

Priced-out: Rent Control and Wage Inequality

Geraldo Cerqueiro

Católica Lisbon

Isaac Hacamo

Indiana University

Pedro Raposo

Católica Lisbon

Jun 2023

CSEF-RCFS Conference on Finance, Labor and Inequality

Housing Affordability and Rent Control

- Most major cities worldwide are grappling with a housing affordability crisis.
- Over 50% of U.S. residents report that housing affordability is a major problem in their city.
- Many cities/countries have introduced, or expanded, rent control and stabilization policies in past years, while others are considering introducing rent control laws.

Political Pressure for Rent Control in US

MA lawmakers debate rent control as agents push for new construction

The legislation being debated by lawmakers would impose more rent control on multifamily units

June 13, 2023, 12:34 pm By Chris Clow

Portland, Maine Passed Rent Control. Here's How.

After a failed attempt in 2017, organizers drew broad support in 2020 with a multi-pronged campaign and found ways to get signatures in a pandemic to win rent stabilization and a slate of other progressive laws.

SANDRA LARSON FEBRUARY 2, 2023



Orange County rent control battle goes to the Florida Supreme Court

December 7, 2022 by [Staff](#) and filed under [Housing, News and Public Affairs](#).

WAKE COUNTY

Raleigh City Council Members Throw Support Behind Rent Control Bill

A Wake lawmaker introduced a bill proposing rent control in the General Assembly this session. It has little chance of passing, but three newly elected Raleigh council members are supporting the bill nonetheless.

by [Jasmine Gallup](#) 05/17/2023

Political Pressure for Rent Control Around the World

Opinion | [Andreas Kluth](#)

Berlin's Rent Controls Are Proving to Be a Disaster

A year ago, the leftist government of Germany's capital region imposed central planning on the city's housing market. That was a bad move.



• LIVE ON BLOOMBERG

[Watch Live TV](#) >

[Listen to Live Radio](#) >

Hong Kong landlords face HK\$10,000 fines under new rent-control law to protect some of city's poorest people

Labour set to reject Sadiq Khan's demand for London rent controls

Sir Keir Starmer is not exploring rent freeze or devolving powers in spite of soaring prices in capital

Wales plans German-style rent controls in crackdown on landlords

Estate agents warn measures will worsen housing crisis and be a 'disaster for tenants'

By [Alexa Phillips](#)

8 June 2023 • 1:25pm

Economic Effects of Rent Control

- Empirical evidence shows that policies that expand affordable housing have negative economic effects:
 - Rent control and stabilization policies reduce housing supply, impose negative house prices spillovers, limit migration, and fail to transfer wealth from high- to low-income households (Ahern and Giacoletti, 2022; Autor et al., 2014; Diamond et al., 2019).
- One argument, often made by politicians, in favor of rent controls relies on providing economic opportunity to middle- and low-income workers, allowing them to live near job-rich areas (Ramakrishnan et al., 2019).
 - *“High housing costs can prevent workers from living near their jobs and can put a strain on the local economy by slowing employment growth.”*
 - Urban Institute, September 2019

Economic Effects of Rent Control on Wages

- Without price controls, low- and middle-income workers have reduced job proximity. A longer commute might then introduce additional costs, potentially lowering productivity in existing jobs or prompting job switches that may weaken job matching quality.
 - ▶ \uparrow rent control \rightarrow \uparrow wages
- Alternatively, as access to price-controlled homes reduces the incentive to relocate, individuals are likely to decline job opportunities located far from their homes (e.g., Svarer et al., 2005). The removal of price controls could then yield significant gains in the labor market by improving job match quality.
 - ▶ \uparrow rent control \rightarrow \downarrow wages

Today

- Using employer-employee-housing linked data from Portugal, we shed light on novel indirect costs resulting from rent control policies.
- We find that the loss of access to rent controlled homes pushes workers to the outskirts, increasing the distance from their existing workplace.
- The loss of access to rent control has an average negative impact on earnings, but this effect **masks substantial distributional effects**.

