Monetary Policy, Property Prices and Rents: Evidence from Local Housing Markets

Martin Groiss[1] Nicolas Syrichas[2]

[1]Universität Duisburg-Essen [2]Freie Universität Berlin

NBS–SUERF Conference, Bratislava

17 November 2026

Motivation

- When interest rates ↓, house prices typically ↑.
- The effect of monetary policy (MP) on rental markets is less clear.
- Rent is a major expense for many households: about one in four rent across the OECD, and about half in Germany and Austria (OECD, 2024).

How do (asking) rents respond to monetary easing?

Motivation

- When interest rates ↓, house prices typically ↑.
- The effect of monetary policy (MP) on rental markets is less clear.
- Rent is a major expense for many households: about one in four rent across the OECD, and about half in Germany and Austria (OECD, 2024).

How do (asking) rents respond to monetary easing?

Short answer: ↑

(at least in Germany)

Why might rents ↑ or ↓ after MP easing?

Demand side

- Rents could ↓. Cheaper mortgages can draw renters into buying, so rental demand may ↓.

  U.S. evidence: rents ↓ after easing (Dias and Duarte, 2019, 2022).

- Rents could ↑. Rental housing is a consumption good. Income ↑ and returns to saving ↓: housing demand among continuing renters may ↑.

Why might rents ↑ or ↓ after MP easing?

Demand side

- Rents could ↓. Cheaper mortgages can draw renters into buying, so rental demand may ↓.

  U.S. evidence: rents ↓ after easing (Dias and Duarte, 2019, 2022).

- Rents could ↑. Rental housing is a consumption good. Income ↑ and returns to saving ↓: housing demand among continuing renters may ↑.

Supply side

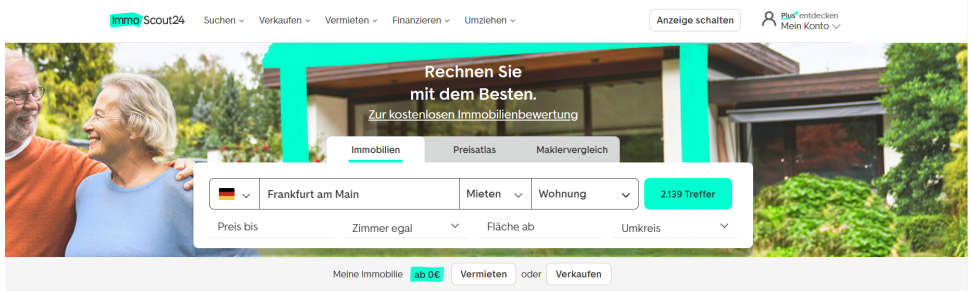
- ↓ Landlord financing. Cheaper borrowing can encourage landlords to buy homes to let, so rental supply may ↑.
- ↑ Sales to owner-occupiers. House prices ↑: landlords may sell to owner-occupiers rather than re-let, so rental supply may ↓.

Measuring Rents with Listing Data

- **What we bring:** A new monthly dataset of rents and house prices across German districts.
  - Official rent indices mostly reflect existing leases, where rents are sticky.
  - ✓ New listings instead show the rents facing households looking for a home.
  - ✓ Sale and rental listings from the same platform let us compare how both markets respond to MP.

▸ What listings measure ▸ Official rent index

German Housing Data: ImmobilienScout24



- About 40 million sale and rental listings, January 2007 to June 2023.
- We construct monthly, inflation- and quality-adjusted district house price and rent indices.

  Hedonic indices; repeat rents as a robustness check.
- We also track contacts per listing-day, active and new listings, and time on market.

▸ Index construction ▸ What listings measure ▸ Repeat rents

Empirical Strategy

Goal: Measure how rents and house prices respond over time to an unexpected easing of ECB monetary policy (MP).

Method: Two-stage panel local projections (LP-IV).

1. ECB surprises: rate movements around announcements.

▸ Regression and controls ▸ ECB surprises ▸ Mortgage-rate check

Empirical Strategy

Goal: Measure how rents and house prices respond over time to an unexpected easing of ECB monetary policy (MP).

Method: Two-stage panel local projections (LP-IV).

1. ECB surprises: rate movements around announcements.
2. First stage: instrument the monthly Shadow Rate change with policy rate, forward guidance and asset purchase surprises.

▸ Regression and controls ▸ ECB surprises ▸ Mortgage-rate check

Empirical Strategy

Goal: Measure how rents and house prices respond over time to an unexpected easing of ECB monetary policy (MP).

Method: Two-stage panel local projections (LP-IV).

1. ECB surprises: rate movements around announcements.
2. First stage: instrument the monthly Shadow Rate change with policy rate, forward guidance and asset purchase surprises.
3. Second stage: estimate rent and price responses β^h.

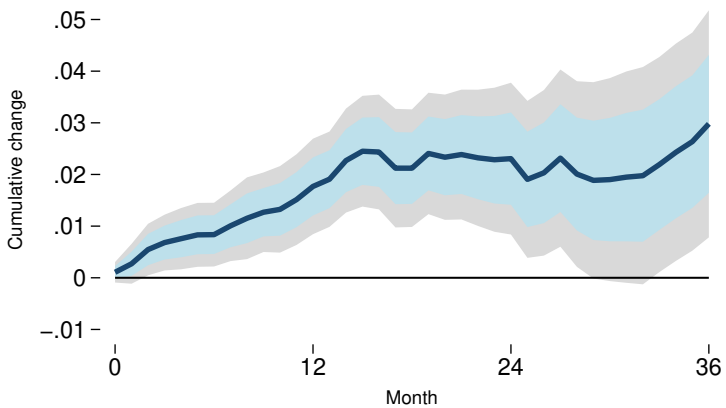
$$\underbrace{\log y_{\ell,t+h} - \log y_{\ell,t-1}}_{\text{House prices / rents}} = c_\ell^h + \sum_{k=1}^{6} \alpha_k^h \Delta \log y_{\ell,t-k} + \beta^h \widehat{\text{policy}}_t + \phi^h(L) X_{\ell,t} + u_{\ell,t+h}^h.$$

ℓ indexes districts and t months. Controls include lagged ECB surprises, German inflation and district unemployment.

