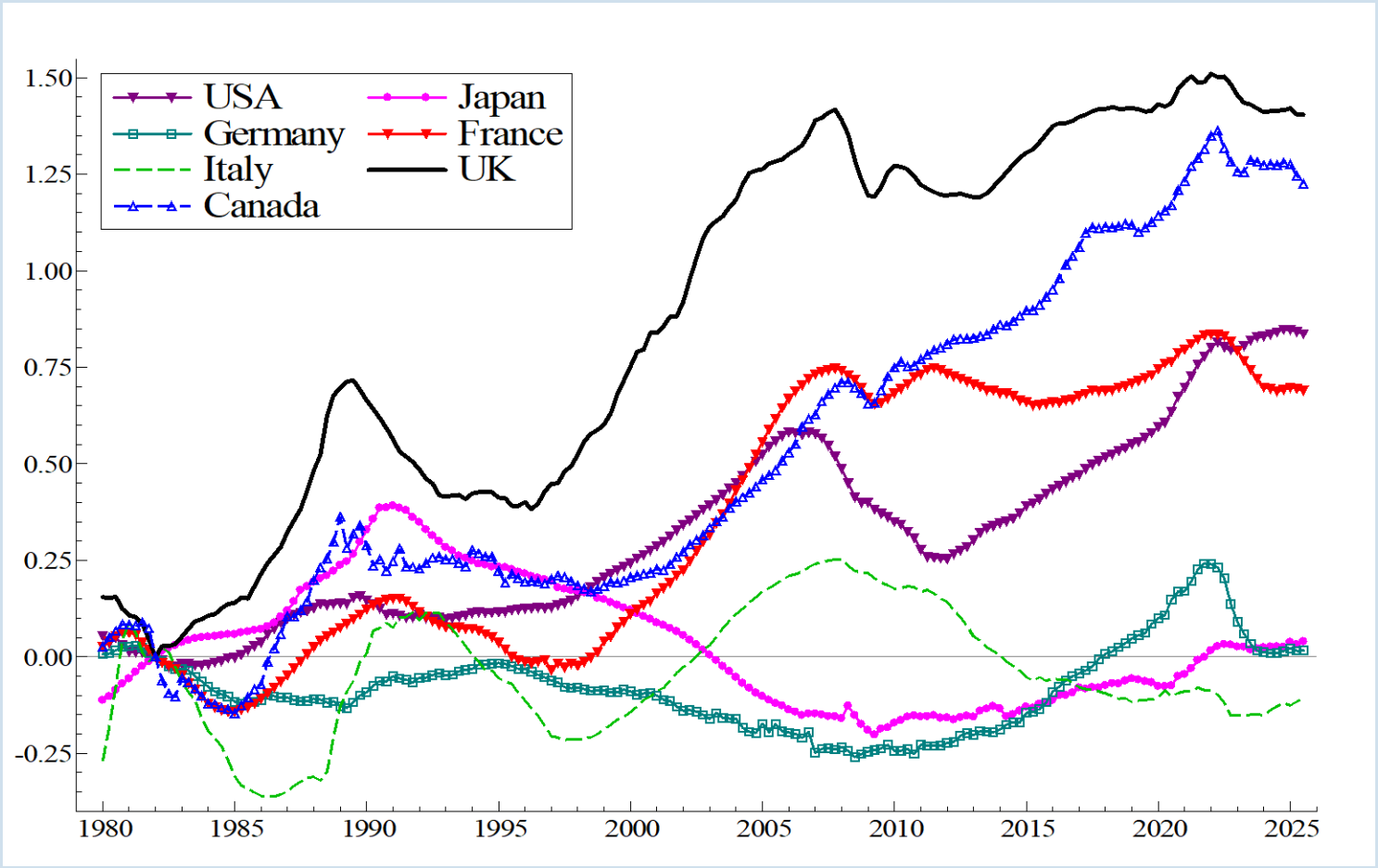
How (not) to meet housing need: lessons from the UK

John Muellbauer

NBS-SUERF conference "Housing markets – squaring supply and demand."

17 November 2026

UK real house prices since 1982 hold the G7 record



The log of real house prices in the G7 (base 1982).

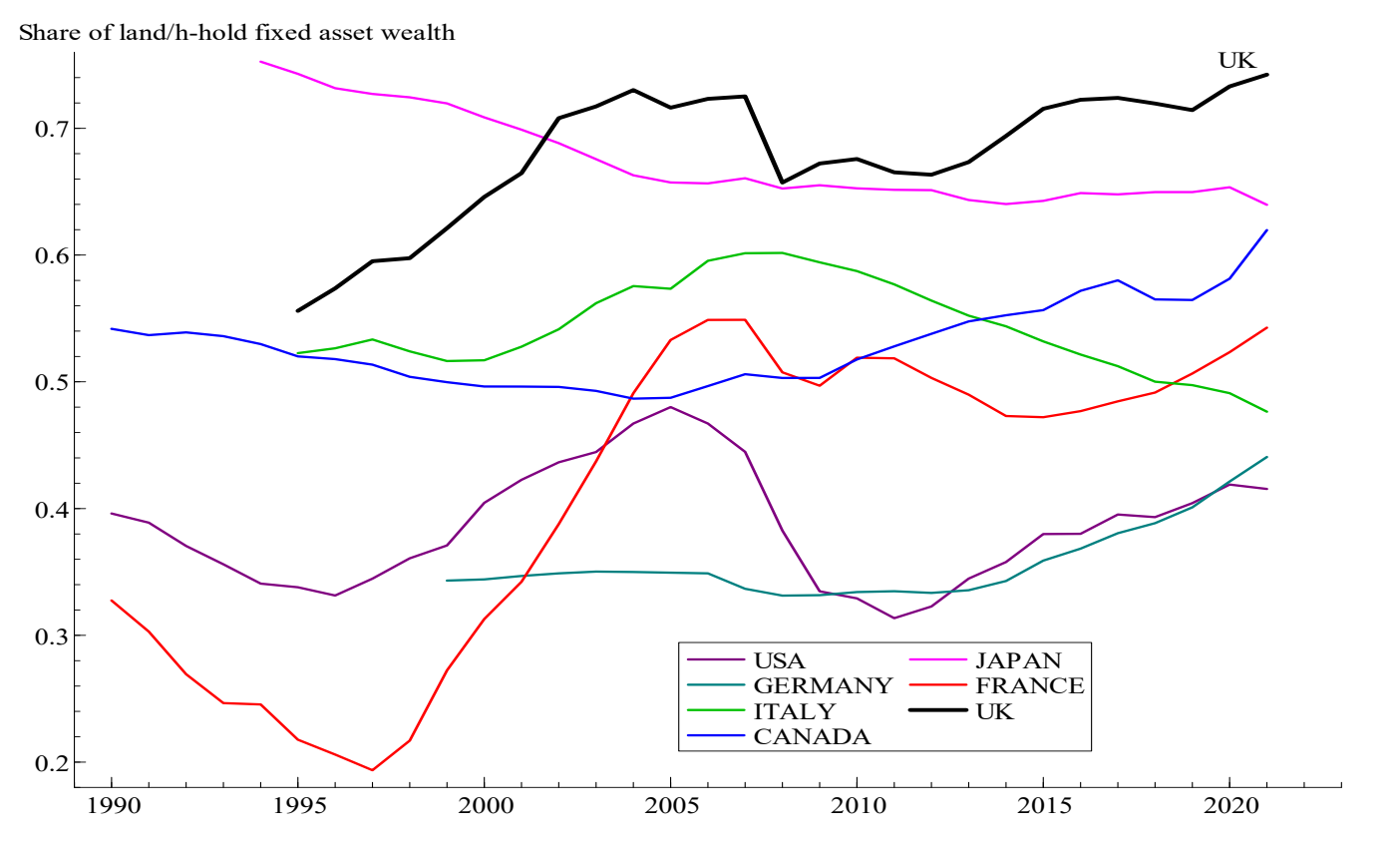
The parlous state of the UK economy, and its dysfunctional housing market: a Thatcher legacy

- **Macroeconomics**
  - Persistent balance-of-payments deficits since 1984.
  - This reflects low national saving and investment.
  - Wealth is increasingly foreign-owned.
  - Productivity lags behind the other G7 economies.
  - The high house-price-to-income ratio has caused an affordability crisis.

