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# Discussion: The Role and the Limits of Monetary Policy in Managing Shelter Inflation

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# Bank of Canada Framework Review: Monetary Policy and Shelter Inflation

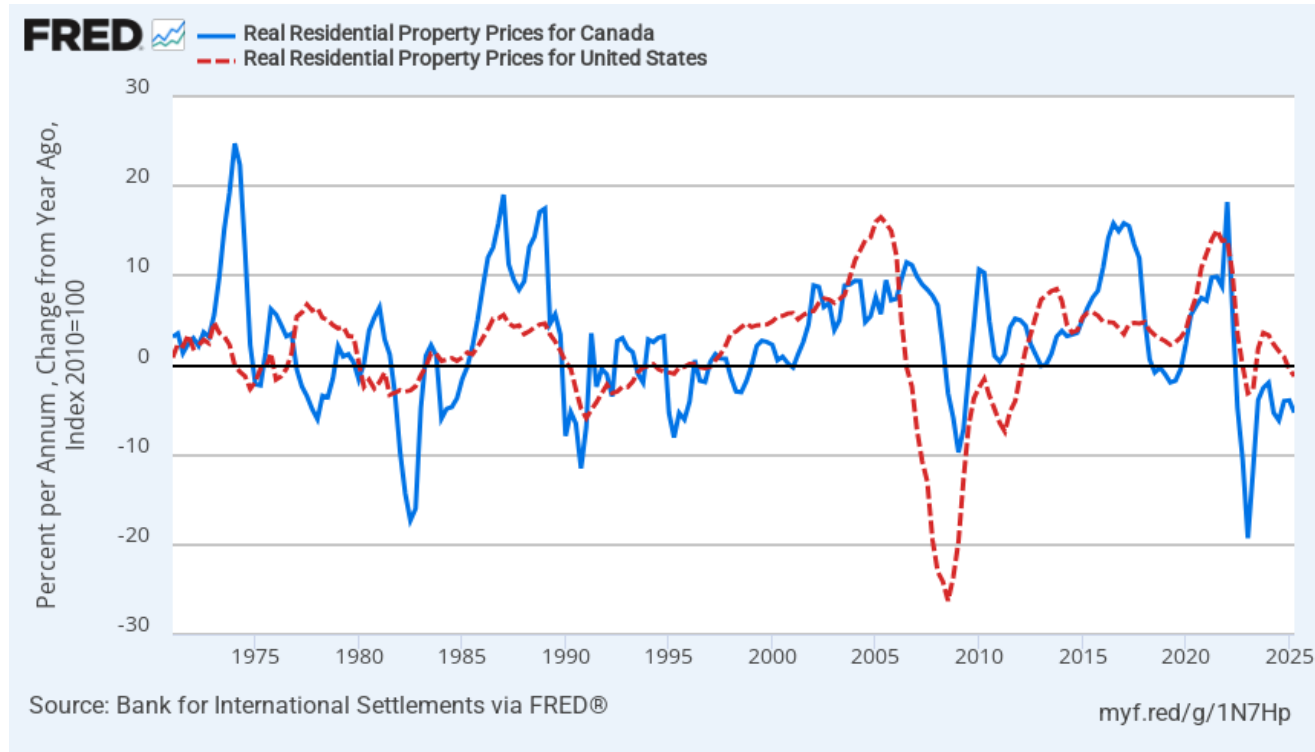
## Central Banks, Research, and the Housing Focus

- Traditionally, central banks trailed academic work, often being a few steps behind the latest ideas.
- Since the financial crisis, Research Divisions in most central banks have transformed, becoming **producers of economic knowledge** rather than just consumers.
- It's commendable how the Bank of Canada (BoC) has evolved its approach (2006, 2011, 2016, 2021) to housing, mortgage financing, and its interactions with the real economy.
- In sharp contrast, the Federal Reserve recently finished its framework review focusing solely on the dual mandate and communication, with **housing completely absent**

## New Issues Post-Pandemic

- The pandemic highlighted the importance of housing, not only for appreciation but also for **inflation**.
- In most cases, an initial increase in house prices (following central bank rate cuts) was subsequently followed by high rent inflation.
- The gap between housing demand and supply has increased dramatically → **Housing Affordability crisis**

