

# Mortgage Servicing Rights: The Right Time to Acquire

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# Table of Contents

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1. Summary of Acquisition Opportunity	3
2. MSR Market Update	4
3. New Loan Production Profile	9
4. PCI Return Analysis	12
5. Other Considerations	19

# Summary of Acquisition Opportunity

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- Create an annuity income stream with a stable 5 year time horizon
- Own an asset that generates positive operating cash from day one
- Take advantage of acquisition prices that are well below economic values
- Minimize the risk of rising operating costs with new production underwritten to high credit quality standards
- Counterparty risk more easily controlled through the flexibility to be selective
- Base Case Scenario:
  - Achieve an estimated gross operating margin of approximately **75%**
  - Under 5 year acquisition strategy, achieve an estimated after-tax IRR of **23.9%**

# MSR Market Update

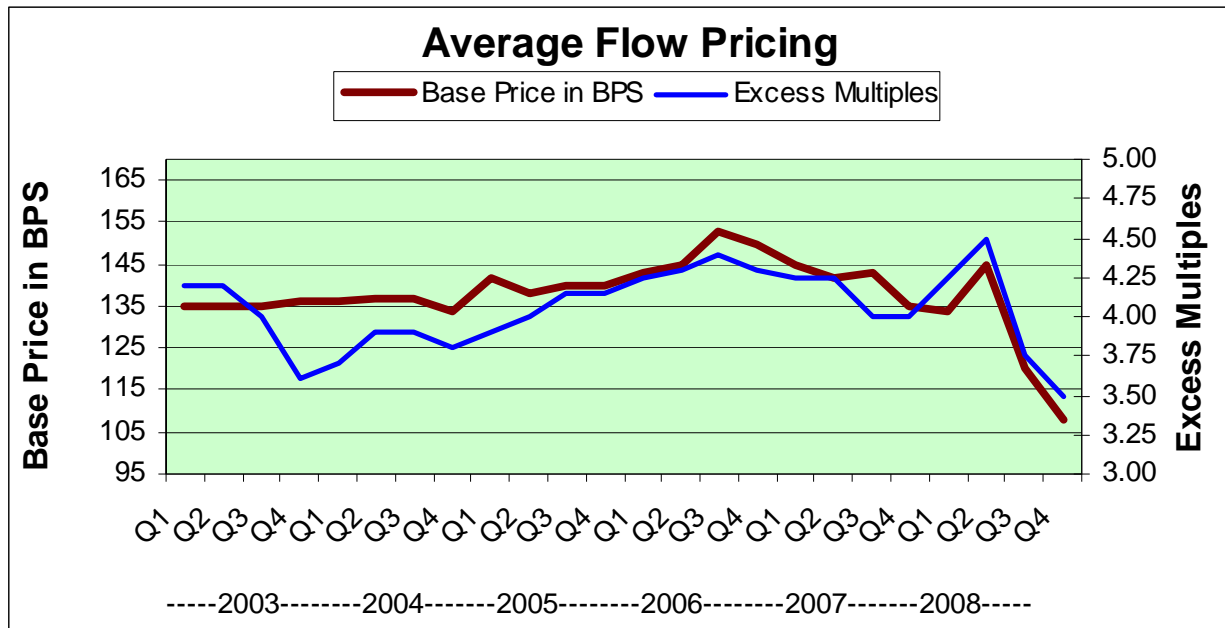
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**Historical Market Prices: Co-Issue/Forward Bulk  
MSR Price Deterioration  
Historical Prepayment Speeds: FNMA  
Market vs Economic Value Disparity**

# MSR Market Update

## Historical Market Prices ~ Co-Issue/Forward Bulk

- Pricing for new, par-rate base servicing was relatively stable from 2003-2007 with an average price of 140bps. (Prices below are approximate, based on a wide range of production profiles)
- Excess servicing multiples were more volatile during the same time period, ranging from a low of 3.6:1 to a high of 4.4:1.
- Both base and excess prices plunged sharply in the last two quarters of 2008. By December 2008 base values declined nearly 23% to near a 1.08% while excess multiples had fallen close to 16% to a 3.5:1 multiple.



