Population Ageing in a Globalised World:  
*Unequal risks in later life?*

Hafiz Khan  
Professor of Public Health & Statistics  

The Graduate School  
University of West London, UK  
www.uwl.ac.uk

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Outline

• Global population ageing

• Drivers of population ageing

• Unequal distribution of risks in later life
  – *Burden of disease in old age*
  – *Financial security in later life*
  – *Familial resources for elderly care*
  – *Care workforce for ageing society*

• Some policy implications
## World population

<table>
<thead>
<tr>
<th>Year</th>
<th>Population (billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>2.5</td>
</tr>
<tr>
<td>2000</td>
<td>6.1</td>
</tr>
<tr>
<td>2050</td>
<td>9.7</td>
</tr>
<tr>
<td>2100</td>
<td>11.2</td>
</tr>
</tbody>
</table>
Change of population structure (China 1950-2050)
Population ageing

Population change is quite dramatic in many places.

The sheer number of older people is increasing faster than what we often thought.

By 2030,

- A quarter of the population in Asia will be over 60 years.
- A quarter of the population of the developed world will be over 65 years.
Percent of population over age 60 years

- up to 10%
- 10 to 19%
- 20 to 24%
- 25 to 30%

% of population aged 60+ years, 1996
1950-2050 population 80+ (millions)
Years lived with disability per 100,000 population (Public Health England, 2017)
Global ageing (1980-2050)

From pyramid 1980 to bell 2015 to barrel 2050
Japan - The super ageing society

Aging of Japanese population (2015-2045)

Men
Women

100 years old or older

2045

2015

Estimates by National Institute of Population and Social Security Research
Drivers of population ageing

- Fertility
- Mortality
- Migration
Life expectancy 1950-2050

- World
- More Dev
- Less Dev
- Europe
Expectation of life at birth, UK

Female life expectancy is 3.6 years greater than for males in 2016.

Male life expectancy is increasing faster than female, closing the gap between the sexes.
Proportion of persons surviving to successive ages, UK

Proportion surviving

1851
1871
1891
1911
1931
1951
1971
1991
2011
2031

Age

0 10 20 30 40 50 60 70 80 90 100 110

Proportion surviving

0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0

1851
1871
1911
1931
1951
1971
1991
2011
2031
Number of centenarians increase at a faster rate. The number will reach some half a million by 2066.

The prevalence of disability rises with age:

- 6% Children
- 16% Working age adults
- 45% State pension age+

Currently over 11 million disabled people in the UK (18%), costing around £80 billion per annum.
<table>
<thead>
<tr>
<th></th>
<th>At birth Males</th>
<th>At birth Females</th>
<th>At age 65 Males</th>
<th>At age 65 Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy</td>
<td>79.5</td>
<td>83.1</td>
<td>18.7</td>
<td>21.1</td>
</tr>
<tr>
<td>Healthy Life expectancy</td>
<td>63.4</td>
<td>64.1</td>
<td>10.5</td>
<td>11.2</td>
</tr>
<tr>
<td>Number of years in poor health</td>
<td>16.1</td>
<td>19.0</td>
<td>8.2</td>
<td>9.9</td>
</tr>
<tr>
<td>% of life in poor health</td>
<td>20.3</td>
<td>22.9</td>
<td>43.9</td>
<td>46.9</td>
</tr>
</tbody>
</table>
Migration

- Migration plays an important role.
- It can slow down the process of ageing.
- Uncertainty in future migration.
# Net annual migration, years to 2050

**UN projections**

<table>
<thead>
<tr>
<th>Region</th>
<th>Net annual migration assumed for UN projections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia</td>
<td>-1,200,000</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>-750,000</td>
</tr>
<tr>
<td>Africa</td>
<td>-400,000</td>
</tr>
<tr>
<td>USA &amp; Canada</td>
<td>+1,300,000</td>
</tr>
<tr>
<td>Europe</td>
<td>+850,000</td>
</tr>
<tr>
<td>Australia</td>
<td>+100,000</td>
</tr>
</tbody>
</table>
Global trends in population ageing

• Population ageing is unprecedented –
  the 21st century will witness rapid ageing than ever before.