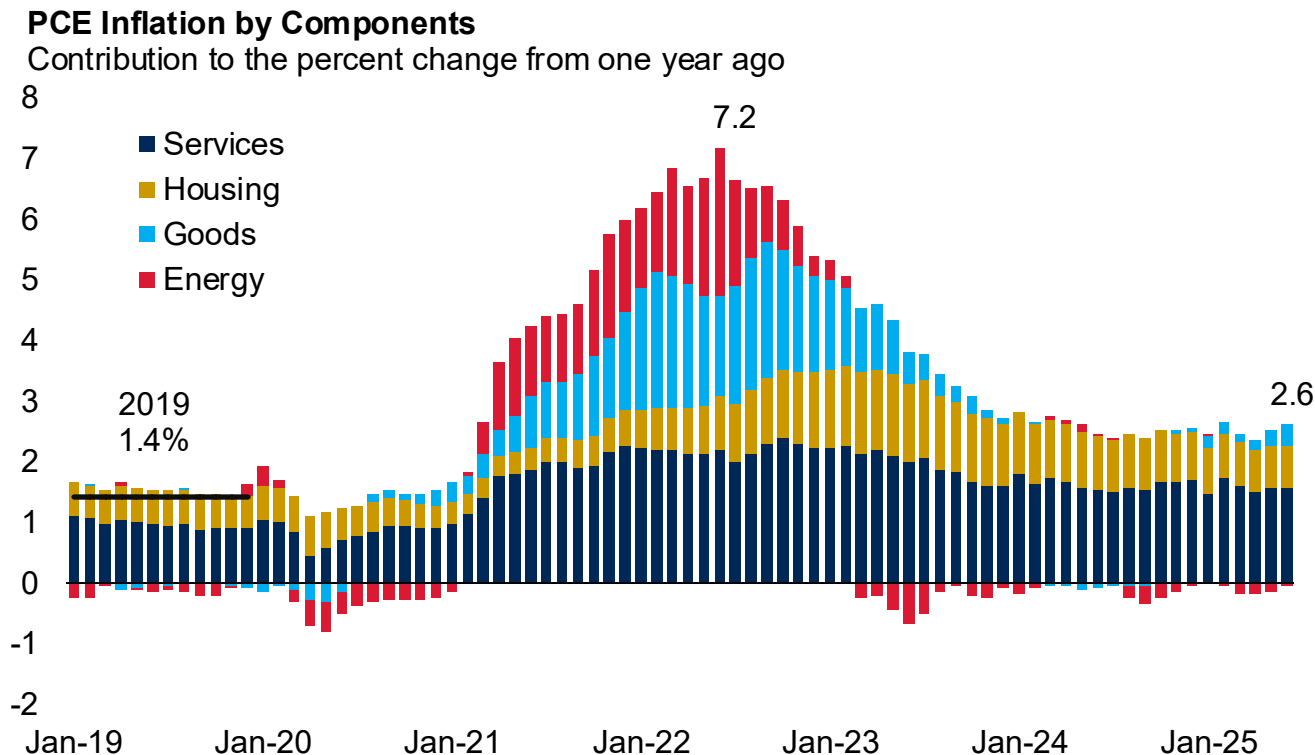
# House Prices Appreciation in Canada and the US



Housing as an asset in Canada seems to have a different risk-return properties than in the US.

