RETIREMENT AGE

One size does not fit all

Ciclo de seminários GEE/GPEARI

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1. MOTIVATION
POPULATION AGEING

Low fertility
rates
+
Increases in
life
expectancy
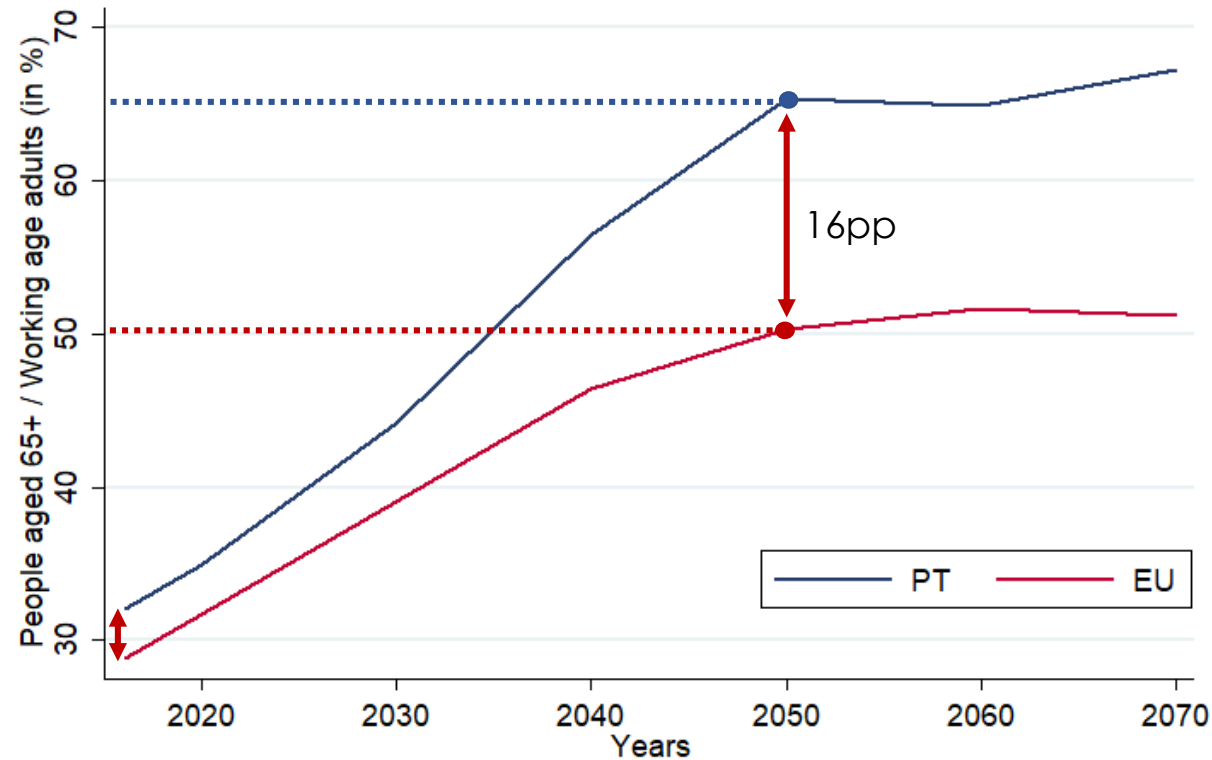
In 2016

