Supervisory Letter

Increasing Risks in Mortgage Lending

Introduction

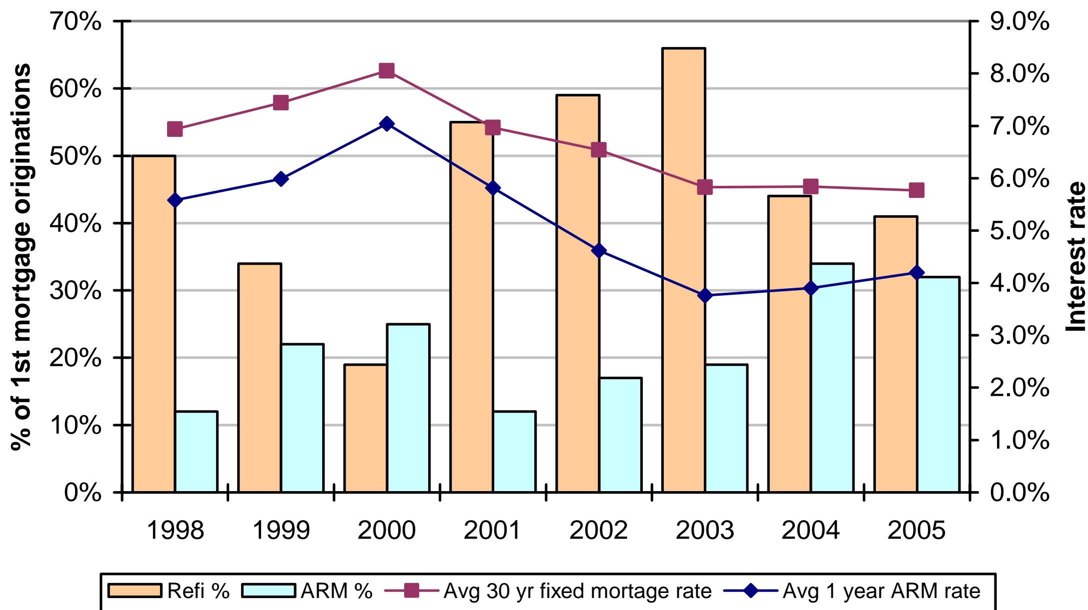
The mortgage lending market has changed dramatically during recent years to accommodate the financing needs of consumers. According to Douglas Duncan, chief economist of the Mortgage Bankers Association[1], there are over 200 kinds of mortgage products on the market. All of these products have different terms, interest rates, down payment requirements, etc. The newer product choices offered to consumers bring with them different risks than traditional mortgage loans, both to the consumer and to the credit unions who make these types of loans.

Background

In 2003, interest rates declined to 45-year lows, resulting in a refinancing boom where borrowers locked in low-rate long-term mortgages. In that year NCUA issued Letter to Credit Unions Number 03-CU-15, entitled “Real Estate Concentrations and Interest Rate Risk Management for Credit Unions with Large Positions in Fixed Rate Mortgage Portfolios.” The concern at that time was interest rate risk related to the increasing concentration of fixed rate real estate loans when rates were at levels not seen in 45 years.

As interest rates were declining from 2000 to 2003, the majority of loans originated were refinances, with adjustable rate loans comprising less than 20 percent of all loans granted. As rates for fixed-rate mortgages leveled off, the percent of refinancing declined. Purchase money loans again comprised the majority of loans granted, and the level of adjustable rate mortgages comprised a growing share of those loans. These trends are seen in the graph below.

[1] As quoted in “Greenspan Wary of Risky Mortgages: Price Peaks Built on ‘Exotic’ Loans Trouble Fed Chairman” by Nell Henderson and Kirstin Downy, Washington Post, June 10, 2005.



Source: MBAA & Freddie Mac

During this period of low rates many areas around the country, especially along the east and west coast, were experiencing significant levels of price appreciation in the housing market. According to the National Association of Realtors, the median sales price of existing homes in the U.S. increased by 8.5% in 2003, 9.3% in 2004, and 14.7% for the twelve months ending June 30, 2005. In several areas, the rate of increase is much higher; for instance, home prices in California, Rhode Island, and Washington D.C., have doubled in five years.[2]

These increases resulted in the cost of housing becoming less affordable even while interest rates remained near historically low levels. To counter this and to stimulate mortgage volume, lenders have become more innovative in the products they offer and more aggressive in their marketing. The current demand for conventional ARMs, Interest Only (IOs) ARMs, Hybrid ARMs, Payment Option ARMs, as well as the use of piggyback lending defies the historical correlation between interest rates and the popularity of these products.

