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## Long-term care for older people

HSBC 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 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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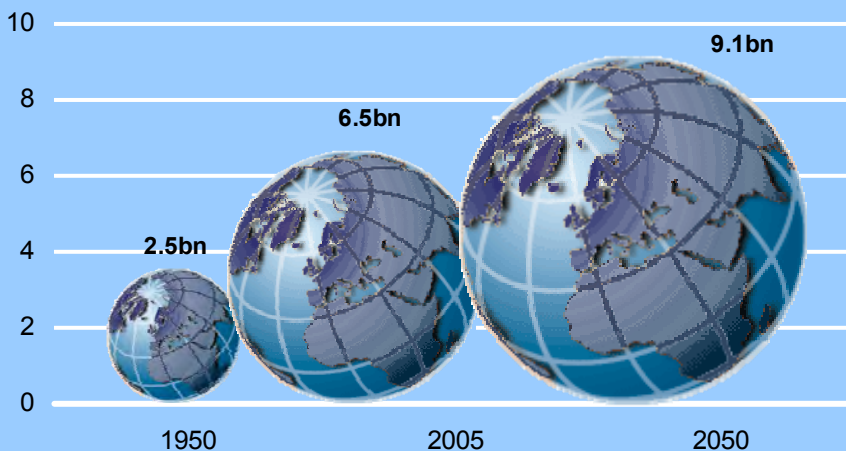
In the end of the 18<sup>th</sup> century, Thomas Malthus maintained “the power of population is indefinitely greater than the power in the earth to produce subsistence for man” (Malthus, 1798). He believed that if unchecked by misery and vice, population growth would exhaust global food resources. He even predicted that this would happen in the middle of the 19<sup>th</sup> century. His prediction failed spectacularly, but nonetheless it helped him to make a good living out of it.

Today, many politicians seem to follow Malthus’ strategy of crisis-mongering. It is a commonplace in political rhetoric that the increase of the share of older people will result in a crisis. Indeed, population ageing is creating serious implications for macroeconomic and financial stability: labour shortages, wage inflation, global capital shortfall, unsustainability of pay-as-you-go pension schemes, and growing health and long-term care expenditure. This data brief looks at the effects of population ageing on long-term care for older people (LTC). ■

### ► The demand for LTC

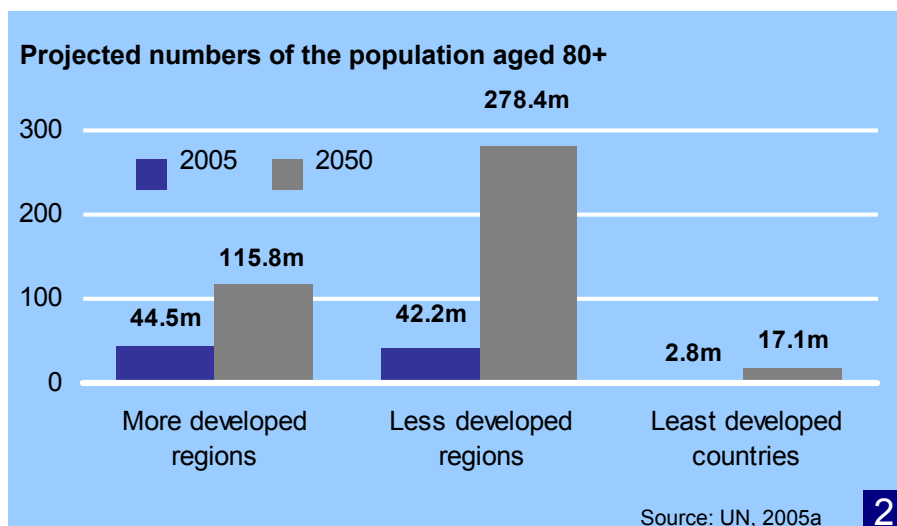
The demand for long-term care for older people will grow in line with the rise of the global population. Between now and 2050, the global population will rise by as much as it was in 1950. This rise is accompanied by two major trends. Firstly, global fertility has fallen from 5 children per woman in 1950 to 2.5 children in 2005 and is set to reach 2 children in 2050 (UN, 2005a). Secondly, global life expectancy has increased from 47 years in 1950-55 to 65 years in 2000-05 and is estimated to reach 75 years by 2050 (UN, 2005a). As a result, fewer children and kin will be available to care for the elderly and the smaller working age population will come under increasing pressure to provide care for both their children and parents.

