

# **Rising Foreclosure Rates in Indiana: An Explanatory Analysis of Contributing Factors**

**Study Conducted by the Research Division of the National Association of REALTORS®  
on behalf of the Metropolitan Indianapolis Board of REALTORS®, the Builders  
Association of Greater Indianapolis, the Indiana Builders Association, and the Indiana  
Association of REALTORS®, and the Indianapolis Neighborhood Housing Partnership.**

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## **Introduction**

Indiana had the highest foreclosure rate in the country as of the third quarter 2002, with 2.38% of the loans in foreclosure – more than double the national average. This paper analyzes the factors contributing to the high foreclosure rate in Indiana.

## **Foreclosure Rate History**

Historically, the foreclosure rate in Indiana did not differ significantly from the national average. In fact, the foreclosure rate in the state was below the national rate for most of the 1990s. Only in the past two year has the Indiana foreclosure rate significantly diverged from the national rate. But as of the third quarter in 2002, Indiana had the highest foreclosure rate in the country with 2.38% of the loans in foreclosure. The national foreclosure rate was less than half that figure at 1.15%.

Figure 1

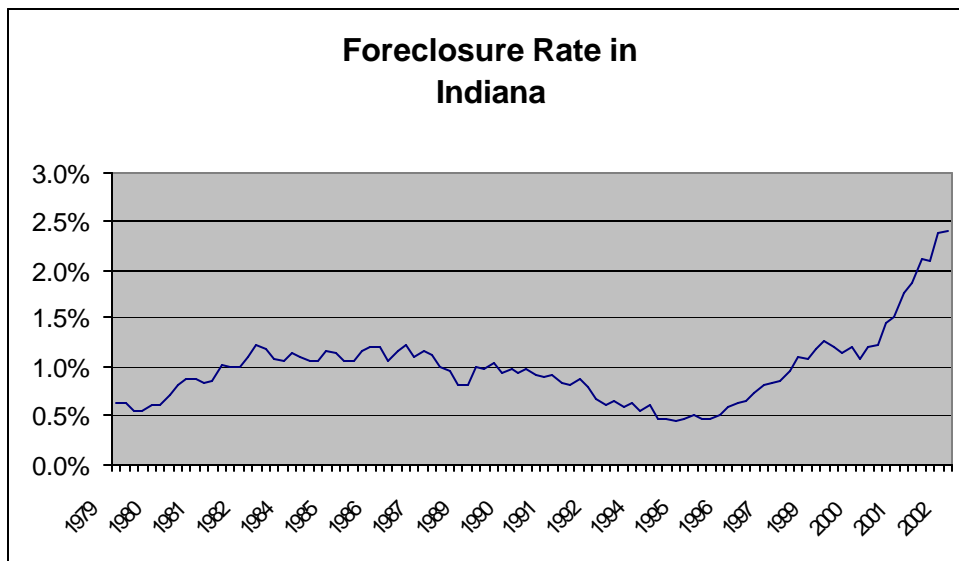
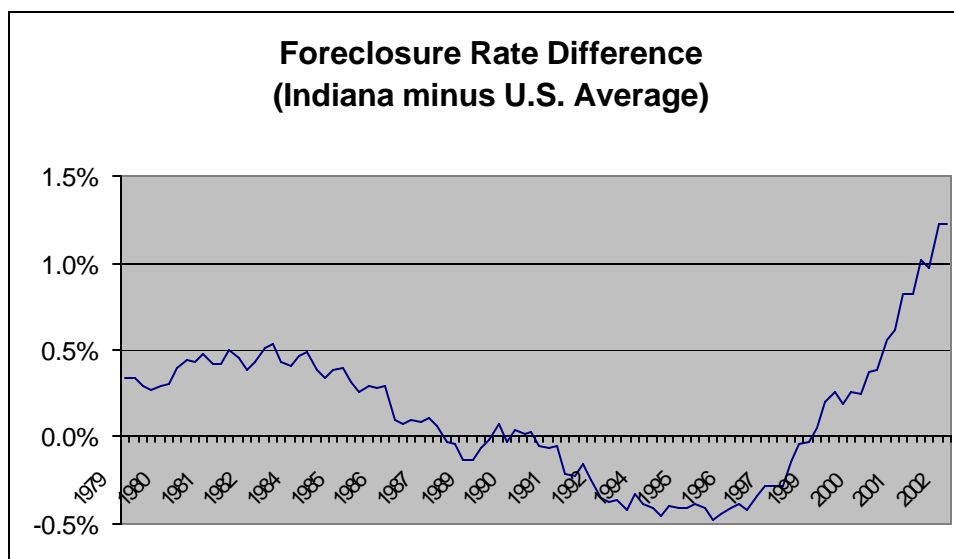


Figure 2



### ***Economic and Demographic Trends in Indiana***

Population growth in Indiana has lagged behind that of the nation. From 1990 to 2000, population grew by 10%, lower than the 13% growth for the U.S. The increase in population has primarily been driven by live births and from foreign immigration. Domestic migration, the movements of people currently residing in the United States, has been negative for some years in Indiana. That is, more people move out of Indiana and into other states than vice versa. According to the Census Bureau, the population in the state increased by 34,300 from 2000 to 2001. Most of the increase was due to natural birth. Foreign immigration added 9,300. But 12,500 people left Indiana for other states. Furthermore, according to 2000 IRS tax return data, which is a better measure of home-owning population since nearly all homeowners file income taxes, 59,621 households moved out of the state while 55,324 households moved into the state, yielding a net loss of about 4,000 households.

