Foreclosures in Missouri: State of the State, How We Got Here, and Potential Impacts

Government Finance Officers Association of Missouri – Western Chapter
Kansas City, MO
May 8, 2008

Kelly D. Edmiston
Senior Economist
Regional, Public, and Community Affairs Division
Federal Reserve Bank of Kansas City
Foreclosure Rates, Missouri and U.S.

Source: Mortgage Bankers Association
Foreclosure Initiation Rates, Missouri and U.S.

Source: Mortgage Bankers Association

Legend

Judicial / Nonjudicial Foreclosure

- Equally
- Judicial
- Nonjudicial

NJ indicates that nonjudicial foreclosure is an option in the state, but judicial foreclosures generally are pursued.
Counts and Effects on Process Days

- Judicial Foreclosure = 24 (Avg. 186.3 days)
- Nonjudicial Foreclosure = 25 (Avg. 87.1 days)
- Range is 27 (TX, NJ) to 445 (NY, J)
- Missouri is 60 (KS = 130; IL = 300)
Where Missouri Stands:
State Foreclosure Rates, 3rd and 4th Quarters 2007

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>3rd Quarter</th>
<th>4th Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ohio</td>
<td>3.72</td>
<td>3.88</td>
</tr>
<tr>
<td>2.</td>
<td>Indiana</td>
<td>3.28</td>
<td>3.53</td>
</tr>
<tr>
<td>3.</td>
<td>Michigan</td>
<td>3.07</td>
<td>3.38</td>
</tr>
<tr>
<td>4.</td>
<td>Florida</td>
<td>2.19</td>
<td>3.22</td>
</tr>
<tr>
<td>27.</td>
<td>Missouri</td>
<td>1.37</td>
<td>1.43</td>
</tr>
</tbody>
</table>

*Source: Mortgage Bankers Association*
Missouri Statewide Foreclosure Rate, 2007

Legend
- No Foreclosures
- Less than .5% of All Mortgages
- .5% to 1% of All Mortgages
- 1% to 2% of All Mortgages
- 2% to 5% of All Mortgages
- More than 5% of All Mortgages
Kansas City, Missouri Median Household Income and Foreclosure Rates

Median Income by Census Tract

Foreclosure Rate by Census Tract

Source: 2000 U.S. Census

Normalized per number of mortgages outstanding by Census Tract
Source: 2000 U.S. Census and RealtyTrac Survey of New Foreclosures

May 8, 2008
K. Edmiston, FRB KC
Springfield MSA Median Household Income and Foreclosure Rates

**Median Income by Census Tract**

**Foreclosure Rate by Census Tract**

Source: 2000 U.S. Census

Normalized per number of mortgages outstanding by Census Tract
Source: 2000 U.S. Census and RealtyTrac Survey of New Foreclosures
Springfield Foreclosure Rate, 2007

Legend
- No Foreclosures
- Less than .5% of All Mortgages
- .5% to 1% of All Mortgages
- 1% to 2% of All Mortgages
- 2% to 5% of All Mortgages
- More than 5% of All Mortgages
The Perfect Foreclosure Storm

• “Nonprime” Mortgage Share
  – Subprime Mortgages
  – Alt-A Mortgages

• Payment Shock for Non-Traditional Mortgages
  – Adjustable-Rate Mortgages (ARMs)
  – Interest-Only Mortgages
  – Payment Option ARMs

• Adverse Equity Position
  – Declining Home Price Appreciation (or Depreciation)
  – High LTV originations
  – Cash-Out Refinancing
“Nonprime” Mortgage Originations

Source: Inside Mortgage Finance
## Foreclosure Rates by Type of Mortgage
Fourth Quarter, 2007

<table>
<thead>
<tr>
<th>Loan Type</th>
<th>In Foreclosure</th>
<th>Foreclosures Started</th>
<th>Past Due (30+ Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prime</td>
<td>0.96</td>
<td>0.43</td>
<td>3.55</td>
</tr>
<tr>
<td>Subprime</td>
<td>8.65</td>
<td>3.71</td>
<td>18.82</td>
</tr>
</tbody>
</table>
Missouri Subprime Penetration Rate by Zip Code

