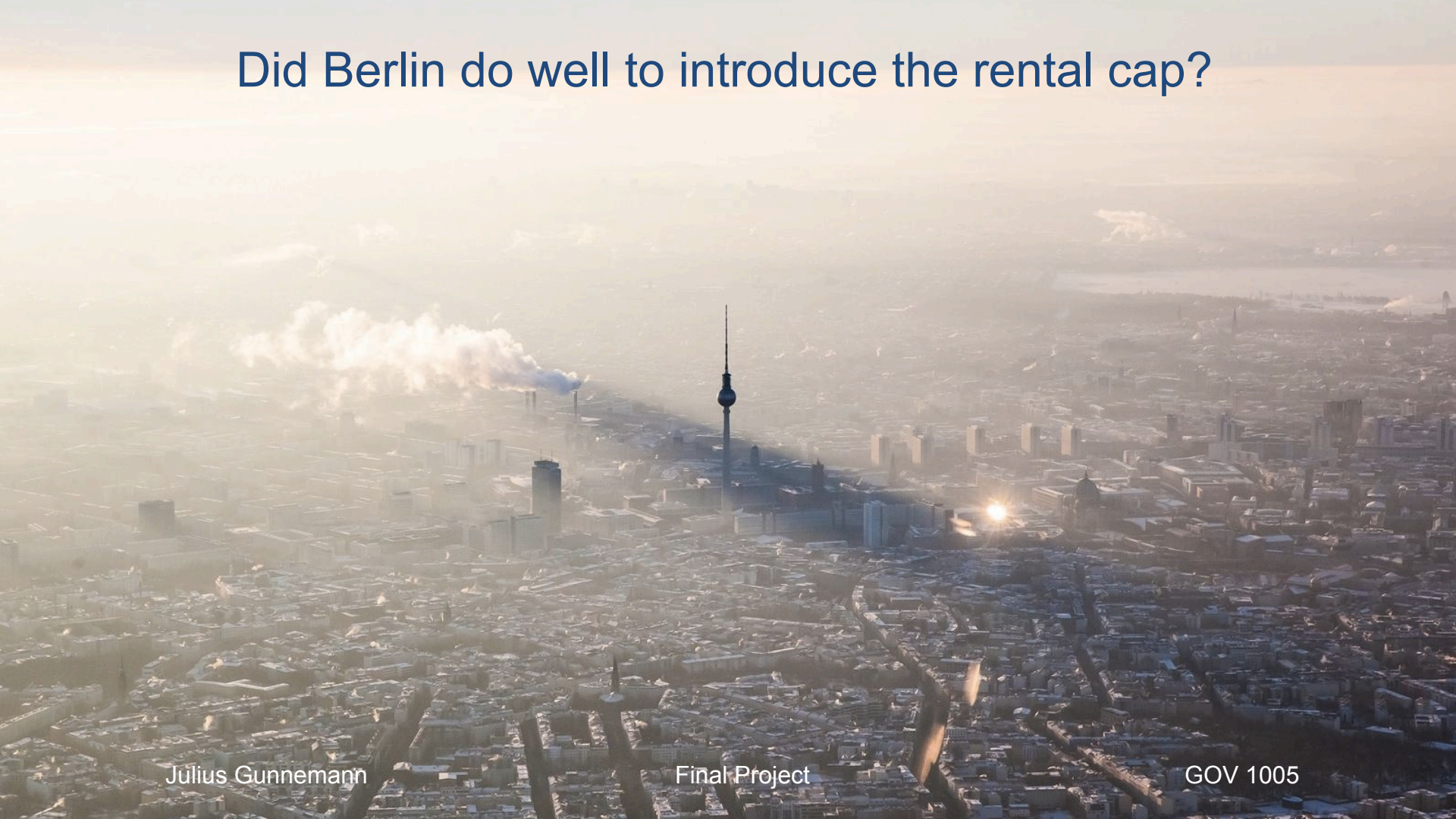
Did Berlin do well to introduce the rental cap?



