#### Restricted FR

# Residential Mortgage Lenders Peer Group Survey: Analysis and Implications for First Lien Guidance

November 30, 2005

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### Executive Summary: Survey Background

- Rapid growth of non-amortizing mortgage products in traditionally volatile residential housing markets focused the banking agencies' attention on so-called non-traditional mortgages (NTMs), sometimes referred to as affordability products.
- In September, the agencies surveyed leading residential mortgage lenders for trends and current practices related to the following NTM products:
  - PayOption ARMs (P/Os)
- Interest only mortgages (I/Os)

Low and no doc loans

- Simultaneous 1st and 2nd mortgage structures
- The primary focus of the survey and this report is on P/Os and I/Os due to their nonamortizing features which create higher potential risk than more traditional mortgages.
- The survey group consists of six leading residential lenders, representing one-half of projected 2005 NTM originations as well as aggregate mortgage originations. However, the data may not be representative of smaller, less sophisticated lenders.
  - Bank of America (BAC)
     Citi Financial (Citi)

Countrywide Financial (CFC)

- Wells Fargo (WFC)
- Washington Mutual (WaMu)
   National City (NCC)

## Executive Summary: Survey Background

- The data request contained over 1,000 data points related to the following:
  - Production volume for the previous four years by product type
  - Underwriting trends
  - Portfolio management (securitization, held on balance sheet, held for sale)
- The qualitative questionnaire contained eleven questions addressing issues that could not be captured in the data request, including the following:
  - Qualification procedures in underwriting NTMs
  - Stress testing methodologies
  - Pricing strategies
  - Consumer disclosure and suitability

### Executive Summary: Rapid P/O and I/O Growth

■ P/O growth expected to increase 70% in 2005. I/O growth expected to increase 24%. While I/O growth has slowed, the dollar volume of originations remains greater than P/Os.

#### P/O and I/O growth

				05 / 04
(\$ billions)	2003	2004	2005	Growth
P/Os	\$ 30.9	\$ 90.3	\$ 153.1	69.6%
I/Os	 72.4	 195.7	 243.1	<u>24.2%</u>
I/Os & P/Os	\$ 103.3	\$ 286.0	\$ 396.2	38.5%

- Countrywide and WaMu dominate P/O lending; Countrywide and Wells dominate I/O lending.
  - BAC and National City began offering P/Os earlier this year
- I/O and P/O assets are a small percentage of total assets for most lenders

#### 2005 P/O & I/O annualized volume by institution

(\$ billions)	CFC	W	/aMu	E	BAC	١	NFC	Citi	NCC	Total
P/Os	\$ 82.4	\$	70.1	\$	0.6	\$	-	\$ -	\$ 0.1	\$ 153.1
I/Os	67.4		12.6		16.3		93.3	 22.4	 31.1	 243.1
I/Os & P/Os	\$ 149.8	\$	82.6	\$	16.9	\$	93.3	\$ 22.4	\$ 31.2	\$ 396.2

# Executive Summary: Relaxation of Underwriting Standards

- LTVs, CLTVs, and DTIs have increased, indicating softening underwriting standards.
- Credit scores have improved slightly when weighted by dollar volume.
- Underwriting standards vary by lender.
  - The data in the table reflect primarily prime/Alt-A products.
  - Some players have adopted more restrictive polices in 2005 not reflected in these numbers.

	2003	2004	2005
Wtd. Avg. LTV			
P/Os	69.8%	71.3%	72.7%
I/Os	66.3%	68.0%	69.2%
Wtd. Avg. CLTV			
P/Os	70.5%	72.6%	75.0%
I/Os	74.2%	78.5%	79.0%
Wtd. Avg. DTI			
P/Os	33.6%	35.8%	37.9%
I/Os	32.4%	34.5%	35.7%
Wtd. Avg. credit score			
P/Os	700.1	703.9	710.5
I/Os	730.8	729.2	731.4

## Executive Summary: Borrower Qualification and Product Risks

- Most (but not all) lenders qualified P/O borrowers at the higher of the fully indexed rate that includes amortization or an internal target rate, in conjunction with minimum LTV ratios and credit scores.
- Banks typically qualify I/O borrowers based on the I/O payment, not a fully amortizing payment.
  - Some lenders do consider a fully indexed rate plus a rate shock
- Utilization of negative amortization has increased and interest-only periods have extended -- increasing the potential for payment shock.
  - Countrywide reports the percentage of P/O borrowers with current balance greater than original balance at about 25% in 2005, up from less than 1% in 2004.
  - Since 2003 the share of loans with interest-only periods greater than 5 years has risen from 34% to 44%; however, 5-year I/Os currently account for 48% of all I/O loans.

# Executive Summary: Risk Layering

- Risk layering (the combination of two or more risk attributes) represents a significant and growing share of P/O and I/O originations.
- Low doc loans have increased for both P/Os and I/Os.
- Low doc and cash out are more prevalent for P/Os. Borrowers are apparently willing to pay a higher interest rate for less documentation.
- Simultaneous seconds growing and more prevalent among I/Os.
- A partial explanation is that P/Os are often used for refinancing, I/Os for purchase.
- Non-owner occupied and second homes account for 20% of P/Os and 10% of I/Os.

Risk Layering Trends						
		P/O			I/O	
_	2003	2004	2005	2003	2004	2005
% Low Doc	64%	63%	68%	36%	24%	28%
% Simultaneous 2nd	1%	7%	<mark>16%</mark>	24%	27%	26%
% of Production that included Cash Out	44%	43%	43%	16%	13%	17%
% Second Home/Non-owner	19%	19%	20%	6%	8%	10%

# Executive Summary: Portfolio Risk Management

- Survey respondents expect to sell or securitize about 63% of P/Os and I/Os, and 84% of low- and no-doc loans in 2005.
  - Generally, the underwriting characteristics of loans held on balance sheet are marginally better than loans sold.
  - Lenders appear to be positioning themselves to offload layered risk by classifying a larger share of these loans as available for sale.
- The geographic concentrations of NTMs tend to be along the coasts in areas experiencing rapid home price appreciation. These areas have traditionally had higher home prices and were early adaptors of previous mortgage innovations, such as neg-am COFI ARMs.
  - California represent almost one-third of the group's NTMs.
  - Few lenders have specific geographic concentration limits.