Source: Loan Performance, U.S. Census
The Perfect Foreclosure Storm

- “Nonprime” Mortgage Share
  - Subprime Mortgages
  - Alt-A Mortgages

- Payment Shock for Non-Traditional Mortgages
  - Adjustable-Rate Mortgages (ARMs)
  - Interest-Only Mortgages
  - Payment Option ARMs

- Adverse Equity Position
  - Declining Home Price Appreciation (or Depreciation)
  - High LTV originations
  - Cash-Out Refinancing
Innovations in the Mortgage Market

The Evolution of Lending

1913
50% LTV
Limited geography
Limited term
Balloons

1913
60% LTV

1935
80% LTV

1940
90% LTV

1970
100% LTV

1989
Automated Underwriting
FICO Scores

1995
Over 100% LTV
Unlimited geography
Up to 40 yr term
Negative amortization
Piggyback lending
Interest only
No documentation

Today

Source: Christopher Henderson, Federal Reserve Bank of Philadelphia
Home Price Appreciation Outpaces Personal Income Growth

Sources: Office of Housing Enterprise Oversight; U.S. Bureau of Economic Analysis
Interest Rate Indexes, 2000 – Present

- 1YR CM Treasury
- Cost of Funds Index
- LIBOR
- 30-Yr Conventional

Month:
- Jan 2000
- Jul 2000
- Jan 2001
- Jul 2001
- Jan 2002
- Jul 2002
- Jan 2003
- Jul 2003
- Jan 2004
- Jul 2004
- Jan 2005
- Jul 2005
- Jan 2006
- Jul 2006
- Jan 2007
- Jul 2007
- Jan 2008

Rate:
- 0.0
- 1.0
- 2.0
- 3.0
- 4.0
- 5.0
- 6.0
- 7.0
- 8.0
- 9.0
Alternative Mortgage Originations

Source: Inside Mortgage Finance
# Payment Structure, by Mortgage Type

## $200,000, June, 2004

<table>
<thead>
<tr>
<th>Loan Product</th>
<th>Initial Payment</th>
<th>Reset Payment</th>
<th>Reset Date</th>
<th>Payment Increase</th>
<th>Increase (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-Year FRM</td>
<td>$1,237</td>
<td>$1,237</td>
<td>None</td>
<td>$0</td>
<td>0%</td>
</tr>
<tr>
<td>3/1 ARM</td>
<td>$1,039</td>
<td>$1,420</td>
<td>June, 2007</td>
<td>$381</td>
<td>37%</td>
</tr>
<tr>
<td>3/1 I-O ARM</td>
<td>$786</td>
<td>$1,462</td>
<td>June, 2007</td>
<td>$676</td>
<td>86%</td>
</tr>
<tr>
<td>Option ARM</td>
<td>$643</td>
<td>$1,555</td>
<td>August, 2007</td>
<td>$912</td>
<td>142%</td>
</tr>
</tbody>
</table>

Assumptions: Option ARM has a 7.5% annual increase limit and a 110% negative amortization cap; Option ARM interest accrual is based off 1 year ARM rate as reported by Fannie Mae; Option ARM Minimum Payment is equivalent to a 1% interest rate; FRM is from Fannie Mae 30 Year FRM Index; ARM is set from LIBOR plus a 2.25% margin; 3/1 Interest Only ARM amortizes in 30 Years.
Many 2/28s are Prepaid

Cumulative Prepayment Rates by Vintage for 2/28s

Time in months

Source: Federal Reserve Board staff calculations from Loan Performance data.
Banks Reporting Tighter Lending Standards for Residential Mortgages

Source: Federal Reserve; Senior Loan Officer Opinion Survey

Latest Release: 02/04/2008
Subprime 2/28 Default Rates

Cumulative Default Rates by Vintage for 2/28s

Time in months

Source: Federal Reserve Board staff calculations from Loan Performance data.
Average Interest Rates on Subprime Loans

