanations will be evaluated against the stylised facts presented in the previous section, but first we consider the role of human capital.

Older workers may have relatively poor human capital because they entered the labour market with little or because the depreciation of their skills has exceeded the accumulation of new ones. There are a number of skills and capabilities which might be expected to depreciate faster in older workers than younger workers.[6] These include some physical and

mental abilities and attitudes. Older workers may also add to their skill stock at a slower rate. Whilst there are skills which are likely to be increasing with experience, they are also likely to be increasing at a diminishing rate such that younger workers will benefit more from gaining experience than older ones. The latter may also have attitudes and attributes which result in them benefiting relatively little from training.[7] This problem may be compounded by employers offering such workers comparatively few training opportunities. Alternatively it may be that older workers choose to accumulate fewer new skills. This could be a rational choice because they have less of their working life remaining to benefit from the investment.

There is some evidence to suggest that older workers' skills do decline through the various mechanisms identified above. Disney, Hawkes and Heden also find that they are less likely to be employed in occupations where there is significant training available. Moreover, the effect is substantial.[8] Furthermore there is evidence in the TSER Report that older workers are less likely to participate in on the job training within any given firm.[9] The Working Life Changes Report (2002) found that whilst older worker participate in similar levels of informal training, they participate in less formal training. They also report that in Norway, despite greater training opportunities for the over 50s, very few workers of this age choose to take these opportunities.

Probably dominating all of this is the fact that many of today's older workers entered the labour market with little human capital and subsequently worked for employers who did little to remedy the situation. To the extent that older workers are lacking in skill, the modern labour market may be particularly unforgiving. This is because there has clearly been a decline in the demand for less skilled workers relative to the more skilled. That this shift has occurred is undeniable, though there is debate about exactly why. We now turn to explanations for disadvantage which are not primarily dependent on lack of human capital.

Discrimination

Lack of human capital implies low productivity and therefore low earnings and employment prospects. Age discrimination implies not being rewarded for the human capital that is possessed. It is perceived to be a prevalent phenomenon across the OECD.[10] In the UK, for instance, a government report observed: "one of the key causes of declining economic activity among older people is age discrimination by employers, which affects both the retention and re-entry of older workers. (...)There is a widespread perception among many employers that older people have inappropriate skills, are less productive and flexible, and take more sick leave than younger people" (Cabinet Office, 2000). Indeed, a MORI Survey (2002) for the UK found that age discrimination was the most common form of discrimination experienced in the labour market, with 5 per cent of respondents saying that they had suffered from it. This finding was confirmed by a survey commissioned by Age Concern England in 2004[11] which found that more people reported age discrimination than any other form of discrimination. According to estimates by the UK Department of Trade and Industry (DTI, 2004) up to 21 per cent of workers between 50 and 59 years of age could have been the victims of some form of age discrimination during the recruitment process.

If we define age discrimination as treating two people with similar capabilities differently simply because of age, then the so-called statistical models seem a relevant way of evaluating the problem. There are three possibilities. The first is that the average older worker is less well possessed of certain relevant characteristics than the average younger worker. However, there are overlapping distributions, which means that the "better" older worker is condemned by the average of his group (Phelps, 1972). The second possibility is that the perception of the median of the group is incorrect. Arrow (1971) discusses the possibility of such a perception persisting. Finally, discrimination may occur even when two groups have the same distributions of abilities and this is recognised by employers, but they are better able to observe the abilities of workers in one of the groups. To the extent that such discrimination occurs, there may be "positive feedback" and it may have a negative impact on older workers' attitudes and incentives to work (Aigner and Cain, 1977).[12]

One other source of discrimination is the monopsony power of employers. Put crudely, whenever a particular group has limited options elsewhere in the labour market that group is in danger of receiving inferior treatment from management. Clearly this is a problem for older workers.