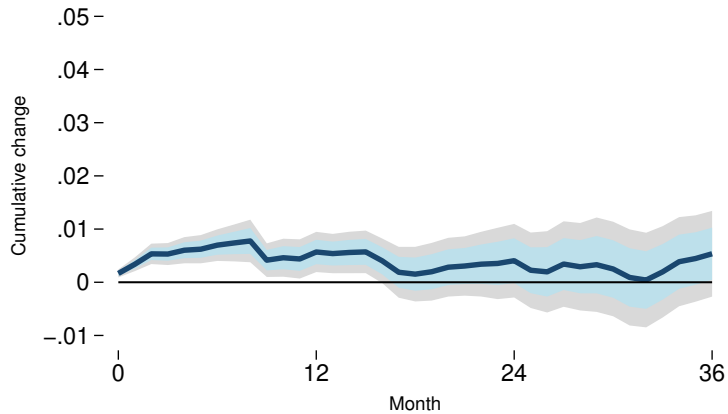
▸ Regression and controls ▸ ECB surprises ▸ Mortgage-rate check

1 SD easing: property prices ↑ and rents ↑

Property prices



Rents

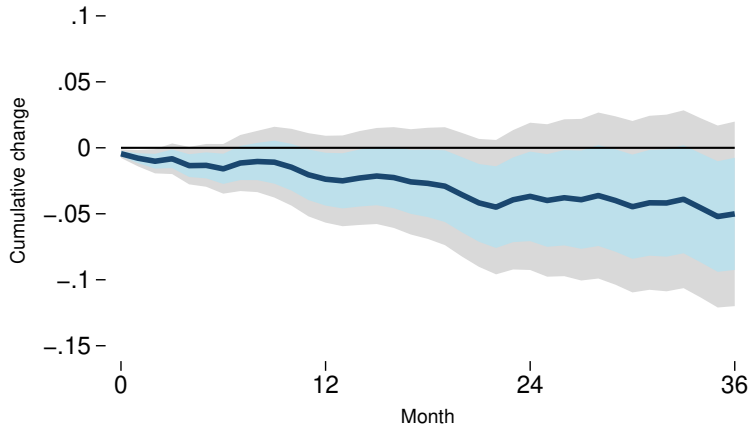


- Rents: ↑ about 0.8% at 6–8 months.
- Point estimates at 36 months: prices ↑ 3%; rents ↑ 0.5%.

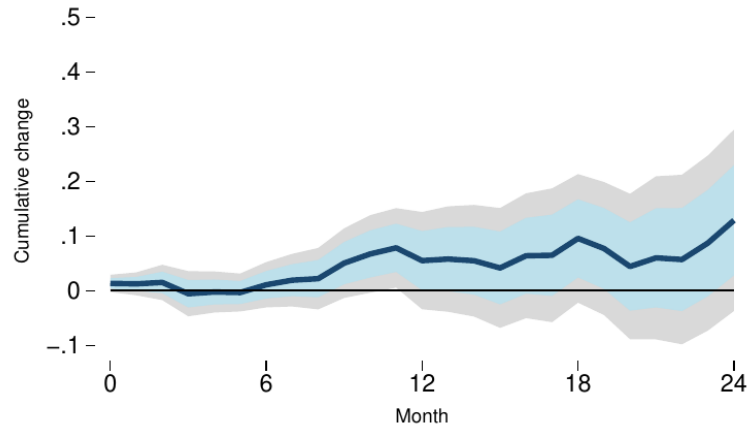
▸ Rental activity ▸ Repeat rents ▸ HICP rents ▸ Pre-COVID

Evidence of Market Tightness

Active rental ads
(supply proxy)



Contacts per listing-day
(demand proxy)



- Active rental ads: ↓ about 5% at 36 months.
- Contacts per listing-day: estimated ↑, consistent with tighter rental markets.

▸ Contacts in detail ▸ New ads and time on market ▸ Regional results

Further Evidence

Following expansionary MP in Germany

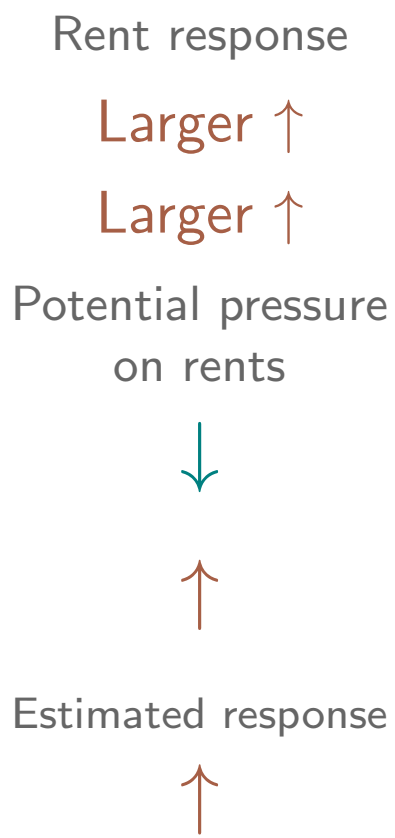
A. Regional Data

Higher transfer taxes (sales)

Smaller rental sector (relative to ownership)

B. Survey Data

1. Rent-to-own transitions ↑ slightly.
2. Young adults initially living with parents: probability of leaving home to rent ↑.
3. Average real rental expenditure



▸ Regional estimates ▸ Household transitions ▸ Rent payments

Key Takeaways

Following expansionary MP in Germany:

- House prices $\uparrow$ and rents $\uparrow$.
- Evidence of tighter rental markets.

