

POPULATION AGEING AND THE STABILISATION ROLE OF FISCAL POLICY

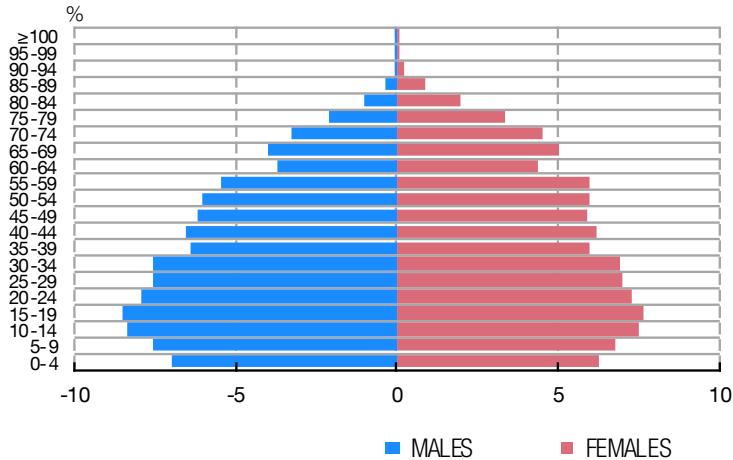
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11TH ANNUAL BCRP & RBWC

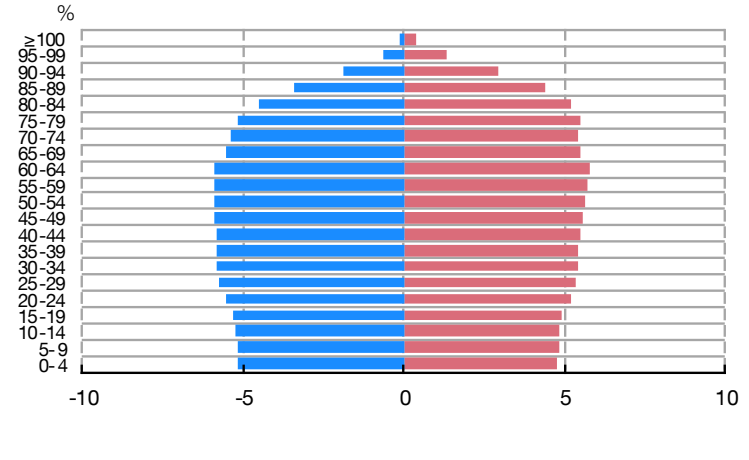
Cuzco, Perú
18 July 2019



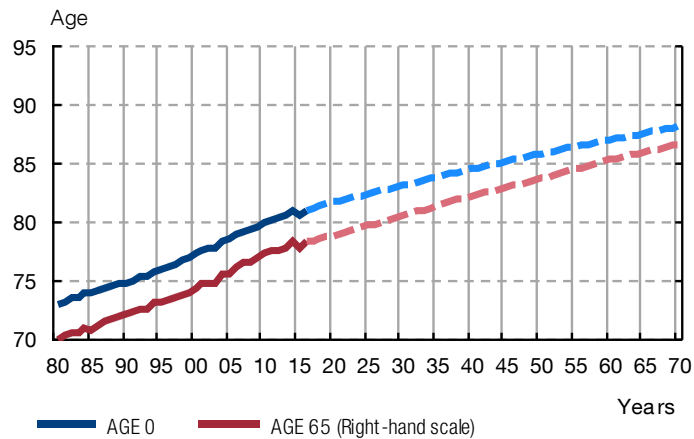
DEMOGRAPHIC PYRAMID IN 1981



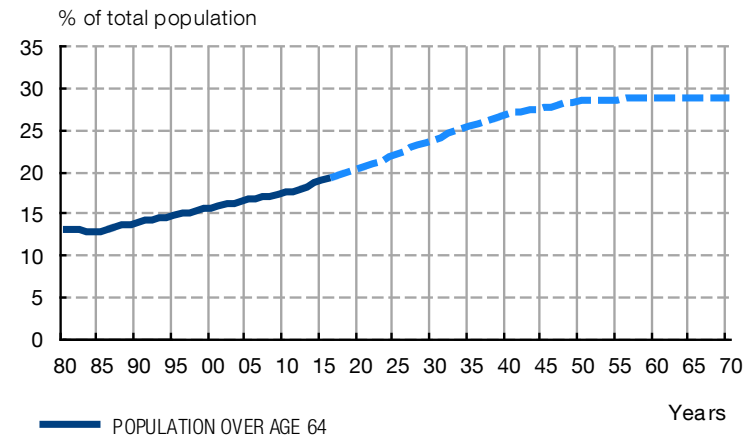
DEMOGRAPHIC PYRAMID IN 2070 (PROJECTION)



