

RESEARCH BUZZ

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'Worst-case' scenario exaggerated

Housing price crash would have great implications on U.S. financial services industry but national crash is unlikely.

■ Financial institutions heavily exposed to real estate sector (IV/2004)

Financial institutions' exposure to real estate goes far beyond banks. Government sponsored enterprises (GSEs) have ballooned exposure to real estate and leveraged up even more the private sector exposure by issuing and guaranteeing mortgage-backed securities (billions of dollars; amounts outstanding end of period, not seasonally adjusted).

BY DR. JOHN A. TATOM
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The large increases in housing prices that have occurred over the past decade have raised concern about whether these prices might collapse. There is a consensus that house prices are relatively high compared with prices of other goods and services, especially in some local markets. But some analysts argue that more reliable data show that national house prices are not yet out of line with increase in other prices. Research shows that prices in some local markets prices have risen far out of line with any sustainable valuation indicator but also shows this has happened in the past without any significant effect on the national economy.

Concern about national house prices boils down to whether there are forces that will compel a correction, either by having house prices fall or other prices rise. Many analysts conclude that interest rate declines account for the rise in the national average house price. Moreover, if house prices were really out of line, then past experience suggests that the pace of house price gains would slow, remaining below overall inflation for a sufficient period, for the relative price to move back into a historically "normal" range.

While analysts have little reason to expect a broad decline in national house prices, this is the worst-case scenario and should it occur, the worst consequences could arise through the financial system.

If house prices were to decline, there is a greater chance that homeowners would default on mortgages. The decline in the col-

SECTOR	TOTAL MORTGAGES	HOME MORTGAGES	AGENCY AND GSE-BACKED SECURITIES	EXPOSURE TO REAL ESTATE RELATED ASSETS
Commercial banks	\$2,595.3 (30.6% of sector assets)	\$1,568.0 (18.5% of sector assets)	\$1,096.4 (12.9% of sector assets)	\$3,691.7 (43.5% of sector assets)
Savings institutions	\$1,058.5 (62.6% of sector assets)	\$875.9 (51.8% of sector assets)	\$223.8 (13.2% of sector assets)	\$1,282.3 (75.8% of sector assets)
Credit unions	\$213.2 (32.6% of sector assets)	\$213.2 (32.6% of sector assets)	\$117.0 (17.9% of sector assets)	\$330.2 (50.4% of sector assets)
GSE	\$474.0 (16.5% of sector assets)	\$366.8 (12.7% of sector assets)	\$1,126.7 (39.1% of sector assets)	\$1,600.7 (55.6% of sector assets)
Other	\$6,192.0 (not available)	\$5,072.5 (not available)	\$3,682.6 (not available)	\$9,874.6 (not available)
TOTAL	\$10,533.0	\$8,096.4	\$6,246.5	\$16,779.5

SOURCE: FLOW OF FUNDS ACCOUNTS, FEDERAL RESERVE BOARD OF GOVERNORS

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lateral on mortgage loans also would subject lenders to greater potential losses in the event of default.

Thus, the value of mortgages would fall because the cash flows from these mortgages would become riskier. Mortgage-backed securities would also fall in value because of the heightened risk of default and/or heightened risk of failure of any explicit or implicit guarantees on them. If losses of financial institutions exceed their capital, then they become insolvent and are closed. Also as financial institutions take losses on loans and write down their capital, they will

be less able to make new loans of any type. In the past two decades, financial institutions have substantially increased their exposure to mortgage loans, so that a given house price decline would be more likely to result in failure.

Real estate loans held by banks have climbed from about 10 percent of total assets in the early 1950s to about 31 percent today. Since 1987, real estate loans have been a larger share of bank assets than commercial and industrial loans, the traditional banking staple. Bank capital equals about 8 percent, so a write-down of about 27 percent of mortgage loans would wipe out a sum

equal to all the capital of the banking industry, eliminating many banks and sharply limiting the ability of banks to make new loans or even to carry existing ones.