Labour Market Regulations and the Incentive Effects of the Social Security System

In the 1970s and 1980s many countries created social transfer programmes to encourage older workers to leave the labour force and to provide a pathway into early retirement (OECD Economics Department, 2004). The logic underlying such policies was that removing them from the workforce would free up jobs for younger people at a time of high unemployment. The logic was flawed as the young were not perfect substitutes for the old and in some cases may even have been complements. In addition, reducing the size of the labour force may have reduced the downward pressure on wages ultimately resulting in higher equilibrium unemployment (Layard, Nickell and Jackman, 2005). Where such schemes still exist in one guise or another, they may create labour market distortions that reduce the labour supply of older workers. The TSER report concluded that labour market regulations encouraged early retirement.[13]

Furthermore social security systems often place implicit taxes on employment and therefore discourage participation. The net benefit (extra social security contributions and fewer pension payments) enjoyed by governments from a person remaining in employment beyond a given age may not be passed on to the individual in terms of higher pension payments. These implicit taxes typically increase with age and may adversely effect the labour supply decisions of

older workers. An OECD Economics Department report (2004) found that at age 55, implicit taxes on employment created by social security systems were below 5% across 22 OECD countries. In contrast, by age 60 the implicit tax rate was found to be 30%. These implicit taxes were found to have risen during the 1970s and 1980s but to then have stabilised and in some cases declined in the 1990s.

Moral Hazard

It is sometimes assumed that workers do not work as hard as they should because the effort they exert is imperfectly observable by their employers. This kind of reasoning motivates incentive contracts. However, this moral hazard problem is reduced to some extent by repeated interactions between workers and employers. Through repeated observations of outcomes employers are better able to infer the effort being exerted and to discipline shirkers. In addition, workers may be rewarded for consistently good observable outcomes through improved promotion prospects. However, for older workers both the payoff from potential future promotion and the cost of being fired are lower than they are for younger workers. Therefore they may have greater incentives to shirk. If employers anticipate this behaviour they will be less inclined to employ them. This could explain the low employment rate for older workers and lower wages may reflect a market response to the lower demand for them.[14]

Evaluation of Possible Explanations

How do these possible explanations stand up against the stylised facts identified in Section 2? All of them are consistent with the lower employment rates of older workers. The other stylised facts are considered below.

> There is evidence for seniority pay (wages increasing with age) when a worker stays in the same job. However, when older workers find a new job they often have to accept substantially lower levels of pay than they had enjoyed with their previous employer. Overall older workers have lower earnings than workers in their 40s.

Seniority wage models predict exactly the pattern of wages observed. Within a firm wages must rise to create incentives and can rise beyond marginal product, but when older workers leave a firm their new employer receives no incentive benefits from offering them higher wages and generally offers them lower wages. Discrimination may also explain why workers have to accept lower wages when switching jobs, but is less able to explain why wages increase with tenure within a firm. Generally the other approaches are consistent with the observed outcomes.

> Across many OECD countries older workers' participation and employment rates improved significantly between 2000 and 2005 continuing an upward trend started in the mid 1990s. However, this followed a substantial decline in the employment rates for older workers which had started in the early 1970s.
> AND
> More educated older workers tend to fare better than less educated older workers.

The decline in the employment rates of older workers between the early 1970s and mid 1990s can be explained by job queuing (Thurow, 1975; Okun, 1981), falling relative demand for older workers and labour market regulations, including the social security systems. Job queuing theory suggests that potential employees form a hiring queue, with an individual's position in the queue being determined by his or her capabilities. As Spence (1973) suggested, a low level of educational attainment may be an indicator of low capabilities more generally. Employers hire from the head of the queue, leaving the tail unhired. In times of low demand this unhired tail increases. The more highly skilled compete for low–end jobs with the less skilled, resulting in 'crowding–out' effects. Lower skilled workers' employment prospects would then be highly correlated with the number of jobs in the economy and the economic cycle. Indeed, the falls in activity and employment rates of older workers over time have been intimately linked to trend rises in unemployment from the early 1970s.[15]

Abstracting from cyclical effects, if relative demand for the less skilled falls, whether as a consequence of globalisation or of skill biased technological change, this could be transmitted through to a fall in demand for older workers.[16] The consensus amongst macroeconomists is that the globalisation explanation has relatively little mileage in quantitative terms. Instead there is a tendency to opt for the technical change explanation. However, both theory and historical experience tell us that any given episode of technological advance can be up-skilling or de–skilling. In the case of technological change in recent years the empiricists generally argue that it has been up-skilling that has dominated, in the sense that a larger proportion of jobs demand capabilities which the less skilled do not possess (see, for example, Dickerson and Green, 2002; Machin, 2002; Machin and van Reenen, 1998; Machin, Berman and Bound, 1998). However, the evidence is not compelling. The empirical literature suffers from many problems. Many of the regressions that have been run may suffer from endogeneity and the proxies used are often unsatisfactory.[17] Moreover, even though there is some evidence at the firm level for technology driving wage changes, these results are not replicated at the aggregate level (Chennells and Van Reenen, 1999). Finally, Card and Di-Nardo (2002) find that technological change is unable to adequately explain the aggregate patterns of wage inequality in the US. This trend change in relative demand, like the cyclical effects described above, is probably at least in part explained by job queuing – even in times of relatively robust economic growth, there are usually more people who want jobs than there are jobs available.