# MSR Market Update

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## MSR Price Deterioration

Values have continued to decline in the first two months of 2009. Overall base MSRs that traded between a 5.5 and 5.75 multiple six months ago are now priced between a 3.25 and 4 multiple in 1<sup>st</sup> Qtr 2009. This represents a 35% to 40% overall price drop from mid 2008. Over the same time frame, par interest rates have dropped approximately 150bps, from a range of 6.25% to 6.50% to 4.75% to 5.25%.

Factors contributing to this price deterioration include:

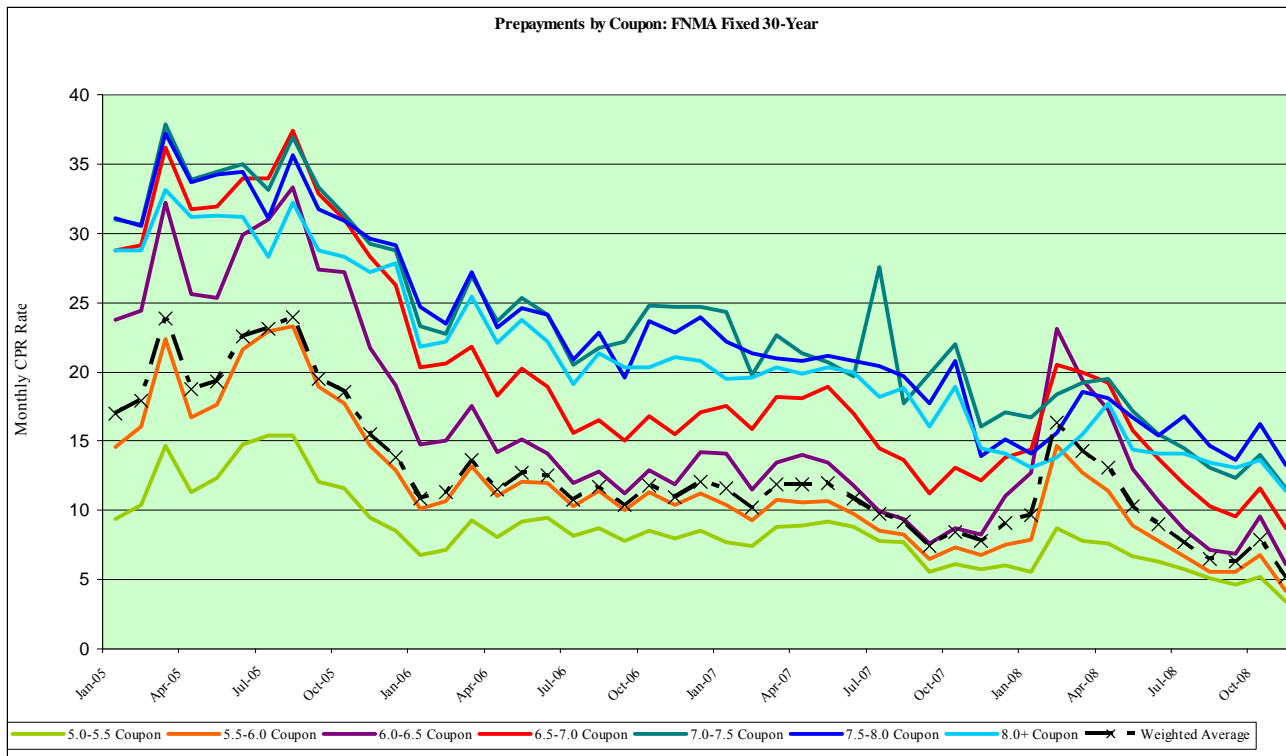
- Increased costs to service from legacy portfolios
- Internal competition for precious capital
- Lack of liquidity as the number of buyers have declined
- Uncertainty regarding new government legislation
- Counterparty risk uncertainty
- Volatility in credit markets

# MSR Market Update

## Historical Prepayment Speeds: FNMA

Historically, prepayment speeds have been the biggest driver of MSR pricing models. The higher the CPR, the shorter the life of the revenue stream.