- **Quality of life**
  - Life-expectancy slowdown: the largest among 20 European countries (GBD 2021: Europe Life Expectancy Collaborators, 2025)
  - High inequality (McCann, 2019).
  - This worsens when including housing costs (Janan & Pittaway, 2025).
  - The worst-insulated houses in NW Europe.
  - The longest commuting times in NW Europe.

UK: share of land in average house value in 2021 around 70%

- House prices are a mix of (even more volatile) land prices and (relatively stable) building costs plus the builder's mark-up.



Changed institutional foundations: the 1980s reforms

- 1980 Banking deregulation: banks entered the mortgage market, causing a **surge in mortgage credit**.
- 1982-6 Building Societies deregulation, caused much **riskier behaviour.** Rise of foreign-bank-linked lenders lacked "skin in the game", weaker borrower screening.
- 1980 Right-to-Buy discounts on council housing, **reduced** social housing supply.
- 1984 Building Act relaxed building standards, **quality & safety** issues.
- 1984 Agricultural Property Relief, a **tax privilege** on agricultural land.
- 1985 **Abolition** of Development Land Tax.
- 1986 Poll Tax legislation passed to **abolish** annual property tax. Began in Scotland in 1989 and England in 1990.
- 1988 Rent controls phased out and **insecure** 'short-hold tenancies' introduced.
- *No major change: Discretionary planning system*: the Town and Country Planning Act (1947).

The long-term persistence of Thatcher's changes

- NIMBY influence stymied potential planning reform.
- R-to-Buy retained and social housing very constrained.
- Lax financial regulation only reversed after Global Financial Crisis.
- Weak building standards persisted (Grenfell Tower fire 2017 with 72 deaths).
- Poll Tax scrapped, but Council Tax from 1993 still highly regressive (regionally and individually, based on 8 1991 value bands).
    - Transfer taxes (Stamp Duty) ramped up by recent governments at progressive rates but large deadweight losses for resource allocation.

Economic implications for growth, fiscal capacity and financial stability

- **Short run consequences:**
  - 1985-89 credit and house price boom ended in bust, see *Figure 1*.
  - Record levels of mortgage arrears and foreclosures in 1990-94.
  - Strains on financial system.
- **Long run damage:**
  - Productivity growth.
  - Financial stability, e.g. 2008-10 financial crisis.
  - Housing affordability.
  - Fiscal capacity.
  - Regional imbalance: Jobs and productivity concentrate in London so demand pressure there is extreme while other regions are neglected.

Macroeconomic effects

- **Basic intuition:**
  - If a household/firm must spend more on housing or rent, other worthwhile spending will be lower.
- **A theory model:**
  - Model with overlapping generations and land speculation (Hirano & Stiglitz, 2025).
  - Credit and land price booms divert credit from and impair investment in productive sectors, and hence damage growth.
- **Empirical evidence on these mechanisms:**
  - **Müller & Verner (2021):** cross-country panel of 116 countries 1946-2016.
  - **Doerr (2020):** industrial panel of US firms, falling productivity when real estate prices rise.
  - **Chakraborty et al. (2018):** US panel study, bank lending for housing during boom periods crowds out commercial lending.
  - **Hau & Ouyang (2024):** for a similar mechanism in China.
  - **Grjebine et al. (2022):** for European evidence, 33 sectors, 14 countries.

Regional evidence and the UK building industry

- **Local authority level studies of benefits for productivity of 1% lower house price/income ratio**
  - For 142 local authorities in London and the greater Southeast NERA Economic Consulting, 2024 finds 0.14 rise in productivity during 2002-2021.
  - Homes England, 2025 finds 0.31 rise.
  - There are also longer run benefits through health and human capital.

- **Productivity of the building industry**
  - Muellbauer (2018): high and volatile land prices increase barriers to entry raise business risk, and shift focus to profits from land appreciation, rather than quality homes.
  - SME share of new home building 39% in 1988, but only 10% in 2020.
  - Mazzucato (2025): the concentrated market power of volume developers stifles innovation and the uptake of new technologies, reducing productivity gains.

The UK's housing supply problem

- Collapse of council house building.
- Weak and slow response to higher prices (Caldera &Johansson,2013)
- Poor quality is widespread and homes often built in flood plains

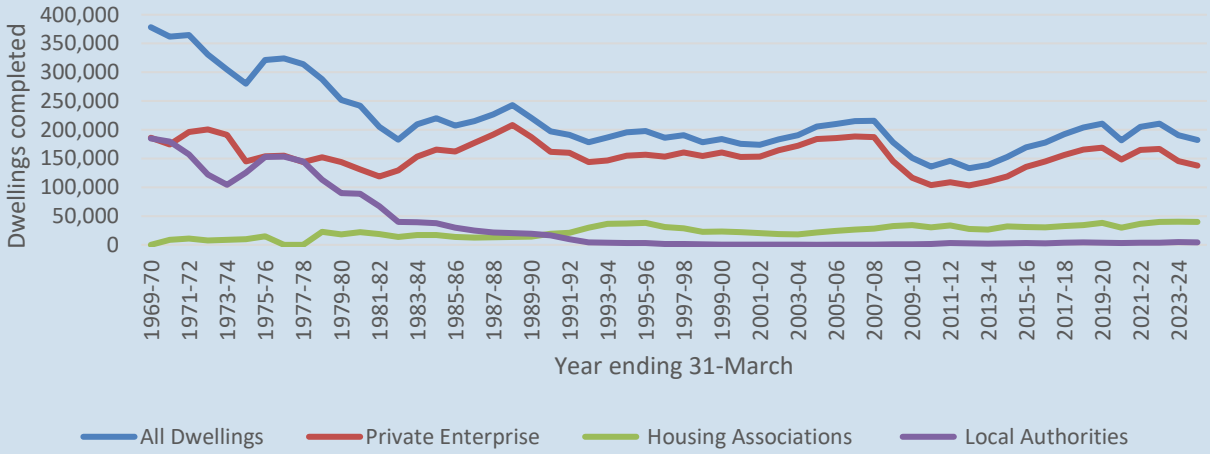


Figure 3: UK new build dwellings completed, by final tenure.

- Despite decline of social housing, owner-occupation by 25-34 years olds halved between 1989 and 2016!

Key UK distinctions from much of Europe – and some parallels

- **Planning:** Cumbersome, highly interventionist system.
- **Social housing:** Privatised and shrunken.
- **Credit:** Radical liberalisation and a historically faulty prudential regime, macro-financial feedback raised macro-risk.
- **Land supply:** Long-term failure to release land for housing.
- **Local incentives and political economy of planning:** Existing owners and councils bear the costs of new development and capture few benefits.
- **Taxation:** Regressive property tax on outdated values, plus high, now progressive, transaction taxes that deter mobility and downsizing by older households; imputed rents and capital gains untaxed.
- **Land value capture:** Weak tools.
- **Land investors:** Tax incentives favour them.
- **Private renting:** Short-term contracts undermine security.
- **Affordability policy:** Boosts demand rather than supply.
- **Mortgages:** Adjustable rates are problematic when interest rates rise exogenously.
- **Speculative building industry** and high concentration hold back supply.

