



The Fiscal Consequences of Shrinking Populations

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Outline



- **Motivation**
- **Long-term trends, demographic uncertainty and fiscal sustainability**
 - Fertility
 - Longevity
- **Policy options to address fiscal challenges of shrinking populations**
 - Policies that affect demographics and labor markets
 - Reforms to age-related spending programs
- **Conclusions**

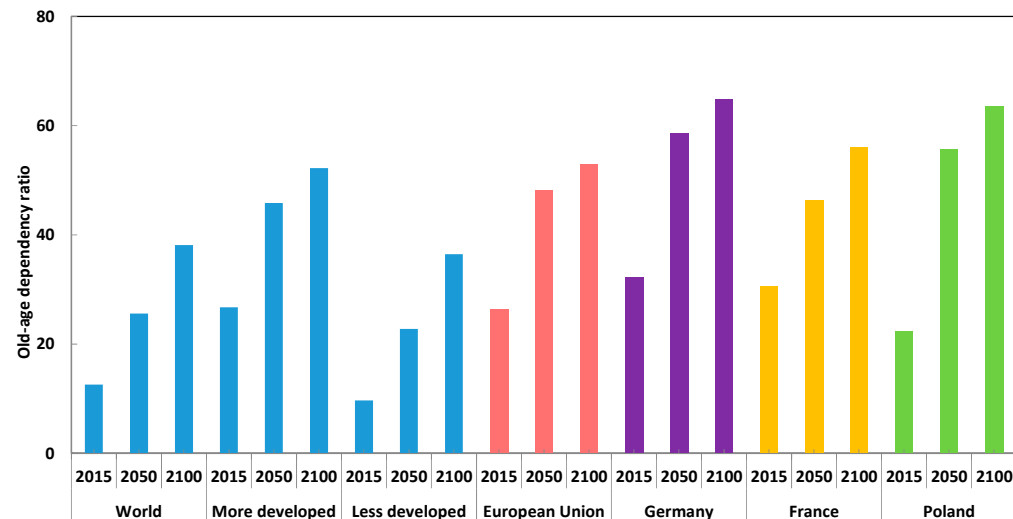
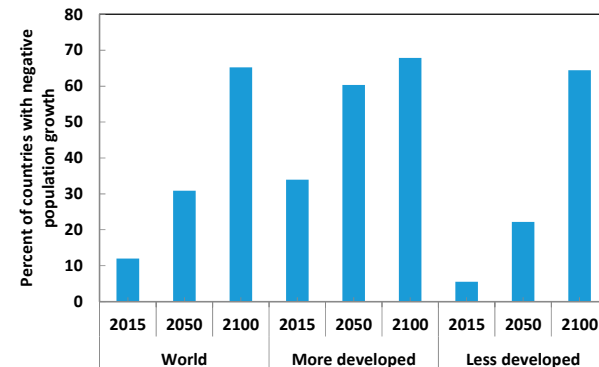


Motivation

Motivation I



- Population is already shrinking in many countries and populations are aging
- Shrinking populations pose a formidable fiscal challenge
 - Age-related spending projected to reach levels incompatible with fiscal sustainability
- Reforms should start now so that they will be gradual and lasting



Motivation II



Paper makes three major contributions to the debate:

- 1. Uses July 2015 UN population projections to help project health and pension spending for over 100 countries**
- 2. It is one of first papers to project spending to 2100—many fiscal impacts will only be realized over longer run**
- 3. Reviews potential options to address these fiscal pressures**



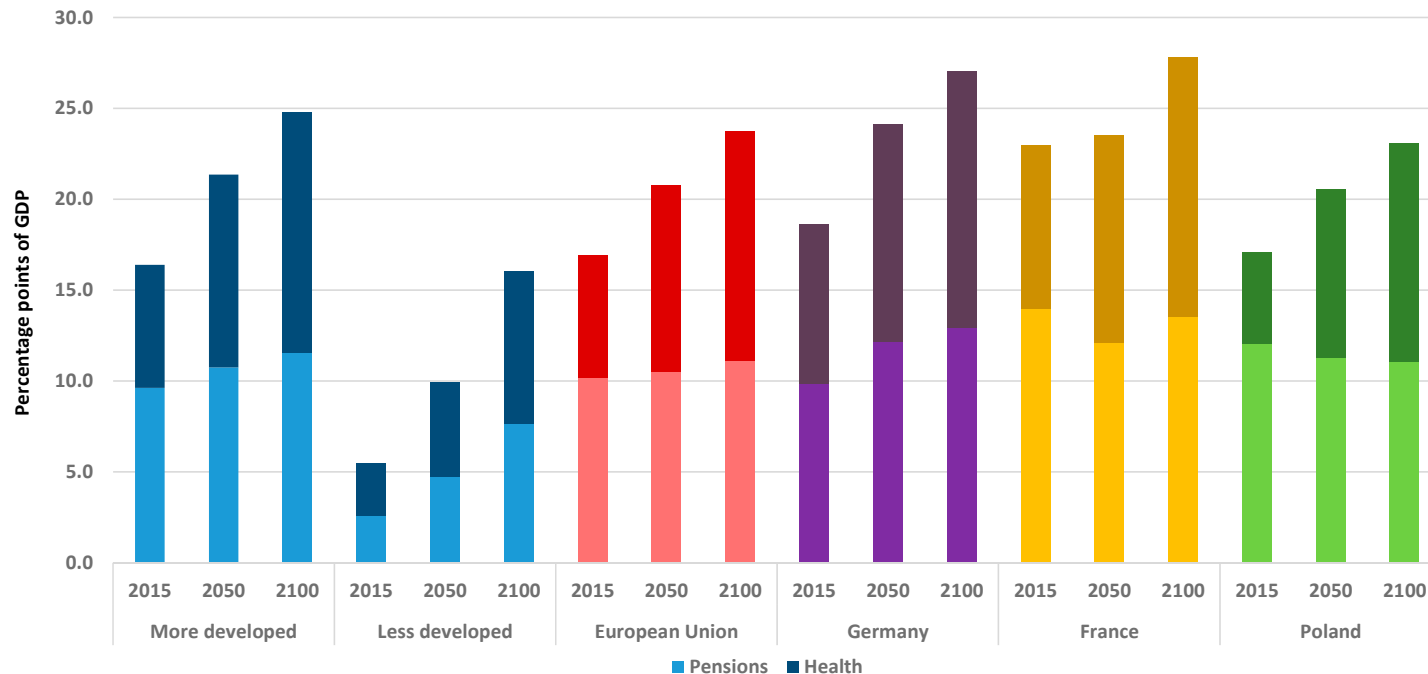
Long-term Trends, Demographic Uncertainty, and Fiscal Sustainability

