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# Ageing workforces

HSBC Insurance and the Oxford Institute of Ageing have entered into a strategic alliance in order to build a cutting-edge research base on global ageing which will provide key information for policy and corporate decision makers. As part of the agreement, HSBC Insurance funds three research fellowships at the OIA, jointly runs the Future of Retirement research programme, and sponsors Ageing Horizons – a quarterly review bulletin which collates and integrates current research and analysis on the medium-term implications of population ageing.

This brief is a supplement to Ageing Horizons. The full review is available online, with regular updates reflecting new developments and ideas on the themes chosen for each issue.

[www.ageing.ox.ac.uk/ageinghorizons](http://www.ageing.ox.ac.uk/ageinghorizons)

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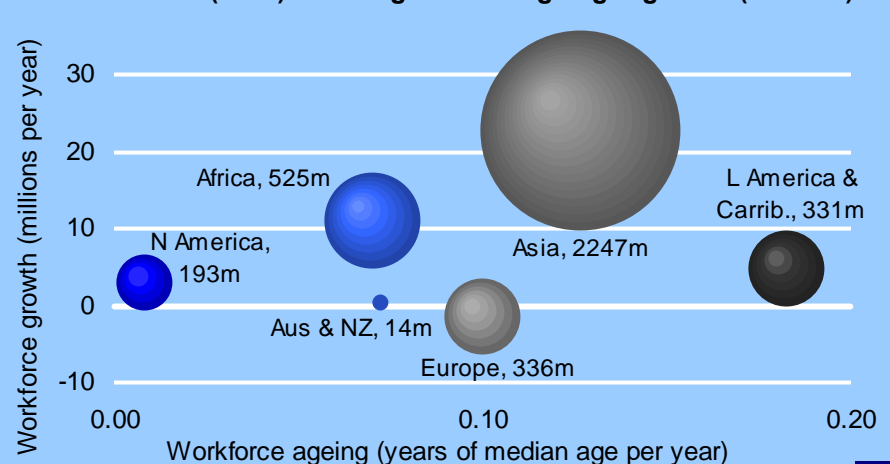
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The workforces of different countries round the world vary considerably in their demographic characteristics. There are some countries, for example, in which only a minority of children can expect to survive to official retirement age; and relatively high mortality in middle age makes for a relatively young workforce. Mortality, of course, is not only reason why people end their working lives at different ages in different parts of the world – and in most developed countries these days mortality has very little to do with it. There are, furthermore, large national variations in the average age of entry into the workforce. As the level of education increases, so does the average age of entry into the workforce. The age composition of national workforces can then be modified by changes in societal norms or governments policies, though – like their size – it also depends a great deal on the background forces of demographic change, especially perhaps on what happens to fertility. Governments can try to redefine the age boundaries of the ‘working age population’ – but fertility remains an independent and major determinant of the size and age structure of the population pool from which the workforce is recruited. Over the next 30 years or so, and as a result of fertility decline, most countries round the world will see more or less parallel shifts not only in the age composition of their working age populations, but also in their size. Governments and policy analysts worry about the impact of these changes on labour supply and workforce productivity – and the knock-on effect on economic growth. If the age boundaries of what society and government regard as the ‘working age population’ remain unchanged, fertility decline will cause these sub-populations, the population pools from which the workforce is recruited, either to stop growing, or to grow more slowly, or to start to shrink. Whether or not the actual workforce will change in the same way (or to the same extent) is by no means clear-cut, however. There are some countries (e.g. Italy) in which a substantial increase in female participation in the workforce, together with an increase in the effective age of retirement (and continuing net inward migration), could *completely* offset the potential impact of fertility decline on the size of the future workforce – and there are others which will have much less room for manoeuvre in this respect.

**Workforce size (2020) & average annual ageing & growth (2008-20)**

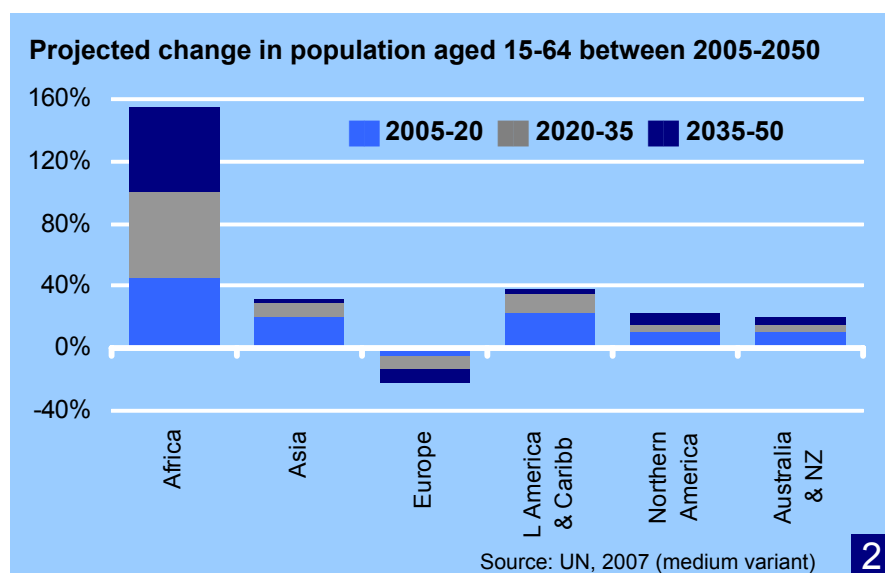
Source: ILO, 2008

Policies to moderate the impact of demographic ageing on the size of the workforce will of course have some effect on its age structure. Most governments, however, recognise that this is something that they have to live with – not least because they want to increase the effective age of retirement (i.e. implement policies which will further increase the median age of the workforce). But they would still like to know whether a substantially older workforce is likely to be a less productive workforce.