# Executive Summary: Portfolio Risk Management (Continued)

- Sophistication of stress testing and management reports varies with the quantity of activity, length of time offering similar products, and relative importance of the product to the bank's overall business.
  - In general, stress tests indicate that all the respondents have sufficient capital to withstand a modest rise in interest rates and declines in collateral values.
- For most lenders, pricing is substantially market-driven.
  - Generally, NTM loans to be held in the portfolio are priced to the same return standards as other mortgage products.
- The proportion of NTM originations in 2005 originated through brokers, correspondents, and retail branches varies by product. Nearly 50% of P/Os and 30% of I/Os were originated by brokers and correspondents.

# Executive Summary: Supervisory Implications and Expectations

- I/O and P/O mortgages can be an effective financial management tool for some borrowers but may not be appropriate for all borrowers.
- Underwriting P/Os to fully indexed rate with a fully amortizing payment assumption provides some cushion against payment shock at recast.
- Potential impact of Neg Am and the extent of payment shock at recast can be managed by initial LTV requirement, spread between start rate and fully-indexed rate, and the Neg Am cap.
- Relaxation of underwriting standards increase risks for depository institutions and borrowers and thus require additional management attention to mitigate the increased risks.
- Rapid growth of P/Os and I/Os challenges existing underwriting and risk management systems. It is critical that banks' policies (including consumers disclosures) & MIS appropriately reflect complexity and risk of these products.
- Essential to stress test the borrowers and portfolio for potential changes in economic conditions and to set capital reserves appropriately given the limited performance history of NTMs.

# Restricted FR Trends

### Peer Group: Six National Residential Lenders

The six lenders in the survey represent both about half of projected 2005 NTM originations and half the total aggregate originations. The numbers below are annualized.

#### **Projected 2005 Peer Group Aggregate and Non-Tradtional Mortgage Originations**

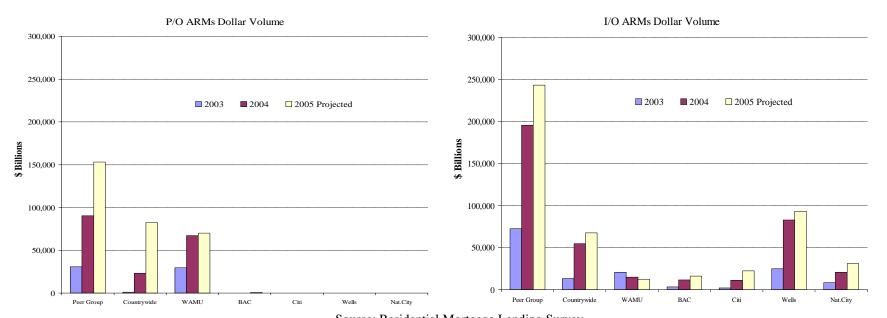
Lender (\$ billions)	National Ranking	Aggregate riginations	Aggregate Market Share	NTM Share of Lender Originations
Countrywide	1	\$ 423.6	14.9%	58.8%
Wells Fargo	2	299.2	10.5%	58.1%
Washington Mutual	3	235.4	8.3%	31.4%
Bank of America	5	146.0	5.1%	18.3%
CitiFinancial	6	145.6	5.1%	26.5%
National City	9	90.4	<u>2.1%</u>	<u>51.1%</u>
Sub Total:		\$ 1,340.2	46.0%	45.4%
All Others		\$ 1,499.8	<u>54.0</u> %	
Total:		\$ 2,840.0	100.0%	

Source: Federal Reserve Residential Mortgage Survey and Inside Mortgage Finance

<sup>1:</sup> NTM originations and market share is estimated using data from the FRB Mortgage Survey, Loan Performance and Inside Mortgage Finance.

## Trends: P/Os and I/Os Experiencing Rapid Growth....

- **Volume:** 2005 peer group P/O and I/O originations are projected to be \$396.1 billion.
  - Countrywide led all peers in volume with \$150 billion
- **Annual Growth:** Total P/O and I/O originations are expected to grow 38.5 percent over 2004, with most peer banks experiencing growth
  - Countrywide is projected to have 92% growth in 2005.



# Trends: On-Balance Sheet Exposure Varies ... Three institutions have significant exposures

- Countrywide, WaMu, and Wells have I/O + P/O exposures greater than 200% of capital (Tier 1 + ALLL)
- P/Os and I/Os, on average, represent about 5 percent of the total assets and about a quarter of the total mortgages held by the peer group.

## P/Os and I/Os as a Percentage of Balance Sheet Residential Mortgages as of June 30, 2005 (\$ billions)

(1)	(2)	(3)	<b>(4)</b>	(5)
	PO + I/O Products	(PO + I/O) / Total Mortgages	(PO + I/O) / Total Assets	(PO + I/O) / Tier 1 + ALLL
BAC	\$ 5.6	3.2%	0.5%	7.3%
Citi	19.7	13.5%	1.3%	22.6%
Countrywide	36.2	53.2%	22.8%	<mark>310.6%</mark>
National City	5.2	12.6%	3.6%	46.6%
Wells Fargo	76.3	55.4%	17.5%	<mark>221.8%</mark>
WaMu	66.6	<u>36.7%</u>	<u>20.6%</u>	<u>237.6%</u>
Total	\$ 209.6	27.8%	5.4%	83.9%

Source: Mortgage Lending Survey and Y9 reporting.

## Trends: Risk Layering

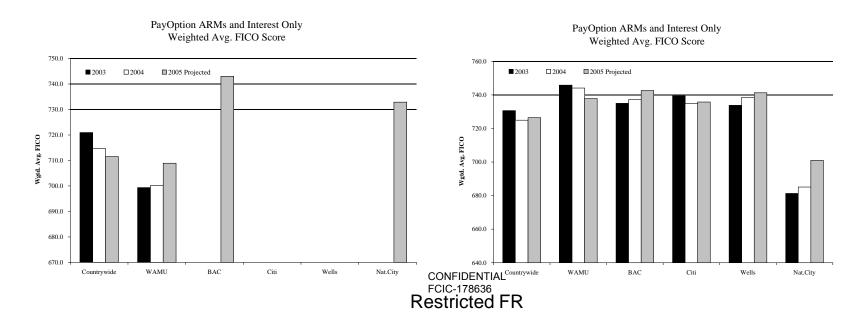
- Risk layering (the combination of two or more risk attributes) represents a significant and growing share of P/O and I/O originations.
  - Low doc and cash out are more prevalent for P/Os.
  - Simultaneous seconds growing and more prevalent in I/Os.
  - Non-owner occupied and second homes account for 20% of P/Os compared with 10% of I/Os.