Long-term trends

The prospect of aging, shrinking populations, and higher age-related expenditure



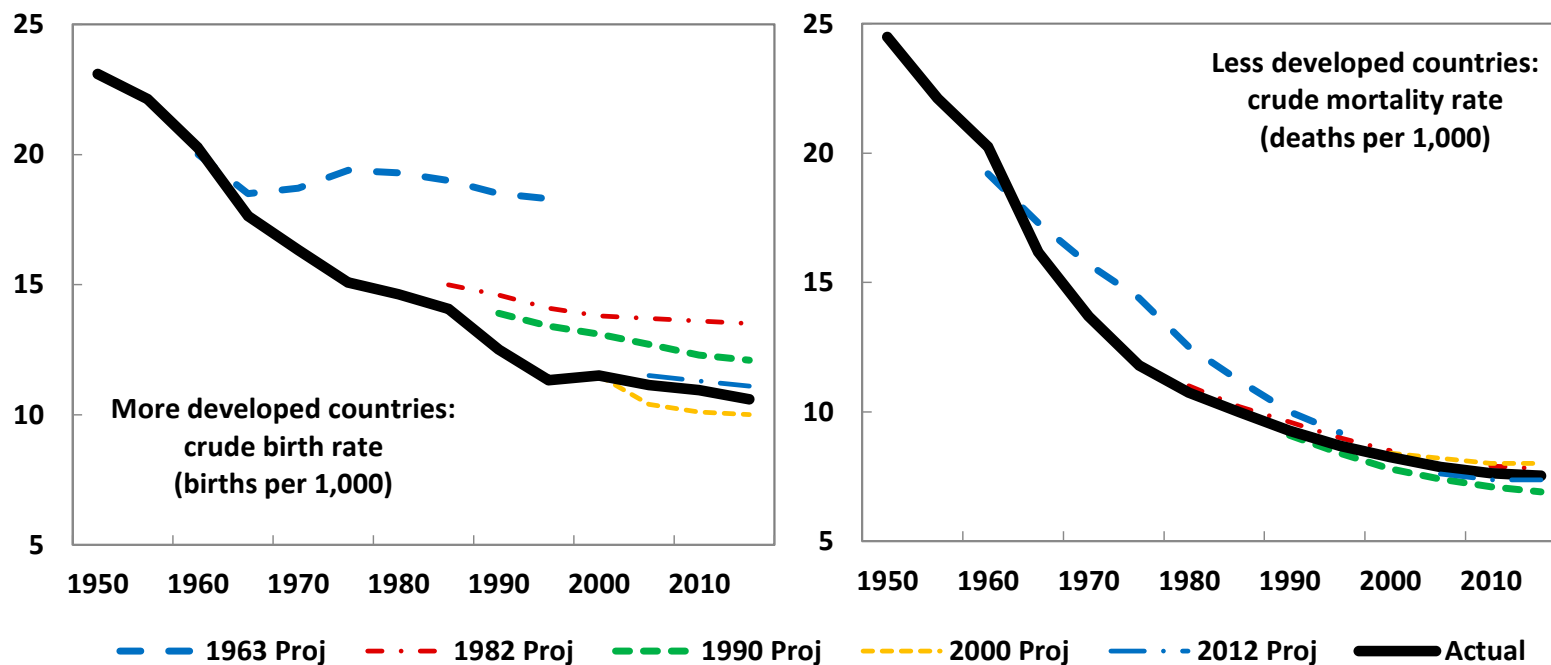
- Population aging will have a large direct impact on public spending
- Demographic changes will also affect fiscal sustainability through their impact on growth



The impact of demographic uncertainty on fiscal sustainability



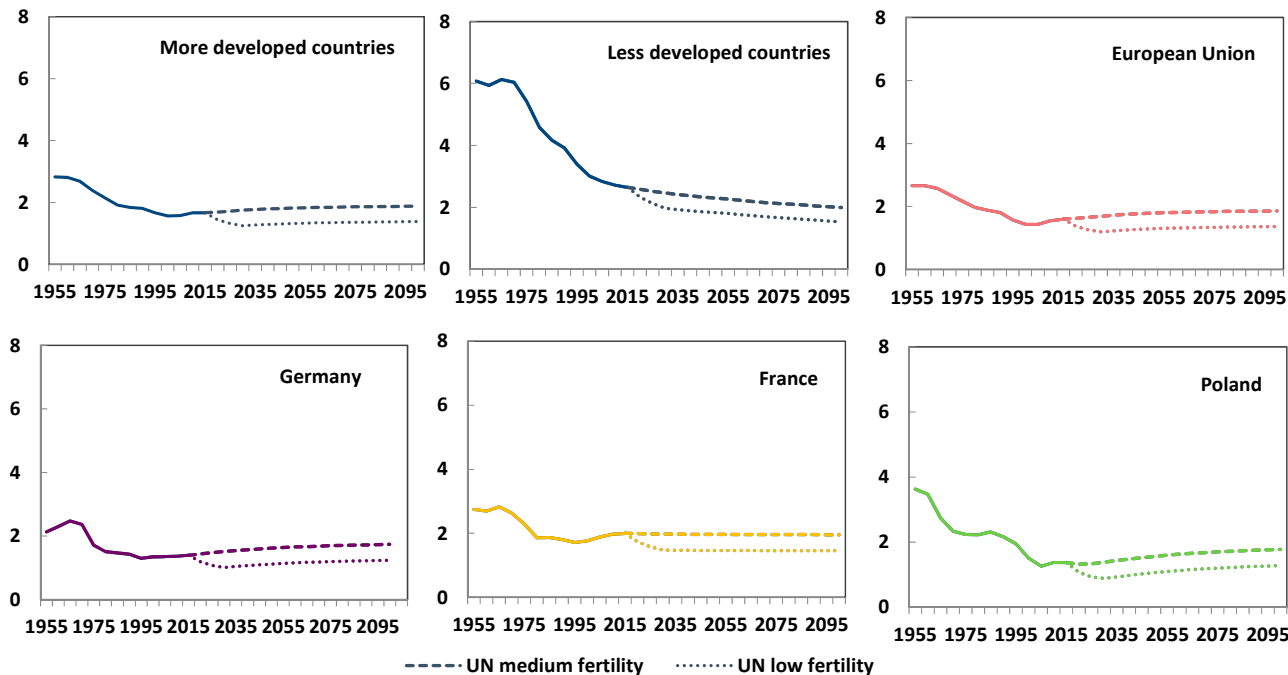
- Demographic projections are surrounded by substantial uncertainty
- Past projections have been subject to large errors