In this briefing we consider these issues in the light of data from International Labour Office (ILO) global projections on workforce change over the next 12 years, as well as some summary data on the relationship between age and the productivity. The ILO projections combine UN population forecasts with an extrapolation of recent trends (last 10 years) in age-specific labour force participation rates to produce estimates for the size and age structure of the actual workforce. The International Labour Office runs its workforce projections forward for 12 years only. That this is a much shorter projection period than is found in most official *population* projections reflects the uncertainty about future trends in labour force participation rates. ■

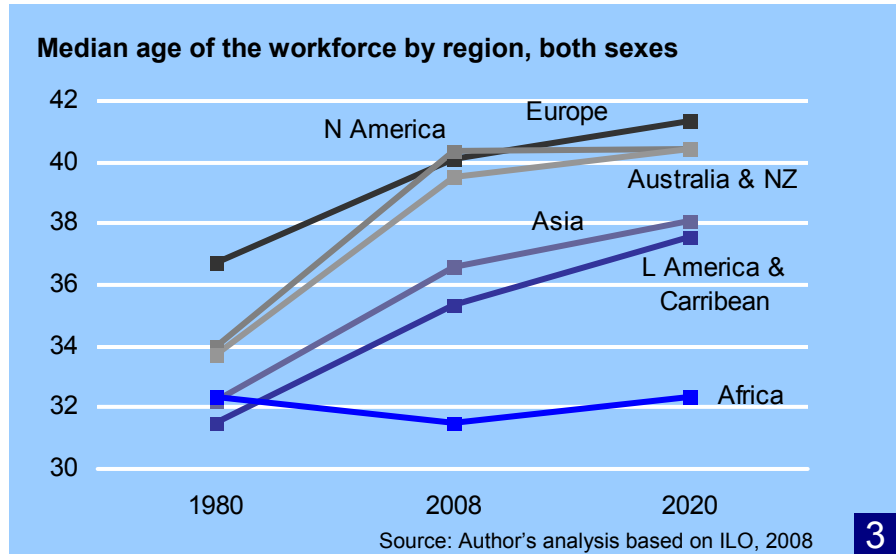
### ► Workforces & working age populations

Only Europe will see a decline in its working age population



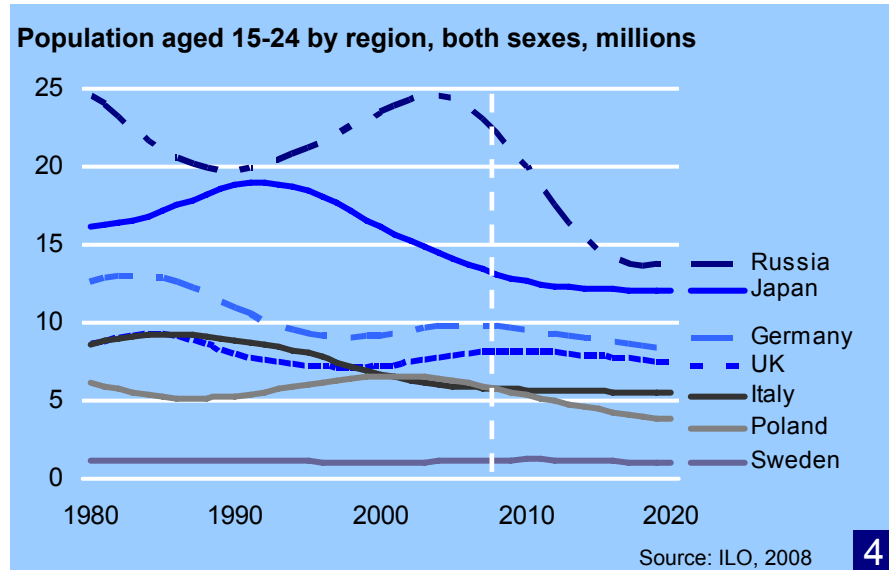
On a global canvas, Europe is the only continent which will see a decline in its *working age population* over the next 40 years – and on this view it is only Europe that has serious cause for concern about its future labour supply. Clearly there is no such problem in Africa, which will see massive growth in the working age population as a result of persistent high fertility. In Asia and Latin America, this population will have more or less stopped growing by 2050 – unlike in North America and Australia. There are, however, large and important variations concealed within this broad regional picture, and this applies as much to the shorter term ILO workforce projections as to the longer term UN population projections (figure 2). The European workforce will shrink (even within this 12 year projection period), but mainly because of declines in southern and eastern Europe. Asia will see most growth – because it already has the largest population – and by 2020 will contain 62% of the global workforce. East Asia, however, is very different from south Asia – more like southern and eastern Europe. India's workforce will expand enormously whereas China's is expected to be stable and Japan's will shrink. Africa's workforce will also grow. Note that the most rapid changes in the age composition of the workforce occur in those regions which have seen the largest fertility declines in recent years, Latin America and Asia.