Today

- Individuals with incomes above the 60th percentile actually experience moderate short-term gains in earnings after losing access to rent control. These gains dissipate after 2 years, and high-incomers are no better off in the long-run.
- In sharp contrast, workers **below the 25th percentile** experience a **significant decline in earnings** that continues to deepen after losing access to rent controlled homes.
- The reduction in earnings for low- and middle-income earners stems from their relocation to the outskirts and transition to new jobs. No evidence of lower productivity in existing jobs and doing long commutes.
- Consistent with a mismatching mechanism, we demonstrate that losing access to rent-controlled homes reduces the likelihood of future promotions and increases the probability of observing an empirical mismatch, à la Abowd et al. (1999).

Today

- Rents paid by displaced households in non-controlled homes are significantly higher than their prior controlled rents.
- We also show that rent prices increase by 292% in homes previously under rent control.
- Preliminary evidence: wage losses for those below the 25th percentile constitute only 4-12% of the potential gains landlords could make if their homes were on an open market.
- Our paper suggests that policymakers could consider alleviating both financial and time costs associated to commuting for low-income workers, rather than implementing distortive price control policies.

Contribution

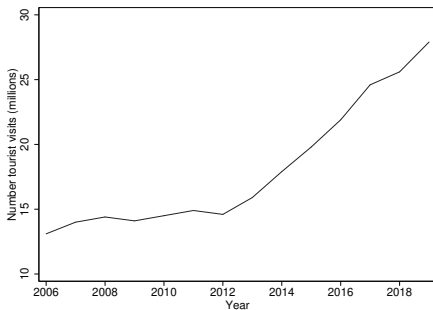
Our paper contributes to three different literatures:

- Literature that studies real effects of rent control policies. (e.g., Diamond and McQuade 2019; Autor et al. 2014; Svarer et al. 2005; Favilukis et al 2019; Ahern and Giacoletti, 2022).
- Impact of spatial frictions on worker's welfare. (e.g., Monte et al. 2018; Manning and Petrongolo 2017; Glaeser et al. 2008; Heblich et al. 2020; Severen 2019).
- Economic implications of working from home (WFH) policies (e.g., Bloom et al. 2015; Delventhal and Parkhomenko 2020; Aczel et al. 2021; Barrero et al. 2021).

Macro Trends in Portugal

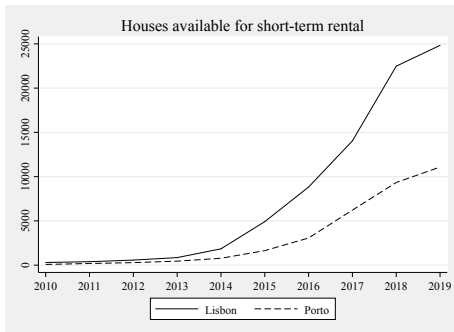
Macro Trends in Portugal: Tourism

Starting in 2012-2013, Portugal started to experience a boom in tourism. The number of visitors in tourist accommodation doubled between 2012 and 2019.



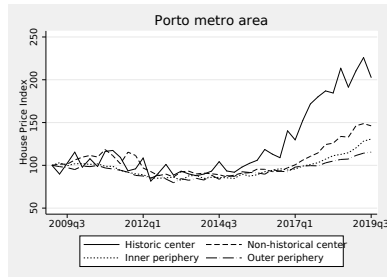
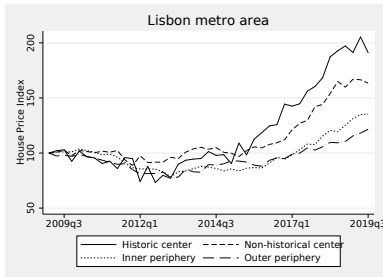
Macro Trends in Portugal: Short-rentals

Accompanying the increase in tourism, the number of available short-rentals also exploded.