- More volatility
- Less persistence

# The Main Drivers of US Inflation: Housing and Services

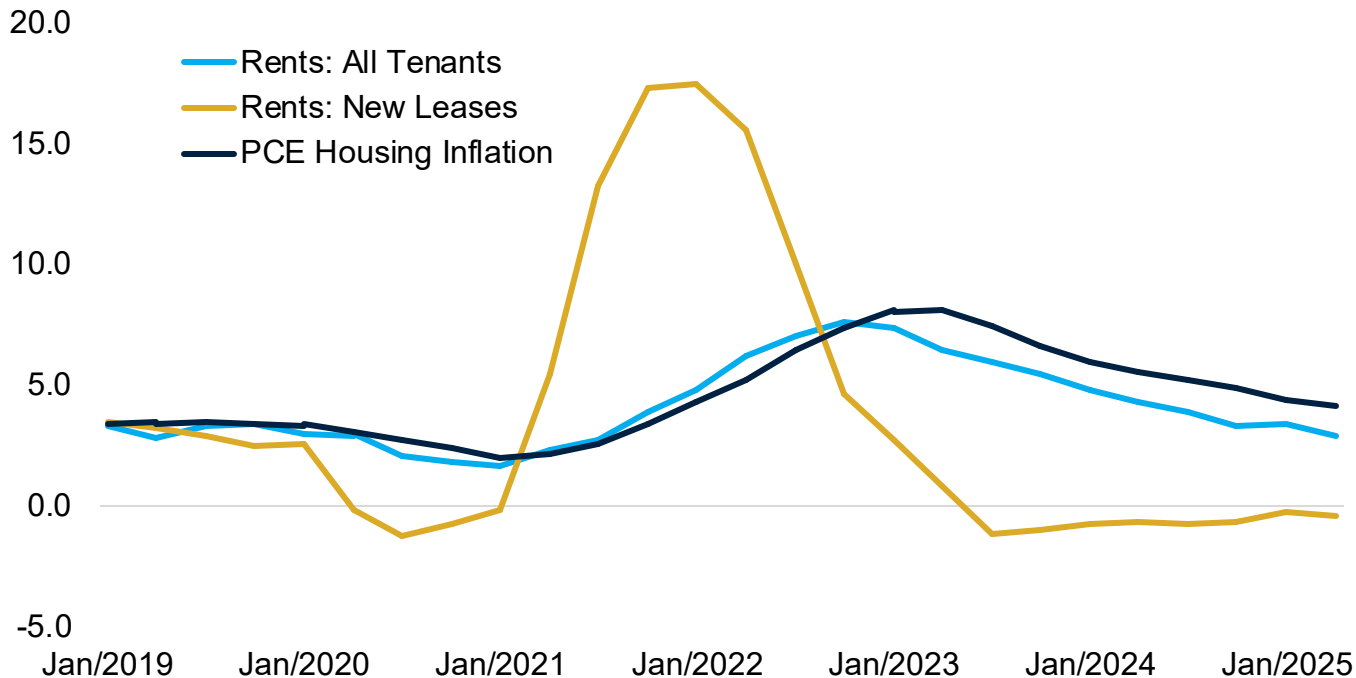


Source: BEA and authors calculations (Last Obs. August 2025)

# Inflation Dynamics for Housing

## Market Rents and housing inflation

Percent change from one year ago



The low growth of new leases is good news for inflation.

The lagging nature of contracts means it takes time to be reflected in PCE.

Sources: BLS (All Tenants), BEA (PCE), Apartment List (New Leases) (Last Obs. Q2:25)

# Key Challenges: Interest Rate Policy Rules, Inflation and Housing Costs

- Modern central banking approximates policy decision-making using an **interest rate rule** that contains inflation and potentially other key objectives (e.g., employment mandate, financial stability, exchange rates, etc.).
- When the measure of shelter inflation includes **Mortgage Interest Costs (MIC)**, there is an **endogeneity issue**, a trade-off for policymakers, and a communication challenge.