P/O ARMs	2002	2003	2004	1H05
% P/O and Low/No Doc	64%	64%	63%	68%
% P/O and Simultaneous Second	1%	1%	7%	16%
Weighted Ave. CLTV	70%	71%	73%	75%
Weighted Average Debt-to-Total Income	34%	34%	36%	38%
Weighted Average credit score Score	693	700	704	710
% of Production that Included Cash Out	44%	44%	43%	43%
% Second Home/Non-owner Occ	17%	19%	19%	20%

I/O ARMs	2002	2003	2004	1H05
% I/O <u>and</u> Low/No Doc	50%	36%	24%	28%
% I/O and Simultaneous Second	14%	24%	27%	26%
Weighted Ave. CLTV	68%	74%	79%	79%
Weighted Average Debt-to-Total Income	29%	32%	34%	36%
Weighted Average credit score Score	736	731	729	731
% of Production that Included Cash Out	25%	16%	13%	17%
% Second Home/Non-owner Occ	5%	6%	8%	10%

## Trends: Credit Scores by Lender

- Credit scores for P/O and I/O loans have exhibited disparate trends among lenders.
  - For I/Os, Countrywide, WaMu, and Citi loans had decreasing credit scores between 2003-2005. BAC, Wells, and National City loans had increasing credit scores during the same period. While National City has exhibited a sharp increase in credit scores, its scores are still well below peer scores.
  - Countrywide and WaMu account for the bulk of P/Os. WaMu's average scores rose over 2003-2005, Countrywide's fell, but now they are about the same level.



## Trends: Rising CLTVs

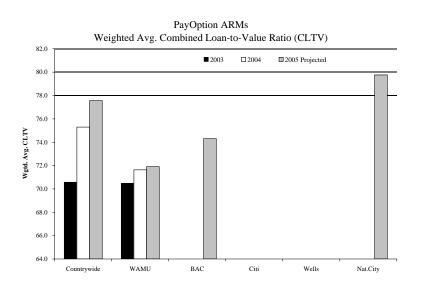
 Weighted-average combined LTVs (CLTVs) for P/Os and I/Os have increased to 77.4% in 2005 from 76.7 percent in 2004 and 73.1% in 2003.

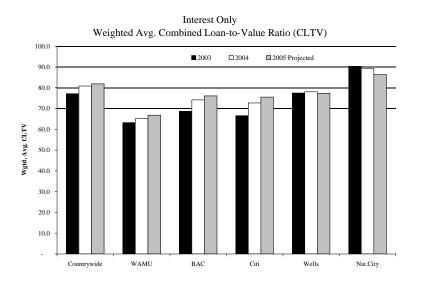
P/O and I/O ARMs
LTV and CLTV

	<u> </u>	a <u> </u>	_		
(\$ billions)		<u>2003</u>		<u>2004</u>	<u>2005</u>
\$ Production Volume	\$	103.3	\$	285.9	\$ 396.1
Combined LTV (CLTV) 1st mortgage LTV Incremental Leverage		73.1% 67.4% 5.7%		76.7% 69.0% 7.6%	77.4% 70.6% 6.8%

### Trends: CLTV by Lender

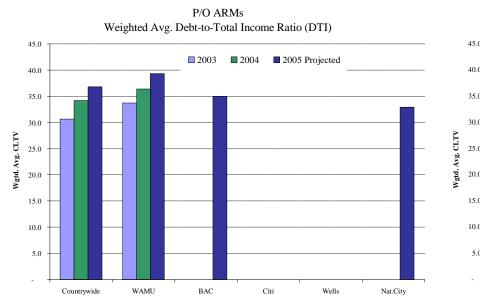
- Most lender's CLTVs for P/O and I/O loans approximated 80 percent with the exception of WaMu and National City.
  - WaMu exhibited the lowest CLTVs during the period with a projected 2005 weighted average CLTV of 71.9%.
  - National City exhibited the highest CLTVs with a projected 2005 weighted average CLTV of 89.6%.

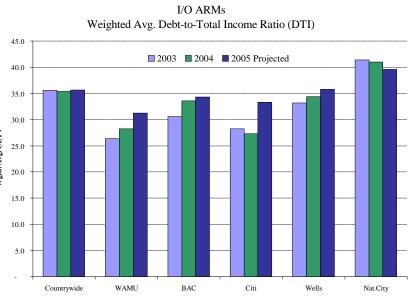




### Trends: Debt-To-Income Ratios by Lender

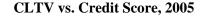
- DTIs for P/Os and I/Os generally increased from 2003-2005.
  - Citi exhibited the lowest DTIs during the period with a projected 2005 weighted average DTI of 33.3%.
  - National City Bank exhibited the highest DTIs with a projected 2005 weighted average DTI of 39.6%.

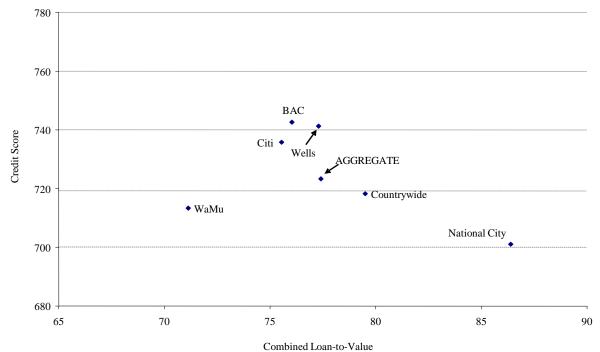




### Trends: Credit Score vs. CLTV by Lender

- The graph below plots the various lenders' average credit scores against average CLTVs.
  - National City has the lowest average credit score and highest CLTV; BAC has the highest average credit score, while WaMu has the lowest CLTV.