Policy implication $\rightarrow$ Homeowners' housing wealth can rise while renters seeking a home face higher costs.

Appendix

1. Setting and data

▸ Germany ▸ Listing measures

▸ Hedonic indices

2. Identification

▸ ECB surprises ▸ Local projections

3. Rent responses and robustness

▸ Rent response ▸ Repeat rents

▸ HICP rents ▸ Pre-COVID

▸ Mortgage rates

4. Rental market activity

▸ Contacts ▸ New ads and duration

▸ Sales vs rentals

5. Regional heterogeneity

▸ 24-month estimates ▸ Other horizons

6. Household evidence

▸ Survey design ▸ Household responses

▸ Moving motives

▸ Rent payments

◂ Key takeaways

Why Study Germany?

- In 2022, 55% of German households rented (OECD, 2024).
- Transfer taxes, notary fees and registration costs make buying expensive up front. State transfer tax rates range from 3.5% to 6.5% in the sample.
- Tenant protections limit adjustment in existing contracts. The rent brake also applies to some new leases in regulated areas.
- Long initial mortgage fixations are common. Rate changes chiefly affect borrowing costs on new contracts in the short run.

◂ Data ▸ Appendix

What the listing data measure

- Listings report advertised prices, not prices agreed in a sale or lease.
- Active ads measure homes available on the platform, not the stock of all rental dwellings.
- Contacts per listing-day capture search intensity for advertised units. They do not count unique households or isolate a demand shift.
- The paper compares sale listing indices with GREIX transaction indices. For rents, the repeat-rent check compares different ads for the same dwelling.

◂ Measuring rents ▸ Appendix

Hedonic Regression

$$\log r_{i,t}^{\ell} = \alpha^{\ell} + X_{i,t}'\gamma^{\ell} + F_{j(i)}^{\ell} + \delta_{t}^{\ell} + \varepsilon_{i,t}^{\ell}.$$

- Estimate separately by district and market segment. Real rents exclude ancillary charges and use state CPI to adjust for inflation.
- Controls include floor space, number of rooms, dwelling type, age, condition and postcode effects.
- The month coefficients form the rent index. We exclude thin district-month cells and check the results with repeat-rent indices.

◂ Data ▸ Appendix

High-Frequency MP Surprises

- Use interest-rate movements in tight windows around ECB policy announcements to isolate unexpected news (Altavilla et al., 2019).
- The instruments capture news about the current policy rate, forward guidance and asset purchases.
- The contemporaneous surprises instrument the monthly change in the euro-area Shadow Rate. Lags of the surprises enter as controls.
- Following Jarociński and Karadi (2020), classify information effects using sign restrictions and set those surprises to zero.

◂ Empirical strategy ▸ Appendix

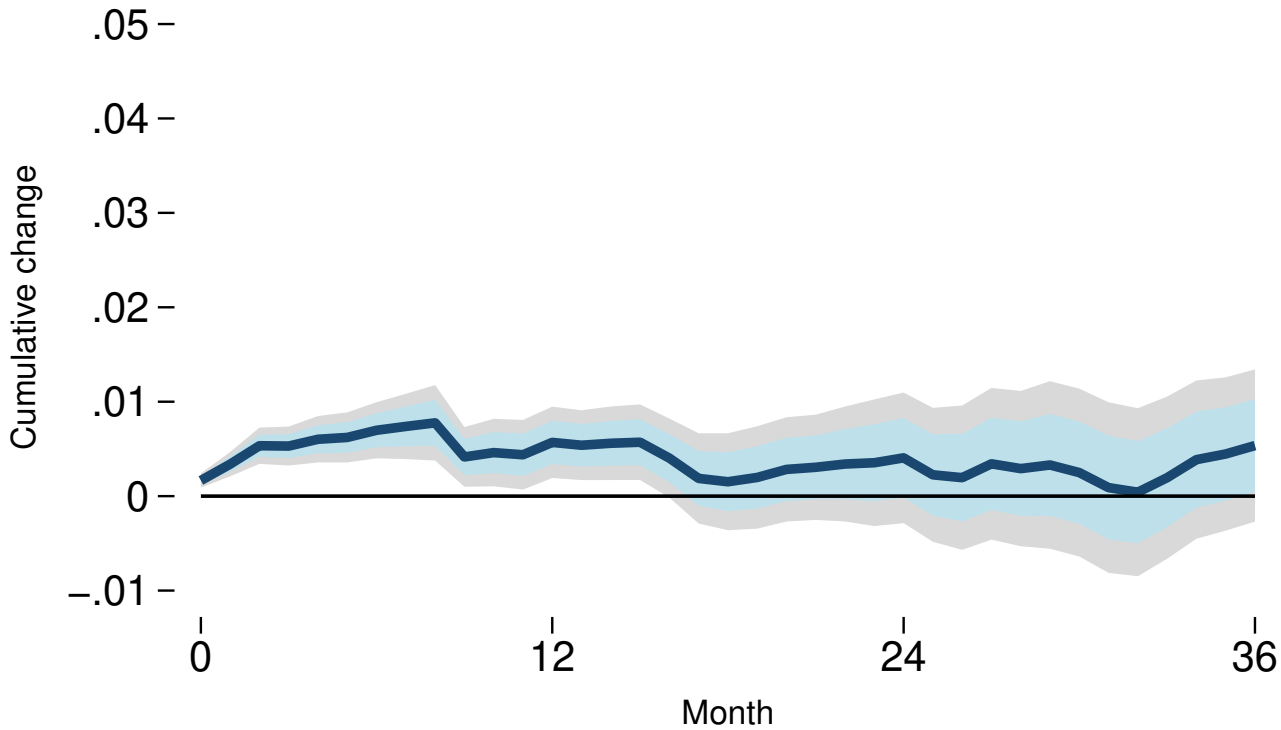
Two-Stage Panel Local Projections (LP-IV)

