

# Demographic Challenges

Tomas Sobotka

Vienna Institute of Demography (Austrian Academy of Sciences), Wittgenstein Centre for Demography and Global Human Capital



Wittgenstein Centre

FOR DEMOGRAPHY AND  
GLOBAL HUMAN CAPITAL



# Background

Demographic Changes in Portugal and in Europe

High attention of media; especially migration and births/population decline as well as family changes

Scope for policy interventions

Both challenges and opportunities (e.g., ageing & longevity, migration); recognised by the European Commission especially since the early 2000s

# Agenda



Review of past trends and the likely future developments

Key challenges, especially those relevant for government policies

Portugal within Southern European, EU & OECD context

Going beyond demographic trends: intersection of emerging  
demographic and societal challenges

# Agenda

Review of past trends and the likely future developments

Key challenges, especially those relevant for government policies

Portugal within Southern European, EU & OECD context

Going beyond demographic trends: intersection of emerging  
demographic and societal challenges

## 1 Demographic trends and challenges

- Fertility / birth rates, Migration, Mortality, health, Population ageing, Future population prospects

## 2 A broader view on selected population & societal challenges

- Regional disparities in population change, Employment and working life, Gender (in)equality, Intergenerational inequalities

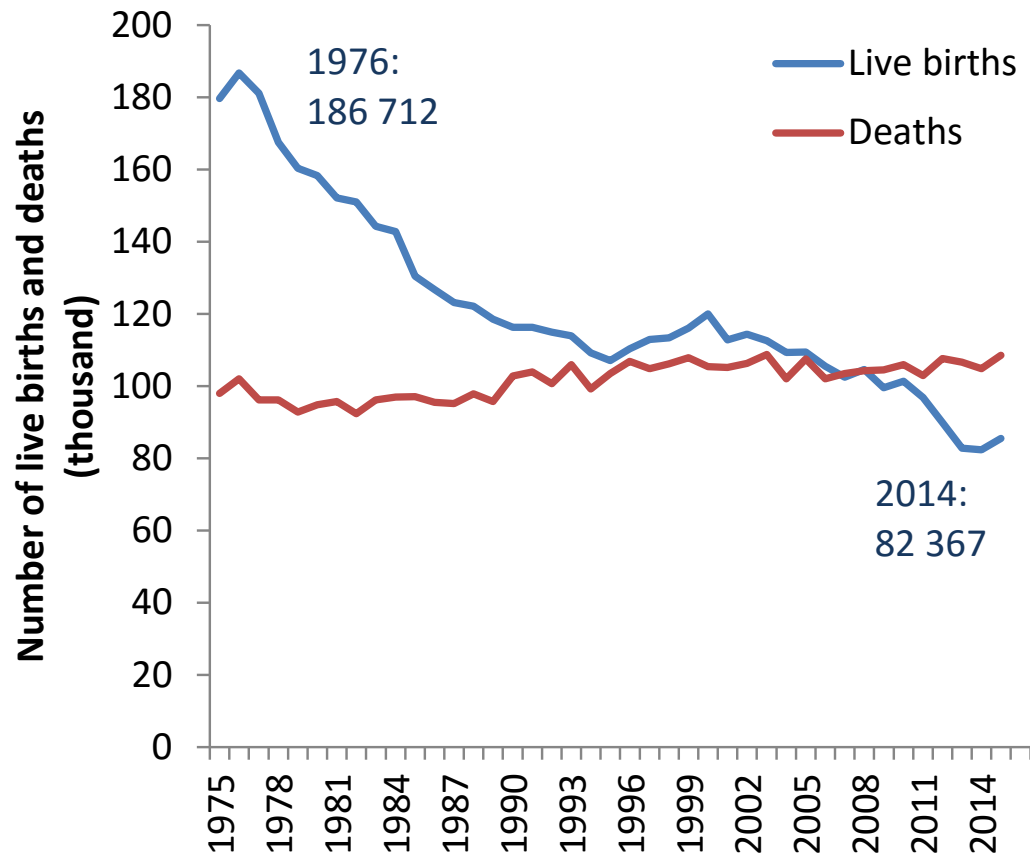
---

# Demographic Trends and Challenges

---

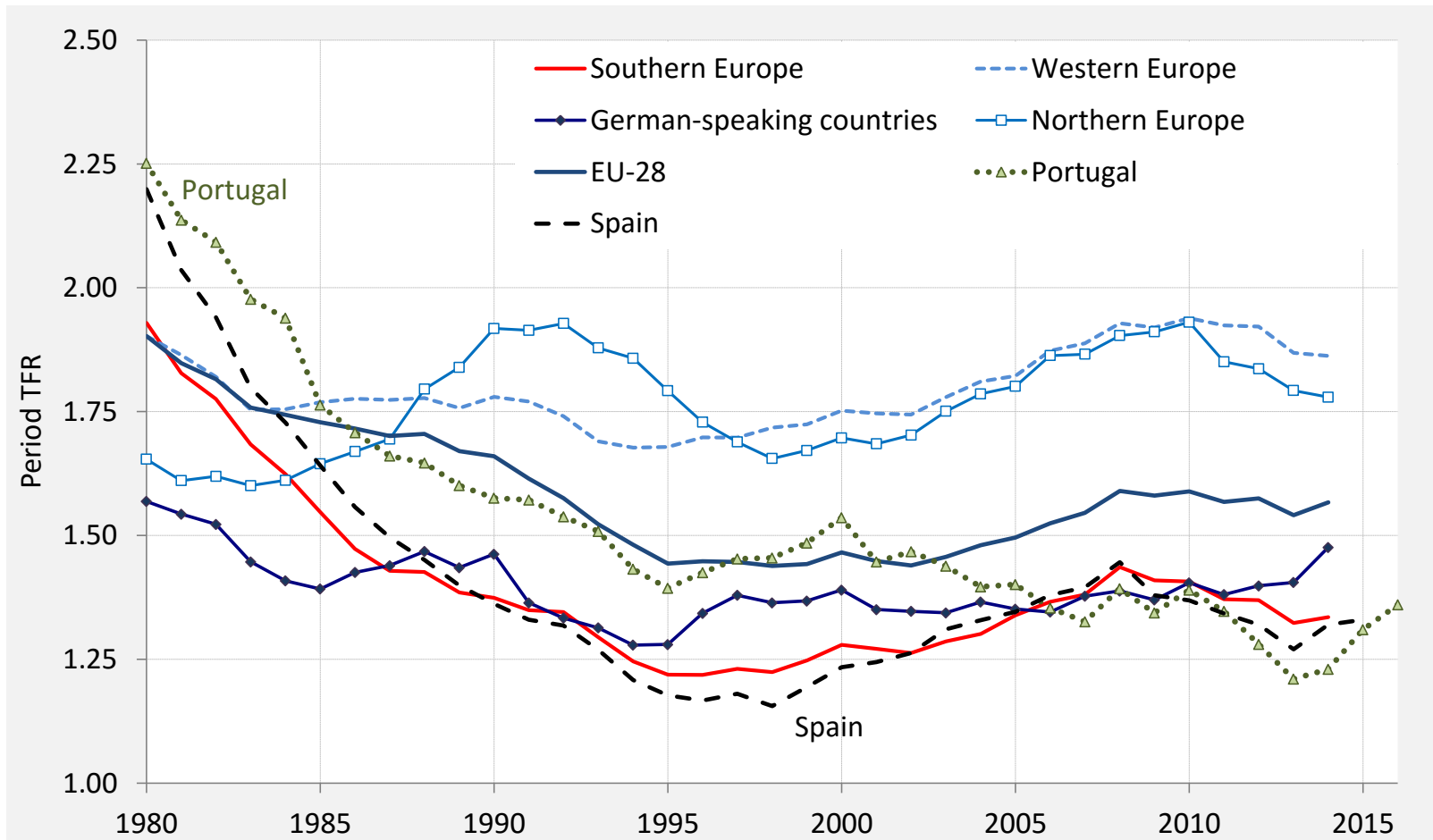
# Birth rates, Fertility

A cross-over in the number of births & deaths after 2008



# Birth rates, Fertility

... mainly a consequence of rapidly falling fertility rates



# Birth rates, Fertility

## Other key trends

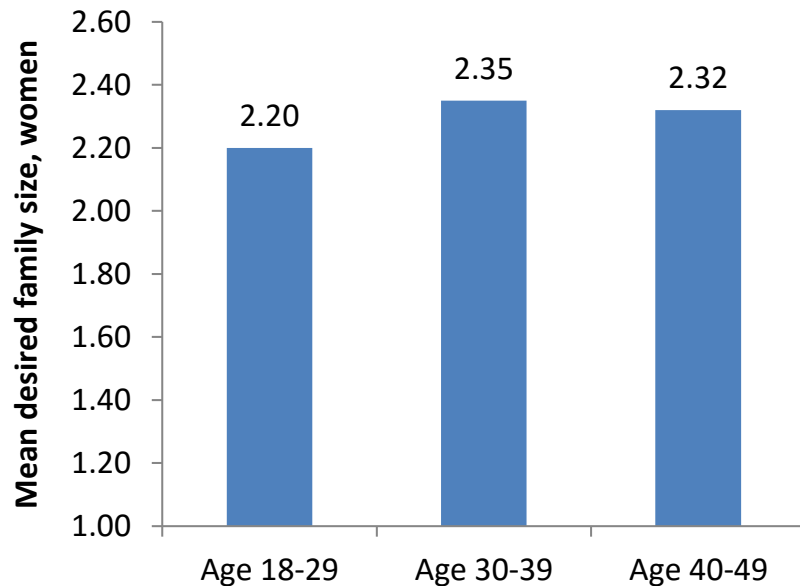
- Fertility pro-cyclical, correlated with business cycle & unemployment: sharp downturn during the recent recession
- Shifting motherhood to later ages: mean age of mothers at first birth up from 23.9 in 1983 to 29.2 in 2014
- Rising contribution of migrant women until about 2010 (19% of births)
- Rising & high share of women with only one child
- Gaps between fertility plans (ideals) and intended family size, especially among highly educated women
- High childlessness highly educated women (ca 20% among those born in the early 1970s)