Labour market regulations restricted the employment opportunities of older workers from the 1970s up until the mid 1990s since when the relevant ones have been relaxed slightly in many countries. In addition, the pattern of implicit taxation has been similar and can also account for the change in older workers' employment rates (OECD, 2004j). Though healthier macro climes are clearly significant in improving the employment prospects of older workers in some countries, the generality of this improvement suggests that regulatory and social security changes have had an even more

important role to play. These policy changes of course reflect the rising concern about pension problems.

Clearly lack of initial human capital makes itself felt as workers enter their later years. In an era when relative demand has shifted against the less educated, the effect will be felt by workers of all ages. But the effects are compounded for older workers. However, the discussion thus far demonstrates that there are many other factors at work.

4. Can education and training help?

This is primarily an empirical question. The relevant literature is limited and far from conclusive. There is a vast amount of research on the impact of education and training on labour market outcomes for adult workers in general. There is a strong correlation between adult training and activity and employment rates. The OECD found that between *"42 per cent and 46 per cent of the residual cross-country variance of labour force participation rates is explained by the variance of training participation rates"* (OECD, 2004, p.190). However, this correlation does not provide evidence of causation and it does not specifically relate to older workers. At the individual level, training does appear to enhance job security, has a durable and positive impact on the probability of being employed and has a negative impact on the probability of being unemployed. But again this research does not relate specifically to older adults. The paucity of relevant studies relating to the particular position of older workers is widely recognised. As the UK NRDC report on the skill development of older workers claims, "there is an almost total dearth of data on rates of return to training of any kind" (NRDC, 2003, p.7).

Against this background we first discuss the literature directly relating to possible channels, as identified by the OECD, through which adult training can increase aggregate employment. Second, the micro evidence from policy interventions relating to older workers is considered.

Channels through which Training can Increase Aggregate Employment

The OECD's public position, as exemplified by Chapter 6 of *Living Longer Working Longer* (2006), seems clear. It is to support a "preventive" strategy whereby human capital is maintained and enhanced throughout the working life in order to increase chances of employability amongst older workers. In a previous publication, *Employment Outlook 2004,* the OECD identified four channels though which adult learning might improve aggregate employment:

- "individuals who have entered their working life with no qualifications may make up for it later".
- "adult training has a positive impact on productivity at the firm level".
- Adult training might be important for firms and countries maintaining their competitiveness.
- Human capital obsolescence may engender a need for education.

As is recognised by the OECD, these mechanisms must be assessed empirically. Both Heckman and Blundell have discussed the possibility that older workers can make up for a lack of qualifications obtained earlier in their life. Heckman's central conclusion is that *"at current total investment levels, efficiency would be enhanced if human capital investment were reallocated to the young"* (Heckman, 2000, p.8). He argues that investing in training for older workers is not likely to yield great returns since they have only a short time to recoup their investment and will not benefit from the dynamic complementarities that characterize human capital accumulation as much as young people would. He suggests that for older workers, wage subsidies may be a more efficient way of stimulating participation and improving labour market outcomes (Heckman, 2000, p.51). Blundell (2000) is perhaps less dismissive of this channel, but does not argue strongly for it.