LIFE EXPECTANCY



POPULATION OVER AGE 64



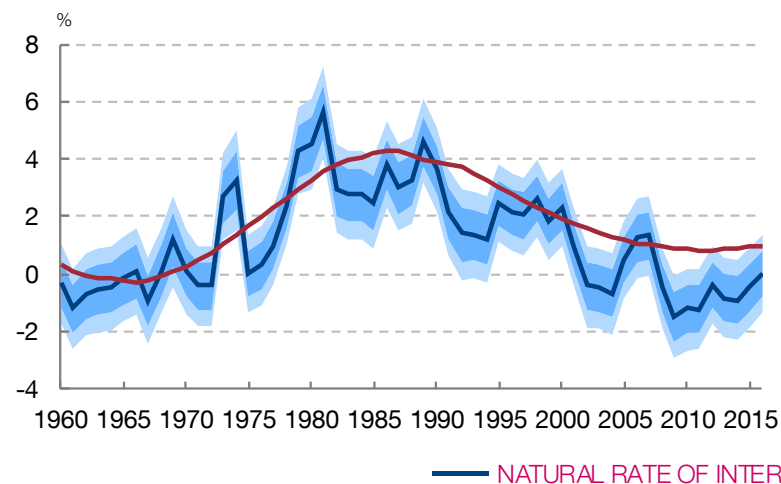
SOURCE: Eurostat.

By increasing the relative supply of savings, ageing partially explains the fall in the natural interest rate (r^*).

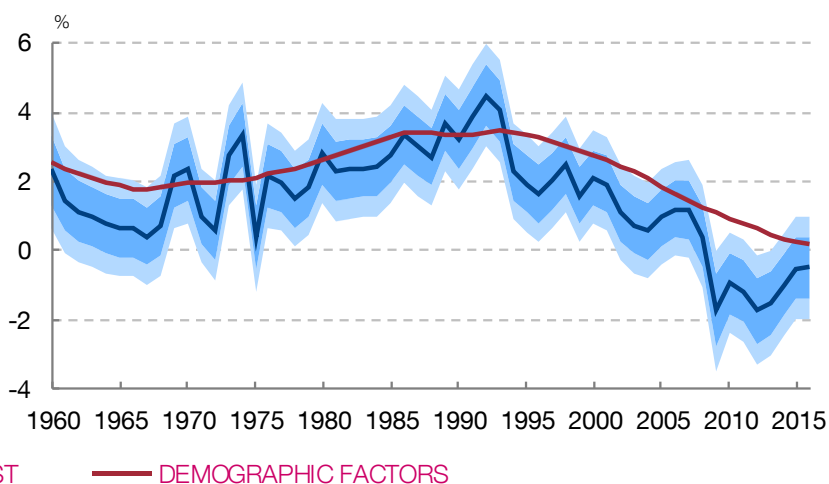
A low or negative r^* poses new challenges for stabilisation policies:

- The zero lower bound might be impacted more frequently.
- Fiscal policy may play a bigger role in sustaining aggregate demand (Eggertsson and Mehrotra, 2014).

US NATURAL RATE OF INTEREST. ERROR CORRECTION MODEL



EURO AREA NATURAL RATE OF INTEREST. ERROR CORRECTION MODEL

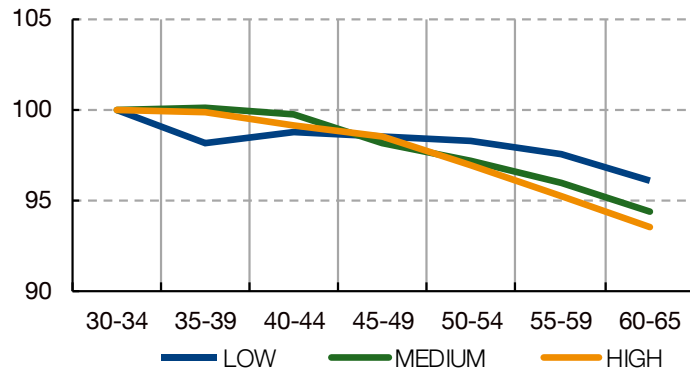


SOURCE: Fiorentini, Galesi, Pérez-Quirós and Sentana (2018).