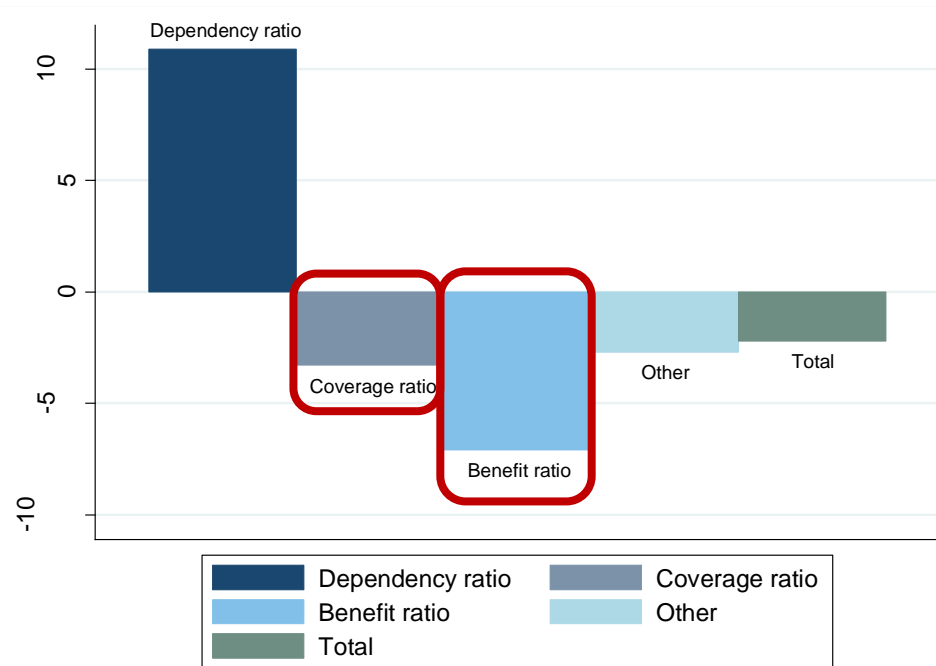The old-age dependency ratio in Portugal was 32% and 29% for the EU.

In 2070

In 50 years, the ratio will reach 67% for Portugal and 51% for the EU.

DECOMPOSITION OF THE INCREASE IN THE PUBLIC PENSION EXPENDITURE (% GDP) 2016-70

Source: author's own computations based on the AWG 2018 projections

Financial sustainability ensured at the cost of people **1) retiring later** with **2) lower benefits**

IS THE ADEQUACY OF PENSIONS BEING ENSURED IN TERMS OF

1) AGE OF TAKE-UP

2) BENEFIT'S LEVEL

1. MOTIVATION
AGE OF TAKE-UP

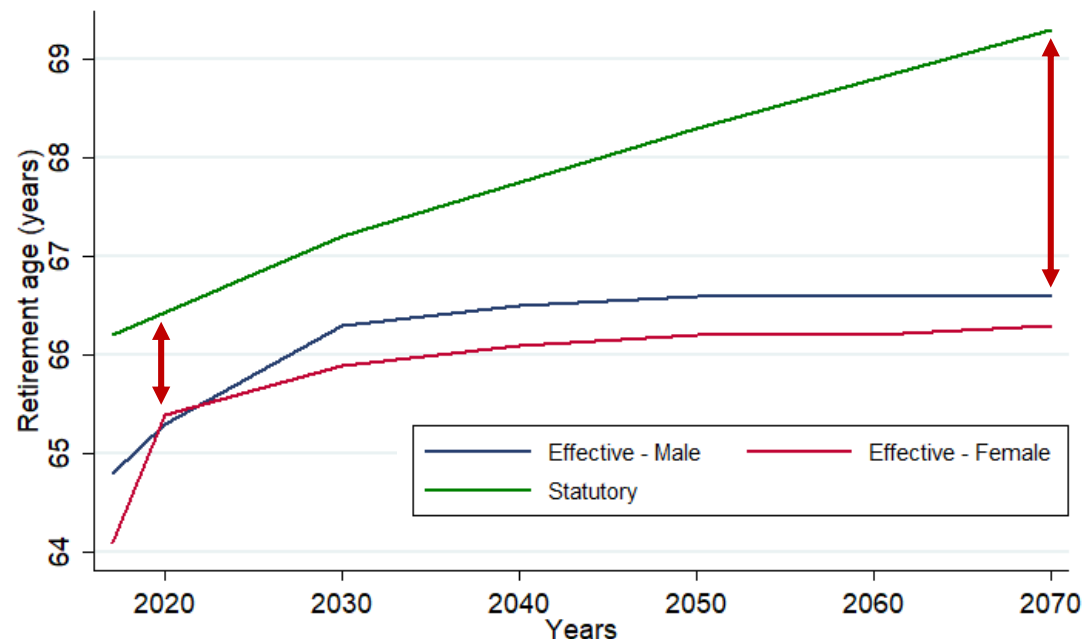Insufficient counterbalancing effect of the coverage ratio (% GDP) with regards to the ageing effect