Fertility



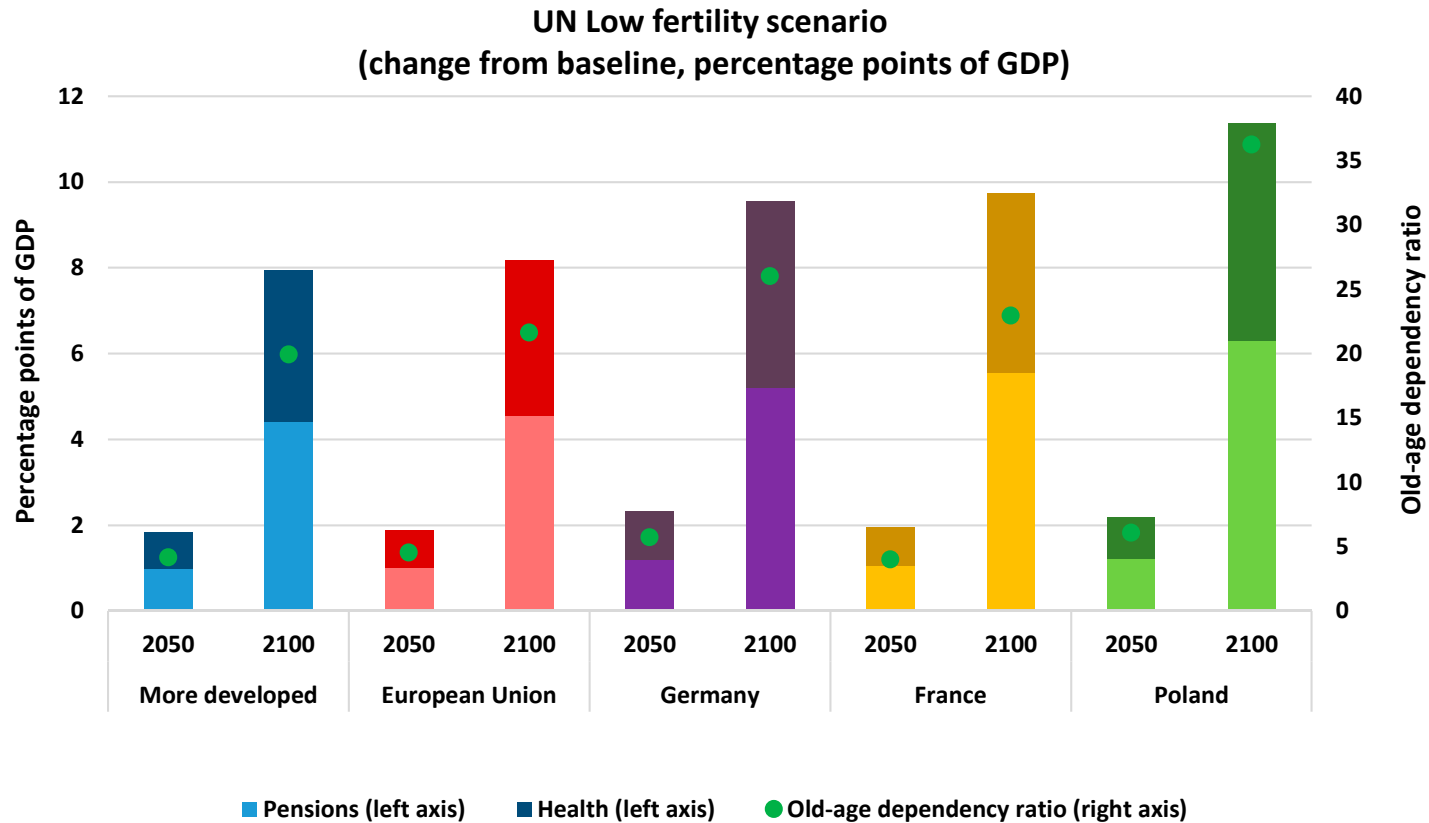
- After declining for over 100 years, fertility rates are projected to increase slightly in the more developed economies over 2015–2100
- For the less developed economies, the projections assume a continued but gradual decline in fertility rates