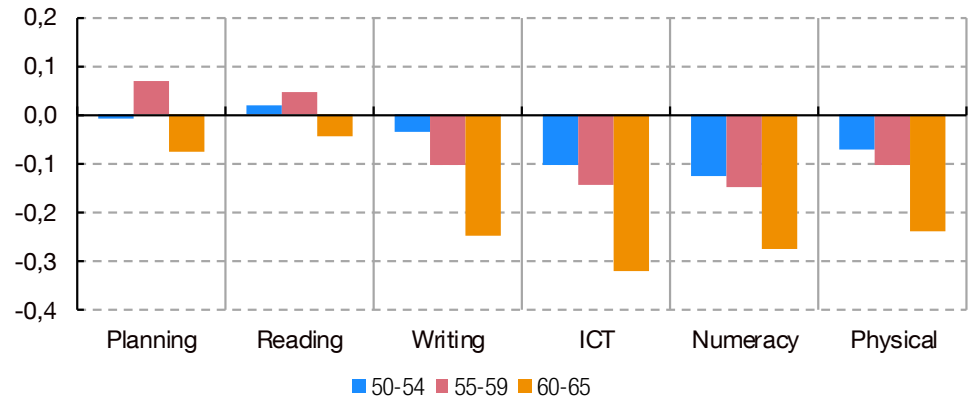
Ageing is associated with lower employment rates and innovation (Aksoy et al., 2015), thus projected output growth shrinks.

Older workers have fewer of the cognitive skills needed to use new technologies.

PIAAC NUMERACY SCORE BY EDUCATIONAL ATTAINMENT LEVEL (a) (100= 30-34 age group)



CHANGE IN SKILLS USED COMPARED WITH 30-34 AGE GROUP (b)



SOURCE: Banco de España with OECD data (PIAAC, 2013).

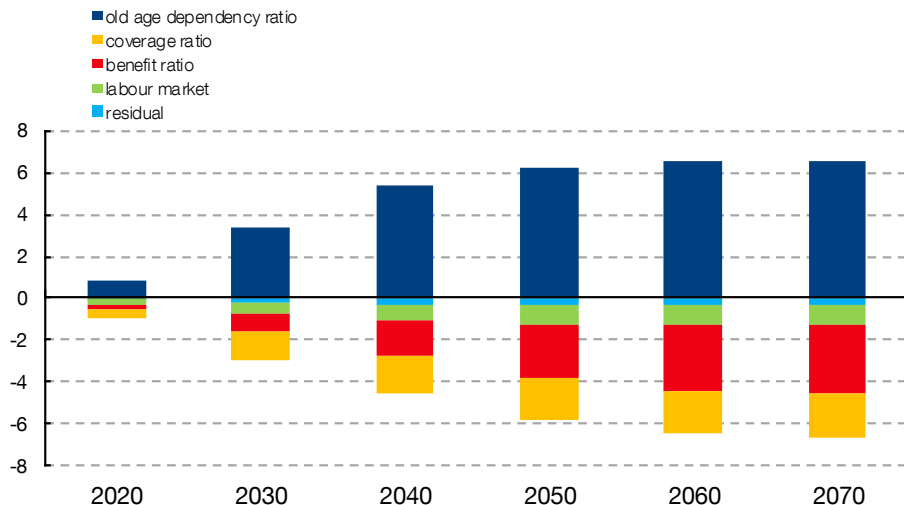
a. Low educational attainment level=lower secondary education or less; medium educational attainment level = upper secondary education; high educational attainment level = university education or more. The series represent the average of the countries included in PIAAC.

b. The bars denote the estimated coefficient of an indicator for each of the age groups (50-54, 55-59 and 60-65) in a regression which dependent variable is the intensity of the usage of a particular skill at work. The regression also includes other control variables such as sex, educational attainment, sector and occupation. The sample comprises all countries included in PIAAC.

Ageing leads to higher public pension spending, while institutional reforms and improvements in the labour market may offset this.
Health spending evidences a marked life-cycle profile.