Source: Residential Mortgage Lending Survey
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FCIC-178640

## Trends: Risk Layering

- Originators are increasingly layering risk on P/Os and I/Os:
  - Low documentation has increased to 43.7% of originations in 2005 from 36.1% in 2004.
  - Simultaneous seconds have increased to 22.1% in 2005 from 17.3% in 2003.
  - Non-owner occupied and second home loans have increased to 14.0% in 2005 from 9.6% in 2003.

#### P/O and I/O ARM Layered Risks

in \$ billions

·				% Non-
	Peer	% Low	% Simult.	Owner
	Origination	Documentation	1st & 2nd	Occ.
2003	103.3	44.0%	17.3%	9.6%
2004	285.9	36.1%	20.6%	11.7%
2005	396.1	43.7%	<mark>22.1%</mark>	<mark>14.0%</mark>

## Trends: Cash-Out Refinances Growing

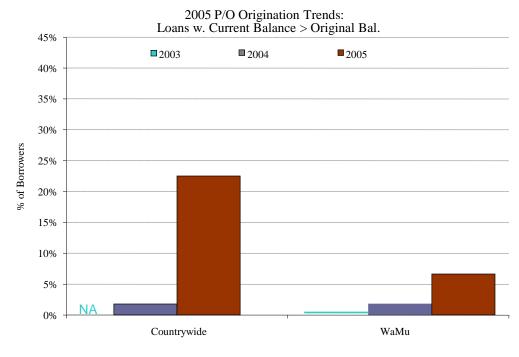
- In 2005, 42 percent of P/O borrowers took cash out during refinancing,
   17% did so for I/Os not much change from previous years.
- In 2005, however, among low and no doc borrowers, 25% took cash out, a substantial increase over the previous two years.

#### Cash Out Refinancings as a % of Total Production

				2005 Refinancing
(\$ billions)	2003	2004	2005	Volume
P/O	44.1%	43.4%	42.7%	\$ 90.4
I/O	16.4%	12.5%	17.1%	\$ 84.7
Low and No Doc	18.5%	17.6%	<mark>24.7%</mark>	\$ 154.2
Simultaneous 1st and 2nd	9.4%	7.3%	9.9%	\$ 35.6

## Trends: P/O Negative Amortization Growing

- P/O loans with current principal balance greater than original principal balance increased significantly since 2003 (23.7% for Countrywide in 2005). Some of this is due to the rapid growth of the product, as negative amortization often occurs in the first year.
  - Of the peer group, only Countrywide and WaMu have originated P/Os since 2003. BAC and National City began originating them in the second half of 2005
  - Borrowers that have utilized the minimum payment at least once has increased significantly, approaching 40 percent in 2005 vs. less than 5 percent in 2003, a partial function of the increase in interest rates.



### Trends: I/O term segmentation

- In recent years, most I/O loans have an interest-only period of five years
- An increasing proportion of I/O loans have a 10 year interest-only period

I/O - Term Segmentation	2003	2004	Projected 2005
% with original I/O period = 1 year:	0.6%	0.5%	0.1%
% with original I/O period = 2 years:	0.0%	0.0%	0.0%
% with original I/O period = 3 years:	3.7%	9.6%	7.4%
% with original I/O period = 5 years:	66.0% →	49.9% -	→ 48.1%
% with original I/O period = 7 years:	4.9%	5.0%	7.1%
% with original I/O period = 10 years:	23.6% →	34.7% -	→ 35.8%
% with original I/O period > 10 years:	5.8%	9.7%	1.5%

## Trends: Balance Sheet Management Loans Sold vs. Loans Held

- For most lenders, the quality of loans sold differs only marginally from those held.
- Although reported differences appear small, according to internal management reports submitted by Countrywide, the delinquency rates of their sold P/Os appear to be significantly higher than those retained in portfolio.

P/O ARM Underwriting Characteristics

P/O ARM Underwriting Characteristics						
	CLTV DTI			Cre	Credit Score	
	Loans for Sale	Loans Held	Loans for Sale	Loans Held	Loans for Sale	Loans Held
Countrywide	78.0%	76.9%	37.4%	36.1%	710.7	718.2
WaMu	72.6%	71.7%	35.1%	33.5%	698.2	697.5
BAC	77.8%	47.3%	32.7%	52.8%	747.4	770.0
Citi	0.0%	0.0%	0.0%	0.0%	-	-
Wells	0.0%	0.0%	0.0%	0.0%	-	-
National City	0.0%	0.0%	NA	NA		
Weighted Avg.	73.4%	73.0%	35.4%	34.2%	700.1	702.6

Source: Residential Mortgage Lending Survey

( I/O ARM Underwriting Characteristics on next slide )

# Trends: Balance Sheet Management -- Loans Sold vs. Loans Held (Continued)

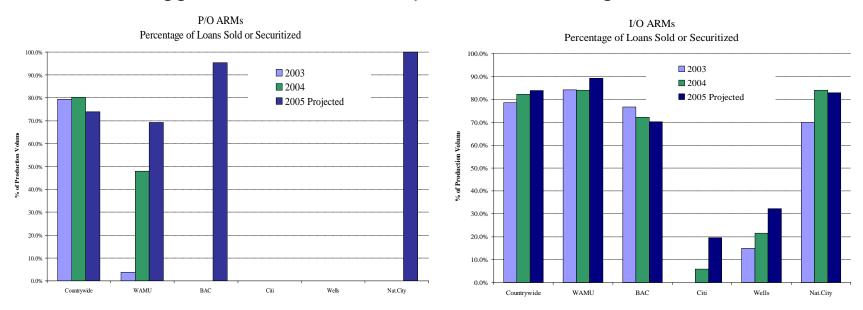
- I/O loans held by National City are riskier than loans held for sale
- Others don't show much difference in underwriting standards