$$\underbrace{\log y_{\ell,t+h} - \log y_{\ell,t-1}}_{\text{House prices / rents}} = c_\ell^h + \sum_{k=1}^{6} \alpha_k^h \Delta \log y_{\ell,t-k} + \beta^h \widehat{\text{policy}}_t + \phi^h(L) X_{\ell,t} + u_{\ell,t+h}^h.$$

- **First stage:** instrument monthly Shadow Rate changes with ECB surprises.
- **Second stage:** estimate one projection per horizon, with district fixed effects.
- Controls: three lags of the surprises, and six lags of housing growth, German inflation and district unemployment.
- Date fixed effects absorb the common policy shock, so the baseline omits them. Heterogeneity regressions include them.
- Conley inference allows for spatial and serial correlation.

◂ Empirical strategy ▸ Appendix

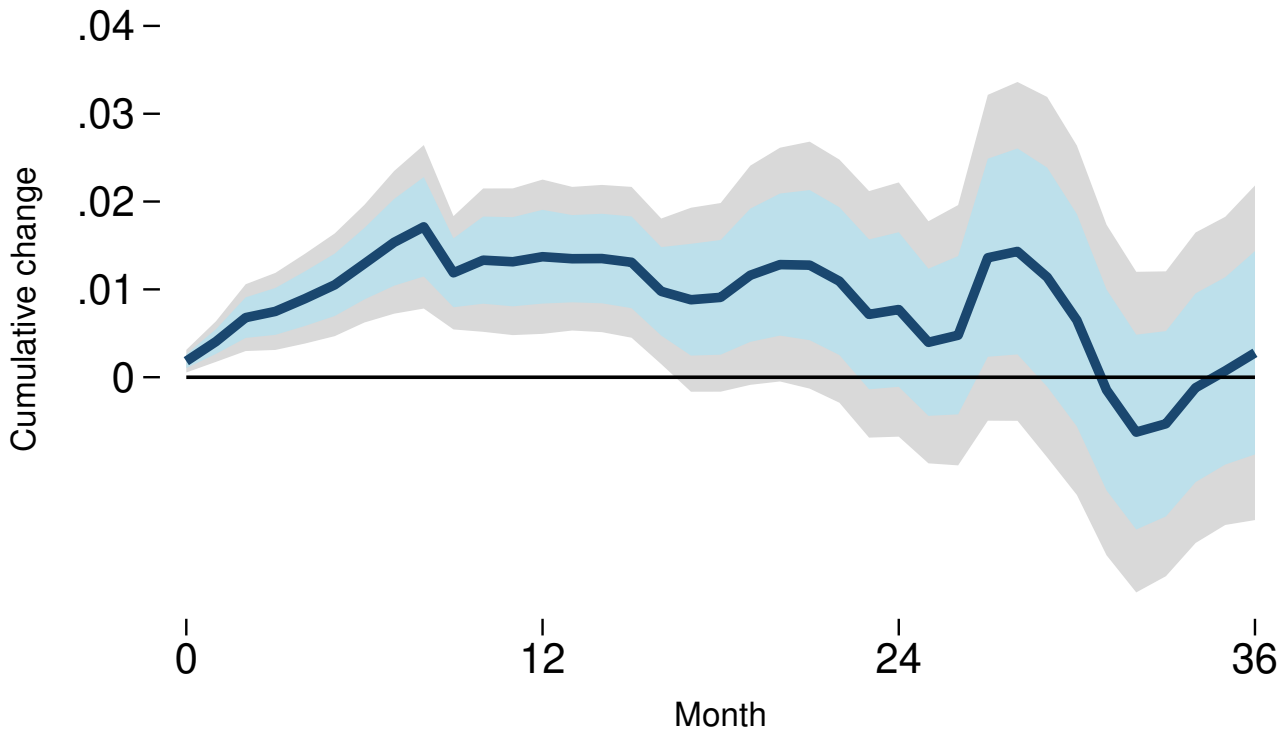
Rents after MP easing



Real cumulative change after a 27 bp Shadow Rate easing. The point estimate stays positive at three years, but the 90% confidence interval includes zero.