According to CPR & CDR Technologies, Inc., FNMA 30yr prepayment speeds across all coupons have slowed since a brief spike at the beginning of 2008. The weighted average monthly CPR was over 16% in February 2008, this number fell to just over 5% in November 2008.



Source: CPR & CDR Technologies, Inc.

# MSR Market Update

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## Market vs Economic Value Disparity

Despite current market prices, the economic value of newly originated mortgage servicing rights is even stronger today due to:

- Historically low interest rates and related prepayment risk
- Imbalance between supply and demand for servicing rights
- Lower expectations of default on new production from higher credit standards reduces the risk of operational shocks and costs of servicing
- Transaction costs to the borrower today are higher than 12 months ago

# **New Production Profile**

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**Lower Default Risk  
Reduced Prepayment Risk  
Purchase & Refi Applications**

# New Production Profile

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## Lower Default Risk Profile with new originations

FNMA and FHLMC have been tightening credit guidelines over the last 18 months in an effort to reduce default risk. Some changes have been:

- The elimination of Reduced Documentation focusing on Full Documentation
- Lower LTVs driven by the GSEs and partially by a reduced ability to get MI >90.0% LTV
- Increased risk based pricing that more appropriately prices LTV versus FICO parameters
- Elimination of weaker credit programs like Fannie Mae Expanded Approval III and a reduction in MyCommunity max LTV
- No GSE portfolio capacity

## Reduced Prepayment Risk

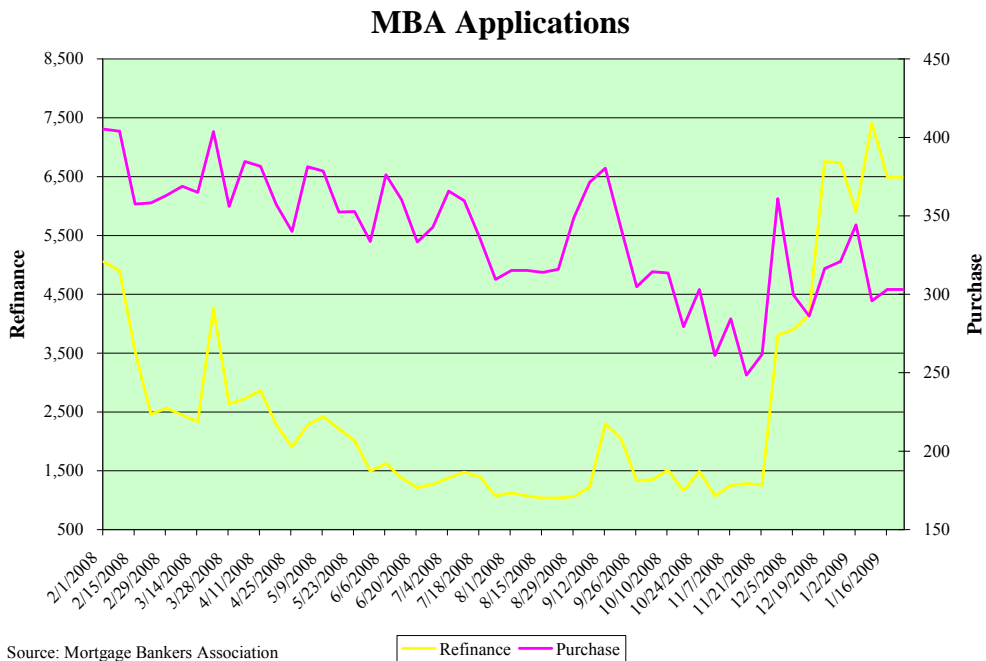
Prepayment risk is fundamentally being changed by several factors:

- Historically low interest rate environment
- Larger down payment requirements and credit standards
- Increased closing costs to the borrower due to MBS price compression and higher loan level pricing adjustors
- A significantly reduced wholesale presence in the origination market
- The demise of over 300 lending entities nationwide
- Difficulty in obtaining warehouse lines

# New Production Profile

## Purchase and Refinance Applications

MBA applications for purchases have trended downward over the past year, while refinances have increased over the past three months. However, due to increasingly tight lending standards, PCI believes the refinance wave will be short-lived as only a portion of the borrowers who would benefit from new terms will qualify.



