

# Changing Population Age Structures and Sustainable Development

Report of the Secretary-General to the 50<sup>th</sup> session of the  
Commission on Population and Development  
(E/CN.9/2017/2)

Population Division, DESA, United Nations

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# Outline

Changing population age structures

- Global and regional trends

- Age structures in urban and rural areas

Fertility, health and education

Individual and household-level intergenerational support

- Changes in inter-generational co-residence

- Gender, balancing work & family obligations

Consequences for the population and the macroeconomy

- Work, pensions and old-age income security

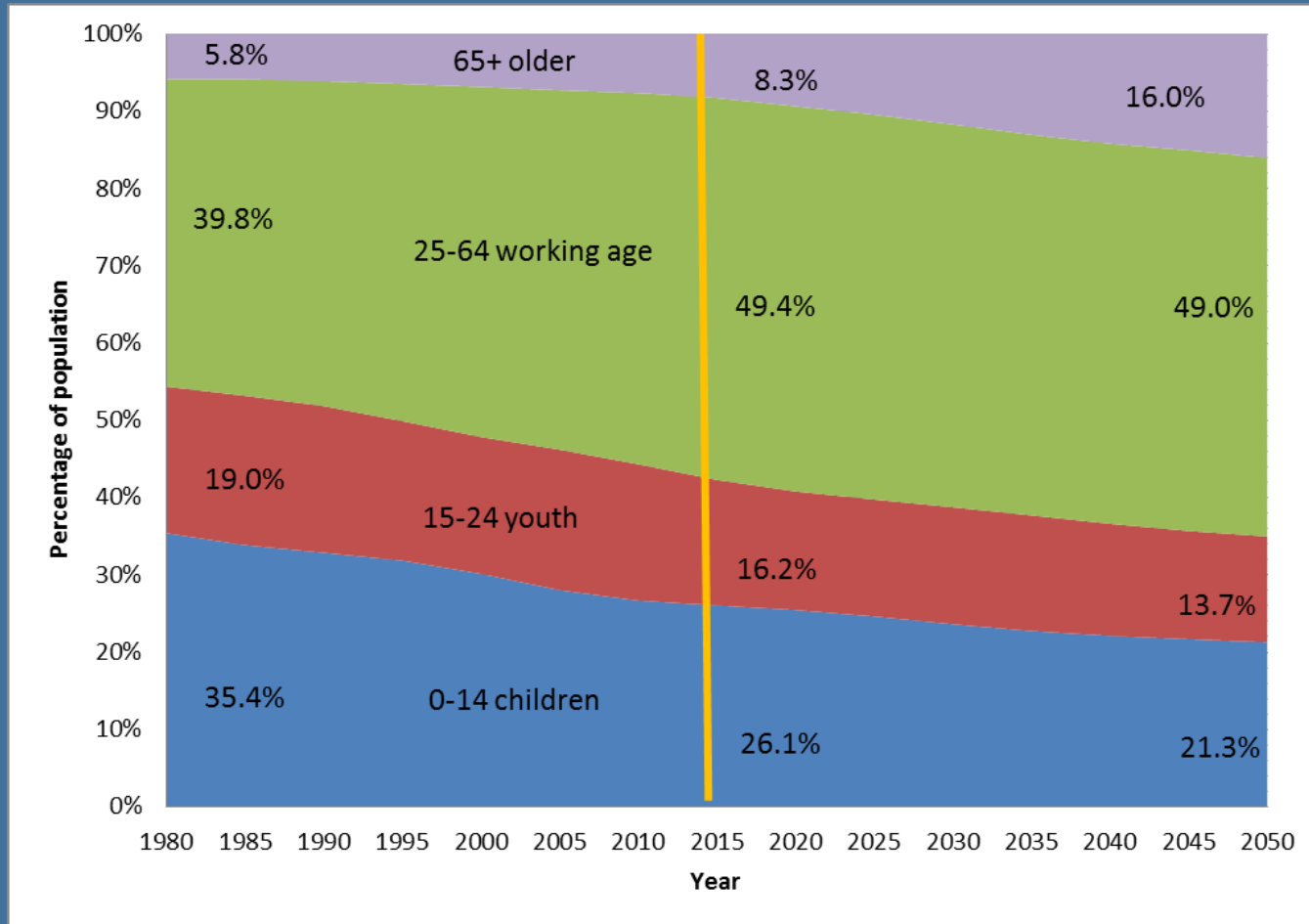
- Macroeconomic implications

Conclusions and Recommendations

# Changing population age structures

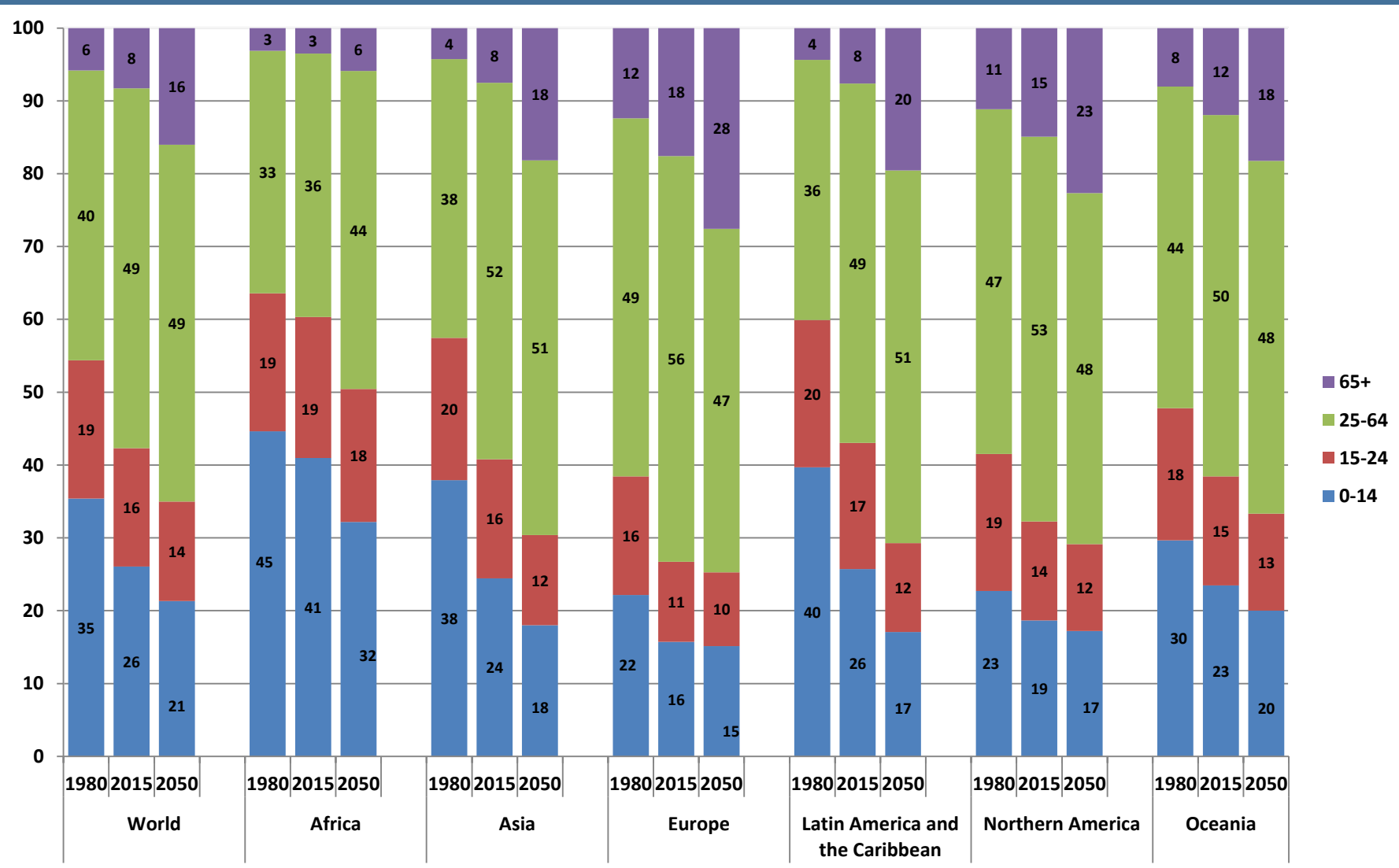
# World population ageing is intensifying

Percentage distribution of global population by broad age group, 1980 to 2050



Source: World Population Prospects: The 2015 Revision.

# Percentage distribution of the populations of major world regions by broad age group, 1980 to 2050



Source: World Population Prospects: The 2015 Revision.

## *Children (aged 0-14) and youth (15-24)*

- Children and young people globally projected to rise slightly in future decades, while falling as a share of the total population;
- The continued increase in the number of children and youth worldwide is due mainly to growth in Sub-Saharan Africa, with smaller positive contributions by Northern America and Oceania;