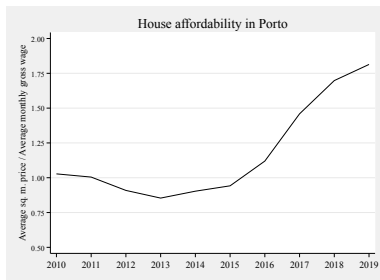
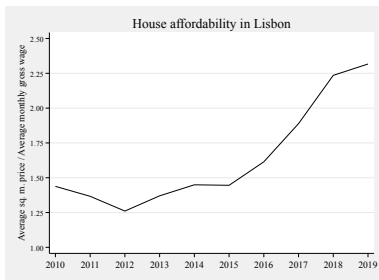
Macro Trends in Portugal: House Prices

House prices doubled in Lisbon and Porto between 2014 and 2019.



Housing affordability

While house prices increased rapidly, median wages did not follow. The plots below depict the ratio of house prices to median wages in Lisbon and Porto.



During this period it rent control homes were always below market prices. For example, in 2011, the average rent control home in our sample was 87.5 euros, and the average non-control home was 330 euros.

Brief History of Rent Control Laws in Portugal

Rent Control Laws in Portugal

- **1910:** First evidence of rent stabilization policies in Portugal. Rents below certain pre-determined thresholds were banned from any price updates.
- **1966:** The ability for a landlord to terminate a rental contract was revoked. A landlord could not terminate a rental contract, and the contract would renew automatically until terminated by the tenant.
- **1981:** Only two rental regimes allowed.
 - *Renda livre*: landlords and tenants negotiate freely a starting rent value, but stringent limitations on any subsequent price updates.
 - *Renda condicionada*, limited the maximum initial rent value based on a percentage of the tax-assessed property value, but allowed annual rent price updates that were determined by a government agency.

Rent Control Laws in Portugal

- **1990:** Government officials acknowledged that rental market was inefficient. Rental units and buildings lacked maintenance, and construction of new housing units had declined substantially.
 - New legislation aiming to liberalize the rental market.
 - One major change: Lease contracts with a limited term, giving the right to a landlord to refuse a contract renewal.
 - But to avoid a political turmoil, reform did not apply to lease agreements signed prior to 1990.

Rent Control Laws in Portugal

- **2012:** Reform aimed to fully liberalize rental markets as it transitioned out most rent control contracts.
 - It allowed landlords to renegotiate rent values and even to terminate rental contracts (with sufficient notice).
 - However, this reform did not apply to tenants older than 65 with a contract signed prior to 1990. These old lease contracts maintained the original protective privileges—i.e., low rents protected by no negotiation or termination.

Legacy Renters

- Landlords are then bonded to these legacy renters until the tenants dies. If a tenant dies, a lease might be transferred to a surviving spouse or descendants, provided they shared residency with the deceased.
- However, the terms of an original lease are only maintained if the succeeding tenant is older than 65, under poverty, or has a severe disability.
- If a lease agreement is transferred to a younger and working-able tenant, a landlord can renegotiate contract terms, rent values, or terminate it.

Empirical Design

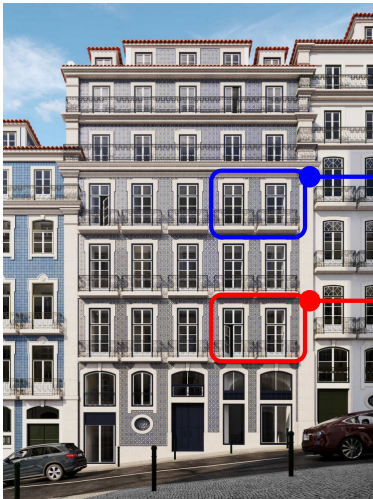
Overview

- We estimate a differences-in-differences models.
- Sample: Workers (age<65) living with *Legacy renter* (renter 65 or older and rental contract dates pre-1990).
- Treatment: Legacy renter passes-away.
- But those who die are usually old and in worse health condition. This characteristics may correlate with age of workers, income, and education.

Matching Legacy Renters

- We match legacy renters, not workers!
- We match legacy renters only on age, health condition, and city (Lisbon or Porto).
- We use the following health conditions:
 - Eyesight issues
 - Hearing difficulties
 - Walking limitations including difficulty in climbing stairs
 - Challenges with memory recall
 - Necessity for personal care such as assistance with bathing or dressing
 - Inability to communicate basic needs.
- After controlling for these characteristics, we assume that the death of the legacy renter is exogenous for wages of working family members.