Average Current Rate (overall) 8.7 9.4
Average Rate (Fixed) 7.9 8.5
Average Initial Rate (ARM) 8.1 8.5
Average Current Rate (ARM) 9.1 9.8
Average Fully Indexed (LIBOR=2.6) 8.7 8.9
Average Fully Indexed (LIBOR=5.4) 11.5 11.7

Percent

US
Kansas City, MO-KS
Interest Rate Indexes, 2000 – Present

- 1YR CM Treasury
- Cost of Funds Index
- LIBOR
- 30-Yr Conventional
Average Interest Rates on Subprime Loans

- Average Current Rate (overall): 8.7
- Average Rate (Fixed): 7.9
- Average Initial Rate (ARM): 8.1
- Average Current Rate (ARM): 9.1
- Average Fully Indexed (LIBOR=2.6): 8.7
- Average Fully Indexed (LIBOR=5.4): 11.5

Percent

US Kansas City, MO-KS
When Are the Resets Going to Happen?

Source: Loan Performance, UBS

Provided by Larry Cordell, Federal Reserve Bank of Philadelphia
The Perfect Foreclosure Storm

• “Nonprime” Mortgage Share
  – Subprime Mortgages
  – Alt-A Mortgages

• Payment Shock for Non-Traditional Mortgages
  – Adjustable-Rate Mortgages (ARMs)
  – Interest-Only Mortgages
  – Payment Option ARMs

• Adverse Equity Position
  – Declining Home Price Appreciation (or Depreciation)
  – High LTV originations
  – Cash-Out Refinancing
# Loan-to-Value Ratios at Purchase Among Foreclosees (Massachusetts)

<table>
<thead>
<tr>
<th>Year</th>
<th>≤ 80%</th>
<th>80%-95%</th>
<th>95%-100%</th>
<th>≥ 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>8.6</td>
<td>41.1</td>
<td>15.7</td>
<td>34.5</td>
</tr>
<tr>
<td>2007</td>
<td>8.0</td>
<td>38.4</td>
<td>13.4</td>
<td>40.0</td>
</tr>
</tbody>
</table>

Source: Federal Reserve Bank of Boston
Cash-Out Refinances

Source: Freddie Mac
## Annual Change in Home Prices

<table>
<thead>
<tr>
<th></th>
<th>2004-05</th>
<th>2005-06</th>
<th>2006-07</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States (NAR)</td>
<td>12.2</td>
<td>1.3</td>
<td>(1.8)</td>
</tr>
<tr>
<td>United States (S&amp;P C-S)</td>
<td>15.5</td>
<td>0.7</td>
<td>(9.1)</td>
</tr>
<tr>
<td>Kansas City MSA</td>
<td>4.5</td>
<td>(0.6)</td>
<td>(1.7)</td>
</tr>
<tr>
<td>Springfield MSA</td>
<td>6.1</td>
<td>3.1</td>
<td>(1.8)</td>
</tr>
</tbody>
</table>

*Source: National Association of REALTORS®*
Existing Home Sales

Source: National Association of REALTORS®
Where Do We Go From Here?
Impacts

• Homeowners
  – Loss of equity (maybe) and credit worthiness
  – Where do we live (affordable housing issues)

• Communities
  – External price effects
  – Neighborhood deterioration
  – Homelessness / lack of affordable housing
  – Local budgetary impact (expenditures and revenues)

• Financial Markets
  – Losses to investors (e.g., pension funds)
  – Mark to market and capital loss recovery reserves
  – Tighter underwriting standards
What Do We Do About It?

• Educate Homeowners
  – before they buy
  – when they are in trouble
    • contact servicer
    • counseling agencies (888-995-HOPE)

• Try to fix the servicer problem
  – bring servicers and borrowers together (contacts problem)
  – bring servicers and lenders together (contracts problem)

• Educate and Inform Communities
  – what can happen
  – resources that are available