Global workforce will continue ageing but at slower pace



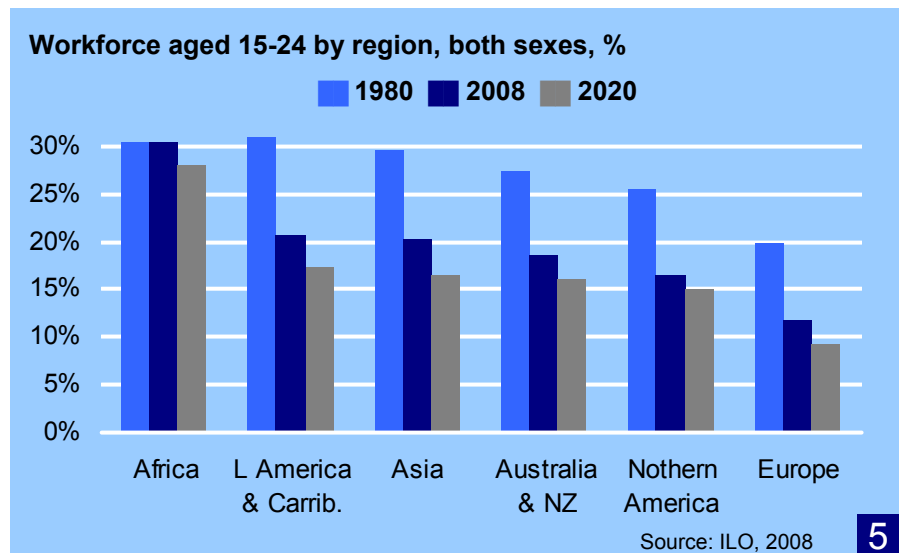
Between 1980 and 2008, the median age of the global workforce rose from 33 to 36.5 years, but between 2008 and 2020 it is projected to increase only to 37.6 years. In developed countries, this slow down in workforce ageing can be attributed to the expectation that in most countries fertility rates will decline more slowly than previously. In developing countries, there are other factors at work, notably the ability of an increasing proportion of successive cohorts of older people to afford retirement – which will push down the effective age of exit from the labour force. Workforce ageing under some conditions should be seen as a sign of economic success (declining midlife mortality and improving social security provision), not as a cause for concern.

Fertility decline will impede workforce replenishment in developed countries but there should be no global shortage of young talent



In most countries from more developed regions (see Notes for the definition of regions), fertility decline is expected to lead in 2020 to fewer young people entering higher education and the workforce than now. However, with the exception of transitional economies, the reduction in the size of the cohorts from the workforce is replenished should be quite small. Overall, by 2020, countries in more developed regions are projected to have 22.3m young people fewer than now, which is equivalent to the size of the current 15-24 population in Russia. This 'deficit' in young people is only slightly than the increase in the same age group that will occur in less developed regions (20.3m). At a global level, there should be no shortage of young talent.

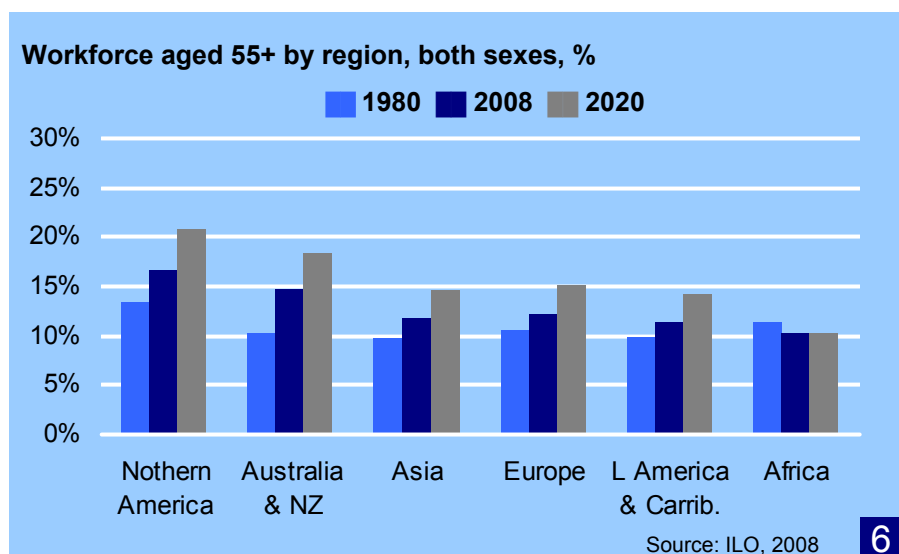
Share of younger workers in the global workforce will decrease



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The younger portion of the global workforce will decrease not only because of declining fertility, but also because more young people will be enrolled in education after age 15. Outside Africa, the decline in the proportion of young in the workforce will be smaller over the next 12 years than it was between 1980 and 2008. Northern America is likely to see the smallest change – partly because of its popularity as a destination for international migrants, and partly because of the buoyancy of its fertility levels.

