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Cashing in your Housing Wealth: Using Equity Release Schemes to enhance Retirement Security

Jorge Bravo, NOVA IMS

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**Cashing in your Housing Wealth:
Using Equity Release Schemes to Enhance Retirement
security**

**Jorge Miguel Bravo (NOVA IMS & Université Paris-
Dauphine PSL)**

**Call Poupança e Financiamento da Economia Portuguesa, Dec.
10, 2019**

I Z A Institute
of Labor Economics

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DISCUSSION PAPER SERIES

IZA DP No. 12656

Making Use of Home Equity: The Potential of Housing Wealth to Enhance Retirement Security

Jorge Bravo
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Making use of Home Equity: The Potential of Housing Wealth to Enhance Retirement Security

Robert Holzmann, Mercedes Ayuso and
Jorge Bravo

Informe PSA sobre Educación Financiera elaborado por



con el apoyo de BBVA



Agenda

1. Motivation
2. Setting the scene
3. Households asset allocation in the Euro Area
4. Housing tenure distribution
5. Ownership of HMR
6. Home Equity and Equity-to-Value ratio
7. A Menu of Equity Release Mechanisms
8. Obstacles and challenges to ERS development
9. Final remarks

Motivation

- The background
 - The demographic change
 - the increasing problems of PAYGO social security systems
 - fiscally driven public pension reforms
 - the move from NDB towards FDC pension schemes
 - the decreasing generosity of public health care systems and of public annuities
 - adequacy and poverty concerns
 - the reduction in the traditional family support at old-age
- ... all have increased the need for additional private savings to cover the old age income gap and to avoid relying on state-managed social transfers to counter the risks of poverty

Setting the scene

- Although private pensions are becoming more widespread, the coverage rates are still small and the contribution amounts insignificant in most cases
- Most DC scheme members have not contributed enough to receive even a modest income stream in retirement
- For the contrary, building up housing wealth through homeownership and mortgage repayment is by far the main way European households set aside for old age
- In the Euro area countries, the household's wealth (excluding pension wealth) is primarily held in the form of real assets (82.2% of total assets)
- The largest component of real assets is the household main residence (HMR)
- In the EU, roughly 70% of Europeans live in owner occupied accommodation
- The proportion of home owners by age band has been steadily increasing with each successive generation

Setting the scene

- Personal pensions and private homeownership are the two main assets individuals have to finance (supplement) retirement consumption in an asset-based approach to welfare
 - They both involve long-term saving and investment decisions over the life cycle,
 - they are motivated by potentially competing objectives and
 - generate different options and outcomes at old-age
- Home homeownership provides a stream of housing services starting at time of house acquisition and represents wealth which could be liquidated in old age if needed
- The asset serves both consumption and investment functions, which are assessed differently by households based on their personal preferences
- Contrary to renting, home ownership is regarded by individuals as an investment in asset-building, a better option to cope with inflation and to profit from house price appreciation
- Access to affordable housing is crucial to any retirement income system

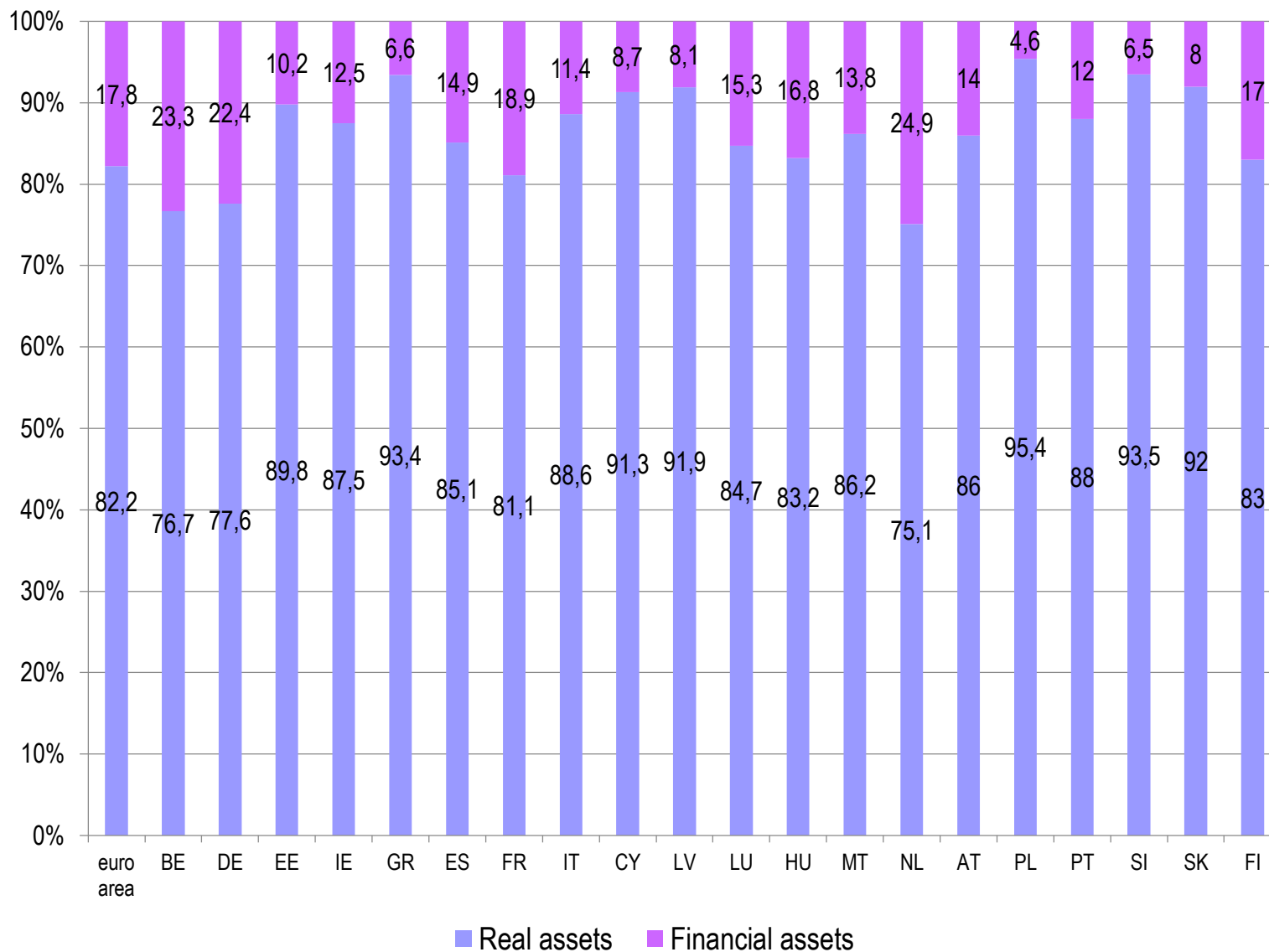
Setting the scene

- Personal pension assets serve mainly as an investment vehicle and have benefits commencing only at the retirement age
- Both financial products and property assets may increase in value over time and expand future consumption opportunities but there are risks involved
- Both can, at least in theory, be used in the future to supplement consumption and welfare needs
- They have, however, different levels of liquidity and their initiation and mobilization entails in the case of home equity significant monetary and non-monetary costs
- Accumulating wealth through homeownership usually requires entering into a fixed or floating-rate mortgage loan on the mortgage market to buy a house and saving over the working lifetime to pay off the debt
- households owning their dwelling benefited substantially from accrued capital gains
- this may trigger a housing wealth effect with important macroeconomic impact on consumption, saving and economic growth

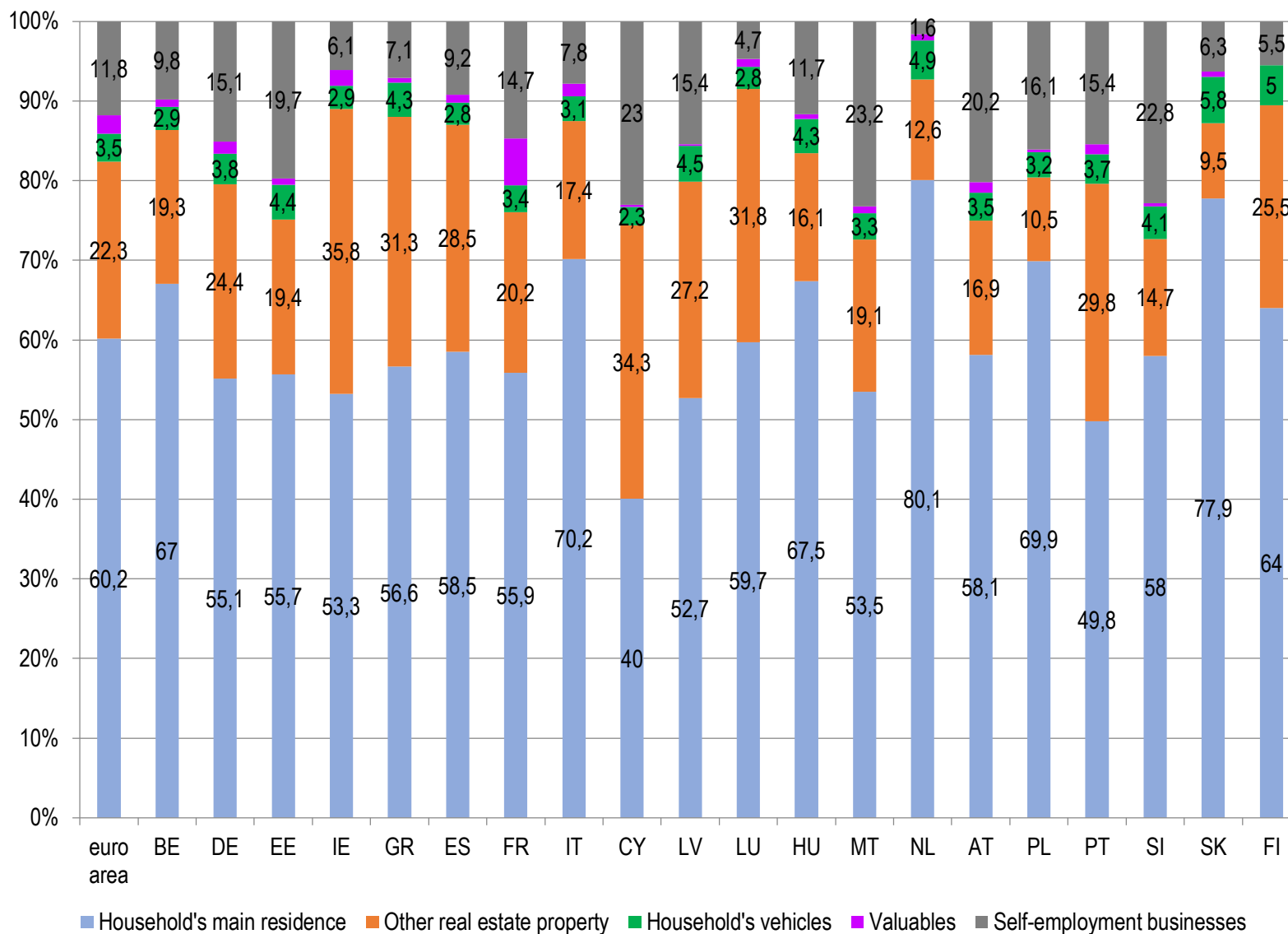
Setting the scene

- The increasing need of private savings for old-age is potentially in conflict with savings for homeownership
- An average household repays annually in mortgage capital an amount that is substantially higher than that saved into the pension pot
- Together with taxation, the resources required for paying for a home act as a strong disincentive to funded social security and welfare
- There is still no sufficient evidence to conclude to what extent homeowners with a mortgage substitute any financial savings with mortgage payments
- If paying off a mortgage is perceived as equivalent to savings for retirement there is no apparent trade-off, but the existence of liquidity constraints and the need to align and integrate the objectives and incentives for both investment decisions is difficult in practice
- One way of mitigating this potential conflict involves unlocking housing wealth by using a number of alternative Equity Release Schemes (ERS)