Lower fertility scenario



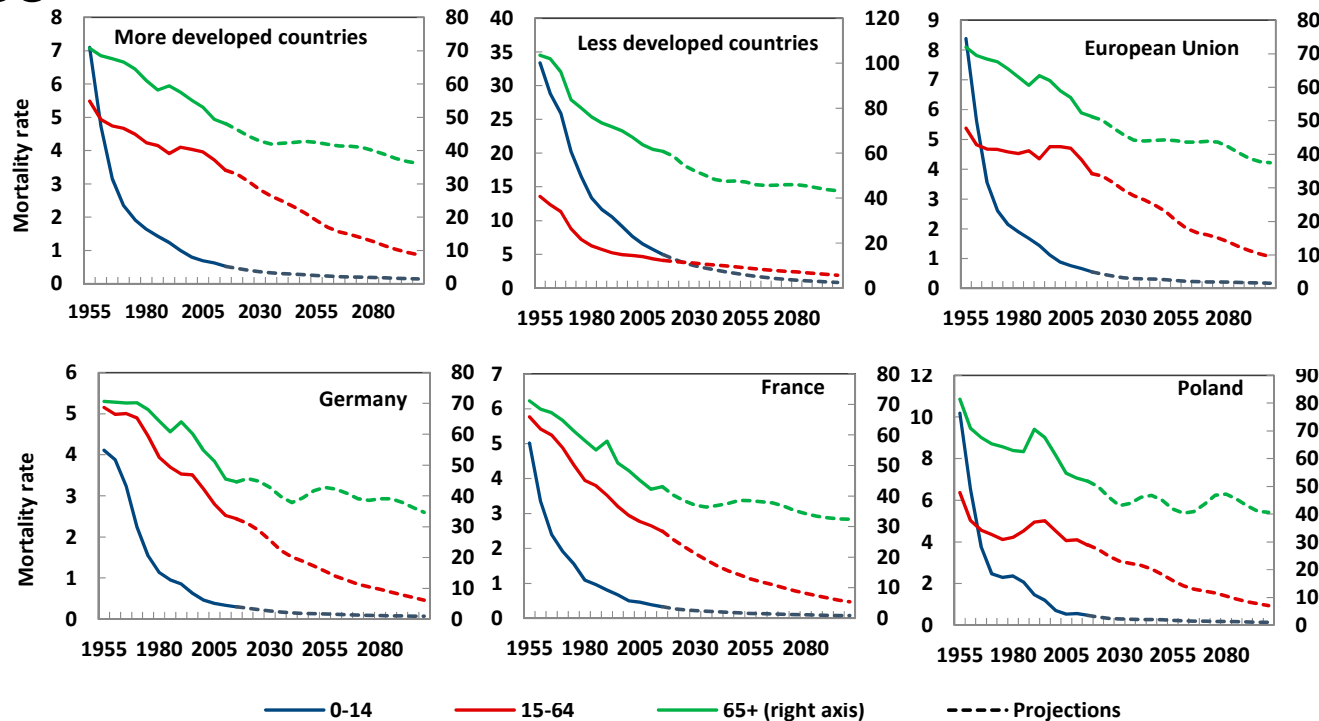
- The impact of lower fertility rates on fiscal variables is significant



Longevity



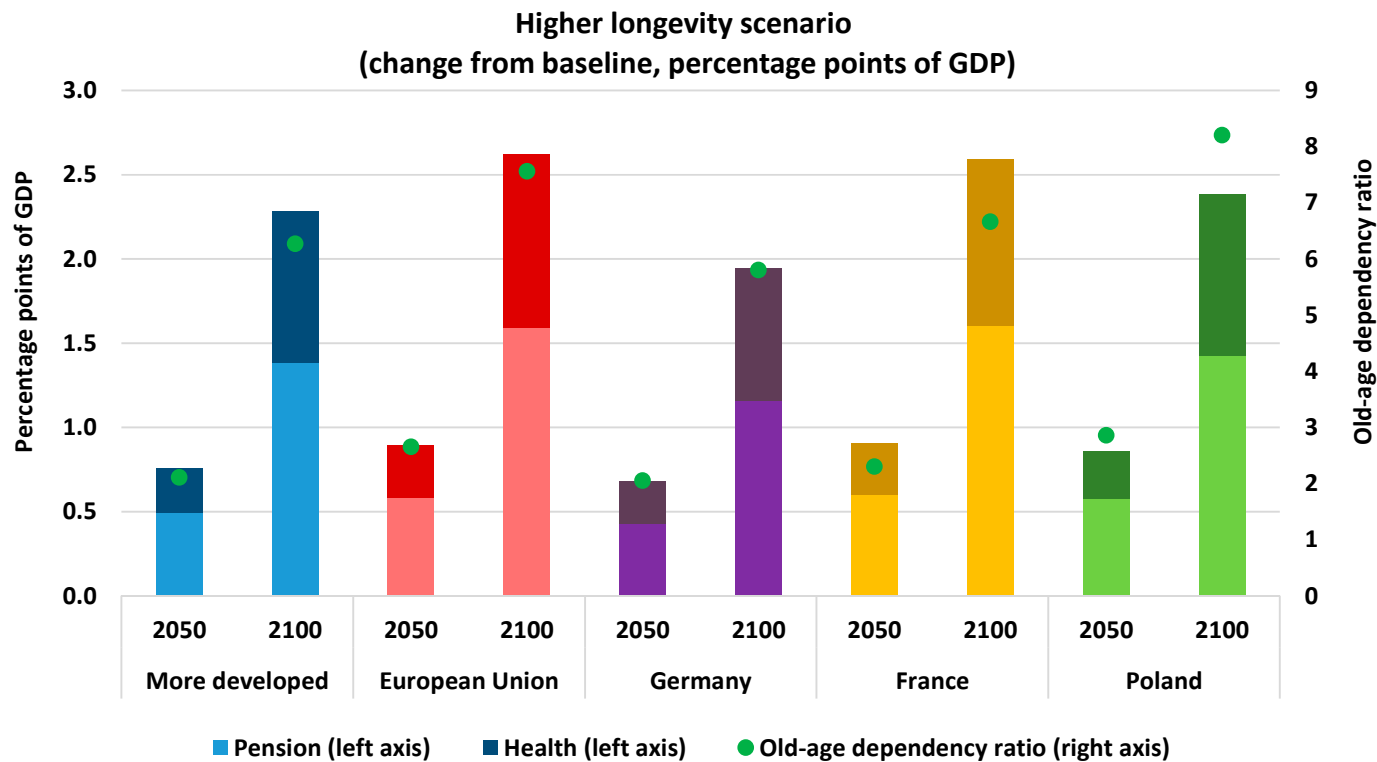
- Longevity improvement is expected to slow down in the more developed economies
- For the less developed economies, the projections suggest continued improvements in longevity