➕

Projections of low productivity gains and already large reductions in the pension generosity

⬇

LRA key element to address ageing burden on the pension system

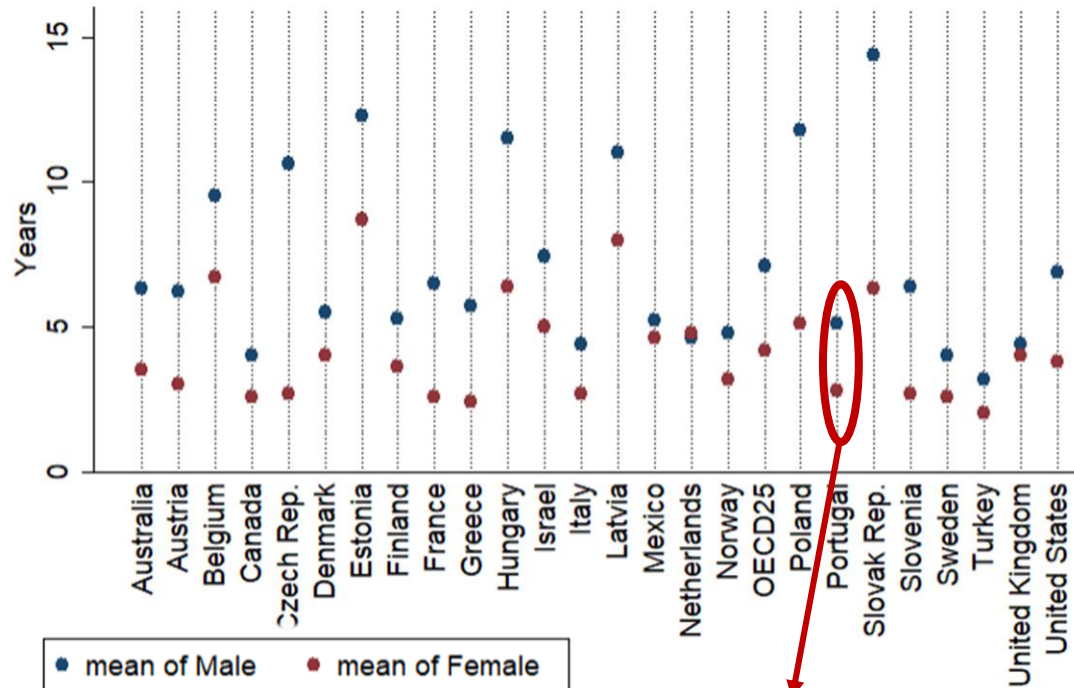PROJECTIONS ON STATUTORY AND EFFECTIVE RETIREMENT AGES UNTIL 2070

Source: author's own computations based on the AWG 2018 projections

1. MOTIVATION
INDIVIDUAL HETEROGENEITY

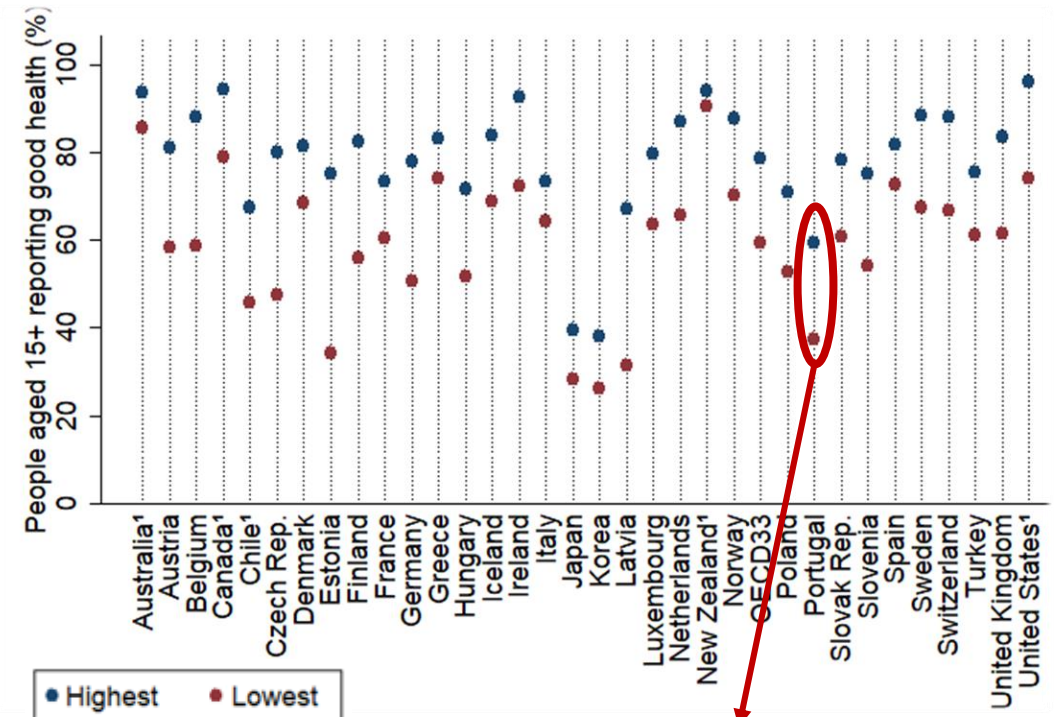### DIFFERENCES IN LIFE EXPECTANCY AT 30, DEPENDING ON EDUCATION LEVEL (2015)

Highly educated men are expected to live 5 more years than those poorly educated. For women, these figure is close to 3 years.

SELF-REPORTED HEALTH CONDITION, DEPENDING ON INCOME LEVEL (2015))

Nearly 60% of high-income individuals report being in good health. For low-income individuals that value is lower than 40%.

2. RESEARCH QUESTION

1. What are the forces shaping the planned retirement age of different individuals?
   Quais as forças que moldam as preferências por diferentes idades de reforma?

2. Are these forces impacting early and late retirement seekers equally?
   Será que estas forças impactam de forma diferente aqueles que pretendem reformar-se ante e postecipadamente?

3. EMPIRICAL STRATEGY

$$(1) \quad ERA_i = \beta_0 + \sum_{n=1}^{N} \beta_n X_i + \varepsilon_i$$

