

# Demographic changes and labour supply in Portugal

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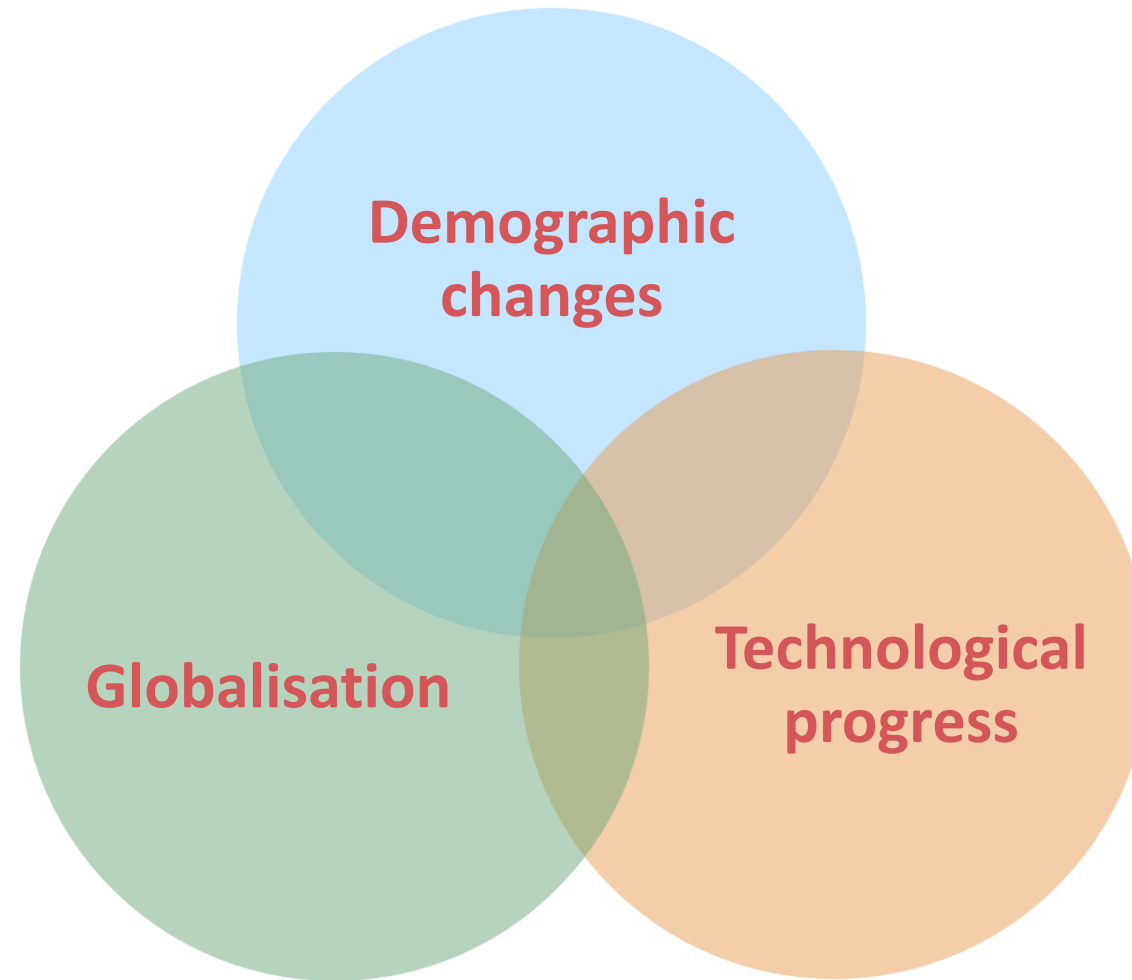
Economics and Research Department



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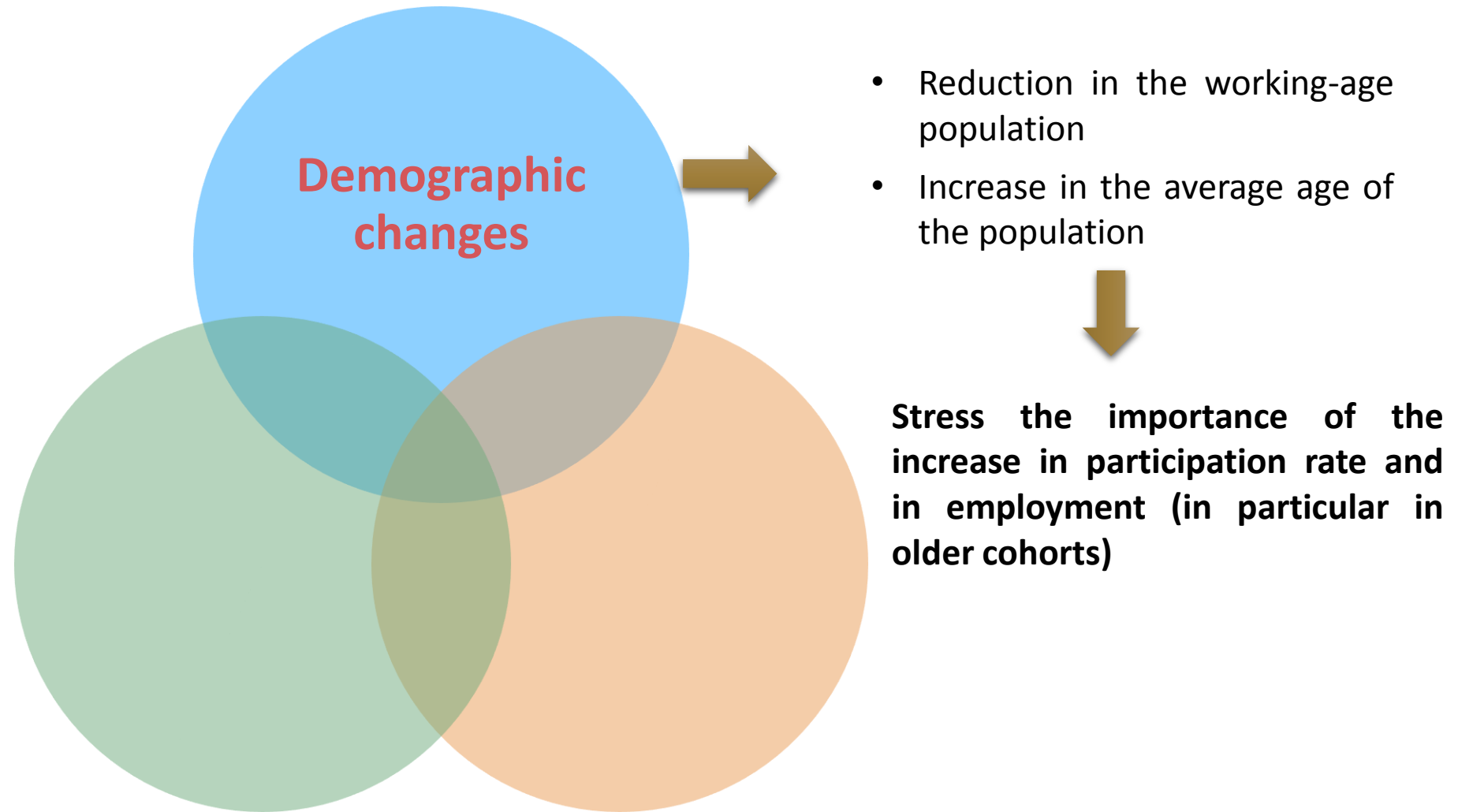
**As in other developed countries, the labour market in Portugal faces the triple challenge...**