Higher longevity scenario



- Improvements in longevity can also have an important fiscal impact





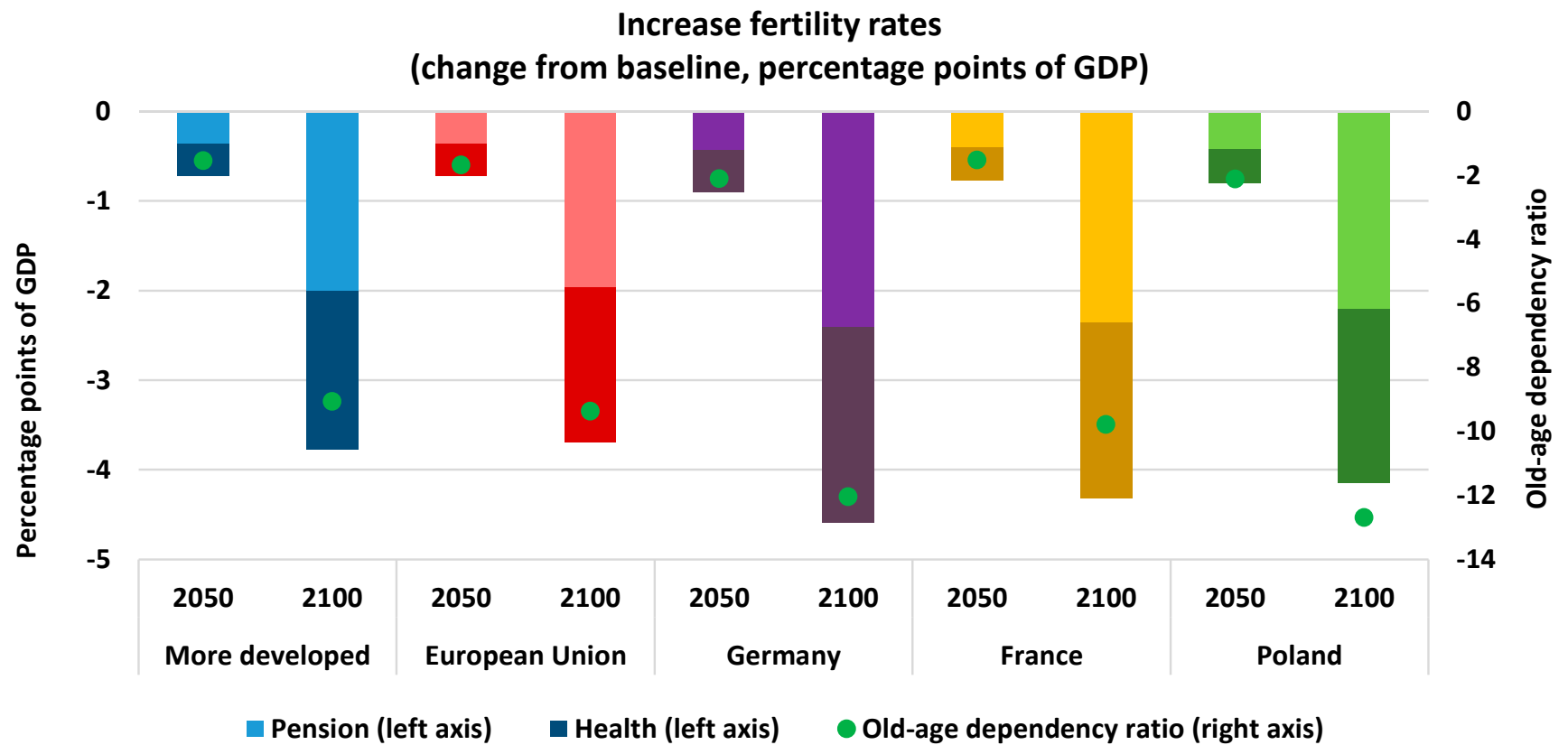
Policy Options to Address Fiscal Challenges of Shrinking Populations