$$(2) \quad ERA_i = \beta_0 + \sum_n \beta_n X_i + \beta_k POST_i + \sum_j \beta_j X_i * POST_i + \varepsilon_i$$

where,

ERA is the expected retirement age of individual I

X denotes all explanatory variables

POST is a dummy variable that equals 1 if the individual plans to retire after the LRA and 0 otherwise

4. LITERATURE REVIEW

Henkens and Tazelaar (1997) and Harkonmäki et al. (2009) find ERA is a good proxy for effective retirement age

DEMOGRAPHIC CHARACTERISTICS

Gender
- No effect (Disney et al., 2006)
- Male => early retirement (Dahl et al., 2003)

EDUCATION

- Low levels => early retirement (Alavinia and Burdorf, 2008)
- High levels => late retirement (Preter et al., 2013, and Larsen and Pedersen, 2017)

HEALTH

- Poor general health status => early retirement (Dwyer and Hu, 2000, and Karpansalo et al., 2004)
- Declines health condition => early retirement (Bound et al., 1999)
- Poor physical condition <65 => early retirement (Cai and Kalb, 2006)
- Good physical condition >65 => late retirement (Larsen and Pedersen, 2017)
- Poor mental health => early retirement

4. LITERATURE REVIEW

INCOME

- High income => early retirement (Mein et al., 2000, and Moreira et al., 2018)

PENSIONS

- High replacement rates => ↑ Pr early retirement (Moreira et al., 2018)
- High expectations on government raising LRA => ↓ Pr early retirement (Moreira et al., 2018)