• Population ageing is pervasive –
  a global phenomenon will affect everyone. 
  Countries that started the process later will have less time to adjust.

• Population ageing is enduring –
  we will not return to the young populations anymore that our ancestors knew.
Key risks of global ageing

What are the key challenges of global ageing with regard to the way it shapes our lives?

- Burden of disease in old age
- Financial security in retirement
- Familial resources for elderly care
- Care workforce for elderly
Burden of disease

• Epidemiological transition – changes in leading causes of deaths from acute and infectious diseases to chronic and non-communicable ones.

• Non-communicable diseases are big threats such as Heart disease, Stroke, Cancer, Diabetes and Dementia.

• These are also linked with disability, dependency & long-term care needs.

• Highly likely to suffer from multi-morbidities.
<table>
<thead>
<tr>
<th>Cause</th>
<th>Deaths (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular disease</td>
<td>11.11</td>
</tr>
<tr>
<td>Cancer</td>
<td>3.93</td>
</tr>
<tr>
<td>Respiratory disease</td>
<td>2.35</td>
</tr>
<tr>
<td>Dementia</td>
<td>2.23</td>
</tr>
<tr>
<td>Diabetes, blood &amp; endocrine disease</td>
<td>1.7</td>
</tr>
<tr>
<td>Lower respiratory infection</td>
<td>1.08</td>
</tr>
<tr>
<td>Diarrheal disease</td>
<td>0.694</td>
</tr>
<tr>
<td>Kidney disease</td>
<td>0.625</td>
</tr>
</tbody>
</table>
Global scenario of dementia
Burden of disease

Complex multi-morbidities + Ageing = Double burden for carers

A big challenge for global public health
Financial security

Financing wellbeing is a big challenge in old age

- Savings for later life such as PAYG.
- Work pension & Mandatory Provident Fund (MPF)
- Pension provides financial security to retired workers.
- In 2000, work pension scheme covered more than 90% of workforce in OECD countries.
- Poverty and vulnerability are issues in old age.
- Social pension (non-contributory pension) is introduced under social protection scheme.
Financial security

• A centaury ago, workers in Europe would be lucky to reach their retirement age. Today, people are expected to live 20 to 30 years after the retirement.

• Ageing is a threat to pension system (number of pensioners are increasing relative to contributors).

• The Equality Act 2010 gives protection to older people.

• State Pension age (65 for men, 60 for women) would increase to 68 between 2037 and 2039.

• Compulsory retirement at age 65 is fully abolished as of 6th April 2011.
8 The move to abolish mandatory retirement age
The case of the United Kingdom

George W. Leeson and Hafiz T.A. Khan

Introduction
The aim of the chapter is to analyse the abolishment of the mandatory retirement age in the United Kingdom. The UK is latest country in the world to completely eliminate mandatory retirement, first raising the mandatory retirement age to 65 in 2006 and then eliminating it altogether in 2011. This was a significant shift in response to demographic trends and the call to eliminate discriminatory workplace and labour market practices (Meenan 2000). More and more governments in the UK realized that they had to meet the costs for the early retirement of employees and provide health and social care to older people but had limited resources to do so if workers retired early (Raeside and Khan 2008). Older workers are also less likely to accept early retirement than they would in the past, in part because of continuing financial commitments, such as a mortgage (AVIVA 2013).

This chapter chronicles the experience of the UK in fully abolishing mandatory retirement and focuses on this specific national case as a possible future scenario for other nations. This chapter focuses on three sets of issues as a means to evaluate the impact of introducing legislation to ban contractual mandatory retirement. First, the chapter discusses the ways in which the removal of a pre-determined retirement age was a state response to population ageing. Second, the chapter reviews the role of labour market discrimination of older workers and how eliminating mandatory retirement was a means to reduce the ageist stereotypes. In this regard, the chapter examines the role of the European Union (EU, hereafter) as a catalyst in UK policy reforms. Third, it analyses how the policy reform has impacted the labour market and older workers. Finally, the chapter concludes with a brief discussion of policy lessons from the UK experience with respect to abolishing mandatory retirement in the labour market.