Overview of policy options

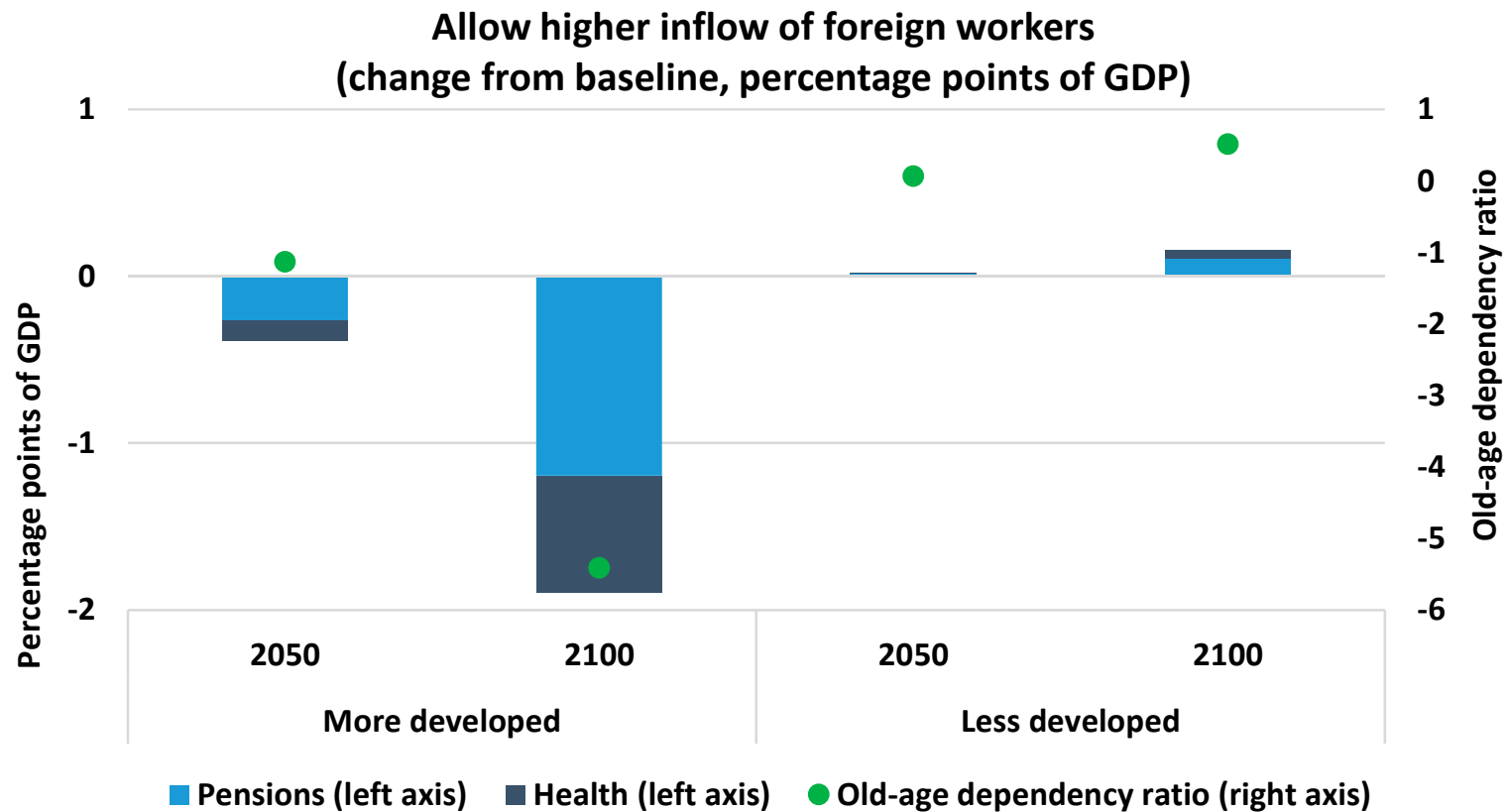


- **Categories of potential policy responses to the fiscal challenges posed by population trends:**
 1. **Policies to raise fertility rates?**
 2. **Labor market policies**
 - Allowing greater inflow of foreign workers
 - Raising labor force participation
 3. **Reforms to age-related spending programs**
 - Increasing retirement ages
 - Addressing the growth of age-related costs

Fertility rates?