Applying a macro-lens to housing supply and demand

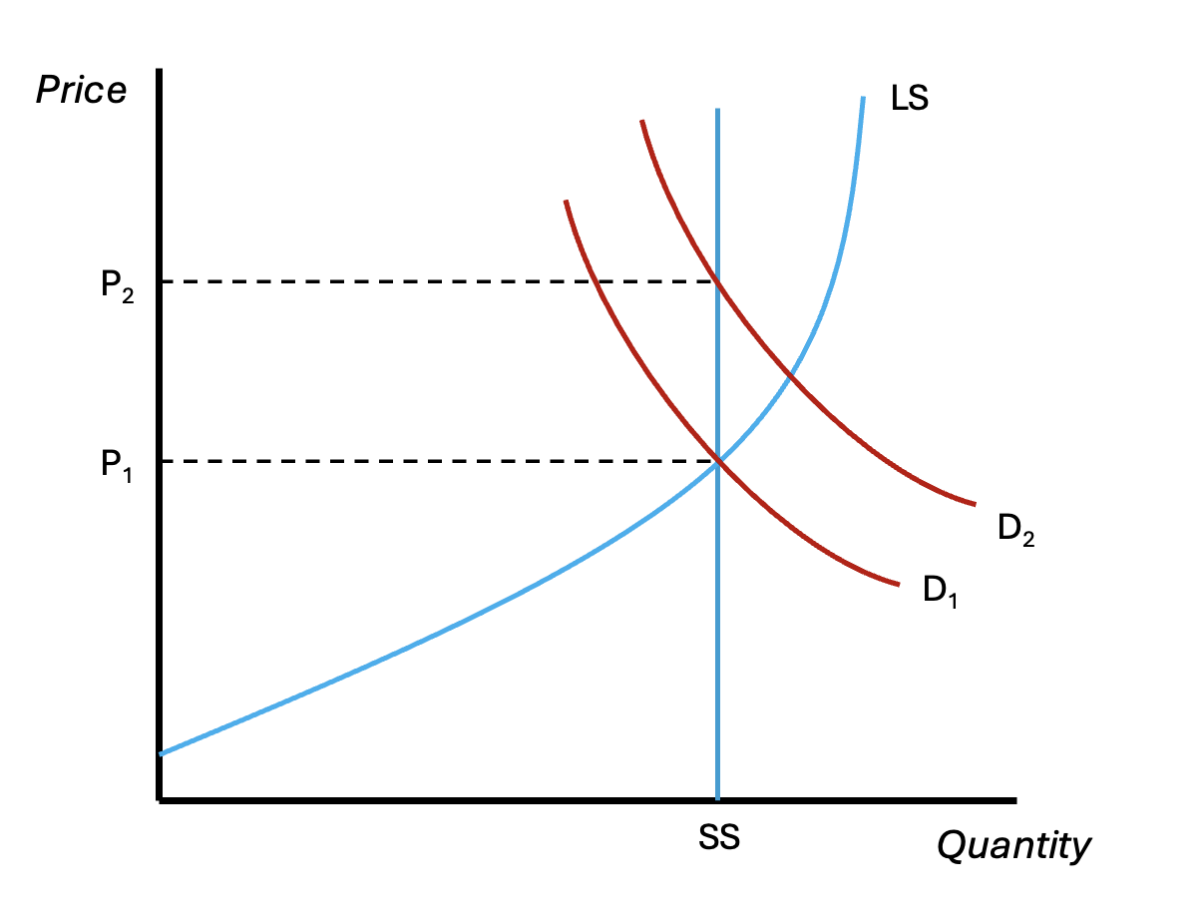


Figure 4: Demand shifts and the short (SS) and long-run supply (LS) of housing.

The inverse demand approach

- In a log-linear approximation, the log of demand, h_{ijt}, of household i in area j (considered in isolation) is:

$$ln\ h_{ijt} = -\alpha_i\ ln\ hp_{jt} + \beta_i\ ln\ y_{ijt} + z_{jt}$$

where *hp* is the real house price in location j, *y* is real income and *z* denotes other demand shifters. The own-price elasticity of demand: $-\alpha$, and the income elasticity: β.

- Averaging across households and inverting the demand equation:

$$ln\ hp_{jt} = (\beta\ ln\ y_{jt} - ln\ h_{jt-1} + z_{jt})/\alpha = b\ ln\ y_{jt} - a\ ln\ h_{jt-1} + a\ z_{jt}$$

where y is average real income, h is the per capita net housing stock and α, β, a and b= βa, are averages of the micro-parameters.

- At a regional level, need to control for prices and income in other regions.
- Less of a problem at the national level.
- Fewer housing options in economies dominated by large cities such as Dublin, London, or Paris, suggests larger value of a for those.
- Gradual price adjustment to stock-disequilibrium.

Long-run drivers of real UK house prices: income and pop. outgrew housing stock, but credit and interest rates crucial

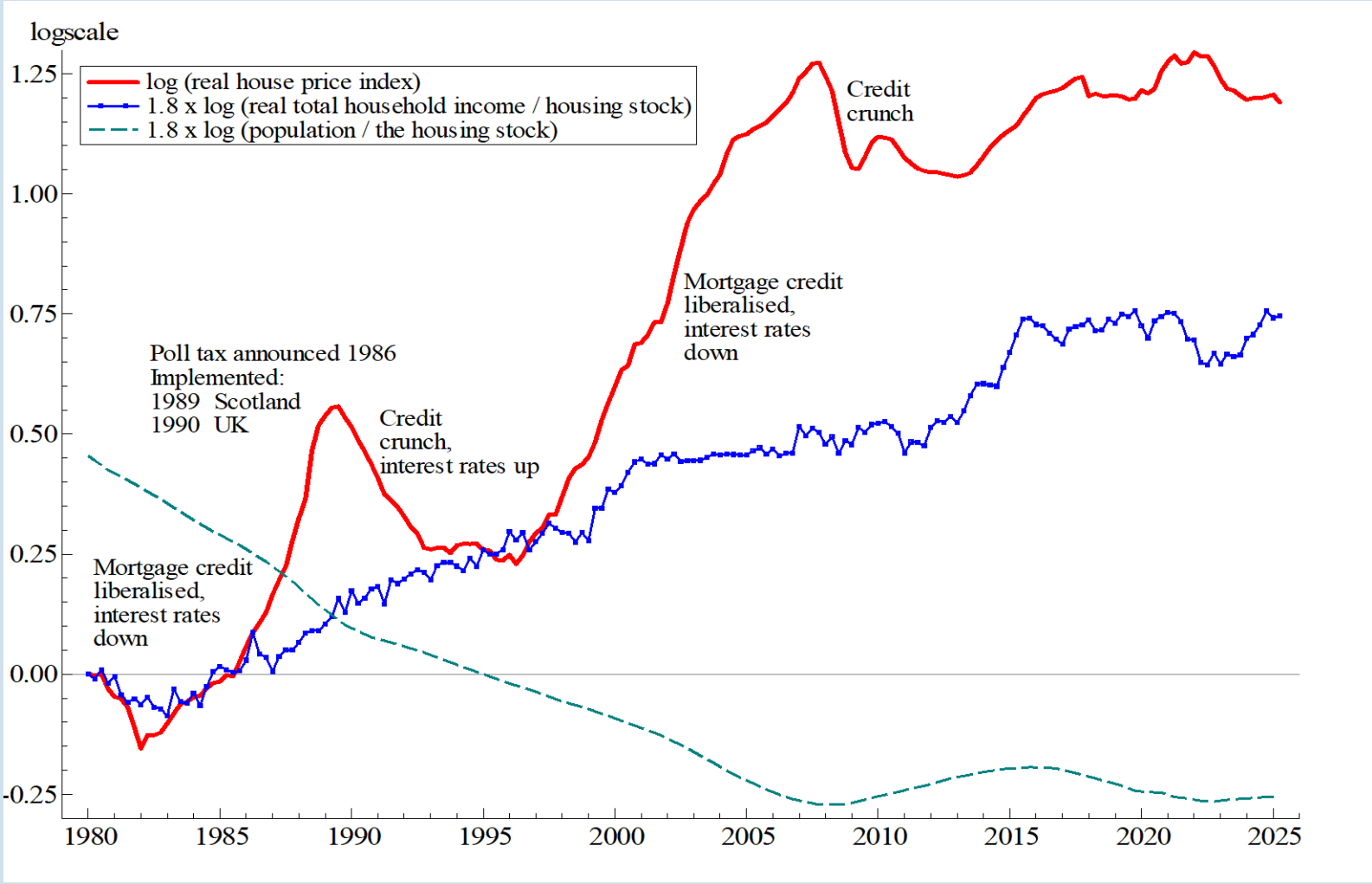
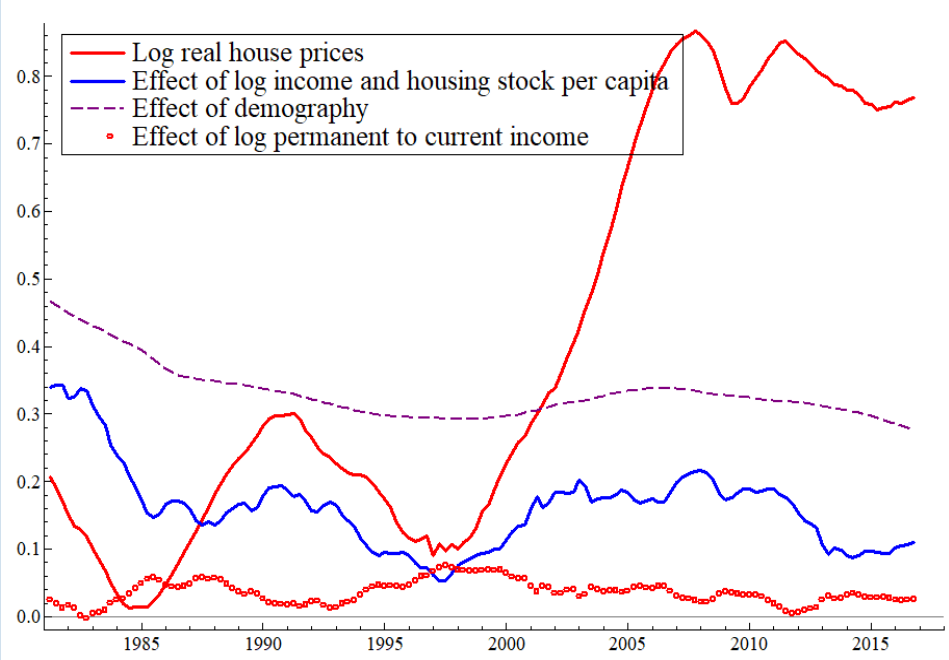