> *"The dramatic increase in the prevalence of interest-only loans, as well as the introduction of other relatively exotic forms of adjustable-rate mortgages are developments of particular concern."*
>
> *- Federal Reserve Chairman Alan Greenspan*

[2] Freddie Mac – Home Price Index by State – June 2005

Typically, ARMs become popular when interest rates rise because borrowers use the lower ARM rate to reduce costs with the expectation that rates will decline. In times of low rates, borrowers typically lock in the rates with fixed-rate, long-term mortgages. However, the opposite has occurred with ARMs becoming more popular in this low rate environment given the extraordinary appreciation in housing prices. Borrowers, particularly in areas with high rates of real estate appreciation, are opting for ARMs and other exotic products which allow them to afford higher priced homes due to the lower monthly payments at origination. During the second half of 2004, adjustable-rate and IO loans accounted for 63% of mortgage originations [3] and in recent months, Option ARMs and IO loans accounted for 65% to 75% of all jumbo-mortgage originations.[4]

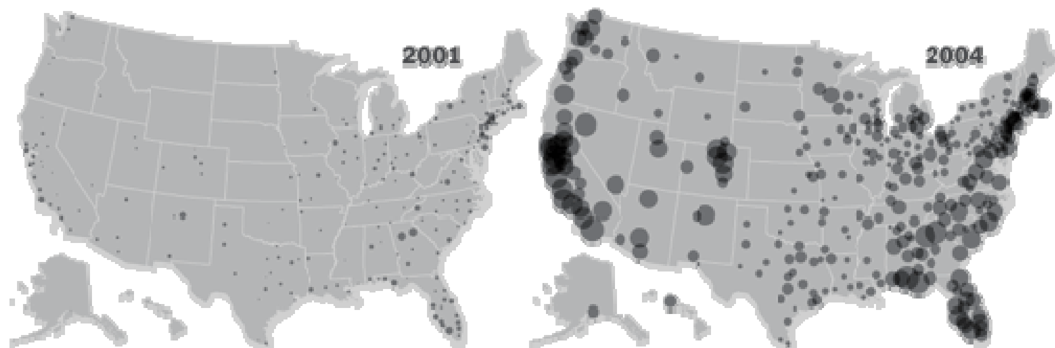
LoanPerformance, a unit of First American Corp., reports nearly 25% of all mortgage loans this year have been IOs, and that in the first two months of 2005 nearly 61% of California purchase mortgages were IOs, up from 47% in 2004 and less than 2% in 2002.[5] The level of IO loans in California is much higher than the nationwide level of 31%. The graphic below illustrates concentrations of IO loans across the nation.

Risking Affordability

As home prices continue to rise across the country, home buyers are turning to riskier adjustable-rate mortgages to help buy homes that they would not otherwise be able to afford.

Circles on the maps are sized by the percentage of home loans greater than $360,000 that are interest-only loans. Does not include refinancing. By metropolitan statistical area.

PERCENTAGE OF LOANS 10% 40% 70%



Source: LoanPerformance

Examiners should be aware that the transition in mortgage products reflects a liberalization of mortgage credit standards in general. Consequently, examiners should be alert to changes in underwriting procedures, written or practiced, indicating an increased appetite for credit risk at the credit unions they review.

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[3] According to the Mortgage Bankers Association as quoted in "Beware The Interest-Only Mortgage" by Liz Moyer, Forbes.com, June 6, 2005
[4] According to UBS AG as quoted in "Housing Gets Even Less Affordable" by Ruth Simon, Wall Street Journal, July 14, 2005
[5] According to LoanPerformance as quoted in "Concerns Mount About Mortgage Risks" by Ruth Simon, Wall Street Journal, May 17, 2005

What is the risk and why is it increasing?