◂ Main result ▸ Appendix

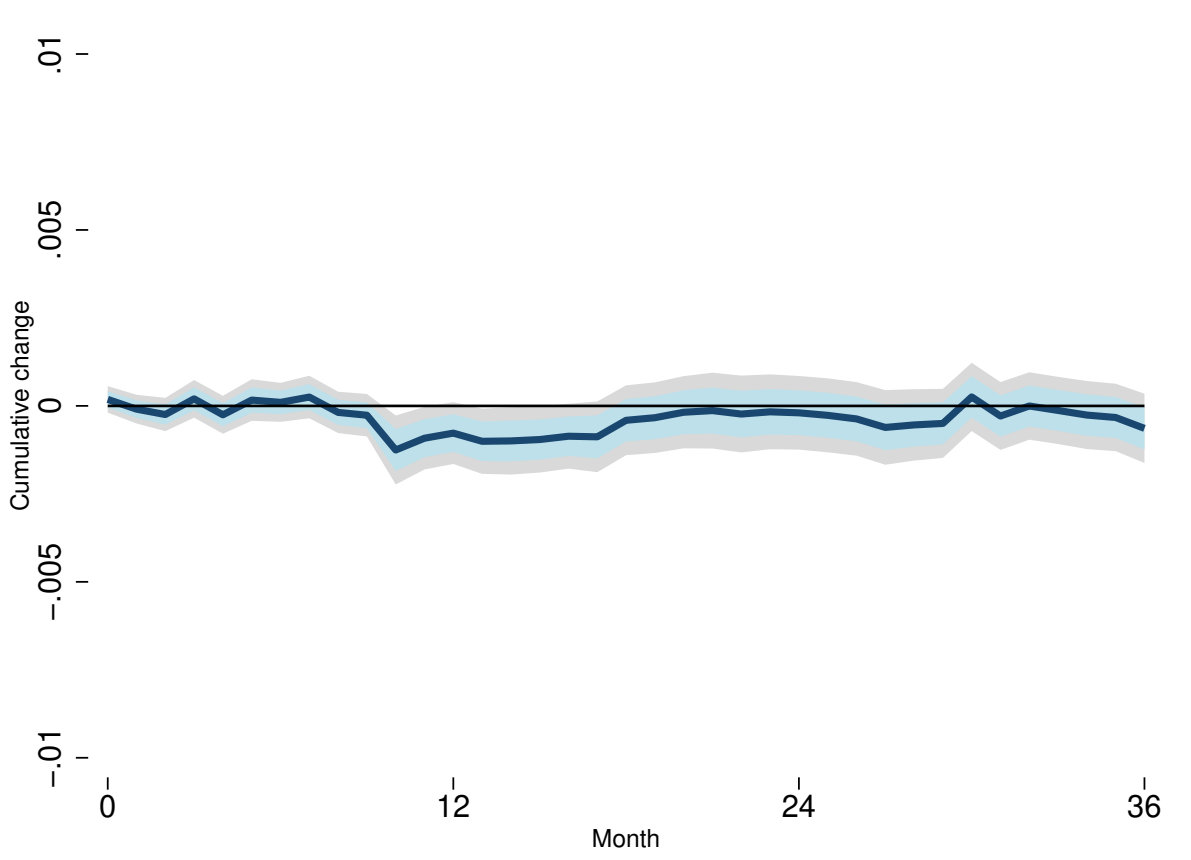
Repeat-Rent Robustness



Comparing separate listing spells for the same dwelling also gives a positive rent response in the short run.

◂ Main result ▸ Appendix

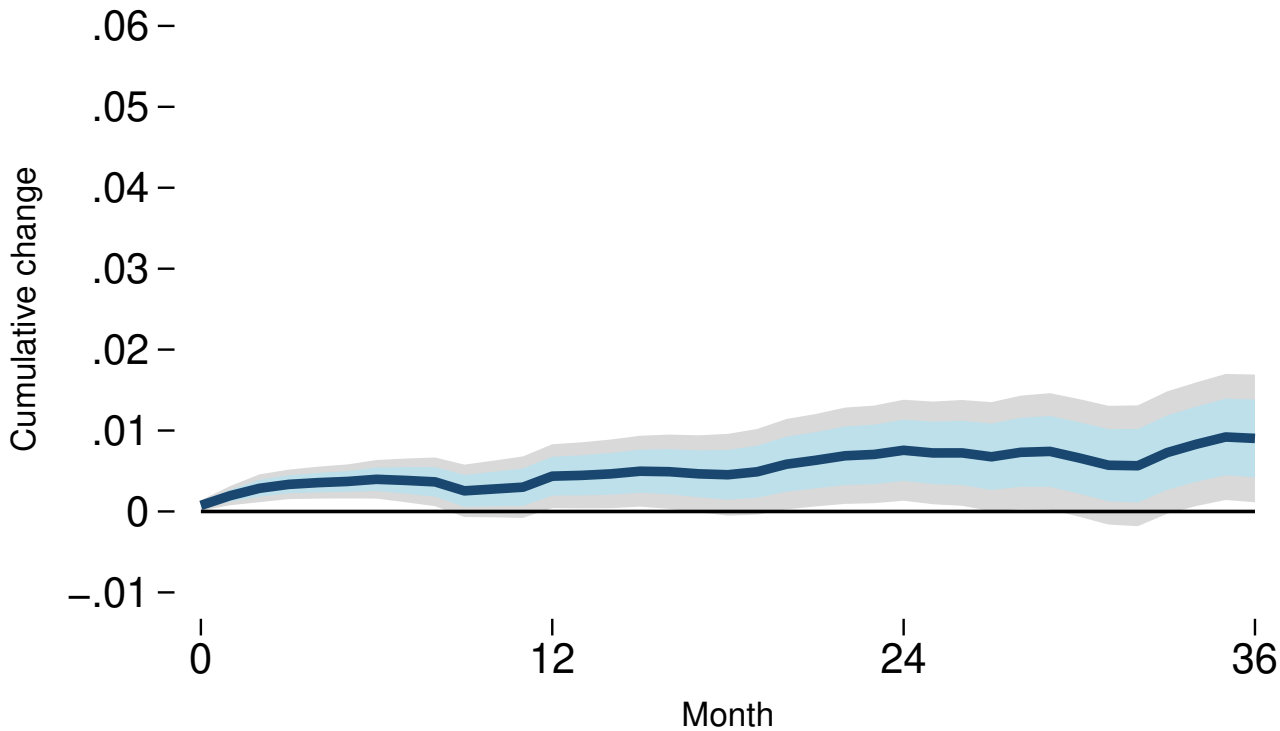
Response of HICP Rents



The HICP rent index, which mainly tracks existing leases, shows no short-run ↑ comparable to rents in new listings.