- Declining numbers of children and youth in Asia, Europe and Latin America and the Caribbean. Globally, 2.1 billion children and 1.3 billion youth by 2050

## *Working-age population (aged 25-64)*

- The world's working-age population (WAP) is projected to increase by about 31 per cent, from 3.6 billion in 2015 to 4.8 billion in 2050. Most of this increase is expected to occur in Africa (+653 million) and in Asia (+440 million);
- Asia will continue to have the largest regional share of the WAP, but this figure will drop from 62 per cent in 2015 to 57 per cent in 2050. At the other extreme, Europe's WAP is expected to start declining after 2015;
- Countries with large net inflows of migrants can attenuate, but not neutralize, the trend toward population ageing. Old-age dependency ratio of developed countries 4 per cent higher if trends in international migration continue to 2050 (United Nations, *World Migration Report 2015*).

## *Older persons (aged 65 or older)*

- Older persons expected to increase 2.6-fold, from from 608 million in 2015 to nearly 1.6 billion by 2050, more than tripling in Asia, Latin America and the Caribbean and Africa. Older people will more than double in Oceania, and grow between 44% and 50% in Northern America and in Europe;
- The proportion of people aged 65 or over, the median age or the old-age dependency ratio yield broadly similar trends in ageing. Alternative measures of ageing that consider the average number of *remaining* years of life rather than the years already lived , give a different perspective. Such “prospective” measures of ageing, suggest much slower speed of ageing (Sanderson and Scherbov, 2015, 2016).