World population, billions



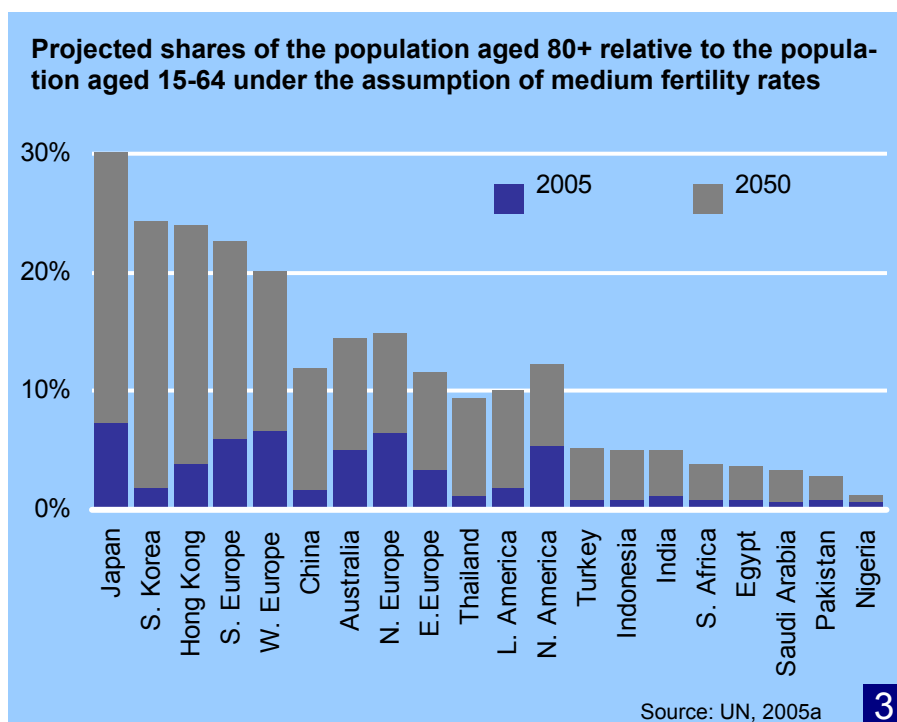
Source: UN, 2005a

By 2050 the number of the older old in the world will increase fourfold



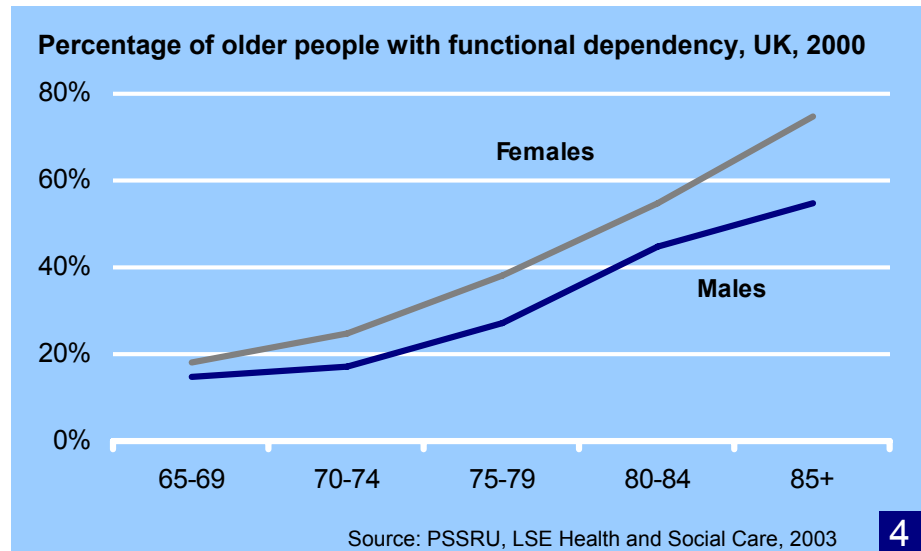
The pressures of demographic ageing faced by the less developed regions<sup>1</sup> are not so well recognised as those of the more developed regions<sup>2</sup>. Over the next 50 years, the numbers of the 'older old' will increase much more quickly in less developed countries than in the more developed countries (figure 2). The global dependency ratio for this age group – the population aged 80+ relative to the population aged 15-64 – will increase more than threefold between 2005 and 2050, from 2: 100 to 7:100.

Older age dependency ratio will grow disparately in different countries



Regardless of whether LTC is funded publicly or privately, ageing societies face the problem of creating the future wealth to fund LTC and having a labour force to provide it. A shrinking labour force jeopardises the sustainability of public finances and many older people may not be able to pay for their LTC privately. In less developed countries with little or no formal LTC facilities, there will almost certainly be growing pressures to create such facilities, especially if family structures and values converge more closely with those of the developed world.

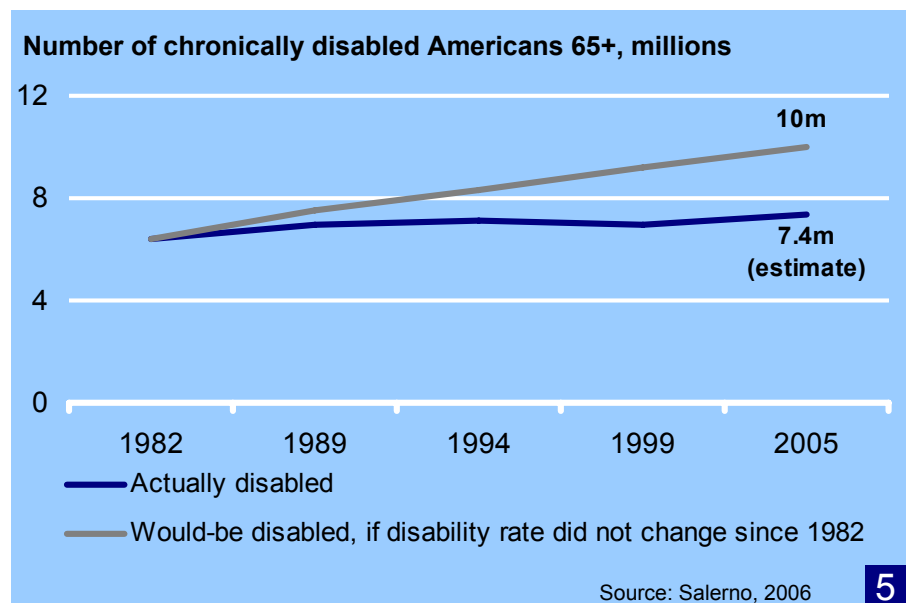
Functional dependency in older people rises steeply with age



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Although the prevalence of functional dependency – the need for LTC – rises steeply with age, it would be a mistake to jump into conclusion that due to population ageing the number of people with disability will increase rapidly over the coming decades. It all depends on the relationship between increasing life expectancy and improving health in later life. For the last three or four decades, the populations of many developed countries have been experiencing longevity gains with additional years of good health.