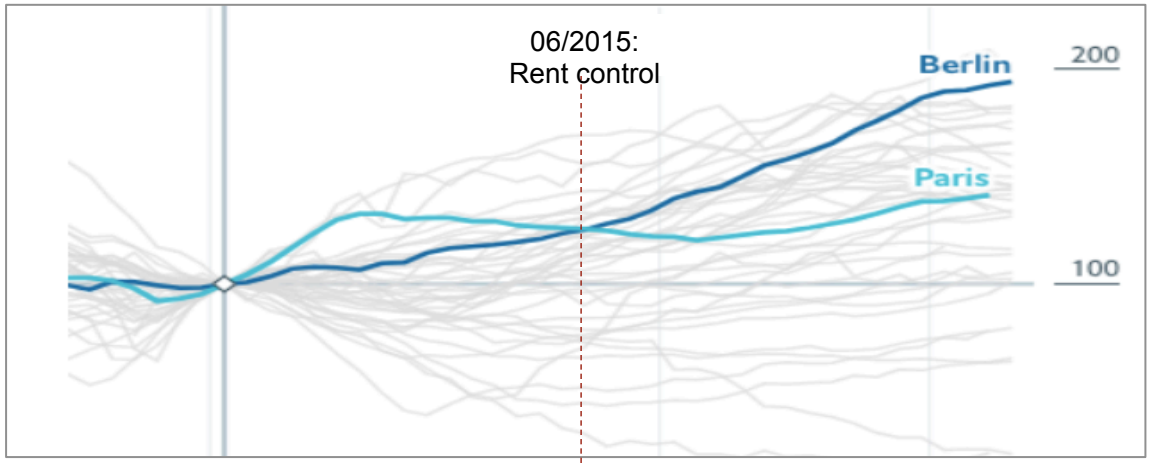
Julius Gunnemann

Final Project

GOV 1005

Context: Since 2010, steepest growth in housing prices amongst world cities, despite rent control since 2015

World city housing prices relative to net income (logs, normalized)



Price for a median sized apartment:

2010: **375 EUR**

2015: **712 EUR**

2020: **1,125 EUR**

Note: 2015 rent control meant maximum rental increases of 15% every three years, and local rental price ceilings for new tenants. Furnished or short-term rentals were excluded, leading to substantial leakage. Graph from The Economist Global Housing Price Index, *Applicable ceiling rental price varies slightly with the age and condition of the building.

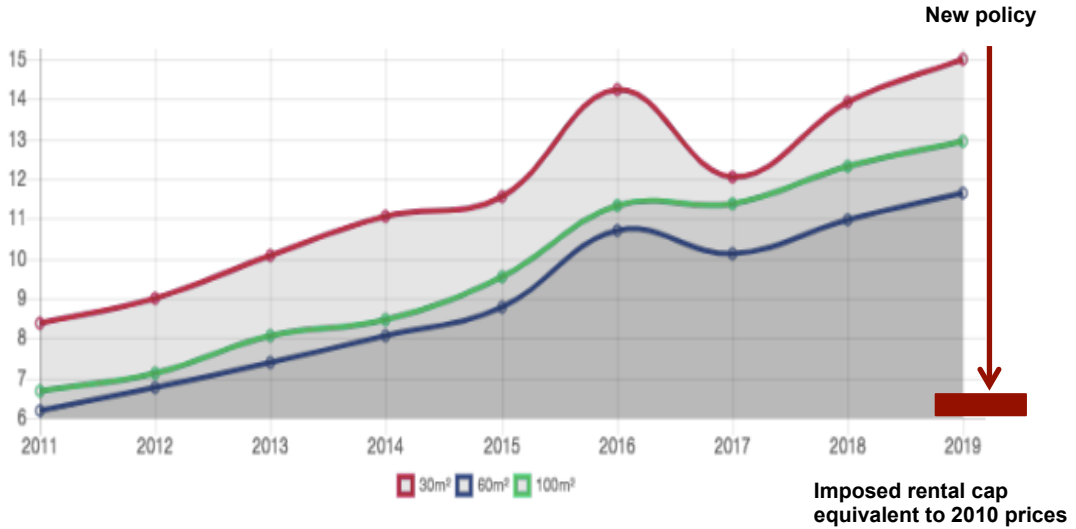
New Policy: An unprecedented market intervention effectively demanding a halving of median prices