Share of older workers in the global workforce will increase faster than ever before

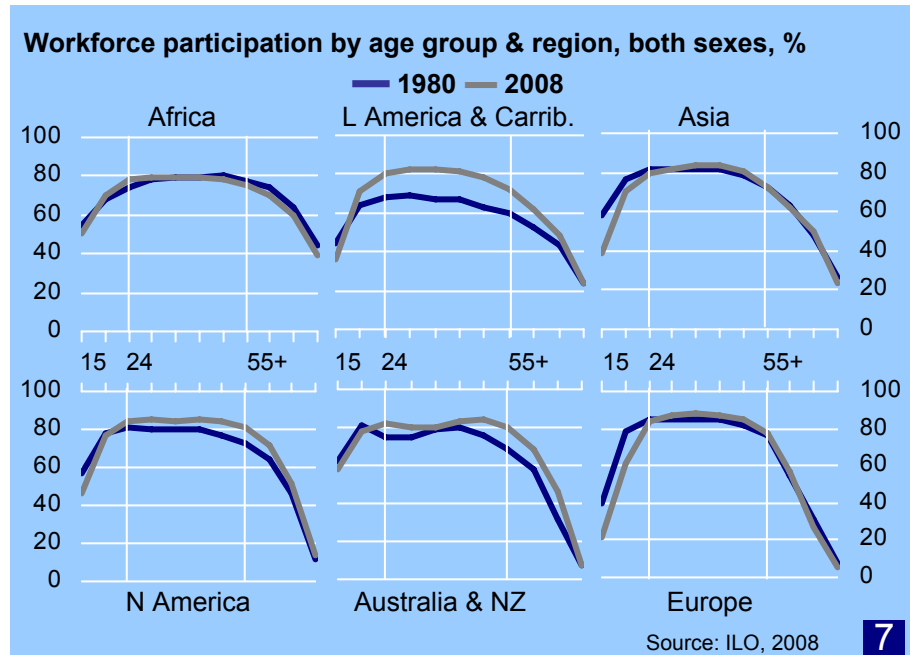


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Africa is again an exception to a global increase in the proportion of older people in the workforce. Over the 28 years between 1980 and 2008, the share of older people in the global workforce rose from 10.3% to 11.9%. Over the next 12 years, it is expected to reach 14.3% – a larger increase in a shorter time. Northern America is expected to see the largest percentage change. By 2020, every fifth Northern American worker is expected to be aged 55 years and over. It is important to appreciate that this largely due to the Northern American employment and pension policies rather than demographic pressure which is far less acute in Northern America than in Europe.

► Workforce participation

Workforce participation rates of older people decline sharply after age 55

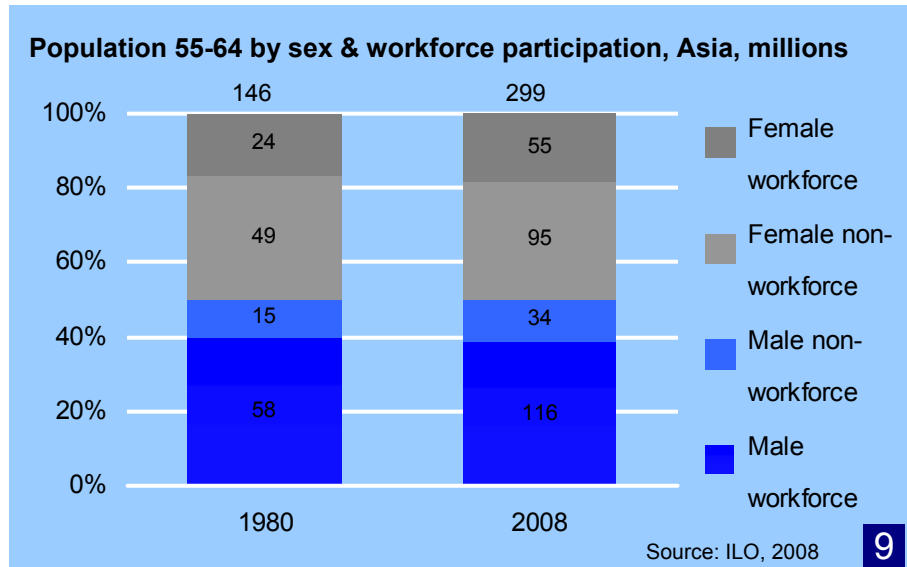


The global workforce participation rate has decreased from 67% in 1980 to 65.6% in 2008 – mainly due to better educational opportunities for younger people in Asia. Changes in workforce participation of older people in some developed countries have not affected the overall global picture, since 81% of the global workforce lives in developing countries. Currently, the majority of the world's older people do not have either savings or pensions that would allow them to retire comfortably. However, thanks to economic growth and government intervention, more older people in developing countries are expected to be able to retire and thus push the global workforce participation rate down to 64.4% by 2020.