### ***Causes of Foreclosure in Indiana***

There are many factors that contribute to home foreclosure. We examine each of these factors in detail. Subsequently, we analyze all the factors simultaneously using econometric techniques.

### ***Job Market Condition***

A job loss and the accompanying loss of a steady source of income will clearly impact foreclosure. The divergence in the default rates over the past years for two California

cities hammers that point home. The foreclosure rate rose in the job cutting San Francisco area and while the foreclosure rate fell in the job creating Los Angeles area<sup>1</sup>.

Given the importance of the job market to foreclosures, how has the job market fared in Indiana? In the past few years, the job market had significantly deteriorated. Job losses began in the state much before the rest of the country. Officially, the national economic recession, coinciding with the employment peak, began in March 2001. By contrast, job reductions in Indiana began in May 2000. Total state payroll employment in January 2003 was 2,883,300, a decrease of 4.4% or 131,100 jobs from the peak employment conditions nearly three years ago. The 4.4% decline was the second highest in the country. Most of the job losses in Indiana occurred in the latter part of 2000 and in 2001. For the most part, the job market stabilized by 2002, with no significant job gains or job losses, but at levels well below those of 2000.

The current national economic recession was induced by the collapse of the manufacturing sector. The fact that Indiana has one of the highest percentages of workforce participation in the manufacturing industry (22% versus a 14.5% national average) made Indiana vulnerable to the macroeconomic slump. With such sharp job losses in the state, it is not surprising that the many Indiana residents went into foreclosure.

A loss of 131,100 jobs surely contributed to a rise in the foreclosure rate over the last three years. There were 686,335 loans serviced in Indiana, as of the third quarter 2002, of which 16,335 loans were in foreclosure. Since typically, about 1% of loans or about 6,863 loans are in foreclosure at any given time, the additional job losses arising from tougher economic times put an additional 10,000 homeowners into foreclose.

### **First-time Home Buyers**

Indiana has one of the highest homeownership rates in the country. Based on 2000 Census data, 74.9% of residents in the state were homeowners versus 67.4% of residents for the country as a whole. There were only seven states with a higher homeownership rate than Indiana. Relatively low home prices in combination with a low unemployment rate (despite the job cuts) largely explains Indiana's high homeownership rate.

The homeownership rate grew during the 1990s as mortgage rates steadily declined and the job market expanded. From 1990 to 2000, the national homeownership rate rose from 63.9% to 66.2%. Growth in the home-owning population of Indiana accelerated much faster from 67.0% to 71.4% over the same period. While the national homeownership increased by 2.3% during the decade, it increased 4.4% in Indiana.

Anytime the homeownership rate is enlarged, it naturally means that there are new homeowners who had previously been closer to the margin of affordability. The lower

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<sup>1</sup> DataQuick news release, March 2003; San Francisco Chronicle, February 13, 2003.

mortgage rates allowed for higher homeownership, but the fact that growth in Indiana far outpaced that of the nation implies that there was a bit of excess homebuying in the state. The marginal borrowers were highly susceptible to default and foreclosure when the economy and the job market turned sour.

## **Predatory Lending**

Predatory lending is difficult to precisely define. Loans that prohibit or carry high penalty for prepayment (as when borrowers are denied the opportunity to refinance when market interest rate falls) could fit that definition of banks preying on desperate borrowers. But loans that are simply offered at higher interest rates cannot be said to be predatory. Some loans are made to people with less than stellar credit records and these loans would necessarily be offered at a higher rate of interest and/or higher fees to compensate for the added risk to the lender. Furthermore, these high interest loans, in a sense are providing a second opportunity to those with a blemished credit history to improve their credit record. One contributor to the nationwide rise in the homeownership rate is the enlargement of the pool of mortgage products that are offered to lower income and marginal borrowers.

The Indiana Mortgage Bankers Association collects data on mortgage products and it has found no evidence of significantly higher predatory or sub-prime lending in the state of Indiana. It stated that less than one-half of one percent of all of the loans covered by its survey were of sub-prime loans<sup>2</sup>. Furthermore, the Mortgage Area Research Institute<sup>3</sup> found that Indiana ranked in the lowest level for the category of predatory lending.

## **Government Backed Loans**

There are two government programs that provide loan guarantees to lenders: FHA and VA. The VA loans are provided to veterans of the armed forces. FHA loans allow someone who may have had a few credit problems to obtain mortgage financing. In both cases, the lender does not bear the risk when foreclosure occurs. Rather, the FHA and VA guarantors absorb the risk.

In this study, the VA program is not deeply explored because VA loans are only given to veterans. Also, the usage rate has been very steady in Indiana and it closely matches that of the rest of the country. Therefore, the FHA loans are more closely examined since their usage rate has varied over time and across states.