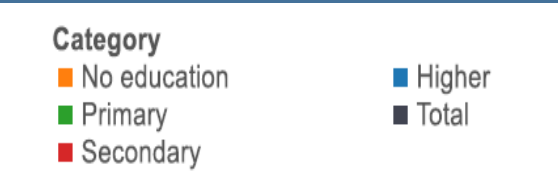
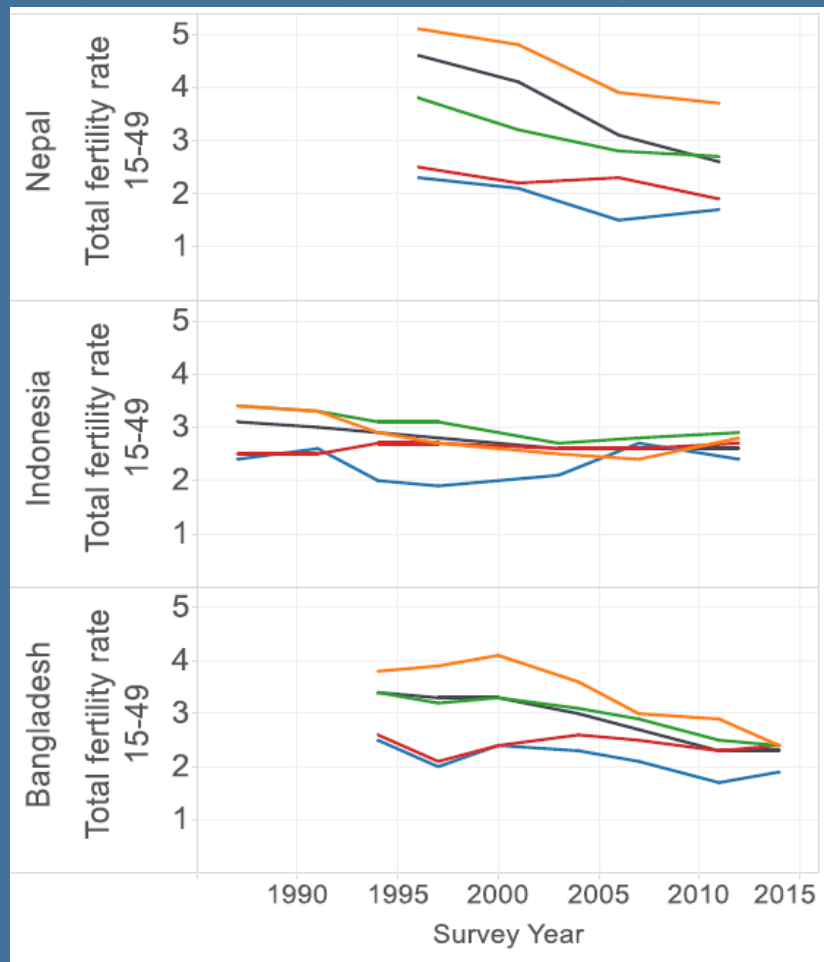
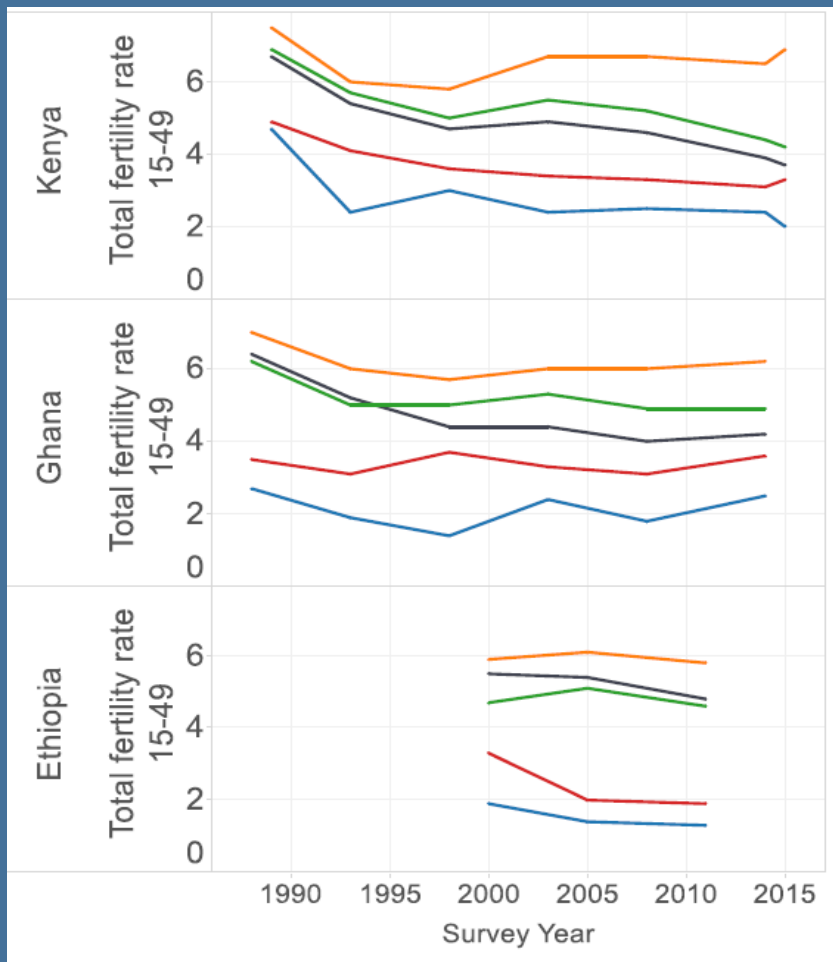