Financial institutions' exposure to real estate goes far beyond banks. Government sponsored enterprises (GSEs), mainly Fannie Mae and Freddie Mac, have ballooned exposure to real estate, and leveraged up even more the private sector exposure by both issuing and guaranteeing mortgage-backed securities. Economywide exposure to real estate-related assets has risen

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MISSION

Networks Financial Institute at Indiana State University was founded in 2003 through a grant from Lilly Endowment Inc. and strives to facilitate broad, collaborative thinking, dialogue and progress in the evolving financial services marketplace by focusing on the areas of education, outreach and research. NFI is a leader in preparing students to excel in careers in the financial services industry. NFI connects Indiana State University's financial, business and educational expertise and resources with community needs. NFI is a primary source for objective and applied research within the financial services industry.

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from about 92.7 percent of GDP at the end of 1995 to \$16,779.5 billion, or 143.8 percent of GDP at the end of 2004.

Mortgage loan exposure of various financial institutions is quite large relative to the total assets of the same institutions. The biggest exposure to real estate loans is actually in the "other" category, which includes households themselves, brokerage and mortgage companies, real estate investment trusts, insurance companies and a host of other financial and non-financial firms. The size of these assets is likely to be a large share of total assets for some of these lenders.

Note that banks also have real estate exposure through their holdings of government sponsored enterprises mortgage-backed debt. These securities are insured by their issuers. But a shock to real estate values could also subject GSE to losses that are larger than their capital as well.

Moreover, the value of mortgage-backed securities falls if there is increased

risk, even if actual defaults do not.

A decline in national house prices is unlikely. Also, risk management practices limit the losses financial institutions can experience from default or loss in asset value by shifting risk to other investors through derivative transactions.

Finally, the first line of defense from such a development is that houses represent the largest single asset in most households' portfolios and owners will be reluctant to walk away from equity. Houses are owned primarily for the housing services they provide and those services do not depend on the price of the house.

Thus, a fall in house prices would reduce wealth but would not force the realization of the loss — nor would the standard of living of those who plan to stay in their houses be affected.

So even the "worst-case" scenario may be exaggerated.

□ Dr. Tatom is director of research at Networks Financial Institute.

For more NFI research regarding the housing bubble theory, see NFI's Policy Briefs (05-1 to 05-3) and Working Paper (05-02) online.

MORE ON THE HOUSING BUBBLE THEORY

A national panel of economists convened by NFI in October agreed a national housing price crash is unlikely though regional busts in key housing market hot spots are certain.

During the first of NFI's five planned financial forums, panelists examined the state of housing and its impact on the U.S. economy and agreed that while the strength of the nation's housing sector has had its highs and lows throughout history, it has traditionally been an area of strength.

Panelists included Jonathan McCarthy, a senior economist with the Federal Reserve Bank of New York; Amy Crews Cutts, deputy chief economist with Freddie Mac; and Dr. Michael Bordo, director of the Center for Monetary and Financial History at Rutgers University.

Read about what NFI's three experts think about the theoretical housing bubble in the U.S. in NFI's Financial Focus magazine, available by calling 800.603.7113 or downloadable online at networksfinancialinstitute. Also online: panelists' whitepapers on the topic and their presentations at NFI's first financial forum series event.



ONLINE For more about NFI, visit networksfinancialinstitute.org.



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3 join NFI graduate fellows program

Graduate Studies Fellowship Program for Academic Excellence in Financial Services attracts top grad students to Indiana State.

BY MARTHA HENN MCCORMICK
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Now in its second full year, NFI sponsors the Graduate Studies Fellowship Program for Academic Excellence in Financial Services.

The program is designed to attract talented, research-oriented graduate students to Indiana State University.

Students are expected to be on a financial services career trajectory, through any of a number of relevant degree tracks at Indiana State University, including the Master of Business or Public Administration programs or master's programs of study in mathematics and computer science, communications or human resource development.

Fellowships spanning the two academic years and intervening summer of a full-time master's degree program provide students with full tuition waivers plus an annual stipend, professional development support and assistance with internship opportunities.

NFI fellows with independent research agendas may be granted permission to conduct that research with the oversight of either Indiana State University faculty or NFI staff. Otherwise, fellows assist faculty and NFI staff with ongoing research needs.