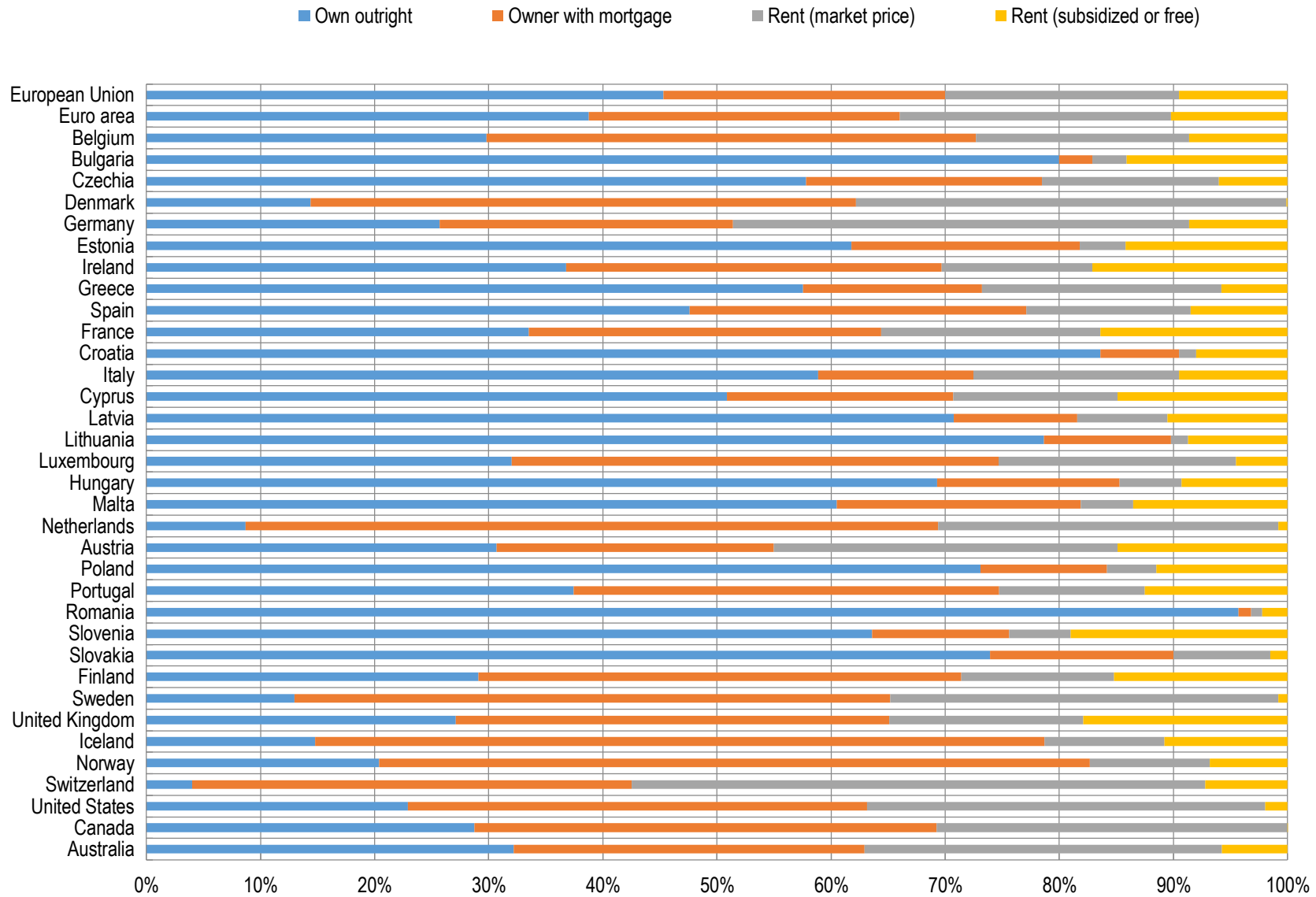
Households asset allocation



Decomposition of real assets by asset category



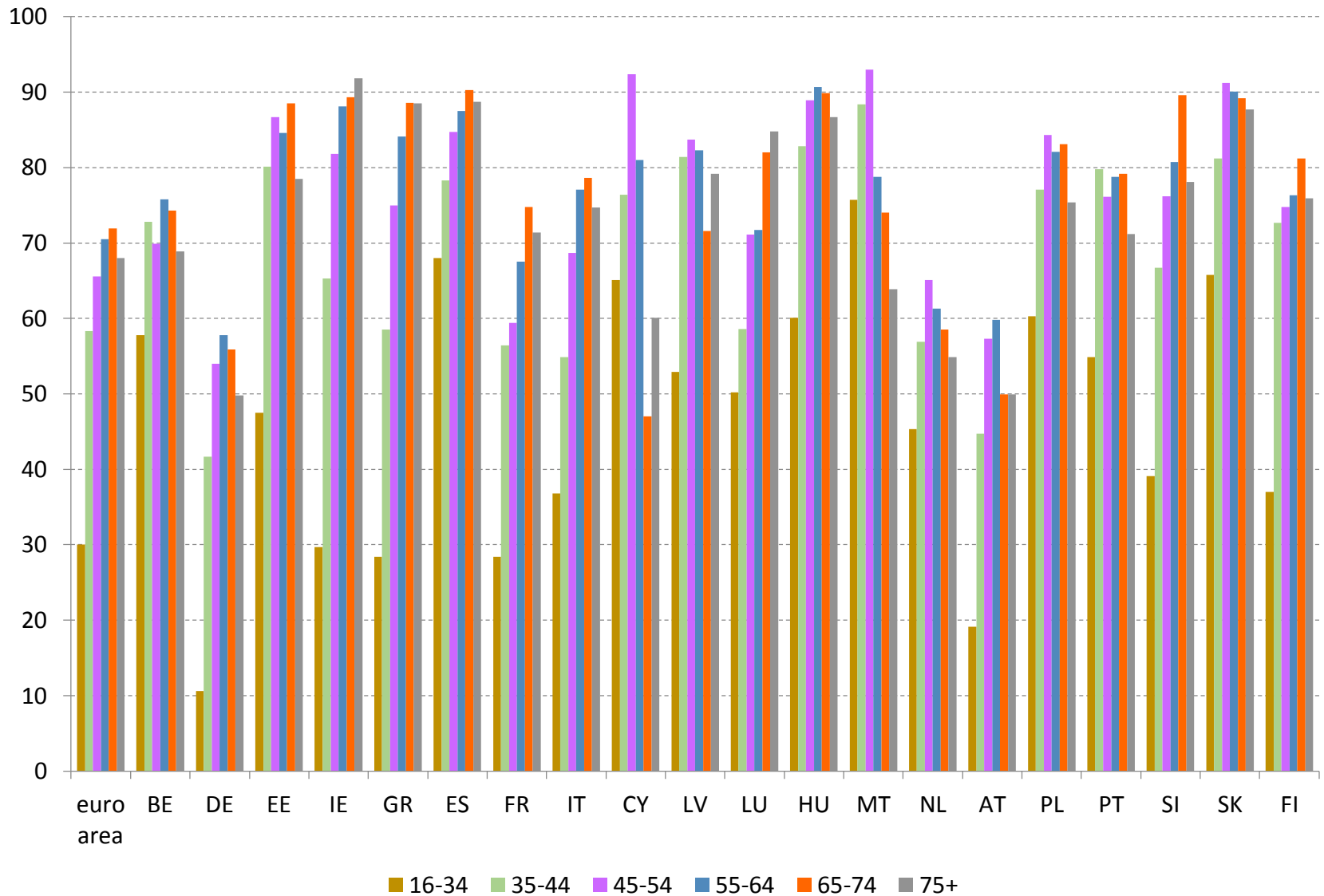
Housing tenure distribution in OECD countries



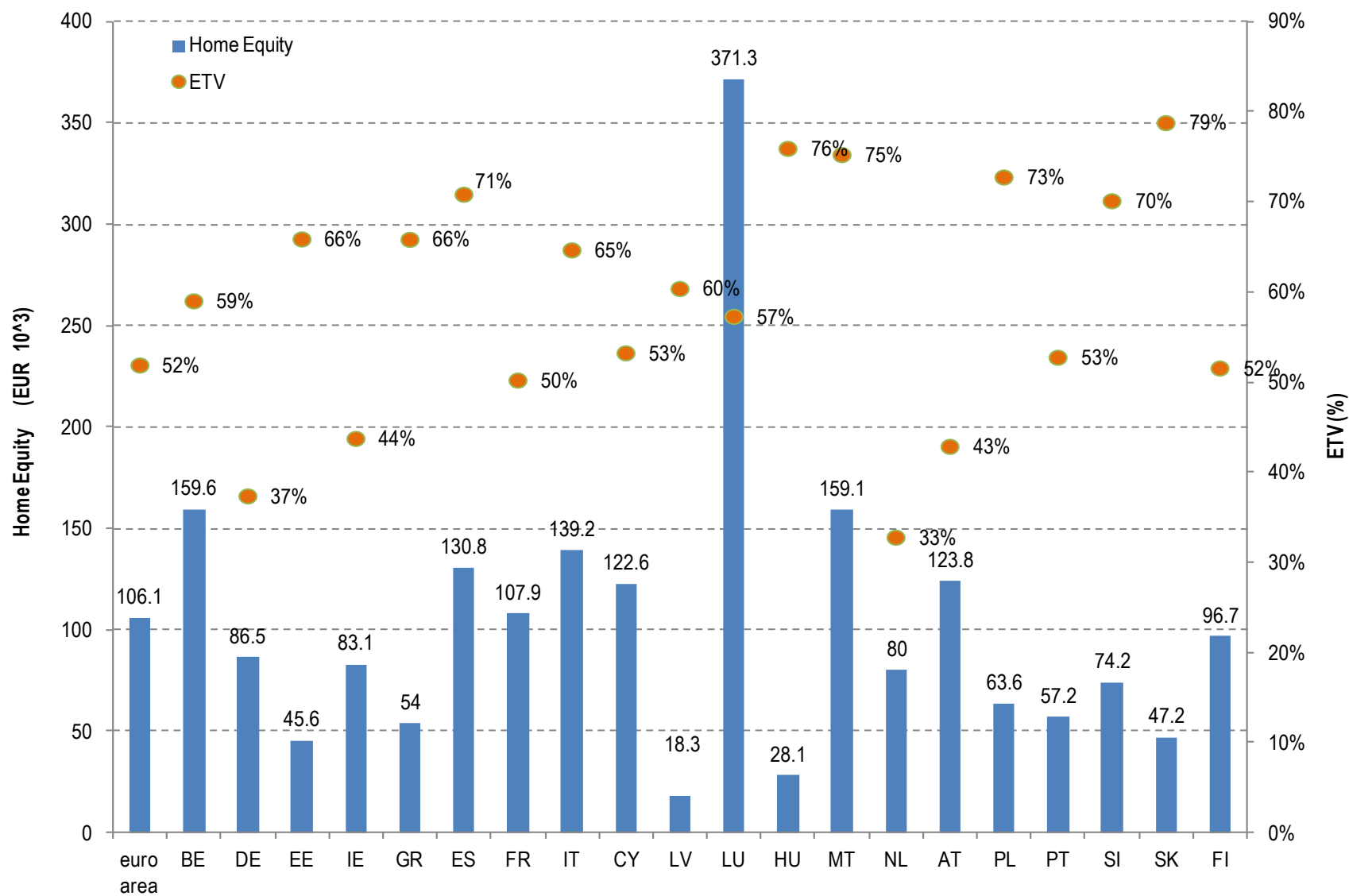
Ownership of HMR: breakdown by income/net wealth quintile

		euro area	BE	DE	EE	IE	GR	ES	FR	IT	CY	LV	LU	HU	MT	NL	AT	PL	PT	SI	SK	FI
Total		61,2	70,3	44,3	76,5	70,5	72,1	83,1	58,7	68,2	73,5	76	67,6	84,2	80,2	57,5	47,7	77,4	74,7	73,7	85,4	67,7
Income	<20%	47,6	44,3	20,3	62	60,2	64,6	73	33	48	59,5	61,2	38,4	77,9	58,5	25,4	24,7	62,8	60,6	64,3	80,2	37,4
	20-40%	51,8	59,3	33,7	73,1	56,9	68,6	79	45,1	59,9	71,1	70,6	61,6	82,1	79,7	45,2	37,6	71,5	66,8	66,3	83,1	55,8
	40-60%	58,5	74,2	43,8	77,6	67,8	71,9	82,9	58,4	66	65,4	80,2	72,1	84,6	84,5	57,2	49,3	79,6	76,1	75,1	83	70,9
	60-80%	68,9	87,2	54,1	82,5	78,9	75,9	88,6	73,1	78,7	80,1	84,3	80,7	86,3	88,5	79,4	57,2	84,8	78,7	81,2	86,8	81,6
	80-90%	76,1	85,1	65,1	82,9	84,7	76,7	93,9	81,6	85,3	88,9	90,6	84,7	89,8	91,4	80,4	62	86,9	89	79,3	93,7	90,1
	90-100%	82,1	88,1	75,3	91,6	92,9	81,9	90,3	86,9	92	94,1	77,8	86,3	90,6	88,5	80,2	77,1	90,1	93,7	84,6	94	95,5
Net wealth	<20%	8,1	4,9	6,4	22	44,3	11,4	38,2	2,3	1,3	25,3	21,7	4,8	42,5	14,7	26,4	1,4	7,5	18,9	4,8	35,1	8,1
	20-40%	31	69	4,6	79	24,6	71,5	89,6	23,3	50,5	71	73,1	52,6	90	94,5	19,4	2,7	88,5	75,4	76,3	96,6	45
	40-60%	80,4	91,4	41,6	91,9	89,3	91,2	95,4	79,8	94,3	88,3	94,7	91,9	94,8	96,7	55,4	49,2	97,2	91	95,5	97,2	91
	60-80%	91,9	93,8	81	93,7	96,6	93,2	95,5	93	97	90,1	96,4	94,4	97,1	97,5	89,4	91,6	95,6	95,5	96,4	98,7	96
	80-90%	94,3	95,4	86	97,9	98	92,4	97,2	94,4	97,7	94,1	94,9	95,5	96,9	97,1	96,9	93,5	97,6	93,6	96,4	99,8	98,4
	90-100%	94,5	89,7	90,6	93,8	97,3	94,8	96,9	95,3	98,4	92,2	93,9	93,6	96,5	98,6	96,9	93,6	99	92	95	98,8	98,4

Ownership of HMR: breakdown by age group



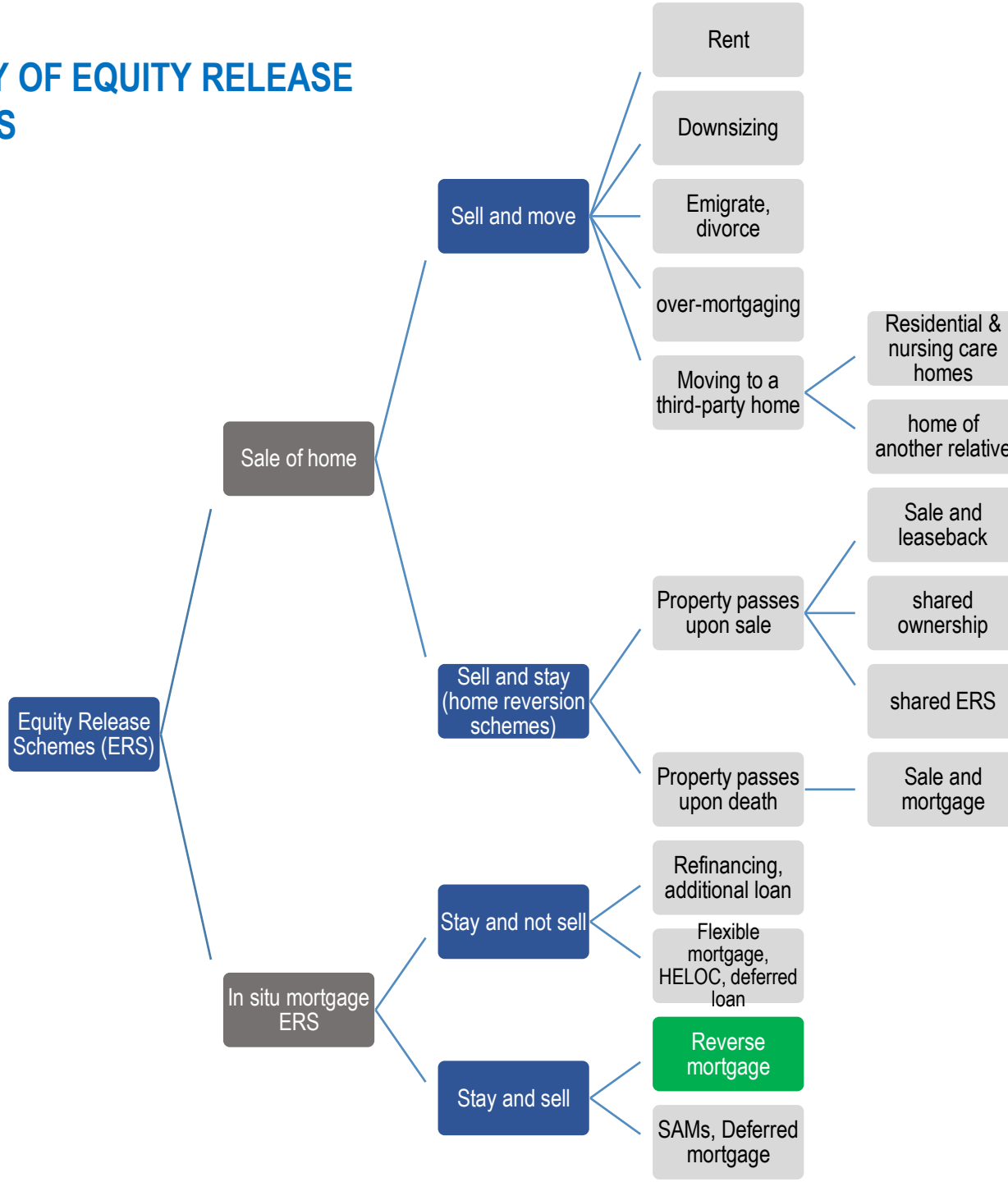
Home Equity and Equity-to-Value ratio in the euro area



10-year Expected Equity release, Housing Equity and ETV

Country /unit	Payments for HMR mortgages (flow) EUR/month	Annuity factor	Residual Loan Term years	Expected 10 Year			
				M_{10} EUR 1000	Outstanding balance of HMR mortgages EUR 1000	Housing Equity EUR 1000	ETV %
Euro Area	563.5	134.0	12.5	58.9	16.6	187.8	91.9%
BE	660.8	119.7	11.0	71.0	8.1	262.3	97.0%
DE	596.7	123.8	11.5	63.6	10.3	221.1	95.6%
EE	209.8	131.6	12.3	22.0	5.6	63.6	92.0%
IE	800.0	161.3	15.5	79.2	49.8	140.1	73.8%
GR	330.8	106.4	9.7	35.2	0.0	82.0	100.0%
ES	450.0	152.4	14.5	45.4	23.2	161.4	87.4%
FR	778.0	108.2	9.9	84.2	0.0	214.8	100.0%
IT	500.0	130.0	12.1	52.7	12.3	202.9	94.3%
CY	881.0	110.9	10.1	96.2	1.5	228.7	99.4%
LV	220.0	95.5	8.6	21.0	0.0	30.3	100.0%
LU	1217.8	156.0	14.9	121.9	68.1	579.8	89.5%
HU	146.4	73.8	6.5	10.8	0.0	37.0	100.0%
MT	368.0	148.4	14.0	37.4	17.2	194.2	91.9%
NL	655.3	202.7	20.2	59.4	73.4	170.5	69.9%
AT	313.0	191.4	18.9	29.1	30.8	257.9	89.3%
PL	215.1	111.6	10.2	23.5	0.5	86.9	99.4%
PT	300.0	212.3	21.4	26.6	37.1	71.3	65.8%
SI	330.0	92.1	8.3	30.4	0.0	105.8	100.0%
SK	183.6	114.4	10.5	19.9	1.1	58.8	98.2%
FI	543.0	137.0	12.8	56.4	18.0	169.5	90.4%

A TYPOLOGY OF EQUITY RELEASE MECHANISMS



Obstacles and challenges to ERS development

- **Demand-side barriers and challenges**
 - Normative attitudes towards inheritance
 - Normative attitudes towards making financial provisions for retirement:
 - Normative attitudes towards the responsibility for financial provision in retirement
 - Cultural preferences:
 - Normative attitudes towards the role of property and debt:
 - Financial literacy issues
 - Value-for-money and risk considerations
 - ...