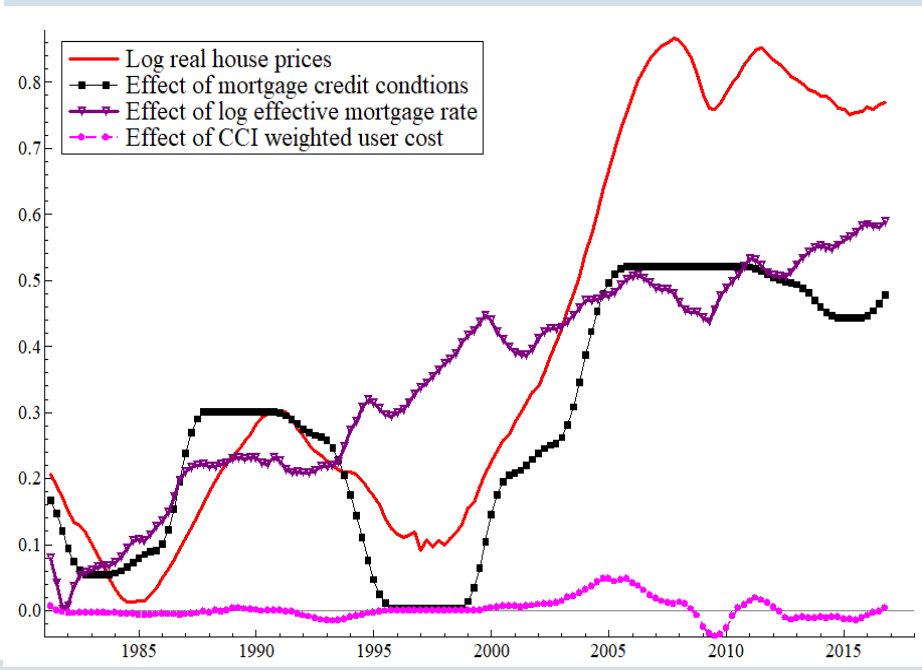
Figure 5 Assumes income elasticity of demand for housing =1. Interpretations based on regional model Cameron et al. (2006). Blake & Muellbauer (2009 EC paper) and Fernandez-Corugedo & Muellbauer (2006).

Calibrating income and price elasticities

- Cavalleri et al. (2018) panel study of 21 OECD countries house price equations, suggests income elasticities of demand for housing **β** are mostly greater than 1.
- Cross-section evidence suggests income elasticity of housing demand for renters is less than 1, greater than 1 for owner-occupiers.
- For time series, simple calibration: **β**=1.4 for owner-occupiers, **β**=0.85 for renters.
- Average **β**=1.4poo + 0.85(1-poo) where poo is proportion of owner-occupiers.
- Ranges from 1.09 in Germany, to 1.22 UK, 1.17 France, 1.25 Ireland, 1.27 Norway, Czechia, 1.28 Spain.
- (Minus) *elasticity of hp to per capita stock* **a** increases with (log) share of population in the largest city as fewer housing choice options.
- Assume minimum **a**=1.5 (Germany), max **a**=2.2 (Finland). Implies 1.86 Czechia, 1.9 UK, Spain, 1.96 France, 2.02 Norway, 2.08 Ireland.
- *Elasticity of hp w.r.t. income* **b= βa,** e.g. 1.17x1.96=2.29 for France.

What drove real house prices in France?

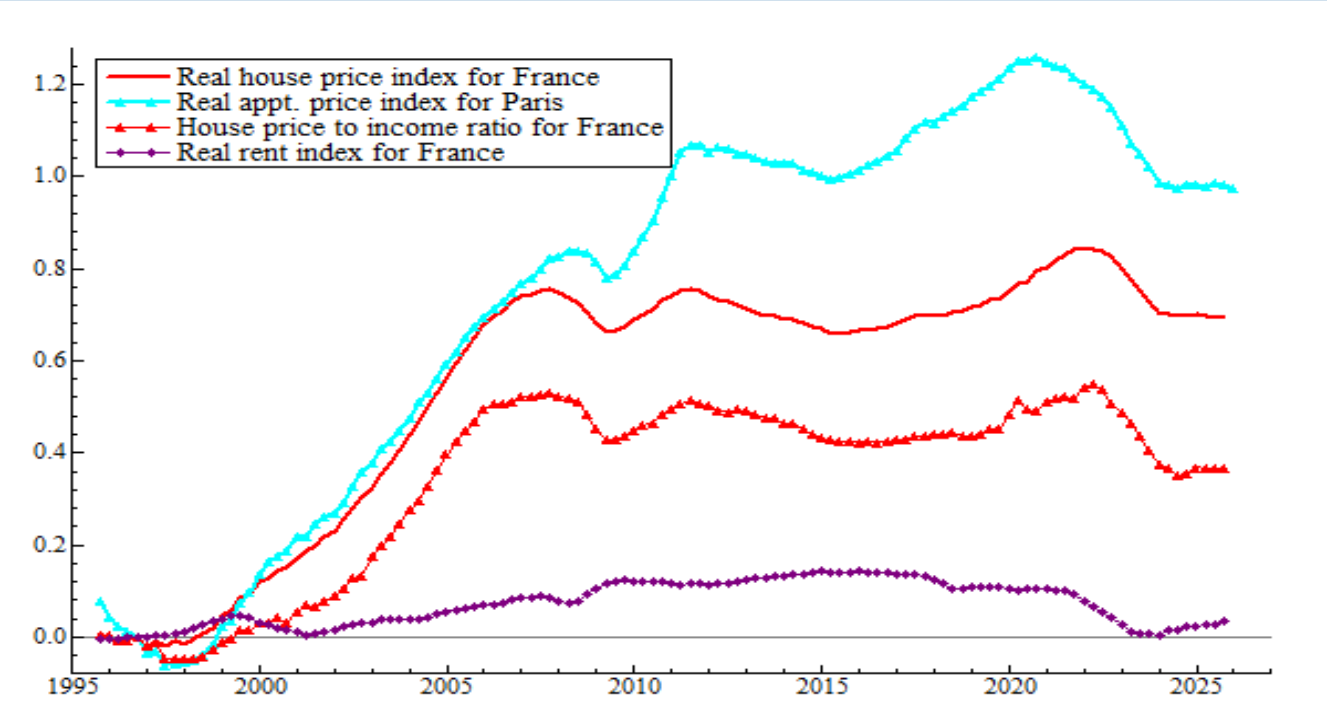




- In France, **housing stock per capita more than kept up with rise in real incomes**, but **lower effective interest rate** and **easing of credit** drove **real house prices**, Chauvin & Muellbauer (2018).

