On the nexus of monetary policy and financial stability:
Novel asset market monitoring tools for building economic resilience and mitigating financial risks

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The views expressed are my own and do not necessarily reflect official positions of the Federal Reserve System.
The crux of the matter

1. Monetary policy long viewed as independent from micro-prudential regulations and policies, even macro-prudential ones
   a. greater recognition of policy interdependencies
   b. greater recognition of the challenges posed by financial instability (financial shocks, systemic, nonlinearities, ...)

2. What are we missing?
   a. a more rigorous approach to bubbles, asset mispricing
   b. a more rigorous, empirically-grounded approach to managing risks
      i. a more comprehensive, real-time monitoring toolkit
A risk management perspective

- Identifying risks and vulnerabilities
- Risk analysis and assessment
- Risk monitoring and mitigation
Identifying risks and vulnerabilities

1. Financial instability arising from financial fragility, and vulnerabilities
   a. what do we know and what do we need to know more about?

<table>
<thead>
<tr>
<th>Known knowns (Things we are aware of and understand)</th>
<th>Known unknowns (Things we are aware of but don’t fully understand)</th>
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<tbody>
<tr>
<td>Unknown knowns (Things we understand but are not aware of)</td>
<td>Unknown unknowns (Things we are neither aware of nor understand)</td>
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More research needed

Research focus
1. The known unknowns
   a. *observation 1*: Financial vulnerabilities are a time-varying feature of the financial system, often related to frictions or constraints
   b. *observation 2*: Financial vulnerabilities can build up in periods of economic expansion
   c. *observation 3*: Financial leverage and indebtedness are key vulnerabilities and sources of financial instability
   d. *observation 4*: Financial crises are to some extent predictable outcomes of credit expansions, particularly when accompanied by asset price booms
   e. *observation 5*: Monetary policy may affect the buildup of financial vulnerabilities
1. Asset price expansions can also arise from nonfundamental bubbles ("fear of missing out," etc.)
   a. an underappreciated source of vulnerabilities—even today—lies in the real estate sector
Risk analysis and assessment

1. Challenging the conventional assessment of exuberance (bubbles) as a risk for monetary policy and financial stability purposes
   a. the large costs of the clean-up option (particularly after the 2007-09 Global Financial Crisis)
   b. independent policies (monetary, micro- and macro-prudential, etc.), but interdependent effects
   c. new tools and techniques that allow monitoring in real-time
1. Asset price exuberance (bubbles) deserve greater attention as a source of financial vulnerabilities, potentially unrelated to indebtedness
   a. there is scope to integrate novel techniques for monitoring exuberance in asset prices for financial stability & macro-prudential purposes
   b. expanding the monitoring toolkit with these techniques can help monetary policymakers evaluate the balance of risks to the policy outlook, shape public and private expectations about asset markets

2. Why do we care about exuberance (explosive bubbles)?
   a. expectations-driven, fragile, and prone to boom-bust dynamics
International House Price Database

About the International House Price Database

The Globalization Institute of the Federal Reserve Bank of Dallas produces an international house price database, which comprises quarterly house price and personal disposable income (PDI) series for a number of countries. All data series begin in first quarter 1975.
The Pandemic Housing Boom Experience
Housing rents are inflationary pressures, even though market rents already rapidly cooling off

NOTES: The last data point is first quarter 2023. Light grey shaded periods indicate real house price exuberance (episodes of a house price boom according to analysis by the Dallas Fed's IHPD).

SOURCES: Dallas Fed's International House Price Database; International Housing Observatory; Bureau of Labor Statistics; Bureau of Economic Analysis; Zillow; CoreLogic; author's calculations.
House prices have slowed quite rapidly in first quarter 2023

NOTES: Data are through first quarter 2023. Light grey shaded periods indicate real house price exuberance (episodes of a house price boom according to analysis by the Dallas Fed’s IHPD).

SOURCES: Dallas Fed’s International House Price Database (IHPD); International Housing Observatory; Case-Shiller CoreLogic; Federal Housing Finance Agency; Census Bureau; Zillow; author’s calculations.

Federal Reserve Bank of Dallas
House rents continue to rise, lagging house prices

NOTES: The last data point is first quarter 2023. Light grey shaded periods indicate real house price exuberance (episodes of a house price boom according to analysis by the Dallas Fed's IHPD).

Market rents for housing have slowed down noticeably as house prices also cool down.

NOTES: The last data point is first quarter 2023. Light grey shaded periods indicate real house price exuberance (episodes of a house price boom according to analysis by the Dallas Fed's IHPD).

SOURCES: Dallas Fed's International House Price Database; International Housing Observatory; Zillow; CoreLogic; author's calculations.
Household owners’ equity wealth increased by $11.2 trillion during the pandemic boom
Mortgage borrowing costs are elevated, but weakening overall household finances slowly.

30-year fixed mortgage rate (end-of-period)

Mortgage debt-service payments as a percent of disposable income

NOTES: Mortgage debt service through fourth quarter 2022. The 30-year fixed mortgage rate is through first quarter 2023. Light grey shaded periods indicate real house price exuberance (episodes of a house price boom according to analysis by the Dallas Fed's IHPD).

SOURCES: Dallas Fed's International House Price Database; International Housing Observatory; Federal Reserve Board; Federal Home Loan Mortgage Corporation.

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Thanks!
(All comments welcome)

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