Obstacles and challenges to ERS development

- **Supply-side obstacles and challenges**
 - Risks facing lifetime mortgage and home reversion providers
 - negative equity guarantee (NNEG)
 - moral hazard (linked to the maintenance of the house by the homeowner/seller)
 - house price depreciation
 - reputational risk (e.g., misselling practices)
 - the risk of insufficient uptake of products that prevent risk pooling from operating
 - operational risks (e.g., customer administration, fraud, dilapidation risks, legal issues and regulation)
 - modelling risk
 - family and work events
 - Regulatory and capital requirement constraints

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Vencedores do prémio “Poupança e Financiamento”

Collateral Value and Entrepreneurship: Evidence from a Property Tax Reform

João Pereira dos Santos, Miguel Ferreira e Ana Venâncio

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Collateral Value and Entrepreneurship:

Evidence from a Property Tax Reform

Miguel Ferreira (Nova SBE)

João Pereira dos Santos (Nova SBE)

Ana Venâncio (ISEG)

Lisbon December 10, 2019

Conferência Poupança e Financiamento da Economia
Portuguesa

This Paper

Research Question: What is the impact of a change on property tax rate on firm entry?

Identification Strategy: Quasi-natural experiment taking advantage of a property tax reform in Portugal

- ▶ Unexpected decrease in 2008, decided by the central government, in the upper bound of the municipal property tax rate from 0.5% to 0.4% (treated municipalities)
- ▶ Difference-in-differences approach using a municipal-level and firm-level data over 2004–2011

Results:

- ▶ Treated municipalities experience higher entry rates in the manufacturing sector but equal entry rates in the service sector
- ▶ Manufacturing new firms located in treated municipalities raise more debt
- ▶ New firms located in treated municipalities are more likely to survive

Takeaway

Plausible mechanisms that drive firm entry:

1. **Financial Constraints**: a decrease in property taxes **reduces entry barriers by increasing the value of pledgeable assets**, allowing new ventures to start their activity, borrowing more and facing less financial constraints
2. **Demand**: a decrease in property taxes **increases individual's disposable income and the wealth in a region**, encouraging business creation
3. **Luxury good**: a decrease in property taxes **changes individual's risk preferences**, making it more attractive for risk-averse individuals to try their changes in entrepreneurship

Literature Review I

Liquidity Constraints: Challenges

Entrepreneurial opportunities are biased towards wealthier individuals

(Evans and Jovanovic, 1989; Evans and Leighton, 1989; Holtz-Eakin et al., 1994a, 1994b).

1. Accurate measure of liquidity (assets, or (household) wealth):

- ▶ instruments for unanticipated changes in wealth:
 - ▶ inheritance (Holtz-Eakin et al. 1994a,1994b; Blanchflower and Oswald, 1998).
 - ▶ lottery winnings (Lindh and Ohlsson, 1996).
 - ▶ housing capital gains (Hurst and Lusardi, 2004; Nykvist, 2008).

2. Alternative explanations:

- ▶ tolerance for risk (Cressy, 1996) or over-optimism (De Meza and Webb, 1999)
- ▶ preference for self-finance (Cressy, 1996)
- ▶ benefits of control (Hurst and Lusardi, 2004; Kerr and Nanda, 2009).

Literature Review II

Liquidity Constraints: Recent Contributions

Increase in collateral value increases the probability of becoming an entrepreneur, job creation, corporate debt and size (Adelino, Schoar and Severino, 2015; Schmalz, Sraer and Thesmar, 2017).

1. New measure: variation in house prices as shocks to the value of real estate collateral
2. Comparison groups: full homeowners with partial homeowners and renters. These groups may differ in ability and risk aversion

Our paper adds to the literature by looking at an unexpected local tax reform (quasi-natural experiment)

2008 Property Tax Reform

Before 2008

- ▶ Main source of own revenues for municipalities.
- ▶ Municipalities have discretionary power to set the tax rate within an interval defined by the central government.
- ▶ Reform of 2003: *Imposto Municipal sobre os Imóveis* (IMI)
 - Tax base: approximation to the market value.
 - After 2003: the new tax (IMI) applied to all sold urban properties (automatic reassessment).

2008 Property Tax Reform

After 2008

- July 2, 2008: Unexpected announcement of a decrease in the upper bound of the property tax rates by the Portuguese Prime Minister.
- Property Tax Rates (%): Upper and Lower Bounds

Year	IMI	
	Min	Max
2003-2007	0.20	0.50
2008-2011	0.20	0.40

Source: Portuguese tax authority.

2008 Property Tax Reform

After 2008

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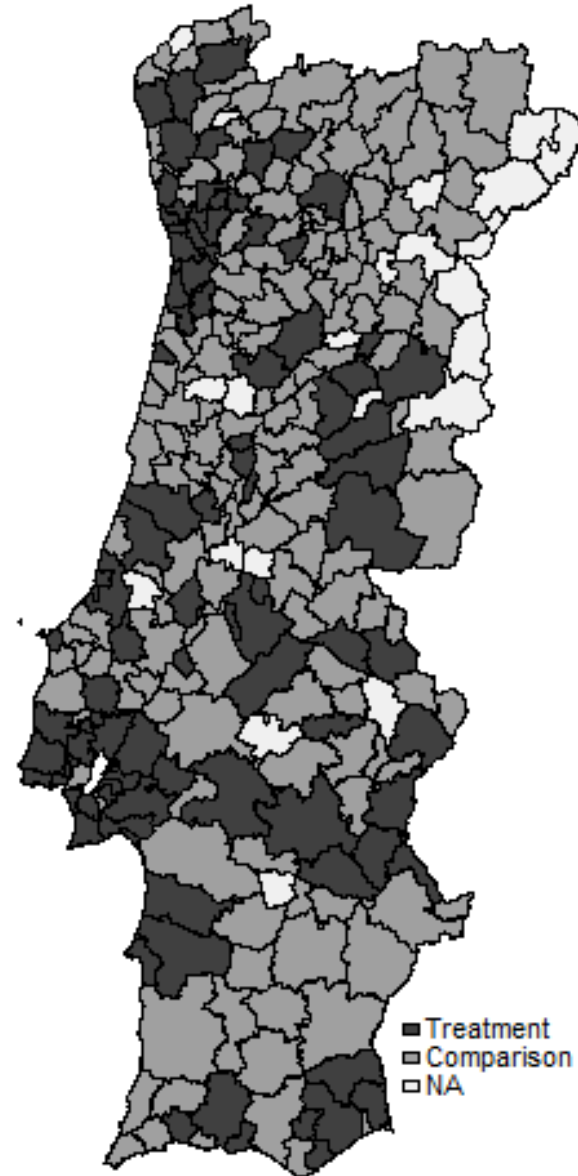
Year	IMI	
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Source: Portuguese tax authority.

2008 Property Tax Reform

Treated and Control Municipalities

- ▶ **Treated Municipalities:** reduced the tax rate from 0.5% to 0.4% in 2008 (94)
- ▶ **Control Municipalities:** did not change the tax rate and charged a tax between 0.3% and 0.4% in 2008 (162)
- ▶ **Excluded Municipalities:** did not change the tax rate and charged a tax lower than 0.3% in 2008 (22)



2008 Property Tax Reform

Economic Impact

- ▶ Mean real state prices increases by 3% to 5% (Alvarez and Santos, 2018)
- ▶ 0.1% reduction on the property tax rate, increases tax savings by 3.000 and 21.000 Euros in the treated municipalities

Tax Savings (in Euros, 2007)

	Yearly	Perpetual
Mean	167	3.341
Median	510	10.200
Max	1.044	20.881

2008 Property Tax Reform

Media coverage I

- ▶ **Drop in IMI will benefit hundreds of thousands of homeowners, says the PM:**
The decrease in the upper bound of the property tax rate will "correct exaggerations", says José Sócrates



The screenshot shows the top portion of a news article from Expresso. The header is dark blue with the 'Expresso' logo in white. Below the logo is a navigation bar with links for 'ÚLTIMAS', 'OPINIÃO', 'ECONOMIA', 'EXPRESSO CURTO', 'PODCASTS', and 'TRIBUNA'. The article title is 'Descida de IMI beneficiará "centenas de milhares" de proprietários, diz o PM'. The date and time are '10.07.2008 às 15h37'. There are social media icons for Facebook, Twitter, and Email. The first sentence of the article is 'A descida da taxa máxima do IMI destinou-se a "corrigir exageros", disse José Sócrates.'

Expresso

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ATUALIDADE / ARQUIVO

Descida de IMI beneficiará "centenas de milhares" de proprietários, diz o PM

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f t e ...

A descida da taxa máxima do IMI destinou-se a "corrigir exageros", disse José Sócrates.

2008 Property Tax Reform

Media coverage II

- ▶ **Mayor association against the tax reduction:** "ease the taxpayers' fiscal burden at the expense of someone else's money"



The screenshot shows a news article from the website tvi24.com. The page features a navigation bar with categories such as INÍCIO, NOTÍCIAS, VÍDEOS, FOTOS, DIRETO, GUIA TV, DOSSIERS, EU VI, and O SEGREDO DOS DEUSES. Below the navigation bar, there is a sub-menu with links for Últimas, Opinião, Sociedade, Política, Economia, Internacional, Desporto, Motores, Tecnologia, Música, Cinema, and Acredite Se Quiser. The main content area displays the article title "Associação Nacional de Municípios contra intervenção no IMI" with a sub-headline "Fernando Ruas não entende o motivo por detrás da intervenção do Governo". The article is dated 2008-07-03 10:13 and is attributed to Redação / CPS. The article text reads: «Achamos normal, até desejável, que se tomem medidas para agradar aos cidadãos, mas o que não percebemos é porque razão se faz uma redução com dinheiro alheio», afirmou o responsável.

tvi24

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Associação Nacional de Municípios contra intervenção no IMI

Fernando Ruas não entende o motivo por detrás da intervenção do Governo

2008-07-03 10:13 Redação / CPS

«Achamos normal, até desejável, que se tomem medidas para agradar aos cidadãos, mas o que não percebemos é porque razão se faz uma redução com dinheiro alheio», afirmou o responsável.

Data Sources

Quadros de Pessoal (QP) entry rate and job creation (municipal-level)
and survival (firm-level)

Sistema de Contas Integrado da Empresa (SCIE) sales, assets, debt
and capital expenditures (firm-level)

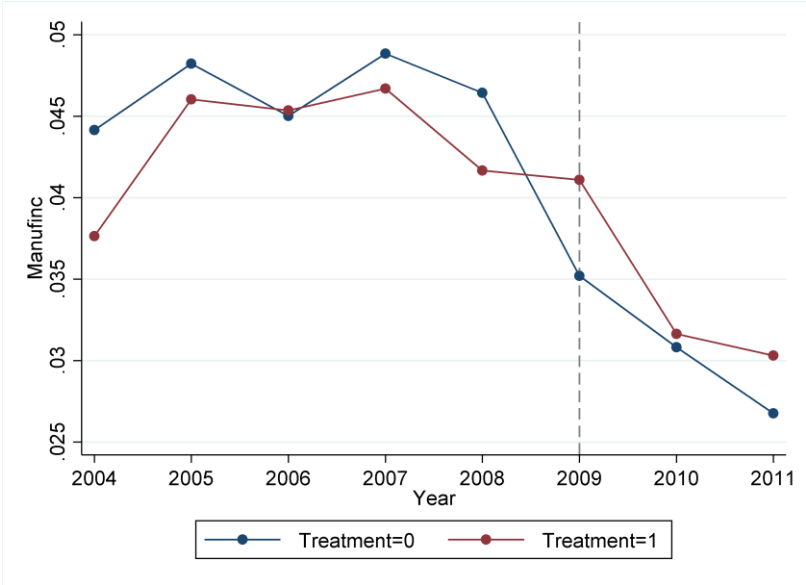
Other databases

- **Statistics Portugal** socio-demographic and economic controls of municipalities
- **National Election Commission** political variables

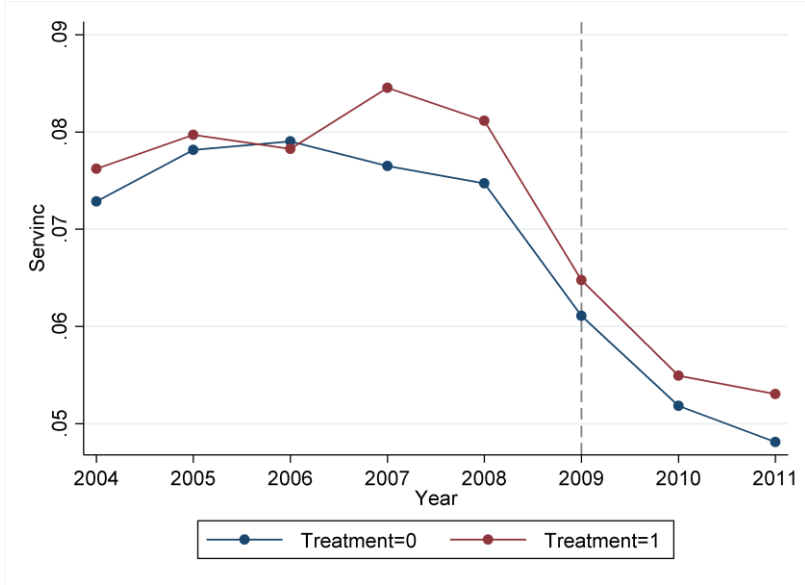
Parallel Trend

Municipal-level Analysis: Evolution of Average Entry Rate

Manufacturing



Services



Empirical Strategy

Municipal-level Analysis: Entry Rate

Difference-in-Differences Model

$$\text{Entry}_{it} = \alpha_i + \lambda_t + \gamma \text{Treated}_i \times \text{Post Period}_t + X_{it}'\beta + \varepsilon_{it} \quad (1)$$

where:

- ▶ Entry_{it} = new ventures relative to existing firms in t-1
- ▶ X_{it} = vector of socio-demographic, economic, and political characteristics of the municipality
- ▶ α_i = municipality fixed effects
- ▶ λ_t = time-period fixed effects
- ▶ Robust standard errors clustered by municipality

Baseline Results

Municipal-level Analysis: Entry Rate

	Entry Rates			
	(1)	(2)	(3)	(4)
		<u>Panel A. Manufacturing</u>		
Treated×Post Period	0.0065* *	0.0074**	0.0060*	0.0063*
Adjusted R ²	0.048	0.044	0.049	0.053
		<u>Panel B. Services</u>		
Treated×Post Period	0.0002 (0.0021)	0.0016 (0.0023)	0.0026 (0.0025)	0.0016 (0.0026)
Adjusted R ²	0.254	0.252	0.256	0.258
Municipality FE	✓	✓	✓	✓
Year FE	✓	✓	✓	✓
Nuts 2×Year FE		✓	✓	✓
Controls			✓	✓
Pop quartiles×Year FE				✓

Notes: N=2048. Stars indicate significance levels of 10% (*), 5% (**), and 1%(***).

Economic Magnitude

Municipalities that were forced to decreased the property tax rate exhibited a 14% increase (0.63%/4.55%) in firm entry rate.