# Birth rates, Fertility

## Desired vs Realised family size

Mean desired family size, 2013

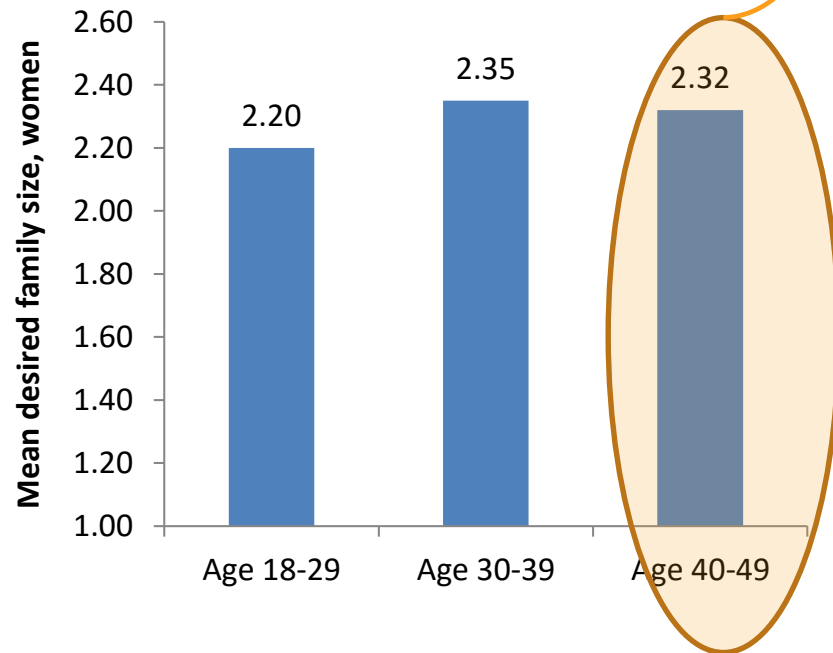


Data based on Fertility Survey 2013 (*Inquérito à Fecundidade 2013*; INE 2014).  
Computation of the mean actual family size: courtesy of Isabel Tiago de Oliveira.

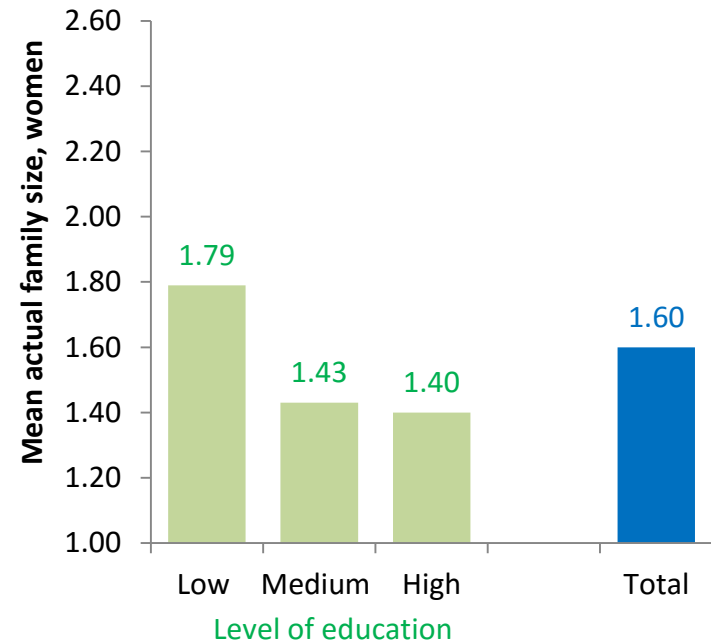
# Birth rates, Fertility

## Desired vs Realised family size

Mean desired family size, 2013



Mean actual family size (children per woman aged 40-44, born early 1970s)



Data based on Fertility Survey 2013 (*Inquérito à Fecundidade 2013*; INE 2014).

Computation of the mean actual family size: courtesy of Isabel Tiago de Oliveira.

# Birth rates, Fertility

## Key challenges

- Very low birth rates, trend strengthened during the recent recession
- Huge gaps between reproductive plans and actual fertility
- High share of women with one child as a response to difficulties of reconciling work and family life
- Risk of rising infertility due to delayed motherhood (especially highly educated)

# Birth rates, Fertility

## Key challenges

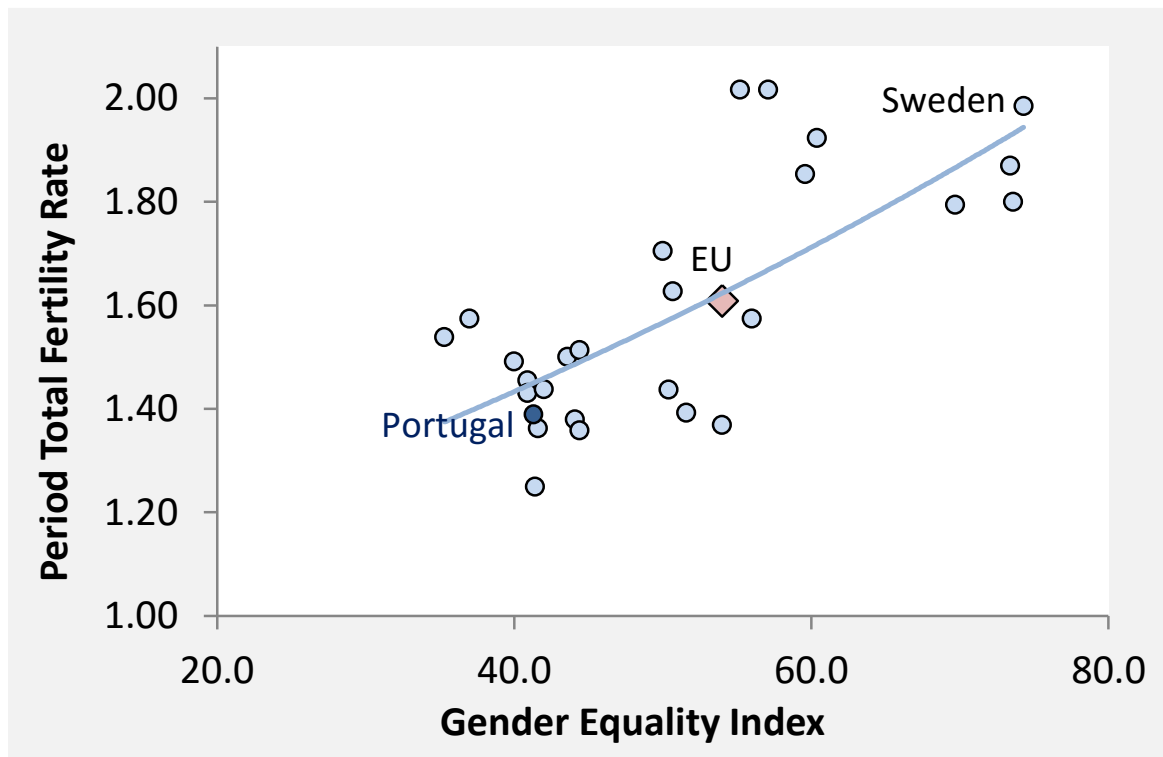
- Very low birth rates, trend strengthened during the recent recession
- Huge gaps between reproductive plans and actual fertility
- High share of women with one child as a response to difficulties of reconciling work and family life
- Risk of rising infertility due to delayed motherhood (especially highly educated)

## Selected underlying factors

- Economic uncertainty, unstable jobs (especially among young adults)
- Low public spending on families: in 2011 1.4% GDP (OECD average 2.6%), especially on public childcare (0.45% vs. 0.95%)
- Lower satisfaction with childcare provision and quality; high prevalence of informal childcare
- Low income & high incidence of child poverty
- Limited access to affordable housing, most young people living with parents
- Prevailing unequal division of household work and childcare

# Gender inequality and fertility link

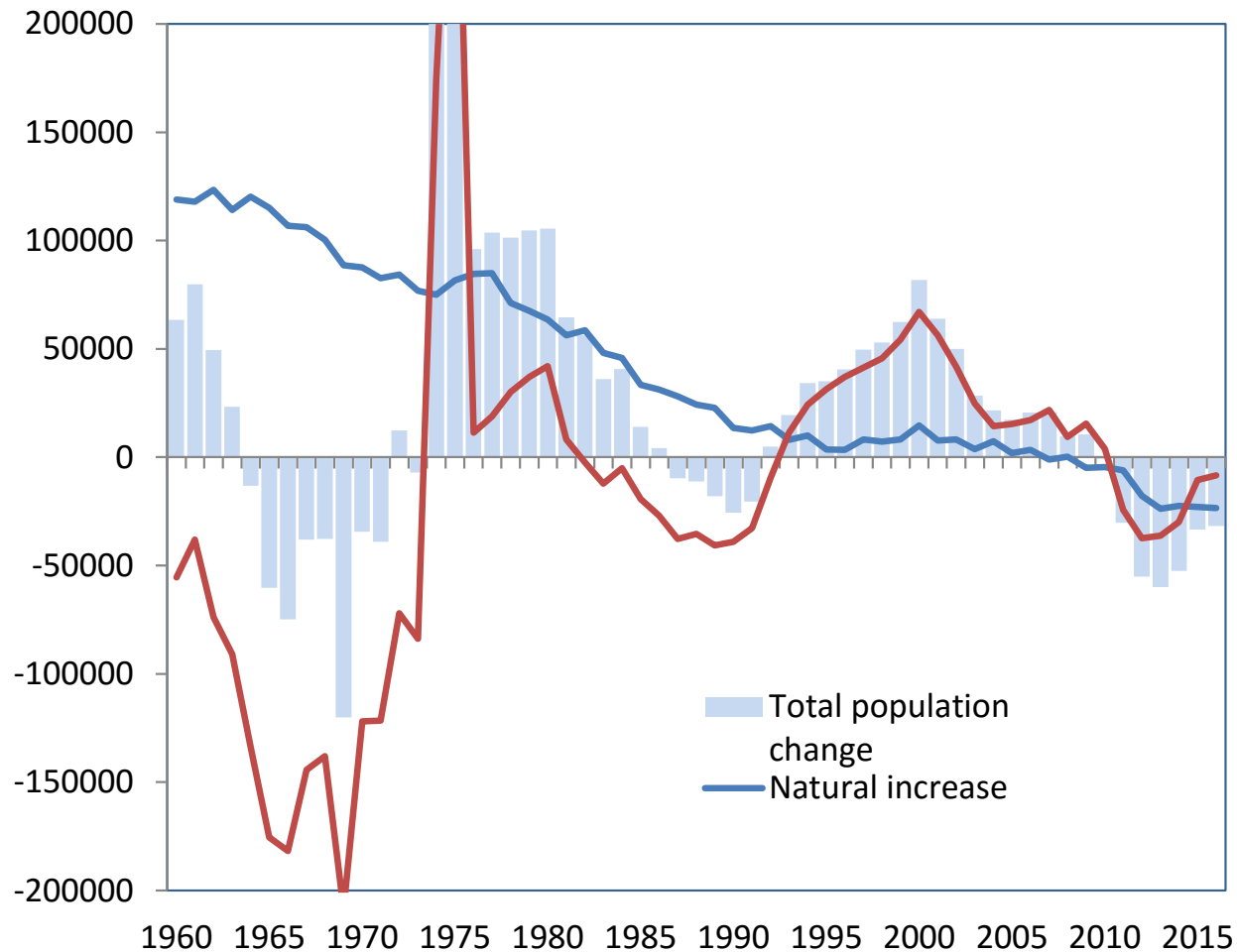
A positive correlation between gender equality and fertility



Source: Sobotka, T. 2016. "Understanding low fertility: Portugal in a European context", in: Vanessa Cunha et al. (eds.) *A(s) Problemática(s) da Natalidade em Portugal: Uma Questão Social, Económica e Política* Lisbon: ICS, pp. 49-71.