It has been pointed out in research that first-time buyers are more likely to default on mortgages than repeat homebuyers. Furthermore, FHA loans have a higher concentration with a low down payment, are for first-time homebuyers, and are in lower-income areas,

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<sup>2</sup> Indiana Mortgage Bankers Association press release on January 9, 2003.

<sup>3</sup> August 2000 report.

than does the conventional market<sup>4</sup>. In the latest Mortgage Bankers data, the foreclosure rate on conventional loans was 0.51%, while that of VA and FHA loans were 1.70% and 2.46%, respectively. In other words, VA loans were more than three times as likely to foreclose than conventional loans, while FHA loans were nearly five times as likely to foreclose than conventional loans.

The share of FHA loans in Indiana closely mirrored the national figures from 1997 to 1999. But a noticeably higher number of loans were obtained in Indiana through the backing of FHA beginning in 2000. Whereas 16% of all mortgage loans originated for home purchase were of FHA variety at the national level in 2000, 20% of loans in Indiana had FHA backing. In 2001, the national and Indiana share of FHA loans were 17% and 25%, respectively.

As discussed earlier, the foreclosure rate in Indiana has closely shadowed that of the national figure for most years with an absolute difference of less than ½ %. The marked difference began to show in 2001. By the second quarter of 2001, Indiana's foreclosure rate was higher than the national rate by 0.6%. The gap widened further to a full 1% by 2002. As recently as the fourth quarter of 1998 and for most of the 1990s, Indiana's foreclosure rate was lower than the national average.

Coincidentally or perhaps as a result of, the Indiana foreclosure rate began to noticeably deviate from the national rate at the same time that FHA backed loans increased in Indiana. Table 1 shows the difference in foreclosure rate by type of loans and by region. It shows that the foreclosure rate in Indiana for each of the loan types is higher than the national average and higher than the average for the East-North Central States (comprised of Illinois, Indiana, Michigan, Ohio, and Wisconsin). It also shows that FHA loans have a higher foreclosure rate than other type of loans.

Because of high usage of more risky FHA loans in Indiana, the foreclosure rate in the state was higher than the national average. But, what if the FHA and other loan usage rates in Indiana had been the same as the national usage rate. A simulation of this outcome is presented in Table 2. It indicates that Indiana would still have a higher foreclosure rate than the rest of the country, since the foreclosure rate is higher in Indiana for each type of loan. But the overall foreclosure rate fell for the state from the previous 2.38% to the new 1.94%. In other word, more than half of the difference in foreclosure rates between Indiana and the U.S. disappears if we assume a similar mix of FHA and other loans (the difference is reduced from 1.23% to 0.71%). So, it can concluded that more than half of the difference in the foreclosure rates can be attributed to the higher composition of risky loans in Indiana, namely FHA loans. In fact, after adjusting for loan mix, the difference in foreclosure rates between Indiana and the rest of the states in the East North Central region largely disappears.

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<sup>4</sup> Bunce, Harold L., Chales Capone, Sue Neal, William Reeder, Randall Scheessele, and Edward Szymanoski. 1996. *An Analysis of FHA's Single-Family Insurance Program*, the Department of Housing and Urban Development Research.

**Table 1: Foreclosure Rates by Type of Loans**

	<b>FHA</b>	<b>VA</b>	<b>Conventional</b>	<b>All loans</b>
Indiana	3.83 (25% of loans)	2.19	0.99	2.38
East North Central	3.78	2.23	0.70	1.72
U.S.	2.46	1.70	0.51	1.15
Indiana – U.S.	1.37	0.49	0.48	1.23

**Table 2: Foreclosure rate assuming share of FHA loans in Indiana to match the U.S.**

	<b>FHA</b>	<b>VA</b>	<b>Conventional</b>	<b>All loans</b>
Indiana	3.83 (17% of loans)	2.19	0.99	<b>1.94</b>
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The remainder of the higher aggregate foreclosure rate in Indiana is attributed to higher foreclosure rates for each type of loan. But why is the foreclosure rate for FHA loans higher in Indiana than for the rest of the country? And why do conventional loans have higher foreclosure rates in Indiana versus the rest of the country?

Furthermore, having explained that more than half of the foreclosure variance in Indiana can be attributed to a higher composition of more risky loans, why are Indiana residents resorting to higher share of FHAs? The sharp cut back in jobs is likely to have contributed greatly in changing the mix of FHA and conventional loans.

### **High Loan-to-Value Ratio**

Borrowers who are not able to tap the conventional home loan market can turn to FHA or VA. In Indiana, many have turned to FHA in the past two years (see above). However, even within the conventional loan arena, Indiana borrowers take out loans with greater leverage than borrowers in most other states. According to the Federal Housing Finance Board, the loan-to-value (LTV) ratio was 80.1% in 2002 in Indiana. The national average was 75.1%. Only thirteen states had a higher LTV than Indiana. Dissecting the data further, nearly a third (31%) of the conventional loans in Indiana had an LTV greater than 90%. Only nine states had a higher percentage with LTVs greater than 90%.