Whereas more older people in developing countries will afford to retire, their counterparts in developed countries will work longer

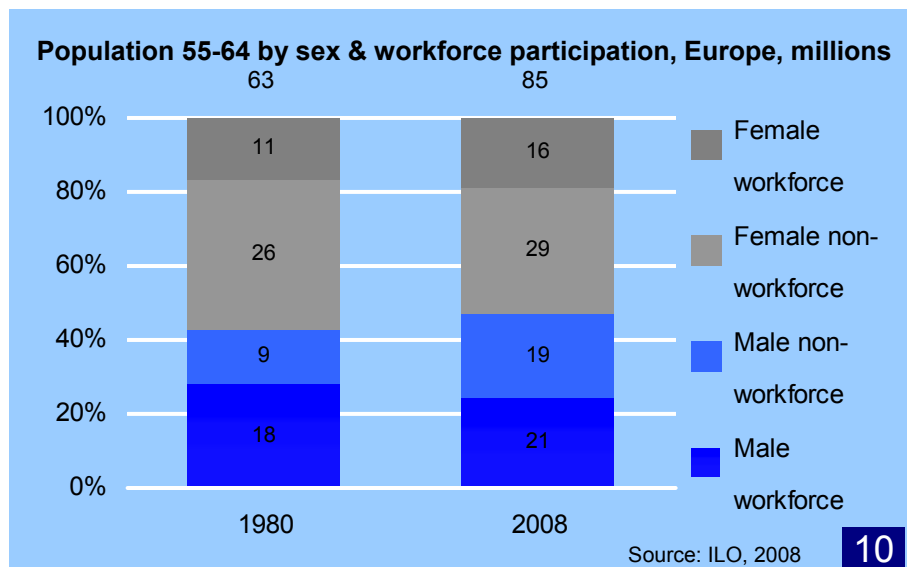


**Most older women in Asia do not participate in the workforce**



Workforce participation of women varies from country to country, but, on the whole, it is considerably lower than that of men. Between 1980 and 2008, female workforce participation in Asia slightly increased while male workforce participation saw a small decrease. Workforce participation among European women also slightly increased over the same period of time but it is still significantly lower than among men. Female workforce participation in Europe is on par with Asia, but the percentage of older European men who do not work is twice higher than in Asia.

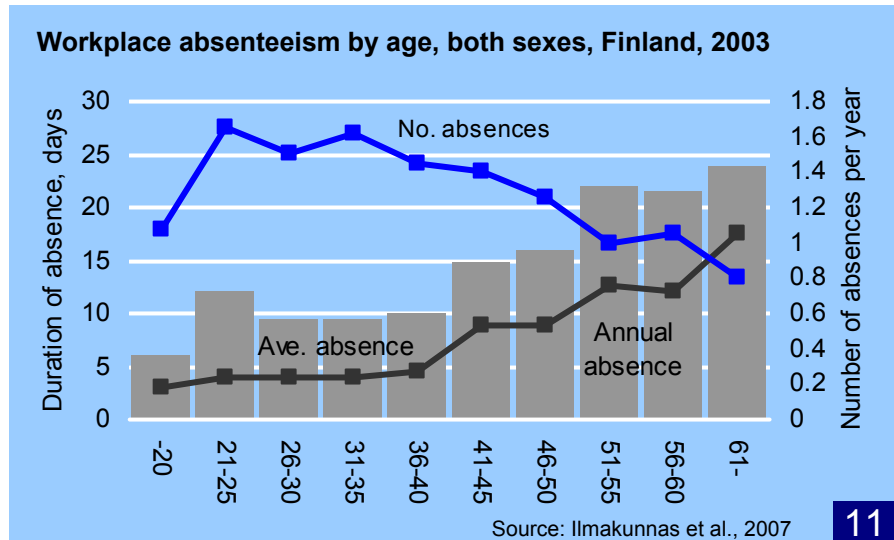
**The number of older European men who prefer not to work is growing**



Overall, in 2008, only 44% of the Europeans of both sexes participate in the workforce compared to 57% of their Asian counterparts. Given that older people in Europe live longer and more affluent lives than their counterparts in developing regions, there is a huge potential for both men and women in Europe and other developed regions to work longer. ■