#### I/O Underwriting Characteristics

	CLTV		DTI		Credit Score	
	Loans for Sale	Loans Held	Loans for Sale	Loans Held	Loans for Sale	Loans Held
Countrywide	81.1%	80.8%	37.1%	35.6%	721.7	732.8
WaMu	67.7%	62.3%	32.2%	27.2%	740.7	743.1
BAC	77.0%	74.3%	35.1%	32.7%	743.2	738.6
Citi	74.0%	73.6%	34.1%	30.4%	725.8	736.0
Wells	77.3%	77.0%	35.7%	34.8%	739.2	739.3
National City	<u>85.1%</u>	<u>96.0%</u>	<u>NA</u>	<u>NA</u>	705.0	662.9
Weighted Avg.	78.8%	76.7%	28.1%	32.3%	728.6	735.2

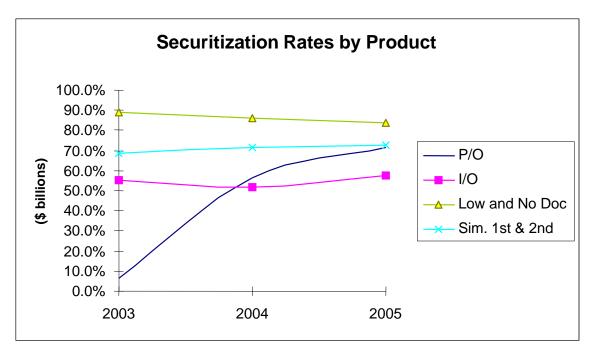
# Trends: Banks Are Securitizing Large Portions of P/O and I/O Originations

- The peer group exhibited fairly wide dispersion in projected percentage sold for I/Os of between 19.5% (Citi) and 89% (WaMu)
- For P/Os, the range was smaller, from 70% (WaMu) to 100% (National City).
- Since these data were collected, comments from several of the banks involved suggest even more of the production is being sold.



# Trends: P/O ARM Securitization Rates Have Risen Significantly

- P/O securitization rates increased significantly since 2003, but appeared to be leveling off at around 72%. Most low and no docs are securitized.
- This level of securitization is more in line with I/Os and reflects the capital market's increasing comfort with P/Os.



#### Trends: Held for Sale vs. Held to Maturity

- For those P/Os and I/Os that remain on balance sheet in peer group, about 17 percent are available for sale. A higher percentage of P/Os are held for sale than I/Os.
  - Among the peer group, Citi has lowest proportion of own portfolio for sale (2 percent) and National City has the greatest proportion (38 percent).
  - In aggregate, lenders expect to sell a higher percentage of P/O cash-out refinances, low / no doc, and especially those with simultaneous seconds.
  - In aggregate, lenders expect to sell a higher percentage of I/O low / no doc loans.

#### **Balance Sheet Loans, 2005**

	P/O ARMs					
	% of Total, per category					
	For Sale	For Sale BS \$ Balance				
Second Homes	13.5%	86.5%	21,832			
Refis	26.8%	73.2%	63,131			
Cash Outs	28.6%	71.4%	45,321			
First Time	18.5%	81.5%	1,657			
Low Docs	28.3%	71.7%	67,366			
Sim. 2nds	35.8%	64.2%	7,269			

I/O ARMs						
_% of To	% of Total, per category					
For Sale	BS	\$ Balance				
9.2%	90.8%	14,003				
12.1%	87.9%	49,617				
19.7%	80.3%	18,169				
15.9%	84.1%	11,314				
22.7%	77.3%	27,703				
11.1%	88.9%	37,195				

# Trends: Origination Channels Third parties play significant role in originations

- More than half of the NTM originations in 2005 will be from Brokers and Correspondents (see appendix for more details).
- Brokers have been particularly active in originating P/Os while Correspondents have been very active in originating Low Doc / No Doc loans.

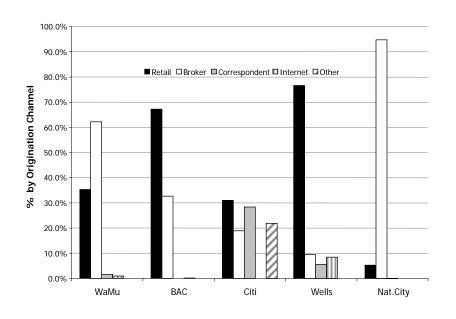
#### **Origination Channels**

	Retail	Broker	Correspondent	Internet	Total
P/O ARMs	49.0%	<mark>47.6%</mark>	2.6%	0.9%	100.0%
I/O ARMs	64.6%	22.2%	7.8%	5.4%	100.0%
Low and No Doc	21.0%	12.8%	<mark>61.9%</mark>	4.2%	100.0%
Simultaneous First and Second	<u>59.1%</u>	<u>24.1%</u>	<u>16.4%</u>	<u>0.4%</u>	<u>100.0%</u>
Total NTMs	46.3%	24.3%	26.1%	3.4%	100.0%

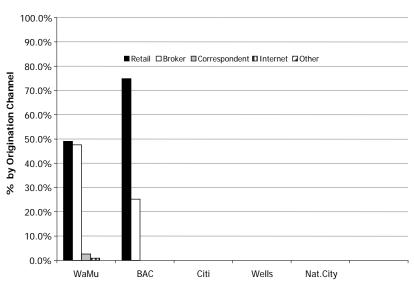
Source: Residential Mortgage Survey

# Trends: I/O and P/O Origination Channels: Reliance on brokers varies by lender





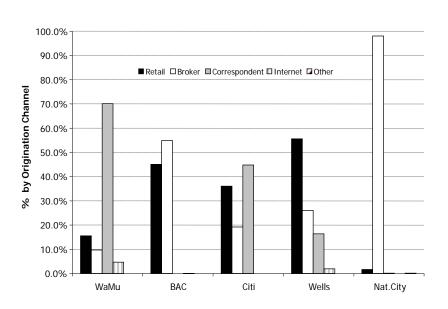
#### P/O Origination Channels



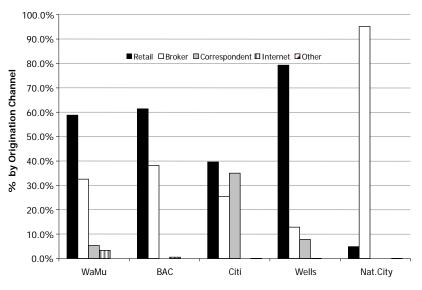
## Trends: Origination Channels: Low / No Doc and Simultaneous First and Seconds

National City uses brokers heavily for both products

Low / No Doc Originations



#### Simultaneous First and Seconds



## Trends: Geographic Concentrations along the East and West coasts

 Consistent with the broader market, the geographic concentrations of NTMs serviced by the peer group tend to be in states concentrated along the coasts experiencing strong house price appreciation.