Certainly, higher values of LTV increase the likelihood of default because there is a greater chance that the borrower will be in a negative equity position early in the life of the loan. If the borrower has a low LTV or adequate positive equity, they will sell and prepay the loan. If, on the other hand, the equity in property is sufficiently negative after accounting for the transaction costs (e.g., real estate agent fees), the borrower will

default. Economists have argued that it is indeed rational for borrowers to default on the loan if the selling of home does not yield enough cash to pay off the outstanding mortgage.<sup>5</sup>

A HUD report in 2002 indicated that Indianapolis was ranked 4<sup>th</sup> in the usage of down payment assistance. The report also noted that the default rate for loans using down payment assistance programs were much higher than similar loans that did not require down payment assistance. This result should not be surprising. Historically, lenders demanded that borrowers make a tangible financial investment – i.e., down payment - as a sign of commitment and discipline on the part of borrower. But with down payment assistance, there is less of a hook to keep the borrower from not foreclosing.

Given that there is a higher than average percentage of mortgages with high LTVs in Indiana, a greater than normal foreclosure rate should be expected. Part of the blame for high foreclosure rates can be placed on lenders' willingness to provide for such loans. (Though, lenders may be financially indifferent to providing these highly leveraged loans provided higher interest rates can compensate for incurring the added default risk.)

High LTV loans become less of an issue if home prices quickly appreciate and, hence, lower LTV. In fact, states that have low LTVs are those states that witnessed strong price gains in recent years such as California, New York, Massachusetts and Connecticut.

Indiana, as is the case with most midwestern states, has seen a much lower rate of home price appreciation. According to the price index created by the Office of Federal Housing Enterprise Oversight (which is based on convention loans purchased by Fannie Mae and Freddie Mac), Indiana ranked 49<sup>th</sup> in the most recent measure of one-year price growth. Over the most recent five-year span, Indiana ranked 45<sup>th</sup>. Therefore, the persistent low rate of home price appreciation in Indiana is one of the reasons for the higher LTV loans and the consequent higher foreclosure rate.

As for low home price appreciation in Indiana, one can point to relatively high rates of new homebuilding activity in relation to employment growth and the overall negative migration trend of more people moving out of the state versus those moving in. The construction of new single-family homes has steadily and sharply risen over the past 10 years. In 1990 only 19,000 new units were built. In more recent years, 30,000 units per year has been the norm. The strong increase in new homes coming to the market has helped to dampen home price appreciation.

## **Other Factors**

Indiana residents pay higher mortgage rates than rest of the country. Based on Federal Housing Finance Board, the average contract interest rate for a conventional loan in Indiana in 2002 was 6.67% - the highest in the country. The national average was 6.44%.

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<sup>5</sup> Ambrose and Capone, Cost-Benefit Analysis of Single-Family Foreclosure Alternatives, *Journal of Real Estate Finance and Economics*, Sep, 1996.

Even more distressing is that Indiana borrowers paid higher initial fees of 0.53% versus 0.46% for the rest of the country. One reason for the higher average interest rate is that Indiana borrowers put less upfront for down payment. As discussed earlier, the loan-to-value (LTV) ratio for Indiana borrowers was 80.1% versus 75.1% for the nation. But given that there were thirteen states with higher LTVs, the greater borrowing leverage in itself cannot justify such a high interest rate in Indiana.

The additional premium for conventional loans that Indiana borrowers are paying must arise from some other factor aside from the higher LTVs. One hard to quantify factor is the legal and institutional factors. What are borrowers and lenders rights in the case of default and foreclosure? Will it be a lengthy judicial process or faster completion by a non-judicial trustee? Foreclosure procedure varies greatly from state to state with some taking an average of six weeks, while others take up to eighteen months. In the long run, a state with laws favoring borrowers at the expense of lenders will have higher interest rates to enable the lenders to quickly reclaiming their financial interest.

NAR Research is not expert in the intricacies of the state foreclosure laws. We cannot therefore examine this factor and its influence in the rising foreclosure rate other than point out that it may affect mortgage rates and foreclosure rates.

Finally, it is impossible to quantify mortgage fraud in which people inflate appraisals or fake paperwork. How much of that occurs in Indiana and the level of law enforcement is an open question that cannot be answered.

## **Econometric Results on Foreclosure**

We have examined several factors that likely influence the foreclosure rate, from job market conditions to the wider prevalence of FHA loans. But we analyzed each of the factors separately. A more sophisticated analysis would take all of the factors simultaneously into account to explain foreclosure rates. One commonly used tool is an econometric analysis, which assesses one economic variable of interest as a function of other explanatory variables. This method can isolate the level of statistical confidence and the magnitude of factors in explaining the changes in foreclosure rate.

Two econometric analyses are performed, one using time-series data (looking at historical changes in the foreclosure rate) and other using cross-section data (looking at variations in foreclosure rates among states). Ideally, both time series and cross-section data can be pooled together for a single comprehensive analysis. But due to data constraints we had to resort to two separate analyses.