# Migration

Ups and downs in net migration and population growth in Portugal since 1960



# Migration

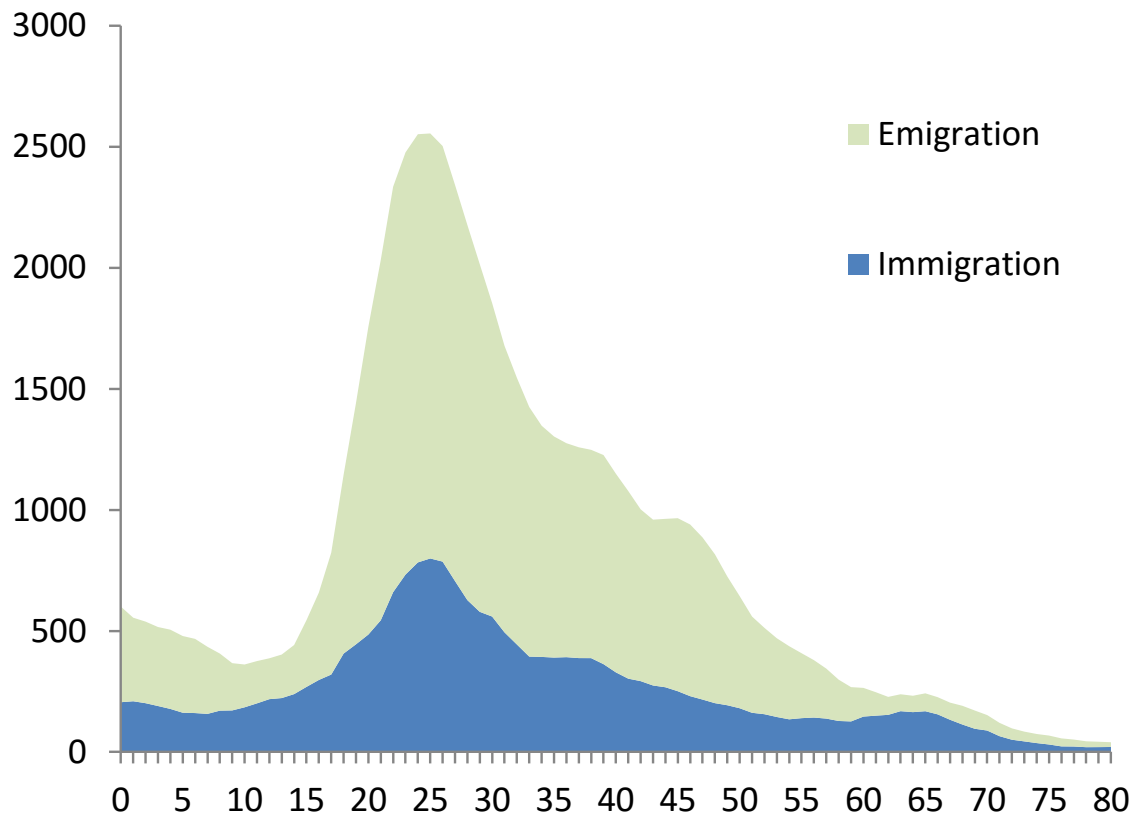
## Key trends

- Most unstable component of population change; most difficult to predict
- Affected by the events in receiving as well as sending countries
- Difficult to record; incomplete data in many countries
- Substantial illegal/undocumented migration
- Pro-cyclical; outmigration during the recent recession (also Spain, Greece)
- Mostly positive migration balance in Portugal after 1990; turnarounds also in other countries of Southern Europe
- Key component of population trends in EU countries since the 1990s
- Young age profile: migrants contributing to filling the gaps in labour market, but also to the “population renewal” (births) via higher fertility & younger age structure
- Diversity of migration streams
- East-West contrast in migration balance in Europe; sharp losses in the East

# Migration

Age profile: Immigration and emigration peaking around age 25

*Average number of immigrants and emigrants per year, 2010-15*

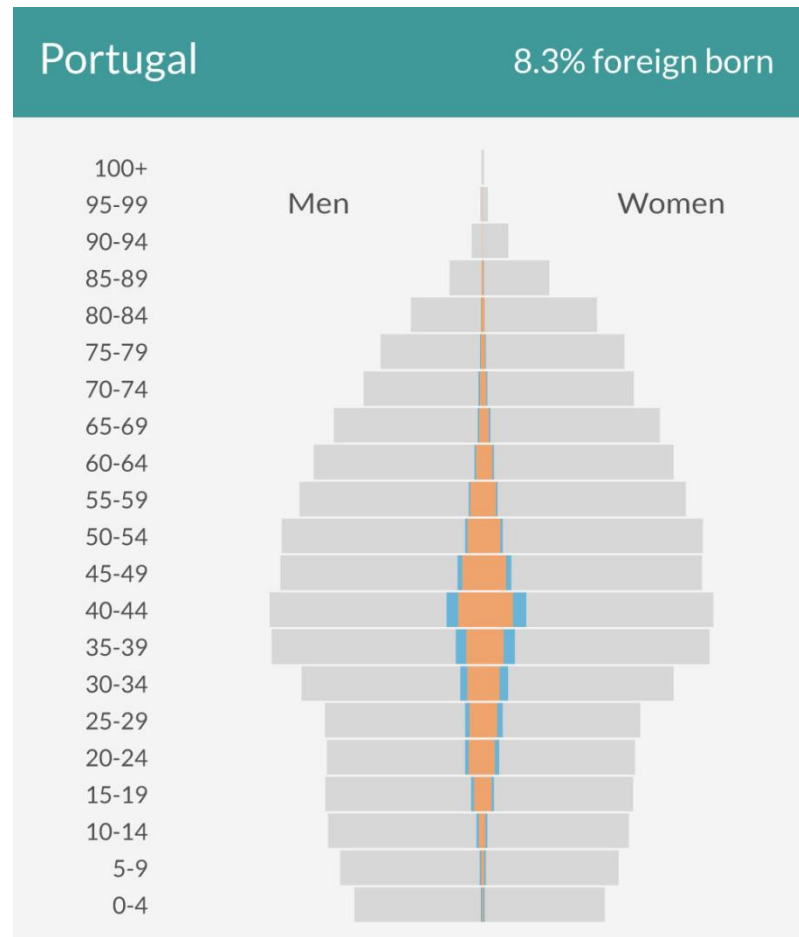


Data source:  
Eurostat 2017



# Migration

Age profile 2015: Foreign-born population most numerous in middle ages



Data source:  
*European Demographic  
Data Sheet 2016*  
(online pyramids at  
[http://populationeurope  
.org/pyramids](http://populationeurope.org/pyramids))