Event Studies

Municipal-level Analysis: Entry Rate

Event Studies

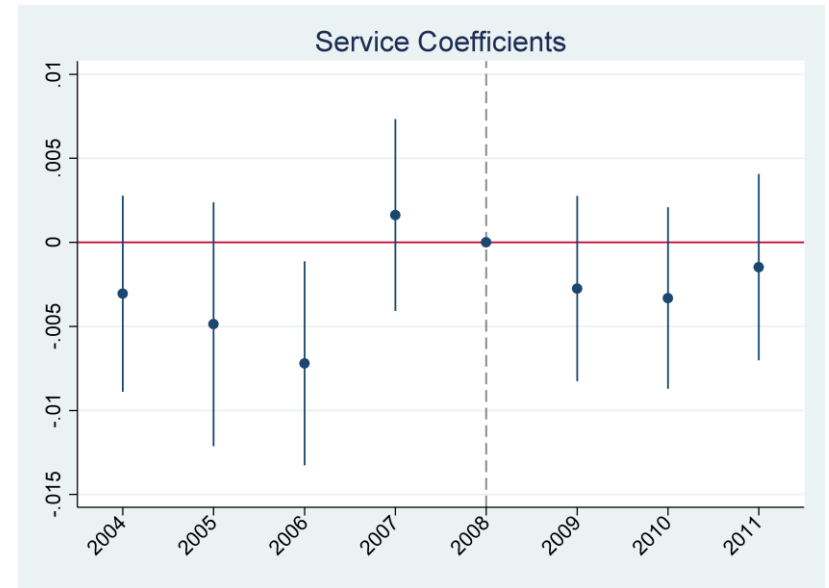
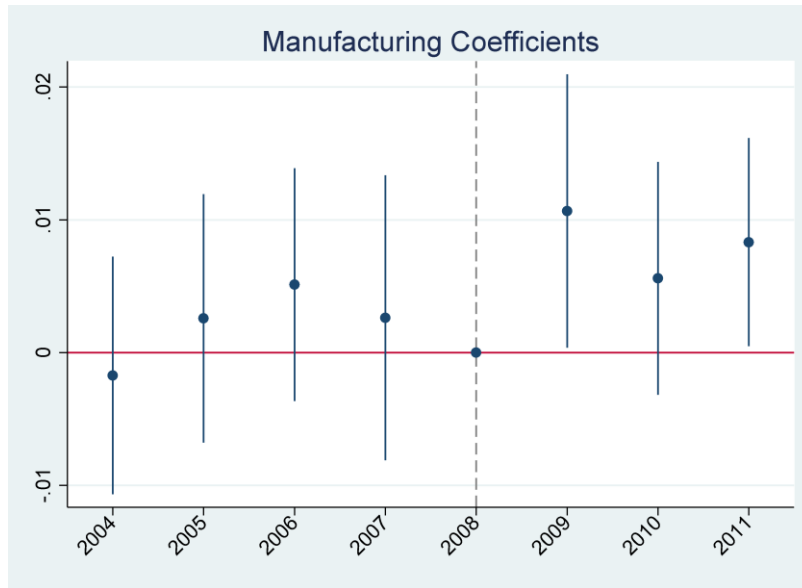
$$\text{Entry}_{it} = \alpha_i + \lambda_t + \sum_{j=-m}^q \gamma_j \text{Treated}_i \times \text{Post Period}_{t+j} + \varepsilon_{it} \quad (2)$$

where:

- ▶ Entry_{it} = new ventures relative to existing firms in t-1
- ▶ m = "leads" of pre-treatment years
- ▶ q = "lags" of post-treatment years
- ▶ α_i = municipality fixed effects
- ▶ λ_t time-period fixed effects
- ▶ Robust standard errors clustered by municipality

Event Studies

Municipal-level Analysis: Entry Rate



Notes: The figures plot the coefficient γ_j for Equation (2). Vertical lines are the 90% confidence intervals for the coefficients.

Robustness and Falsification Tests

Municipal-level Analysis: Entry Rate

1. Alternative samples:
 - ▶ All mainland municipalities
 - ▶ Single establishment firms
2. Anticipation effects of the reform: Drop 2008
3. Selection Bias:
 - ▶ Drop 2011
 - ▶ Excluding coastal municipalities
4. Heterogeneity results: low tech firms
5. No effects on exit rates
6. Placebo test

Mechanisms

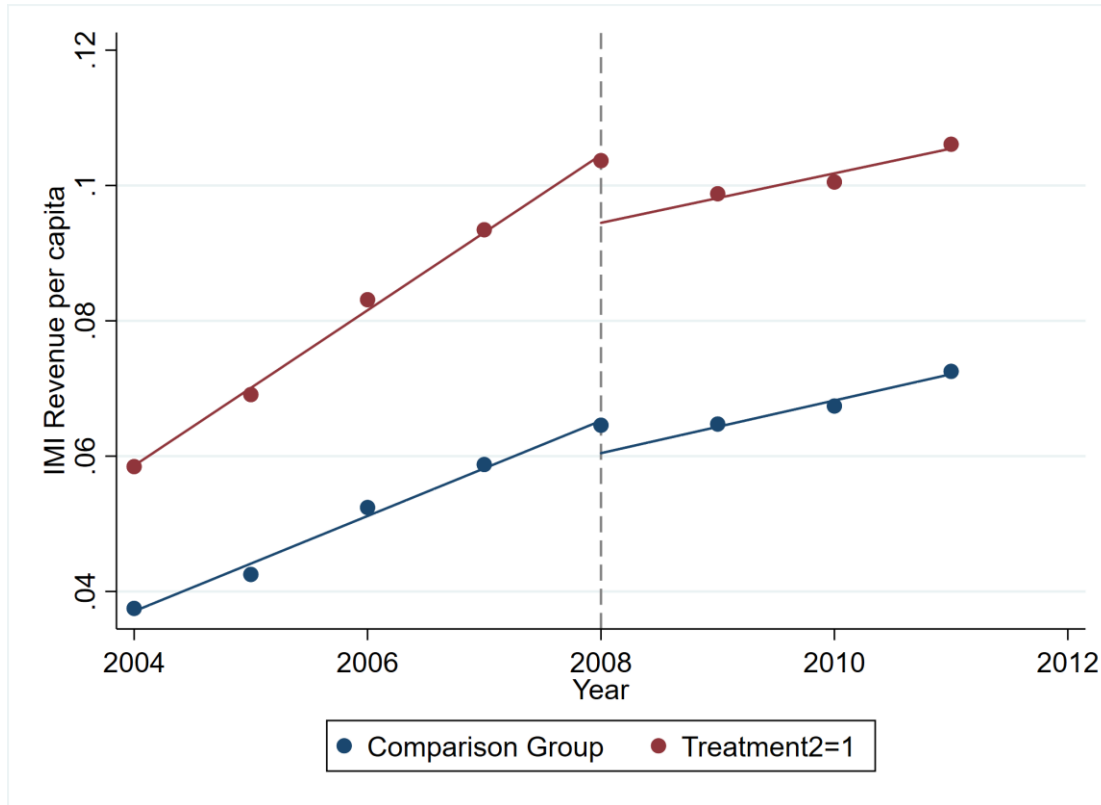
Firm entry increases because

1. **Financial Constraints**: a decrease in property taxes **reduces entry barriers by increasing the value of pledgeable assets**
 - ▶ Increase firm entry for ventures with higher capital needs
 - ▶ Increase on debt
2. **Demand**: a decrease in property taxes **increases individual's disposable income and the wealth in a region**
 - ▶ Increase firm entry
 - ▶ Increase on economic activity in the region
3. **Luxury good**: a decrease in property taxes **changes individual's risk preferences**
 - ▶ Increase firm entry
 - ▶ Decrease on new venture's performance

Financial Constraints Mechanism

Wealth effect of the entrepreneur?

- ▶ Homeowners pay less property taxes.



Financial Constraints Mechanism

Wealth effect of the entrepreneur via the collateral channel?

- ▶ Evidence that real estate prices capitalized (Alvarez and Santos, 2018)
- ▶ New ventures raise more debt and use it to investment in real estate property
- ▶ No time-varying changes on credit supply

Empirical Strategy

Firm-level Analysis

Difference-in-Differences Model

$$y_{fit} = \alpha_i + \lambda_t + \gamma \text{Treated}_i \times \text{Post Period}_{it} + X_{it}'\beta + Z_{jt}'\beta + \varepsilon_{it} \quad (3)$$

where:

- ▶ Dependent variables:
 - ▶ $Debt_{fit}^n$ = logarithm of long and short-term debt plus one in year n , $n \in \{0, 5\}$
 - ▶ $CapEx_{fit}^n$ = logarithm of capital expenditures in buildings plus one in year n , $n \in \{0, 5\}$
 - ▶ $Survival_{fit}^n$ = dummy variable that equals one if the new venture survives after n years, $n \in \{1, 3, 5\}$
- ▶ Z_{ft} = vector of firm characteristics (such as 2-digit industry dummies)
- ▶ Robust standard errors clustered by municipality

Empirical Results

Firm-level Analysis: Debt Year 0

	Short Debt/Assets		ln(Short Debt)	
	(1)	(2)	(3)	(4)
	<u>Panel A. Manufacturing</u>			
Treated×Post Period	0.044**	0.061**	1.251**	1.610**
	(0.020)	(0.026)	(0.554)	(0.694)
Adjusted R ²	0.118	0.0977	0.121	0.132
	<u>Panel B. Services</u>			
Treated×Post Period	0.007	0.009	0.167	0.260
	(0.011)	(0.011)	(0.157)	(0.167)
Adjusted R ²	0.0488	0.0476	0.107	0.107
Municipality FE	✓	✓	✓	✓
Year FE	✓	✓	✓	✓
Nuts 2×Year FE	✓	✓	✓	✓
Firm Controls	✓	✓	✓	✓
Controls		✓		✓
Pop quartiles×Year FE		✓		✓

Notes: Standard errors in parenthesis are clustered at the municipal level. Stars indicate significance levels of 10% (*), 5% (**), and 1%(***)

Empirical Results

Firm-level Analysis: Corporate Investments and Debt: Year 5

	Investment		Financing the Activity			
	ln(CapExp Buildings)		Debt/Assets		ln(Debt)	
	(1)	(2)	(3)	(4)	(5)	(6)
<u>Panel A. Manufacturing</u>						
Treated×Post Period	0.982** (0.494)	1.093* (0.653)	10.265 (12.379)	8.023 (11.726)	1.839* (1.065)	2.655** (1.190)
Adjusted R ²	0.155	0.161	0.0019	0.0253	0.119	0.151
<u>Panel B. Services</u>						
Treated×Post Period	-0.017 (0.163)	0.018 (0.138)	1.817 (3.557)	1.340 (2.613)	-0.448* (0.251)	-0.548* (0.292)
Adjusted R ²	0.0382	0.0406	0.0012	0.0028	0.0782	0.0793
Municipality FE	✓	✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓	✓
Nuts 2×Year FE	✓	✓	✓	✓	✓	✓
Firm Controls	✓	✓	✓	✓	✓	✓
Controls		✓		✓		✓
Pop quartiles×YearFE		✓		✓		✓

Notes: Standard errors in parenthesis are clustered at the municipal level. Stars indicate significance levels of 10% (*), 5% (**), and 1%(***) .

Empirical Results

Municipality-level Analysis: Credit supply

	ln(Mortgage Credit)		ln(Housing Credit)		ln(No. Banks)	
	(1)	(2)	(3)	(4)	(5)	(6)
Treated×Post Period	-0.0295 (0.0265)	-0.0060 (0.0287)	0.0086 (0.0178)	0.0007 (0.0176)	0.0229 (0.0156)	0.0155 (0.0161)
Adjusted R ²	0.825	0.828	0.708	0.723	0.357	0.391
Municipality FE	✓	✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓	✓
Nuts 2×Year FE	✓	✓	✓	✓	✓	✓
Firm Controls	✓	✓	✓	✓	✓	✓
Controls		✓		✓		✓
Pop quartiles×YearFE		✓		✓		✓

Notes: Standard errors in parenthesis are clustered at the municipal level. Stars indicate significance levels of 10% (*), 5% (**), and 1%(***)).

Demand Mechanism

Wealth effect of the municipality?

- ▶ No changes in the economic activity (Amount and number of ATM Withdrawals)
- ▶ No changes on municipal spending profile and public good provision (Primary Expenditures)
- ▶ No changes in business tax revenues

Luxury Mechanism

Change on Risk Preferences?

- ▶ Start-up performance increase (Survival)

Empirical Results

Firm-level Analysis: Survival in Year 1, 3 and 5

	Probability of Surviving					
	1 Year		3 Years		5 Years	
	(1)	(2)	(3)	(4)	(5)	(6)
<u>Panel A. Manufacturing</u>						
Treated×Post Period	0.038*** (0.010)	0.046*** (0.010)	0.041** (0.017)	0.041** (0.016)	0.026* (0.015)	0.030* (0.017)
Adjusted R ²	0.0199	0.0200	0.0370	0.0381	0.0418	0.0427
<u>Panel B. Services</u>						
Treated×Post Period	0.045*** (0.008)	0.050*** (0.008)	0.041*** (0.008)	0.044*** (0.009)	0.025*** (0.007)	0.026*** (0.008)
Adjusted R ²	0.0419	0.0422	0.0619	0.0621	0.0571	0.0572
Municipality FE	✓	✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓	✓
Nuts 2×Year FE	✓	✓	✓	✓	✓	✓
Firm Controls	✓	✓	✓	✓	✓	✓
Controls		✓		✓		✓
Pop quartiles×Year FE		✓		✓		✓

Notes: Standard errors in parenthesis are clustered at the municipal level. Stars indicate significance levels of 10% (*), 5% (**), and 1%(***).

Conclusion

We exploit a **quasi-natural experiment (changes on property tax rate)** to identify casual effects of the increase on individual's income on entrepreneurship

A reduction on the property tax rate

- ▶ increases **firm entry** in the manufacturing sector, increasing the value of pledgeable assets to finance new venture
- ▶ those new firms are more likely to raise more **debt** and use it to invest in fixed assets
- ▶ those firms are more likely to **survive**

Less developed regions would benefit the most from public policies (subsidized loans, loan guarantees, tax rebates) intended to promote entrepreneurship

Thank you!

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Lisbon December 10, 2019

Conferência Poupança e Financiamento da Economia Portuguesa



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Vencedores do prémio “Poupança e Financiamento”

The Financial Channels of Labor Rigidities: Evidence from Portugal

Ettore Panetti, Edoardo Acabbi e Alessandro Sforza

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The Financial Channels of Labor Rigidities: Evidence from Portugal*

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*The analyses, opinions and findings of this paper represent our own views, and are not necessarily those of Banco de Portugal or the Eurosystem.

Introduction

Questions and motivation

Questions

- How do credit shocks affect firms' employment adjustment and exit?
- How does the propagation of these shocks depend on labor rigidities at the firm level?
- Do credit shocks reinforce or hinder productivity-enhancing reallocation in the real economy?

Motivation: Portugal and beyond

- Recent episodes:
 - The 2007-2009 global financial crisis
 - The 2010-2012 EU joint bank and sovereign debt crisisrevamped the interest on how financial crises affect the real economy
- Interact with and magnify other distortions in the real economy
- How they distort resource reallocation, potentially harming long-run growth

Are financial crises cleansing?

What the economic literature says

- Classic Schumpeterian view: crises bring about creative destruction \Rightarrow Cleansing effect
- Recent evidence (Ouyang, 2009; Osotimehin and Pappadà, 2015) argues that financial frictions might attenuate or reverse it \Rightarrow “Scarring” effect
- The Great Recession featured less productivity-enhancing inputs’ reallocation and a weaker cleansing effect in firms’ exit (Foster et al., 2016)
- The fact that it started as a financial crisis could be an explanation, but there is no real proof

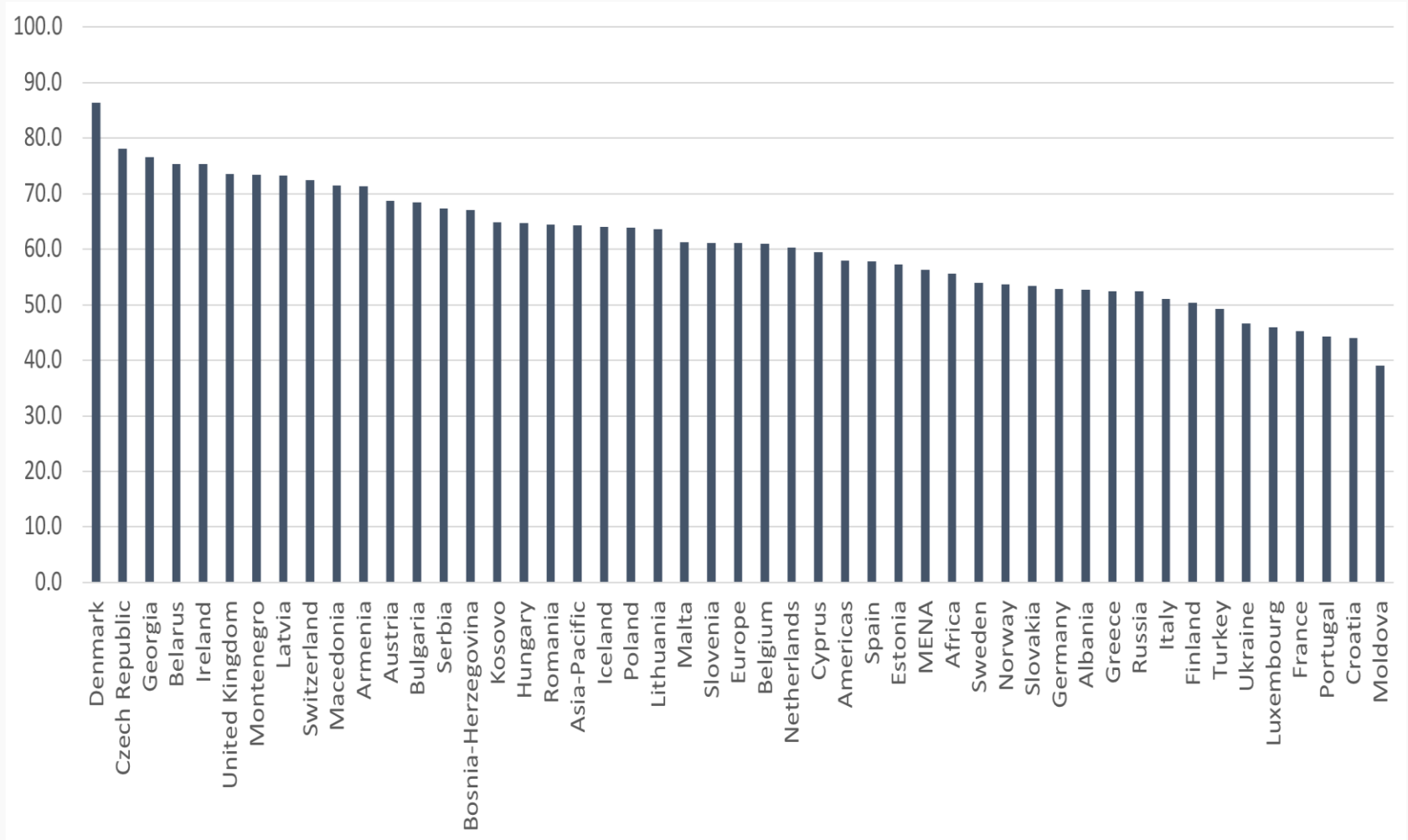
Our contribution

- We exploit the exogeneity of a financial shock to analyze firms’ employment adjustment and exit
- We document how the responsiveness of firms to the shock depends on their labor rigidities
- We find evidence of non-cleansing effects