First, we examine the national foreclosure rate over time. Our result indicates that the following factors significantly influence the foreclosure rate:

- Percentage of conventional loans with LTV over 90%
- Unemployment rate
- Share of FHA loans

That is, if any of the above factors increased, then the foreclosure rate went up as well. In terms of magnitude, FHA loans had the biggest influence, followed by the unemployment rate, and then the percentage of conventional loans with LTV over 90%. Surprisingly, home price appreciation did not impact foreclosure. The full econometric results are shown in the appendix.

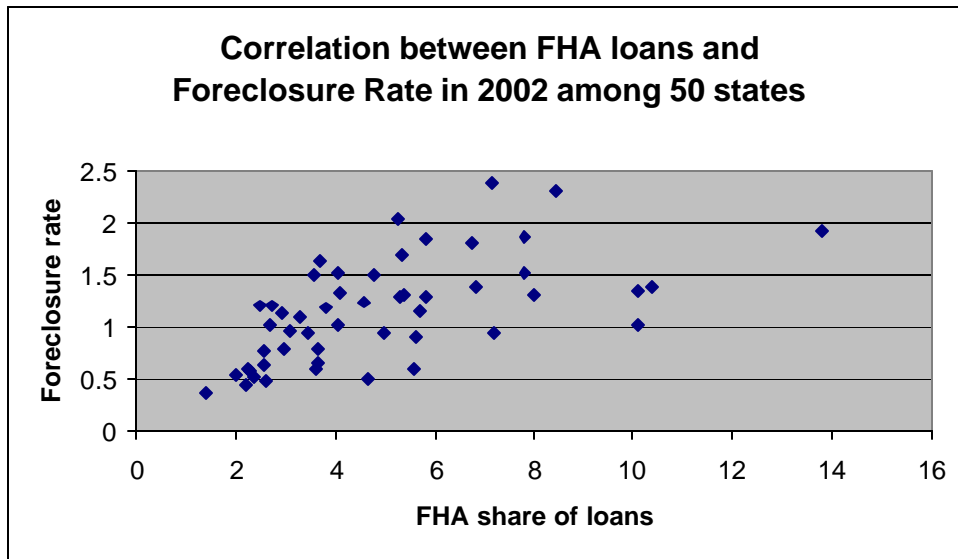
The second method of assessing the foreclosure rate is to examine the variation in foreclosures among states for the most recent, relevant data. Our result indicates that the following factors significantly influence the foreclosure rate:

- Share of FHA loans
- Percentage of conventional loans with LTV over 90%
- Homeownership rate

That is, if a certain state had a high percentage of conventional loans with LTVs over 90%, then this state had a higher foreclosure rate, other things equal. The same can be said for the share of FHA loans and the state homeownership rate. In terms of magnitude, FHA loans had the biggest influence followed by the percentage of conventional loans with LTV over 90%. The homeownership rate had a modest positive influence. Surprisingly, the unemployment rate differential between states did not impact foreclosure rates. The proper interpretation on the unemployment rate is that the rate of jobless at any point in time does not impact the foreclosure rate (New York consistently has a higher unemployment rate than Indiana, but this does not necessarily imply that New York will have a higher foreclosure rate). However, from the time series analysis, we found that the unemployment rate changes did influence foreclosure, meaning that it is not the level of unemployment rate that matters, but how it changes from one time period to the next. So, if New York's unemployment rate was to decline from, say, 7% to 6%, while Indiana's unemployment rate was to rise from 3% to 4%, the foreclosure rate can be expected to be higher in Indiana than in New York, even though Indiana has a lower unemployment rate for both periods.

Though econometric analysis provides simultaneous analysis of many explanatory factors, it is sometimes useful to examine the correlation between foreclosure rate and a single variable to allow us to see it visually. In Figure 3 (below), we plot 51 data points for each of the states plus D.C. As can be seen, it clearly demonstrates that a higher share of FHA loans usage is more likely to be associated with a higher foreclosure rate.

Figure 3



### ***A Focus on Indianapolis***

The Indianapolis metropolitan area is the largest city in the state and comprises 28% of the state's labor force. We, therefore, provide additional analysis of this city. However, because data are more limited at the metro level (there is no data for foreclosure rates at the city level), we cannot fully examine the foreclosure rates in the city as was done for the state as a whole.

Economic and demographic trends in Indianapolis have been noticeably different than that of the state as a whole. While state employment lagged behind the national growth rate, Indianapolis surpassed it. From 1990 to 2000, employment rose 23.5% in the metro area (or by 170,100) outpacing the national employment growth rate of 20.4%. As discussed earlier, the job reductions in Indiana were some of the sharpest in the nation. A total of 131,100 jobs were lost in the state since its peak. By contrast, the job losses in Indianapolis have been much milder with only 6,000 job cuts, a significantly milder loss than its share of the state's labor force (28%) would suggest.

The migration pattern in Indianapolis has also differed with the state as whole. The movement of residents has been mildly favorable for Indianapolis. That is, there are more new residents coming into the city versus those leaving. In 2001, according to IRS tax data, there were 57,628 households who moved in, while 53,509 residents moved out. This trend is unusual for a city in the Midwest given that the overall U.S. migration pattern has been away from cold northern states like New York and Illinois and into warmer sunnier states like Florida and Texas.