# Migration

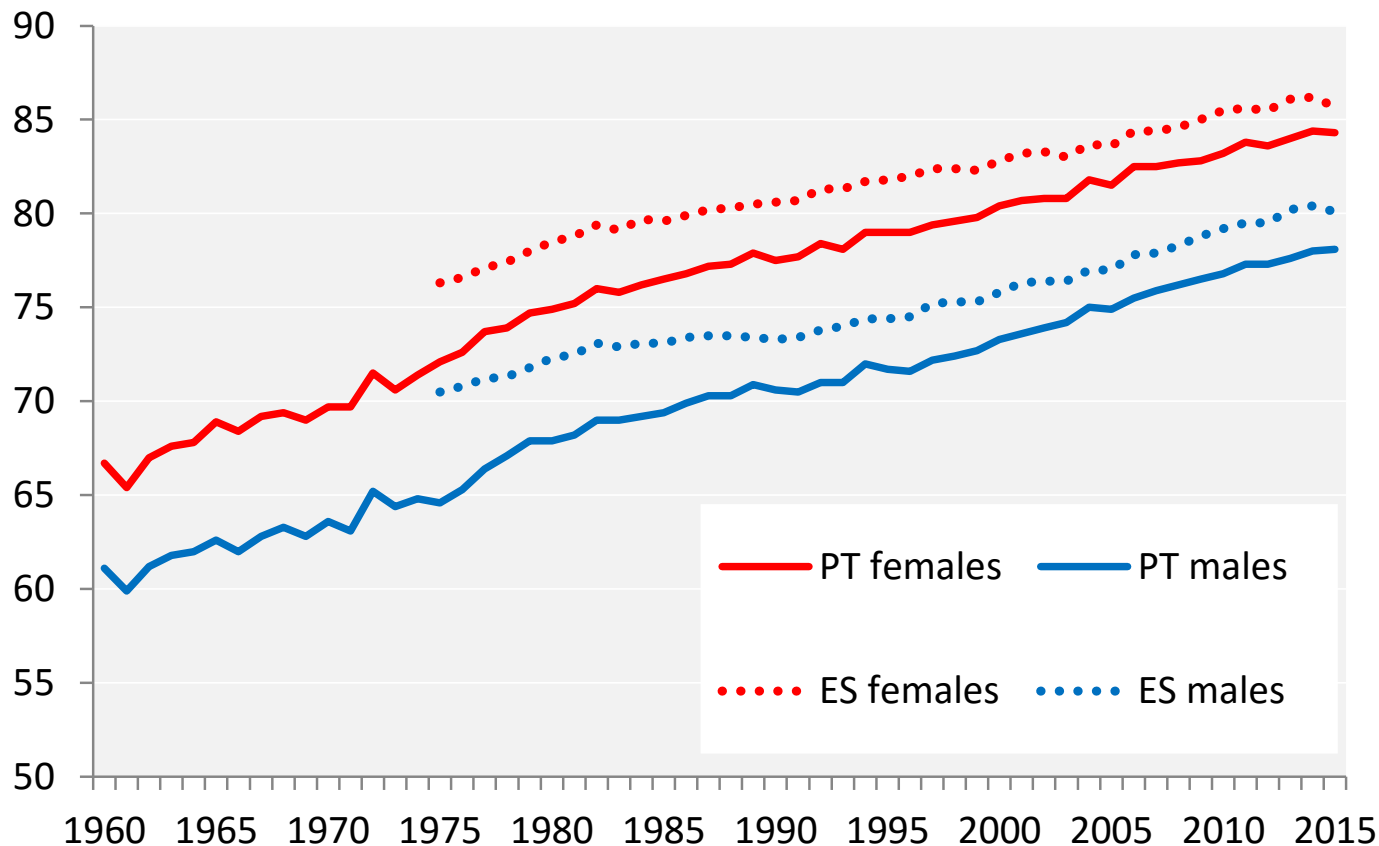


## Key challenges

- Instability, often driven by the events in the countries of origin (including political instability, economic crises, wars, famine, disasters)
- Huge potential for immigration to Europe (Gallup poll 2017: Desire to leave strongest in Sub-Saharan Africa (31%) and Central-eastern Europe (27%))
- Difficulty to enact effective migration policies and to enforce them
- Need for Europe-wide solutions
- Diversity of countries of origin: linguistic & historical links (Angola, Brazil...)
- Dealing with undocumented/illegal migrants
- Tapping the skills of migrants, supporting their education, work integration and good assimilation into the society; dealing with migrants' "overqualification"
- Prioritising migrants by education & language skills and other characteristics?
- Local resentment to migration explored in political campaigns, elections
- Dealing with the "brain drain"

# Health, mortality, ageing

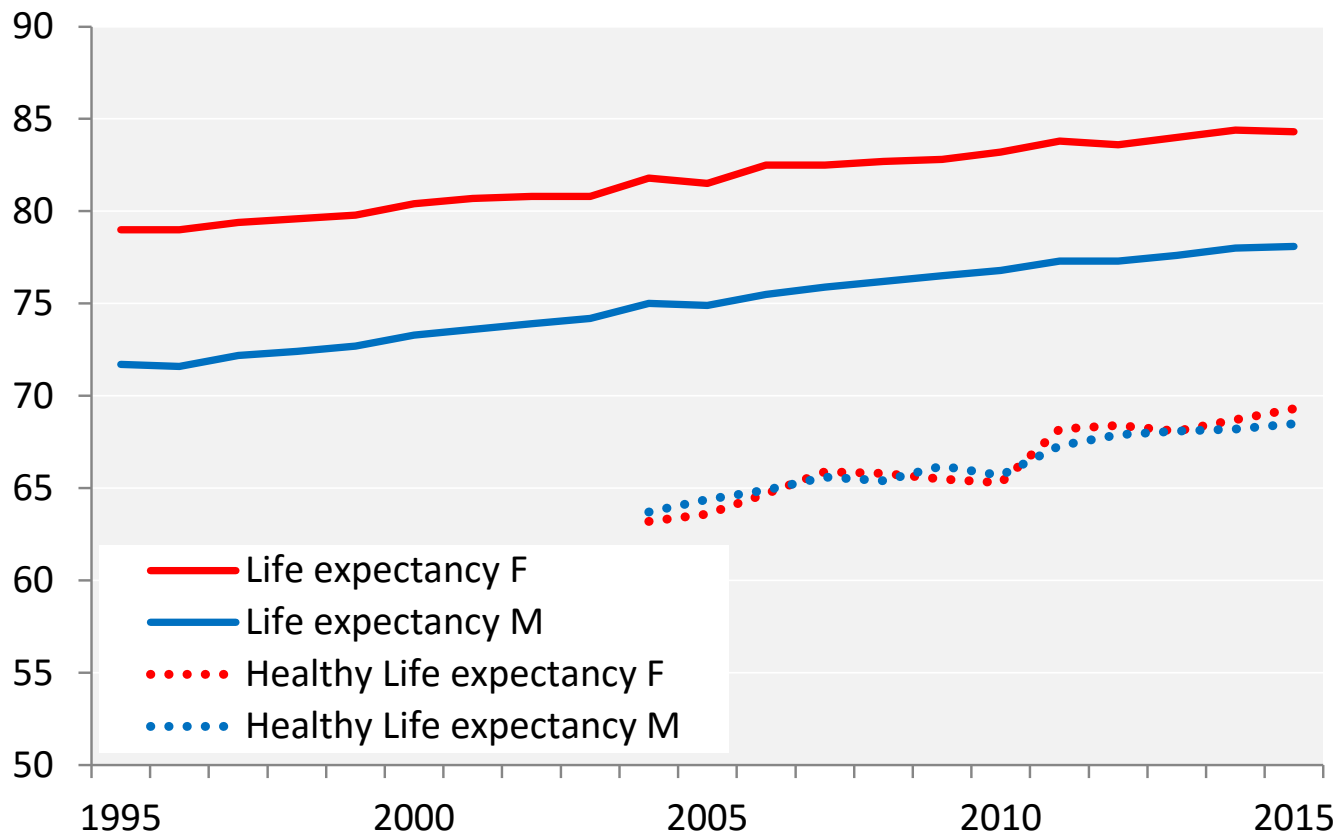
The long-lasting expansion of longevity: Life expectancy in Portugal and Spain



Source:  
Eurostat  
Database 2017

# Health, mortality, ageing

More years spent in good health: Estimated Healthy life expectancy based on self-perceived health



Source:  
Eurostat  
Database 2017

# Health, mortality, ageing

## Key trends

- Continuing rise in life expectancy; “catching up” with Spain
- Also longer life in good health (different measures)
- A gradual narrowing of the LE gap between M and F after 1996
- Sharp increases in the number of very old people (80+) and centenarians

# Health, mortality, ageing

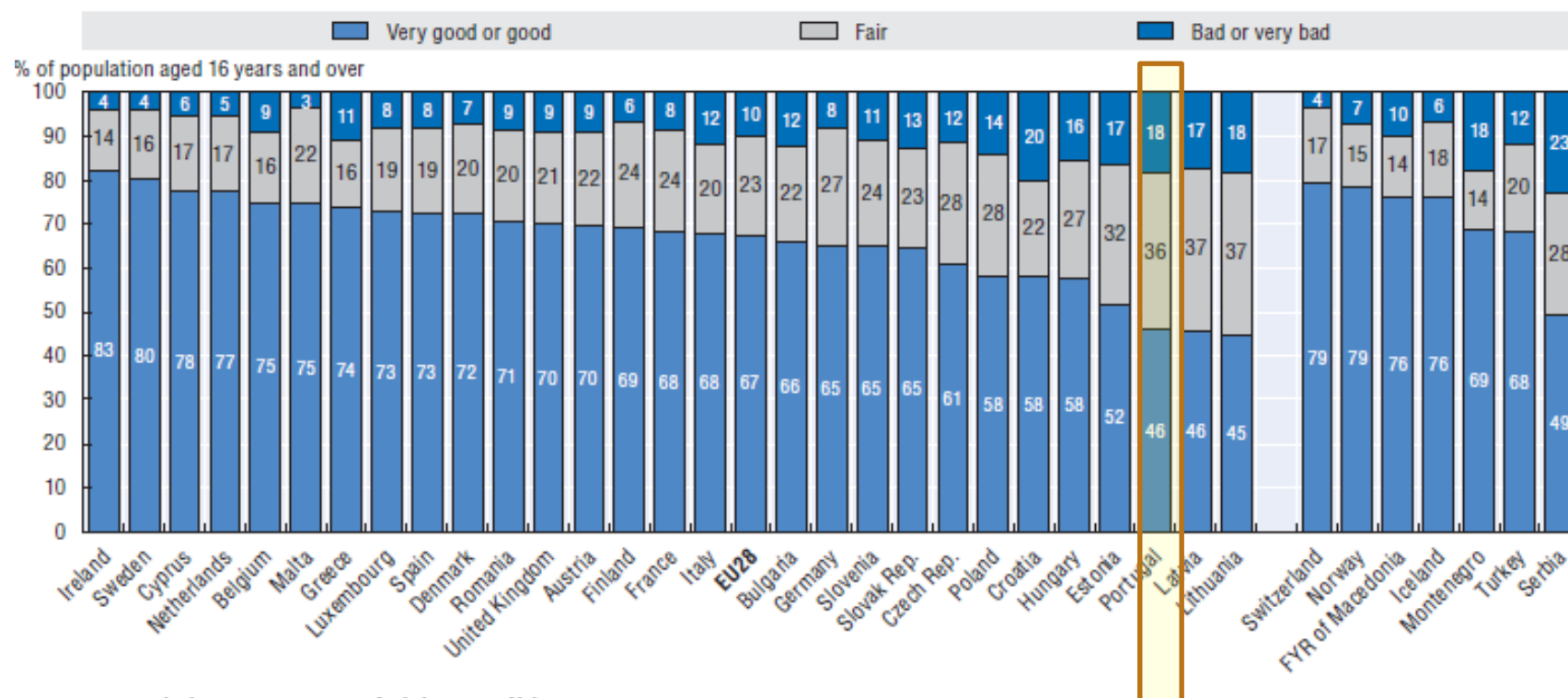
## Key challenges

- Rather poor self-reported health in EU comparison
- High prevalence of diabetes (self-reported), especially among low-educated population
- High prevalence of dementia
- Rising obesity
- Low levels of physical activity among adults, especially women
- Keeping equitable access to high-quality healthcare


# Health, mortality, ageing

## Self-reported health, adult population

3.22. Self-reported health status, 2014



Source: EU Statistics on Income and Living Conditions survey.