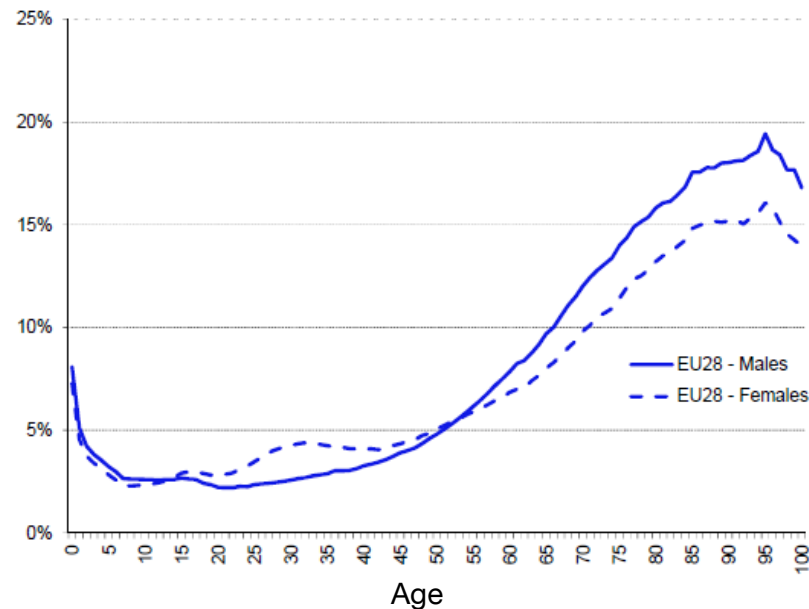
Drivers of changes in pension expenditure

EU28. Percentage points of GDP; changes relative to 2016.



SOURCE: 2018 Ageing Report.

Age-specific expenditure profiles of health care provision in 2016



- There is a negative relationship between ageing and the labour share (Glover-Short 2018) through, e.g. more robotisation (Acemoglu and Restrepo, 2017).

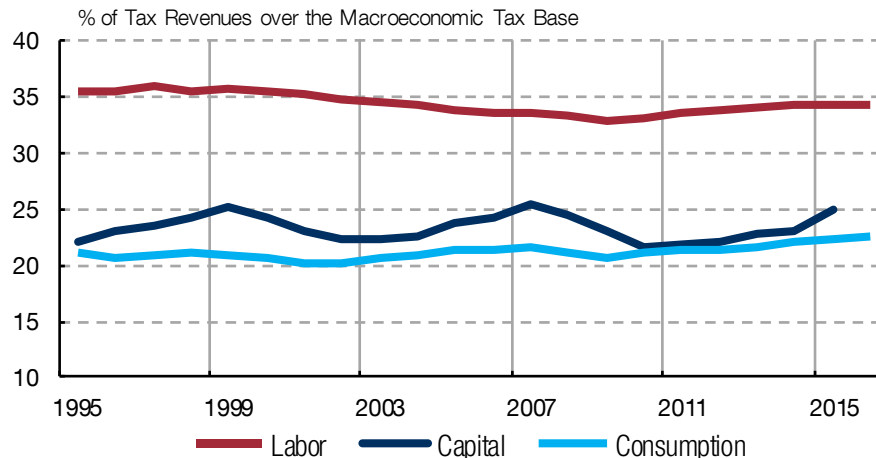
Ageing is associated with higher accumulation of assets.

The EU tax structure is biased towards labour income, which is taxed higher relative to capital income.

- Ageing also alters the composition of the consumption basket towards goods and services with lower effective taxation.

As a result, effective rates for older people tend to be lower than for prime-age individuals.

Implicit Tax Rates in the European Union 1995-2016



Source: Taxation Trends in the European Union, Eurostat (2017).

AVERAGE EFFECTIVE TAX RATES BY AGE GROUP (SPAIN, 2015)



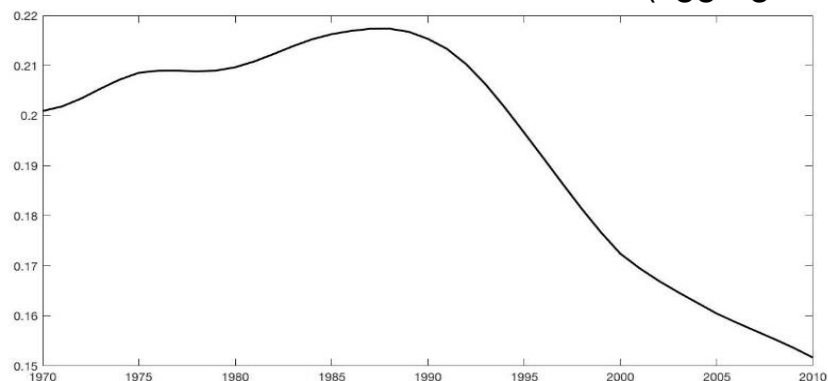
SOURCE: Banco de España.