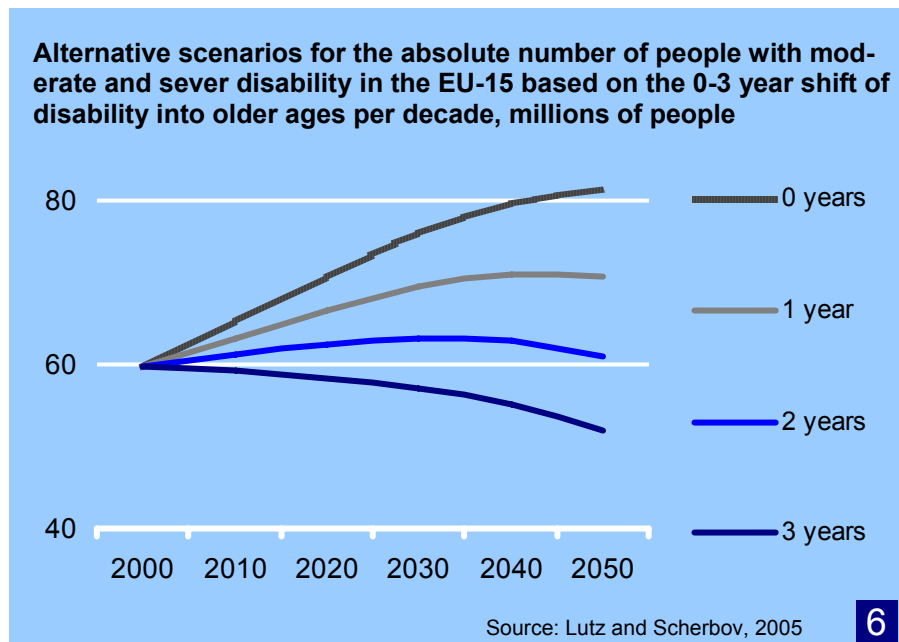
Longevity gains come with additional years of good health



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American data on disability in older people show a dramatic difference between what would have happened had age-specific disability rates remained constant since 1982 and what actually happened. It is not implausible to suppose that as people live longer *and healthier* lives, demand for LTC will not explode as rapidly as some analysts have feared but rather will shift progressively into older ages.

### Healthy ageing may well offset the demand for LTC



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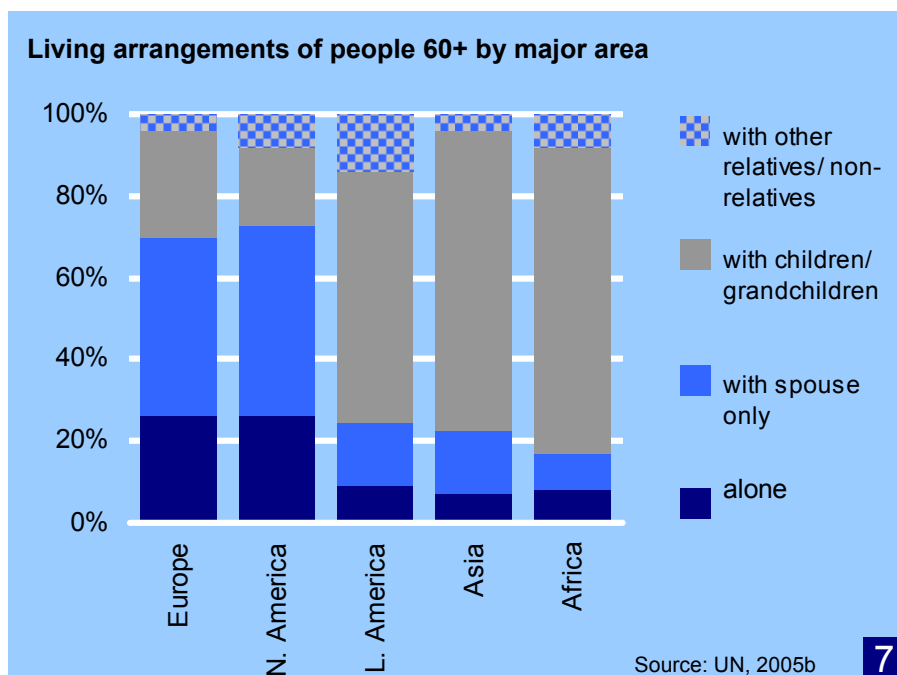
On the assumption that healthier ageing will manifest itself as a shift of current patterns of disability into older ages, researchers at the Vienna Institute of Demography made projections for four different scenarios of healthy ageing in the 15 most developed countries of the European Union (Lutz and Scherbov, 2005). If longevity gains come with no additional years of good health then by 2050 the number of people with disabilities will increase by more than 20 millions. If the pattern of disability shifts by one year per decade then the number of people with disabilities will increase only by 10 million. If the pattern of disability shifts by two years per decade, there will be just a minor increase which by 2050 will come down to the current number of approximately 60 millions. Unexpectedly, if the pattern of disability shifts by three years per decade, then there will be a decrease in the number of people with disabilities.

It is not impossible then that improvements in healthy ageing may well offset the pressures of population ageing on the demand for LTC. Unfortunately, the prospects for healthy ageing in less developed countries are not so promising. These countries have higher disability rates and many of them are still struggling with malnutrition, communicable diseases and other sources of disability that have been eliminated in developed countries. ■

## ► Supply of informal LTC

The pressures of population ageing will increase the policy significance of informal care in both developing and developed countries. In the latter, spousal care is more important than filial care and demographic projections favour its further growth in the coming decades. In less developed countries, filial care is often more important than spousal care. Families in less developed countries are well positioned to provide informal care because they are larger, stronger connected, and more multigenerational than in developed countries.

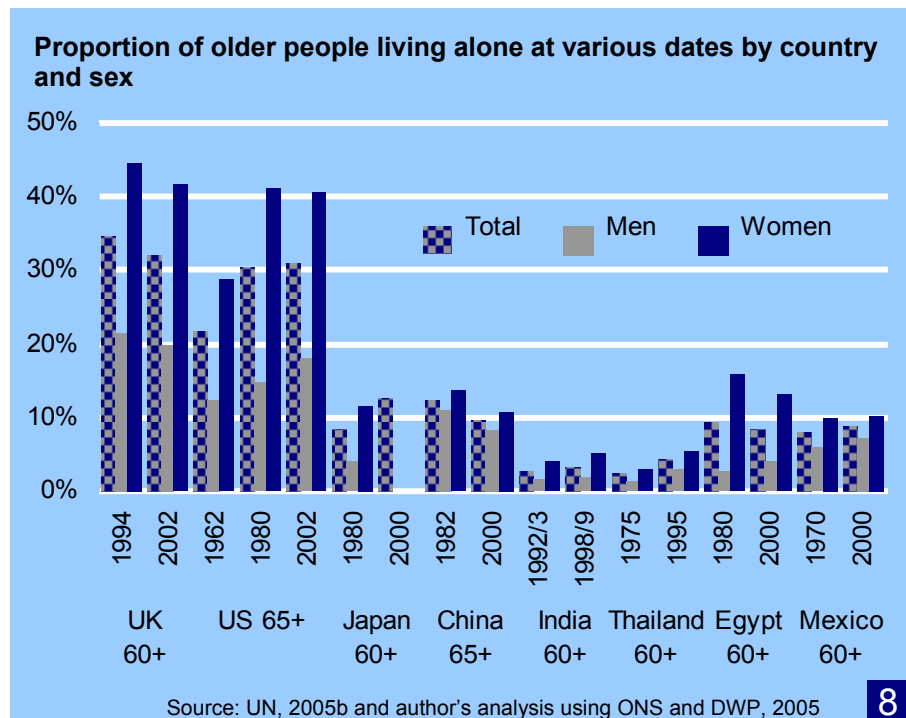
**A large majority of older people in the world live with their children**