◂ Main result ▸ Appendix

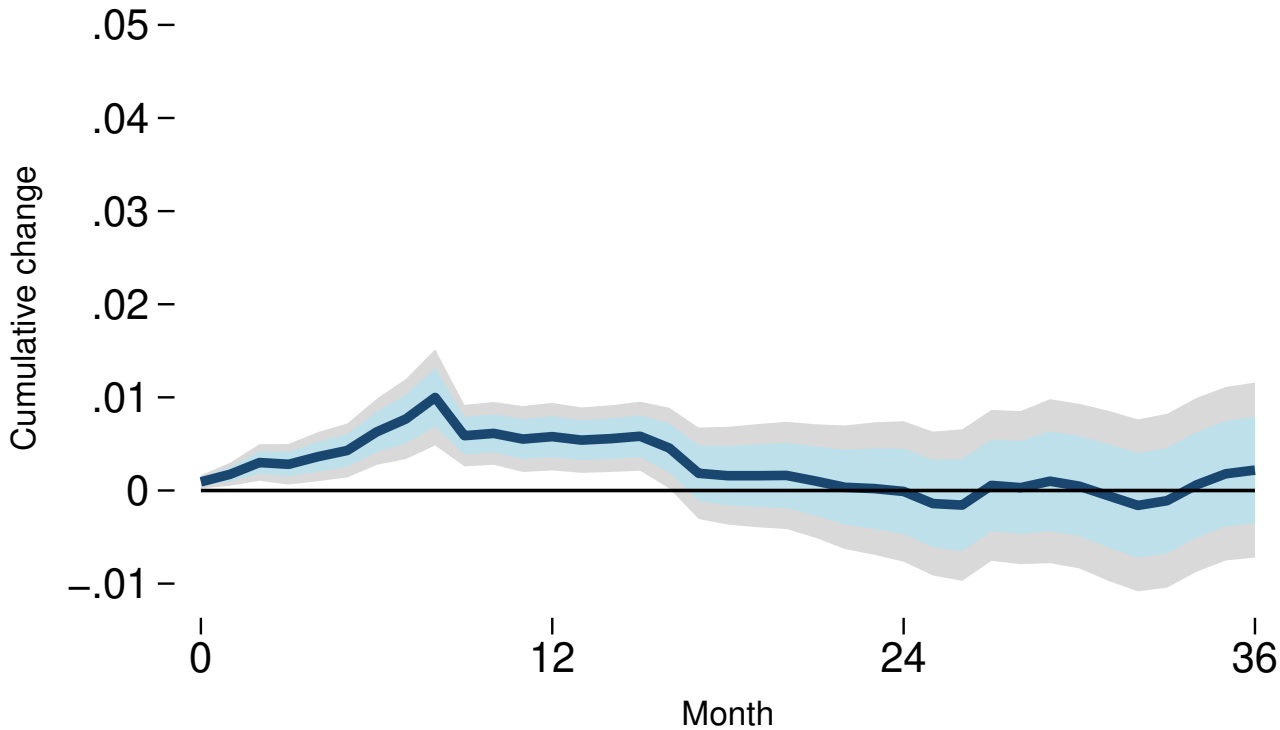
Before COVID-19



The estimated short-run ↑ in rents also appears in the pre-pandemic sample.