The fellowship program is a win-win proposition for all parties, furthering NFI's leadership mission in financial services and meeting identified needs of employers, graduate students and Indiana State University.

The fellowships gel with the NFI's intention to develop the

financial services talent pool for employers. NFI works to support undergraduate student preparation for financial services careers with the expansive Networks Scholars program.

NFI's graduate fellowship program is more limited in terms of numbers but no less dedicated to the aims of educating and preparing future financial services leaders.

The fellowships are compelling to financial services employers who can subsequently recruit Indiana State University master's degree graduates with enhanced educational and experiential credentials. Graduating candidates are well-equipped to succeed as financial professionals in the blended and globalized financial services environment that merges the separate arenas of banking, insurance and securities.

The fellowships also serve to highlight the varied graduate offerings available at Indiana State University and set them apart in a crowded higher education marketplace. At Indiana State University, graduate students find multiple programs of study with dedicated faculty, numerous research facilities, state-of-the-art technology and well-equipped libraries.

Most importantly, the fellowships are a special opportunity for strong graduate student candidates who are interested in careers in the financial services marketplace. Collegial and close-working ties among Indiana State University students and faculty provide an environment that contributes to student success. Students benefit from the connections their faculty members help them make with industry and from the networking and industry outreach efforts of NFI.

An informal regional survey that NFI conducted in early 2005 of 21 university MBA programs in both Indiana and Illinois reveals that few

Only four programs at other Indiana and Illinois universities meet or exceed the remuneration of NFI's graduate fellowship stipend but none match the combination of stipend, tuition waiver and professional development support the Graduate Studies Fellowship Program for Academic Excellence in Financial Services provides. For more about NFI's graduate fellows program, contact Martha Henn McCormick at 800.603.7113 or martha.mccormick@isunetworks.org. Visit Indiana State University's School of Graduate Studies online: web.indstate.edu/sogs

campuses are able to offer any comparable graduate fellowship opportunity.

Only three universities, including Indiana State University, offer a fellowship program for MBA students. A handful of others offer some opportunity for graduate assistantship employment.

Only four programs meet or exceed the remuneration of NFI's graduate fellowship stipend but none match the combination of stipend, tuition waiver and professional development support that the Graduate Studies Fellowship Program for Academic Excellence in Financial Services provides.

This year, NFI and Indiana State University welcomed back returning fellows Jay Page and Kyle Plesniak and accepted Jason Dean, Elizabeth Illyes and Rebecca Shorter into the graduate fellows program.

Page is enrolled in the Public Administration program through the Political Science department while Dean, Illyes, Plesniak and Shorter are pursuing MBAs. Page works primarily with NFI Assistant Director of Education Livia Scott and Indiana State University professors Drs. Priscilla Wolfe and Art

Sherwood on a professional development program for Networks scholars.

Last year, Plesniak primarily assisted NFI staff with research and data collection including Indiana life sciences and regional higher education issues. This year, Plesniak's interest is to examine the possibility of replacing federal foreign aid with tax incentives to individuals and businesses to buy securities from other countries' businesses.

As new fellows, Dean, Illyes and Shorter are defining their areas of focus.

Dean has signed on to work with Sherwood on a project to discover if small banks make a difference to the economic development of local communities in Indiana. The study will probe whether these banks provide any unique services to small businesses that large banks don't and if local and state governments should support them. The study will initially be concerned with local banks in 14 Indiana counties and will eventually expand to include the community banks of Indiana's 92 counties.

Illyes is pursuing an accounting major in the MBA program and hopes to investigate the accounting considerations of charitable giving plans as integral components of retirement and estate planning. She is expected to lead on NFI's behalf an effort to collect data on corporate funding lifecycles for Indiana life science enterprises.

Shorter, who has an insurance bachelor's degree from Indiana State University, is excited to assist the Insurance Industry Working Group of the Indiana Economic Development Corporation in compiling a database of insurance employers in the state.

□ Martha Henn McCormick is a research coordinator at Networks Financial Institute.