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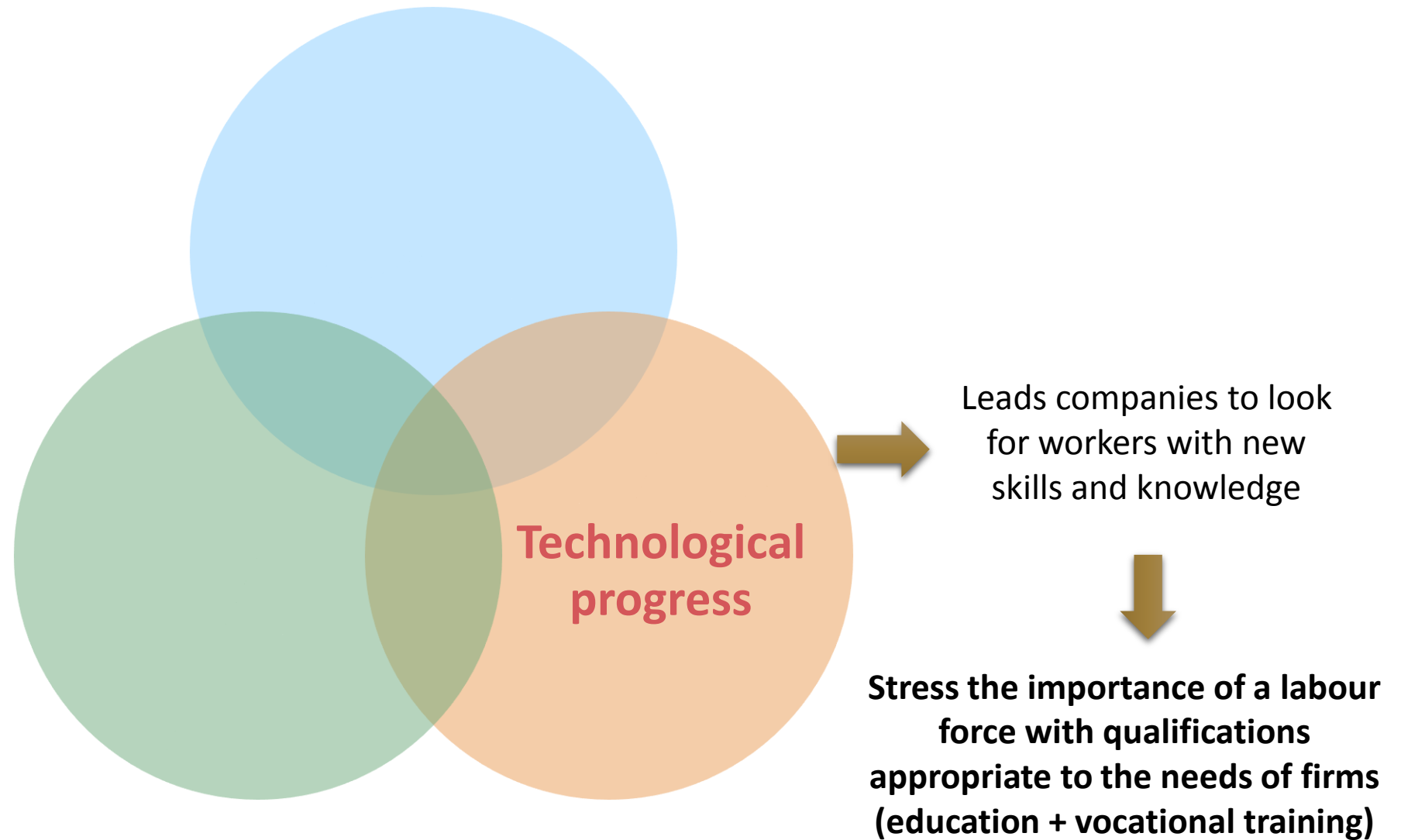
## As in other developed countries, the labour market in Portugal faces the triple challenge...

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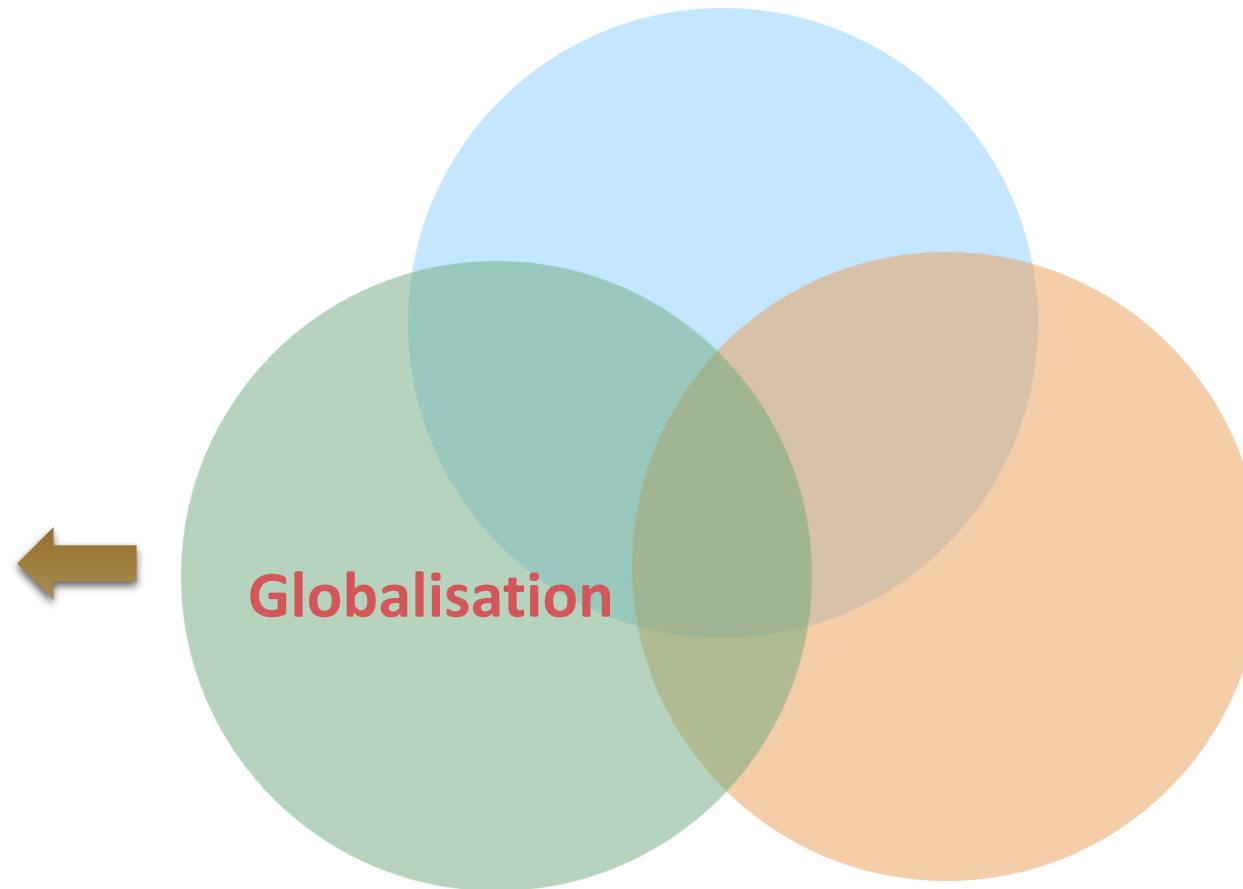


## As in other developed countries, the labour market in Portugal faces the triple challenge...

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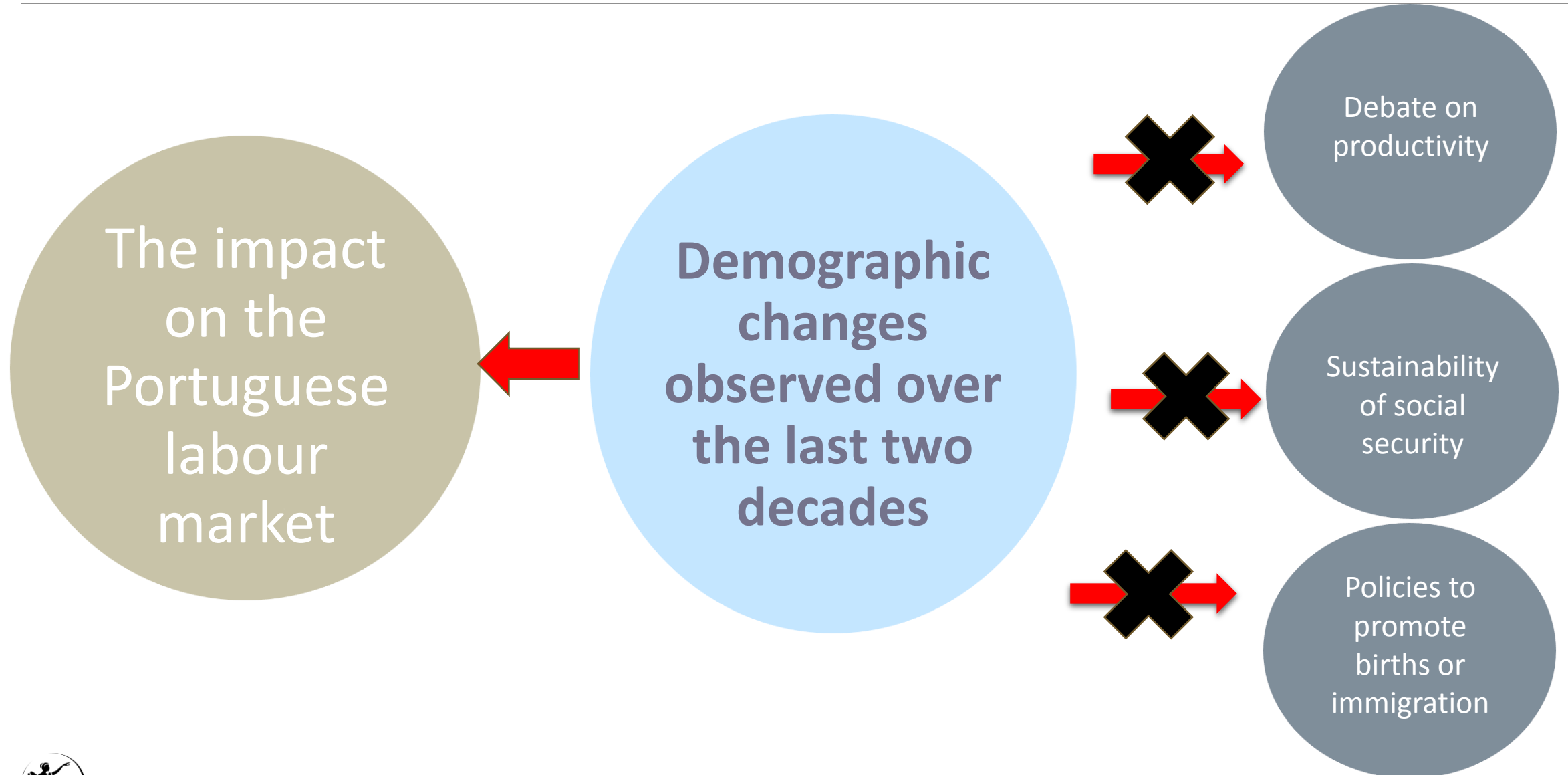
Makes it easier for Portuguese firms to hire foreign workers (foster immigration)