Why age discrimination matters
While discrimination on grounds of sex and race had been long acknowledged and legislation has been enacted to prevent or at least minimize it in workplaces in the UK and other western nations, it is only recently that discrimination on the
Familial resources for elderly care

• Family has been known as the main sources of informal care in many countries, particularly in Asia.

• Changes in family size and structure.

• This has reshaped living arrangements in the household.

• Older people quickly become vulnerable within the household.
Living arrangements of people aged 65+ in Japan
Care cost in Japan

The increase in the number of elderly people will put a strain on costs for medical and nursing care services.

Medical service costs for people aged 75+ run to an average of £6,090 per year.

Nursing care service costs for people aged 75+ works out an average of £3,572 a year.

Total annual cost per person aged 75+ is £10,000.
Traditionally, covering cost of elderly care was part of family responsibility.

Is it sustainable any more? If not,

- Who is going to pay the cost of care in old age?

- Is it the Individual, or the Family, or the Government?
Attitudes Towards Bearing the Cost of Care in Later Life Across the World

Hafiz T.A. Khan, George W. Leeson, University of Oxford
Helen Findlay, Sir William Beveridge Foundation, London

Abstract
The aging population is recognized by many as a unique global phenomenon and has become a subject of interest among multidisciplinary professionals. Perhaps one of the most common key concerns among individuals and family members in many countries today is to meet the increasing demand for elderly healthcare, particularly the real challenges and crisis in old age morbidity and health. As the socioeconomic, demographic and cultural context of populations

*Illness, Crisis & Loss, Vol. 21(1) 49-69, 2013*
Persons aged 15-64 years to support per 65+

Inverse Dependency Ratio

Year 2000  Year 2050

Japan 1 4
France 2 4
UK 3 5
Germany 4 5
Denmark 2 3
USA 5 4
Canada 5 3
Russia 6 2
Hong Kong 7 2
Taiwan 8 2
South Korea 10 2
Singapore 10 2
China 12 3
Brazil 12 3
India 13 5
Mexico 13 4
Malaysia 15 3
Philippines 17 4
South Africa 17 5
Saudi Arabia 22 6
The current generation (G4) may need to take care of max of 14 people
Care burden

• New generation has an increasing care responsibility.

• Care responsibility usually shared by siblings within families.

• The lower the number of sibling the higher degree of care responsibility goes to them.

• Childlessness in the household may be a big concern for future care provision.
Healthcare workforce for elderly

- Healthcare workforce include doctors, dentists, nurses as well as a host of allied health professionals involved in the healthcare.
- Growing demand for adequate number of care workforce for ageing population.
- Production of healthcare workforce for treatment.
Hospital might be able to produce a maximum of 1000 treatments per year if it employs 60 nurses and 7 doctors, as at point C.

However, it could produce the same amount in a technically efficient way with 20 nurses and 35 doctors, as at point D.
The rising demand for care

- Rapid growth in the number of the oldest old
- More and more experience of multimorbidity, disability and dependencies
- Obesity and complex health in old age
- In 2010 an estimated 35.6 million people are living with dementia – this is projected to double every 20 years, reaching 115.4 million in 2050
- Increase in labour force participation by women & growing migration
Why this matters

Long-term chronic illness and the need for long-term care have major impacts on

individuals and households

psychological stress – for older people and caregivers

economic burden – producers become consumers of care

societies and economies

loss of productivity, lost development
Statistics on healthcare workforce for older adults

Lack of data available on workers’ employment related to healthcare for older adults and there cross-country comparison is almost difficult.

However, it is felt that such statistics are needed to monitor the progress of a country’s positive attitude towards challenging issues related an ageing society.
Globalization is the increased diffusion of worldwide connections between people.

The world is now increasingly interdependent in many ways – socially, economically, and environmentally.

What happens when various actors of world economy do not play their role on trade, free movement of labour etc.?
Concluding remarks

The ageing population presents many challenges and ignoring these could undermine the potential benefits of living longer.

Ageing should not be just considered as a problem because of unmanageable size, care burden and cost.

There are also huge opportunities of ageing as older people makes an increasing contribution to society as workers, volunteers, taxpayers, and carers.
Question & Answer

Professor Hafiz Khan

Hafiz.Khan@uwl.ac.uk