In Africa, Asia, and Latin America most of the elderly population live in multi-generational households with their children, who provide informal care if it is needed. For example, in Thailand, 64% and 27% of older people are cared for by their children and spouses respectively (Jitapunkul, Chayovan, and Kespichayawattana 2002). Older people in more developed regions are much more likely to live apart from their children. In Japan, co-residence with adult children has declined dramatically over the last decades of economic growth, from 69% in 1980 to 48% in 2001 (Kohara and Ohtake, 2004).

Although the level of social and economic development explains much of the variation in living arrangements both across and within regions, cultural values are undoubtedly important determinants of the prevalence of multi-generational living arrangements. Older eastern Europeans are more likely to live apart from their children than older people in more developed Asian countries. In many developing countries, furthermore, co-residence with children is associated with a higher socio-economic status (UN, 2005b). Nonetheless, worldwide the proportion of older people who live with a child has been declining despite the fact that the percentage of older people who have living children is increasing (UN, 2005b). Worldwide the proportion of older people who live with a child has been declining despite the fact that the percentage of older people who have living children is increasing (UN, 2005b).

### A greater proportion of older women than men live alone



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Globally, approximately 90m older people live alone and 60m of them are women (UN, 2005b). Older women are less likely to be married or have a living partner. Although high levels of solitary living are strongly associated with economic development, in Northern America and some European countries the trend towards solitary living among older people has been halted and even reversed. There has been a decline in the proportion of the older population who are unmarried or widowed, especially among women.

### Do traditional values of filial piety and family responsibility affect rates of formal LTC utilisation?

#### Percentage of older people with LTC needs using formal LTC, South Korea

Service	Use without charge	Use with charge	Do not use	Total
Home help	0.9	6.1	93	100.0
Adult day care	0.0	0.0	100.0	100.0
Short stay care	0.4	0.0	99.6	100.0
Visiting nurse	0.6	0.9	98.5	100.0
Nursing home	0.0	0.2	99.8	100.0
Elderly hospital	0.2	0.6	99.2	100.0

Source: Choi, 2002

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In South Korea – one of the world's fast-ageing societies – more than 90% of older people with LTC needs are exclusively cared for by informal carers. They are most frequently a spouse (46%), followed by daughters-in-law (31%), daughters (8%) and sons (8%) (Choi, 2002). Low rates of formal LTC utilisation are attributed not merely to the scarcity of services, but also to the 'traditional values of filial piety and family responsibility; face-saving cultural attitudes of being reluctant to use services provided by non-familial persons; and a lack of understanding of in-home/community care services' (Choi, 2002).

Generous public programmes lead to high rates of formal LTC utilisation

#### Percentage of older people with LTC needs using formal LTC, Sweden

Service	Use without or with charge	Do not use	Total
Home help	42.7	53.3	100.0
Adult day care	4.3	95.7	100.0
Short stay care	3.0	97.0	100.0
Visiting nurse	15.7	84.3	100.0
Institution	37.0	63.0	100.0
Informal carer receiving benefits	1.8	98.2	100.0
Salaried informal carer	0.7	99.3	100.0

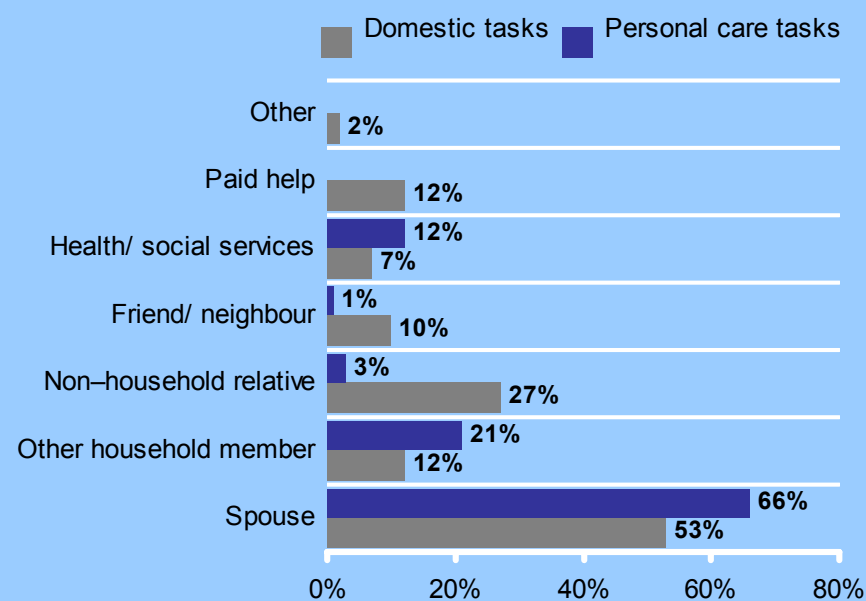
Source: Author's analysis using Socialstyrelsen, 2005

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In a country with a large welfare state such as Sweden, 57% of older people with LTC needs rely on informal care only and 24% on a mix of informal and formal care (Socialstyrelsen, 2005). Compare this with the UK, where it has been estimated that 80% of older people with LTC needs rely exclusively on informal care (Pickard et al, 2000).