Paris prices react more to credit conditions and interest rates

- Real price index of Paris apartments vs. national index (logs)

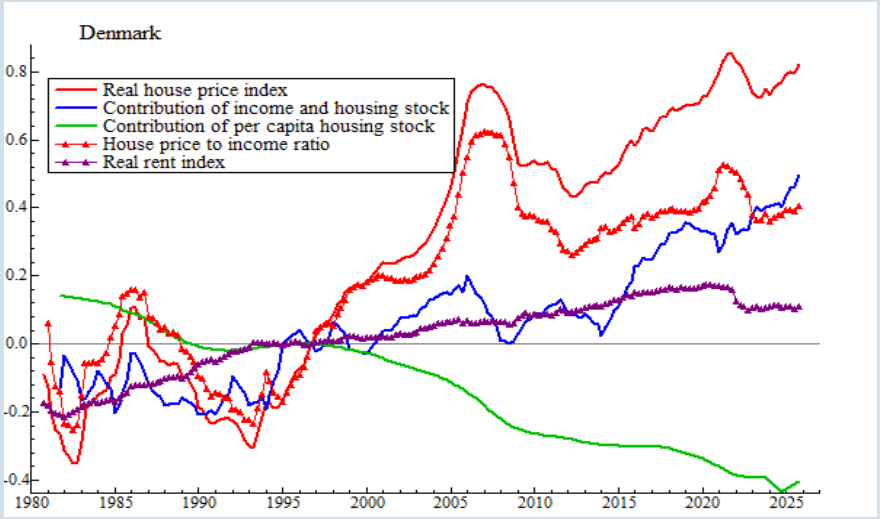


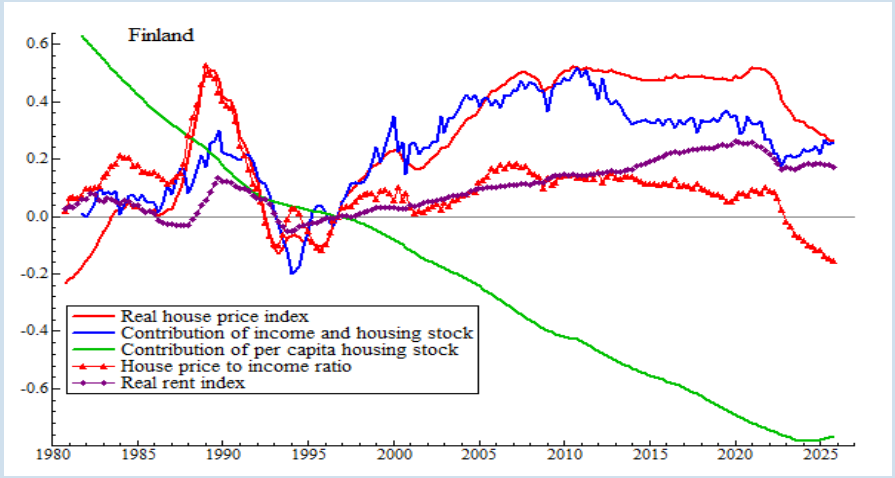
- See [Muellbauer 'A Tale of two Cities: is Overvaluation a Capital Issue', 2019.]
- Banks tended to use a 33% informal ceiling on DSIR, formally regulated from 2017. Helps explains why effective nominal interest rate, including repayment is relevant.

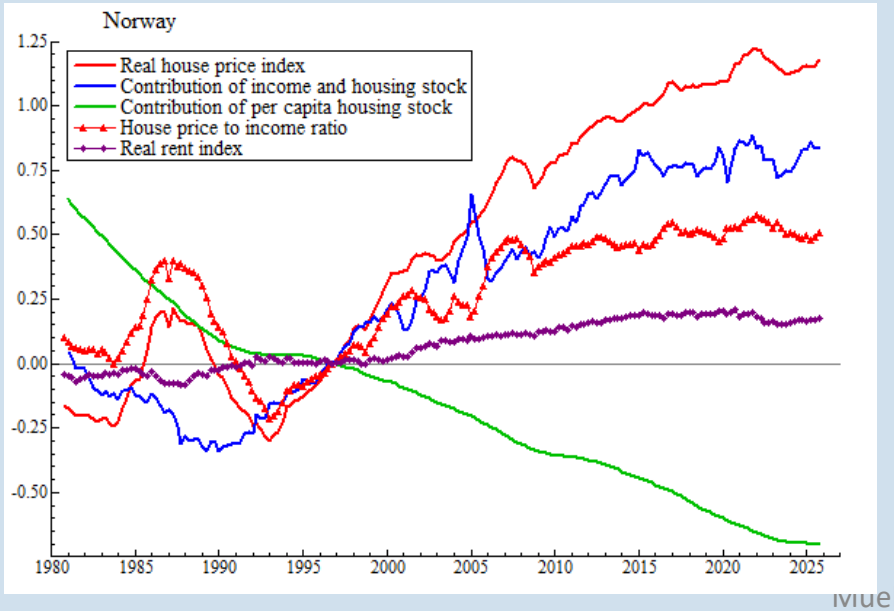
France’s affordability crisis

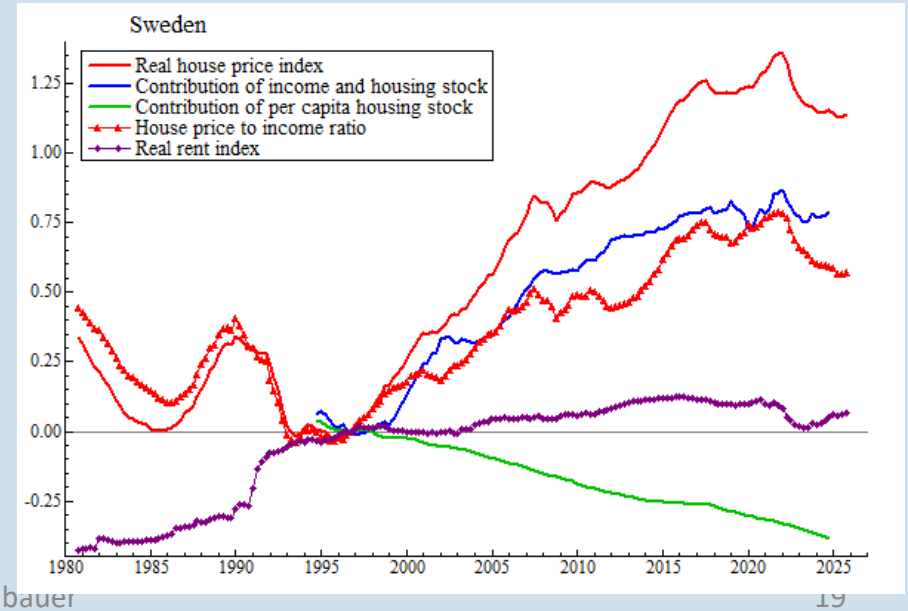
- **Affordability crisis:** Prices outpaced incomes in 2015-2021, most acutely in Paris, Lyon and Lille.
- **Ownership and rental strain:** Young families are priced out of buying, and many low-income renters spend over 40% of income on housing.
- **Political salience:** Housing featured in the 2026 election cycle. The National Rally ties it to cost of living, while traditional parties face criticism.
- **Policy response:** The 2018 ELAN law permits rent benchmarks (Paris since 2019, extended to 2026), alongside more benefits and social housing. Compliance is patchy but helped reduce average real rents.
- **Supply?** long-term aggregate supply kept up with income and population, but Paris region under-built. Temporary supply boost after 2010. Short-term: rate rises, zoning limits and labour shortages explain weak construction.