◂ Main result ▸ Appendix

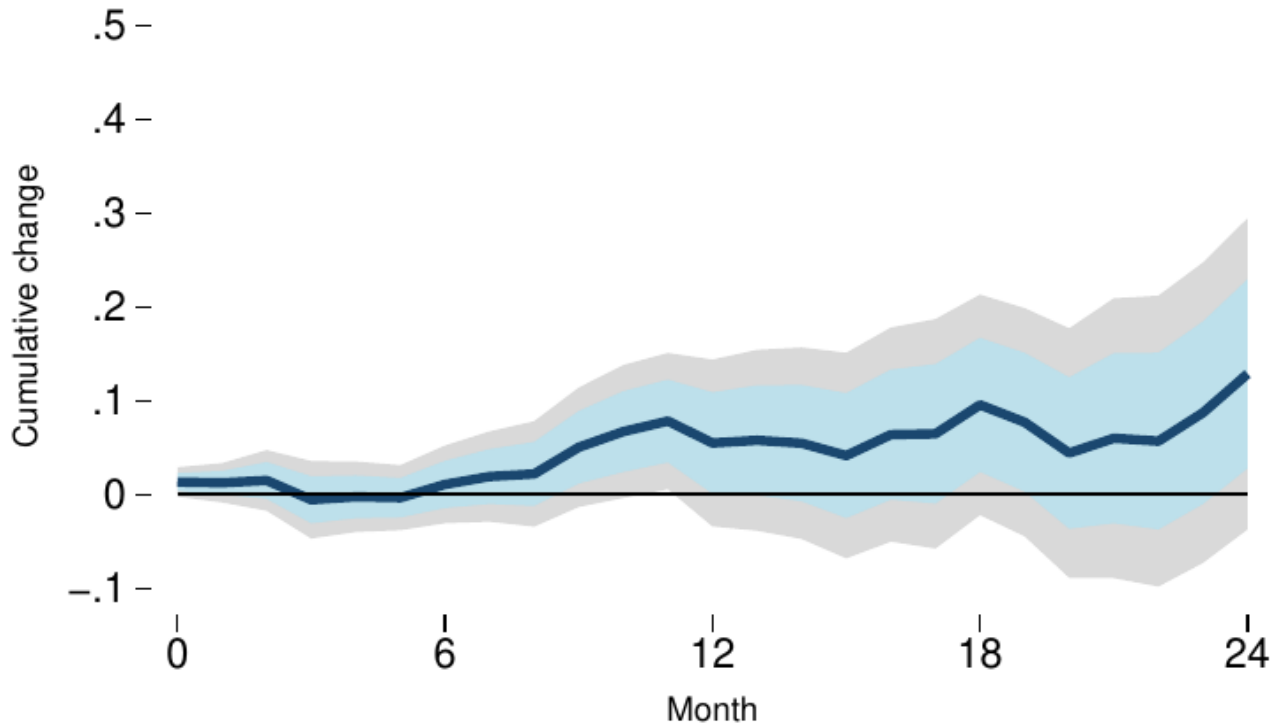
Rent Response Using Mortgage Rates



Rents ↑ in the short run after German mortgage rates ↓ by 0.11 pp (initial fixation of ten years or longer).

◂ Empirical strategy ▸ Appendix

Contacts per rental listing-day ↑



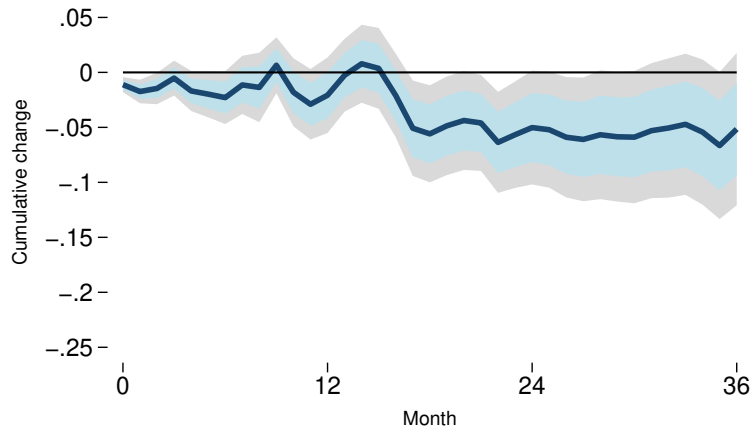
Point estimates ↑, but the 90% confidence interval includes zero. The hedonic contacts index proxies search pressure per ad, not the number of searchers.

2009–2018; 27 bp Shadow Rate easing. Shading: 68% and 90% Conley bands.

◂ Rental activity ▸ Appendix

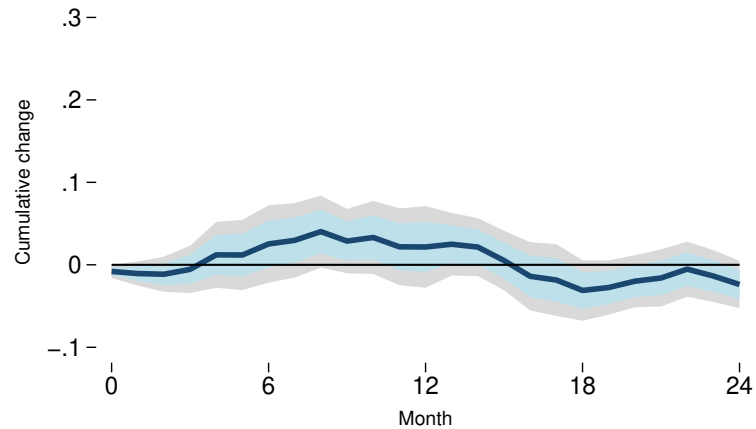
New ads ↓ or faster removals?

New rental listings



2007–2023

Time on market



2009–2018

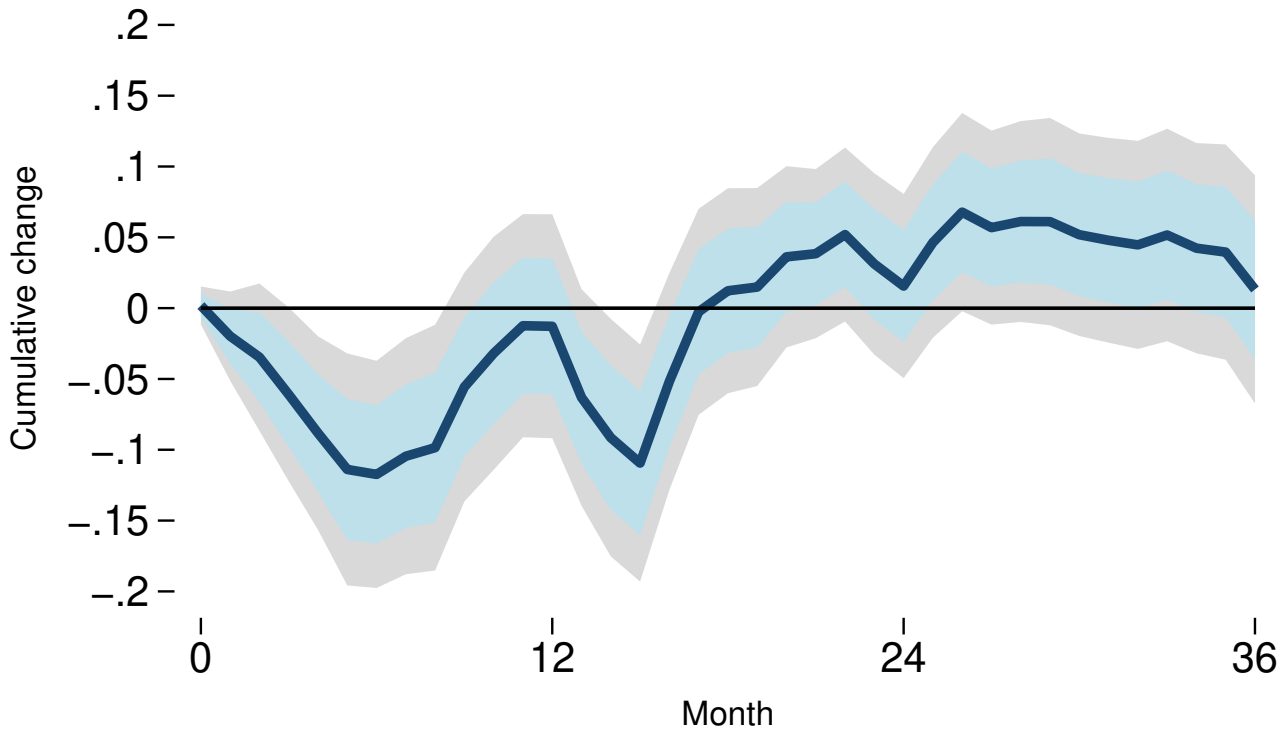
- Entry: new ads ↓ from around 18 months.
- Exit: no detectable ↓ in time on market.