$$i = r^* + \pi + 0.5(\pi(x, i) - \pi^*) + 0.5(y - y^*)$$

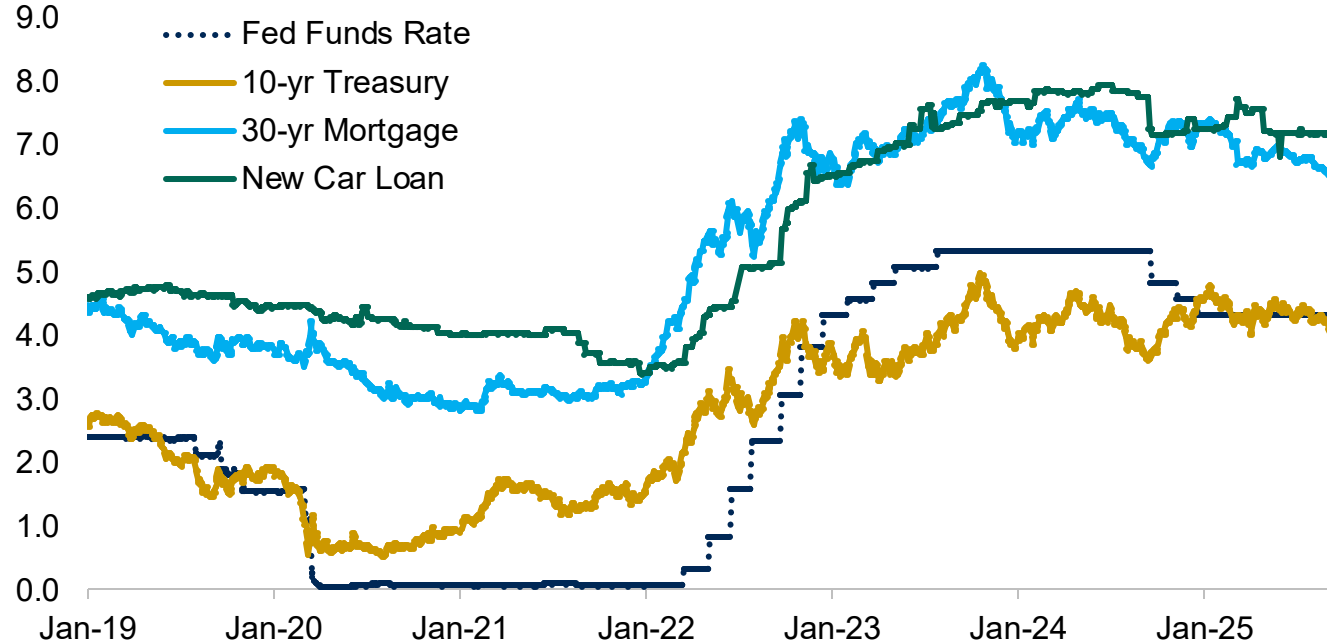
- MP tightening drives MIC inflation higher,  $\pi(x, \Delta i)$ , resulting in a **significant communication challenge** for the Bank.
- Targeting MIC can lead to **unwelcome swings in output and consumption**, as the central bank "**chases its own tail**" by raising rates to control inflation partly driven by its own high rates.

However, most housing decisions are driven by long-term rates which are typically outside the scope of traditional Taylor rules (Gali 2025).