Labor rigidities are an overlooked source of financial risk

- Labor costs constitute a sizable fraction of firms' cost structure
- In several advanced economies, the labor share of income is declining but still above 50% (Karabarbounis and Neiman, 2014)
- On top of that, labor is a rigid production input

Labor freedom 2019 (Source: Index of Economic Freedom)



Conceptual framework: Labor-as-leverage and labor-as-investment

Labor-as-leverage

- It refers to the operating leverage from the rigidity of compensation for incumbent workers
- Salaries are rigid and have priority over other expenditures in the use of internal funds

Labor-as-investment

- Timing mismatch between labor costs payouts and a firm's cashflows
- Vacancy/training costs create lags between hiring and production

Common features

- Crucial role played by human capital accumulation
- The two channels reinforce and complement each other
- A credit shock might force firms to cut employment and/or investments

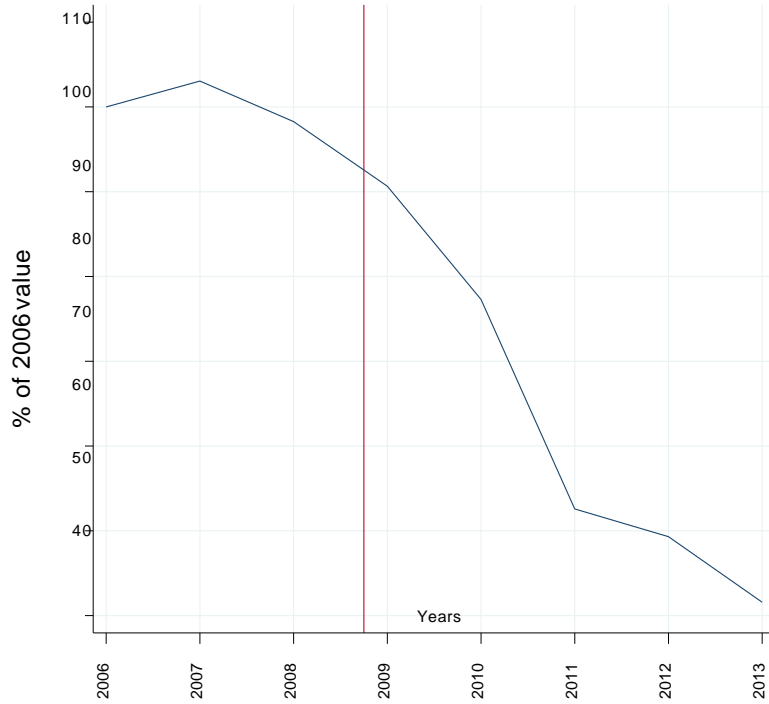
Portugal is a unique laboratory to study the financial channels of labor rigidities

- We analyze the real effects on Portugal of the failure of Lehman brothers
- This event is a unique opportunity
 - The failure of Lehman Brothers was sudden and unexpected, and exogenous to Portugal
 - It led to a dry-up of the interbank market, on which Portuguese banks heavily relied to finance corporate short-term credit
 - Portugal corporate sector is populated by medium- and small-sized firms, highly dependent on relationship banking (Bonfim and Dai, 2017) and bank credit (Iyer et al., 2014)
 - Labor is a critical production input of Portuguese firms: Avg labor share in value added $\approx 60\%$
 - Portugal's labor market is highly rigid and subject to considerable nominal wage rigidity

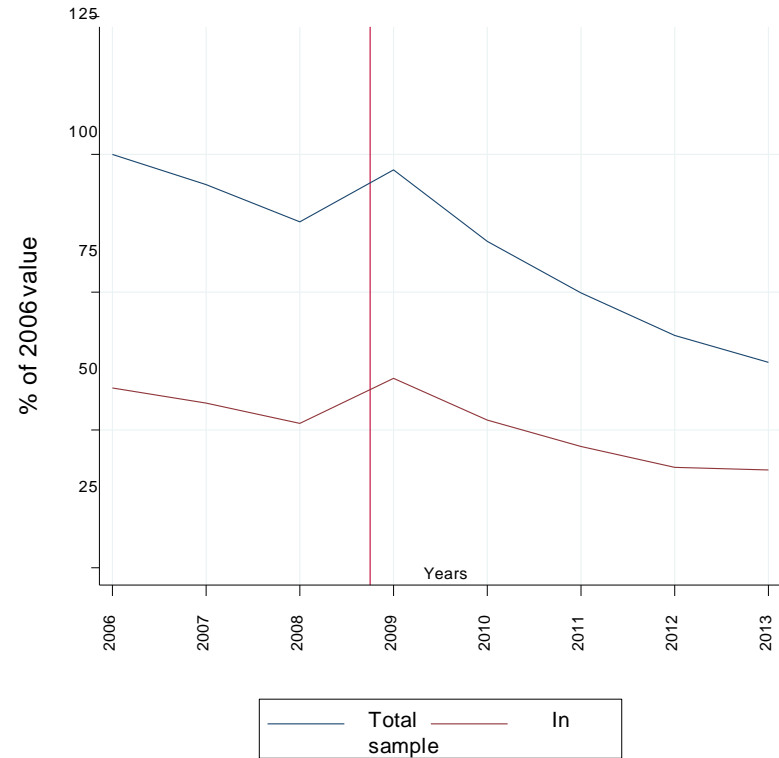
Portugal is a unique data provider

- **Quadros de Pessoal:** Matched employer-employee dataset, yearly snapshot of the labor market in October
 - Detailed information about sector of operation, location, occupation, education and qualification of workers
- **Central de Balanços:** Yearly balance-sheet dataset for all Portuguese firms
- **Central de Responsabilidades de Crédito:** Monthly loan-level exposures of all firms
- **Banks Balance Sheets:** Balance-sheet items and nationalities of counterparties

The “Lehman shock” in Portugal



(a) Foreign interbank liabilities



(b) Short-term regular credit

Firm-level results

From banks' shocks to firms' shocks

- We consider the change S_i in avg short-term credit of firm i between the two years before the crisis (2006-2007) and the two year after (2009-2010)
- We instrument S_i with a measure of firm indirect exposure to the interbank market through its bank networks (Iyer et al., 2014; Cingano et al., 2016):

$$Z_i = \sum_{b \in B_i} \omega_{i,b} FD_b \quad (1)$$

where:

- $\omega_{i,b}$ = the share of credit to firm i from bank b in 2005
- FD_b = the share of liabilities of bank b in the foreign interbank market in 2005

The Lehman shock had strong firm-level effects

Employment

- We run the following diff-in-diff specification:

$$\log(Y_{i,t}) = \gamma_i + \tau_t + (\beta S_i + \Gamma X_{i,pre}) \cdot 1\{t = Post\} + FE_{i,t} + \varepsilon_{i,t} \quad t \in \{Pre, Post\} \quad (2)$$

- A 1-stdev drop in S_i lowers avg firm employment by around 4% (log) and explains between 14 and 17% of the total employment variation in the period

Firm exit

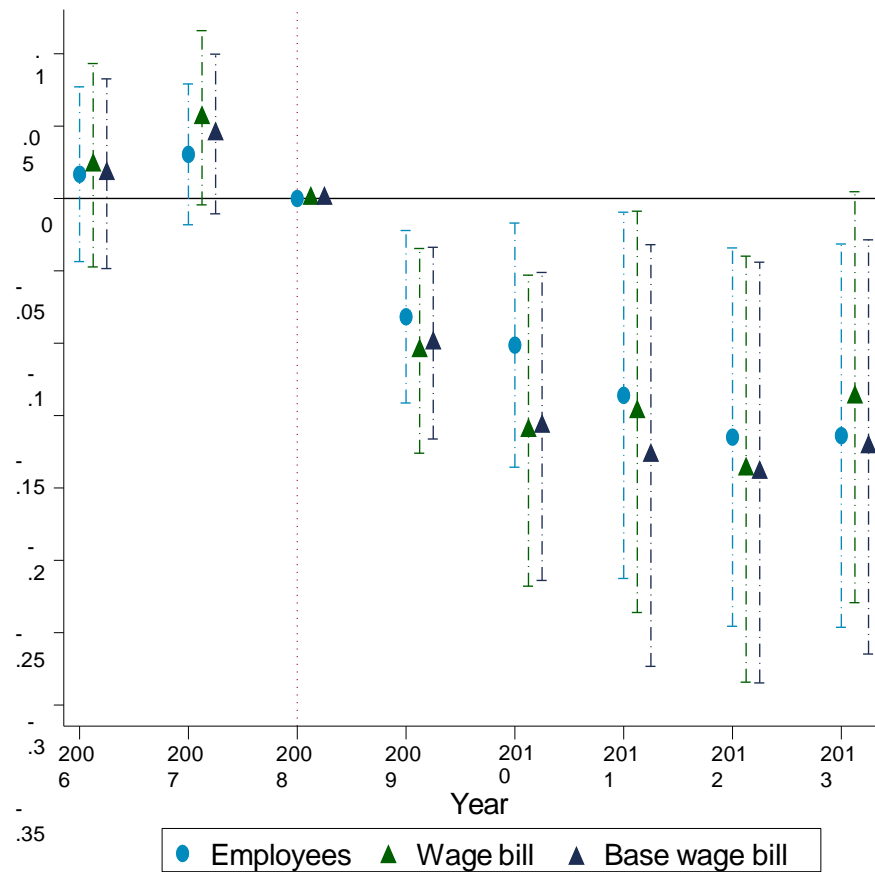
- We run the following linear probability model:

$$P(exit_{i,t}) = \tau_t + \beta S_i + \Gamma X_{i,pre} + FE_{i,t} + \varepsilon_{i,t} \quad (3)$$

- A 1-stdev drop in S_i increases the probability of firm exit by 0.59-0.76% per year, against an avg exit rate of 5% (and no effect of productivity)

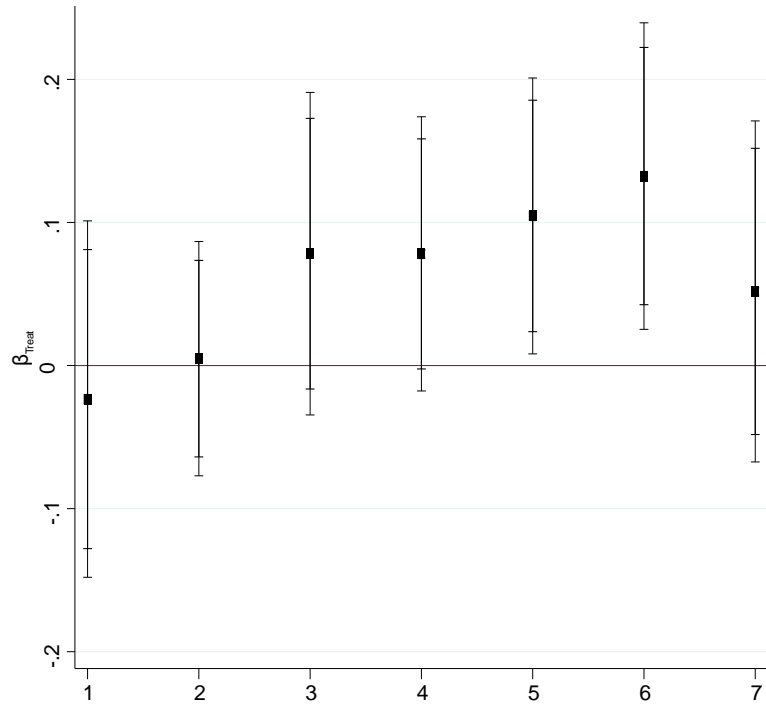
The effects of the Lehman shock were persistent

$$Y_{i,t} = \gamma_i + \tau_t + \sum_{k=2008} (\beta_k S_i + \Gamma_k X_{i,pre}) \cdot 1\{t = k\} + FE_{i,t} + \varepsilon_{i,t} \quad (4)$$