In terms of home price movement, Indianapolis has mirrored the state's drudgingly low price appreciation. According to the home price index (from the Office of Federal Housing Enterprise Oversight), the city's typical home price grew at 3.0% compared to 2.6% for the state as a whole in 2002. Over the past five years, Indianapolis home price rose 20.8% versus 20.1% for the state. The prime cause of low home price growth is the active supply of new homes hitting the market. New single-family homes coming to the market were well under 10,000 from 1990 to 1994. By contrast, this figure was 12,500 to 15,000 per year for the past five years. Low mortgage rates in more recent years partly explain the robustness of new home building activity, but relative to other cities in the Midwest, the increase in Indianapolis has been absolutely phenomenal. Columbus, Ohio, which is of similar size in population to Indianapolis added just over 10,000 per year over the same period.

Regarding the trend in FHA loan utilization, it has spiked up significantly in 2001 for each of the counties comprising the Indianapolis metro market. This fact will undoubtedly translate into higher foreclosures, particularly if the job market turns markedly negative.

**Table1: FHA share of mortgage loans**

	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>
<b>BOONE COUNTY</b>	16%	11%	16%	16%	19%
<b>HAMILTON COUNTY</b>	13%	14%	17%	17%	26%
<b>HANCOCK COUNTY</b>	23%	20%	21%	21%	39%
<b>HENDRICKS COUNTY</b>	22%	23%	28%	28%	40%
<b>JOHNSON COUNTY</b>	27%	26%	30%	30%	40%
<b>MADISON COUNTY</b>	29%	22%	25%	25%	30%
<b>MARION COUNTY</b>	36%	34%	34%	34%	41%
<b>MORGAN COUNTY</b>	21%	20%	21%	21%	33%
<b>SHELBY COUNTY</b>	26%	25%	28%	28%	33%

Finally, one other relevant data available at the metro level is the LTVs for conventional loans. Indianapolis' conventional loans were not as stretched in relation to the rest of the state. In 2002, the average LTV was 77.5% in Indianapolis (versus 80.1% for the whole state) and 23% of the conventional loans had LTV greater than 90% (versus 31% for the whole state).

## Appendix

### Time-Series Econometric Analysis

The national foreclosure rate is a function of the percentage of conventional loans with LTVs greater than 90%, the national unemployment rate, the share of FHA loans, and one-year price appreciation. That is,

$$\text{Foreclosure rate} = a_0 + a_1 * \text{LTV90} + a_2 * \text{unemployment rate} + a_3 * \text{FHA share} + a_4 * \text{price appreciation}$$

Quarterly data from 1984 Q1 to 2000 Q4 is used, yielding 68 observations. The regression result is as follows:

R-square = 0.863

Adjusted R-square = 0.849

Variable	Coefficient	T-statistic
A0	-0.51	-0.7*
A1	0.0037	2.5
A2	0.17	1.7
A3	0.38	2.5
A4	0.23	0.4*

\* Statistically not reliable

### Cross-Section Econometric Analysis

The state foreclosure rate is a function of state homeownership rate, the share of FHA loans in the state, the percentage of conventional loans with LTVs greater than 90% in the state, and the state unemployment rate. That is,

$$\text{Foreclosure rate} = a_0 + a_1 * \text{homeownership rate} + a_2 * \text{FHA share} + a_3 * \text{LTV90} + a_4 * \text{unemployment rate}$$

Data were from 50 states plus the District of Columbia in 2002, yielding 51 observations. The regression result is as follows:

R-square = 0.841

Adjusted R-square = 0.827

Variable	Coefficient	T-statistic
A0	-1.3	-3.4
A1	0.0063	1.2**
A2	0.19	12.9
A3	0.0042	10.4
A4	-0.0019	0.6*