Create conditions that reduce emigration, in particular of young and qualified workers



The first of these challenges will be analysed in this Special issue:

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# Agenda

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- 1. Major demographic trends**
- 2. Labour force and participation rate: trends and recent developments**
- 3. Labour supply and underutilisation in the labour market**
- 4. How the demographic and labour force trends can be projected for the future**
- 5. Final considerations**



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# Major demographic trends

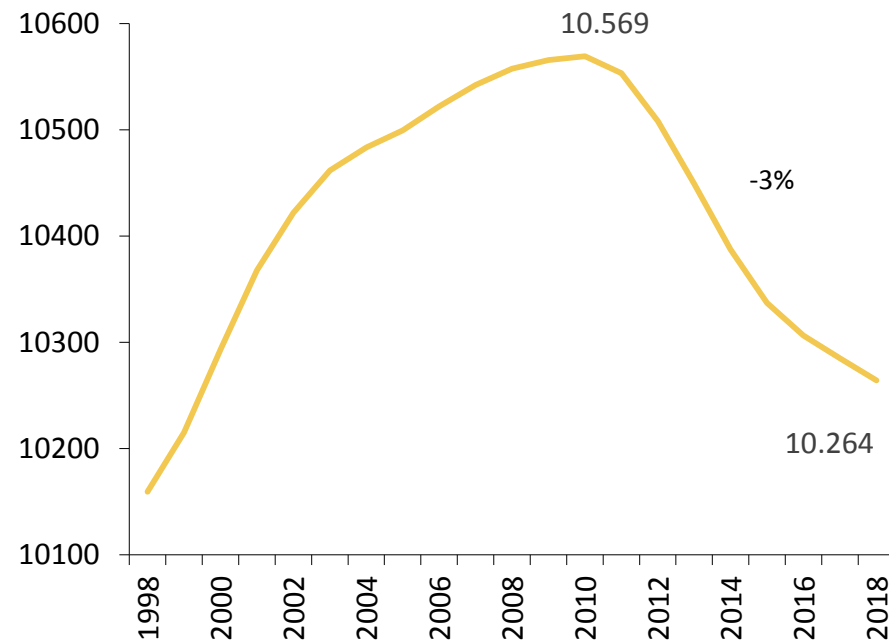




# Major demographic trends

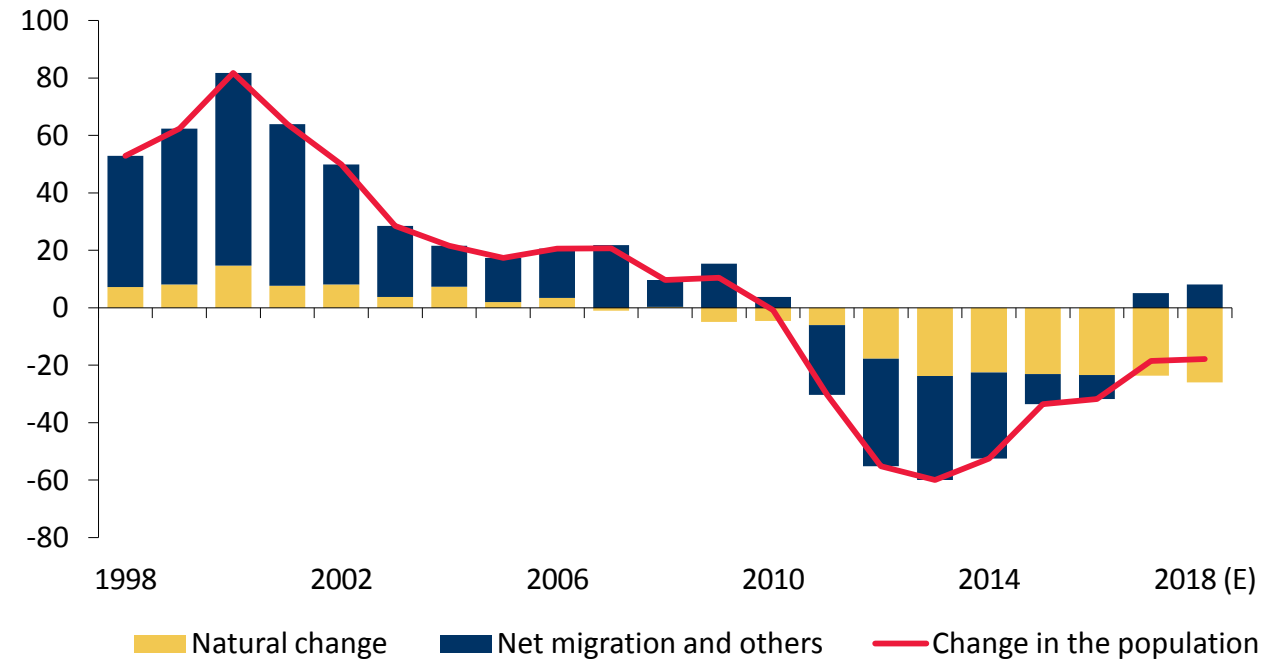
- A **continuous reduction of the resident population in Portugal** has been observed since 2010
- In the last ten years the **natural change** has been systematically **negative**
- **Net migration became negative in 2011** and only **returned positive in the last two years**

Total population | Thousands of persons



Source: Statistics Portugal - Labour Force Survey (Banco de Portugal calculations).

Change in the resident population in Portugal | Thousands of persons



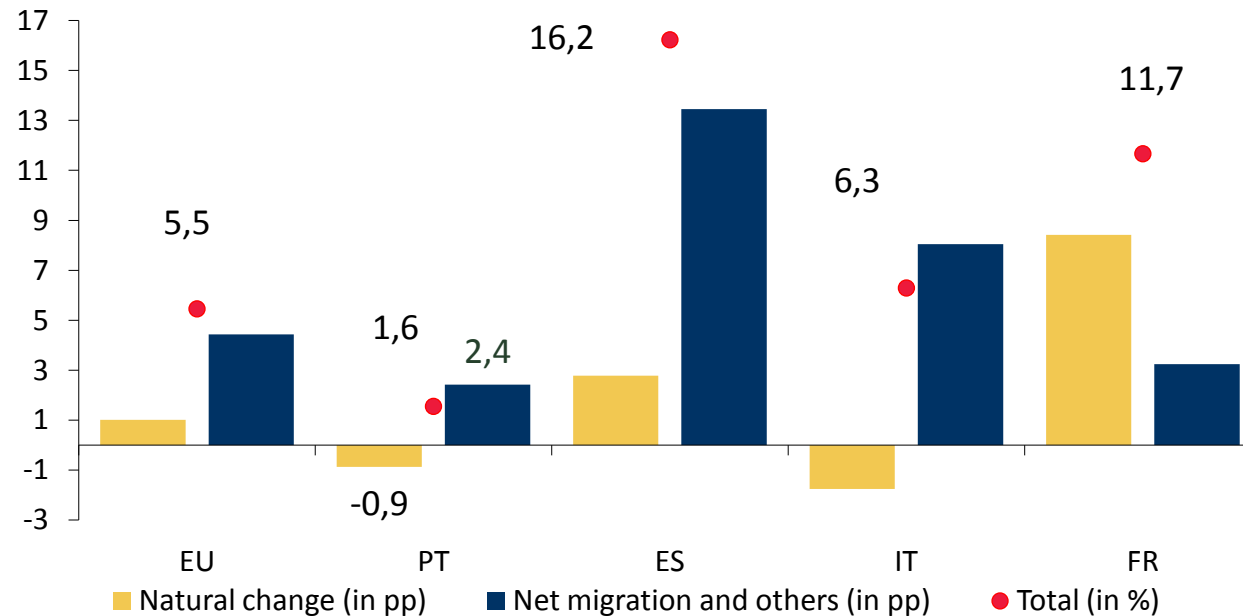
Source: Statistics Portugal – Demographic Statistics (Banco de Portugal calculations).