# Interest Rates at Different Maturities in the US

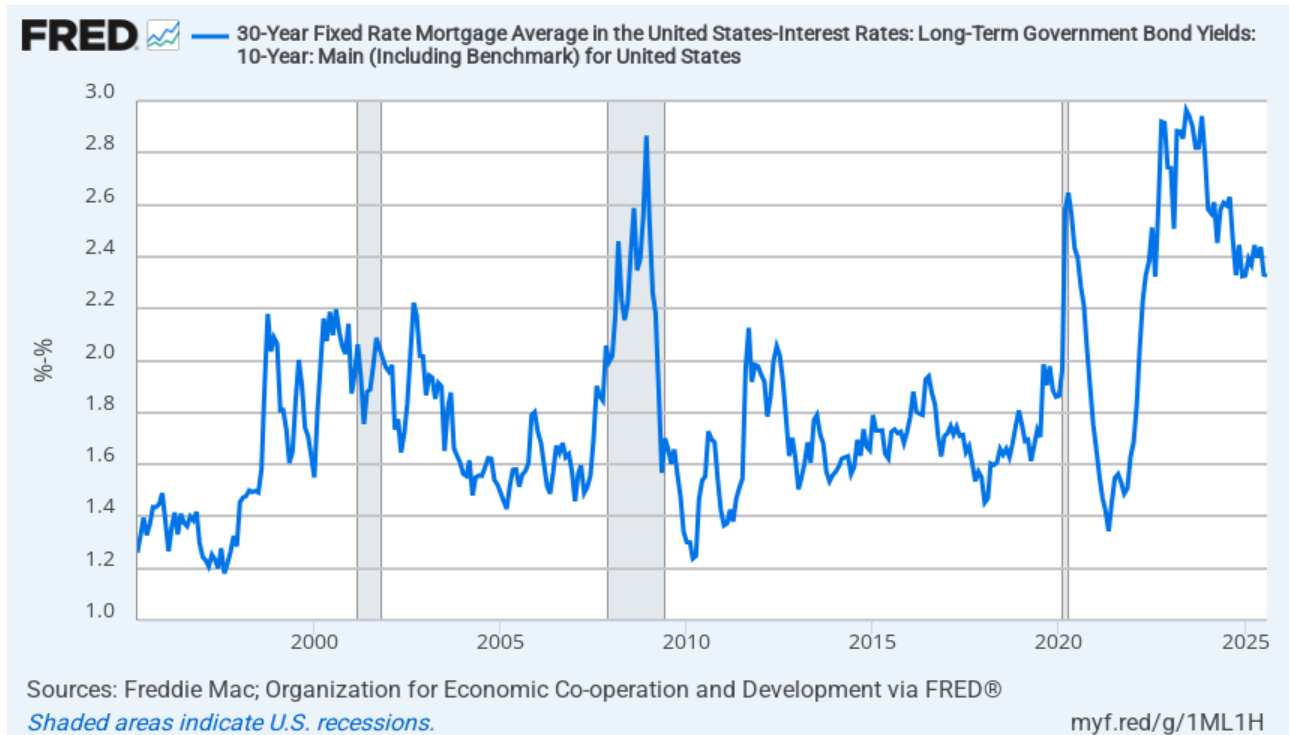
## Selected Interest Rates

Percent



Sources: Federal Reserve Board, Wall Street Journal, Last Obs. 09/18/25

# The Cost of Funding Housing is Very High



Historically, the spread between mortgage rates and a 10-year UST is around 180 bps

We had a housing deficit with low borrowing spreads.

Now with spreads at 240 bps, it will prove even more challenging



# Monetary Policy's Impact on Housing Imbalances

## Demand vs. Supply Dynamics

- MP affects both housing demand and supply, but **demand responds faster**.

The demand channel operates in the existing inventory of housing (demographics, migration, and vacant units).

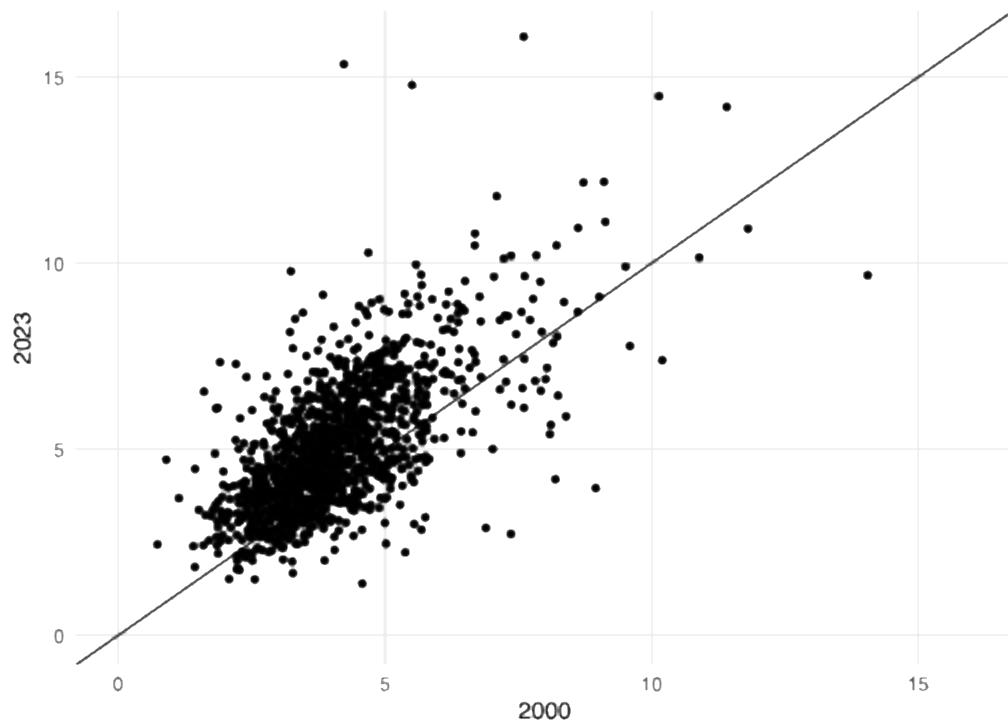
Housing starts (supply) respond persistently after a year, and this is a classic example of **long and variable lags** as it affects demand and supply.

- MP easing leads to a significant increase in house prices, but the effect on rents is mixed or **insignificant nationally**(more to come on that in my comments).

## Limited and Uncertain Medium-Term Influence

- Given the various **offsetting channels**, MP has a **limited and uncertain influence on the overall dynamics of shelter inflation** over the medium term. (→ Discuss later the effects of path dependence and surplus/deficit of housing units).
- The Bank **cannot fix housing affordability issues** (→ I agree with the assessment that housing affordability is a supply issue).