► **Workability & productivity**

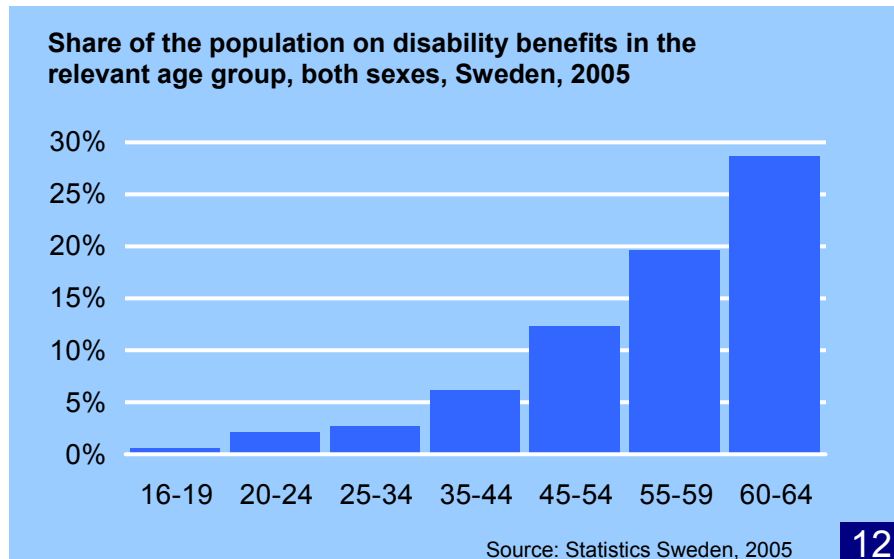
Older people are absent from work less frequently but for longer and, in overall, spend more time off work



Note: zero observations are not included in the sample

Finnish data show that older workers are less likely to take sickness absence than younger workers, but because older workers take longer absences they tend to spend more time off work than younger workers. It is not implausible to suppose that older workers have a stronger work ethic and thus take less non-genuine sickness absence. Employers, according to a UK survey of managers and human resource practitioners, reckon that about 15% of all sickness absence is not genuine (ONS, 2005).

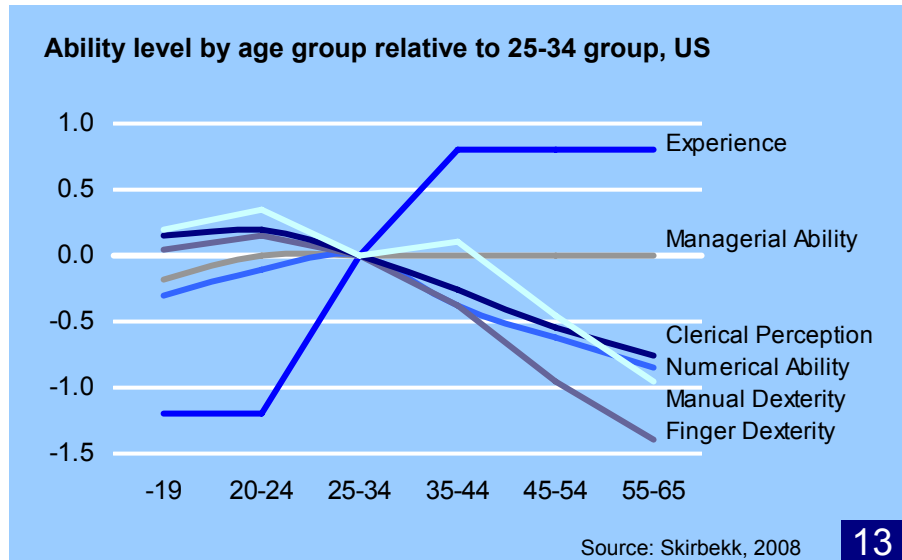
Generous and accessible disability benefits allow early exit from the workforce



In addition to spending more time on sickness leave, older workers are more likely to be receiving disability benefits. In some European countries with very generous welfare provisions (e.g. Sweden), disability benefits have become an accepted route to early retirement. About half of the Swedish recipients of disability benefits do not classify themselves as disabled (OECD, 2005).



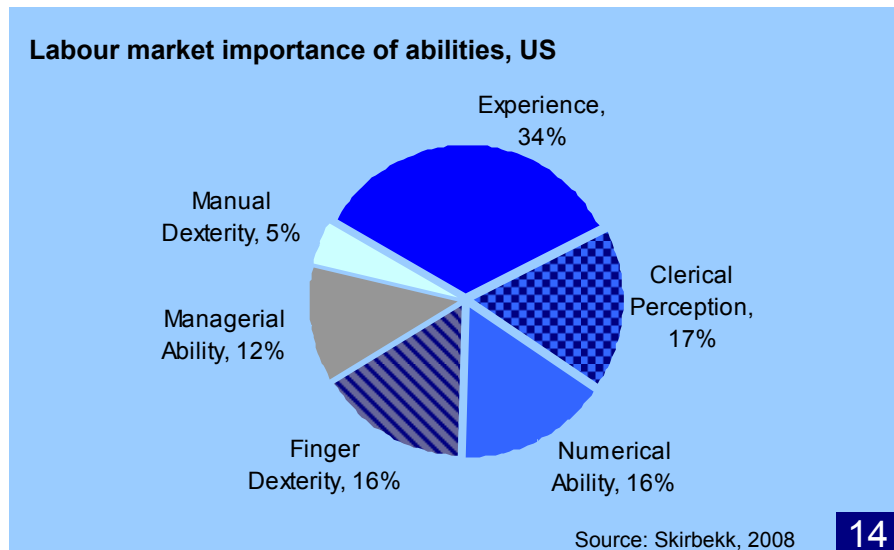
Most abilities that determine productivity significantly deteriorate after age 25-34 when compared to other cohorts



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Attempts to measure age-related changes in abilities that are important for productivity invariably show that older people tend to perform less across a wide range of abilities than younger people. The trend is by no means uniform, however. Manual dexterity appears to fluctuate until early middle age, and managerial ability shows no decline after the early 20s. The level of experience peaks even later – and again shows no decline thereafter. When the performance of the same people is compared over their lifecourse, the picture becomes even more complicated: age decrements in psychometric abilities cannot be reliably confirmed prior to age 60, except for word fluency, which shows significant decline by age 53 (Schaie, 1994). Each new generation tends to do better in psychometric tests, perhaps, because of better education.