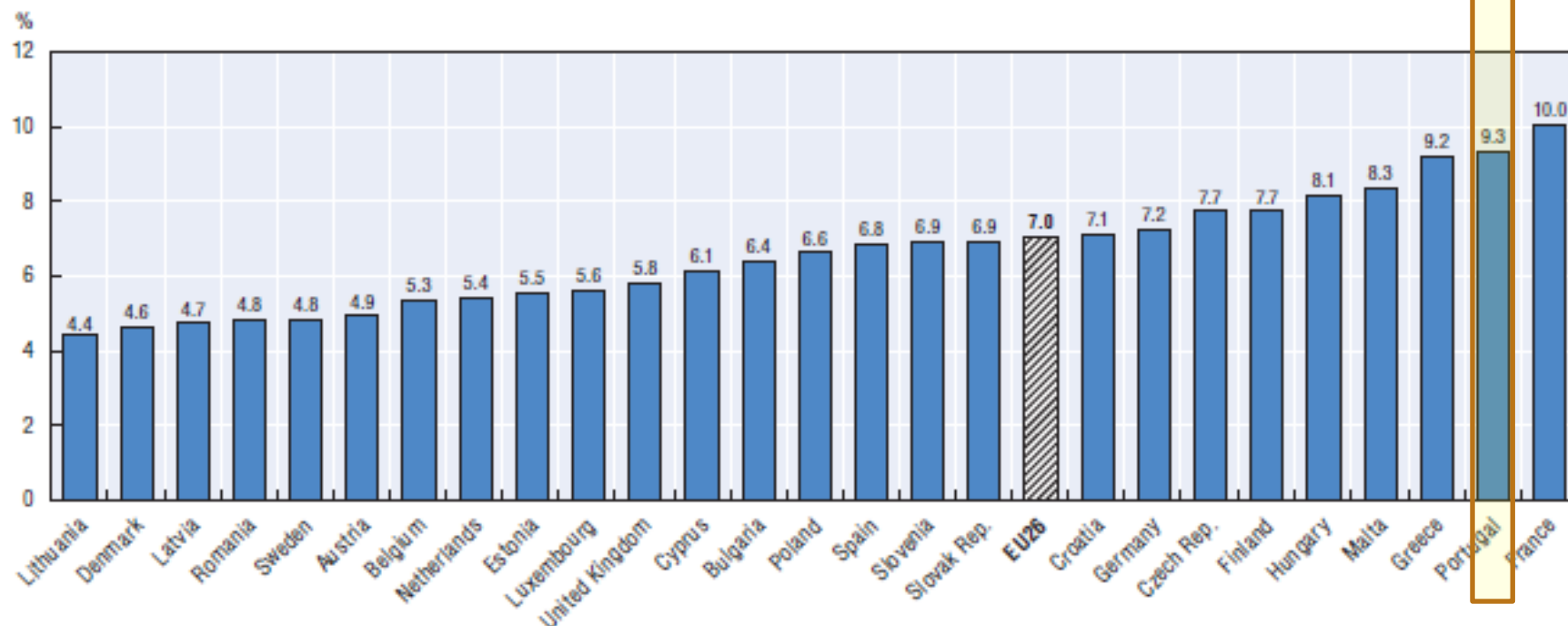
StatLink  <http://dx.doi.org/10.1787/888933428725>

Source: *Health at a Glance, Europe 2016* (OECD 2016)


# Health, mortality, ageing

## Self-reported diabetes

3.34. Self-reported diabetes, population aged 15 years and over, 2014 (or nearest year)



Source: Eurostat Database, based on Health Interview Surveys.

StatLink  <http://dx.doi.org/10.1787/888933428845>

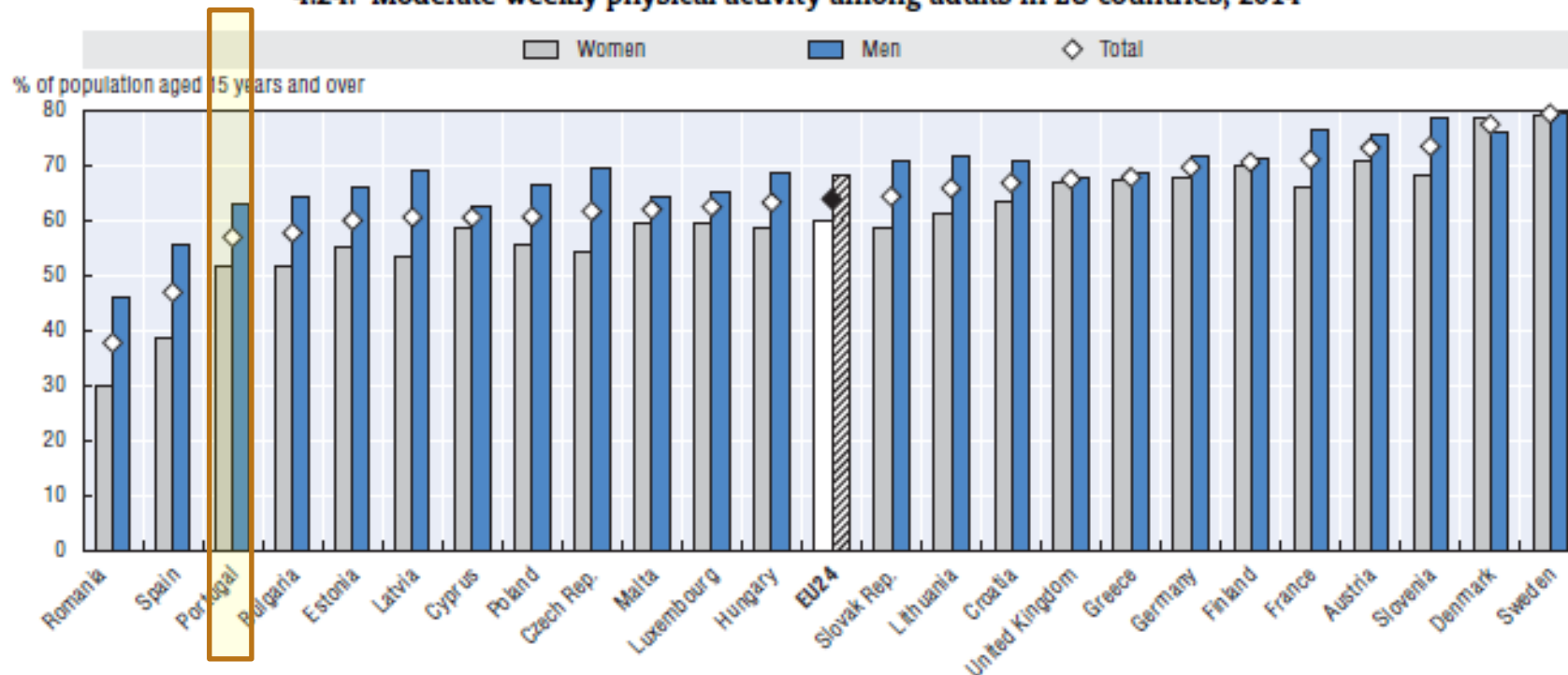
Source: *Health at a Glance, Europe 2016* (OECD 2016)




# Health, mortality, ageing

## Moderate physical activity, population aged 15+

4.24. Moderate weekly physical activity among adults in EU countries, 2014



Source: Eurostat, EHIS 2014.

StatLink  <http://dx.doi.org/10.1787/888933429157>

Source: *Health at a Glance, Europe 2016* (OECD 2016)

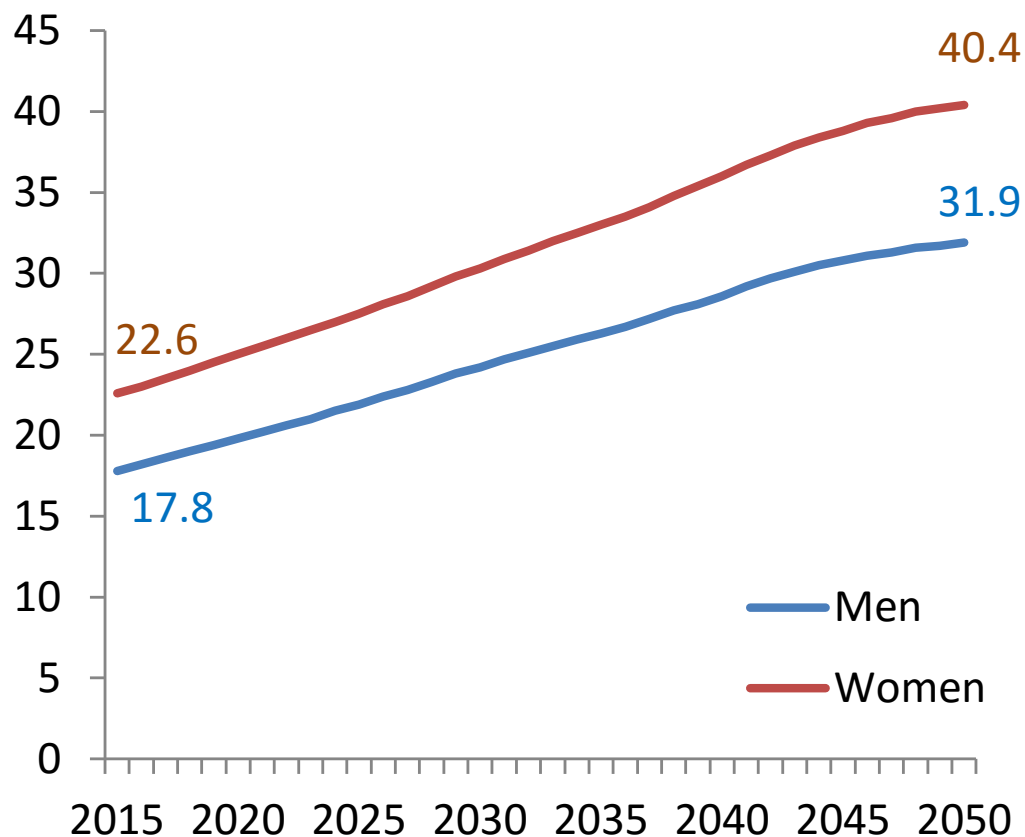
# Projected population trends

## Key issues & challenges

- Overall population size will decline without immigration (from 10.3 mill. in 2016 to 9.1 mill. in 2050 according to the *Wittgenstein Centre* (2016))
- Life expectancy likely to surpass 90 for women and 85 for men by 2050
- Number of births likely to fall further in medium-term (echo of the past fertility declines, especially in the 1980s)
- Uncertain migration trends: migration might be considerably higher than projected
- Conventional indicators of population ageing will increase sharply irrespective of fertility & migration trends, driven by longevity
- A need for continuous adjustments in retirement patterns & labour force participation