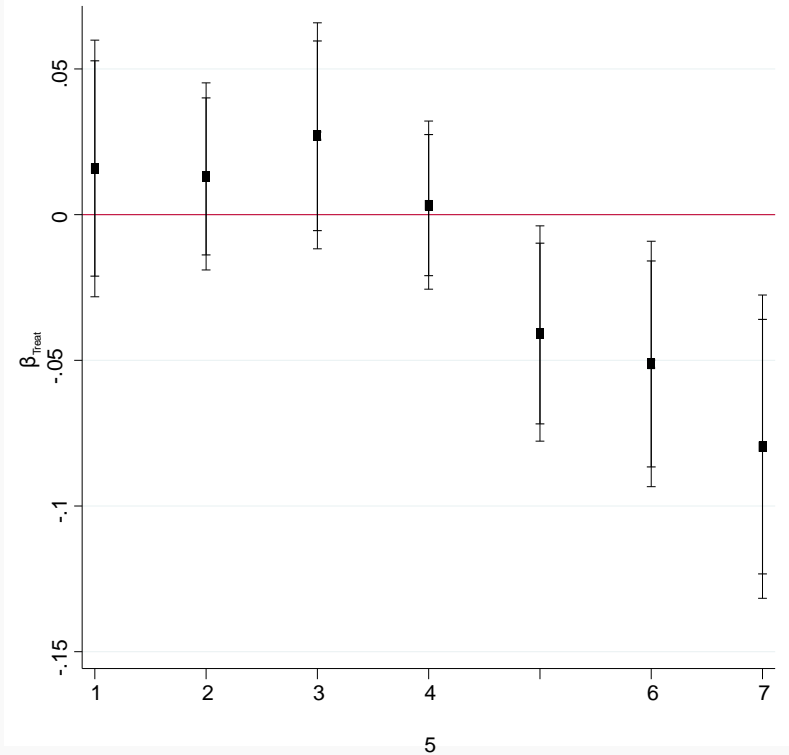


The financial channels of labor rigidities

The firm-level effects are completely attributable to high labor costs

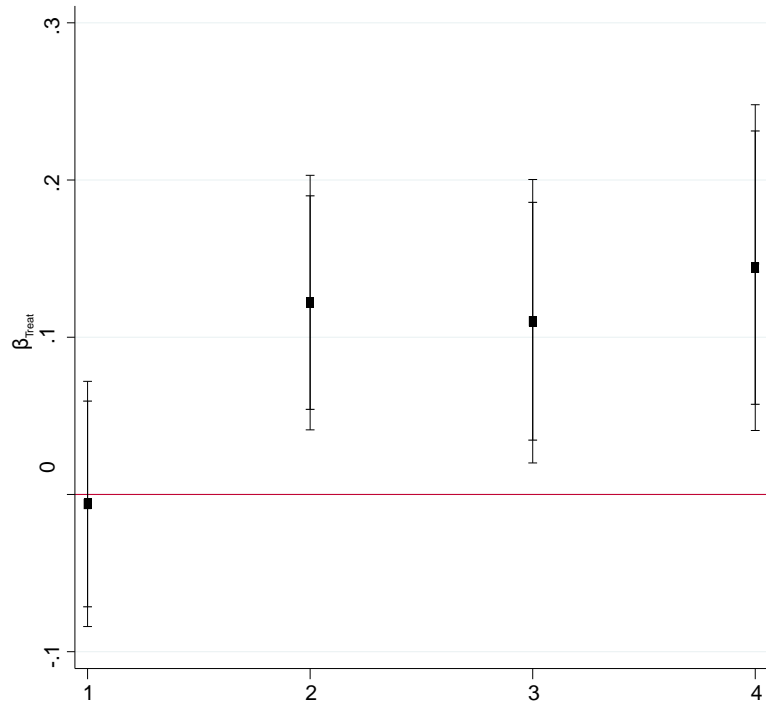


(a) Employment

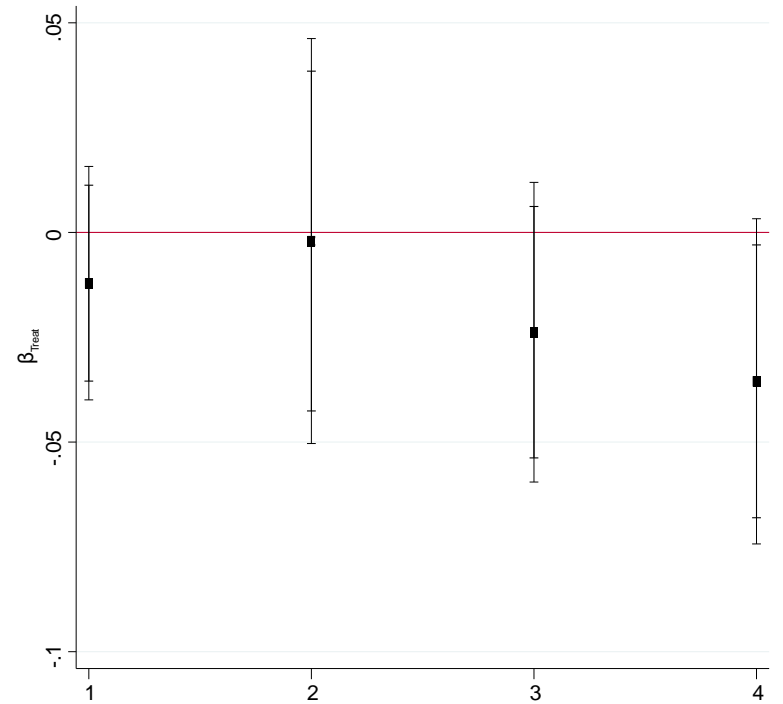


(b) Firm exit

The effect of labor costs is attributable to labor-as-investment

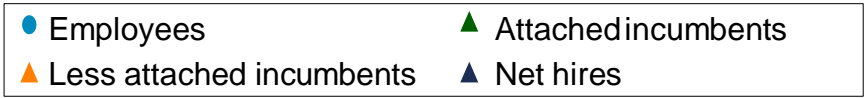
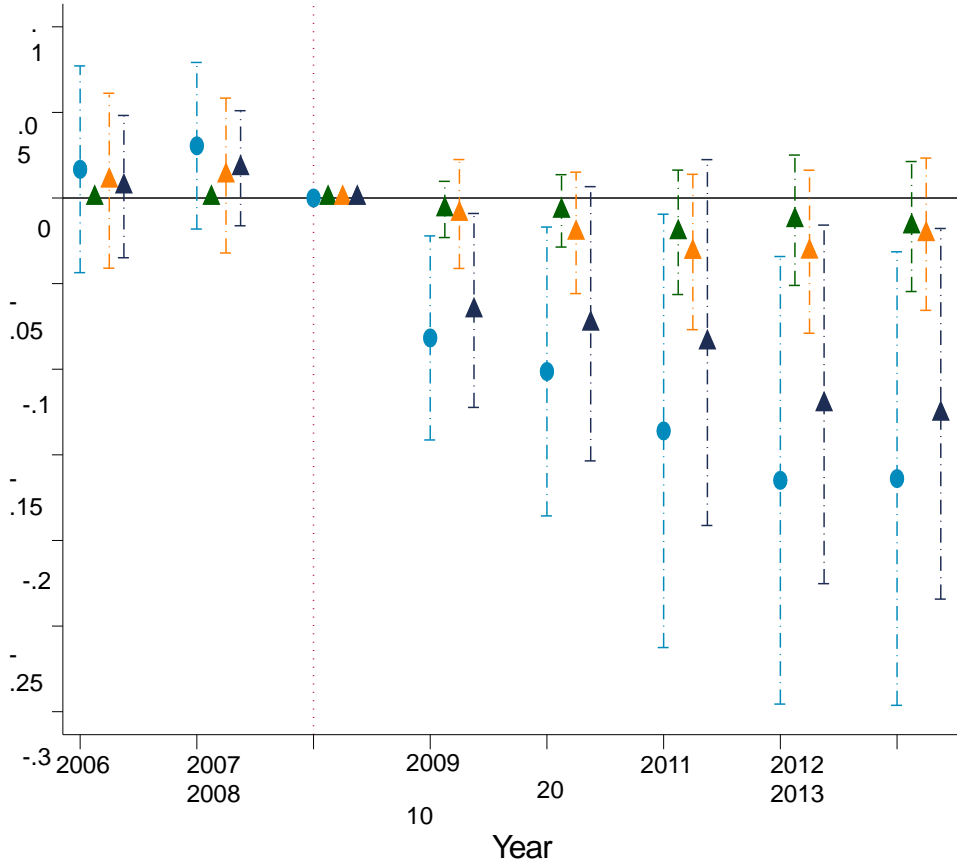


(a) Employment



(b) Firm exit

More evidence on labor-as-investment

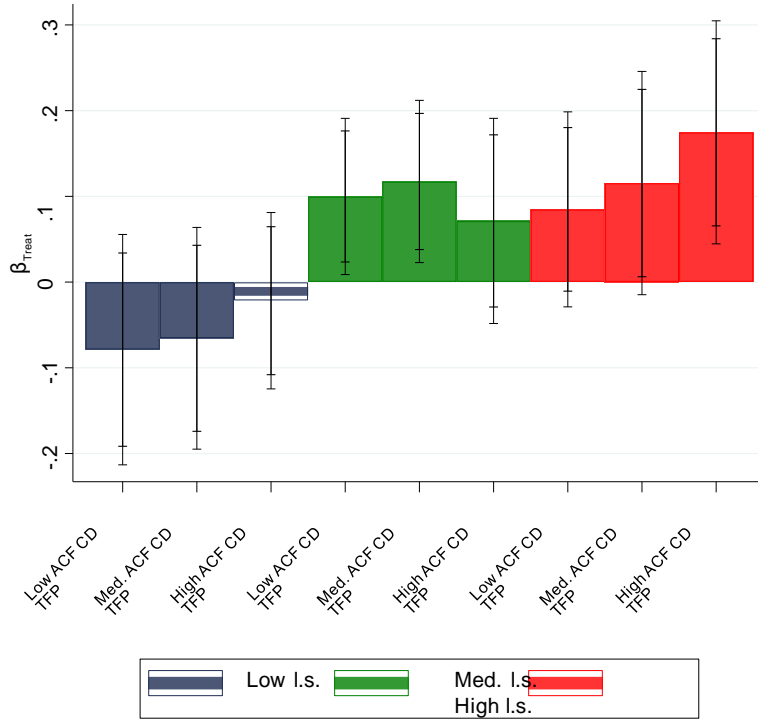


Non-cleansing effects

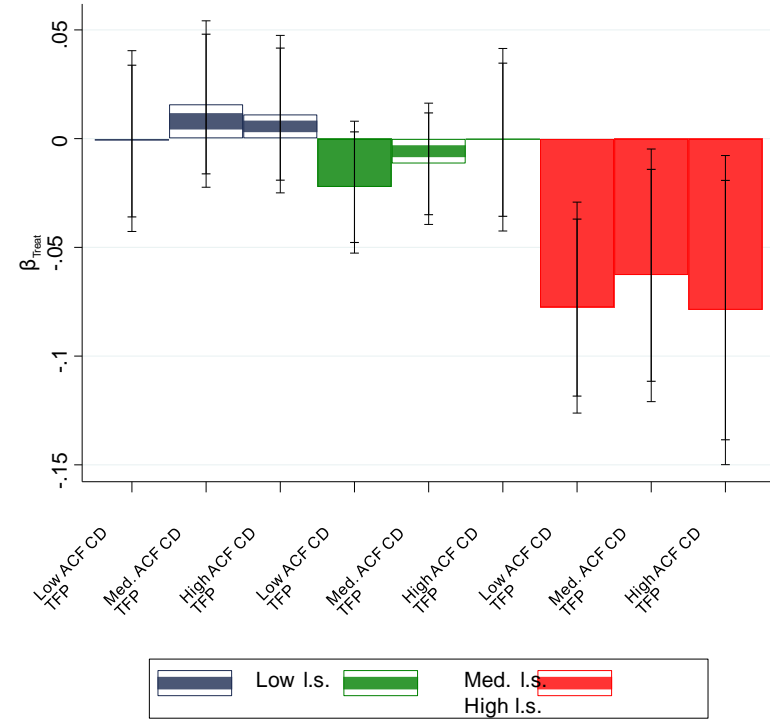
The Lehman shock was partially non-cleansing

	$\log(emp_{i,t})$	$P(exit_{i,t})$
S_i , Low TFP	0.070*	-0.033**
	(0.037)	(0.013)
S_i , Medium TFP	0.087**	-0.015
	(0.042)	(0.013)
S_i , High TFP	0.080*	-0.017
	(0.042)	(0.016)

The Lehman shock was non-cleansing where labor costs mattered



(a) Employment



(b) Firm exit

Concluding remarks

The financial channels of labor rigidities explain the effects of the Lehman shock

- The Lehman shock significantly lowered firms' employment adjustment and increased exit
- The effect is completely attributable to firms more exposed to high commitments to labor
- Firms more exposed are affected regardless of their productivity levels \Rightarrow Non-cleansing effect
- Back of the envelope: the credit shock through the financial channels of labor rigidities explains around 30% of aggregate employment losses, increases labor misallocation

The policy implications are non-trivial

Labor-as-leverage

- It calls for policies that alleviate labor-market frictions and wage rigidity
- They should aim at alleviating the burden of firms' current employment costs
- Example: short-term-work schemes in Italy (Giupponi and Landais, 2018) and France (Cahuc et al., 2018)
- They might allow policymakers to distinguish firms that would like to (but are constrained from) firing unproductive workers from firms that do not want to fire and lose future human capital
- Thus, there are potential productivity gains to exploit

The policy implications are non-trivial

Labor-as-investment

- It is deeply ingrained in how firms carry out production processes
- Its relevance will only increase over time as intangible human capital becomes more important (Sun and Xiaolan, 2018)
- Thus, standard labor-market policies might be ineffective
- The development of alternative sources of financing to alleviate liquidity risk is critical
 - Equity markets
 - Bond markets

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Can a small leak sink a great ship? A comprehensive analysis of the Portuguese household savings

Tiago Domingues e Margarida Rego



Call for Papers: Poupança e Financiamento

Can a small leak sink a great ship?

A comprehensive analysis of the Portuguese household savings

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Master's degree - Monetary and Financial Economics, ISEG

Postgraduate degree - Enterprise Data Science and Analytics, Nova IMS (candidate)

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Master's degree - Economics, Nova SBE

1. Motivação

2. The Small Leaks - A Micro Perspective of Household Saving Behaviour

- Objetivo da análise
- Dados e Metodologia
- Resultados

Micro (survey) data
Households Behaviour

3. The Great Ship - A Macro Perspective of Household Saving Dynamics

- Objetivo da análise
- Dados e Metodologia
- Resultados

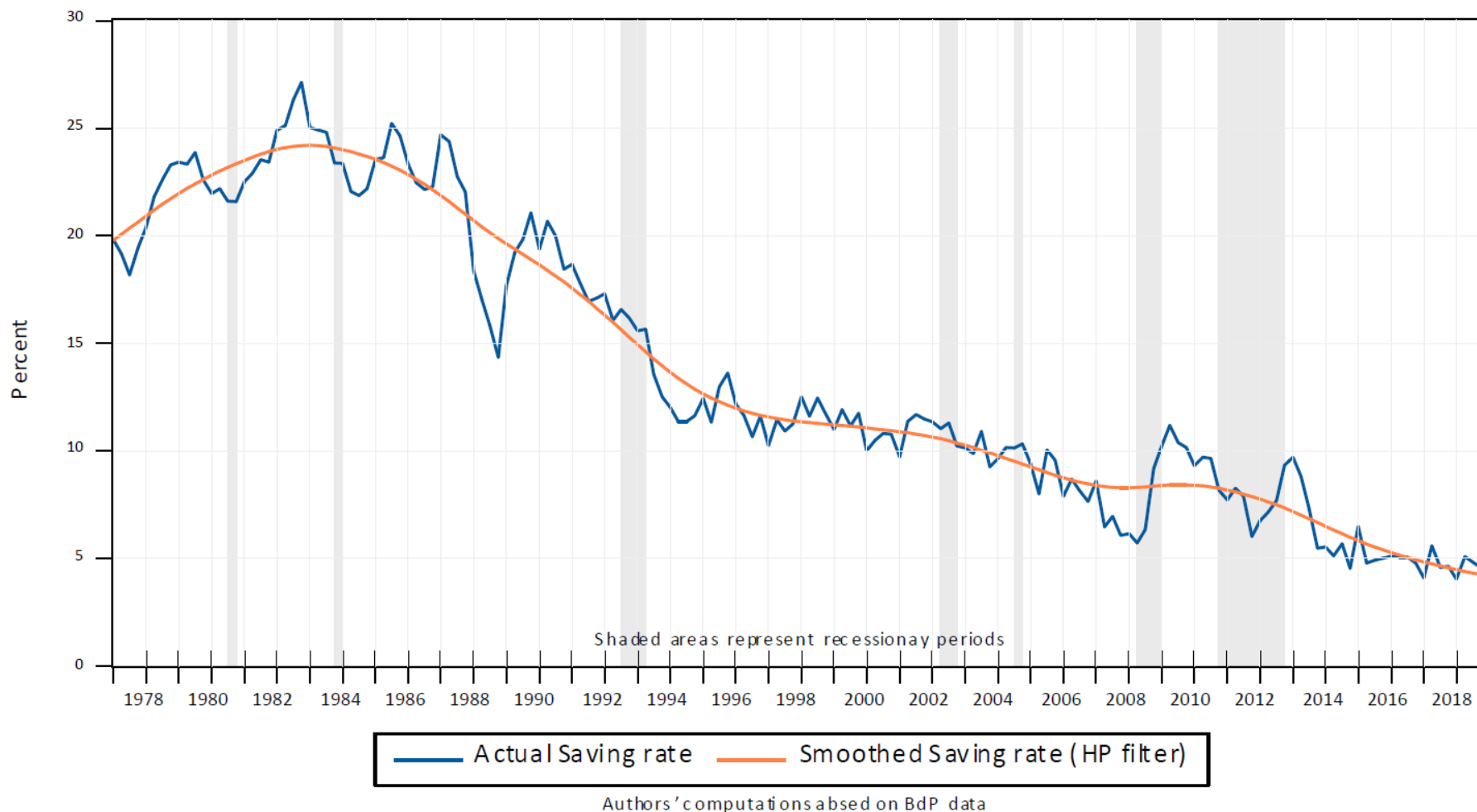
Macro (time-series) data
Households Dynamics

4. Principais Conclusões

5. Questões e Debate

Motivação

- A taxa de poupança das famílias em Portugal está em queda desde o início da década de 1980 e em 2018 registrou um mínimo histórico.