# 2000 vs. 2025: Housing Affordability Has Declined in the Vast Majority of US Counties

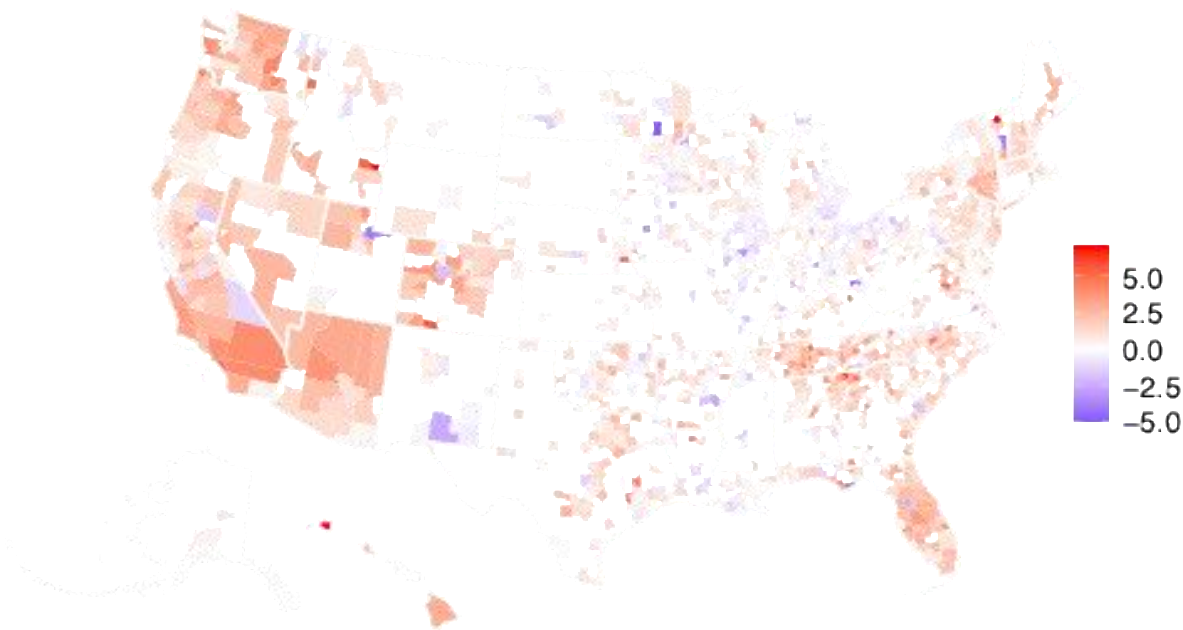


## Affordability Crisis

Nearly All US Counties Fall Above the 45-Degree Line, Confirming Widespread Deterioration in the House Value-to-Income Ratio (2000 vs. 2025).

Creates a big separation between participants in the housing market and non-participants in wealth accumulation and inequality.

# Housing Affordability has Deteriorated Everywhere, but Especially in Key Regions



The most significant surge in the House Value-to-Income Ratio (darkest red) is concentrated on the **West Coast, the Northeast, and the Mountain West**, confirming that housing costs are rapidly outstripping local income gains in these markets.

# Key Conclusions Implications of the Analysis

## Optimal Response to Different Shocks

<u>Shock Type</u>	<u>Policy Implication</u>	<u>Rationale</u>
Targeting MIC	Best to <b>down weight MIC</b> or replace it with an alternative measure.	Avoids self-reinforcing policy cycles ("chasing its own tail") and resulting swings in output/consumption.
Housing Demand	<b>Respond to shelter inflation.</b>	Stabilizes demand and inflation, particularly when house price expectations are <b>extrapolative</b> .
Housing Supply	Better to <b>look through</b> if expectations are anchored.	Ambiguous impact on inflation but leads to larger output losses.

## Measurement & Welfare Trade-offs: We do not live in a Modigliani-Miller world

- **Welfare:** Policy choices affect homeowners and renters differently, complicating the use of MP to address inflation and affordability. Homeowners prefer policy actions that inflate asset prices, and renters prefer high interest rate for their savings.
- **CPI Measurement:** Canada's current user-cost approach compares well, but a publicly available *CPI basket with fixed interest rates (CPI-F)* could help address MIC communication issues.