## Major demographic trends

- In the past two decades population growth in Portugal was very modest (1.6%) and one of the lowest in EU
- Natural change was negative in Portugal and Italy but very positive in France
- In Portugal net migration made a contribution of 2.4 pp to the 1.6% growth in population between 1998 and 2018

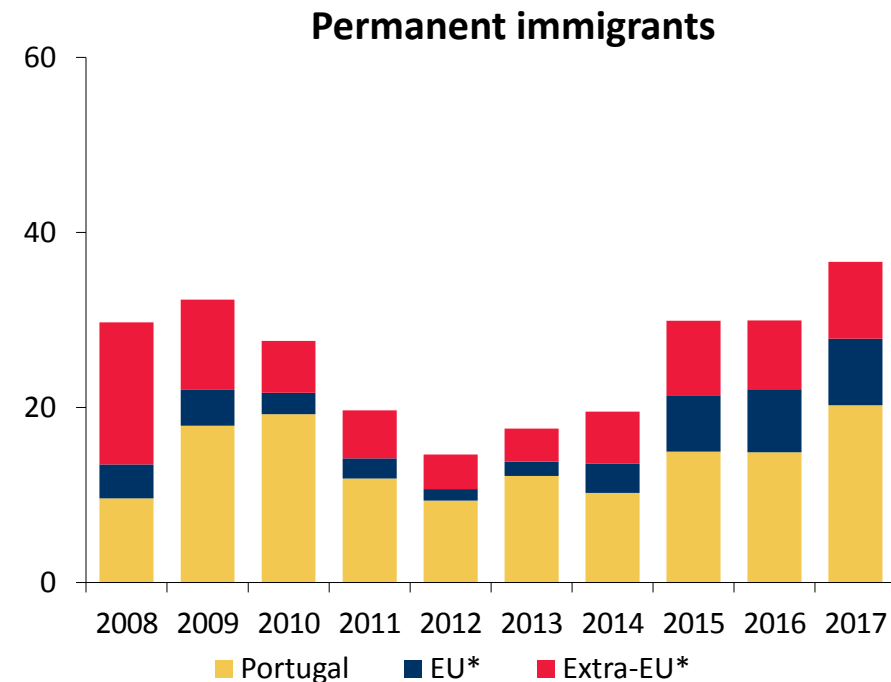
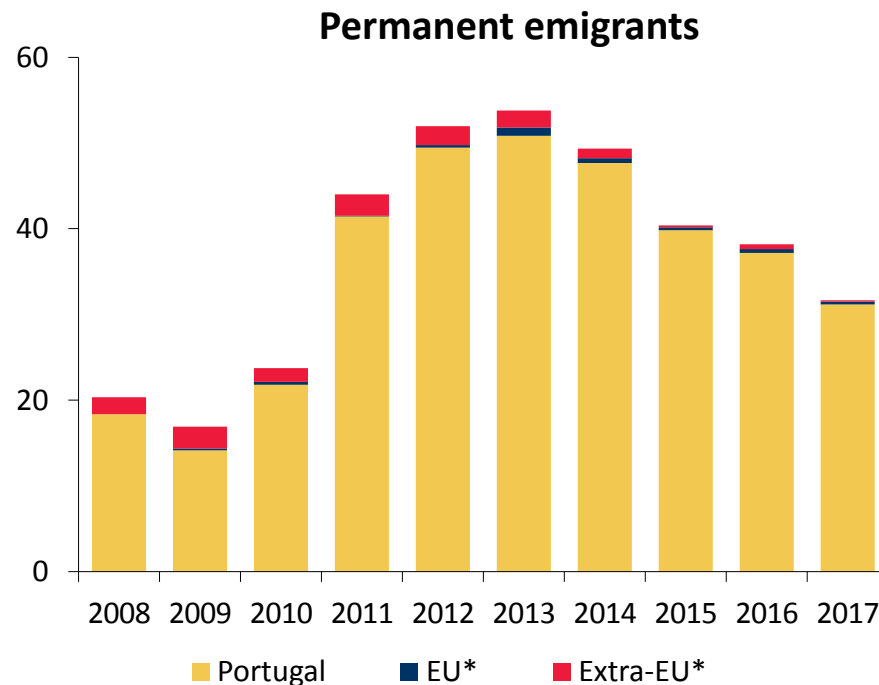
**Growth in total population 1998-2018** | Percentage and contributions in pp



## Major demographic trends

- The recent **recovery of net migration**, in line with the economic cycle, reflected a **reduction in the number of permanent emigrants and an increase in the number of permanent immigrants**
- By nationality, **Portuguese individuals are predominant**, most noticeably during the last recession.
- However, the **recovery of immigration flows since 2014** has shown **similar contributions on the part of the Portuguese and foreigners**

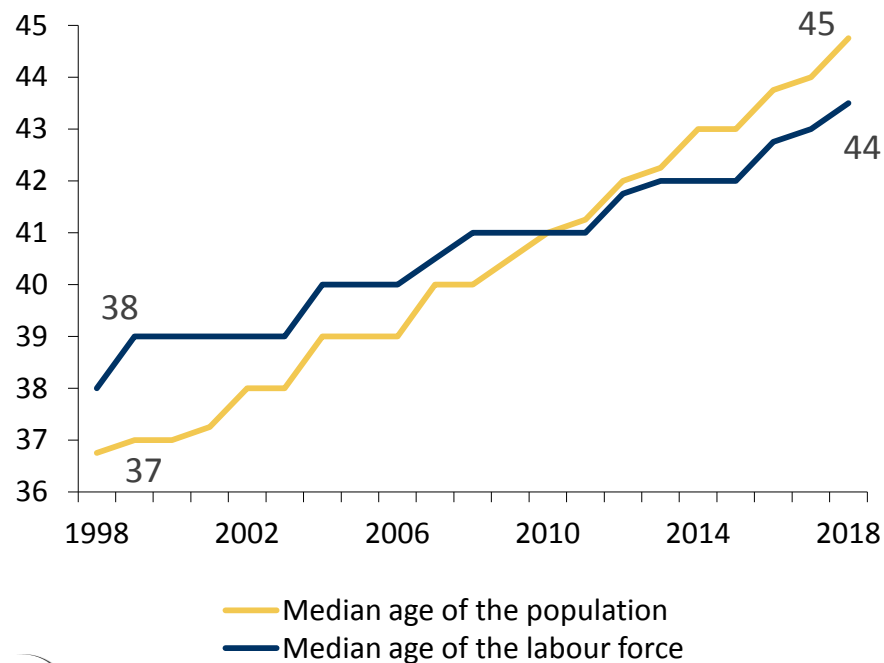
### Permanent emigrants and immigrants by nationality | Thousands of persons



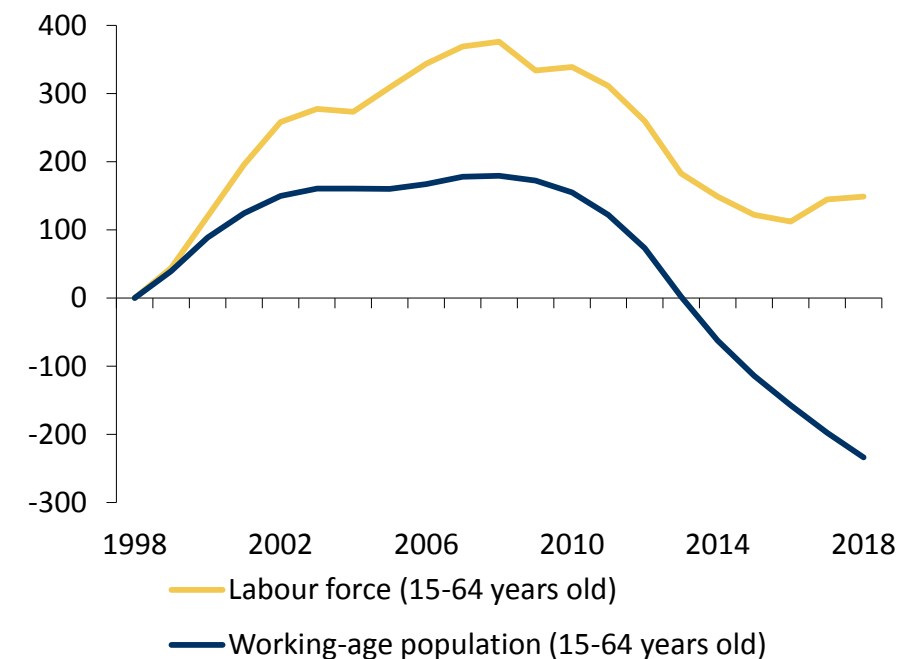
# Major demographic trends

- The **secular trend for population and labour force ageing** has remained
- From 2008 onwards, **there was a decrease in the working-age population**, i.e. even before total population started to decline
- The **increase in the labour force over the last few years partly reflected the usual pro-cyclical behaviour of the participation rate**, which is also visible in the sharp falls observed in the last recession

**Median age of the total population and the labour force (15 years old and over) | Years of age**



**Cumulative change in the labour force (15-64 years old) and in the working-age population (15-64 years old) | Thousands of persons**



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# **Labour force and participation rate:**