For the Nordics, after boom/bust crisis, strong explanation from per capita income and housing stock









The Nordics

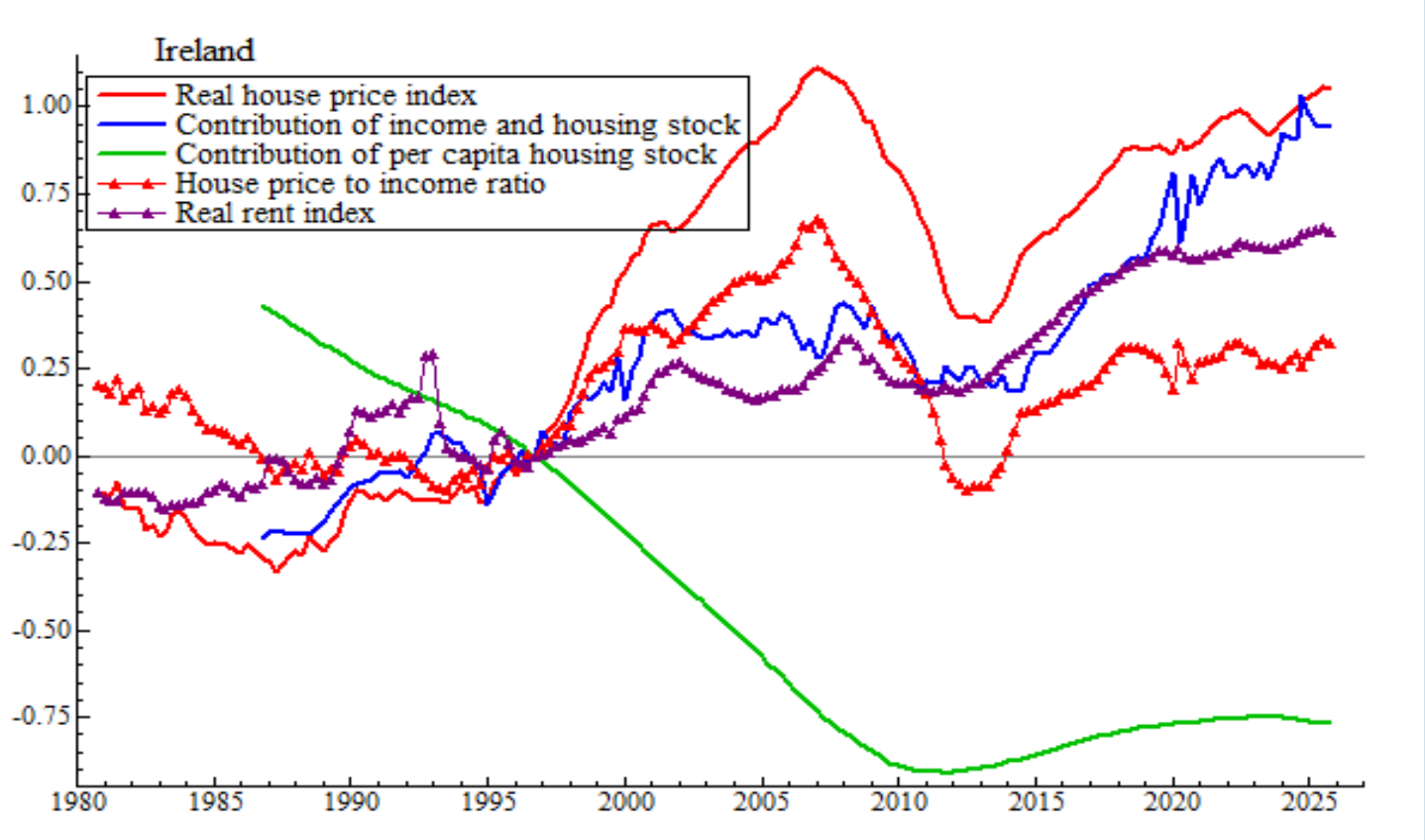
- **Finland** did best in matching income and population growth with housing provision: house price/income ratio now below post-1980 average, lowest growth in real house prices and real rent index.
- Since 2000, **Sweden** had weakest growth in per capita housing stock, largest increase in house price/income ratio and real house prices.
- In all 4 Nordics, rent controls and/or social housing, co-ops and other alternatives kept down official real rent index.
- In 2023-5, weak residential investment in all 4 Nordics, esp'y Finland, reflects weak demand, building cost rises, high interest rates, falling prices.
- In **Sweden**, rental access is the pinch point: one rental platform reports Stockholm queues exceeding 10 years for desirable areas.
- **Denmark** rental sector relies on regulation more than market supply. Only one in five rentals is private and unregulated, and the rest have long wait lists.

Where Nordic affordability pressure is greatest

- Pressure is concentrated in capitals: 2024 housing costs above 40% of disposable income: 22.7% in Danish cities, 13.2% in Swedish cities and 7.7% in Finnish cities (Eurostat).
- Though omits families locked out of the market.
- **Denmark:** costs are high and demand and supply are out of balance around Copenhagen. Prices rose strongly again in 2025, esp'y in Copenhagen.
- **Norway:** Between 2011 and 2023 Oslo-region prices rose faster than incomes. The share of 20–35-year-olds buying fell in every affordability group except the top 10%, and buyers are older and rely more on equity. norges-bank
- **Sweden:** the most stringent rental regulations in the OECD, disincentivising efficient use and construction & severe insider/outsider problems in Stockholm.
- **Finland:** falling prices mean the least acute pressure, though owner-occupation has fallen for younger hhs.

Ireland

- From 2010, housing stock failed even to keep up with population growth: explains most of rise in real hp and house price/income - and record rise in real rent index.