# Projected population trends

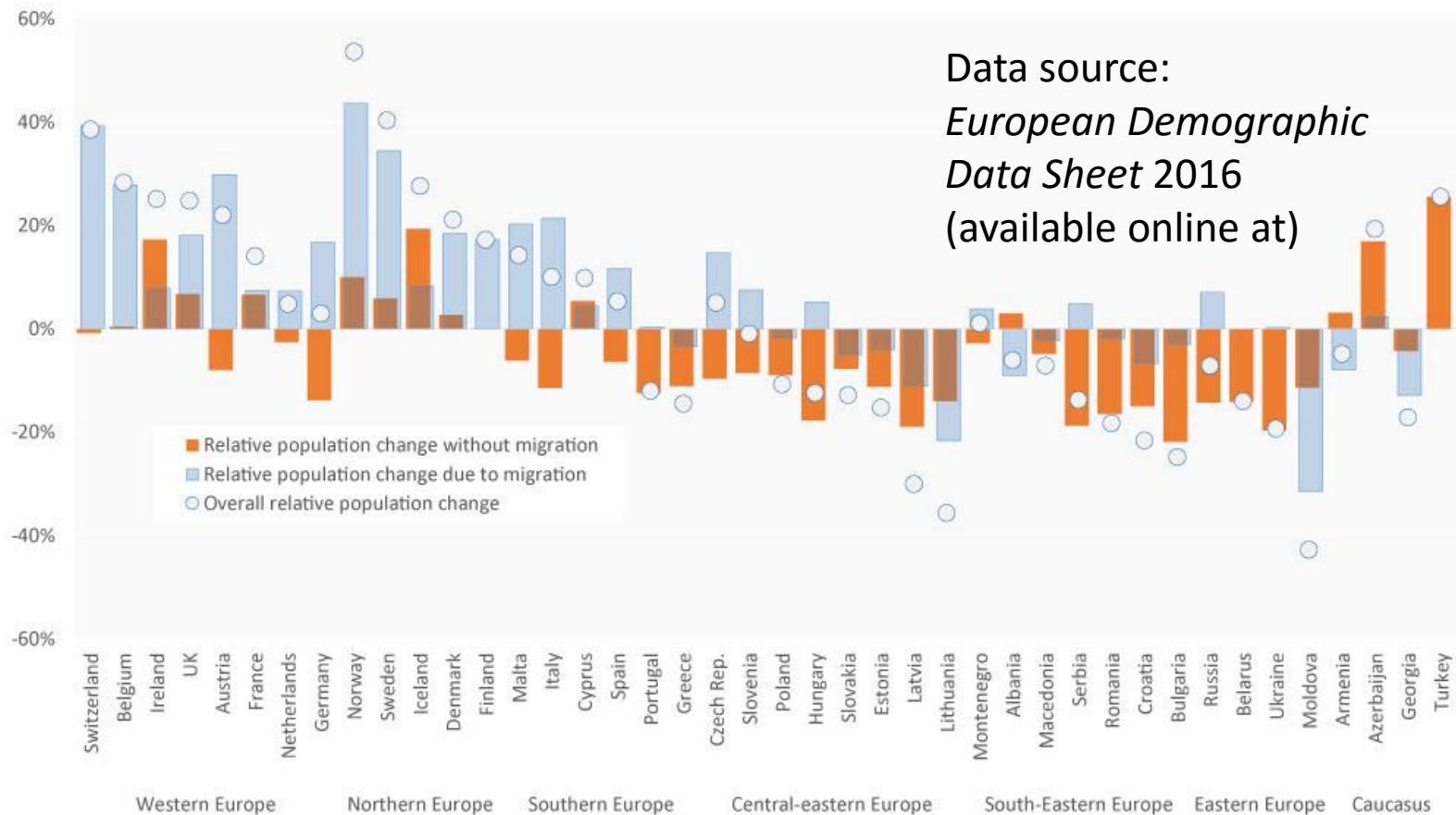
## Projected share of population aged 65+, 2015-50



Source: *European Demographic Data Sheet 2016* (Wittgenstein Centre 2016)