Treated and Control Workers



Treatment: Workers living with
legacy renter
who passes away

Control: Workers living with
legacy renter
that is still alive

Treated and Control Workers

There is no economic or statistical significant difference in demographics, educational achievement, or labor outcomes in the beginning of the sample (prior to death and law change).

Table: Characteristics in 2010

	Treatment vs Unmatched Control		Treatment vs Matched Control	
	Difference	t-stat	Difference	t-stat
Age in years	1.687***	3.61	-0.449	-0.83
Female	0.0152	0.76	0.011	0.44
No high school	0.0641***	3.22	0.027	0.91
High school diploma	-0.0107	-0.61	-0.0037	0.73
College	-0.0535***	-2.79	-0.023	-0.85
Located in Lisbon	0	-	0	-
Wages per hour (in euros)	-0.368*	-1.96	-0.294	-1.24
Monthly hours worked	0.398	0.62	0.431	0.51

Regression Equation

- We estimate the following two-way fixed effect regression:

$$Y_{it} = \beta_1 \times \text{Legacy death}_i \times \text{Post}_t \\ + \text{Year FE} + \text{Individual FE} + \varepsilon_{it}$$

- Y_{it} : likelihood of moving to outskirts, wages, labor supply, job change, unemployment, and hourly wage.
- Our sample covers 2010 through 2020. Errors clustered at the strata-level.
- Identification assumption: The death of elder only affects labor outcomes through re-allocation and not through other channels.

Identification assumption

- The death of an elder may, however, affect the career outcomes of surviving family members through two alternative channels.
- First, if the deceased elder provided childcare, households might reduce labor supply.
 - To gauge the impact on labor outcomes due to changes in childcare availability, we compare results for families with and without children.
- Grief associated with a family member's death might adversely affect productivity at work.
 - Larger effects in the short-run than long-run.
 - Larger effects higher incomers, whose wages are more sensitive to productivity
 - No difference between movers and stayers.

Data

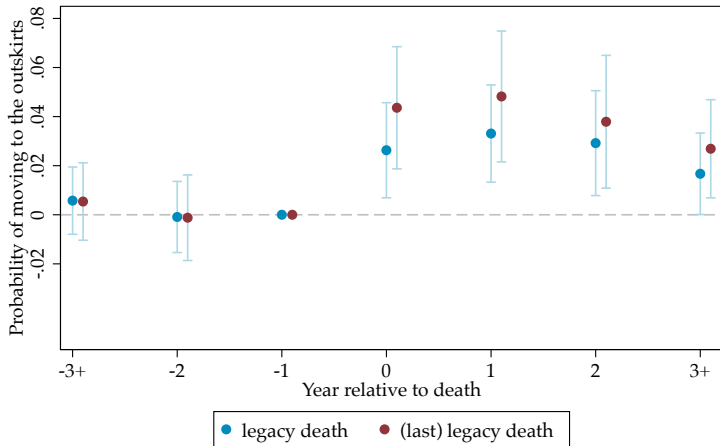
Data

We examine our hypothesis using several administrative data sources from Portugal. We have access to data for the whole country, but our primary focus is Lisbon and Porto, the two major cities that experienced rapid growth in house prices in the past ~ 6 years.

- Quadros Pessoal (wages, hours worked, base salary, total salary, occupation)
- Social security data (employment, unemployment)
- Housing data (exact address, house prices, rent values, rental contract, house characteristics)
- Firm-level data (employer, sales, size, num employees, location)
- Demographic data (age, family size, education)

Results

Event plot: Moving to the city outskirts



Within 4 years after the (last) legacy death, the prob. of moving to the outskirts is almost 12 (20) pct's points higher, a 80 (120)% increase relative to the mean.