Ceiling for all apartments except new-builds

- All rental **prices frozen** for 5 years (06/2019)
- No new rental contracts above EUR 6.50/ m2* (02/2020)
- Landlords to **reimburse tenants** for any rents paid above cap since 06/2019

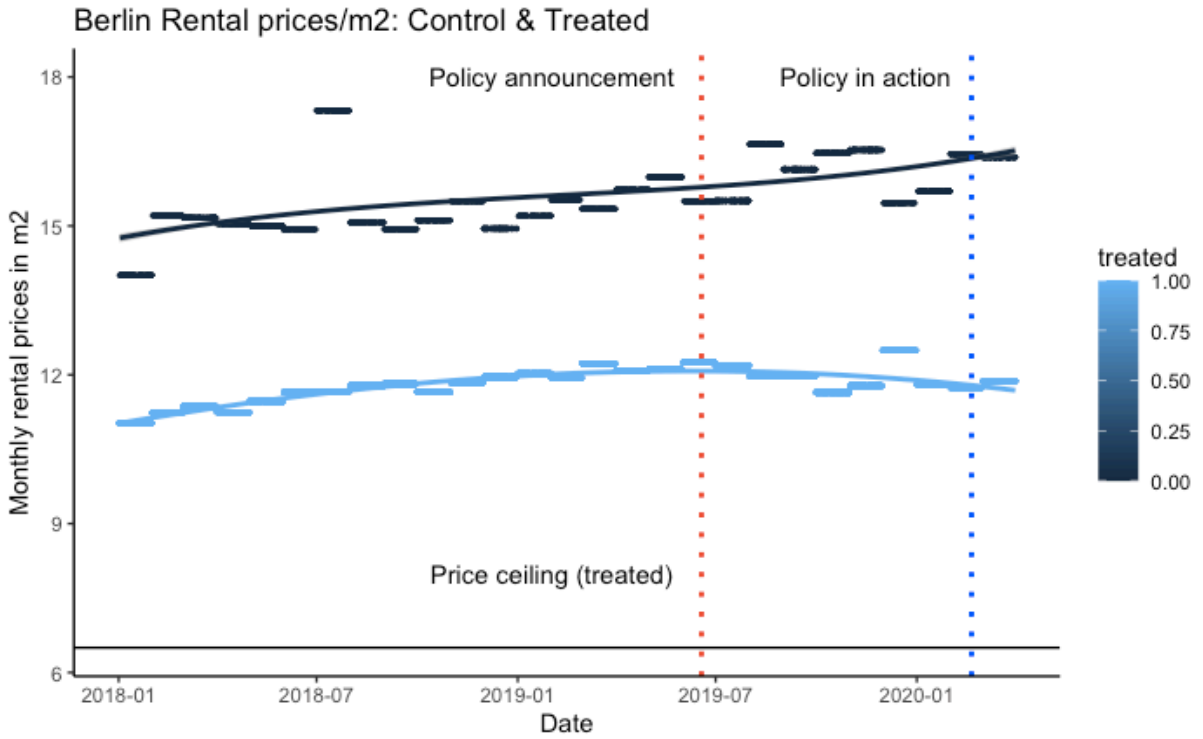
→ Opposition has launched an **appeal in the constitutional court**