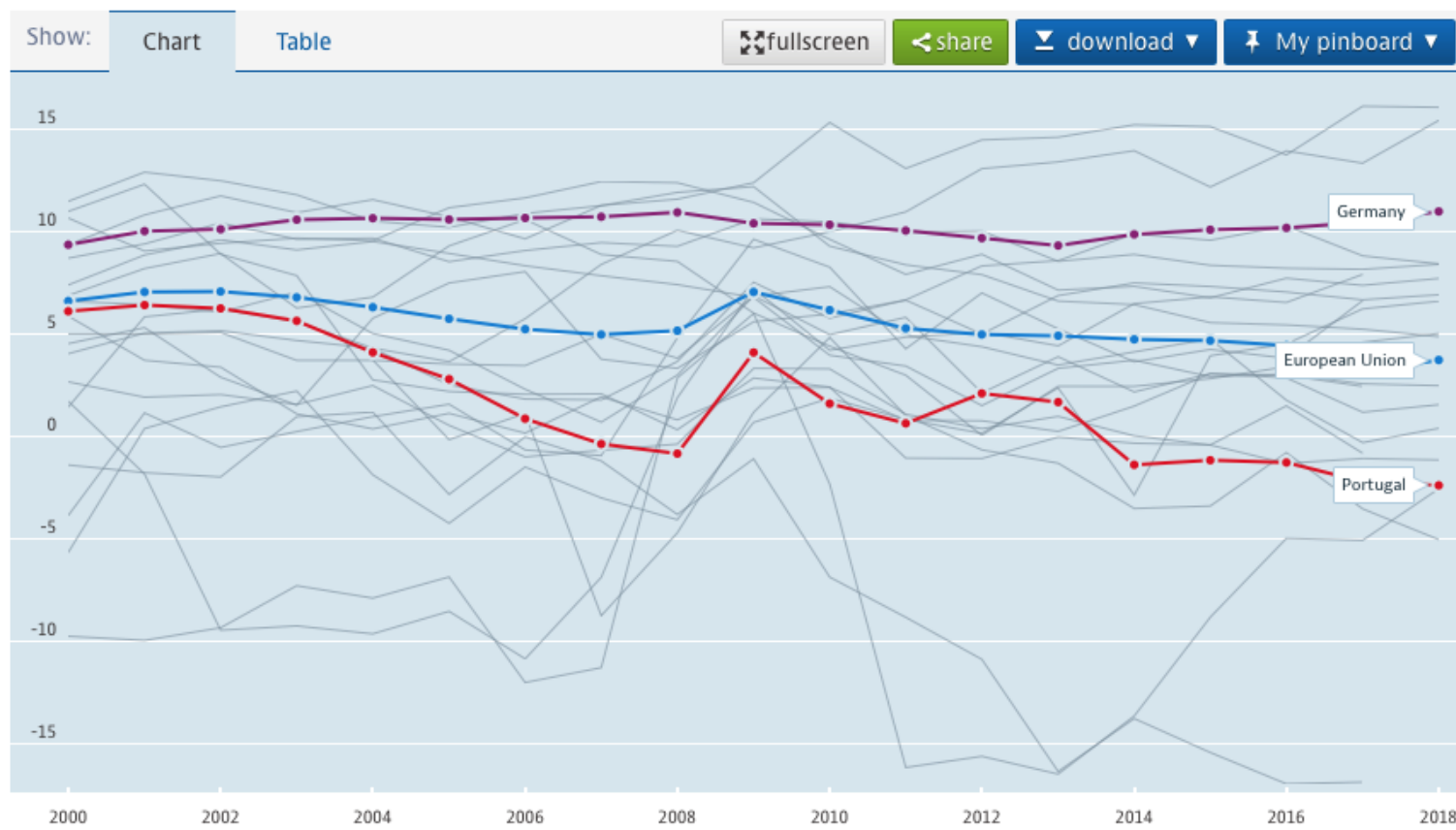


Motivação

- Em 2018, Portugal era o quarto país da UE-28 onde a taxa de poupança das famílias era menor, apenas ultrapassado pela Grécia, Lituânia e Letónia.

Household savings Total, % of household disposable income, 2000 – 2018

Source: OECD National Accounts Statistics: National Accounts at a Glance



- O artigo procura contribuir para o debate sobre a evolução da taxa de poupança das famílias em Portugal, fazendo uma **análise conjunta de evidência micro e macroeconómica**.

MICRO

Que características pessoais determinam a poupança das famílias em Portugal?

Exemplo: Idade, Género, Nível de Educação, Situação de Emprego, Estado Civil, etc...

MACRO

Que fatores económicos determinam a poupança das famílias em Portugal?

Exemplo: Taxa de juro, Inflação, Desemprego, Confiança, Incerteza, etc...

- As decisões individuais nem sempre são consistentes com os efeitos agregados ao nível da economia como um todo. (**Paradoxo da poupança - Keynes**)

Can a small leak sink a great ship?

A comprehensive analysis of the Portuguese household savings

"Beware of little expenses; a **small leak** will sink a great ship."

Benjamin Franklin - Almanack (1732-1758)

The **Small Leaks** - A **Micro** Perspective of Household Saving Behavior

1. Quem são as famílias Portuguesas que não conseguem poupar?
2. Como é que essas famílias financiam os seus níveis de poupança negativa?
3. Que fatores determinam as restrições de crédito das famílias Portuguesas?

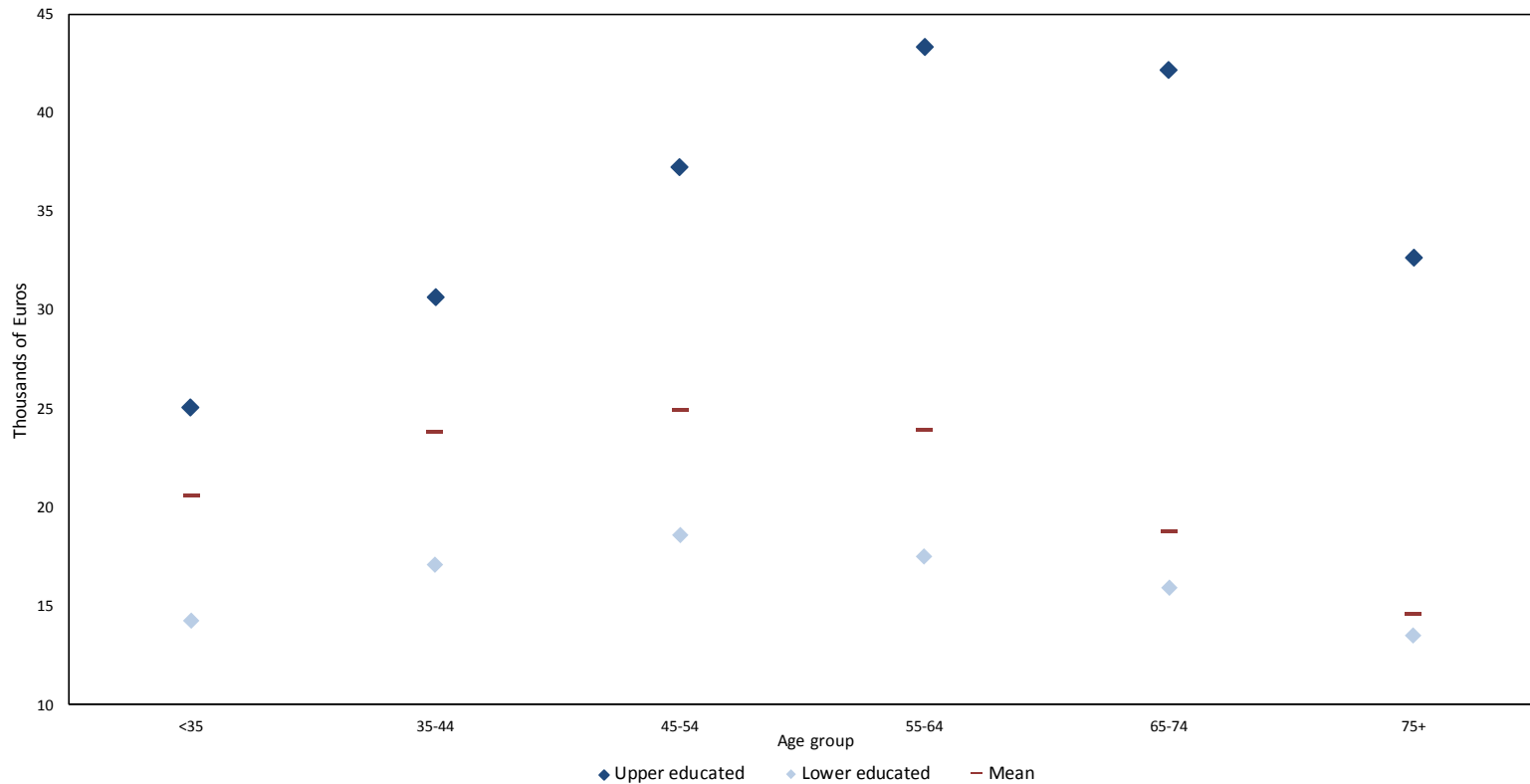
Dados

- Utilizámos a Segunda série do Inquérito sobre as finanças e consumo das famílias (HFCS) do Banco Central Europeu (BCE);
- Informação em áreas relacionadas às **decisões de poupança e consumo**, emprego, rendimento e restrições de liquidez, demografia e medidas socioeconómicas bem como informação qualitativa sobre as expectativas das famílias;
- Amostra final incluiu **6.207 famílias** e registou uma **taxa de resposta de 84.8%**.
- Com base nos dados do HFCS construímos um conjunto de **modelos *Probit*** de forma a avaliar as características individuais das famílias num conjunto de áreas.

The Great Ship - A Macro Perspective of Household Saving Dynamics

- Diferenças no nível de educação das famílias têm um impacto bastante significativo no seu rendimento, e crescente com a idade.

Rendimento das Famílias

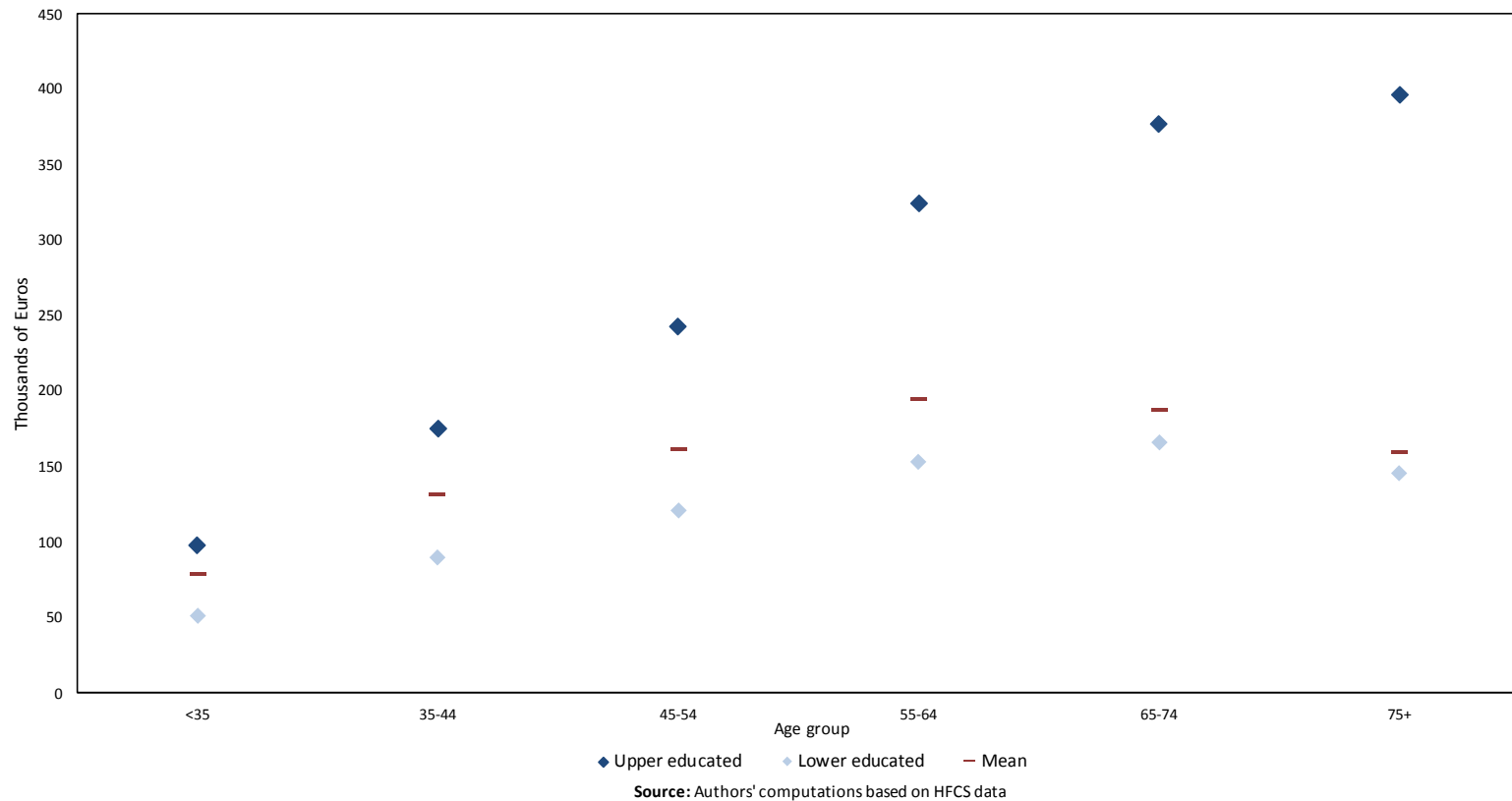


Source: Authors' computations based on HFCS data

The Great Ship - A Macro Perspective of Household Saving Dynamics

- Diferenças no nível de educação das famílias têm um impacto bastante significativo na sua riqueza, e crescente com a idade.

Riqueza das Famílias



1. Quem são as famílias Portuguesas que não conseguem poupar?

Question HI0600: *Aside from any purchases of assets, over the last 12 months would you say that your (household's) regular expenses were higher than your (household's) income, just about the same as your (household's) income or that (you/your household) spent less than (your/its) income?*

$$Expenses \geq Income_i = \beta_0 + \sum_{i=1}^n \beta_n X_i + \varepsilon_i$$

- $Expenses \geq Income_i$ é uma variável dummy igual a 1 quando a família teve gastos superiores ao rendimento no último ano;
- X_i denota as variáveis explicativas;
- 50% das famílias portuguesas reportaram $Gastos = Rendimento$, 35% tiveram $Gastos < Rendimento$, mas 15% não conseguiram cobrir as suas despesas com o rendimento auferido.

The Small Leaks - A Micro Perspective of Household Saving Behaviour

- **Em famílias em que o responsável financeiro é um homem com menos de 25 anos, é 82% mais provável que os gastos ultrapassem os rendimentos anuais;**
- **O estatuto de trabalho não se mostrou muito relevante na nossa análise;**
- **Como esperado, quanto maior o tamanho de uma família, maior a probabilidade do seu rendimento ser insuficiente para cobrir as despesas;**
- **Outros fatores associados a uma maior probabilidade de ter despesas anuais superiores ao rendimento são: famílias que estejam a pagar juros, tenham uma dívida associada a um cartão de crédito, tenha sido recusadas crédito ou tenham a perceção que não conseguiriam ter acesso ao crédito.**

2. Como é que essas famílias financiam os seus níveis de poupança negativa?

Question H10700x: *You have told me that your expenses in the last 12 months have been above your income. What did you do to meet expenses?*

$$\text{Financing Sources}_i = \beta_0 + \sum_{i=1}^n \beta_n X_i + \varepsilon_i$$

- A maioria recorreu a riqueza acumulada. 40% pediram um empréstimo informal a um familiar ou amigo. As restantes famílias pediram empréstimos a uma instituição financeira ou contraíram uma dívida;
- *Financing sources_i* é uma variável *dummy* igual a 1 quando a família usou um determinado instrumento para responder aos gastos superiores ao rendimento;
- X_i denota as variáveis explicativas.

The Small Leaks - A Micro Perspective of Household Saving Behaviour

- No primeiro modelo probit sobre famílias que recorreram a riqueza acumulada, observámos, como esperado, que **famílias mais ricas tendencialmente recorrem à própria riqueza para cobrir gastos que ultrapassem o rendimento**. Encontramos um efeito semelhante com famílias que auferem maiores rendimentos;
- **Famílias mais ricas tendem a usar menos empréstimos informais;**
- **Famílias maiores são menos prováveis de contrair dívidas e mais provavelmente usaram a sua riqueza para financiar gastos extra;**
- **Famílias com uma dívida no cartão de crédito, com pagamentos regulares de juros e que têm uma casa com uma hipoteca associada pedem mais provavelmente empréstimos formais para financiar gastos acima do seu rendimento;**
- **Quando o responsável financeiro familiar está desempregado, a família recorre mais provavelmente a amigos e familiares.**

3. Que fatores determinam as restrições de crédito das famílias Portuguesas?

Question HC1310x: *In the last three years, has any lender or creditor turned down any request you [or someone in your household] made for credit, or not given you as much credit as you applied for?* **Question HC1320:** *(Were you/Was your household) later able to obtain the amount requested, by reapplying to the same institution or somewhere else?* **Question HC1400:** *In the last three years, did you (or another member of your household) consider applying for a loan or credit but then decided not to, thinking that the application would be rejected?*

$$\text{Credit constraints}_i = \beta_0 + \sum_{i=1}^n \beta_n X_i + \varepsilon_i$$

- Por último, analisamos dois tipos de restrições de liquidez: as famílias a quem foi negado total ou parcialmente crédito (2%), e as famílias que julgam não conseguir obter um crédito junto de uma instituição financeira (5%);
- $\text{Credit constraints}_i$ é uma variável dummy igual a 1 quando a família sofre uma restrição de crédito
- X_i denota as variáveis explicativas

The Small Leaks - A Micro Perspective of Household Saving Behaviour

- Para famílias com gastos anuais superiores ao seu rendimento há uma maior probabilidade de crédito lhes ser recusado;
- Curiosamente, famílias que julgam não cumprir as condições necessárias para obter um crédito estão associadas a uma maior probabilidade de crédito lhes ter sido recusado;
- Pessoas solteiras ou famílias maiores têm uma probabilidade maior de se julgar numa situação desfavorável para pedir crédito;
- Famílias onde o responsável viu as suas condições laborais deteriorarem-se nos últimos dois anos têm tipicamente uma maior percentagem de se julgarem numa situação de restrição de crédito.