EMPLOYMENT

- Industrial sector => early retirement (De Preter et al., 2012) – link to poor health conditions
- High job satisfaction => late retirement (Siegrist et al., 2007)
- Poor job conditions => early retirement (Moreira et al., 2018)
- Correlation between health and job satisfaction (Cai, 2010)

5. DATA
DATABASE

SHARE – *Survey on Health Ageing and Retirement in Europe*

- Micro-level database on health, socio-economic status and social and family networks

- More than 120 000 aged 50+ from 27 European countries and Israel

- Portugal: 2011 (wave 4) and 2015 (wave 6)

- 379 respondents with 312 having information also in 2011

    - 1676 respondents in 2015 (1505 were also interviewed in 2011)

    - We target those not retired yet - 34%

- Simplified version – easySHARE
    - + age of pension collection
    - + risk aversion measure
    - + replacement rate
    - + contributory career's length
    - + expectation on government raising the LRA
    - + sector of activity

5. DATA
VARIABLES & DESCRIPTIVE STATISTICS (%/MEAN)

DEMOGRAPHIC

Age (59)

Female (61%)

Partner (87%)

Rural (29%)

Age of expected retirement (65)

EDUCATION

Years of education
- [0;4] – 39%
-]4;9] – 34%
-]9;24] – 27%

Cognitive skills
- [0;7] – 13%
-]7;12] – 74%
-]12;15] – 13%

HEALTH

Poor health (54%)

Health worse (22%)

Chronic illness (64%)

Physical limitations (11%)

Depression (11%)

INCOME

Household income
- [p0;p25] – 25%
-]p25;p75] – 75%
-]p75;p100] – 100%

Variations (13%)

PENSIONS

Years of contributions (32)

Private (6%)

Expectations on LRA (43%)

Information (15%)

JOB

Current job situation
- Employed (70%)
- Unemployed (18%)
- Homemaker (12%)

Sector
- Primary (8%)
- Secondary (14%)
- Tertiary (78%)

Satisfaction (11%)

Variations in satisfaction (10%)

Public sector (18%)

6. RESULTS

Dependent variable:
Age of expected retirement

		Model (1)	Model (2)	Model (3)
Demography				
Age		0.22***	0.24***	0.26***
Female		0.33	0.25	0.11
Partner in the household		0.20	0.22	-0.79*
Rural		0.29	0.27	0.64
Education and skills				
Education				
	]4;9]	-0.24	-0.17	-0.12
	]9;24]	-0.38	-0.11	-0.57
Cognitive capabilities				
	[0;7]	0.01	0.31	-0.07
	[13;15]	0.27	0.32	-0.10
Health status				
Poor health		-0.88***		-1.13**
Health became worse				0.16
Chronicly ill			-0.75***	
Physical limitations			-0.21	
Very depressed		-1.04*	-1.28**	-1.87**

6. RESULTS

	(1)	(2)	(3)
Income			
Household income			
Poor	0.29	0.19	-0.08
Rich	0.39	0.27	0.35
Significant income variation			0.8
Pension-related			
Years of contributions	-0.06***	-0.05***	-0.05**
Private	-0.30	-0.39	-1.03
Expects government raises retirement age			-0.26
Information scenario on pensions			0.02
Job-related			
Current job situation			
Unemployed	-1.77***	-1.72***	-2.34***
Homemaker	-0.95**	-0.9**	-0.3
Sector			
Secondary			0.18
Tertiary			-0.43
Very satisfied	0.35	0.29	0.22
Public sector	0.22	0.34	0.32
Constant	53.87***	52.94***	53.32***
Observations	341	341	199
R-squared	25%	24%	30%

6. RESULTS

Age of expected retirement

		Model (4)	
		Early	Post
Demography			
Age		0.21***	0.06
Female		0.49	-0.13
Partner in the household		0.3	0.34
Rural		0.37	0.31
Education and skills			
Education			
	]4;9]	-0.42	-0.19
	]9;24]	-0.64	0.1
Cognitive capabilities			
	[0;7]	-0.03	-0.47
	[13;15]	0.69	-0.68
Health status			
Poor health		-1.***	0.14
Very depressed		-0.1	0.24
Income			
Household income			
	Poor	0.14	-0.19
	Rich	0.48	1.06**
Pension-related			
Years of contributions		-0.06***	-0.03
Private		-0.21	0.62
Job-related			
Current job situation			
	Unemployed	-1.84***	-0.03
	Homemaker	-0.81*	-0.65
Very satisfied		0.55	1.11
Public sector		-0.18	0.32
Constant		54.07***	66.56***
Observations		316	
R-squared		37%	