The second possible channel is the relationship between training and productivity at the firm level. However, the evidence for such a *causal* relationship is not necessarily as pervasive as it appears at first sight. An influential example of this genre of studies in the UK is Machin *et al.* (2003). They try to estimate the impact of changes in human capital levels on productivity growth. They conclude that recent training does not appear to have an impact on productivity although the employment of workers with higher vocational qualifications *may* be positively related to productivity. A problem with most such studies is that if a full and adequate range of control variables is not used, then a correlation between training and productivity may not imply a causal connection. Certain types of firms have characteristics that cause them to be both highly productive and to be good trainers. This is but one example of a series of possible endogeneity issues which usually are not fully addressed. There is little empirical work, certainly for the UK, which adequately accounts for this complication (Keep, Corney and Mayhew, 2003). Across the array of international literature, the OECD (p.189) argues that there are only two studies (Dearden *et al.*, 2000 and Ballot *et al.*, 2001) that appropriately account for the endogeneity issues. Both of these studies find a positive impact of training on productivity, but two articles hardly represent a substantial corpus of literature demonstrating the link.

The third link mentioned by the OECD is the importance of education and training for competitiveness and therefore for employment. Competitiveness is critical for a country's economic success and it would be foolish to deny that, in the long term, this will require an educated labour force. However, this is not the same thing as saying that every incremental shot of education or training will be a good thing. This observation is consistent with the fact that, in a highly contentious empirical literature, there seems to be stronger evidence for a relationship between economic growth and levels of education than between economic growth and changes in the level of education. It is also important to note that such studies more often focus on education rather than training, and that a common conclusion of those who have

reviewed the field is that the critical human capital variable is usually ill specified. Krueger and Lindahl (2001), for example, start with the puzzle that, whilst there appear to be large effects for schooling in micro data, these effects are more contentious in macro data. However, they find that correcting for measurement errors in the schooling variable produces positive macro returns to schooling, but stress that the returns could be the consequence not only of educational externalities but of reverse causality and omitted variable bias. Interestingly they suggest that, in their preferred specification, there is an inverted U shaped relationship between growth and education, and suggest that the typical OECD country is on the downward sloping segment of the education growth profile. In their careful survey Sianesi and van Reenen (2003) conclude that "whilst there is an emerging consensus on the important effect of education on growth, suspicion abounds surrounding the existing estimates of the size of the impact that education has on growth".

Turning to the OECD's fourth possible link, the evidence for the impact of skills obsolescence on the economic fortunes of older workers, as already noted, is scantier than often appreciated. In short, strong indications of the importance of certain types of skills obsolescence for older workers exist, though the evidence is not unequivocal. (See for example, Aubert, Caroli and Rogers, 2004; Bartel and Sicherman, 1993; Givord and Maurin2003; Borghans and ter Weel, 2002; Allen and van der Velden, 2002).

Helping Unemployed, Employed and Inactive Older Workers

The second strand of empirical literature relates to the ability of adult training interventions to help older workers in different labour market situations. In particular, training may help employed workers keep their jobs (or move into alternative positions), unemployed workers gain employment and inactive workers gain employment.

Keeping Older Workers Employed

Many studies surveyed by the OECD find that training has a positive impact on the individual employment prospects of older workers. Furthermore, training enhances perceived employment security (OECD, 2004a). In the Finnish Adult Education Survey, for example, the reason older workers most often report for not engaging in training is simply that they do not have enough time rather than that suitable training is not on offer, although this is the second most important reason (OECD, 2004d). The survey found that older workers were more likely to report positive experiences with training than younger or prime–age workers. They reported that training helped them obtain higher wages and keep their jobs (OECD, 2004d). The results may be affected by sample selection bias. If employers are generally less willing to offer training to older workers, those who do receive it may be more likely to get more from it. Similarly, fewer older workers and only those particularly capable of benefiting from training may choose to undertake the training. But the most important conclusion to be drawn from this and other OECD country studies is that the impact of training is stronger if it is preventative – that is it occurs in earlier years.

Getting the Unemployed Back Working

The evidence here is mixed. Overall, the impact of training is generally small but positive, although it is likely that the training has no impact on many of the participants and as such generates large deadweight losses. Again, it is difficult to measure how much training matters in isolation or, in other words, how much of the measured effects of training should be attributed to other variables.

The Finnish Adult Education Survey found that one fourth of older workers claimed to have obtained a permanent job as a result of training (OECD, 2004d). However, the Survey can be criticized for its use of subjective measures and it only examined workers receiving training which may have resulted in sample selection bias.

Data from the Czech Ministry of Labour and Social Affairs suggests that retraining programs for unemployed workers have had positive effects. The OECD country report found that approximately 70% older workers who participated in the programmes were in employment a year after completing the courses (OECD, 2004e). However, only a limited number of older workers participated in the programs and those that did might have found work regardless of the program.