Ageing may erode fiscal stabilisers - via reduction in relative weight of progressive income taxation, increase in structural spending, or greater role of capital taxation.

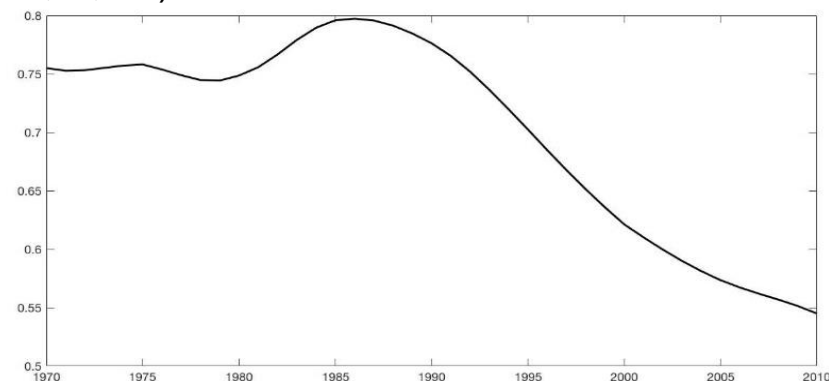
Age composition of population affects the transmission of fiscal policy – youth consumption is more responsive to policy, thus ageing decreases government spending fiscal multipliers (Basso and Rachedi, 2018 and Alloza and Sanz, 2018).

An aged society may require more targeted and discretionary fiscal interventions

Demographics and fiscal multipliers
(aggregate of DE, FR, IT, ES)



(a) Share of Young (20-30 years old)

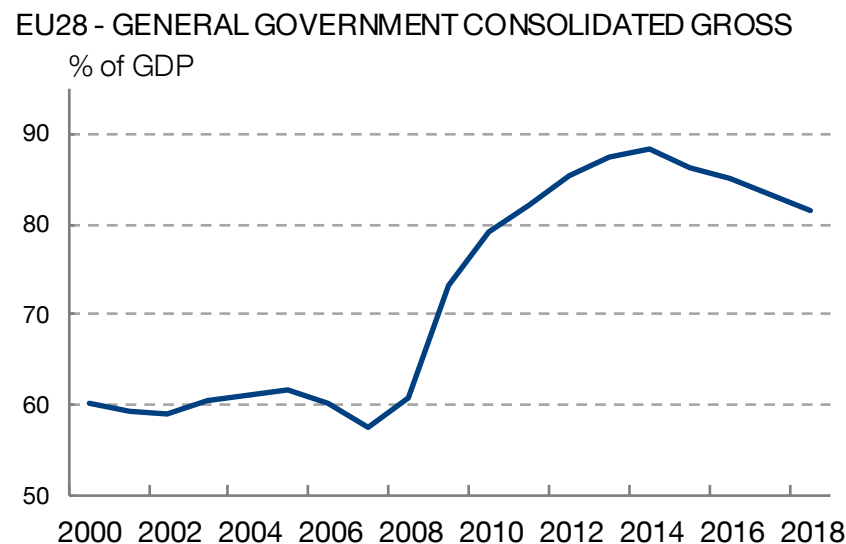
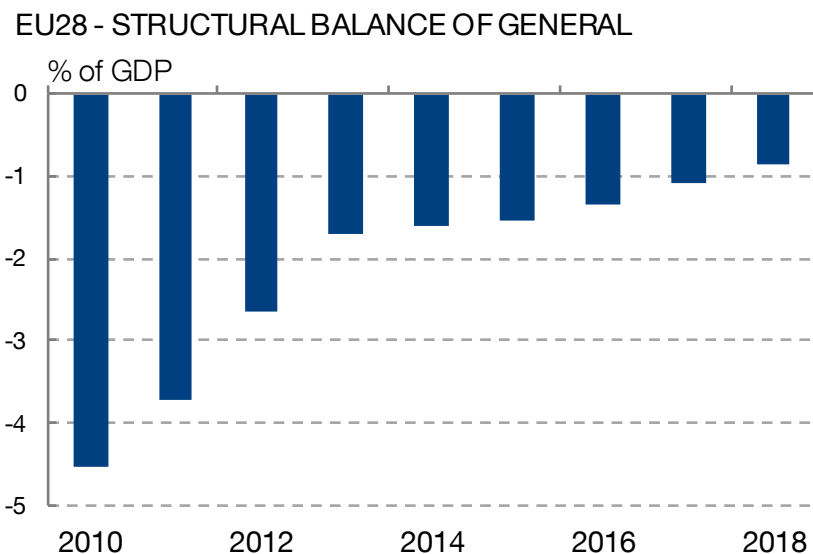


(b) Fiscal Multiplier

Note: Share of 20-30 year old in the population and fiscal multipliers for Europe (France, Germany, Italy and Spain). Source: Basso and Rachedi (2017).