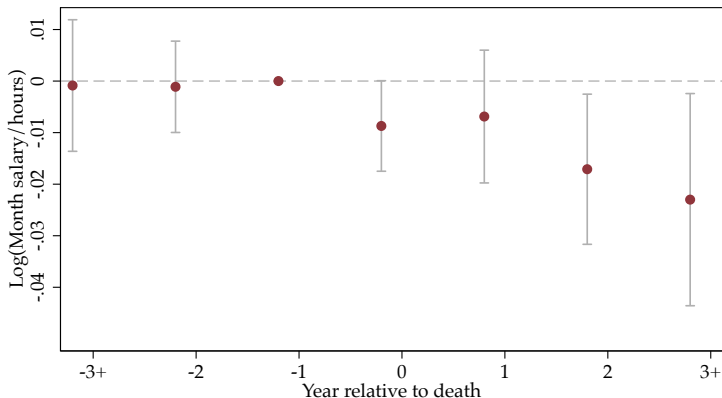
Does loss of rent control affect earnings?

	Log(Monthly salary/hours)					
	Full sample	City center vs outskirts		Moved outskirts		
		Moved outskirts	Stayed in city	New job	New job (last death)	Same job
Treatment \times Post	-0.013* (0.007)	-0.029** (0.012)	-0.011 (0.012)	-0.056** (0.028)	-0.053** (0.023)	-0.018 (0.0145)
Post	0.001 (0.001)	0.001 (0.002)	0.0001 (0.001)	0.002 (0.002)	0.001 (0.002)	0.0002 (0.004)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes
Strata-death year FE	Yes	Yes	Yes	Yes	Yes	Yes
N	117,776	35,411	82,054	17,367	14,169	18,319
R-squared	0.937	0.972	0.943	0.974	0.968	0.864

After losing access to rent controlled homes, workers experience a decline of 3 percent in earnings.

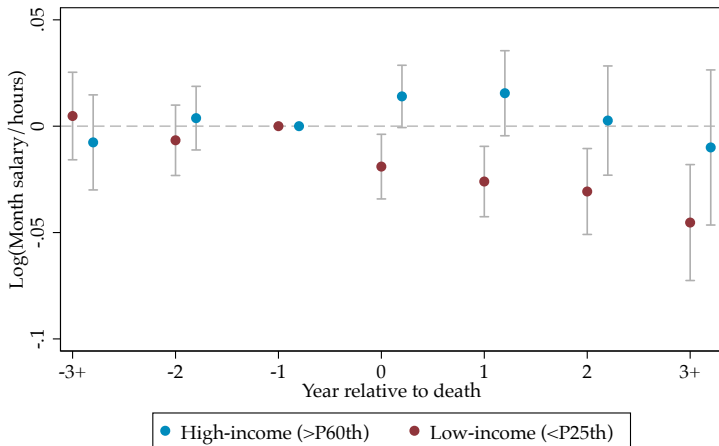
Event plot: Average Earnings

The decline in earnings is gradual. Consistent with worse matching, but also composition effects.



Event plot: Low- vs high-income

Declines are all concentrated on workers below P25th. High-incomers experience mild positive effects in the short-term but they taper off in the long-run.



More on distribution of wages

	Income group		
	Bottom tercile [$Inc < P25th$]	Mid tercile [$P25th < Inc < P60th$]	Top tercile [$Inc > P60th$]
Treatment \times Post _{$t=\{0,1\}$}	-0.0235*** (0.009)	-0.0203** (0.009)	0.0206* (0.012)
Treatment \times Post _{$t=\{2,3,4\}$}	-0.0410*** (0.013)	-0.0210 (0.016)	0.0016 (0.019)
Post	0.00144 (0.001)	0.00410*** (0.001)	-0.00147 (0.001)
Year FE	Yes	Yes	Yes
Individual FE	Yes	Yes	Yes
Strata-death year FE	Yes	Yes	Yes
N	23,701	28,815	31,553
R-squared	0.766	0.779	0.894

Does rent control affect promotions?

Treated households are less likely to receive a promotion in the following 5 years.