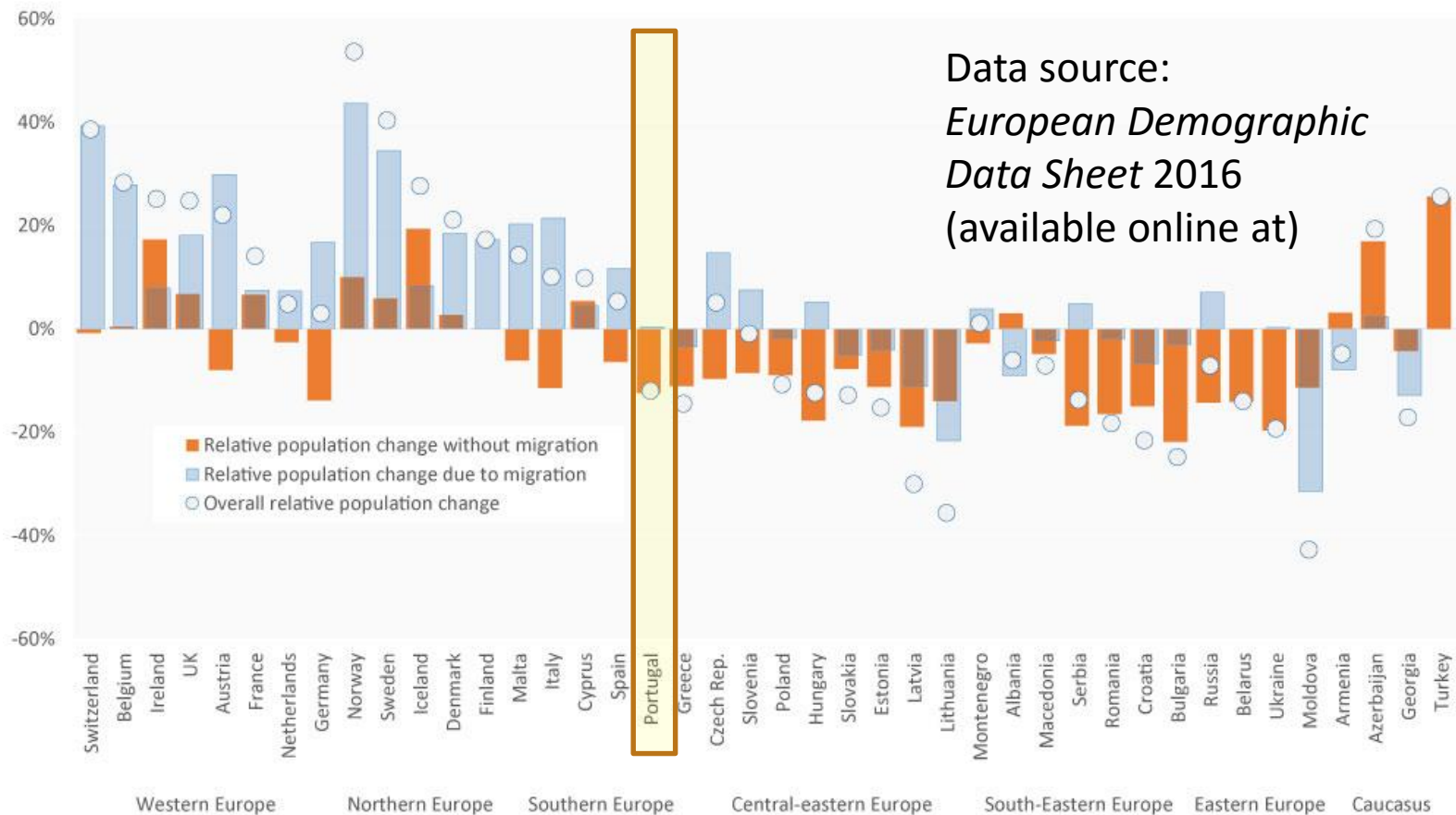
# Migration

Expected continuation of East-West contrasts in migration balance, 2015-2050



# Migration

Expected continuation of East-West contrasts in migration balance, 2015-2050



---

# A broader view on selected population & societal challenges

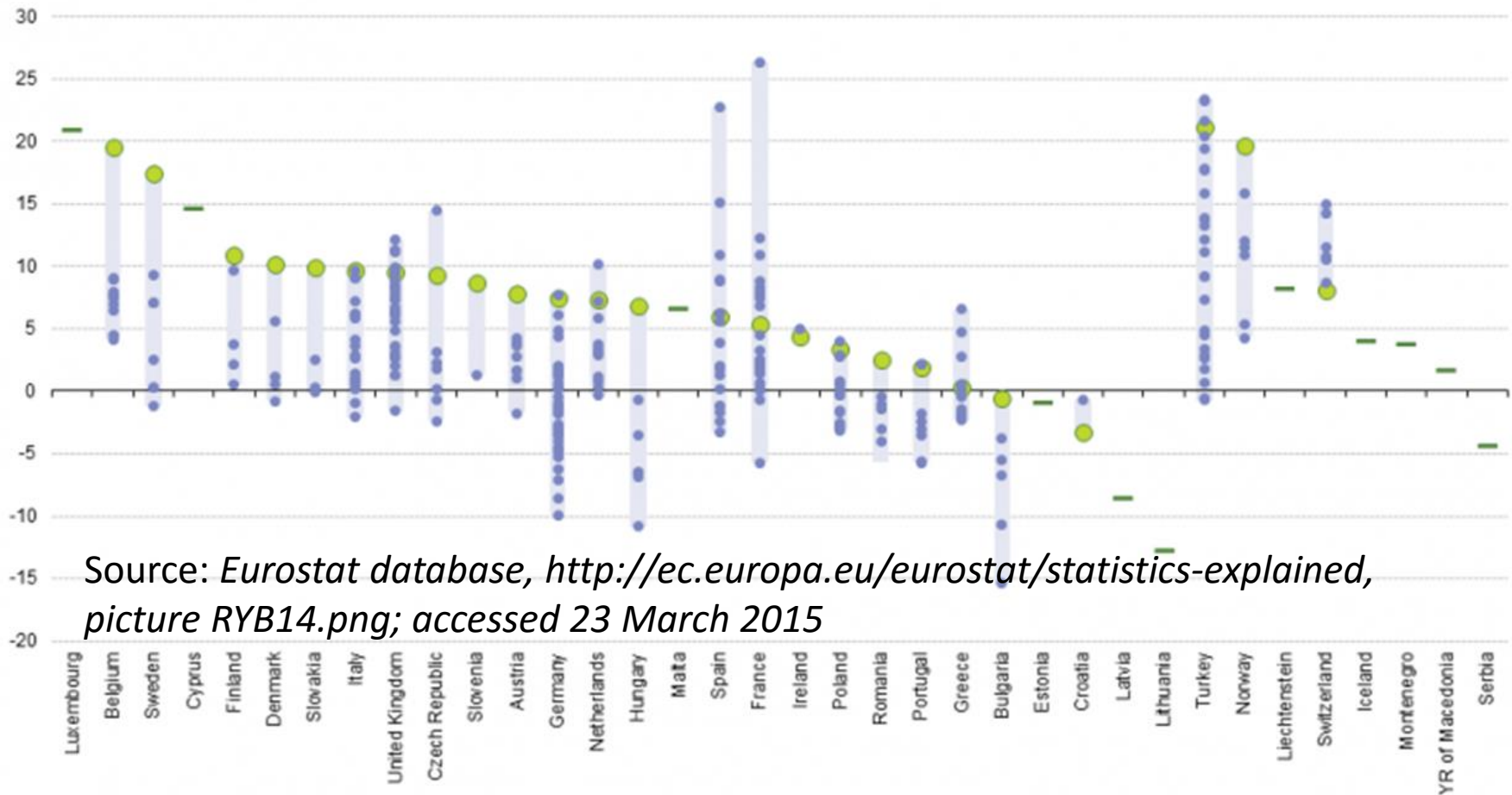
---

# Why looking at these broader trends?

- It is not so much changes in the number and age structure of the population, but rather their health, education & skills that matter
- They will determine the future societal trends, prosperity and sustainable development in Portugal and Europe
- New challenges of technological innovation and rapid employment changes
- Societies have a strong adaptive capacity: education systems, changes in labour force participation and retirement (including women, elderly, young adults, migrants), health interventions
- Tapping into the potential of healthy elderly and migrants
- Need to address multiple inequalities in education, income and gender division of work; also inter-generational inequalities in public spending

# Regional disparities in population trends: the appeal of the capital cities

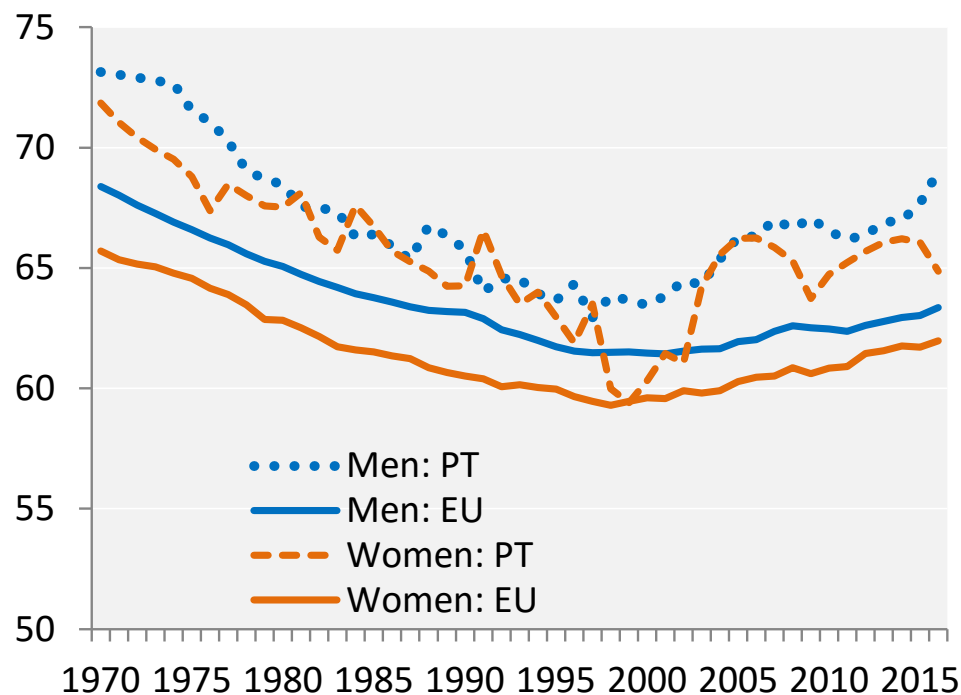
Average rate of population change (per thousand), NUTS-2 regions in Europe, 2008-12





# Changing retirement ages

Average effective retirement age, Portugal compared with EU average (1970-2016)



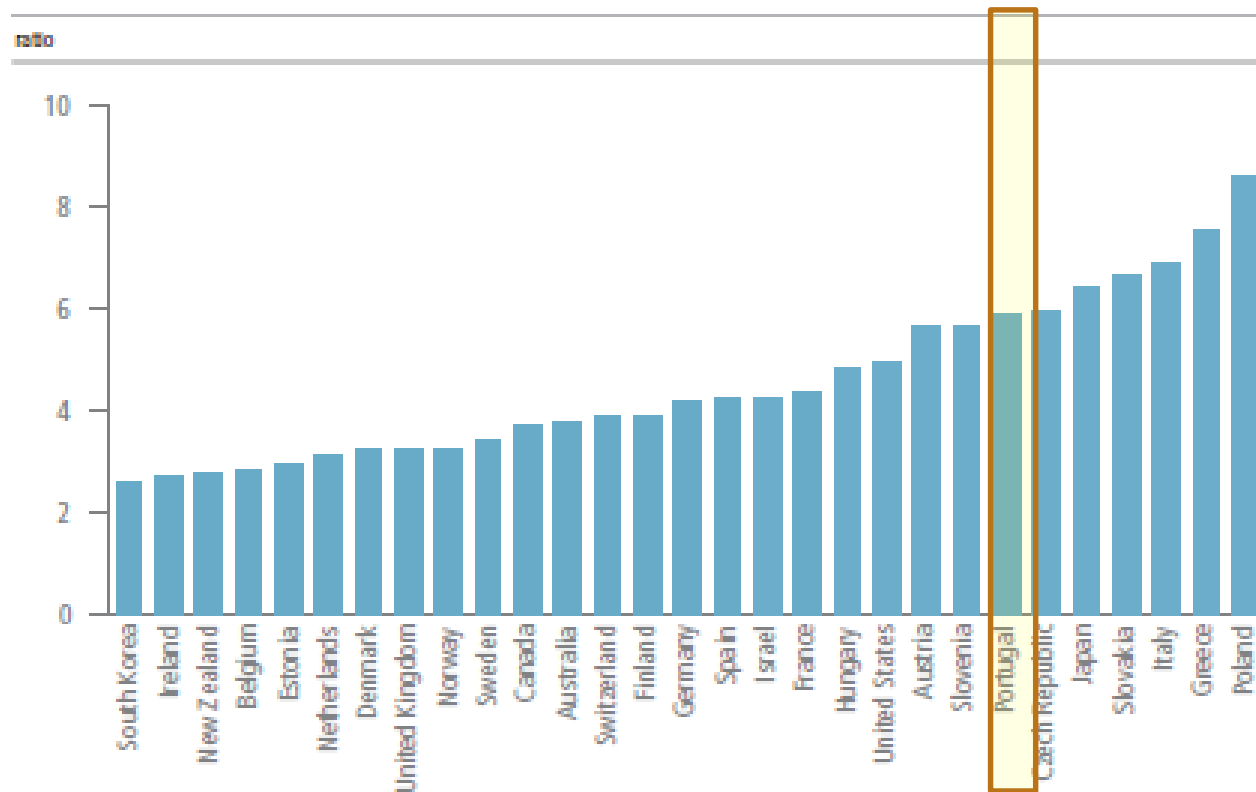
Source: *OECD database*;

<http://www.oecd.org/employment/emp/ageingandemploymentpolicies-statisticsonaverageeffectiveageofretirement.htm> (accessed 28 November 2017)