Despite its recent downward trend, the public debt in the EU remains above 80% of GDP.

Population ageing, by putting pressure on public expenditure and affecting tax revenues, can hamper the process of fiscal consolidation.

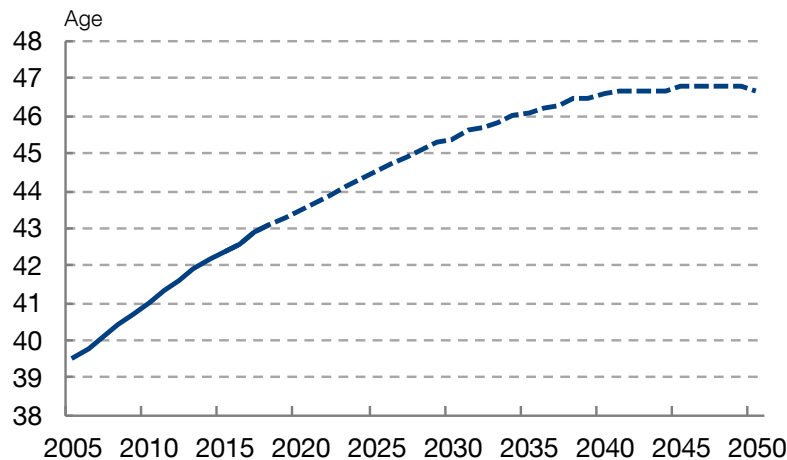


SOURCE: Ameco.

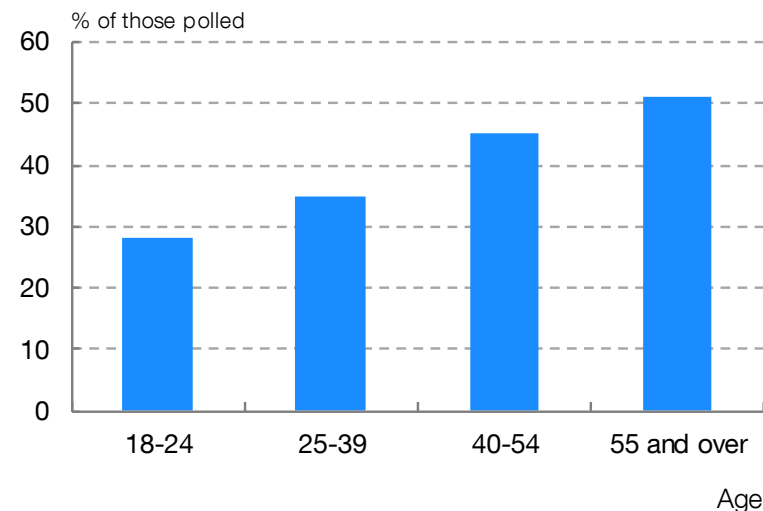
The median age of the population in the EU will rise dramatically between 2018 and 2050 (from 43.1 to 46.7 years).

If historical patterns of electoral participation by age group hold constant, public support for policies financed by income transfers to older people could rise.

MEDIAN AGE IN EU28



ELECTORAL PARTICIPATION, BY AGE (a)



SOURCES: Eurostat, European Parliament, and TNS opinion.

a. Percentages by age group of persons indicating, in the post-electoral poll conducted by TNS opinion, that they had voted in the 2014 European Elections.

Arguments for a more active role of fiscal policy:

- Secular stagnation and the effective zero lower bound constraint on monetary policy.
- In a world of low interest rates, public deficits could be higher without significant debt sustainability risks.

Reasons to be cautious:

- Ageing might lead to lower potential output growth, higher public expenditure and lower taxes, which could increase sustainability concerns.
- Ageing could lead to lower fiscal multipliers.
- Political process limits the timeliness and flexibility of fiscal policy as a stabilisation tool.

THANK YOU FOR YOUR ATTENTION