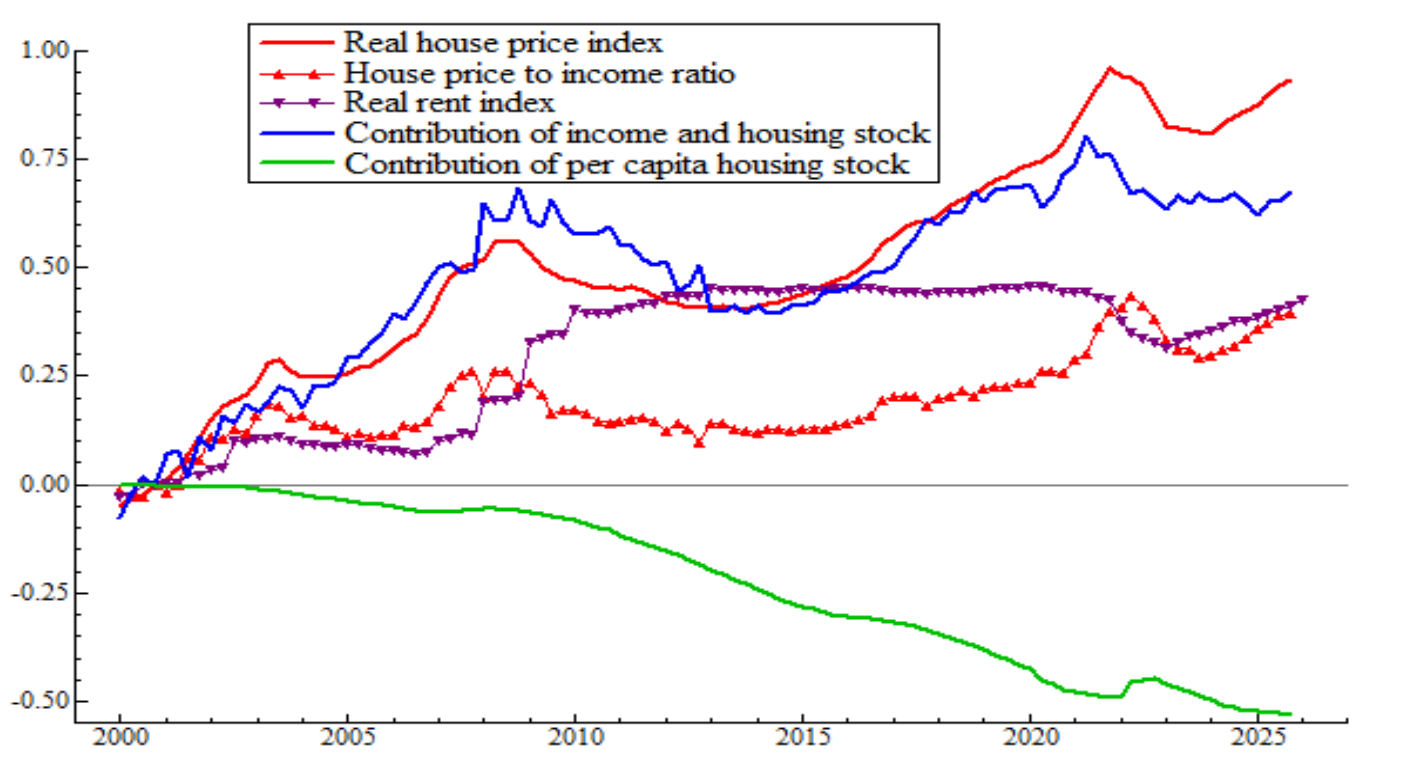


The Irish affordability crisis

- World record boom-bust collapse in house-building: over 90,000 homes completed at the 2006 peak; fewer than 4,600 in 2013!
- Housing Commission report 2024: 26 per cent of 18–39 year olds lived with their parents, against 4 per cent who would choose to.
- Owner-occupation less accessible: 59% of Irish adults aged 20-34 lived with parents in 2022, up from 38% a decade earlier, the largest increase among major European countries.
- Housing has become a dominant political issue: the 2024 National Youth Council survey found 67% of young people identify housing as their greatest concern.
- Policy responses include the National Planning Framework revision, Urban Regeneration Development Fund, and macroprudential measures on mortgages.
- See Ronan Lyons *Brittle: How the Housing Crisis Is Breaking Ireland – And How to Fix It*, Atlantic Books, 2026.

Czechia

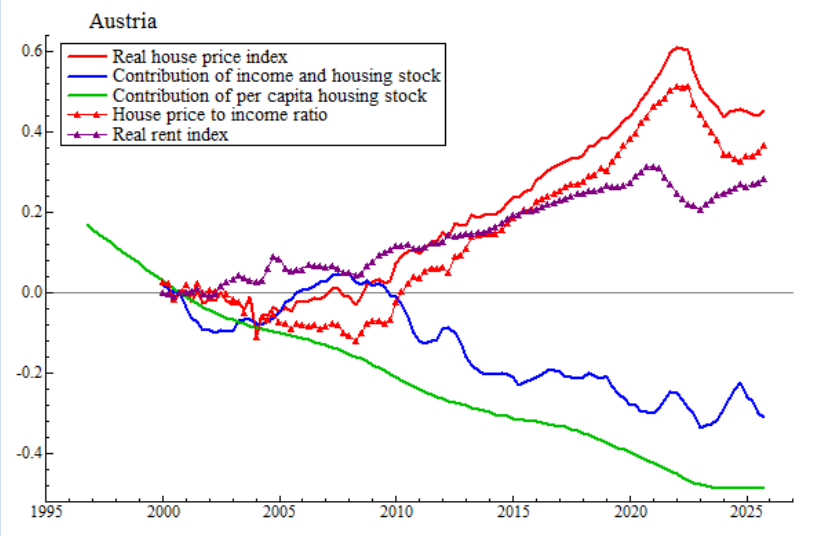
- Calibration suggests b=2.36 a=1.86. Consistent with a new (provisional) time series model (2003Q3- 2025Q4).
- Growth of per capita income relative to per capita housing stock explains most of rise in log real house price index since 2000.

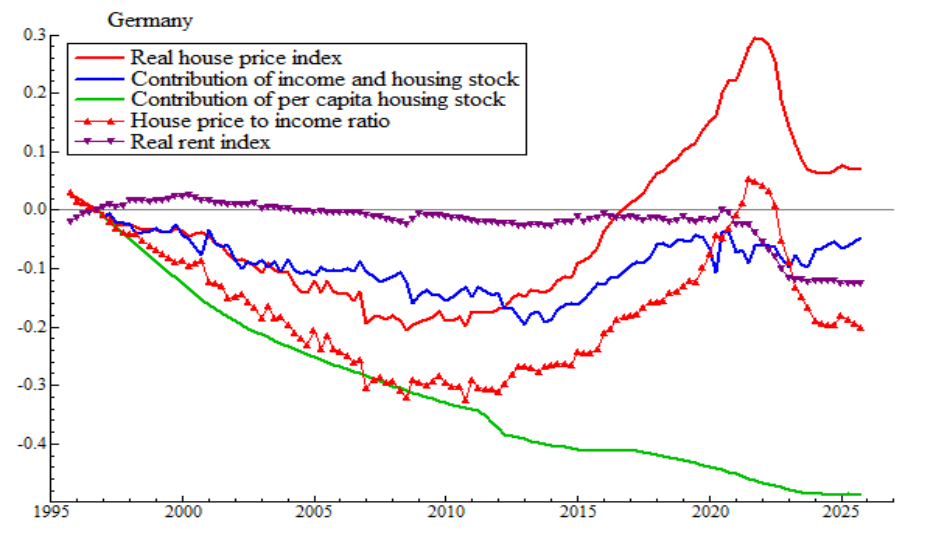


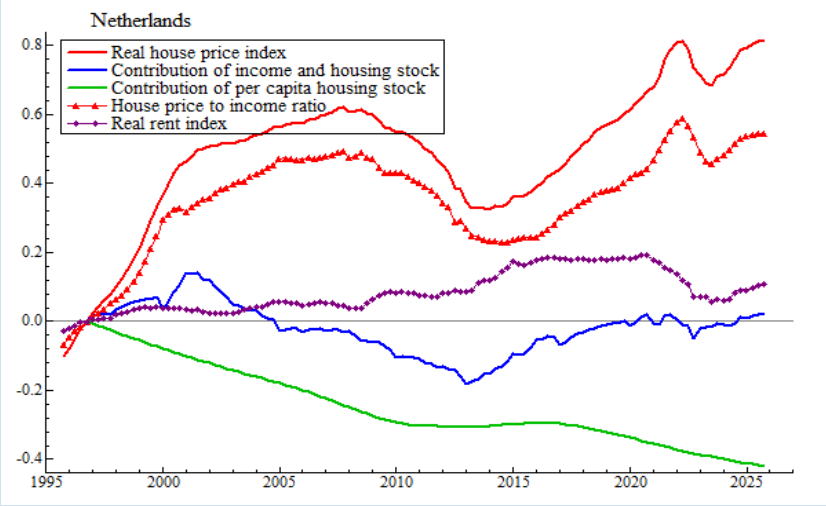
The Czech – mainly Prague's -affordability problem

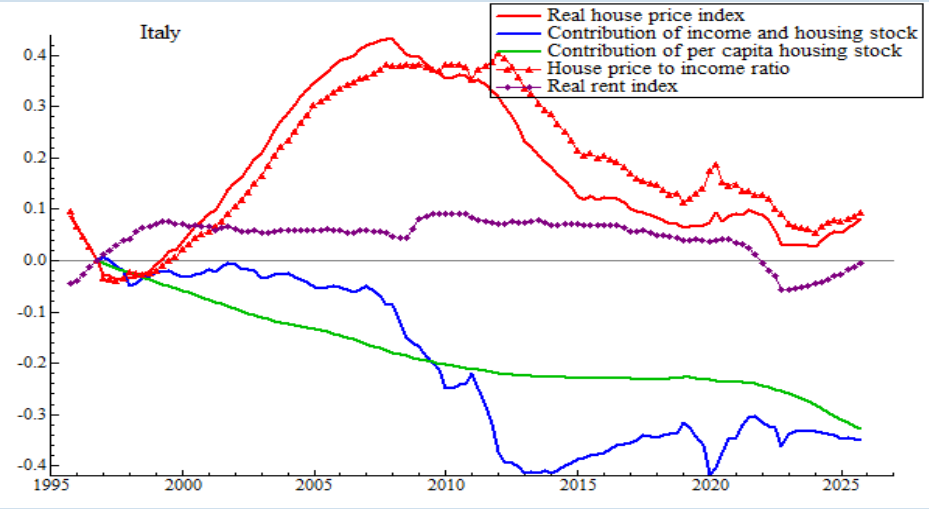
- **Prague** is one of the Europe's least affordable capital cities.
- 60% of non-homeowners believe they will never own a home.
- **Supply shortage:** Local construction lags far behind demand due to slow permitting, rigid spatial plans, and fragmented municipal governance.
- **Tiny social safety net:** Privatisation left national homeownership at 75%, while social rental housing accounts for just 3.6% of total stock.
- **Overburdened rental market:** Demand has flooded rentals, forcing 25% of all Prague households—and 45% of its private tenants—to spend over 40% of their income on housing.