	Likelihood of promotion	
	Full sample	Moved outskirts
Treatment \times Post	-0.0282** (0.011)	-0.0372* (0.020)
Post	0.0028 (0.002)	0.0064 (0.004)
Year FE	Yes	Yes
Individual FE	Yes	Yes
Strata-death year FE	Yes	Yes
N	117,776	35,696
R-squared	0.558	0.548

Do effects differ by gender?

No evidence that effects differ by gender.

	Log(Monthly salary/hours)	
	Full sample	Moved outskirts
Treatment \times Post	-0.032*** (0.011)	-0.0369** (0.017)
Treatment \times Post \times Female	0.0154 (0.014)	0.0075 (0.021)
Post \times Female	-0.0106 (0.007)	-0.0168* (0.010)
Post	-0.007** (0.0035)	-0.012** (0.005)
Year FE	Yes	Yes
Individual FE	Yes	Yes
Strata-death year FE	Yes	Yes
N	86,207	26,720
R-squared	0.890	0.864

Does loss of rent control affect unemployment?

After losing access to rent controlled homes, workers are not more likely to become unemployed.

	Log(Hours worked)		Unemployment	
	Full Sample	Moved outskirts	Full Sample	Moved outskirts
Treatment \times Post	0.0008 (0.003)	0.0012 (0.003)	0.0019 (0.001)	0.0028 (0.004)
Post	-0.0007 (0.0005)	-0.0005 (0.0004)	-0.00118** (0.0005)	-0.00128* (0.0008)
Year FE	Yes	Yes	Yes	Yes
Individual FE	Yes	Yes	Yes	Yes
Strata-death year FE	Yes	Yes	Yes	Yes
N	117,589	35,690	117,589	35,690
R-squared	0.637	0.716	0.361	0.314

Are results driven by childcare?

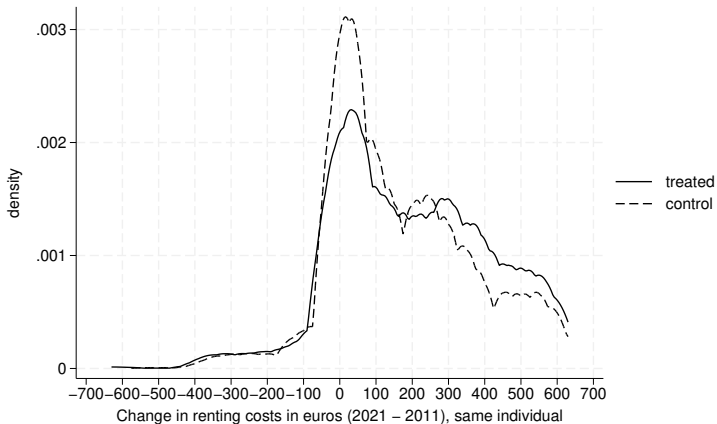
Effect stronger on those without children.

	Family structure	
	Without children	With children
Treatment \times Post	-0.0260*** (0.009)	-0.0191 (0.019)
Post	0.00265** (0.001)	0.0009 (0.002)
Year FE	Yes	Yes
Individual FE	Yes	Yes
Strata-death year FE	Yes	Yes
N	76,168	10,013
R-squared	0.889	0.892

What can we learn so far?

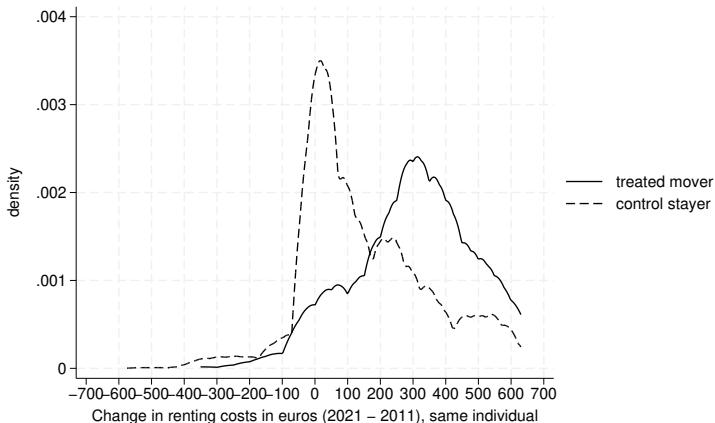
- Evidence seems consistent with low- and middle-income workers have reduced job proximity.
- **Commuting costs** prompting low-income workers to switch jobs that may weaken job matching quality.
- In Lisbon and Porto, average commuting costs are approximately 4.5% of average earnings. For low-income workers, this is close to 8%. Evidence consistent that low-income workers should avoid this costs and take a lower wage job close to home.
- No evidence in favor of reduced job proximity lowering productivity in existing jobs.