Most British elderly are cared for by their spouses

#### Sources of support with domestic tasks and personal care tasks for older people, UK, 1994/95

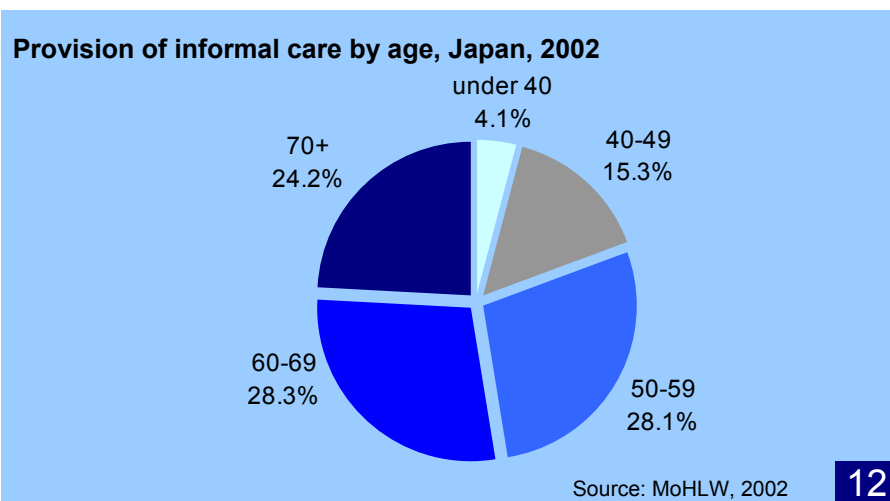


Source: Pickard et al., 2000

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Unlike less developed countries, where filial care is often a major type of informal care, most informal care in developed countries is provided by spouses. Older people are not only receivers of care but also major providers of care (see figure 12). As the population ages, there will be a growing supply of spousal care. Although since these spouses will themselves be older people, it seems not unlikely that they will require more support from formal services than younger caregivers.

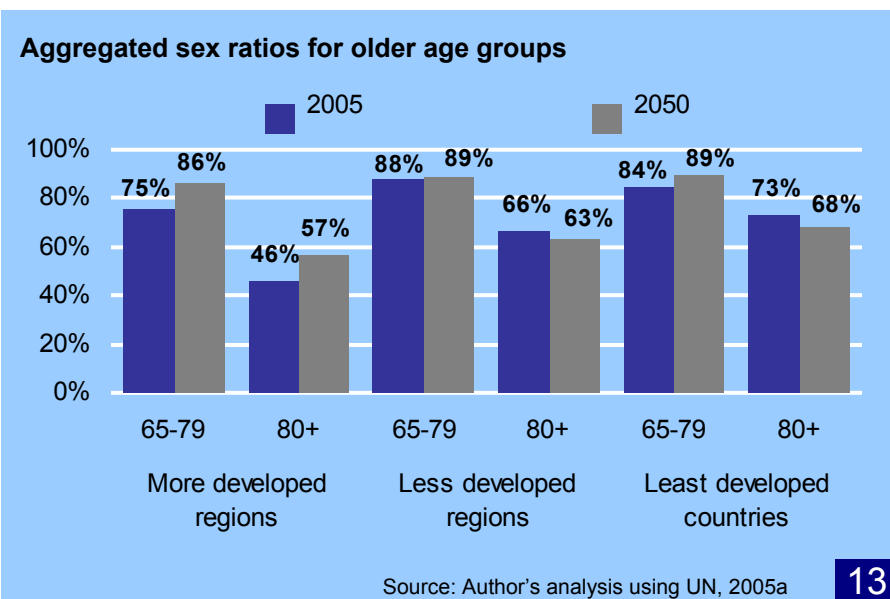
The vast majority of carers are older people



12

In the coming decades, the significance of spousal care in developed and developing countries is expected to take divergent paths. Whereas male life expectancy in developed countries is predicted to grow faster than female life expectancy, a reverse trend is predicted in developing countries. As a result, sex ratios at older ages, i.e. numbers of men per 100 women, will increase in developed countries and decrease in developing countries. When sex ratios are used as a proxy for the supply of spousal care, we can expect the supply of spousal care to rise in developed countries and to fall in developing countries (see figure 13).

Supply of spousal care in developed countries is expected to increase

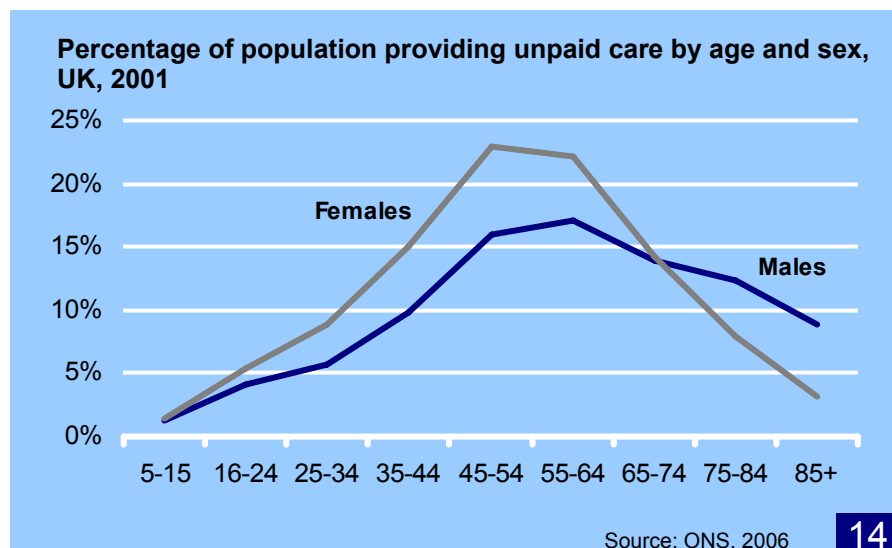


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The potential of changing sex ratios at older ages in developed countries to offset demand for LTC may be held back by the increasing incidence of family breakdown and changing patterns of household formation. Even so, a set of projections for England, which take into account both legally married and cohabiting couples, suggest that in 2031 a greater ratio of older people will be likely to receive spousal care than now (Pickard et al, 2000). As for the impact of rising divorce rates on the availability and willingness of informal caregivers to supply informal care, while it is plausible to assume that stepchildren will be less committed to care for their stepparents than for their biological parents, an increased family network of reconstituted families may provide a greater probability that at least one child or stepchild will care for their elder parent (Harper, 2006).