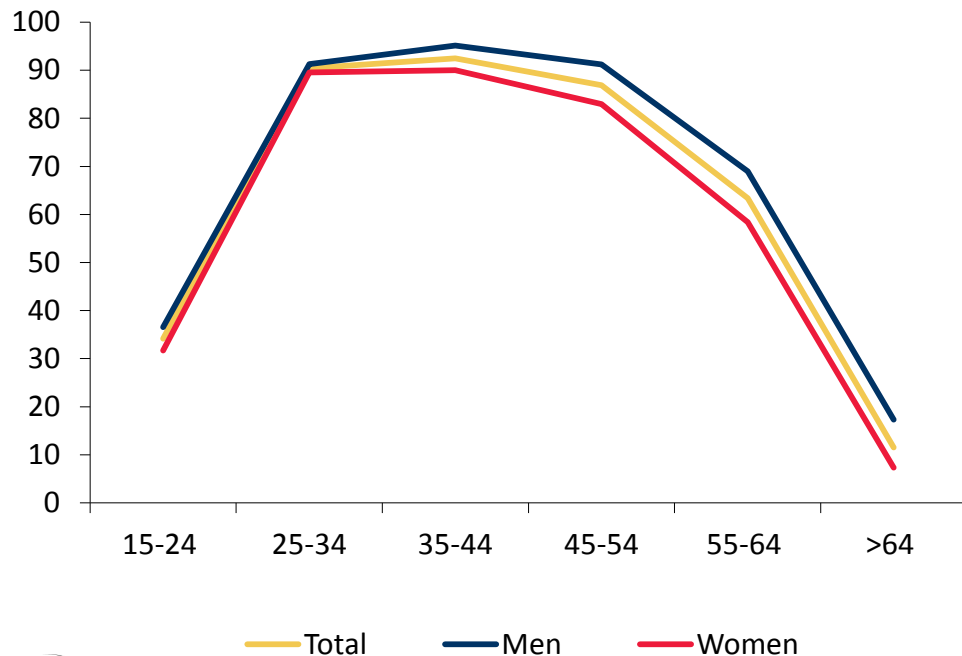
## **Trends and recent developments**



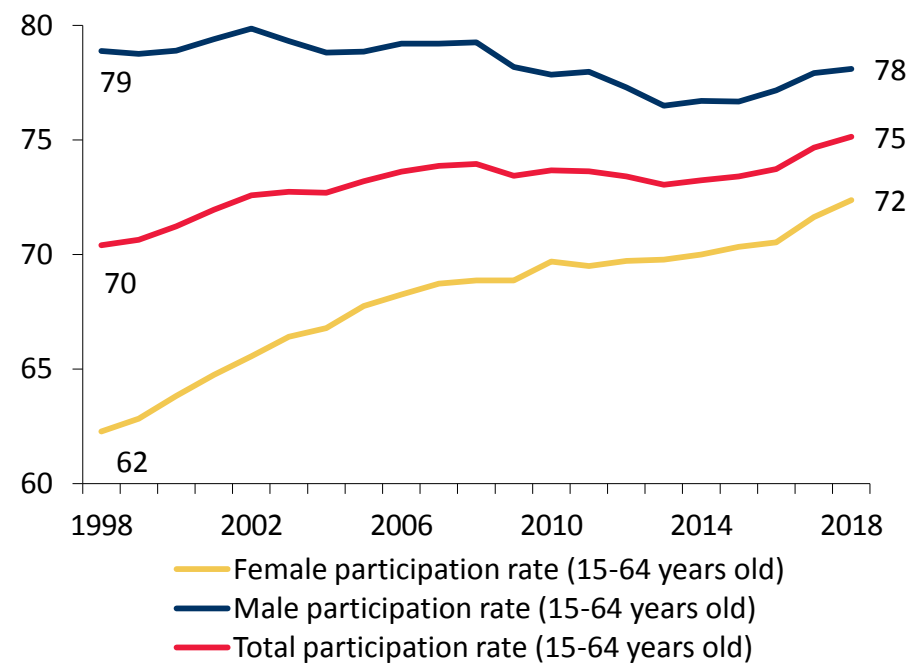
# Labour force and participation rate: trends and recent developments

- The impact of population ageing on the participation rate results from the usual life cycle of individuals
  - In **2018**, the **participation rate** in Portugal was **34.2% for the 15 to 24 age group**, around **90% for the 25 to 54 age group**, **63.4% for the 55 to 64 age group** and **11.5% for the over 64 age group**
- The impact of these dynamics on the labour force has been mitigated by an overall upward trend in the participation rate, which is largely due to **the increase in female participation in the labour market**

Participation rate by age group in 2018 | Percentage



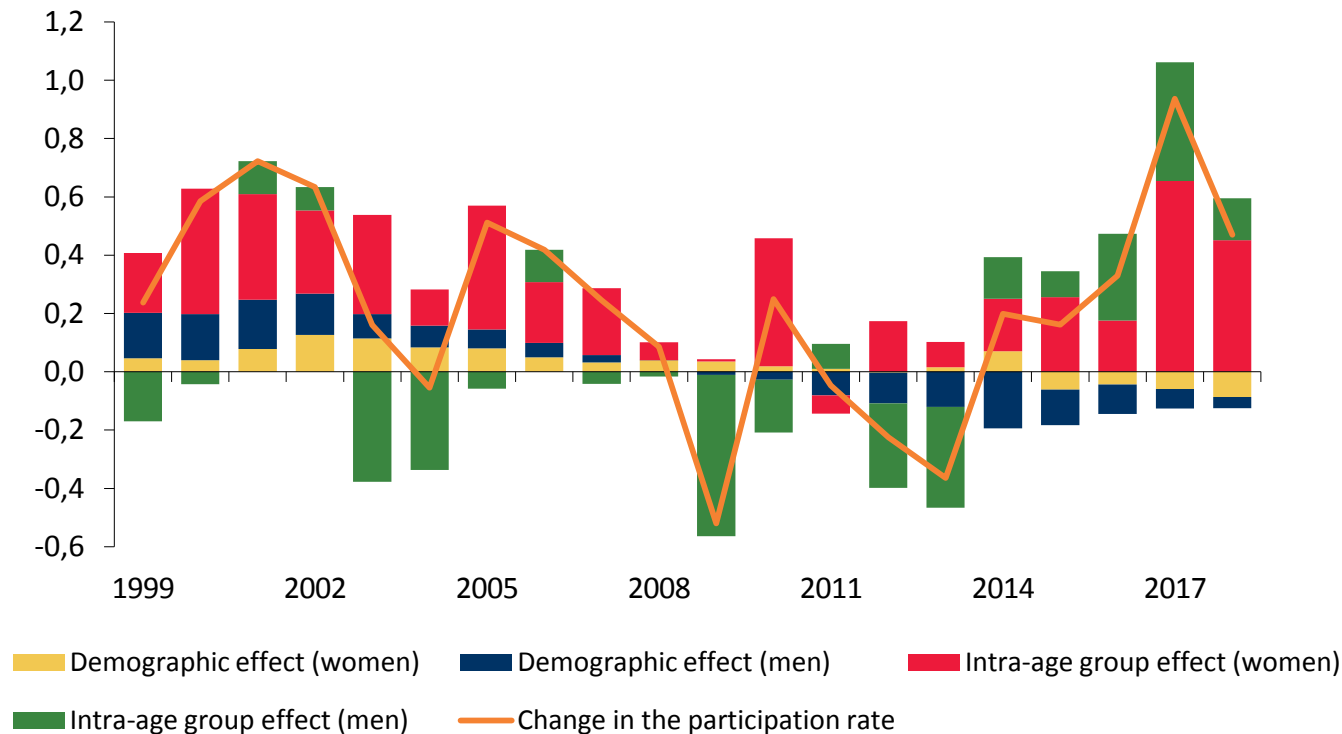
Evolution of total participation rate by gender | Percentage



## Labour force and participation rate: trends and recent developments

- The change in the participation rate may be broken down between the effect of demographic changes (**demographic effect**) and the effect of the labour force dynamics within each age group (**intra-age group effect**)
  - **Negative demographic effect in the last 10 years**, reflecting the increased weight of older cohorts in the population
  - **Very significant intra-age group effect among women**, reflecting the higher female participation rate

**Decomposition of change in participation rate by gender between “demographic” and “intra-age group” effects** | Contributions to the change in the participation rate, in percentage points