## *Older persons (aged 65 or over)*

- Increasing evidence of improvements in cognitive ability, overall health status, and potential productivity (Skirbekk, 2016) over the range of adult ages. A major implication is that population ageing need not have the dire socio-economic consequences that are often attributed to it.
- Another important feature is the female predominance in the older population. In 2015, women accounted for 55 per cent of the global population aged 65 or older, and for 61 per cent of those aged 80 years or older (percentages highest in Europe, followed by Latin America and the Caribbean, Northern America and Africa, and Asia and Oceania)

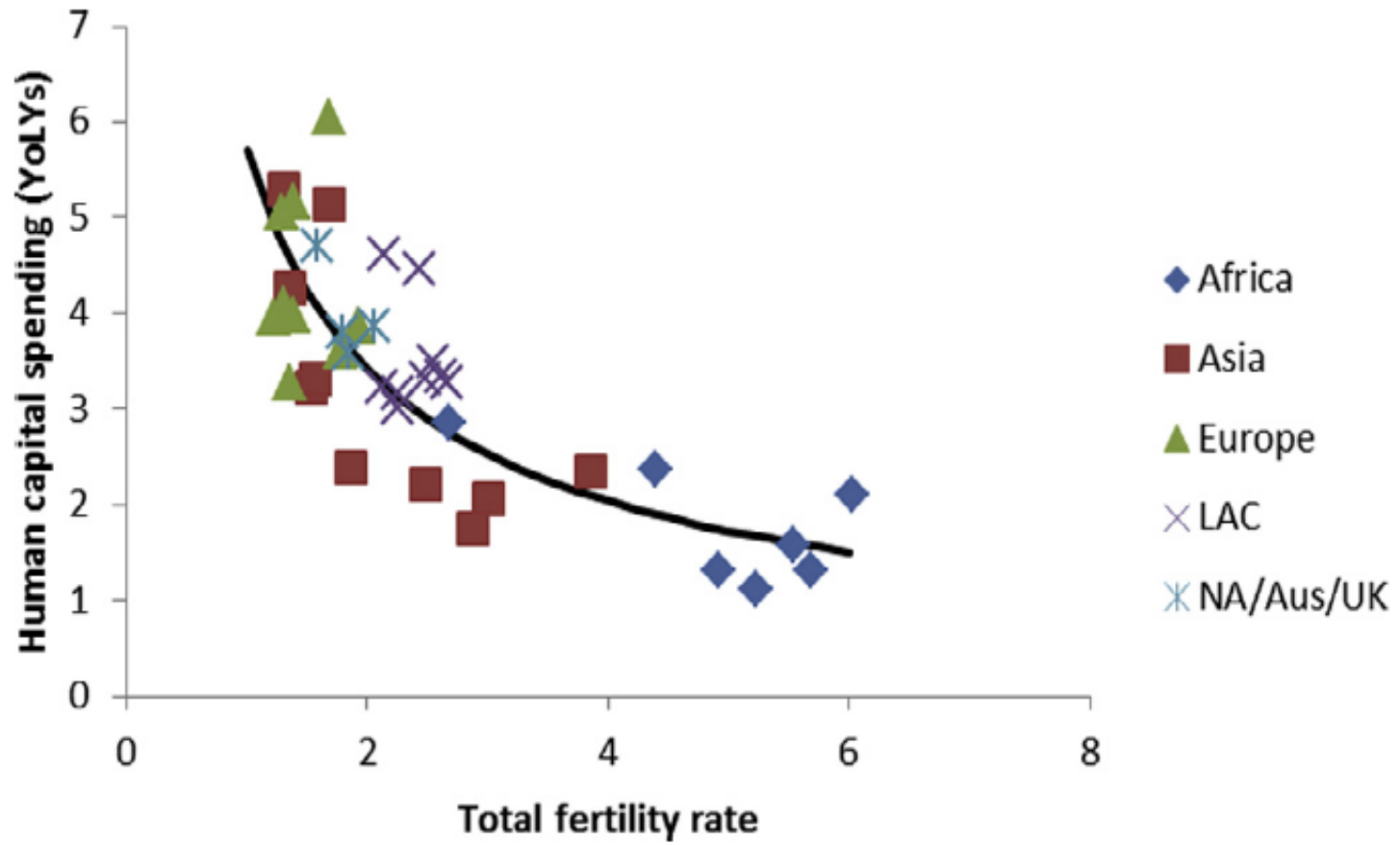
# Fertility, health and education

# Association between education and fertility remains strong, but varies internationally



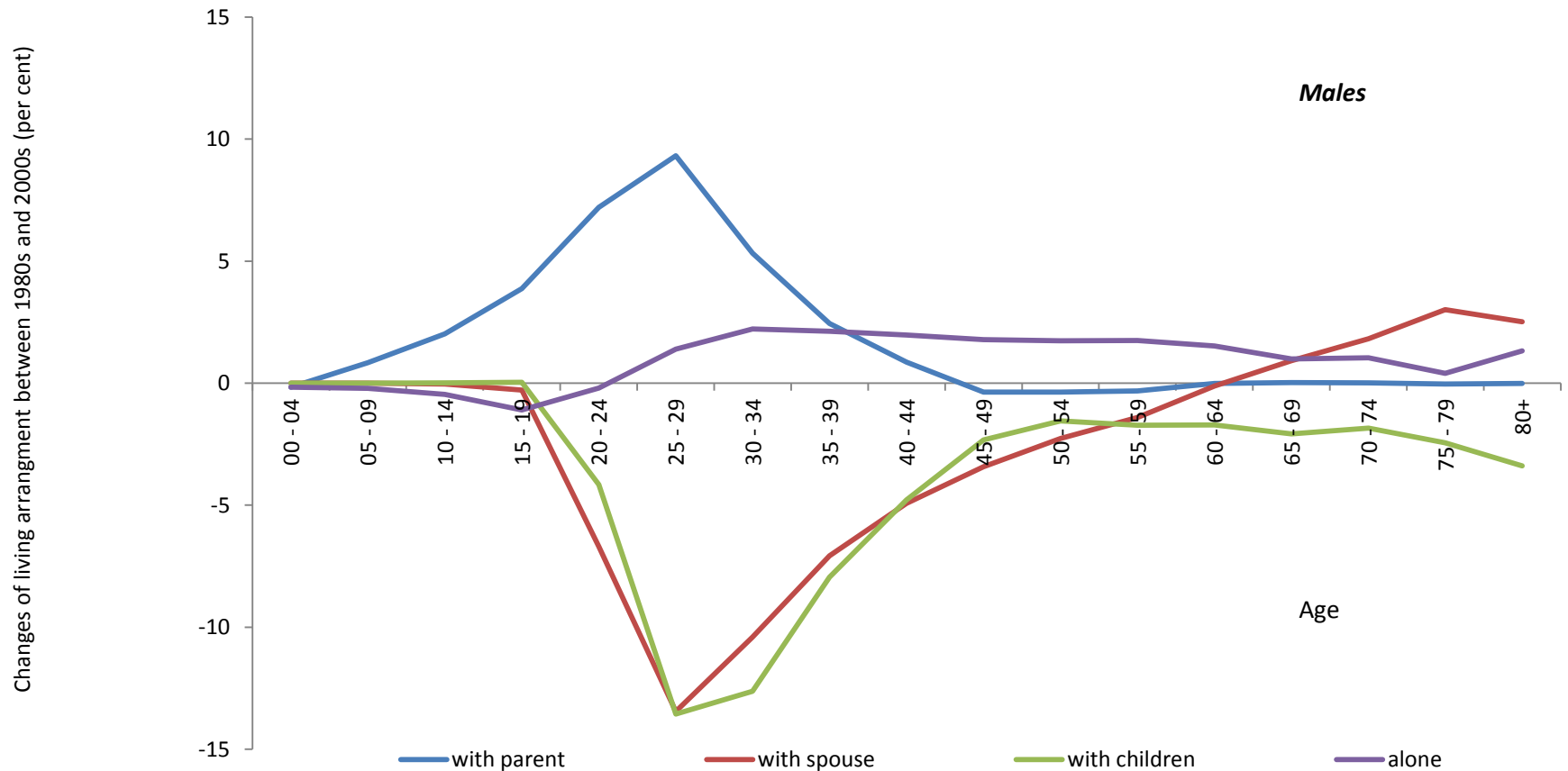
Source: Pradhan (2016)

*Association of fertility with health less strong, but often positive*  
*Overall association between fertility and human capital significant*