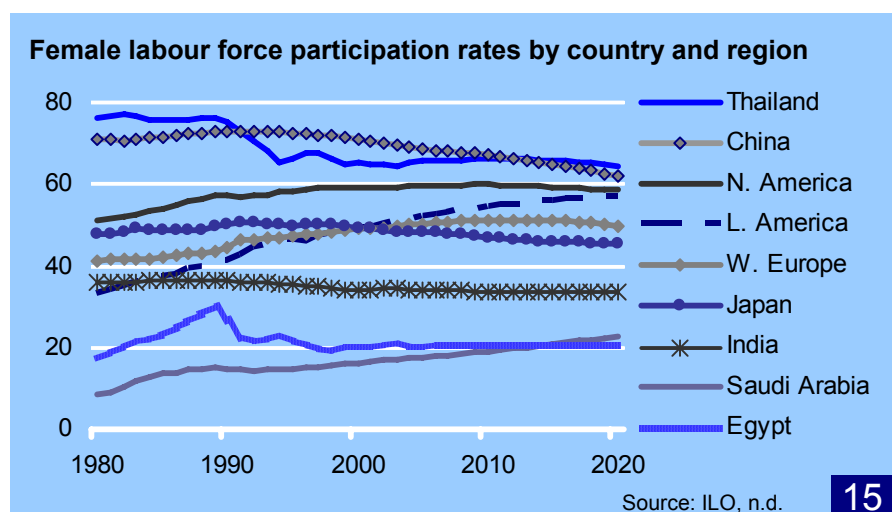
A larger proportion of older men than older women provide informal care



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The role of men as informal caregivers in developed countries is set to increase. Under the age of 65, women are principal providers of informal care but after the age of 65, a larger proportion of men than women provide informal care. Furthermore, the proportion of carers providing more intensive care rises sharply after the age of 65: 33%, 44%, and 51% of carers provide 50 or more hours of informal care per week at the age of 65-74, 75-84, and 85+ respectively (ONS, 2006).

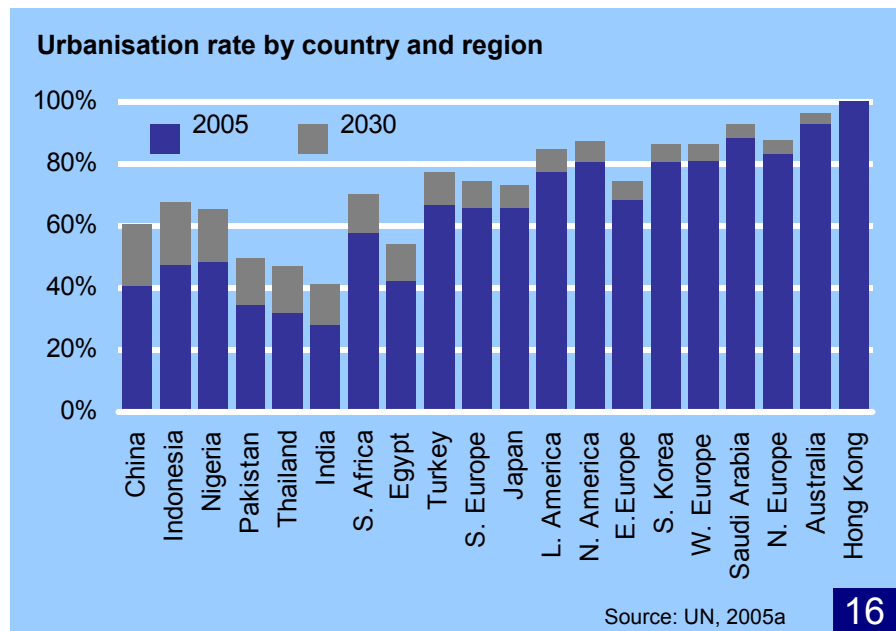
Recent increases in female labour force participation are unlikely to continue



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In the 1980s and 1990s, most developed and many developing countries saw a large increase in female labour force participation. It should help with the costs of publicly-subsidised or privately supplied LTC. It is also likely to exert downward pressure on the supply of informal care. There are many uncertainties here, however. There is, for example, evidence to suggest that where the increase in the labour force participation of potential carers has been mainly in part-time employment, there is no significant decrease in the supply of informal care (Yoo et al., 2004). And in Sweden with its 74% female employment rate and strong policy emphasis on public-sector responsibility for the elderly, 57% of the people aged 65+ with LTC needs rely exclusively on informal care and 24% on a mix of informal and formal care (Socialstyrelsen, 2005). Between now and 2020, the female labour participation rate is projected to continue growing in Latin America, and also in some other countries with very low rates of female participation. In most countries, however, the increase is expected to halt and – in some fast-ageing societies such as Japan and China – to decline.