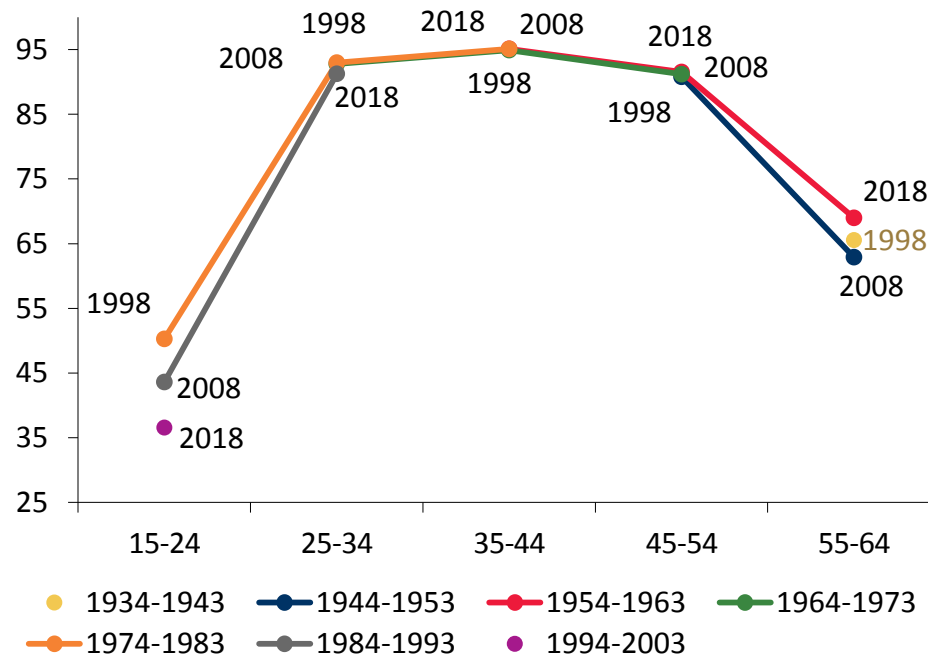


# Labour force and participation rate: trends and recent developments

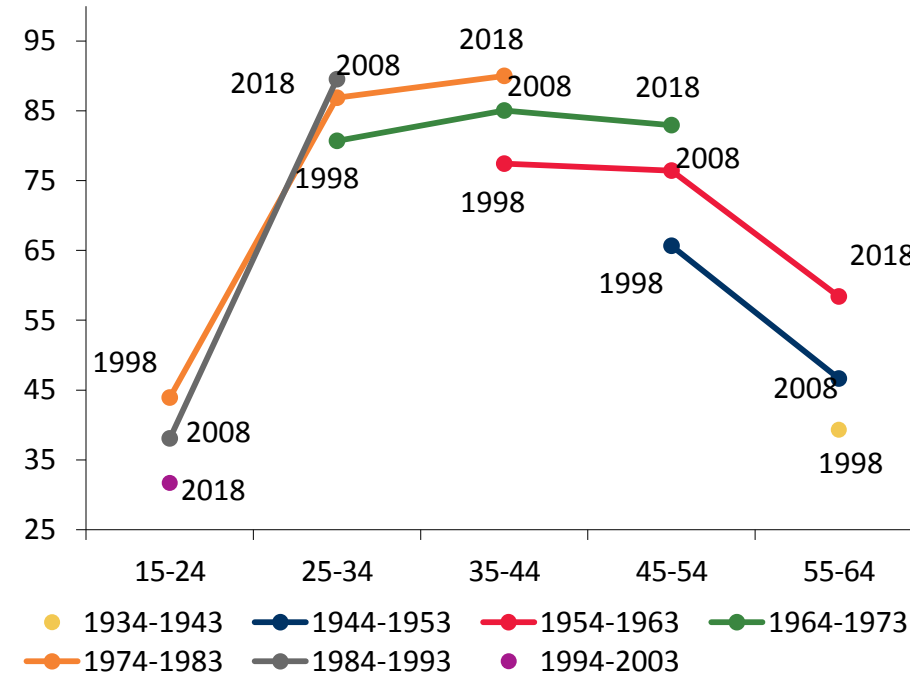
- The **female participation rate has been growing continuously from generation to generation**, converging on younger ones (born after 1974) to levels close to the participation rate of men
- This momentum is set to continue to contribute to an increase in the total participation rate in the coming decades, as younger generations of women are replacing the older ones over the whole life cycle.
- Both in men and women, there is a **decline in participation rates for the cohort 15 to 24 years old**. The main factor contributing to this development is the increase in education; and an **increase of participation rates in older cohorts due to the extension of working life**.

Participation rate by gender and generations | Percentage

Male



Female



Box

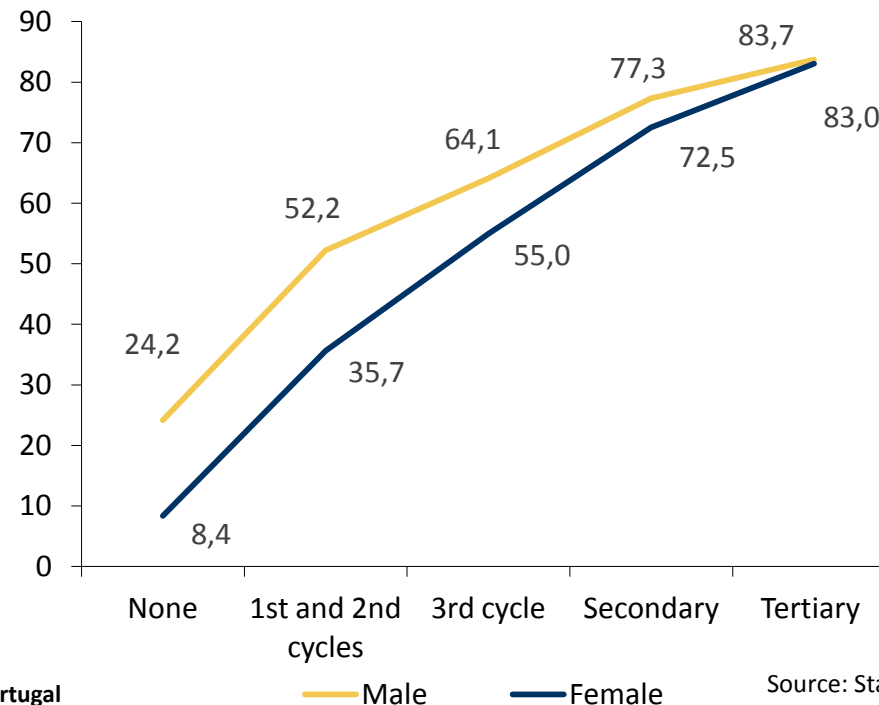




## Labour force and participation rate: trends and recent developments

- In addition to the impact of higher life expectancy and changes in the rules of public pension schemes **the increase in the participation rate of the older cohorts may also reflect other effects:**
  - Possibility of **returning to the labour market after retirement**
  - Composition effects associated with the significant increase in the level of education in these age groups, as **participation rates tend to increase with the level of formal education**
- In 2018, the participation rate in the population with tertiary education was 83,7% for men and 83% for women

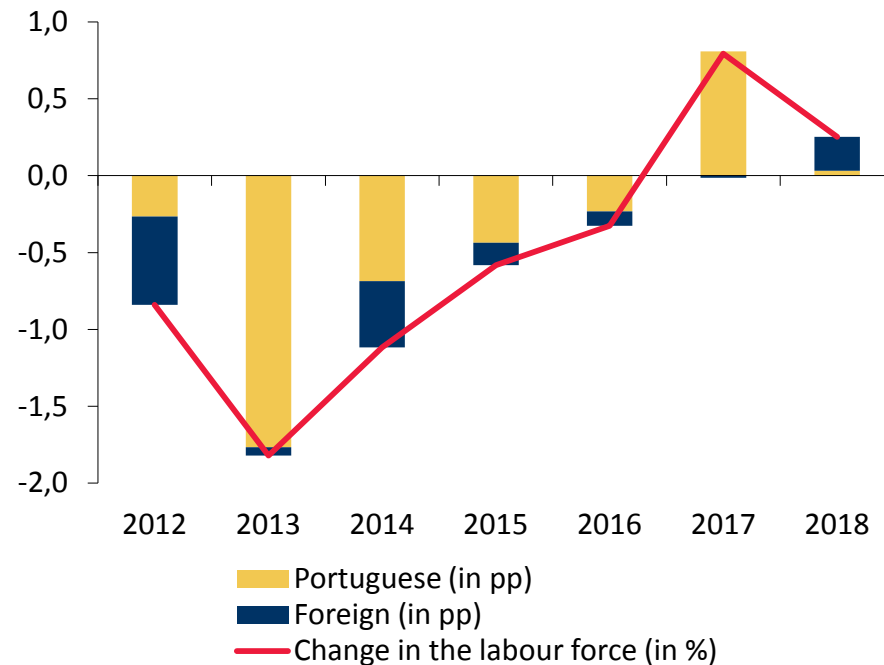
**Participation rate in 2018 by gender and level of education** | Percentage of male and female population in each level of education



## Labour force and participation rate: trends and recent developments

- A development that has most recently contributed to the increase in the participation rate in Portugal is **the contribution of the foreign population**.
- **Immigration flows appear to be a potential channel to mitigate the negative impact on labour supply resulting from the other demographic trends**; in 2018 the foreign labour force contributed by 0.2 p.p. to the growth of 0.3% of the labour force
- This reflects the higher participation rates of the foreign population compared to the Portuguese population, particularly marked for individuals under the age of 35