Apartment rental prices over time vs. new price ceiling

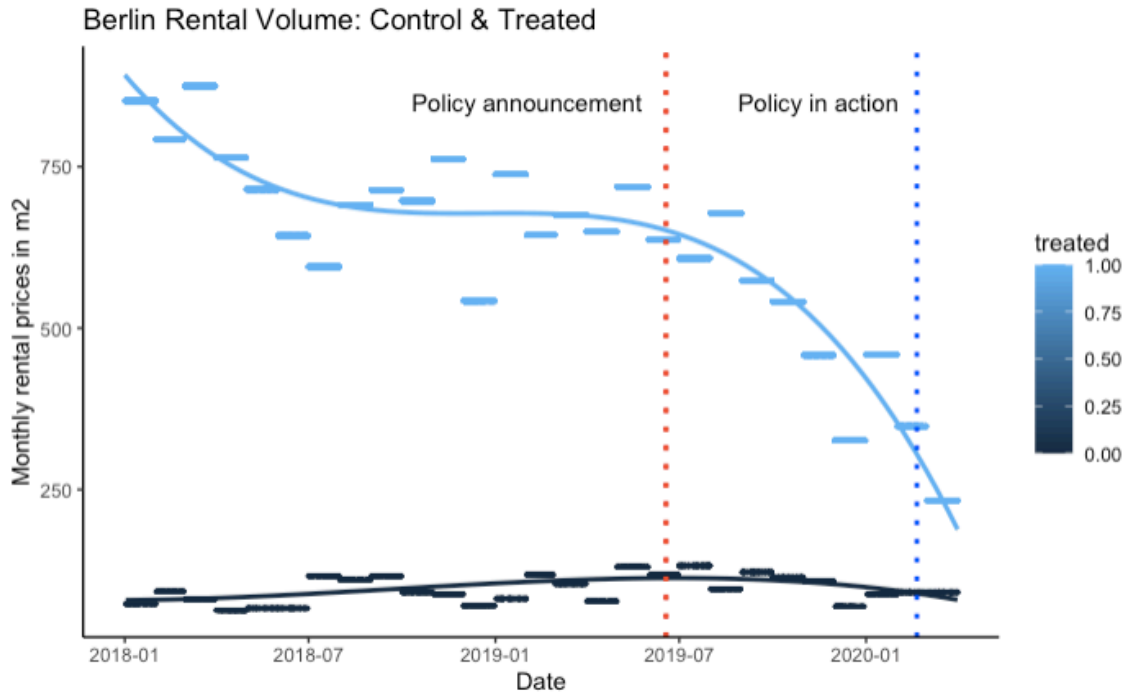


Note: *Newly enforced ceiling corresponds to 2010 average price. Graph from Berliner Wohnungsboerse (https://www.wohnungsboerse.net/mietspiegel-Berlin/2825)

Prices: treated apartments with slight downward trend since announcement



Volume: Most landlords appear to just take their apartments off the market and wait for policy change