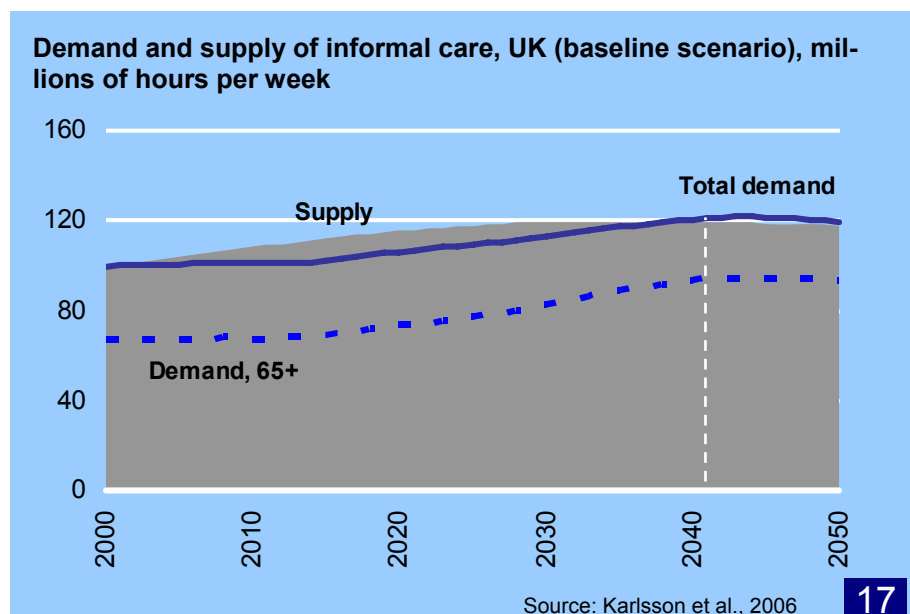
**More older people will live in cities**



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Today, almost half of the world population lives in cities and in 2030 it will increase by 10%. While in the last century urbanisation occurred at fastest rates in developed countries, in this century the urban population in developing countries has been growing fastest. Urbanisation has three major influences on LTC. Firstly, urbanisation reduces capacity of the extended family and community to provide informal care either as a result of children migrating into cities or lower fertility and higher life expectancy associated with urban dwelling. Secondly, cities are increasingly becoming centres of poverty. In developing countries most older people do not have pensions and have to work to sustain their livelihood. Lastly, the complexity of the urban built environment may impair the mobility of older people.

**Growing demand for LTC will be mitigated by an increased supply of informal care**



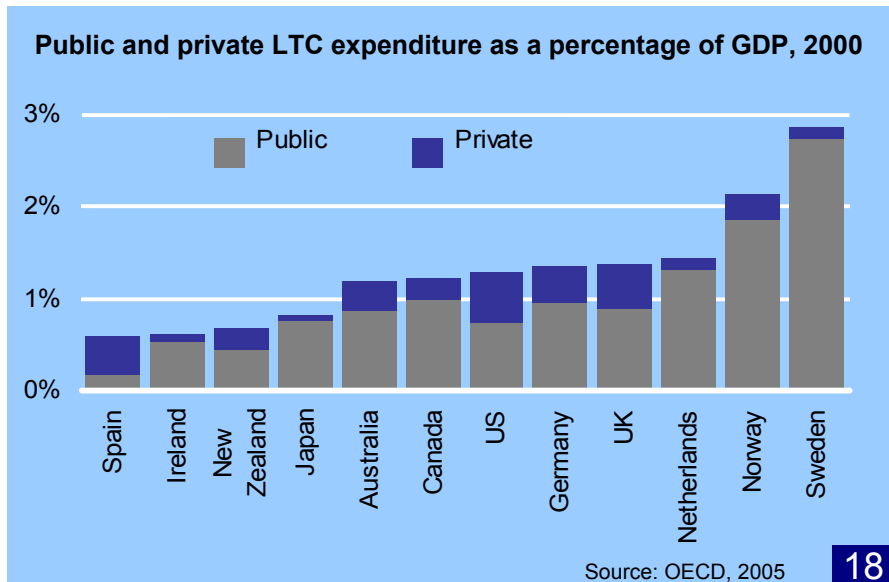
17

Taking into account demographic changes and care-giving patterns, it is projected that until 2040 there will be an excess of informal carer supply in the UK (Karlsson et al., 2006). These findings are consistent with other studies that predicted an increase in the availability of informal care in England (Pickard, 2000) and in OECD countries (Yoo et al., 2004). ■

### ► LTC expenditure

The fact that informal and formal LTC are often close substitutes suggests that there may be growing demand for publicly-funded LTC even when informal care is available. The availability of publicly-funded LTC also provides a disincentive for personal saving for future care needs. Hence, even in countries with universal LTC provision, private households share LTC costs by making co-payments for publicly-provided care or paying for it out-of-pocket.

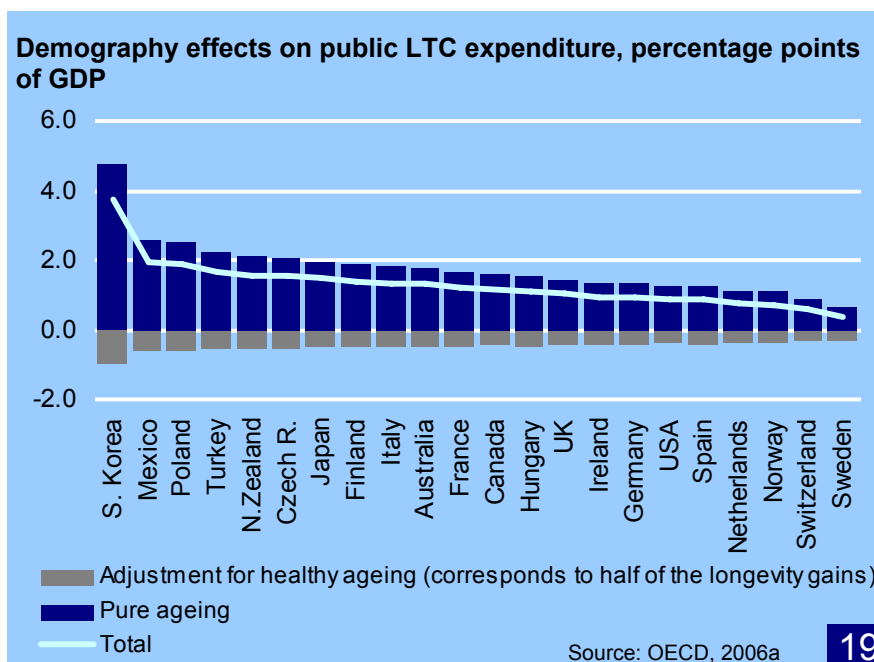
Current LTC expenditure levels are better explained by the generosity of public programmes than by population age structure



18

Despite large differences in population age structure and LTC systems, there are similarities in the levels of LTC expenditure across many OECD countries. Public expenditure is the main source of LTC funding in all countries apart from Spain. Overall levels of public LTC expenditure are nonetheless relatively low compared to other age-related expenditures such as pensions and health care. However, without user cost-sharing and the availability of informal care spending levels would be much higher (OECD, 2005).