Product	Bank of America	Citigroup	Wells	National City	Countrywide	WaMu
Pay Option ARMs	California 66% Florida 13% Nevada 4%	NA	NA	California 24% Florida 6%	California 57% Florida 10% Nevada 4%	California 55% Florida 9% New York 5%
I/Os	California 42% Florida 6% Virginia 6%	California 38% New York 9% Florida 6%	California 50% Florida 5% Colorado 3%	California 29% Virginia 14% Maryland 11%	California 42% Florida 8% Nevada 5%	California 63% New York 4% Connecticut 4%
Low and No Doc	California 47% Florida 14% Illinois 4%	California 45% Florida 7% New York 5%	California 26% Florida 6% Minnesota 4%	California 37% Virginia 6%	California 43% Florida 9% Texas 2%	California 23% Illinois 7% Florida 7%
Simultaneous First and Second	California 26% Florida 11% Virginia 6%	California 24% New York 10% Illinois 5%	California 15% New Jersey 6% Maryland 5%	California 15% Virginia 14% Maryland 10%	California 40% Florida 8% Illinois 4%	California 51% Washington 7% New York 5%

# Restricted FR

# Responses to Qualitative Questions

## How have underwriting criteria changed since 2002 ?

- Initially, banks' policies mitigated increased risk in loan/borrower types and some underwriting factors with tighter conditions for other factors and/or risk based pricing
  - Max DTI and Min credit scores more restrictive for higher LTV/CLTV loans; some banks consider months of PITI reserve in tiering and pricing
  - LTV/CLTV and/or Min credit scores more restrictive as loan size increases and for nonowner occupied or low doc borrowers; Neg Am cap may be lower for loans with simultaneous seconds
- Some relaxation of policy standards with new entrants and growth in product occurred in 2004
  - Both CFC and WaMu relaxed LTV/CLTV constraints late last year.
  - Citi reduced Min. credit scores and increased loan size; NCC lowered Min. credit scores;
     WFC relaxed max. CLTV, min credit scores and loan size over time
- 2005 has seen proposal and/or adoption of some more restrictive policies by some players
  - WaMu has increased Min credit scores and is planning to lower Neg Am caps and implement more risk based pricing options by year-end.
  - BAC made DTI more restrictive on some I/O products in 2005.

## Describe qualification procedures for P/Os

#### **Typical Qualification Terms**

Index: Libor or MTA or COFI

Margin: 2.125% to 2.375%

Qualifying Rate: Greater of Fully Indexed Rate or 4.5% to 6.5%

Periodic Caps: 7.5% payment increase cap per year

Life Cap: 9.95%

Qualifying LTV < 70%, Max DTI =45%

Ratios\*: LTV=70-95% max DTI =45% when Credit Score > 720

LTV=70-95% max DTI =40% when Credit Score = 660-719

\*Only BAC provided detail on Qualifying Ratios

(See Appendix for more detailed matrices on qualifying criteria for P/Os & I/Os by institution)

## Explain Underwriting Differences between Held and Securitized

- WaMu, CFC & WFC generally follow same basic underwriting guidelines for loans Held on Balance Sheet or Securitized
- Nat. City's nonprime affiliate (FFFC) has more conservative standards for portfolio loans
  - Combinations of lower max loan amount, higher min credit score and lower max LTV/CLTV; FFFC does not offer P/O ARMs
  - No I/O & P/O production is originated for portfolio as of September 2005
- BAC directs certain special characteristic products to portfolio and securitizes all others
  - Portfolio products include lot loans, Associate Loans (below market pricing), CRE Super Jumbo Balance Sheet Initiative Loans, Mortgage Credit Accommodation Loans and Relationship Approval Program Loans
- Citi generally originates fixed rate products for sale and ARM products for portfolio
  - No ARM products originated solely for sale, certain ARM products may be sold because yields are insufficient for portfolio investment returns.

# Describe use of AVMs in collateral valuation process

- Four lenders require appraisals and do not rely on Automated Valuation Models (AVMs), on a stand alone-basis.
- AVMs generally appear to supplement, rather than supplant, appraisals and evaluations.
- AVMs are used to support the value conclusion within a reasonable tolerance of the original appraised value. AVMs are also used for fraud detection.
- The lenders all rely on a system of internal controls, which vary widely, to assess AVM accuracy.
- Some lenders use AVMs in lieu of an appraisal for conventional first mortgage programs meeting specific requirements. At least one lender uses an AVM for simultaneous 1st/2nd lien transactions up to a maximum CLTV of 95%.

## Describe the methodology used for stress testing NTMs

- Level of sophistication in stress test modeling differed widely
  - New products are untested in stressed environments
- The better models were driven at both the loan level and the portfolio level (top-down and bottom-up) and included:
  - Covariance simulation
  - Monte Carlo simulation
  - Spreadsheet analysis
- Factors and parameters in stress tests
  - Common variables that are stressed include:
    - LTV, credit score, DTI, Employment level, Housing prices, etc.
  - Common levels of stress include:
    - 10% increase in LTV
    - 20 point reduction in credit score
    - 300 basis point increase in interest rates
    - Payment shock
    - Increases in unemployment levels
- All model results show that losses appear manageable

## Describe the risk base pricing methodology for NTMs

- For most lenders, pricing is substantially market driven.
  - Some lenders indicated that loans originated to be held in the portfolio were priced to yield a specific ROE.
- NTM loans to be held in the portfolio are priced to the same return standards as other mortgage products.
- Some lenders incorporate certain risk attributes into pricing the impact of that particular loan characteristic on secondary market execution when loans are sold.