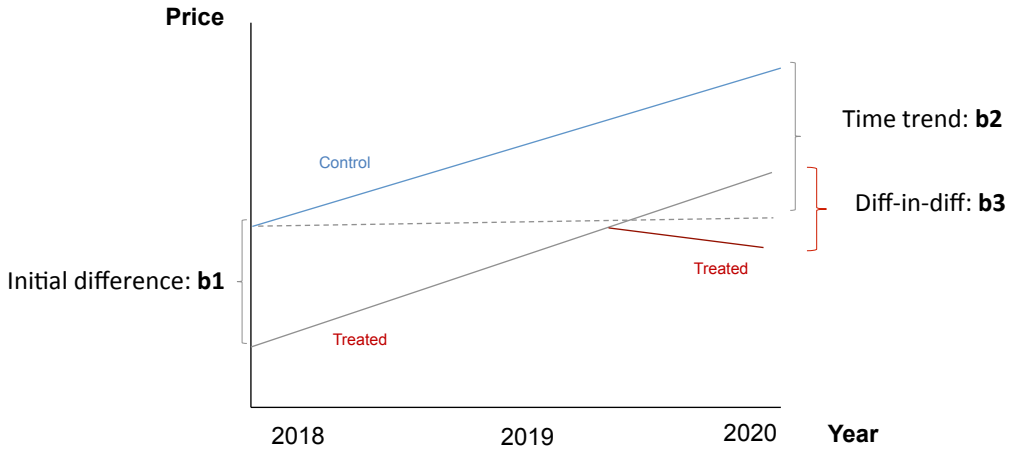


Empirical approach: Diff-in-diff identification

Data

- Daily **rental market** offers since 2018, 66k transactions
  - Hamburg (Control)
  - Berlin (Treatment)
- Daily **purchase price** offers since 2018, 35k transactions
  - Hamburg (Control)
  - Berlin (Treatment)
- Controls for size, location, building condition, vacancy, amenities, etc.*

Diff-in-Diff approach



Estimation equation

$$Log(Price_i) = \beta_0 + \beta_1 (Treatment) + \beta_2 (Timing) + \beta_3 (Treatment*Timing) + \gamma t + \gamma t^2 + \beta_4 (Controls_{I,x}) + \varepsilon_{I\,t}$$

Controls include: City, post code level district, number of rooms of apartment, floor in building, amenities (Kitchen type, bathroom type, floor heating etc.), condition, year of construction

Results: Significant differential negative effect of policy on regulated apartments rental prices

Effect of Housing Policy on Rental Prices in Berlin

Logged housing rental prices

Variable	Estimate	Lower bound	Upper bound
(Intercept)	3.44599418966	3.40721438626	3.48477399305
treated_missing	-0.08359081274	-0.08977612071	-0.07740550477
timing_announced	-0.00848998241	-0.01909620396	0.00211623915
Berlin	-0.49230389866	-0.51036170839	-0.47424608893
post_code	-0.00004442749	-0.00004617835	-0.00004267662
trend	0.00716485912	0.00610791033	0.00822180791
trend_squared	-0.00016057409	-0.00020560636	-0.00011554181
nrooms	-0.01555570187	-0.01758118377	-0.01353021997
zust_erstbezug_janein	0.17105842666	0.16472337365	0.17739347966
built_1918	0.06363434619	0.05655584351	0.07071284887
zust_neuwertig_janein	0.15372583004	0.14548450791	0.16196715217
zust_saniert_janein	0.03362691990	0.02896840475	0.03828543505
treated_missing:timing_announced	-0.01096250008	-0.01978795573	-0.00213704443

Take-away:

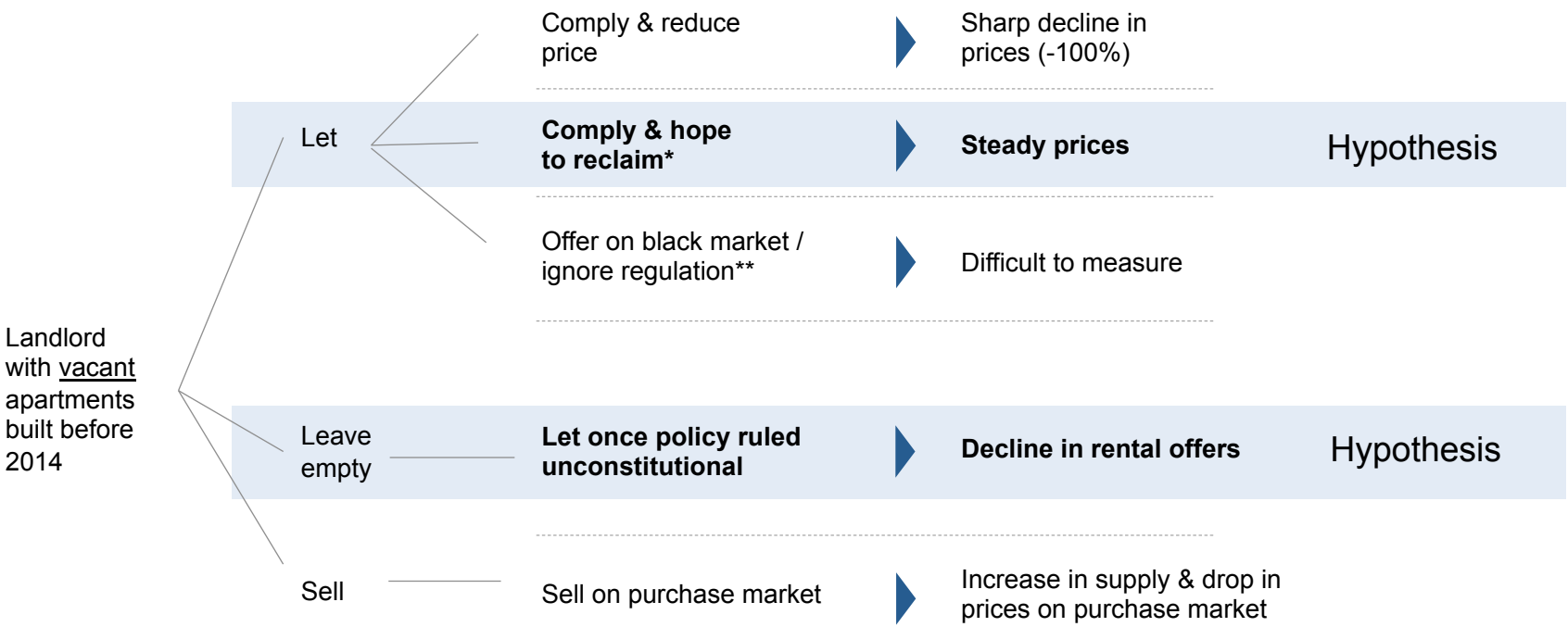
- **Diff-in-diff estimator is significant at the 1% level**
- **The policy has led to a very small 1% decrease in apartment rental prices.**

Theoretical framework: ceiling should lead to drop in prices and quantity supplied