The impact of ageing alone on long-term care expenditure will be limited

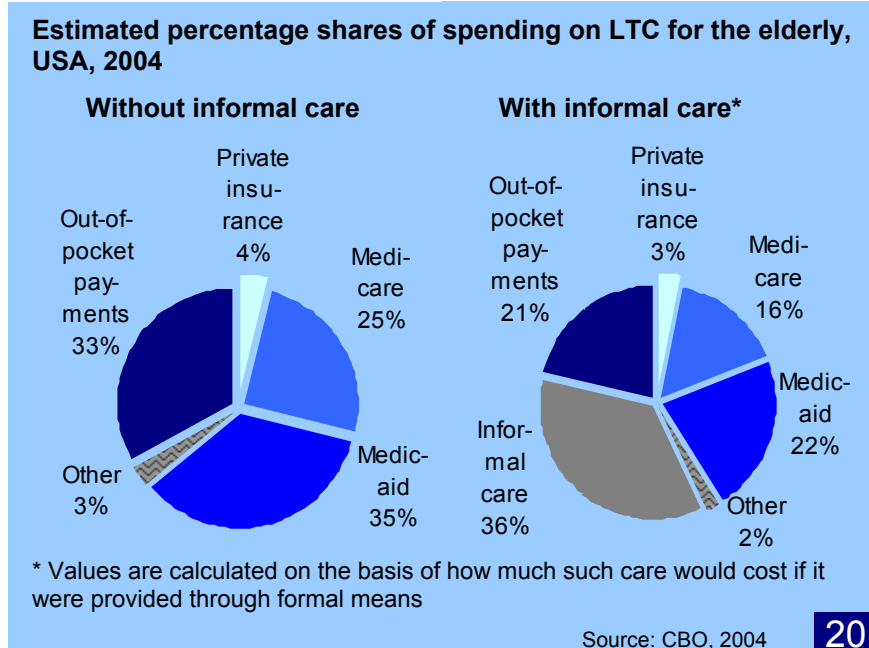


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On the rather pessimistic assumption that only half of the longevity gains translate into a reduction of dependency and without taking into account the growing supply of informal care, OECD project an average increase of 1.2% of GDP in public LTC spending over 2005-2050 (OECD, 2006a) (see figure 19). However, this increase may be much higher because of the way that relative price changes may affect the cost of different inputs into service provision. LTC is highly labour-intensive and has a low scope for technological innovation. A high labour intensity of LTC inflates the price of LTC relative to other goods and services which can benefit from productivity gains due to new technology (OECD, 2006b). It is estimated that rising prices for LTC could increase the percentage of GDP spent on public LTC by 0.6%-1.5% over the period 2005-2050 (OECD, 2006a).

Heightening budgetary strains on the face of rising public LTC expenditure prompt policy-makers to seek ways to encourage people to pay themselves for their future LTC needs.

**Out-of-pocket payments are the main source of private LTC expenditure**



The US Congressional Budgetary Office has estimated that 'self-insurance' – setting aside savings and assets – made a far greater contribution than private LTC insurance to the £135bn spent on formal LTC services in the USA in 2004 (CBO, 2004). Although such 'self-insurance' allows utmost flexibility and control over one's finances, 'self-insured' persons do run the risk of losing most or all of their wealth. A year in a nursing home cost in 2003 on average \$66,000 per year, a figure well in excess of the income of all but a small minority of older Americans (CBO, 2004).

In the USA, the demand for private insurance, which enables people to minimise the risk of a large financial loss in case they require LTC, is expected to grow in the future – assuming that current policy remains unchanged (CBO 2004). It is recognised, however, that this rise (17% of all LTC spending by 2020) will be limited by many factors negatively affecting demand for private LTC insurance.

**Many factors negatively affect demand for private LTC insurance****The availability of publicly-funded LTC**

- ▶ Publicly-funded LTC may encourage people to hide assets and discourage from saving because the less they have, the quicker they will qualify for coverage;
- ▶ publicly-funded LTC is free and has defined-benefit structure whereas private insurance ensures that a policyholder will have a specified monetary benefit to pay for care but does not guarantee that the money will be sufficient to pay for that care if prices rise faster than the value of the benefit.

**The inability to insure against certain risks**

- ▶ Most policies guarantee to provide contractually specified cash benefits but do not insure against the risk of significant price increases for LTC;
- ▶ policies may become obsolete because LTC services and policies that cover them are steadily evolving;
- ▶ insurer insolvency.

**Administrative costs**

- ▶ LTC insurance premiums are high because the costs of marketing to and enrolling individuals are as twice as high as those for groups (for which economy of scale may apply).

**Premium instability**

- ▶ Premiums may be increased substantially because LTC insurance is a relatively new product, which makes it difficult for insurers to accurately predict the volume of claims that they will have to satisfy;
- ▶ if premiums change policyholders may cancel their coverage to recoup from the insurer as much as all of the premiums they have paid, but they cannot receive the associated returns on the investment of that money.

**Potential adverse selection**

- ▶ Because the market for LTC insurance is young, it may be affected by adverse selection. If insurers believe that it occurs, they may set premiums higher than a policyholder's health status suggests. According to the adverse selection theory, people who purchase LTC insurance have greater expectations than non-purchasers of using services in the future, and those greater expectations are not captured in the information that insurers collect as they enrol purchases of their policies.

Source: CBO, 2004

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## Notes

<sup>1</sup> Less developed regions comprise all regions of Africa, Asia (excluding Japan), Latin America and the Caribbean plus Melanesia, Micronesia and Polynesia.

<sup>2</sup> More developed regions comprise all regions of Europe plus Northern America, Australia/New Zealand and Japan.

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