\*Statistically not reliable

\*\*Weakly statistically significant

## Data

### State Level Data

	Homeownership rate (Census 2000)	FHA share (New loans made in 2001)	Unemployment rate (2002)	Foreclosure rate (2002 Q3)	LTV greater than 90% (2002)
Alabama	73.2	17.1	5.8	1.1	32.0
Alaska	66.4	26.5	7.4	0.4	26.0
Arizona	68.0	19.9	5.6	0.8	29.0
Arkansas	68.9	20.0	5.1	1.2	47.0
California	57.1	14.3	6.2	0.5	10.0
Colorado	68.3	21.6	5.5	0.6	10.0
Connecticut	70.0	16.9	4.6	0.9	15.0
Delaware	72.0	16.0	3.9	1.3	21.0
DC	41.9	14.0	6.6	1.3	26.0
Florida	68.4	13.5	5.3	1.2	19.0
Georgia	69.8	20.5	4.8	1.2	30.0
Hawaii	55.2	4.8	4.2	0.8	21.0
Idaho	70.5	22.6	5.6	1.3	15.0
Illinois	67.9	15.8	6.4	1.5	18.0
Indiana	74.9	24.7	4.8	2.4	31.0
Iowa	75.2	12.6	3.9	1.0	37.0
Kansas	69.3	15.8	4.6	1.2	43.0
Kentucky	73.4	15.7	5.4	1.8	25.0
Louisiana	68.1	20.0	6.3	1.7	30.0
Maine	76.5	12.2	4.7	0.9	18.0
Maryland	69.9	26.0	4.1	1.4	19.0
Massachusetts	59.9	9.4	5.2	0.5	18.0
Michigan	77.2	15.9	5.9	1.3	23.0
Minnesota	76.1	16.2	3.9	0.5	21.0
Mississippi	75.2	19.2	6.7	1.9	30.0
Missouri	74.2	17.8	4.9	1.1	37.0
Montana	70.2	20.7	4.2	0.8	26.0
Nebraska	70.2	23.2	3.4	1.0	30.0
Nevada	64.0	16.8	5.0	1.3	23.0
New Hampshire	69.2	11.6	4.8	0.4	19.0
New Jersey	66.2	14.4	5.5	1.4	12.0
New Mexico	73.7	20.8	5.9	1.7	43.0
New York	53.4	13.8	6.3	1.4	12.0
North Carolina	71.1	14.5	6.4	1.5	30.0
North Dakota	70.7	25.8	3.0	0.6	25.0
Ohio	71.3	18.3	5.3	2.3	25.0
Oklahoma	72.7	22.2	4.7	1.5	41.0
Oregon	65.3	14.3	7.0	1.0	9.0
Pennsylvania	74.7	15.3	6.0	1.9	22.0

Rhode Island	61.5	19.5	5.4	0.6	17.0
South Carolina	76.5	9.2	6.0	2.1	37.0
South Dakota	71.2	15.9	3.0	0.6	24.0
Tennessee	70.9	21.4	4.7	1.5	36.0
Texas	63.8	20.1	6.2	1.0	24.0
Utah	72.7	29.9	5.6	1.9	12.0
Vermont	68.7	6.6	4.2	0.6	26.0
Virginia	73.9	18.8	3.9	0.6	16.0
Washington	63.6	15.5	6.8	0.9	12.0
West Virginia	75.9	10.7	5.6	1.3	31.0
Wisconsin	71.8	7.4	5.4	0.9	26.0
Wyoming	71.0	16.6	4.4	0.5	26.0

### Mortgage Foreclosure Data

Description	All Loans in Foreclosure at End of Quarter, Indiana (NSA, %)	All Loans in Foreclosure at End of Quarter, U.S. (NSA, %)
Source	Mortgage Bankers Association	Mortgage Bankers Association
Q1-1979	0.64	0.31
Q2-1979	0.63	0.30
Q3-1979	0.56	0.27
Q4-1979	0.55	0.29
Q1-1980	0.61	0.32
Q2-1980	0.62	0.32
Q3-1980	0.72	0.33
Q4-1980	0.82	0.38
Q1-1981	0.87	0.44
Q2-1981	0.88	0.41
Q3-1981	0.83	0.41
Q4-1981	0.86	0.44
Q1-1982	1.02	0.53
Q2-1982	1.00	0.55
Q3-1982	1.00	0.62
Q4-1982	1.10	0.67
Q1-1983	1.22	0.71
Q2-1983	1.19	0.66
Q3-1983	1.09	0.66
Q4-1983	1.07	0.67
Q1-1984	1.14	0.68
Q2-1984	1.11	0.63
Q3-1984	1.06	0.68
Q4-1984	1.06	0.73
Q1-1985	1.17	0.79
Q2-1985	1.15	0.76
Q3-1985	1.06	0.75
Q4-1985	1.07	0.81
Q1-1986	1.16	0.87
Q2-1986	1.20	0.92
Q3-1986	1.21	0.92
Q4-1986	1.07	0.98
Q1-1987	1.16	1.09
Q2-1987	1.22	1.12
Q3-1987	1.11	1.03
Q4-1987	1.17	1.06
Q1-1988	1.13	1.07
Q2-1988	1.00	1.03
Q3-1988	0.96	1.00
Q4-1988	0.81	0.95
Q1-1989	0.82	0.95

Q2-1989	0.99	1.06
Q3-1989	0.97	0.99
Q4-1989	1.05	0.98
Q1-1990	0.94	0.97
Q2-1990	0.97	0.93
Q3-1990	0.94	0.93
Q4-1990	0.97	0.94
Q1-1991	0.92	0.97
Q2-1991	0.89	0.96
Q3-1991	0.92	0.98
Q4-1991	0.83	1.04
Q1-1992	0.81	1.04
Q2-1992	0.88	1.04
Q3-1992	0.79	1.04
Q4-1992	0.67	1.02
Q1-1993	0.62	1.00
Q2-1993	0.66	1.02
Q3-1993	0.59	1.01
Q4-1993	0.63	0.96
Q1-1994	0.55	0.94
Q2-1994	0.62	1.03
Q3-1994	0.46	0.92
Q4-1994	0.46	0.86
Q1-1995	0.45	0.86
Q2-1995	0.47	0.88
Q3-1995	0.52	0.91
Q4-1995	0.46	0.87
Q1-1996	0.47	0.95
Q2-1996	0.52	0.96
Q3-1996	0.59	1.00
Q4-1996	0.64	1.03
Q1-1997	0.66	1.08
Q2-1997	0.74	1.08
Q3-1997	0.81	1.09
Q4-1997	0.83	1.11
Q1-1998	0.86	1.14
Q2-1998	0.96	1.10
Q3-1998	1.10	1.14
Q4-1998	1.08	1.11
Q1-1999	1.19	1.14
Q2-1999	1.27	1.07
Q3-1999	1.20	0.95
Q4-1999	1.15	0.96
Q1-2000	1.20	0.95
Q2-2000	1.09	0.85
Q3-2000	1.21	0.84