Short term: Price decrease and supply shortage

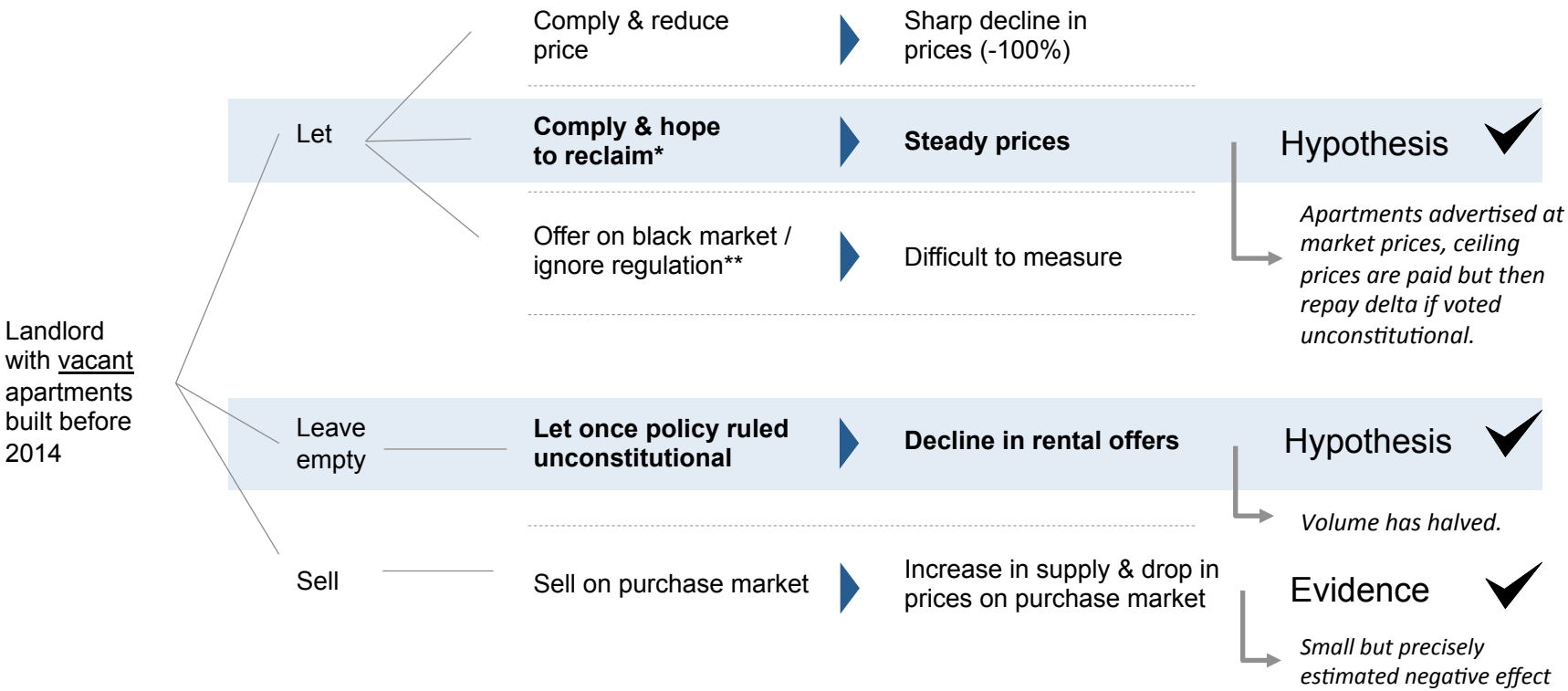
Long term: Increase in supply of unregulated new builds

A landlord's decision framework: two hypothesized actions



Note: *Institutional investors advertise apartments at their market value, then accept only the enforced ceiling price but then reclaim delta if policy is ruled unconstitutional; **If ignoring regulation, landlords face fines of up to EUR 0.5M.

Evidence: suggests landlords continue to offer apartments at market values or leave them vacant



Note: *Institutional investors advertise apartments at their market value, then accept only the enforced ceiling price but then reclaim delta if policy is ruled unconstitutional; **If ignoring regulation, landlords face fines of up to EUR 0.5M.

Conclusion, distributional effects & recommendations

Findings

- Virtually no apartments rented at legal rent cap
- Landlords appear to bet on constitutional court decision
- Tiny reduction in rental and purchase prices
- Massive drop in number of offers

Distributional effects

Winners

- Ruling coalition (popular policy with median voter)
- Current tenants

Losers

- Private landlords, institutional landlords potentially less so
- Tenants currently looking for a lease
- Possible debt trap for tenants that will need to reimburse landlords

Alternative recommendations

- Abolishment of the rent cap & reimbursement policy
- Increase in supply through strong building development incentives, esp. for affordable housing
- Better enforcement of rent control, incl. the closing of loopholes

Appendix: Academic literature: One of few opportunities for causal inference on housing policies, the first to study a rent freeze

- Simps (2007):
  - Diff-in-Diff using elimination of **rent control** in Cambridge, MA.
  - Find little effect on construction, decreased investment in housing stock, and shifts ownership from rental to owner-occupied
- Autor et al (2015):
  - Assess **spillovers** on overall housing stock, using same Cambridge, MA, data
  - Find elimination of control causes large positive spillover effects on never-regulated, nearby housing
- Kholodin et al (2015):
  - Exploit variation in **rent-control** policies at municipality level in Germany
  - Find that rent control has, if anything, led to an increase in rental prices
- My Project:
  - Exploits **rent-cap** & reimbursement policy in Berlin, using diff-in-diff approach
  - Find small price decreases in both rental and purchase market and drastic volume drop