Older workers have a wealth of experience

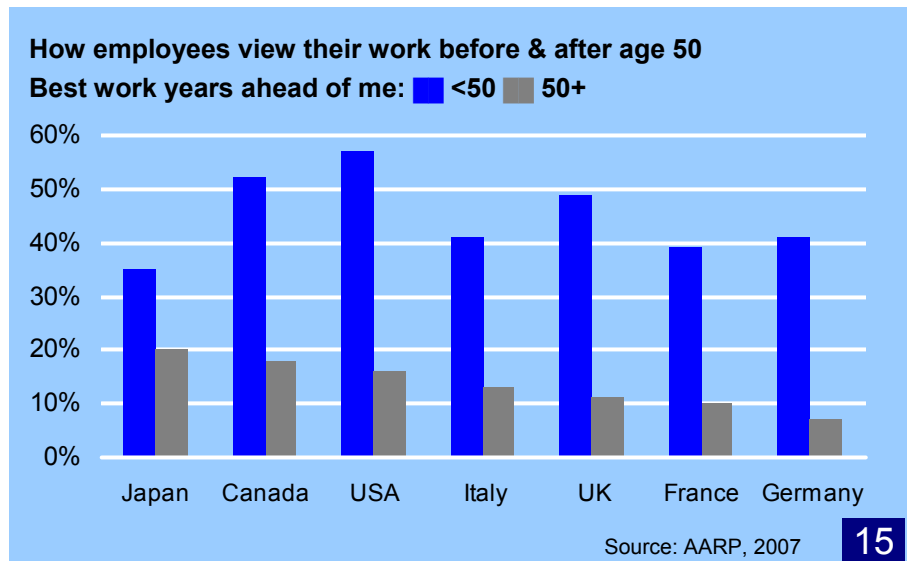


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Older workers are likely to outperform younger workers in managerial jobs, but after age 35-44 when the gains from experience cease to compensate relative losses of ability, younger workers are likely to outperform older workers in clerical, analytical, and manual jobs.

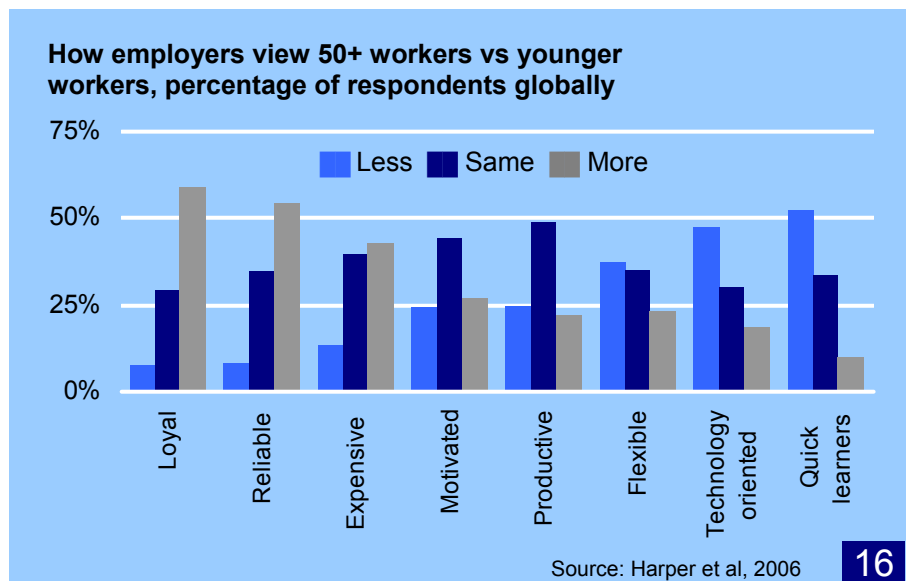


Older workers are far less likely than younger workers to have positive views of the future