Do treated households experience larger rent prices?



Do treated households experience larger rent prices?

Treated-mover households pay higher rents in non-rent controlled homes.
Moving to the outskirts does not lead renters to lower rent prices.

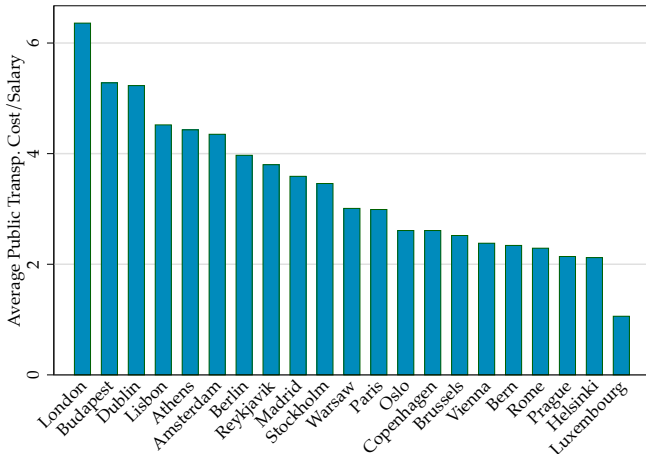


How much are landlords losing?

- We examine the increase in rents at the property level, which allows us to measure the potential gains landlords may earn in an open market. Early evidence indicates that rent prices are likely to increase by 292% following the end of rent control.
- These figures suggests that the wage losses for those below P25th account for only 4-12% of the potential gains landlords could earn in an open market.
- Not considering value of selling rent-controlled home. This estimate is an extremely conservative upper bound.

What can we learn from Portugal?

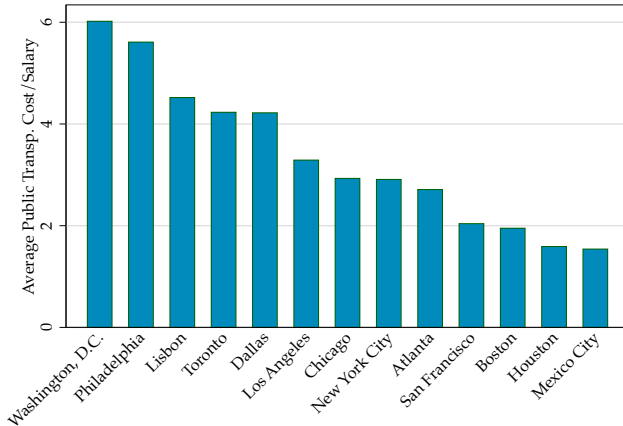
Average cost of public transportation in Lisbon relative to average salary is one of the highest in Europe.



Average commuting time in Lisbon in 2018 is 78 minutes.

What can we learn from Portugal?

Even compared with other major North American cities.



The estimates showing that only workers below the P25th are likely lower bound. We might expect that the fraction of workers affected in other cities might be even lower than P25th.

Conclusions and Next Steps

- Data from Portugal does not support the argument that introduction of rent controls alleviates large indirect costs in labor markets.
- Paper suggests that policymakers could consider alleviating both financial and time costs associated to commuting for low-income workers, rather than implementing distortive price control policies.
- Next steps:
 - We still need to clean some aspects of the identification to obtain more precise estimates.
 - A bit more work on estimating costs to landlords.
 - More work on generalizing our results to other cities.

Thank you!