# Provide samples of summary risk reports used by management

- Quality of management reports vary, correlated to size/significance of mortgage portfolio for each lender.
- Some lenders seem to have detailed data by product type, while others have mortgage reports that are not product specific.
- The best reporting systems:
  - Reported clearly on trends in LTV and CLTV by specific product type.
  - Reported trends in delinquency rates by LTV, by type of documentation, by credit score, loan size, occupancy, and purpose
  - Reported changes in underwriting practices
  - Reported macroeconomic in trade market (i.e. unemployment, bankruptcies, etc.)
  - CPRs by product type and product characteristics
- Reports did not provide any analysis or observations that may not be readily apparent from the data:
  - For example, additional risk layering trend not discussed

# Describe concentration limits by product type and geographic area

- Portfolio Limits:
  - Most lenders manage limits at portfolio level, by aggregated risk levels.
  - Limits generally driven by market and strategic factors. Limits may be adjusted with improving/worsening market conditions.
  - New products have explicit limits until risk and loss data can be collected over time.
- Geographic Limits
  - Few lenders have geographic limits; California exposure is largest exposure for most.
- Product Limits
  - Most lenders do not have limits by product type.
- Lenders actively managing portfolio concentrations through the secondary market and with credit derivatives.

## How do institutions determine whether NTMs are suitable for borrowers?

- Minimum qualifying DTI, LTV ratios and credit scores scores
- Minimum Disposable Income Policies (e.g., \$750/month for families of 3 or less)
- Automated & standardized approval processes based on borrower's ability to repay
- Short reset ARMs (that float monthly, semi-annually or annually) have 10 year I/O periods

# Explain how the origination process determines the suitability of products for applicants

	1				
Pay Option ARMs					
Institution	Qualifying Rate	LTV	Max CLTV	FICO	Maximum DTI
					45% - 1 unit primary res. & 2nd
Bank of America (1-3 Month "Many Options")	> of 4.25% or FI	95%	N/A - no 2nds		homes w. TLTV of 70% or less
Citimortgage/CMI - Doesn't originate	N/A	N/A	N/A	N/A	N/A
			90% w. 2day		
Countrywide	> of 4.25% or FI	90%	financing; 95% w/o	N/I	N/I
National City (First Franklin)	N/I	N/I	N/I		First Franklin uses a residual income test to qualify borrowers with DTIs between 50.50-55.49%. There are no other qualification requirements based on the applicant's FICO score, disposable income or NOO status.
National City Mortgage	N/I	N/I	N/I		38% at fully indexed rate. Min. loan size of \$200,000. No additional qualification requirements based on disposable income or NOO status.
National Home Equity	N/I	N/I	N/I	N/I	N/I
Institution	Qualifying Rate	LTV	Max CLTV	FICO	Maximum DTI
	> of 4.25% or start rate. NOO > of 4.5% or start rate.				A - 1 0 0 7 h
Washington Mutual - 1,3,6 & 12 month "MTA Option ARMs (80% LTV or less)	As of 8/05 qualifying rates were based on product regardless of LTV, FICO, or other risk characteristics. As of 9/05 36 & 60 month Option ARMs were qualified at their start rates - 5.75%		No response noted	See "Qualifying Rate" response	As of 8/05 borrowers were qualified using an "administratively" set rate to determine DTI ratios. However, in late 05 WAMU will begin using risk based pricing that considers LTV, FICO and other risk characteristics as elements in pricing adjustments. Also, the base qualifying rate will be the midpoint between the current FI rate & the 10-year ave. of the index & margin. The base qualifying rate will be higher because the index is currently below its 10 year ave
Option ARMs (80% LTV or less)	As of 8/05 qualifying rates were based on product regardless of LTV, FICO, or other risk characteristics. As of 9/05 36 & 60 month Option ARMs were qualified at their start rates - 5.75%	80%	noted	See "Qualifying Rate" response See "Qualifying	using an "administratively" set rate to determine DTI ratios. However, in late 05 WAMU will begin using risk based pricing that considers LTV, FICO and other risk characteristics as elements in pricing adjustments. Also, the base qualifying rate will be the midpoint between the current FI rate & the 10-year ave. of the index & margin. The base qualifying rate will be higher because the index is
	As of 8/05 qualifying rates were based on product regardless of LTV, FICO, or other risk characteristics. As of 9/05 36 & 60 month Option ARMs were qualified at their	80%		See "Qualifying Rate" response	using an "administratively" set rate to determine DTI ratios. However, in late 05 WAMU will begin using risk based pricing that considers LTV, FICO and other risk characteristics as elements in pricing adjustments. Also, the base qualifying rate will be the midpoint between the current FI rate & the 10-year ave. of the index & margin. The base qualifying rate will be higher because the index is

# Explain how the origination process determines the suitability of products for applicants

Interest Only					
Bank of America (6 mo IO ARM)	2% above start	95%	95%	680	45% w TLTV 70% or less. If TLTV >70% consider FICO, reserves & max DTI is lower (e.g., 36% w. credit score of 620-659)
Bank of America (10/1 IO LIBOR ARM)	Start rate		N/A no 2nds		45% w TLTV 70% or less. If TLTV >70% consider FICO, reserves & max DTI is lower (e.g., 36% w. credit score of 620-659)
Citimortgage/CMI (LTV 80.01-90%)	Loans are qualified on IO pymt. 1 mo, 6 mo, 1/1 LIBOR: FI rate; 3/1, 5/1, 7/1 10/1 LIBOR & T Bill: Initial Note Rate	90%			·
Citimortgage/CMI (LTV < 80%)	1 mo, 6 mo & 1/1 LIBOR: FI - 3/1, 5/1, 7/1, 10/1 LIBOR & T bill: Initial Note Rate	80%	100%	680	45%
Countrywide	N/I	N/I	N/I	N/I	N/I

# Explain how the origination process determines the suitability of products for applicants

Interest Only (contd.)					
Institution	Qualifying Rate	LTV	Max CLTV	FICO	Maximum DTI
National City (First Franklin)	N/I	N/I	N/I	See DTI response	First Franklin uses a residual income test to qualify borrowers with DTIs between 50.50-55.49%. There are no other qualification requirements based on the applicant's FICO score, disposable income or NOO status.
National City Martaga	N/I - see response for Option ARMs	N/I	N/I - see response for Option ARMs	N/I - See response for Option ARMs	NI - See response for Option ARMs
National City Mortgage National Home Equity	N/I	N/I	N/I	N/I	N/I
Washington Mutual (5/1, 7/1, 10/1 IO) *3/1 ARM w 3 years of IO - DTI 36%, start rate		Example provided. \$650k full doc, owner occupied, no cash out, outside "High Risk Areas" - 80%	Example provided. \$650k full doc, owner occupied, no cash out, outside "High Risk Areas" - 80%	680-700	No percentage given. "Ratios calculated using IO payment at the note rate." "Standard ratio guidelines apply."
+2% if LTV >70%  Wells Fargo (LTV ≥ 80%)	PC - note rate; PNC - note rate except 3/1 ARM	80%	PC - 95%; PNC - 100%; NP - 100%	PC - 680/NP 580	PC - 38% if manually underwritten. Higher DTI allowed w. automated decisioning tool that uses statistical analysis. PNC - 45% w. higher allowance w. decisioning tool; NP 50% if residual income test met.