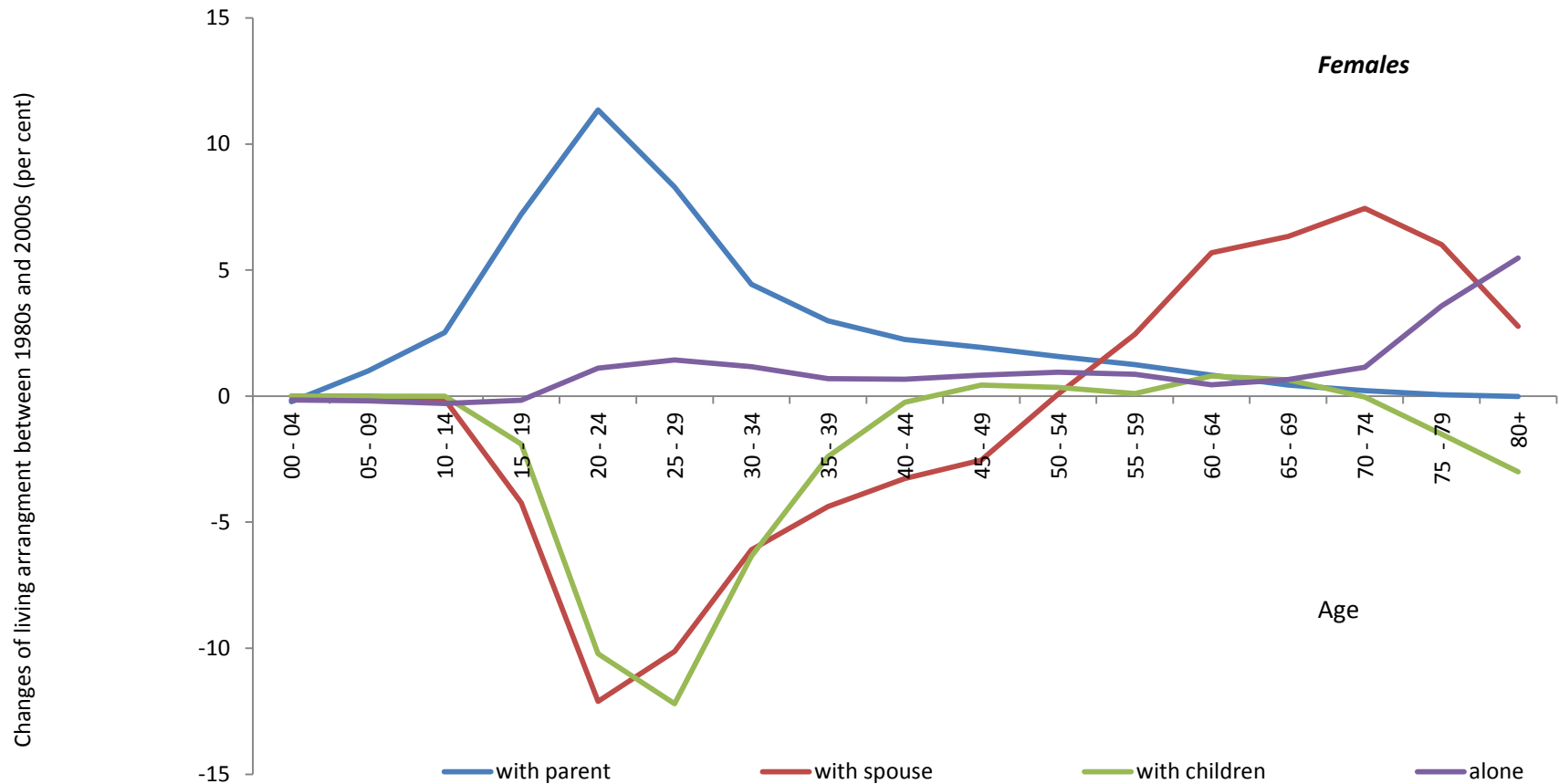


# Individual and household-level intergenerational support

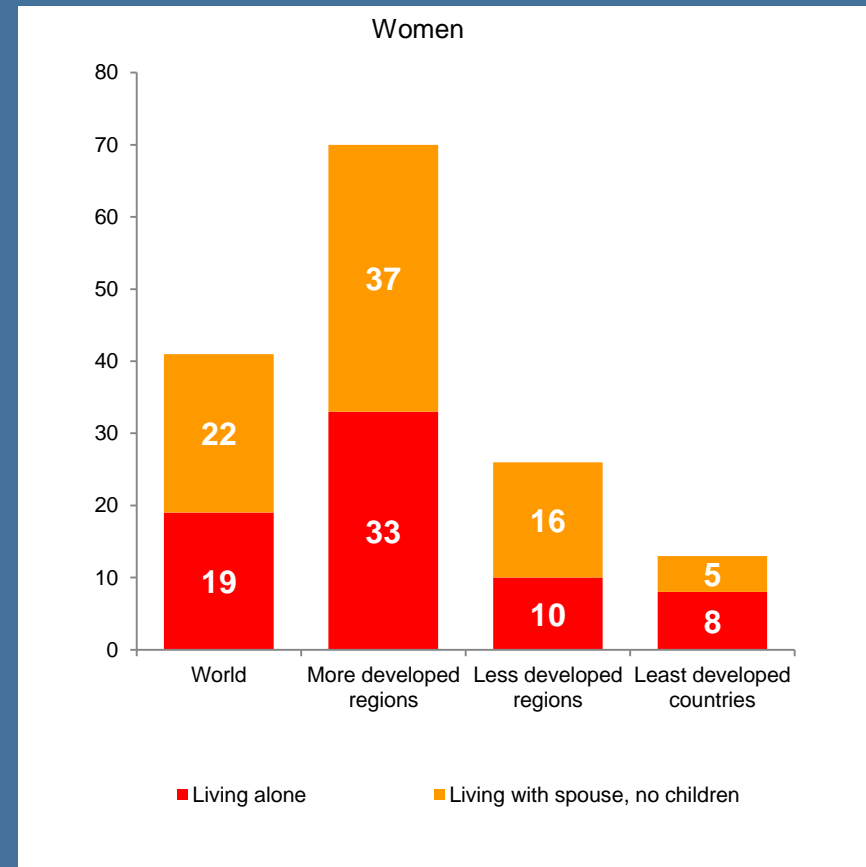
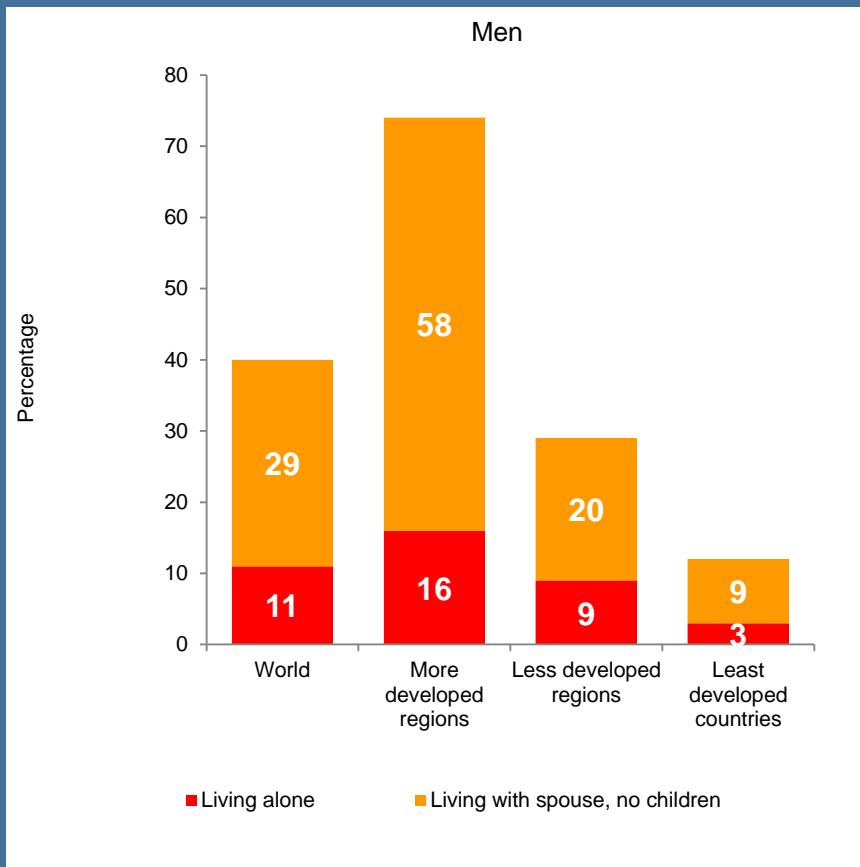
# Changes of living arrangements of males between 1980s and 2000s in 27 countries (per cent)



# Changes of living arrangements of females between 1980s and 2000s in 27 countries (per cent)



# Proportion living independently (alone or with spouse only), persons aged 60 years or over by sex: world and development regions circa 2005





# Gender and balancing work-family obligations

- Over the demographic transition, women have fewer children, later in life, and often increase their labour force participation;
- Generally positive changes, but also a “sandwich generation” affecting mostly women who care for children and elderly parents, while also being more active in the workforce;
- Increasing evidence of the large contribution of women to market and non-market production: In *Senegal*, women contribute 87% of all household production and 58% of total aggregate work. In *Mexico*, household production (mostly by women), is nearly 22% of GDP (Donehower, 2016). In *Brazil*, women’s household work (but not men’s) tends to increase when they marry and when they have children (Wajnman, 2016);
- Policies to support women’s labour force participation, parental leave for both father and mother, as well as affordable child care and long-term care for the elderly, can help to reduce gender inequalities, and ease the fiscal pressures of population ageing