# Reflections and Thoughts maybe Comments

Based on my own research work and policymaking experience

- Mortgages and monetary policy (ARM vs. FRM)
- House prices-rent disconnect
- Consumption volatility and financial fragility
- Mortgage design and interest rate risk

# Mortgages & Monetary Policy (Garriga, Kydland, Šustek 2017, 2020)

Model Element	Mechanism	BoC Relevance (Canadian Context)
Cash Flow Effects (ARM)	Higher policy rates → Immediate rise in real mortgage payments → <b>Sharp reduction in disposable income</b> . Homeowners act like "hand-to-mouth" consumers.	Canadian short-term fixed mortgages reset quickly, functionally resembling <b>Adjustable-Rate Mortgages (ARM)</b> . This explains why <b>Mortgage Interest Cost (MIC) inflation</b> translates into an immediate, substantial shock to household consumption.
Gradual Effects (FRM)	Higher rates → Gradual reduction in real payments over time.	Highlights why the <b>monetary transmission mechanism is weaker</b> in Fixed-Rate Mortgage (FRM) countries (like the US) compared to ARM-like systems.
Shock Decoupling	<b>Persistent</b> policy shocks (affecting the long-term yield curve) transmit primarily through the <b>debt channel</b> , generating persistent, heterogeneous consumption effects.	Supports the BoC finding that MP shocks create <b>sharp, uneven responses</b> in homeowners' consumption that may not align with aggregate output measures.

# House Price-Rents Decoupling (Garriga, Manuelli, Peralta-Alva 2019)

Mechanism	Finding	BoC Relevance
Credit Conditions & Price Sensitivity	Reductions in mortgage rates <b>generally</b> increase house prices when financial markets are segmented (wedge between mortgage rates and asset returns).	<b>Confirms the critical role of expectations:</b> House price movements are highly sensitive to the magnitude and <b>expected duration</b> of the new, lower interest rate environment.
The Price-Rent Disconnect	Credit easing leads to: <ol style="list-style-type: none"> <li>1. Increased housing investment (supply).</li> <li>2. Increased housing consumption (demand).</li> </ol>	Rationale for the observation that MP easing can cause <b>significant house price increases</b> while <b>rents remain flat or fall</b> , and reversed during the tightening.

# Credit Cycles, Consumption Volatility & Fragility (Garriga & Hedlund 2020)

Credit Cycle Phases	Consumption Effect	Vulnerability
<b>Boom</b> (Cheap credit)	Consumption increases primarily due to direct income/credit effects. <b>Rising home equity adds little extra boost.</b>	High-debt households are accumulating risk.
<b>Bust</b> (Tight credit)	<b>Sharp decline</b> in consumption due to equity evaporation and liquidity drying up. This <b>significantly amplifies the recession.</b>	Amplification is concentrated among <b>highly leveraged homeowners</b> (High LTI), supporting the BoC's concern about disproportionate sensitivity.

## Key Points

- For large or persistent interest rate movements, consumption responses can be asymmetric, which would not be captured by most structural or statistical models.
- This is why it is critical to track credit data (micro level) in real-time and not just the aggregates.



# Mortgage Design & Interest Rate Risk (Garriga & Hedlund, 2020)

Policy Challenge	Model Finding	Policy Implication
<b>MP Blunting</b>	Monetary Policy (MP) is a <b>blunt instrument</b> for addressing sector-specific financial imbalances and housing bubbles.	MP should focus on its primary mandate (inflation control).
<b>Financial Fragility</b>	Macroprudential policies (MPs), such as <b>Loan-to-Value (LTV) caps</b> , are effective tools for dampening housing booms and reducing financial fragility when rates are low.	Macroprudential tools are <b>necessary complements</b> to target financial stability efficiently by limiting credit expansion across both the leverage (intensive) and homeownership (e

## Key Point

Our analysis strongly supports the BoC's concern that the high exposure of Canadian households to rate volatility creates an elevated level of financial fragility during periods of monetary policy tightening.

# Conclusion: Developing Theory and Nimbly Responding

## The Challenge Ahead

- The interactions between interest rates, inflation, housing, and debt structure represent **complex and persistent challenges** for central banks.
- The profession (academic and policymakers) is actively working to develop **better theories** that can quantify the complex trade-offs inherent in policy choices, especially concerning financial stability and welfare distribution.

## Policy Approach

- Solving these issues requires a **nimble and pragmatic approach** to policymaking.
- This includes being open to **flexible policy rules** that can down weight endogenous measures like MIC and integrating **macroprudential tools** to address sector-specific financial imbalances.

**Thank You:** Once again, I want to thank my colleagues at the Bank of Canada for the **opportunity to speak today** and share my thoughts and reflections on this critical topic.