Austria, Germany, Netherlands and Italy contrasted









Austria and Germany

- **Austria**, especially Vienna, has maintained the most stable and protected housing market in Europe.
- However, a "two-tiered" housing reality has emerged, causing affordability pressures on low-income households, migrants, and newcomers trapped in the unregulated private market, where 21% spend over 40% on rent vs. Vienna average of 10%, Kadi (2025).
- **Germany:** housing supply failed to match income and population since 2010; despite fall in house price to income ratio and official real rent index since 2021, severe problem of new tenants not protected by rent regulation in major cities.
- Surging new lease rents, 3 million tenants spending over 40% of income on rent.
- After unification, trend to privatise public housing.
- Between 1999 and 2011, around 1.4 million public housing units were sold off—about 3.5% of Germany's housing stock. Berlin lost over 200,000.

Italy and the Netherlands

- **Italy:** housing supply failed to keep up with income and population since 2012.
  - Though the national house prices to income ratio is far lower than 20 years ago, tenants face an affordability crisis: 22.3% of all tenants renting at market prices across Italy face housing cost overburden, and far higher in Milan and Rome.

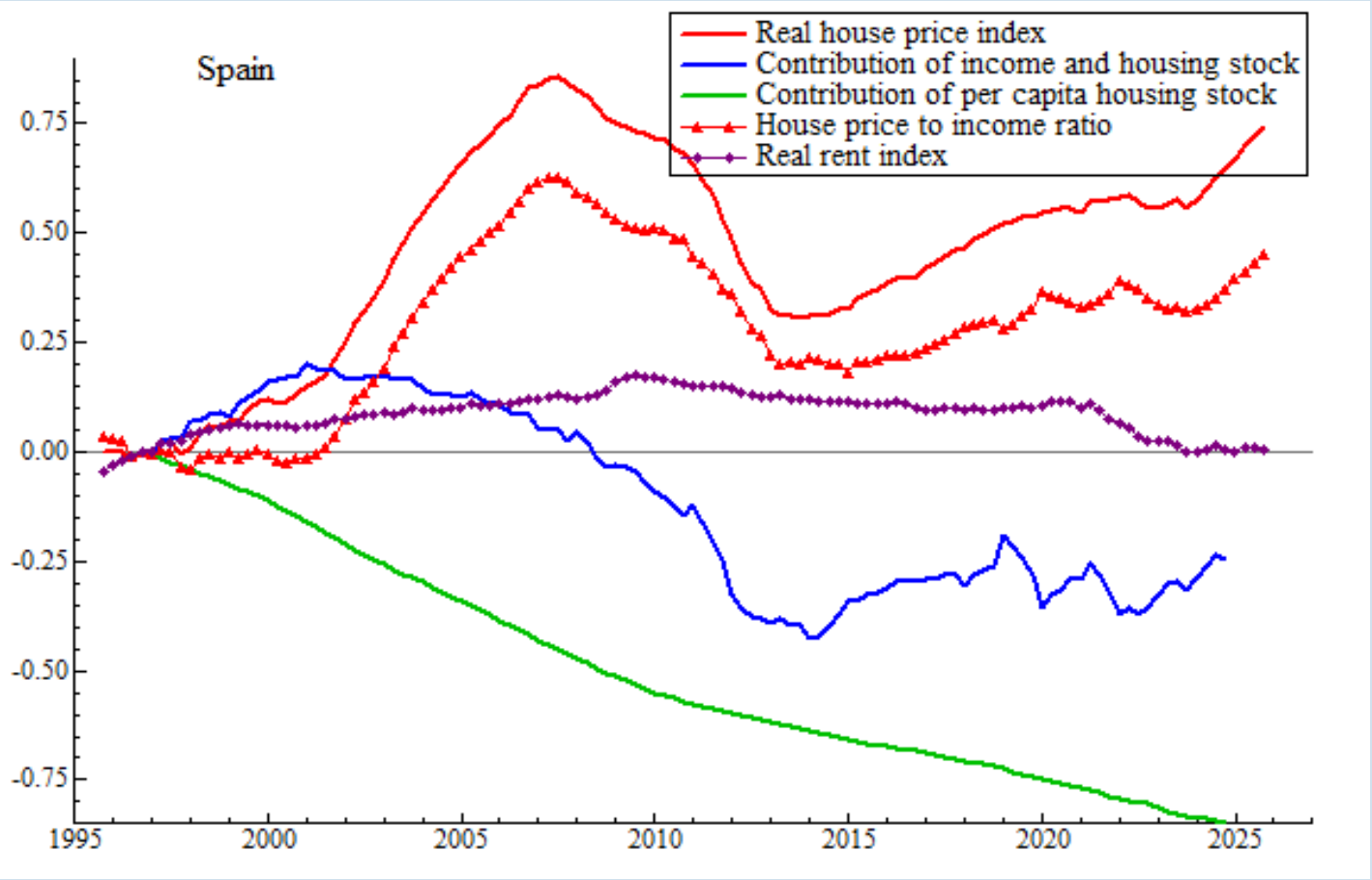
- **The Netherlands:** housing supply failed to keep up with income and population since 2010.
  - **Frozen social sector:** A 30% social housing stock protects existing tenants but creates bottlenecks, with waitlists stretching up to 10–19 years in Amsterdam.
  - **Private market squeeze:** Newcomers and middle-income earners forced into a tiny private rental market, driving average rents to extreme levels and consuming 40% to 70% of their income.

Conclusions

- Institutional frameworks shape land and housing markets, affecting growth, inequality, and quality of life, Muellbauer (2026).
- In contrast to the UK, Vienna has well managed widespread access to shelter through substantial public ownership/control of land and housing stock.
- Considerable parallels with UK across Europe: privatization, decline in social housing, poor design of property taxes, financialization, the role of investors, supply chain problems.
- The macro-lens: only in Austria and Finland did post-2010 residential investment keep up with income and population.
    - But national housing and rent indices understate the severity of affordability crises in major metropolitan hubs (like Paris, London, Dublin, Berlin, Prague, Madrid, and Barcelona).
    - National rent indices for standard CPI's often fail to capture the severe burden on new tenants, newcomers, and young families exposed to escalating market rates for new leases.
    - That can be a side effect of rent controls and aggressive regulations on a dominant private sector – which can also make underinvestment worse.

Spain (spare slide)

- Weak supply since 2010 relative to income and pop. growth
- Real rent index for *incumbents* is down because of rent controls but stress for new tenants.



Spain’s affordability problem (spare slide)

- **Underinvestment** in housing since 2010, tiny social housing sector**.**
- **Metropolitan bottlenecks:** In Madrid and Barcelona, typical rents for new lets consume up to 75% of a local worker's net income, trapping 45% of young adults with their parents.
- **The "Maricarmen" breaking point:** The forced September 2026 eviction of **Maricarmen Abascal**—after an investment fund hiked her rent by 230%—became a national flashpoint.
- **Backfiring rent regulations:** Implementing new rent caps in Barcelona triggered a loophole where landlords shifted long-term stock into unregulated "seasonal" rentals, cutting standard lease availability by 25%.
- **Political collapse and snap elections:** government proposed emergency housing decrees; their failure in parliament triggered national election set for 29th November 2026.