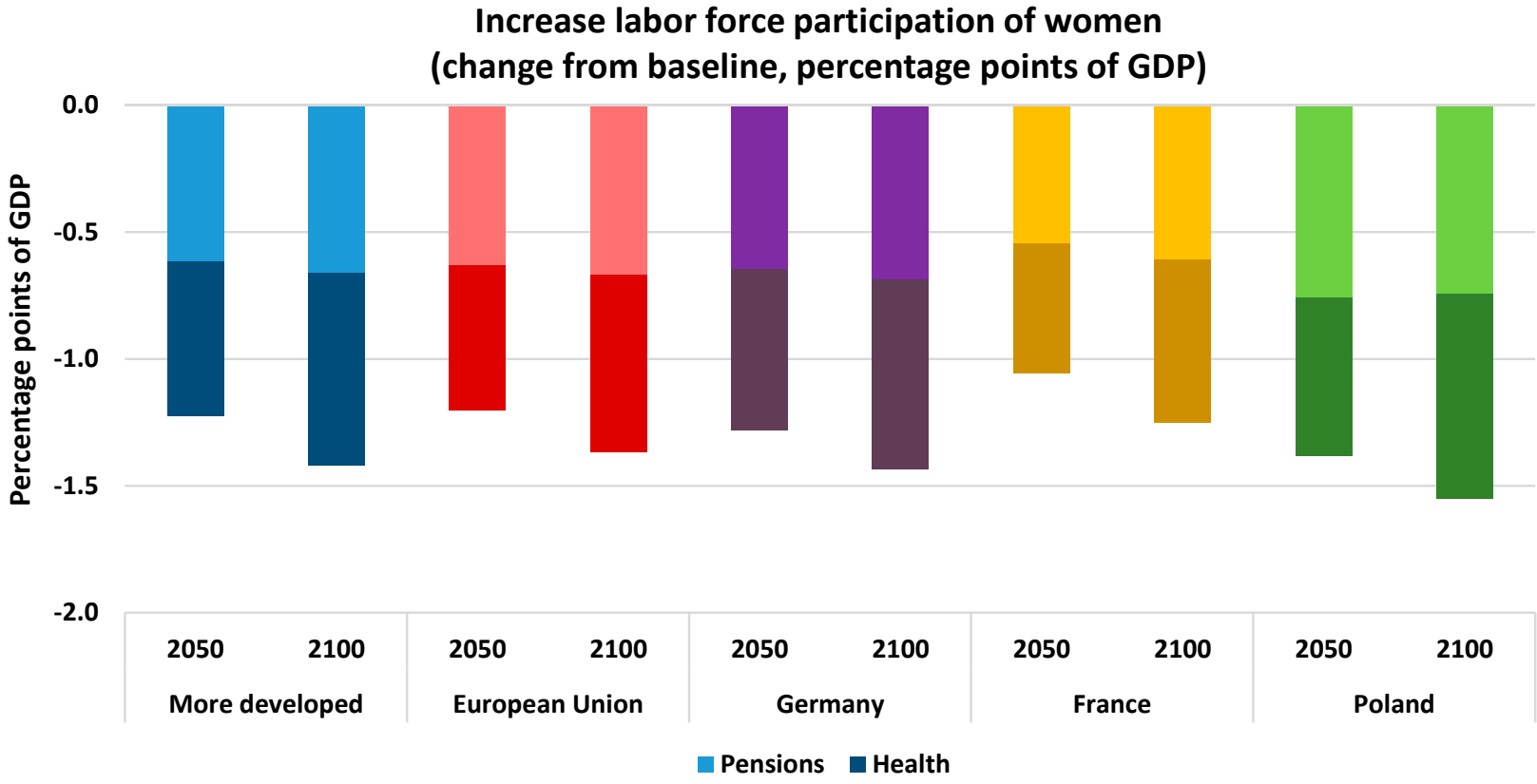


Allowing higher inflow of foreign workers





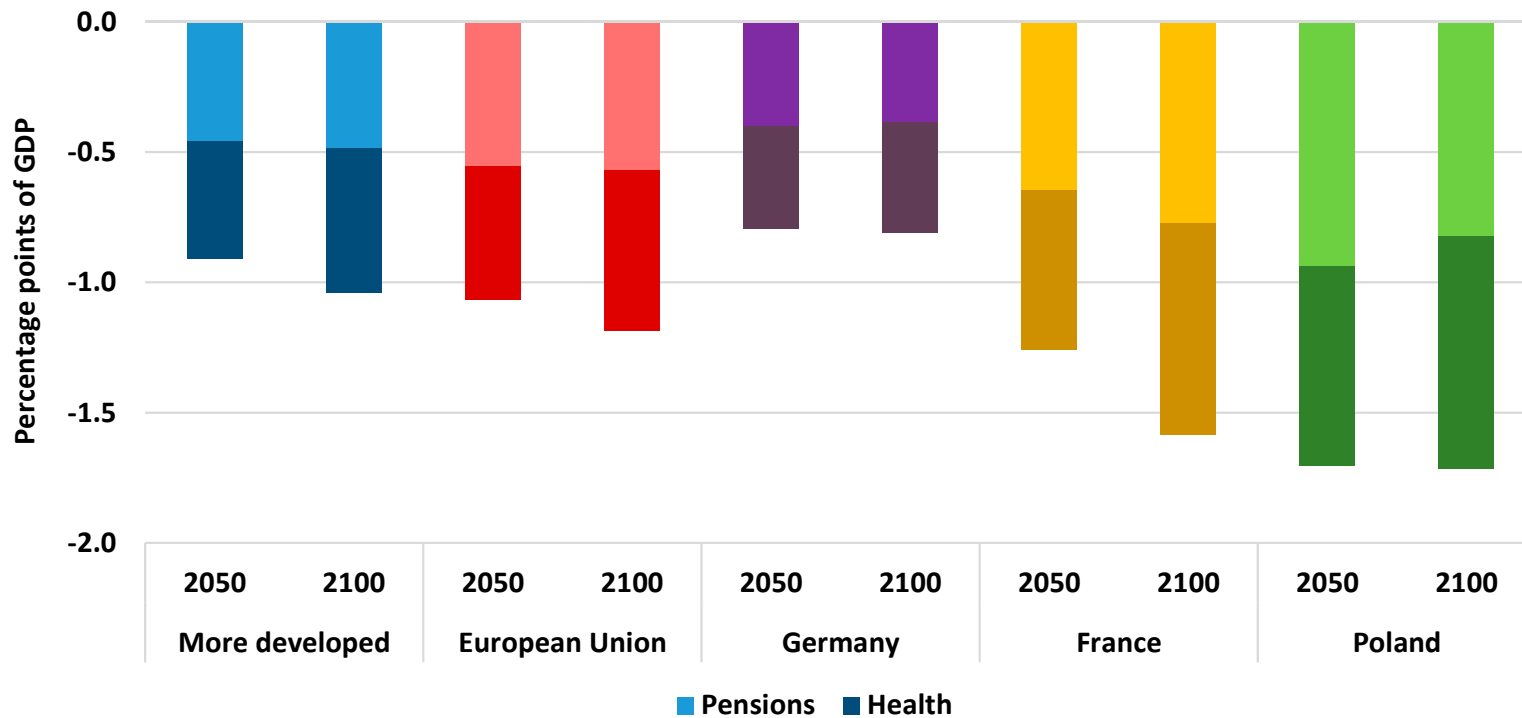
Raising labor force participation I



Raising labor force participation II

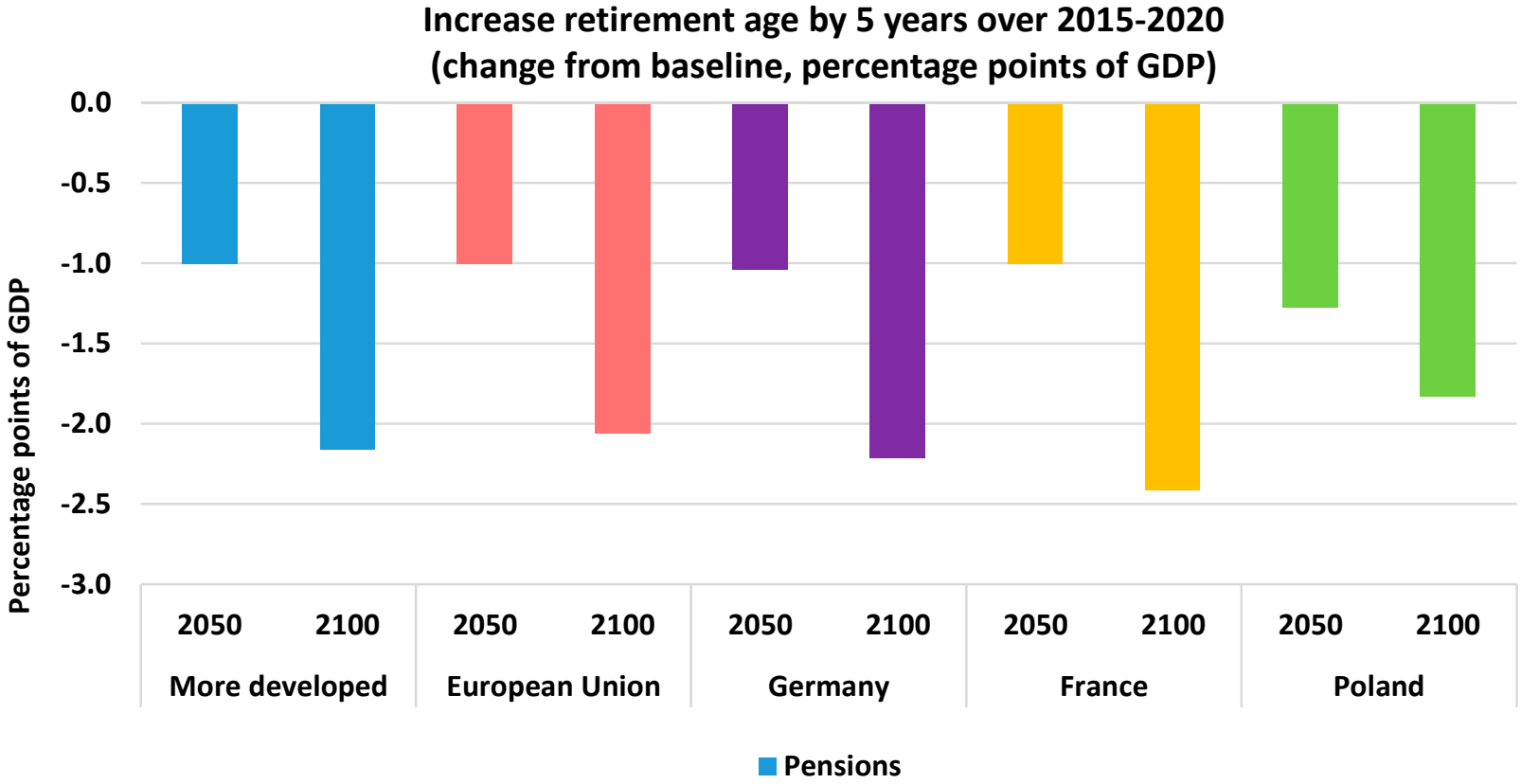


Increase labor force participation of older workers
(change from baseline, percentage points of GDP)

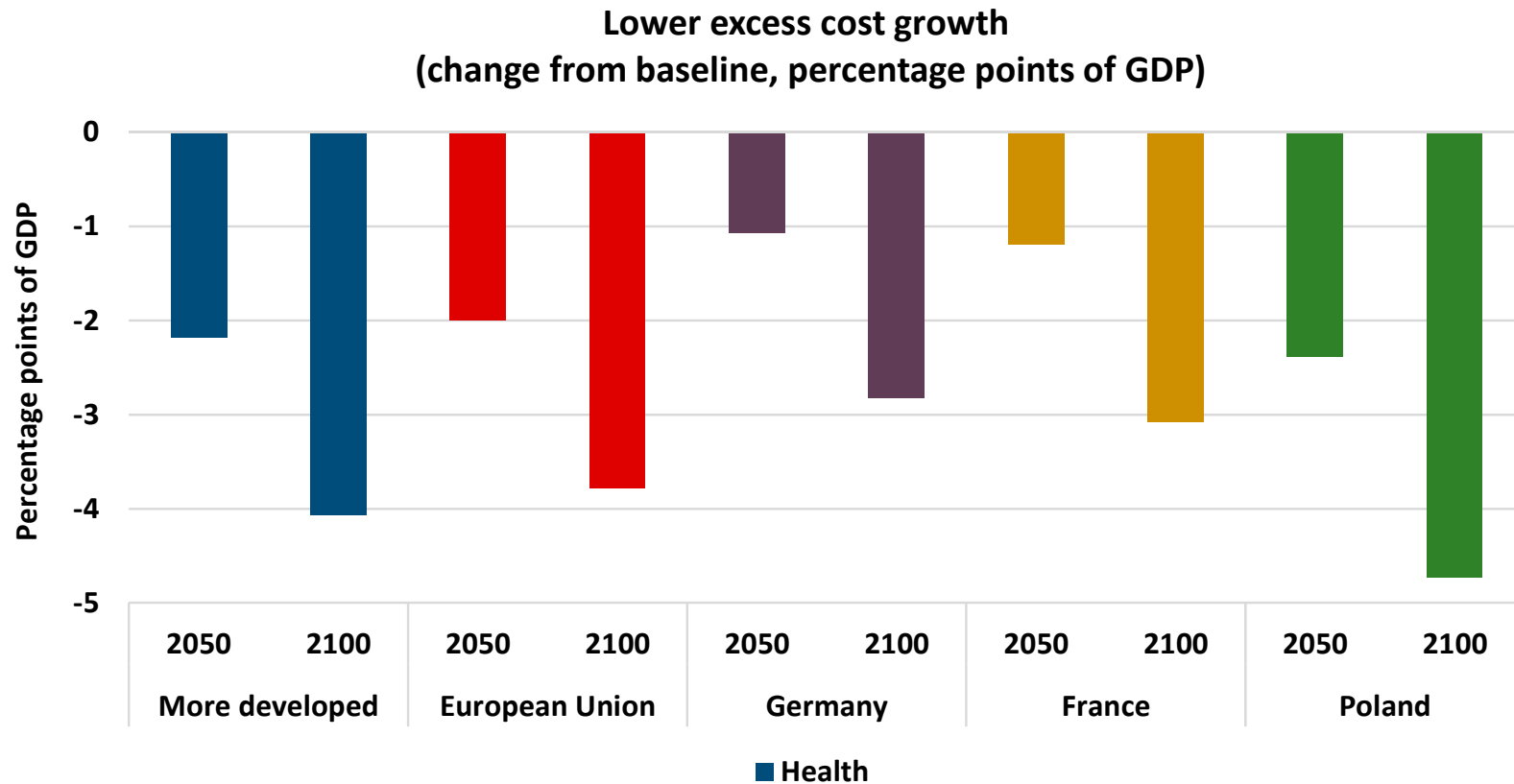




Addressing the growth of age-related costs I



Addressing the growth of age-related costs II





Conclusions

- The fall in fertility and eventual decline in world population are part of the transition to a sustainable growth path
- Nevertheless, shrinking populations pose a grave fiscal threat
- Demographic and age-related spending projections are surrounded by substantial uncertainty
- There is no escape from reforming entitlements
- Labor market policies can ameliorate the impact of aging in the more developed economies
- Given the magnitude of the fiscal challenge, reforms should start now but be gradual