In the UK the New Deal 50+ was a package of policy measures specifically geared toward getting the older unemployed back into employment. Measures included training grants to individuals and non–pecuniary benefits in the form of a personal advisor at a job centre as well as financial incentives. Grierson (2002) finds that 77% percent of participants did not claim benefits during the months following the end of their entitlement, which suggests that the New Deal 50+ is very successful. However, Atkinson (2001) argues that more than half of the Employment Credit Recipients would have returned to work without participating in the programme. In addition take up of the training component for the New Deal 50+ is low (OECD 2006). Overall, the evidence on the New Deal 50+ is thus mixed. After completion of the programme participants are better off, but what part of their success can be attributed to the programme and in particular the training component of the program is unclear.

Japan's 1998 Education and Training Benefit encouraged unemployed workers to engage in "self training" (OECD, 2006f). However, older workers were underrepresented among program participants. The OECD argues that limited use of such take-up grants signals a "general unwillingness on the part of older persons to take-self training or possibly that the designated courses are not very attractive to them" (OECD, 2004f)

In Sweden, the Activity Guarantee provides unemployed workers with the opportunity to train. This program seems unsuccessful for older workers. Of the 6113 persons

between age 50 and 64 who left the activity guarantee between August 2000 and February 2002, only 741 got a regular job afterwards. The older unemployed also participate in a variety of labour market programmes that are open for all unemployed. However, pessimistic attitudes and the high incidence of long term unemployment suggest that "these general unemployment programmes only have had a limited impact on getting unemployed elderly back into jobs". (OECD, 2003).

Such evidence is consistent with the survey of the effect of labour market policy measures by Martin and Grubb (2001), who argue that training that is targeted and has a strong on-the-job element is most likely to be successful. This conclusion is echoed in the OECD 2006 report *Living Longer Working Longer* and evidence from the UK is also consistent with such claims. Work Based Learning for Adults (WBLA) programmes in England and Scotland have job-placement rates at approximately 27 per cent which are relatively constant across age groups. Such a success rate is not negligible, but not overly impressive either, especially if one recognizes that to evaluate the "true" success of such programmes, one would need to look at the success rate of a control group. The OECD concludes that where evidence is considered against a control group it is mixed (OECD, 2006).

Getting the Inactive back into Employment

The role that training can play in getting the inactive back to work is hard to evaluate and there is little evidence. A particularly problematic feature is that, depending on the specific country circumstances, it can be hard, if not impossible, to force people in this category to train. The inactive who do train are the most likely to be enthusiastic and optimistic about their employment prospects. Thus a self-selection bias is lying in wait for any econometric evaluations.

It seems that a significant proportion of the inactive are involuntarily so. Many studies indicate that workers who participate in training attach higher value to being employed and also have higher self-reported employment prospects. This suggests that training might be helpful in fostering positive attitudes among the inactive.

Presuming that, on the whole, those in the labour market are generally more optimistic about their employment prospects than inactive workers, the low take-up of training grants by older unemployed workers in the UK, the Czech Republic and in Japan casts serious doubts on the efficacy of training for the inactive.

Conclusions on the Ability of Training to Help

Education and training are clearly importantly related to the labour market disadvantage of older workers. Those who received relatively little of it in their early years suffer most when they get older. There are various mechanisms accounting for this link, but whichever of these mechanisms dominates, the provision of education and training in later years is unlikely to be sufficient on its own. Whilst any single individual would be in less danger later in life if that individual were better educated or trained early in life, the key question is whether a Pareto improvement is possible, that is, whether a general increase in early education and training provision can increase total welfare. The answer to this question depends upon the demand side as well as the supply side. In other words it depends upon the use (or lack of it) to which employers put skills – upon the nature of production processes and upon the consequent structure of jobs available (see, for example, Keep and Mayhew, 2001). The OECD Report (2006) concludes that there is some evidence for *"a demand side problem, which needs to be addressed in combination with supply side problems"*.