# The elderly bias in public spending

## The elderly bias indicator of social spending, 2007-2008

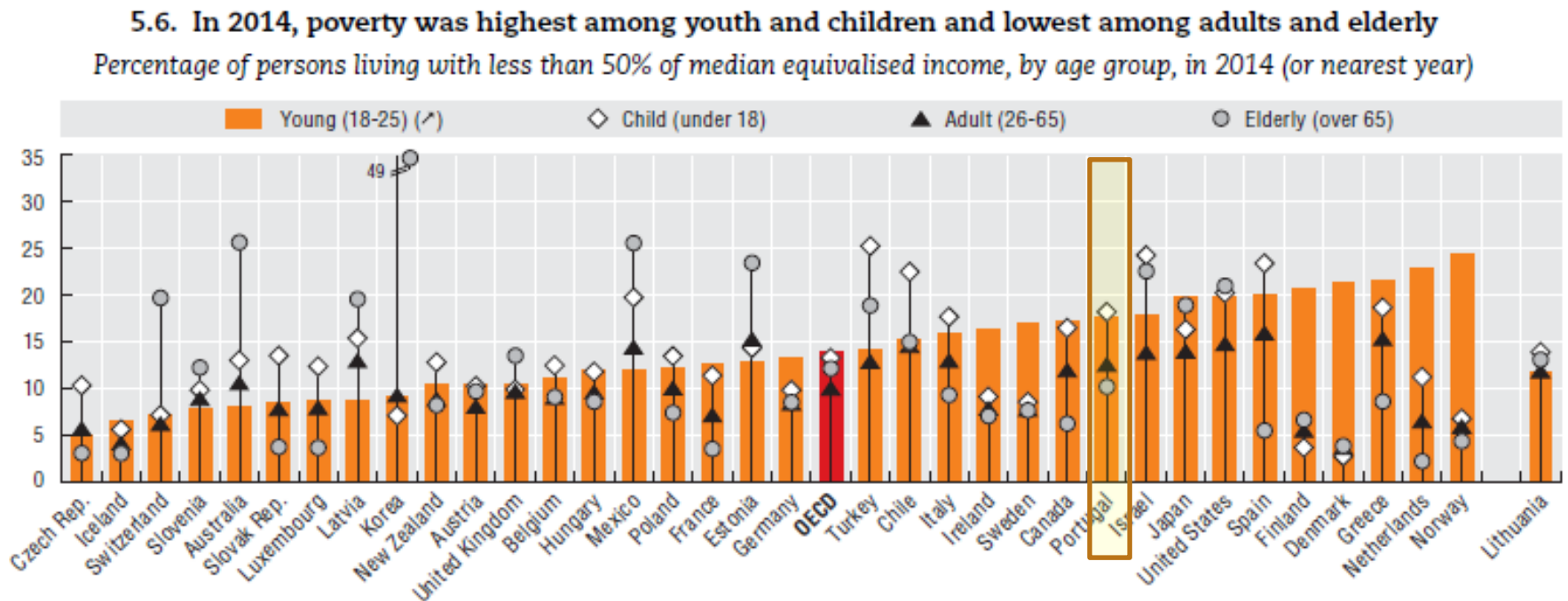
Figure 6: The elderly-bias indicator of social spending EBISS, 2007 – 2008




SOURCE:  
Vanhuyse, P.  
2013.  
Intergenerational  
Justice in Aging  
Societies. A Cross-  
national  
Comparison of 29  
OECD Countries.  
Gütersloh:  
Bertelsmann  
Stiftung, p. 27.

# High poverty among kids & the young

Share of people living with less than 50% of median income, 2014



Source: Provisional data from OECD Income Distribution Database (<http://oe.cd/idd>).

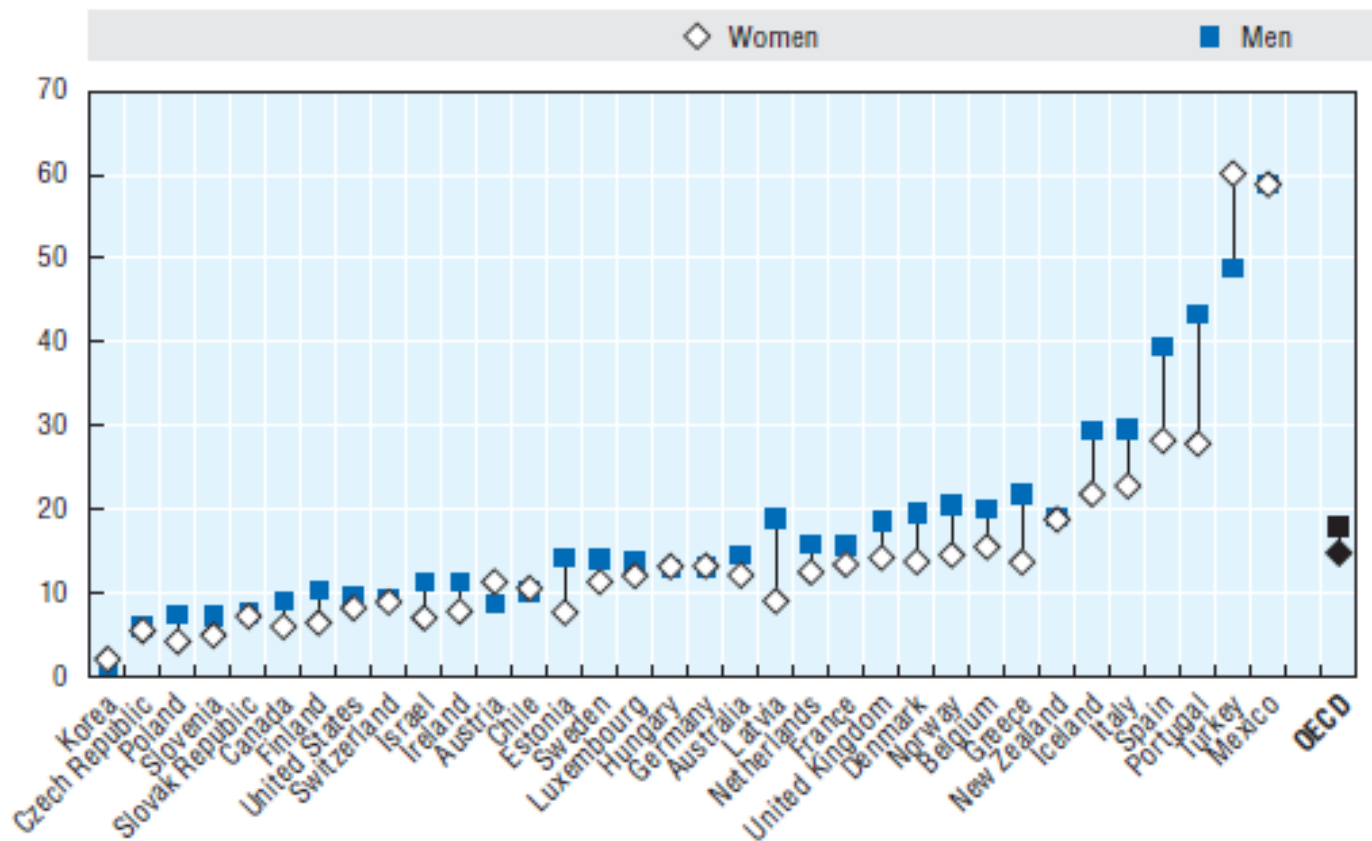
StatLink  <http://dx.doi.org/10.1787/888933405464>

Source: *Society at a Glance. OECD Social Indicators 2016*, p. 105

# Low education among young men

Share of people living with less than 50% of median income, 2014

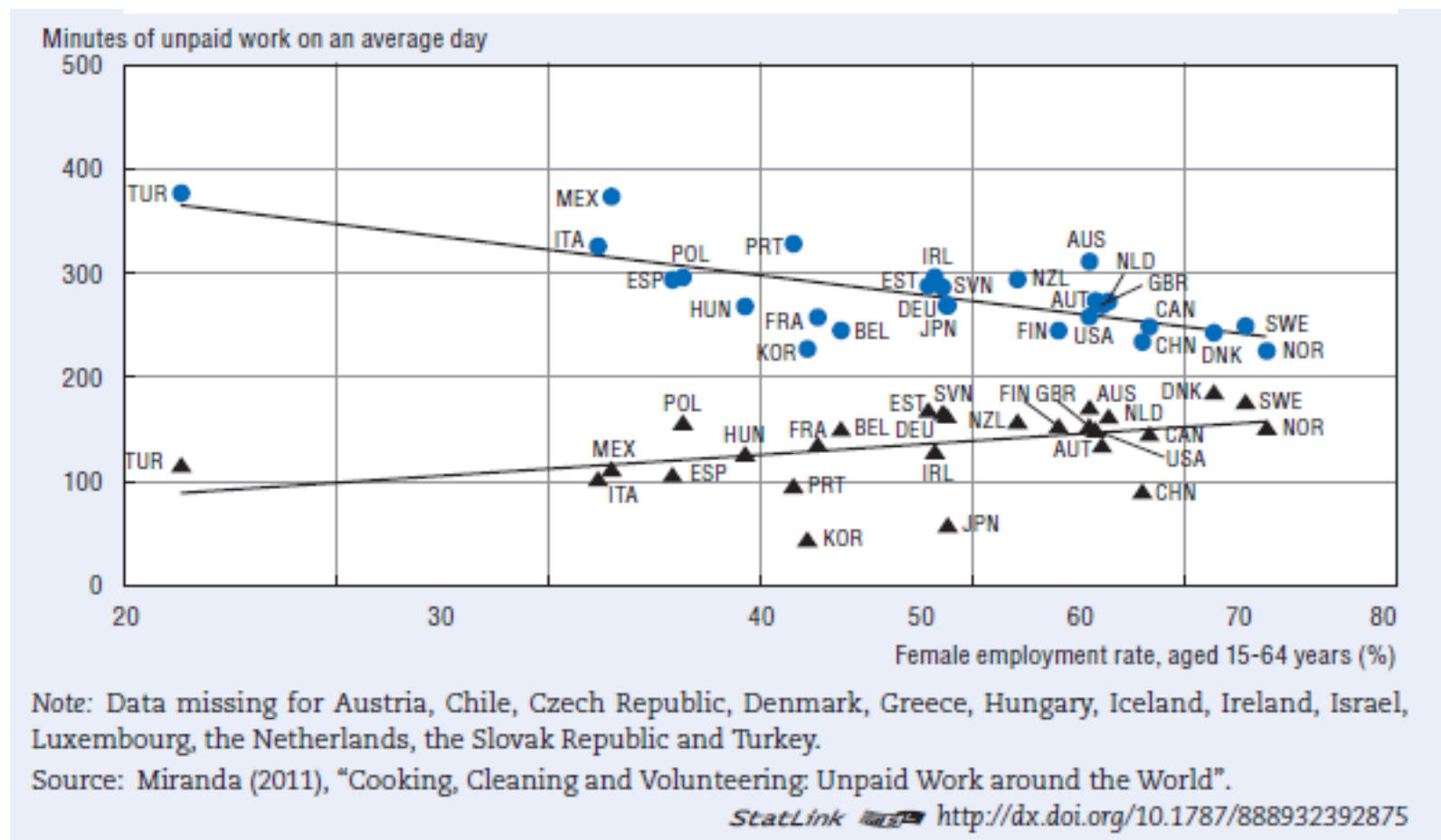
Panel A. Percentages of 25 to 34 year-olds with below upper-secondary education by gender in OECD countries, 2014



Source: *Society at a Glance. OECD Social Indicators 2016*, p. 44

# Unequal division of household work

## Minutes of unpaid work: contrasts between men and women



Source: *Doing better for Families*. OECD 2011, p. 39.