**Labour force by nationality** | Contribution to the labour force growth, percentage points



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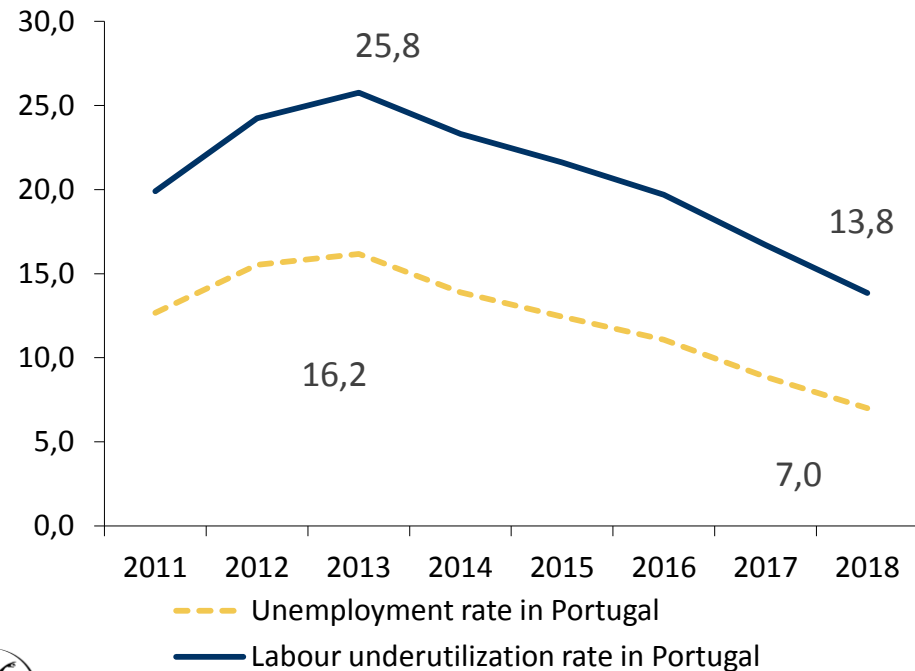
# **Labour supply and underutilisation in the labour market**



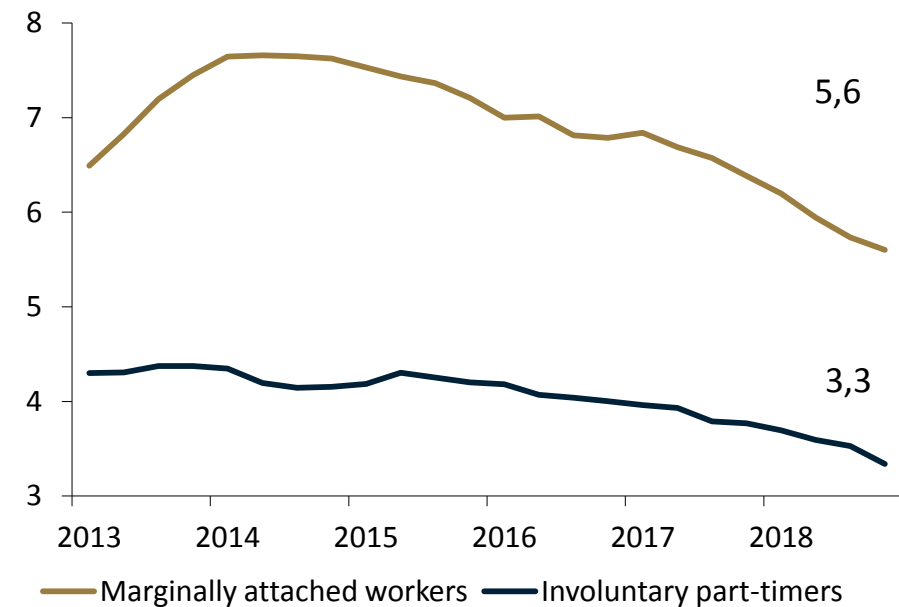
## Labour supply and underutilisation in the labour market

- The debate around the potential growth of the labour force in Portugal takes increased interest in the **current context of the economy's cyclical situation is reflected in a tightening in the labour market**
- Some **indicators suggest the existence of difficulties in Portuguese firms to hire workers**, particularly with higher levels of qualification
- A number of alternative indicators also point to the **substantial reduction in underutilisation in the Portuguese labour market**

Labour underutilisation rate and unemployment rate in Portugal | Percentage



Marginally attached workers and involuntary part-time workers | Percentage of total labour force



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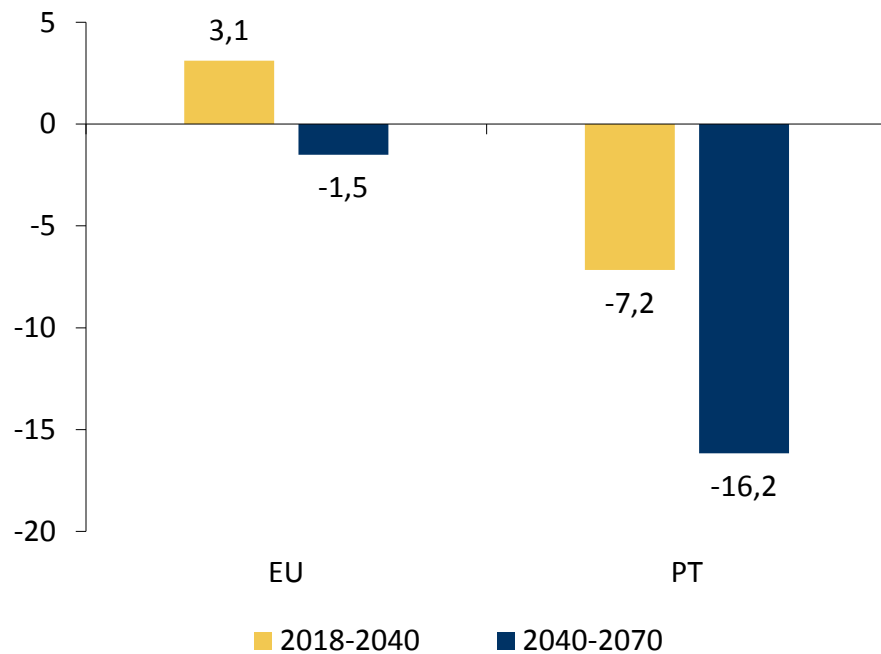
# **How the demographic and labour force trends can be projected for the future**



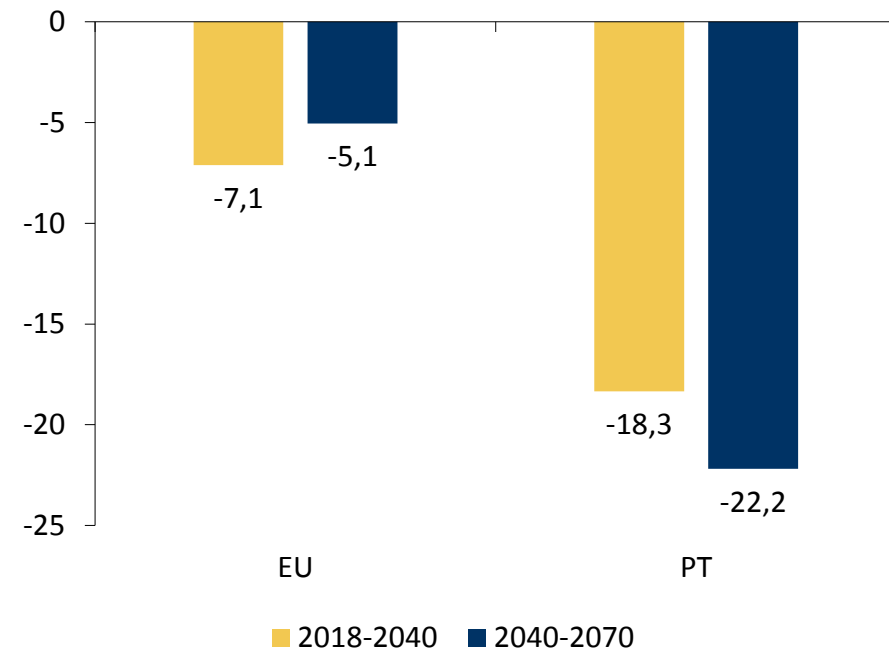
## How the demographic trends can be projected for the future

- According to the latest Eurostat demographic projections (EUROPOP2015), the **resident population in the EU is expected to continue to grow over the next two decades**, albeit moderately, and a reduction is expected in the following three decades;
- **In the case of Portugal, the expected demographic decline is significant over the same period**; this reduction is even more significant for the working-age population