6. Conclusions

Older workers are disadvantaged in the labour market. They have substantially lower employment rates, suffer from greater long term unemployment, are less likely to make the transition out of inactivity, and often have to accept substantial reductions in their earnings when they find a new job. There are many causes of this disadvantage, several of which are driven or at least closely related to skill levels and lack of recent training. No one cause is able to explain all the stylised facts identified and it is clear that older workers suffer in the labour market for a complex interweave of reasons. At both the theoretical and empirical the case for training interventions is mixed at best. The task of empirically assessing the impact of training older workers is fraught with possible endogeneity issues and with the problem of poor proxies for the variables of interest. Providing older workers with additional skills will only make a difference if employers value them. Even where training subsidies do appear to improve their labour market outcomes, it is far from clear that the results are economically inefficient or justifiable on distributional grounds. What is clear is that, if the real problems lie on the demand side, improving the supply side will not help. Why, then, has there been so much emphasis on a largely unproven policy tool? Part of the answer must be that supply side interventions are easier than demand side policies, which involve "interfering" with both social attitudes and with the product and production strategies of organisations. In this sense the importance accorded to human capital in addressing the problems of older workers is part of a larger tendency to over-play its role in tackling a broader range of economic and social problems.

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Notes

[1] Denmark, Ireland, Portugal, Finland, Sweden, the UK.
[2] France, Germany, Greece, Netherlands, Spain.
[3] Belgium, Italy, Luxemburg, Austria.
[4] Calculated from participation and unemployment rates.
[5] Annual Survey of Hours and Earnings.
[6] European Commission (2003, p.174) reports that "the productivity of older workers is not impaired by age but by skill obsolescence".
[7] For example, older workers' may be less willing to learning new skills. Hausman (2003) finds that older workers attitudes and motivation are very important for their employment prospects.
[8] They use a regression methodology and control for unionisation, percentage of jobs that are in the public sector, percentage of employees that are male and the percentage of employees that are permanent. Similar results are obtained for the flow of older workers
[9] TSER Report (2000), table 3.
[10] See for example OECD country reports on the UK (OECD 2005b), Luxembourg (OECD, 2004h) and Italy (OECD, 2004g) as well as MORI (2002), and DTI (2004).
[11] Professor Dominic Abrams of the University of Kent and Sujata Ray, Research Adviser at ACE, presented findings from this Survey in 2006: Tackling Age Discrimination, Beyond the Workplace, Age Concern Seminar Series, July 2006.
[12] Aigner and Cain show that discrimination can persist due to a positive feedback mechanism with no productivity difference between two groups of workers. The two groups, in our case older and younger workers, are assumed to have the same average ability and the same variance in ability. However, ability is more precisely observed for younger workers than older workers. A risk adverse employer will then be more inclined to employ a younger worker than an older worker with the same expected ability, because the ability of the older worker is more uncertain. This will result in employment of more younger workers than older workers and might be self enforcing if employing more younger workers helps an employer to better estimate the ability of other younger workers.
[13] Another way in which older workers may have been discouraged to participate in the labour market is though the disability benefits offered by governments. For example, Faggio and Nickell (2003) argue that doctors in the UK may have colluded with older patients to let them take up disability benefits which reduced the incentives for older workers to remain in employment. There is also evidence for this occurring in the Netherlands.
[14] Gibbons and Murphy (1992) provide evidence that explicit incentive contracts are stronger towards the end of workers' careers. Such a response is shown to be theoretically optimal in the presence of declining implicit incentives for older workers to exert effort.
[15] This explanation also has serious policy implications since it could imply that training interventions for particular groups would have no effect on the jobs available in the queue as a whole, and at best would improve the position of the target group, at the expense of some other group, without any overall Pareto improvement. There is some limited empirical support for this proposition. Work on crowding-out by Teulings and Koopmanschap (1989) and, to a lesser extent, Van Ours and Ridder (1995) support this hypothesis although the findings of Gautier et al (2002) are inconsistent with crowding-out. The OECD (2004) finds no effect of training on the aggregate level, whereas it does find that training improves prospects on the individual level, which is entirely consistent with a job queuing explanation.
[16] As shown above, older workers as a whole might be expected to have lower skill endowments than other workers.
[17] For example, the exact quality of workers is often unobserved. Thus the difference in quality between workers could explain much of the variation in wages. If workers of unobserved higher quality use more new technology, then their higher wages will be attributed to the technological difference, when it is actually being driven by observed differences in quality between workers.

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