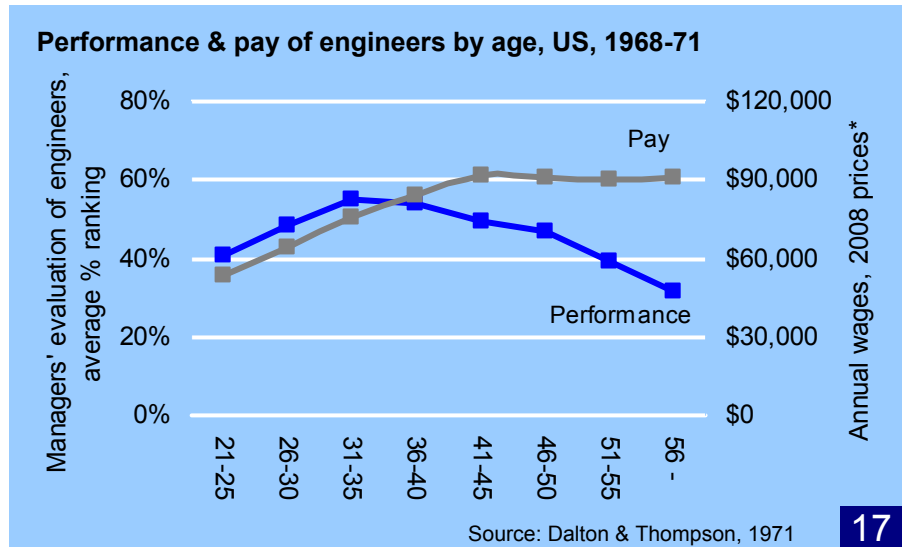
In G7 countries, age-related decline in productivity and a lack of opportunities for older workers lead to a negative outlook of the majority of older workers on their working years yet to come. Perhaps, because of the advanced age of the Japanese workforce, this outlook is the least negative in Japan.

Employers do not have strongly negative perceptions of older workers



The HSBC Future of Retirement Survey shows how older workers in different countries round the globe are perceived by employers. While older workers are seen as more loyal and flexible, younger workers are quicker learners, more technologically oriented, somewhat more flexible, and somewhat less expensive. The tendency towards negative stereotyping of older workers (if that is what is going on here) is relatively weak in some domains: 49% of employers feel that older workers are at least as technologically oriented and 43% find them at least as quick to learn as younger workers. And 50% of all employers see no productivity difference.

In high-tech industries older workers are less productive and more expensive than younger workers

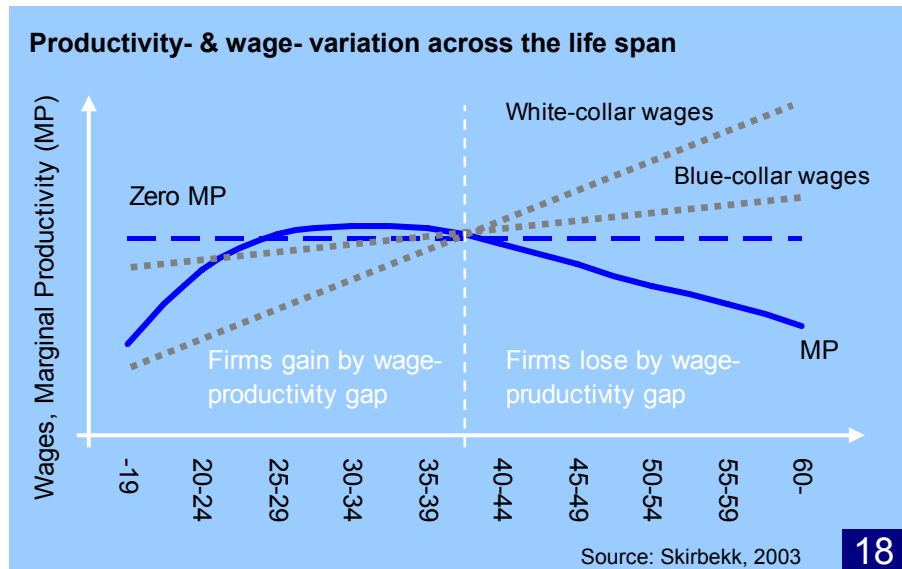


\* Wages adjusted to the current price level with 1971-2008 CPI Index (US BLS, 2008)

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The conclusions of the much-cited study by Dalton & Thomson on the effect of age on the relationship between wages and productivity in the US engineering sector has been replicated by recent research in the Finnish ICT sector (Ilmakunnas & Maliranta 2007). The study attributes the widening discrepancy between wages and productivity to rigidities in wage structures when rapid technological change makes the skills of older workers obsolete at a rate that exceeds the rate of learning-by-doing.

More flexible wage policy may increase workforce participation of older people



Source: Skirbekk, 2003

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Generally, older workers can enhance firms' business performance by bringing in experience, skills, and a strong work ethic. However, industries with rigid seniority-based remuneration have incentives to lay off older workers when their remuneration starts exceeding their productivity. While in some industries education of older workers can increase their marginal productivity, there are industries where the cost of educating older workers will be higher than the resultant productivity gain. Therefore, more flexible wage policy may provide incentives to firms to retain older workers. ■

## Notes

*More developed regions* comprise all regions of Europe plus Northern America, Australia/New Zealand and Japan (see definition of regions).

*Less developed regions* comprise all regions of Africa, Asia (excluding Japan), Latin America and the Caribbean plus Melanesia, Micronesia and Polynesia (see definition of regions).

*Least developed countries* include 50 countries - Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Samoa, São Tomé and Príncipe, Senegal, Sierra Leone, Solomon Islands, Somalia, Sudan, Timor-Leste, Togo, Tuvalu, Uganda, United Republic of Tanzania, Vanuatu, Yemen and Zambia. These countries are also included in the less developed regions. Full definitions of major areas and regions are available online at: <http://esa.un.org/unpp/>.

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