# Restricted FR Appendix

## Product Description: I/O and P/O ARM Features

- The P/O ARM borrower is only obligated to make the minimum monthly payment (MMP) specified in the note.
- However, the monthly mortgage statement typically provides the borrower with three other payment options. They are based on a 30 or 40-year amortization, a 15-year amortization, and an interest only calculation.
- The payment cannot be less than the MMP, even if the other options might result in a lower payment.
- I/O products vary enormously in terms (frequency of interest rate changes, fixed or adjustable rate reset, etc). For example, a hybrid I/O 5/1 ARM can face both amortization and interest rate shock in year 5 because the interest payment has been fixed for five years

## Product Description: Minimum Monthly Payment

- At origination, a starter interest rate (usually 1% to 2%) is specified. The MMP for the first 12 payments is based on this starter rate plus a principal payment sufficient to amortize the loan over its remaining life.
- The MMP is reset at the end of 12 months to the note's fully indexed rate. However, most option ARMs have a payment adjustment cap that prevents the MMP from changing more than 7.5% from year to year.
- The loan is recast every five years or when it reaches its negative amortization cap. At these points, the MMP is computed at the current fully indexed rate plus a principal amount that will pay off the loan over its then remaining life. At these resets, the MMP is not subject to a cap on the size of the change.

## Product Description: Negative Amortization

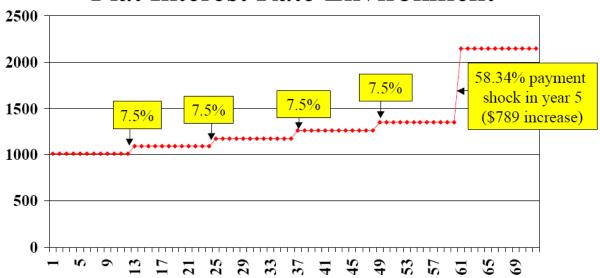
- Interest adjusts to the fully indexed rate on a monthly basis after one, three, or six months from origination.
- Interest accrues at the fully indexed rate. However, that rate may be subject to a lifetime cap.
- In the first year, MMP is "teased", but the interest obligation is not, so if MMP is chosen, the loan will almost always negatively amortize during its first year.
- The MMP's cap on changes in the size of the payment will typically keep it from reflecting a fully indexed rate during the initial years. As a result, if the borrower chooses the MMP, negative amortization can continue till a five-year recast or neg-am cap is reached. Neg Am may be magnified in a rising interest rate environment and result in accelerating Neg Am trigger.
- At recast, the borrower can face a significant payment increase.

## Product Description: Risks Unique to P/Os

- The primary additional risk with P/O is the payment increase the borrower faces when the MMP changes at a five-year recast or earlier if a neg-am cap is reached.
- Negative amortization can also expose the lender to greater losses/default probabilities because of less equity.
- The drivers of payment shock and negative amortization are:
  - The start rate (lower, more risk)
  - The index underlying the note (the more volatile, the more risk)
  - The Neg-AM cap (higher risk to Neg Am, but delays payment shock)
  - Level and extent of interest rates changes (increases in underlying index)
  - Margin (higher, higher risk of Neg Am)
- Most option ARMs are tied to a 12 month moving average of monthly 1year CMT rates. This index is more volatile than a COFI index, but much less so than a 1 month LIBOR rate.

## Payment Shock Example

## Option ARM Borrower Payment Shock Example Flat Interest Rate Environment



Assumptions: Constant use of minimum payment option, \$315,000 loan, 1% start rate for payment, fully indexed accrual rate, and no changes in interest rates.

## Stress Testing Survey Responses

#### **Stress Testing Methodologies used:**

#### More advanced / customized

- Portfolio segmented by product type
- Loan level default and severity risk models
- Uses both Portfolio / Loan variables (CLTV, credit score scores, DTI) and Economic events (rising or declining interest rates, declining housing values, equity drawdowns).
- Scenario Analysis, Covariance Simulation, Monte Carlo Simulation, Historical simulation
- OFHEO based stress testing methodology and assumptions
- Loan Performance<sup>®</sup> forecasting model

#### Less advanced / customized

- Portfolio level stressing with no segmentation
- Only uses Portfolio / Loan variables
- Stress testing uses already existing models designed for credit loss forecasting which may not capture tail events from economic occurrences
- Selective products (not comprehensive set) are stress tested

Citi, Nat City, WaMu

Countrywide

Wells, BAC

## Risk Based Pricing Survey Responses

#### Risk Based Pricing Methodologies used:

#### More advanced / customized

- Loan Performance® forecasting model – estimates the risk of a loan relative to a benchmark loan (recent – June, 2005)
- Risk based pricing methodology applies to all products, regardless of destined for sale or the portfolio.
- Proprietary models which include "loss and prepay algorithms and risk based capital allocation. Also uses competitive analysis, portfolio distribution targets, sales perspective."
- Credit risk rank ordering based on LTV and credit score.

#### Less advanced / customized

- No pricing difference from other products – "same return standards as other products."
- Risk based "pricing adjusters" based on "investor surveys, competitive analysis and understanding agency rate models."
- Affordability products are slated to be placed for sale to the 2° market and prices are based on "market conditions."

WaMu

Wells, Nat. City

Citi, BAC, Countrywide