The newer mortgage loan products carry higher levels of credit risk than the standard 80 percent loan to value, 30 year fixed-rate mortgage. This risk is due in part to the structure of the loan products combined with changes to underwriting standards and the high levels of home price appreciation. Price appreciation was discussed earlier, so this section will focus on the credit risk in the loan products and the changes to underwriting standards.[6]

New Mortgage Loan Products

A comparison of the features and issues is important to determine the risks of the various mortgage products, as follows:

Product	Features	Issues
Payment Option ARMs	Minimum payment is not a set amount each month. The borrower has the choice of up to four payment options: 1. **Minimum payment** – based on the "initial rate" which can be as low as 1%. Negative amortization is added to the loan balance. 2. **Interest only payment** – all interest due, no principal 3. **30-year amortizing payment** 4. **15 year amortizing payment**	• Borrower qualifies at initial, IO payment. • High potential for payment shock. The options are complicated and borrowers may concentrate on initial low minimum payments. • Minimum payment selection will cause negative amortization. • Every 5 years (or 115% negative amortization) the loan is recast to ensure minimum payments pay off the balance by the end of the loan's term.
Interest Only	Borrower pays only interest for a fixed period – typically 3, 5 or 10 years. Principal is then amortized over the remaining term. These can be similar to a Hybrid ARM, with a fixed rate, interest only initial period, converting to a variable rate, amortizing period.	• Borrower qualifies at initial, IO payment. • Allows borrower to purchase a higher-priced home than they could otherwise afford. • Will eventually require principal payments at an accelerated pace, with significant increases to monthly payments. • Borrower could owe more than the value of the home if housing value declines during IO period.

[6] While not discussed in this letter, there is transaction risk associated with these loans. Credit unions should have the ability to process and account for these complex loans before offering them.

Product	Features	Issues
Conventional ARM	Rates adjust periodically, typically tied to a published index. The frequency of adjustments and the index vary. Caps typically limit the change during any one year and over the life of the loan.	• Borrower is self-insuring against rate increases during the time they hold the loan. • If the increase in ARMs is due to affordability, there is likely a brewing problem. • Delinquencies and losses are higher for ARMs than for fixed-rate mortgages.
Hybrid ARM	For instance 3/1 and 5/1 – the first number is the length of the fixed term and the second is the adjustment interval applied after the fixed period ends. Annual and lifetime change caps also apply to these loans.	• Bridges gap between fixed and adjustable rate mortgages. • Rates are typically lower than conventional fixed, but higher than ARMS due to the fixed-rate period. • Also come with an interest only option, typically lasting for the fixed rate period.
Fixed-rate conventional	Rate is fixed at inception with principal amortizing over term of loan, typically 15, 20, or 30 years.	• Higher rate is “insurance” a borrower pays to protect against increasing interest rates. • Most recent “innovation” is a 40-year mortgage. • Risk to borrower is they seldom stay in the home for the full term, so are paying for insurance they won’t likely need.

The IO mortgage has been around since the 1920s when it was primarily used for the wealthy to manage their cash. If an average person was to get a mortgage at that time to purchase a property, the primary loan available had a term of 5 years, had a fixed rate of interest, a balloon payment at the end of the loan term, and required a 50-80% down payment. The primary underwriter for these loans was insurance companies, not banks. They made these loans not for the interest income, but in hope of the borrower defaulting so they would take ownership of the property.

These fell out of favor during and after the great depression when real estate and stock prices plummeted, and only became a mainstream loan type in the last 2-3 years. Unlike the IO loans of the past, the current offerings do not have a balloon feature, are not fixed rate, and are not limited to the wealthy. Some of these loans greatly increase credit risk by allowing negative amortization and all of them have no initial principal repayment.

Many borrowers choose these loans counting on the continued increase in the value of their home. However, when combined with a potentially overpriced real estate market, the impact of this credit risk increases tremendously. When the principal repayment becomes a reality, the minimum payment on these loans can increase significantly and may not be manageable by the borrower. Additionally, if prices stay flat or decline, the borrower could owe more than the property is worth. The likelihood of default is much higher when a borrower has no equity in the home.

The tables below show the increase in the minimum payment for two types of adjustable rate, IO mortgages. In the first example, a $200,000 mortgage has an interest only feature for three years, after which it is adjusted annually with a 2% initial adjustment and 2% annual, 6% lifetime caps. As shown below, changes in interest rate can dramatically change a borrower’s mortgage payment. Even with no rate changes, the payment can increase as much as 33% once the interest only period ends. Combine that with a rise in interest rates and the payment can increase 63% at the initial adjustment period, and up to 126% after all adjustments.