Change in total population | Percentage



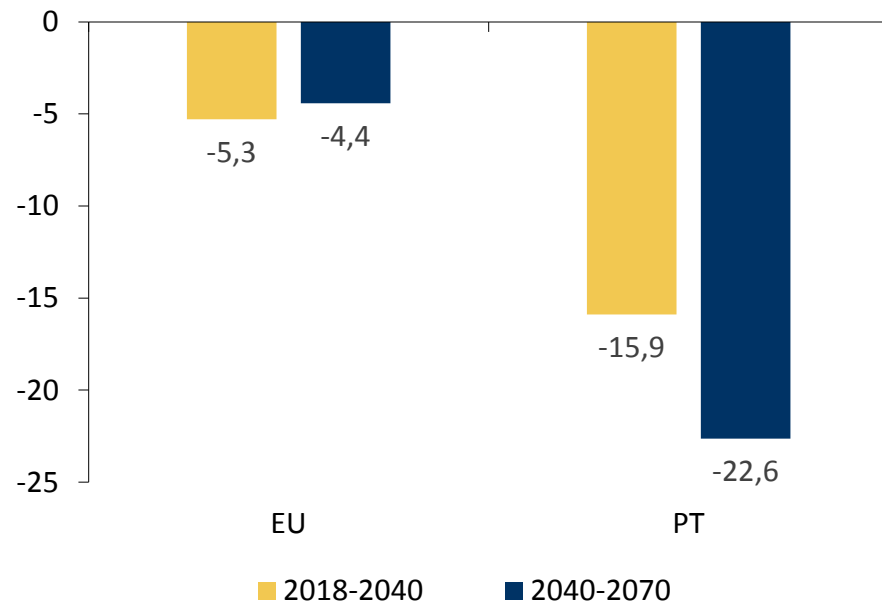
Change in working age population (15-64 years) | Percentage



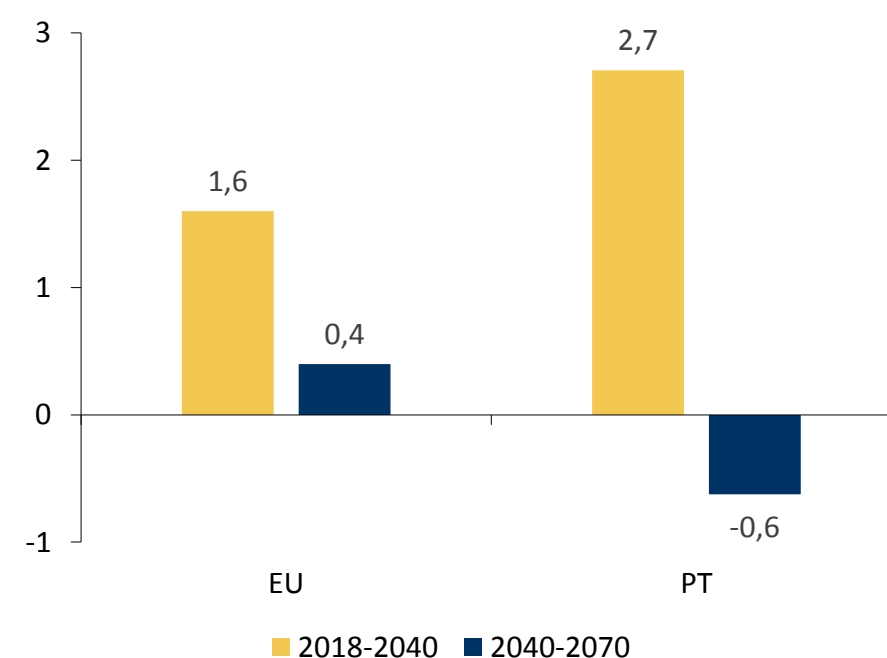
## How the labour force trends can be projected for the future

- It is expected a very sharp reduction in the labour force (15 to 64 years old) in Portugal in the long term, despite the increase in the participation rate above the EU average over the next two decades
- The expected increase in the participation rate in Portugal is essentially the result of an ongoing convergence of the female participation rate and the male participation rate over the next two decades, with the male participation rate being expected to stabilise over the whole horizon
  - This convergence is expected for the various age groups, but more sharply for the cohort over 55 years old

**Change in labour force (15-64 years) | Percentage**



**Change in participation rate (15-64 years) | Percentage points**



## Final considerations

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- Evidence presented in this Special issue highlights **the importance of demographic changes that occurred over the last two decades**, including the **reduction and ageing of the resident population**, which limit the potential growth of the labour supply in Portugal.
- Simultaneously, emphasis was placed on **some factors that could mitigate these unfavourable demographic changes**:
  - i. the increase in the participation rates in the various age groups, especially in the oldest cohort, where the growth margin is higher and boosted by a gradual increase in the retirement age;
  - ii. the maintenance of the secular trend of a rising female participation rate, converging with the male participation rate over the next few decades;
  - iii. the increased net migration flows.
- Factors **i. and ii. are more structural** (they are projected to remain over the next decades ); factor **iii. is more volatile and more procyclical**.
- Yet, labour supply constraints and the dynamics of demand are likely to increase pressure on wages in the short term;
- The **supply conditions of the economy are determined not only by the available labour force, but also by the level of qualifications, which is reflected in productivity developments**.
  - In this context, the very significant increase in the average level of qualifications of the labour force in recent years is noteworthy.
- Thus, **the ageing trend and the higher average level of qualifications are two characteristics of the labour force operating in opposite directions to explain future developments in output in Portugal**.





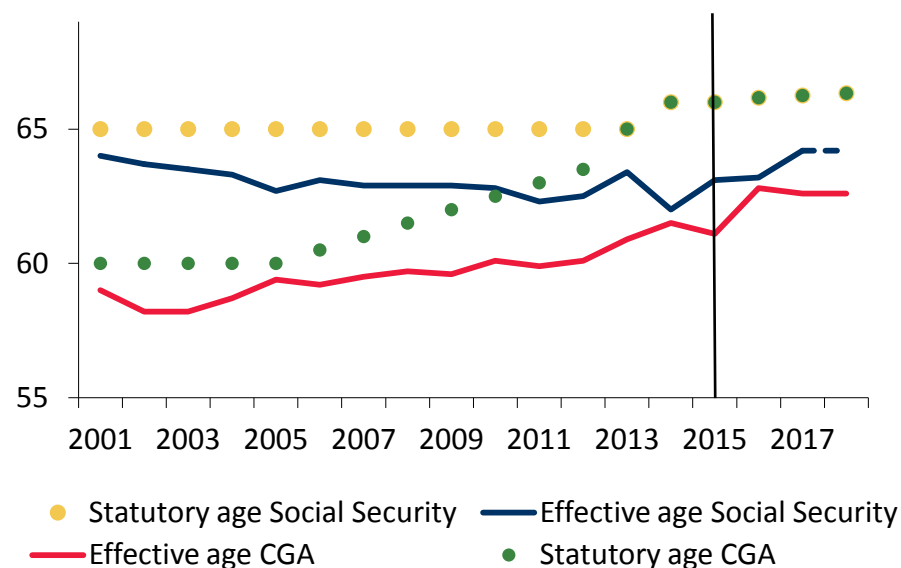


## **Additional information**

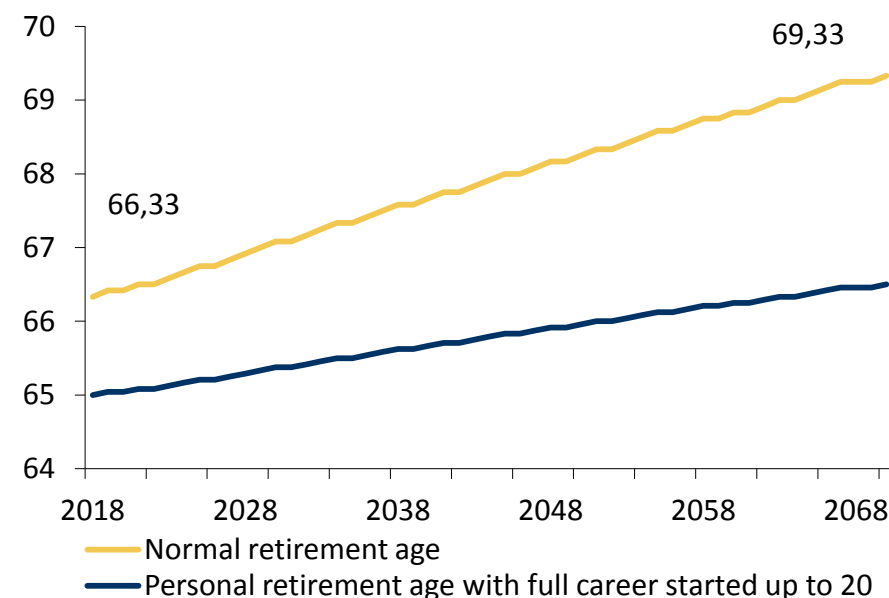
## Box 1: Effect of the increasing retirement age on labour force developments in Portugal

- There has been an **increase in the effective average retirement age over the last decade and more continuously since 2015**, and this trend is expected to remain in the future
  - **Between 2015 and 2018**, average effective retirement age increased by 1 year in the general regime (1,5 years in CGA), which exceeded the increase in the statutory age (4 months)
- The expected nearly five years of average gains in longevity between 2018 and 2070 (EUROPOP2015) result in a three-year increase in the normal retirement age over this period.

**Evolution of the statutory and of the average effective retirement ages | In years**



**Projection of the retirement age according to longevity gains | In years**



Sources: CGA, Pordata and legislation

Sources: Eurostat, Statistics Portugal (Banco de Portugal calculations).