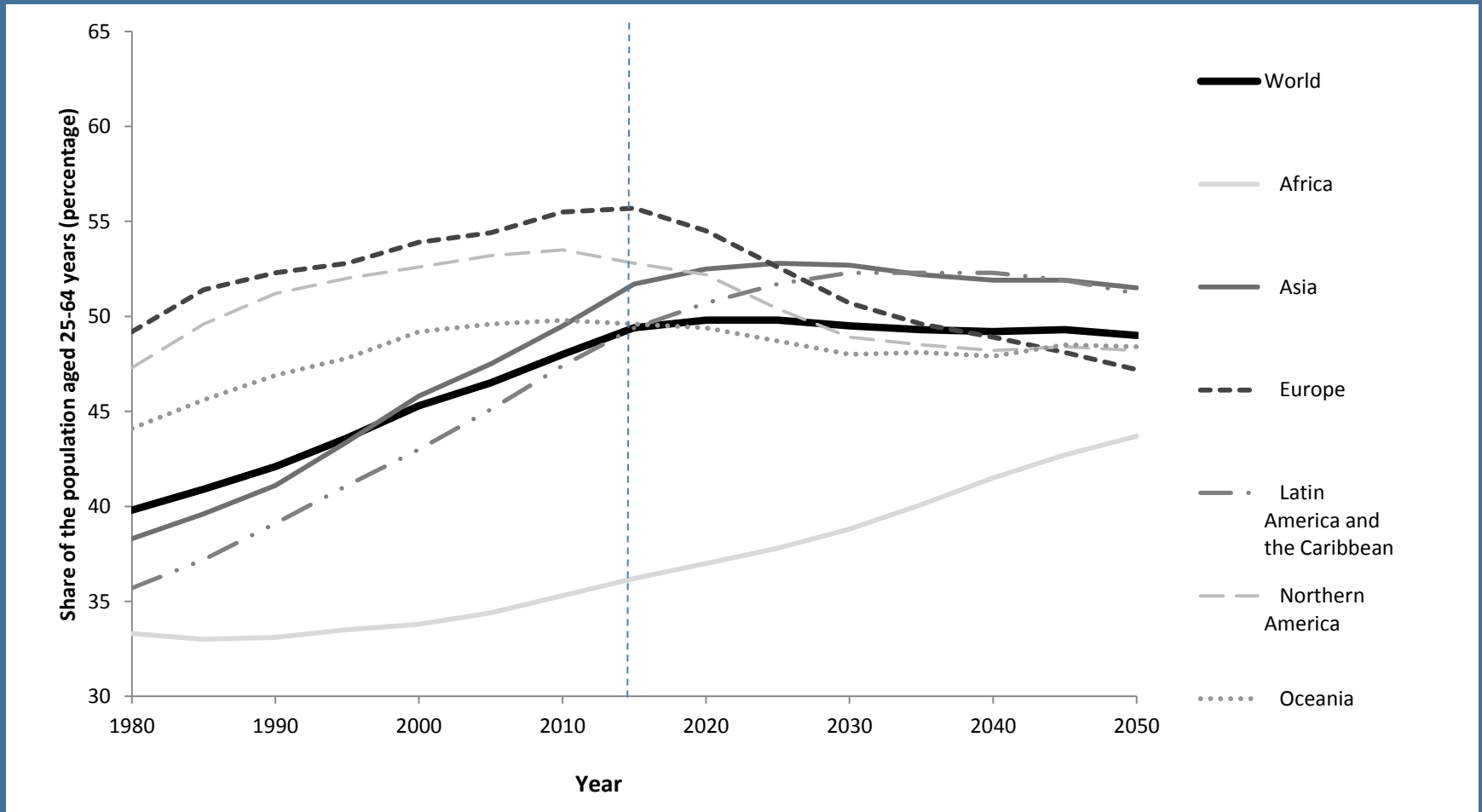
# Macroeconomic implications

# *Era of increasing global labour supply is ending*

*Two main factors:*

1. Falling total labour force participation rates at the world scale, and in some of the major economies of the world, including China, India, Japan and the United States (World Bank, 2017)
2. Stabilization and start of the decline of the share of the working-age population as a share of the world total

# *Era of increasing global labour supply is ending*



# Evidence on the demographic dividends

- Countries in Africa, and some in Asia and Latin American and the Caribbean in the early intermediate stages of the demographic transition, will see increasing economic support ratios (positive “first demographic dividend”) through 2050;
- Countries with declining support ratios include China, Germany, Italy, the Republic of Korea, Spain, Slovenia and Thailand, where support ratios could decline by 0.5 per cent or more per year over 2015-2050;
- A “second demographic dividend” can remain positive long after the first dividend phase has elapsed.

# Evidence on the demographic dividends

- Recent international evidence suggests that:
  - 1) The “window of opportunity” for the demographic dividends opened in earlier Europe, then in Asia, Oceania and the Americas, and later in Africa;
  - 2) The largest (peak) annual increases in economic growth (demographic dividends) estimated in Asia (2.3% per year), owing to the region’s rapid demographic transition and major investments in education. In other regions, the estimated peak dividends range from 1.5% to 1.8% per year;
  - 3) Africa’s demographic transition is delayed and projected to be slower than other developing regions, but it could end up reaping the largest total (long-term) demographic dividend;

# Evidence on the demographic dividends

4) The second demographic dividend estimated much larger and longer lasting than the first, but its realization is less certain, as is conditional on access to SRH care services, investment in human and physical capital, and productive employment available during the dividend period. This would be consistent with the successful implementation of the 2030 Agenda for Sustainable Development in developing countries, but it is not a foregone result

# Conclusions and recommendations

- Demographic transition virtually universal, but its timing, speed and its implications for sustainable development vary greatly across countries and regions
- Globally, slower growth in the number of children and youth, turned negative in more countries and regions, presents a historic opportunity to invest in human capital (health and education) and productive employment. **Governments should actively pursue these opportunities for their intrinsic value in fulfilling basic rights, and as an investment in future economic growth and in the well-being of present and future generations**



# Conclusions and recommendations

- Countries with high fertility and youthful populations to prioritize **support for universal access to sexual and reproductive health care services**, in accordance with the Programme of Action of the ICPD and the goals and targets of the 2030 Agenda for Sustainable Development;
- Governments to pro-actively pursue **reforms of social security systems, including increases in the age of retirement** in proportion to life expectancy, among other measures to ensure income security in old-age and fiscal sustainability, with due attention to gender equity;
- Ensure social protection floor through **universal pensions**;
- Gender imbalances in family and work obligations call for **policies to support affordable child-care programmes, paternal and maternal leave, part-time and flexible employment opportunities for both men and women, and long-term care programmes**
- Policies to promote accumulation of personal assets and physical capital through the older ages can enhance the demographic dividend

*Thank you*