Ad removal does not necessarily mean a lease was signed.

Responses to a 27 bp Shadow Rate easing. Shading: 68% and 90% Conley intervals.

▸ Sales vs rentals ◂ Rental activity ▸ Appendix

New Sale Relative to Rental Listings



The ratio of new sale to new rental ads shows no clear lasting shift toward sales. It does not track individual conversions.

◂ Rental activity ▸ Appendix

Where Do Prices and Rents ↑ More?

Regional heterogeneity analysis

Difference in the response to the same MP easing

At 24 months, percentage points; 27 bp Shadow Rate shock

District characteristic	Property prices	Rents
Transfer tax (+1 pp)	0.01	0.68**
	(0.73)	(0.35)
Homeownership (+10 pp)	0.32	0.25***
	(0.21)	(0.08)
Sale-to-rent listings ratio (+1 SD)	0.35	0.23**
	(0.31)	(0.09)

Reading the first row: With a 1 pp higher transfer tax, the estimated rent response is 0.68 pp larger.

Rows estimated separately. Sale-to-rent ratio measured in 2007–09. District and month fixed effects; Conley standard errors in parentheses.
$*p < 0.10$, $**p < 0.05$, $***p < 0.01$.

▸ Other horizons ◂ Further evidence ▸ Appendix

Regional Transmission of MP

Exposure	12 months	24 months	36 months
Rent response			
Transfer tax (+1 pp)	0.02	0.68^{**}	0.90^{*}
Homeownership (+10 pp)	−0.07	0.25^{***}	0.33^{***}
Sale-to-rent listings (+1 SD)	−0.21	0.23^{**}	0.40^{***}
Rent brake in place	-0.39^{***}	-0.33^{*}	−0.37
Property-price response			
Transfer tax (+1 pp)	−0.49	0.01	0.97
Homeownership (+10 pp)	-0.33^{*}	0.32	0.50^{**}
Sale-to-rent listings (+1 SD)	−0.36	0.35	0.11

Response differences (pp) after a 27 bp Shadow Rate easing.
Exposures estimated separately; district and date effects.
Exposure interactions instrumented with ECB-surprise interactions.

Conley inference. $*p < 0.10$, $**p < 0.05$, $***p < 0.01$.

▸ 24-month estimates ◂ Further evidence ▸ Appendix

Household Survey Design

- German Socio-Economic Panel (SOEP), 2005–2022; survey weights.
- Match interviews to quarterly surprises. Year and calendar-quarter effects; household effects for tenure transitions.
- Household and lagged macro controls; errors clustered by interview year-quarter.
- Sum the coefficients on each surprise and its eleven quarterly lags, average across the three components, scale to 2.5 bp in Target-rate units, and divide by three to annualise. This is separate from the monthly Shadow Rate scale.

◂ Further evidence ▸ Appendix

Household Responses to Expansionary MP

Housing transition	Baseline rate (% per year)	Effect of 2.5 bp easing (pp per year)
Change in tenure		
Renting → owning	2.23	$+0.046^{***}$
		(0.012)
Owning → renting	1.28	-0.074^{*}
		(0.039)
Move within tenure		
Renting → renting	8.64	$+0.062$
		(0.047)
Owning → owning	1.21	-0.088^{***}
		(0.025)

Left parental home: $+1.08^{***}$ pp/year (s.e. 0.21).
New renter household: $+0.54^{**}$ pp/year (s.e. 0.21).
Ages 18–29, previously living with parents.

$*p < 0.10$, $**p < 0.05$, $***p < 0.01$.

▸ Survey design ▸ Moving motives ◂ Further evidence ▸ Appendix

Moving Motives among Rent-to-Rent Movers

Reason	Relative risk ratio (2.5 bp easing)	S.E.
Family (reference)	1.00	—
Flat size	1.31	0.089
Flat quality	1.01	0.071
Occupational change	1.21	0.071

- These estimates compare stated reasons conditional on moving from one rental to another.
- Uses current surprises and three quarterly lags.
- They do not show that households rented larger flats or that the probability of moving $\uparrow$ for all renters.

◂ Further evidence ▸ Appendix

Real Rental Expenditure

	Total rent	Rent per m^2
Estimated response	1.09%	0.55%
Standard error	(0.48)	(0.46)

- The survey records payments by renters, including rent on existing leases.
- Total payments ↑. The estimates do not isolate changes in how much space or what quality of housing renters consume.

Annualised responses on the 2.5 bp quarterly SOEP scale. Standard errors on the same scale as the estimates.

◂ Further evidence ▸ Appendix