Before/at LRA

+ Age
- Poor physical health
- Length of the contributory career
- Unemployed
- Homemaker

After LRA

+ High income
+ Job satisfaction

8. CONCLUSIONS
POLICY IMPLICATIONS

Mitigate health differences across individuals

- Ex: more inclusive health system

- Ensuring those in poor health have access to earlier retirement with adequate pensions

Promote labour market participation

- Ex: effective active labour market policies

Incentives of the system itself (particularly on long contributory careers)

Create greater incentives for individuals with lower income levels

Incentivize firms to invest on their workers' satisfaction

- Ex: award the workers' friendliest firm in each sector

PENSÕES

# Idade de reforma vai poder ficar abaixo dos 65 anos sem penalizações. Tudo depende da carreira de cada um

30/11/2018, 18:25 ↗ 774 💬 12 🔖

Governo cria "idade pessoal de reforma" e acaba com o limite mínimo dos 65 anos. Ano de aposentação passa a depender da carreira contributiva de cada um.

negocios

Governo propõe nova "idade pessoal de reforma" que pode ficar abaixo dos 65 anos

A proposta foi apresentada pelo Governo em concertação social e prevê que por cada ano de carreira acima dos 40 anos, a idade da reforma possa ser reduzida em quatro meses, agora sem limites. A alteração deverá beneficiar sobretudo pessoas com muito longas carreiras.
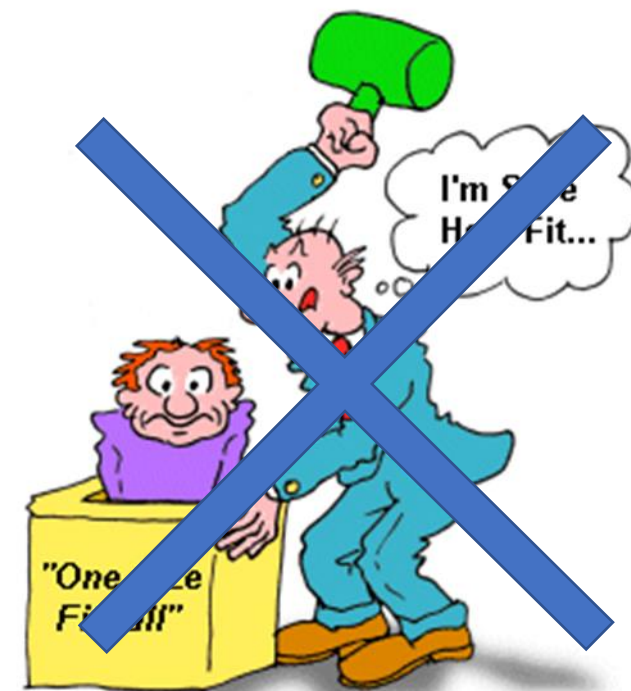
8. CONCLUSIONS
LIMITATIONS & FUTURE WORK

This study focuses the intensive margin of the retirement age

- We have also been studying (via probit models) the forces shaping the expectation on an early/late retirement

    => *Early retirement:* (+) unemployment, (+) years of contributions, (-) age, (-) high education

    => *Late retirement:* (+) public sector, (+) age, (-) homemaker, (-) rural

Limited years of observations => more waves of the SHARE for Portugal

- Studying dynamic effects (ex: changes in income or health condition)

- Follow individuals across time (changing preferences, policy changes' effects and link between planned and expected retirement)

Focuses the supply side of the story (mostly) but…

- Portuguese badly perceive older workers

    => Further research on labour demand factors

    => Further research on employment of youngsters and elderly - interactions

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OBRIGADA