$200,000 3/1 IO ARM – 2/2/6 caps									
	No change in rates				**Maximum change in rates**				
Year	**Int. Rate**	**Pmt**	**Change**	**% chg**	**Int. Rate**	**Pmt**	**Change**	**% chg**	**Cum. chg**
1-3	5.15%	$858.33			5.15%	$858.33			
4	5.15%	$1,143.98	$285.64	**33%**	7.15%	$1,395.25	$536.91	**63%**	**63%**
5	5.15%	$1,143.98			9.15%	$1,661.03	$265.78	**19%**	**94%**
6	5.15%	$1,143.98			11.15%	$1,937.63	$276.65	**17%**	**126%**

Source: FNMA Calculations

The increase in payment is even more dramatic under the second scenario using a $200,000 mortgage with interest only payments for five years. After five years the rate is adjusted annually with a 5% initial maximum adjustment and 2% annual, 5% lifetime caps. With the interest rate rising 5% at the initial adjustment period, the payment increases 104%.

$200,000 5/1 IO ARM – 5/2/5 caps								
	No change in rates				**Maximum change in rates**			
Year	**Int. Rate**	**Pmt**	**Change**	**% chg**	**Int. Rate**	**Pmt**	**Change**	**% chg**
1-5	5.60%	$933.33			5.60%	$933.33		
6	5.60%	$1,240.15	$306.81	**33%**	10.60%	$1,902.67	$969.33	**104%**

Source: FNMA Calculations

These examples clearly illustrate the huge potential for borrowers to become overburdened by changes in their mortgage payments that may result as rates rise and/or the interest only options expire. Teaser rates, or initial low rates, are

often used to attract borrowers to ARM products; however, the teaser rate can expire within six months, and sometimes in as little as one month. These introductory rates also pose credit risk because payments may significantly increase at the end of the teaser rate term.

A piggyback loan is defined as a simultaneous first and second mortgage designed to enable borrowers to receive a large loan with up to zero down payment.[7] Piggyback loans have become more attractive due to the record home price appreciation in many markets.

> *"The House Price Index shows the rise in house prices continues at an extremely strong pace and raises the potential for declines in some areas later on."*
>
> *-- OFHEO Chief Economist Patrick Lawler*

According to a June 2005 report by Calhoun Consulting, during the first half of 2004 approximately 42 percent of home purchase mortgage loan dollars involved piggyback loans.[8] This percentage doubled from 2001. These loans (along with IO mortgages) tend to be concentrated in areas with rapidly increasing housing costs which have far outpaced income growth. This type of lending allows borrowers to afford a more expensive home with a lower down payment and no private mortgage insurance premiums. Further, the interest payments on the second lien portion of the loan are tax deductible.

These loans are attractive to lenders because fee income is increased by originating two loans instead of one, and the first lien conforms to secondary market standards for selling purposes. The drawback is that many borrowers are not prepared for increased payments as interest rates rise since the second trust is typically a variable-rate home equity loan. Also, areas with the highest real estate appreciation are often at the highest risk of experiencing declining house prices. Piggyback loans may support the speculative bubbles in local housing markets by qualifying borrowers for larger loans with higher loan to values. As long as housing values rise at the current pace this arrangement will work; however, these loans may result in high loss rates if housing values decline.

FNMA published an informative paper that discusses adjustable rate mortgages in detail. "The Pluses and Minuses of Adjustable-Rate Mortgages" can be viewed at: http://www.fanniemae.com/commentary/pdf/fmpv3i4.pdf

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[7] Also see Letter to Credit Unions 05-CU-07 – "Risks Associated with Home Equity Lending"
[8] SMR Research Corporation, "Piggyback Mortgage Lending, November 2004, as quoted in "The Hidden Risks of Piggyback Lending" by Charles A. Calhoun, PhD, June 2005 http://www.pmigroup.com/newsroom/media_newsroom/hiddenriskspiggyback.pdf

Liberalized Underwriting Standards

To remain competitive and increase volume, many lenders appear to be loosening their credit standards. Some of the current practices include:

- Being more creative in structuring loans so borrowers can qualify for loans that they previously would not be approved for given their income levels. It is not unusual for up to 50% of income to be allocated for a mortgage payment when in the past this was limited to between 28% and 32%.[9]
- Qualifying borrowers at the interest only payment level or initial rate rather than at the subsequent or highest possible payment. This practice is an approved secondary market underwriting standard.
- Making additional loans resulting in higher total LTVs while avoiding private mortgage insurance (piggyback).
- Reducing loan documentation. According to Inside Mortgage Finance, almost 7% of new loans in 2004 were low-documentation loans, up from 2% in 2003.[10]

The trend towards liberalizing underwriting standards further increases credit risk. The effects of relaxed standards cannot be fully measured currently because these changes are too recent. However, as evidenced in the chart below, a correlation exists between LTV ratios and credit scores. When a lower level of equity is required from the borrower and this is combined with lower credit scores, default rates rise.

Low Risk — LTV Ratio — High Risk

FICO SCORE — High Risk

	>0-70	>70-80	>80-90	>90-95	>95-97	>97-100
740+						
700-739						
660-699						
620-659						
<620						
Unk.						N/A

Related Default Rate		
Above Average		>4.0
		>2.0-4.0
		>1.0-2.0
Avg. and Below Avg.		>0.5-1.0
		>0.2-0.5
		0-0.2
N/A – not calculated – too few loans		

[9] "Analysts see solid growth for builders: Housing demand stays strong; loan standards a concern", by John Spence, MarketWatch, July 8, 2005.
[10] "Getting in at any price: What risk do new loan products pose for housing market" by Andrea Coombes, MarketWatch, May 6, 2005.

The chart was taken from the February 2005 GAO report on mortgage financing and analyzes the results of the 4-year default history of 1997-1999 originations. GAO concluded that conventional mortgages with higher LTVs and lower credit scores have higher default rates. Given this conclusion, if we combine more lenient credit and underwriting standards with higher LTVs, IO or negative amortization loans, and with the rapid appreciation in housing values, it is possible we could see default rates increase over current levels.

> *"It is important that lenders fully appreciate the risk that some households may have trouble meeting monthly payments as interest rates and the macroeconomic climate change."*
>
> *Federal Reserve Chairman Alan Greenspan*

Conclusion

Mortgage lending has changed in recent years. Products and processes that were once standard operating procedure have been revised radically in almost every aspect of the business. Piggyback loans, IOs, and other new mortgage products have become very popular, primarily in areas with high levels of real estate appreciation. When coupled with more liberalized lending practices that only consider the initial payment on interest only products, the heightened level of risk becomes clear.

In areas with high price appreciation borrowers are opting for these newer products so they can qualify for more expensive homes than they would under conventional mortgage terms. In the end, these products replace interest rate risk with credit risk as many borrowers may not be able to afford a higher mortgage payment when interest rates rise, potentially increasing default rates. A drop in real estate property values coupled with the unanticipated burden of increased payments as interest rates rise will likely result in hardship for borrowers and could cause default rates to increase.

When reviewing a credit union's real estate loan programs, examiners should:

- Analyze the mortgage loan products offered by the credit union, carefully evaluating any associated risks, especially in markets with large housing price appreciation.
- Evaluate the level of exposure a credit union is placing on its balance sheet and whether or not the risk is being mitigated (e.g. through selling the more exotic products).
- Assess changes in mortgage underwriting credit standards as reflected in credit union policies and practices.

- Discuss these risks with credit union officials to ensure they are aware of the inherent risks and have the appropriate policies, procedures, and monitoring mechanisms in place to manage the risks while ensuring these products fit into their overall strategic plan.
- Determine that the credit union maintains sufficient capital to support the level of credit risk and interest rate risk.

Our objective is to ensure that credit unions have in place appropriate risk management practices to mitigate the exposure posed by the changing risks in mortgage lending and the related economic environment. Examiners who find credit unions engaged in material levels of the activities described in this letter, or other practices that indicate loosened mortgage credit standards, need to ensure that these programs are safe and well-managed. Any significant deficiencies in a credit union's management of the risks associated with mortgage lending should trigger heightened supervisory oversight.