Can a small leak sink a great ship?

A comprehensive analysis of the Portuguese household savings

"Beware of little expenses; a small leak will sink a **great ship**."

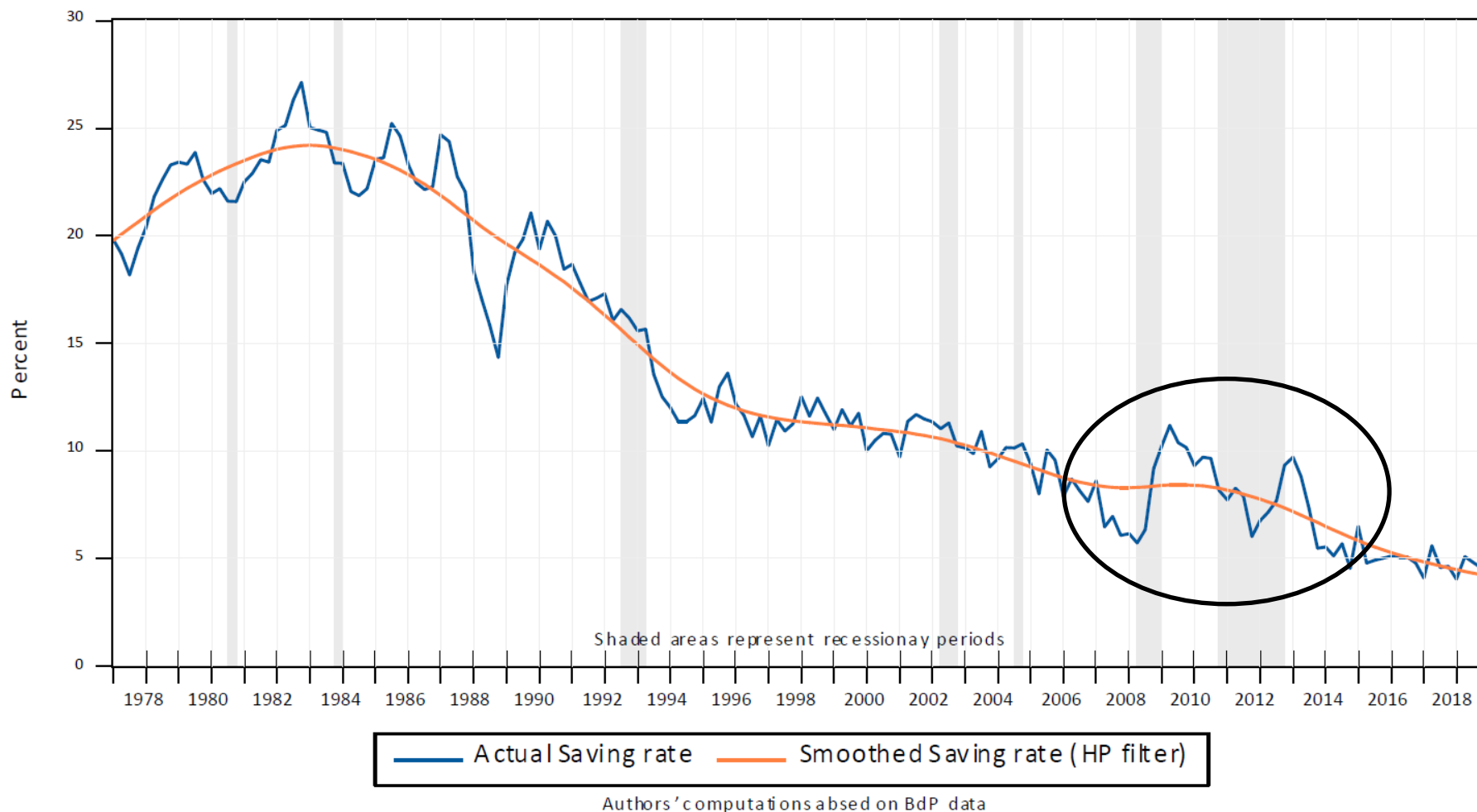
Benjamin Franklin - Almanack (1732-1758)

The **Great Ship** - A **Macro** Perspective of Household Saving Dynamics

1. Que fatores determinam a poupança das famílias?
2. A última crise financeira alterou estruturalmente o comportamento das famílias?
3. Qual a tendência futura da taxa de poupança das famílias?

The Great Ship - A Macro Perspective of Household Saving Dynamics

- O nosso principal objetivo é entender até que ponto a recente crise financeira produziu uma mudança estrutural na poupança das famílias.



The Great Ship - A Macro Perspective of Household Saving Dynamics

- O nosso exercício é baseado em investigação realizada pelo FMI para os Estados Unidos.

Ouliaris, S. and C. Rochon (2018). The U.S. personal saving rate. IMF Working Paper.

- Consiste na **estimação de um modelo para o consumo agregado das famílias** que será, posteriormente, incorporado na **equação fundamental da poupança**.

$$\text{Household saving rate} = 100 \times \frac{(rdy - (rc - (\text{adjustment pension funds}/\text{consumption deflator})))}{rdy}$$

- **O nosso exercício de previsão é baseado na seguinte ideia:** Estimámos um modelo para o consumo agregado das famílias utilizando todos os dados disponíveis até ao início da crise financeira (2008-T2). **Se o modelo conseguir prever de forma convincente a taxa de poupança das famílias depois desse período (2008T3-2018T4), ele produz evidencia estatística de que a crise financeira não alterou de forma estrutural o comportamento das famílias no que respeita á sua decisão inter-temporal entre consumo e poupança.**

Dados

- Os dados utilizados foram retirados das **series longas do Banco de Portugal** (*Real Consumption, Real Disposable Income e Real Net Wealth*). Adicionalmente foram utilizadas séries temporais do **Banco Central Europeu, Comissão Europeia, Eurostat e Chicago Exchange** (*10 year Gov.bills, Unemployment, VIX, Euribor rate e Consumer confidence index*).
- A estimação do consumo agregado das famílias e a previsão da taxa de poupança das famílias foi baseada num **Vector Error Correcting (VEC) model**.
- **A escolha das variáveis** para o modelo explicativo do consumo agregado das famílias **teve como base um conjunto de teorias económicas como:**
 - Permanent Income Hypothesis - Milton Friedman
 - Intertemporal Substitution Hypothesis - Frank P. Ramsey

The Great Ship - A Macro Perspective of Household Saving Dynamics

- O **modelo de longo prazo** para o consumo agregado das famílias:

$$\ln(rc_t) = \beta_0 + \beta_1 \ln(rdy_t) + \beta_2 \ln(rnw_t) + \beta_3 euribor_t + \epsilon_t$$

O nosso modelo considera o Rendimento Disponível (rdy), a Riqueza (rnw) e a Taxa de juro (euribor), como principais **determinantes de Longo Prazo do consumo**.

- O **modelo de curto prazo** para o consumo das famílias:

$$\begin{aligned} \Delta \ln(rc_t) = & \Psi + \sum_{i=0}^k \omega_i \Delta \ln(rdy_{t-i}) + \sum_{j=0}^p \psi_j \Delta \ln(rnw_{t-j}) + \sum_{l=0}^h \phi_l \Delta \ln(eur_{t-l}) + \sum_{m=0}^y \kappa_m (10yield_{t-m}) \\ & + \sum_{n=0}^z \varphi_n (\Delta unemp_{t-n}) + \sum_{f=0}^g \theta_f (vix_{t-f}) + \sum_{w=0}^z \delta_w (ci_{t-w}) + \lambda ECT_{t-1} + \mu_t \end{aligned}$$

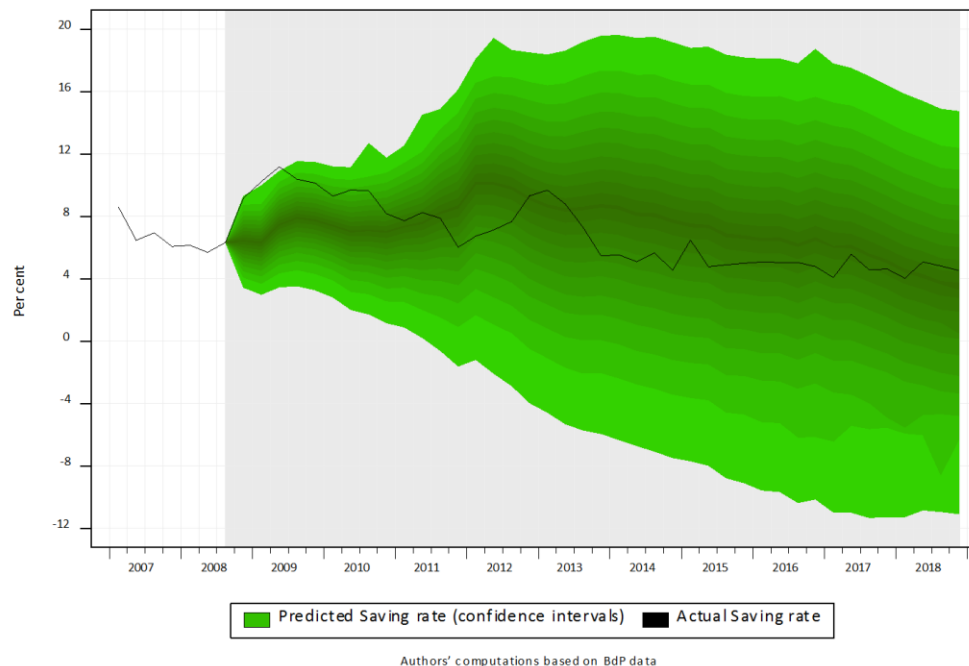
- O nosso modelo considera a Taxa de juro das obrigações do Estado (10yield), a taxa de Desemprego (unemp), a Volatilidade dos mercados financeiros (VIX) e a Confiança dos consumidores (ci), como principais **determinantes de Curto Prazo do consumo**.

The Great Ship - A Macro Perspective of Household Saving Dynamics

- + • **Rendimento das Famílias (rdy)** – Permanent Income Hypothesis
 - + • **Riqueza (rnw)** - Permanent Income Hypothesis
 - +/- • **Taxa de juro (euribor)** - Intertemporal Substitution Hypothesis
-
- • **Taxa de juro das obrigações do Estado (10yield)** – Proxy para Estabilidade Governo
 - • **Taxa de Desemprego (unemp)** – Proxy para situação económica
 - • **Volatilidade dos mercados financeiros (VIX)** - Proxy para Estabilidade dos mercados
 - + • **Confiança dos consumidores (ci)** – Proxy para confiança das famílias

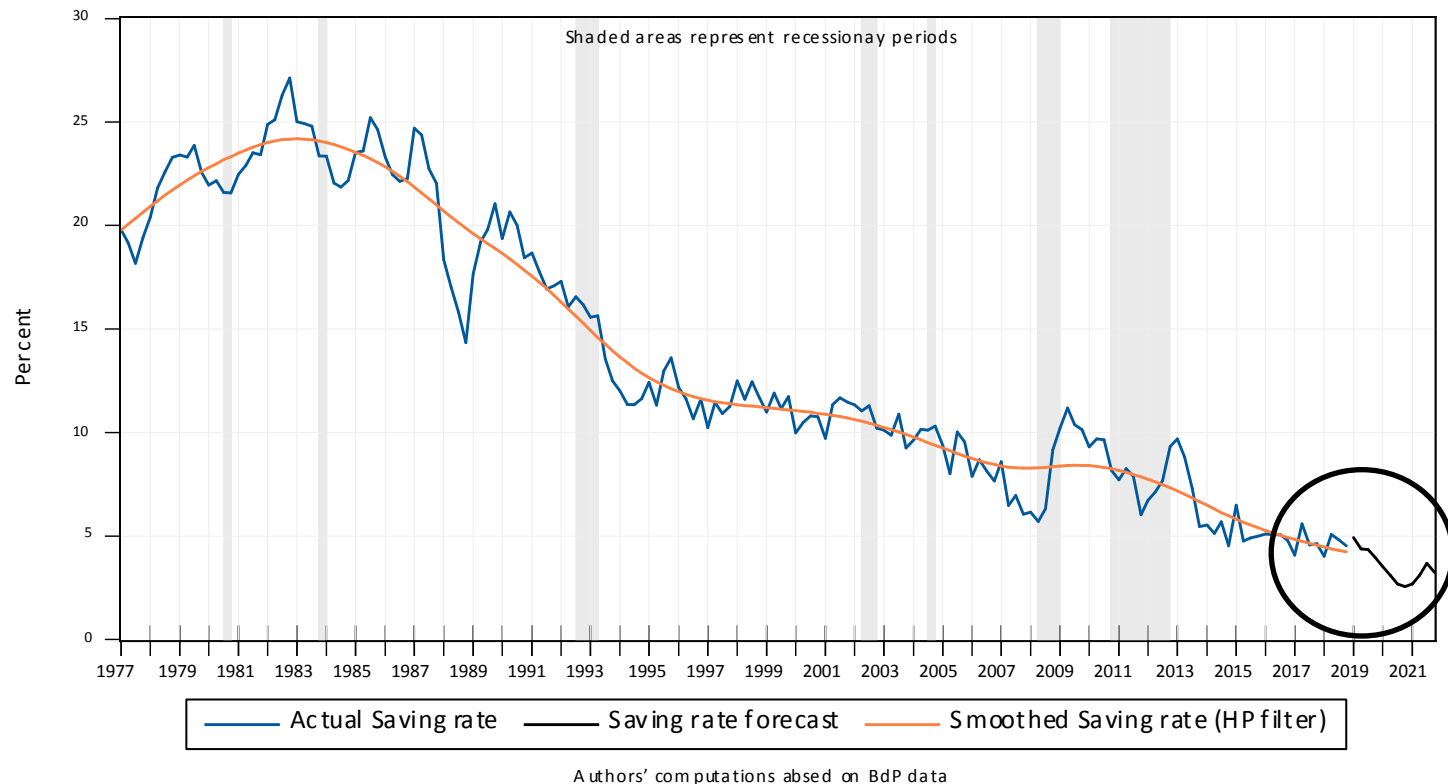
The Great Ship - A Macro Perspective of Household Saving Dynamics

- Utilizando dados até 2008T2, o nosso modelo prevê de forma aceitável a evolução da taxa de poupança das famílias em Portugal.
- O aumento (inesperado) da taxa de poupança das famílias durante a última crise internacional deveu-se a um shock temporário no rendimento e na riqueza.



The Great Ship - A Macro Perspective of Household Saving Dynamics

- Por fim, estimámos o modelo utilizando todos os dados disponíveis (até 2018T4). O modelo prevê uma continua descida da taxa de poupança das famílias no período 2019-2021.



Principais Conclusões

- A taxa de poupança das famílias em Portugal está **em queda desde os anos 1980** e em **2018 registou um mínimo histórico**, apenas ultrapassado pela Grécia, Lituânia e Letónia;
- A **entrada de Portugal na UE, a adoção do Euro, a liberalização dos mercados financeiros** e a (recente) **política de estímulos do BCE** contribuíram para essa tendência;
- A poupança das famílias depende de **fatores demográficos, sociais, culturais e económicos**, constituindo um pilar importante para as famílias em períodos de recessão;
- As **características pessoais e a heterogeneidade observada** entre famílias são fatores significativos e economicamente **determinantes na decisão de poupança** das famílias;
- Ao nível agregado, as famílias Portuguesas tendem a poupar mais em alturas de **instabilidade económica ou incerteza** perante o futuro;
- A **tendência da taxa de poupança das famílias em Portugal deve manter-se no futuro próximo**, o que constitui um risco adicional em futuros períodos de contração da atividade económica.

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