Q4-2000	1.23	0.85
Q1-2001	1.45	0.90
Q2-2001	1.52	0.91
Q3-2001	1.78	0.95
Q4-2001	1.87	1.04
Q1-2002	2.12	1.10
Q2-2002	2.11	1.13
Q3-2002	2.38	1.15
Q4-2002	2.41	1.18

## Mortgage Rate Data 2002

States	Contract Interest Rate (%)	Initial Fees and Charges (%)	Loan to-Price Ratio(%)	% of Loans LTV 70.0 Less	% of Loans LTV 70.1 - 80.0	% of Loans LTV 80.1 - 90.0	% of Loans LTV - Over 90.0
ALL	6.44	0.46	75.1	27	42	10	21
ALABAMA	6.54	0.74	80.8	16	38	14	32
ALASKA	6.31	1.14	77.1	25	39	11	26
ARIZONA	6.51	0.68	77.7	22	38	10	29
ARKANSAS	6.55	0.41	82.6	15	28	11	47
CALIFORNIA	6.2	0.36	68.6	40	44	5	10
COLORADO	6.28	0.58	73	31	50	9	10
CONNECTICUT	6.44	0.41	73.6	30	43	12	15
DELAWARE	6.53	0.6	76.9	23	45	11	21
DISTRICT OF COLUMBIA	6.56	0.36	73	26	41	7	26
FLORIDA	6.53	0.21	75.5	26	42	12	19
GEORGIA	6.45	0.48	78.2	21	38	10	30
HAWAII	6.44	1.27	78	20	51	9	21
IDAHO	6.53	0.53	74.5	27	49	8	15
ILLINOIS	6.36	0.26	74.3	30	40	12	18
INDIANA	6.67	0.53	80.1	18	36	15	31
IOWA	6.53	0.85	83.5	12	38	13	37
KANSAS	6.54	0.25	82.3	17	29	12	43
KENTUCKY	6.49	0.59	78.1	22	42	12	25
LOUISIANA	6.43	0.68	81.3	16	36	18	30
MAINE	6.58	0.59	74	33	35	14	18
MARYLAND	6.58	0.56	74.3	26	48	7	19
MASSACHUSETTS	6.38	0.33	73.7	31	41	11	18
MICHIGAN	6.41	0.58	77.1	24	43	10	23
MINNESOTA	6.37	1.16	78.4	19	51	9	21
MISSISSIPPI	6.52	0.93	80.7	18	32	20	30
MISSOURI	6.62	0.32	80.9	19	33	11	37
MONTANA	6.59	1.03	78.3	25	40	9	26
NEBRASKA	6.57	0.73	81.4	16	41	13	30
NEVADA	6.44	0.6	76.3	24	43	10	23
NEW HAMPSHIRE	6.6	0.4	74.3	31	39	11	19
NEW JERSEY	6.43	0.37	71.8	35	42	11	12
NEW MEXICO	6.49	0.57	82.2	15	34	8	43
NEW YORK	6.47	0.2	73.4	31	46	11	12
NORTH CAROLINA	6.43	0.58	78	19	40	11	30
NORTH DAKOTA	6.44	0.85	80.4	14	51	10	25
OHIO	6.53	0.57	78.8	20	41	13	25
OKLAHOMA	6.59	0.32	82.4	15	31	14	41
OREGON	6.38	0.43	69.7	37	46	7	9
PENNSYLVANIA	6.53	0.49	76.8	23	44	11	22
RHODE ISLAND	6.49	0.44	73.3	37	37	9	17

SOUTH CAROLINA	6.43	0.34	81.2	16	32	15	37
SOUTH DAKOTA	6.51	1.35	79.4	18	47	12	24
TENNESSEE	6.55	0.64	79.9	18	37	9	36
TEXAS	6.61	0.46	74.9	26	42	8	24
UTAH	6.29	0.61	72.8	30	49	9	12
VERMONT	6.54	0.3	76.7	26	35	13	26
VIRGINIA	6.54	0.62	73.2	25	50	8	16
WASHINGTON	6.31	0.44	71.1	34	46	7	12
WEST VIRGINIA	6.65	0.68	80.8	17	39	13	31
WISCONSIN	6.47	0.58	79.2	19	42	13	26
WYOMING	6.56	1.21	80.1	17	44	12	26