Based upon our conversations with numerous industry participants, only 30% to 40% of their existing MSR book is in a position to refinance. This can be attributed to the following:

- Stricter underwriting standards (FICO, LTV, Doc Type, etc.)
- Home price depreciation
- Deteriorating personal income, rising unemployment
- Absence of affordability/creative financing products

Of the population currently in a position to refinance, our sources indicate approximately a 60% pull-through rate.

# PCI Return Analysis

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**MSR Return Profile**  
**Modeling Assumptions**  
**5yr Returns: 5yr Acquisition Strategy, \$1B/Quarter**

# PCI Return Analysis

## Mortgage Servicing Rights Investment Returns

Beginning Purchase Price @ 1.00%	Sales Price > Estimated Market Value		Sales Price = Estimated Market Value		Sales Price < Estimated Market Value	
	Scenario 1	Scenario 2	Scenario 3	Scenario 4 (Base Case)	Scenario 5	Scenario 6
Acquisition Price	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Fair Value - Beginning	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
Quarterly Fair Value Change	-0.015%	-0.015%	-0.015%	-0.015%	-0.015%	-0.015%
Acquisition Price Incremental Yearly Increase (Capped at Capitalization Rate)	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%
Sale Price Multiple (of 5th yr Fair Value) <sup>1</sup>	110%	110%	100%	100%	90%	90%
Exit Value as a % of UPB	1.16%	1.16%	1.06%	1.06%	0.95%	0.95%
Cost of Debt	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
Interest Rate earned on Cash	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Minimum Cash Balance	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Max Debt % of Fair Value	50%	60%	50%	60%	50%	60%
Tax Rate	40%	40%	40%	40%	40%	40%
Annual Return after Tax	23.50%	28.90%	19.30%	23.90%	14.80%	18.20%

Beginning Purchase Price @ .95%	Sales Price > Estimated Market Value		Sales Price > Estimated Market Value		Sales Price > Estimated Market Value	
	Scenario 7	Scenario 8	Scenario 9	Scenario 10	Scenario 11	Scenario 12
Acquisition Price	0.95%	0.95%	0.95%	0.95%	0.95%	0.95%
Fair Value - Beginning	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
Quarterly Fair Value Change	-0.015%	-0.015%	-0.015%	-0.015%	-0.015%	-0.015%
Acquisition Price Incremental Yearly Increase (Capped at Capitalization Rate)	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%
Sale Price Multiple (of 5th yr Fair Value)	110%	110%	100%	100%	90%	90%
Exit Value as a % of UPB	1.16%	1.16%	1.06%	1.06%	0.95%	0.95%
Cost of Debt	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
Interest Rate earned on Cash	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Minimum Cash Balance	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Debt % of Fair Value	50%	60%	50%	60%	50%	60%
Tax Rate	40%	40%	40%	40%	40%	40%
Annual Return after Tax	27.70%	34.10%	23.50%	29.10%	18.90%	23.60%

<sup>1</sup>Exit Value does not include any expenses associated with liquidation of the MSR Asset

# PCI Return Analysis – Base Case Scenario

## Return Modeling Assumptions

PCI has modeled the opportunity to buy new servicing rights using the following assumptions:

- All product is assumed to be FNMA MBS/FHLMC PC Fixed 30yr, current-rate, new production with 25bps of base servicing fees only.
- Purchase price in Year 1 is 100bps.
- Ongoing quarterly acquisitions of \$1B for 5 years. The purchase price for acquisitions after Year 1 was increased by 5bps per year to reflect the eventual convergence of market vs economic value.
- Fair Market Value = 120bps
- Decline in Market Value = 1.5bps/quarter
- Rate Environment = Static
- Debt/Equity % was capped at 60/40 of fair market value net of positive operating earnings reinvested to reduce debt
- 8% CPR (lifetime runoff rate)
- Cost to service = \$70 (additional costs added for foreclosed loans)
- Average balance at purchase = \$225,000
- Cost of debt = 5.50%
- Earnings rate of cash balance = 2.50%
- Tax rate = 40%
- Hedging Costs are NOT included
- Accounting Methodology = Fair Value

PCI believes these to be conservative assumptions and they can be altered upon request.

# PCI Return Analysis – Base Case Scenario

## Pro Forma Income Statement: Quarterly \$1 Billion Acquisitions

<u>Income Statement</u>		Year 1	Year 2	Year 3	Year 4	Year 5
<b><u>Revenues</u></b>						
Servicing Revenue		7,446,786	19,102,545	29,856,332	39,607,104	48,413,026
Interest Earned on Cash		25,000	25,000	25,000	25,000	31,250
<b>Total Revenue</b>		<b>7,471,786</b>	<b>19,127,545</b>	<b>29,881,332</b>	<b>39,632,104</b>	<b>48,444,276</b>
<b><u>Expenses</u></b>						
Servicing Expense		(927,710)	(2,653,208)	(4,355,721)	(5,934,742)	(7,403,971)
Borrowing Cost		(910,640)	(2,294,319)	(3,482,694)	(4,492,902)	(5,353,066)
<b>Total Expenses</b>		<b>(1,838,350)</b>	<b>(4,947,527)</b>	<b>(7,838,415)</b>	<b>(10,427,644)</b>	<b>(12,757,037)</b>
<b>Operating Margin</b>		<b>5,633,436</b>	<b>14,180,018</b>	<b>22,042,917</b>	<b>29,204,460</b>	<b>35,687,239</b>
<b><u>Change in FMV</u></b>		<b>(2,599,524)</b>	<b>(8,319,672)</b>	<b>(14,106,134)</b>	<b>(19,281,316)</b>	<b>(23,937,698)</b>
<b>Net Income before Gain on Acquisition</b>		<b>3,033,911</b>	<b>5,860,346</b>	<b>7,936,783</b>	<b>9,923,144</b>	<b>11,749,541</b>
<b><u>Other Income</u></b>						
Unrealized Gain (Loss) on MSR Asset		8,000,000	6,000,000	4,000,000	2,000,000	-
Realized Gain (Loss) on MSR Asset						-
<b>Net Income (Before Taxes)</b>		<b>11,033,911</b>	<b>11,860,346</b>	<b>11,936,783</b>	<b>11,923,144</b>	<b>11,749,541</b>
Taxes		4,413,565	4,744,138	4,774,713	4,769,258	4,699,816
<b>Net Income (After Taxes)</b>		<b>6,620,347</b>	<b>7,116,207</b>	<b>7,162,070</b>	<b>7,153,887</b>	<b>7,049,725</b>

Purchase Price = 100bps +5bps/yr ♦ Debt Ratio = 60% ♦ Capitalization = 120bps ♦ Cost of Debt = 5.50% ♦ Earnings Rate = 2.50%

# PCI Return Analysis – Base Case Scenario

## Pro Forma Balance Sheet Statement: Quarterly \$1 Billion Acquisitions

<b>Balance Sheet</b>	<b>Year 0</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Assets</b>						
Cash	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Mortgage Servicing Rights (MSR)	-	45,400,476	85,080,803	118,974,669	147,693,353	-
Excess Cash		999,113	3,057,544	4,950,118	6,681,237	76,947,013
<b>Total Assets</b>	<b>5,000,000</b>	<b>47,399,589</b>	<b>89,138,348</b>	<b>124,924,787</b>	<b>155,374,591</b>	<b>77,947,013</b>
<b>Liabilities</b>						
Loan Payable						
<b>Total Liabilities</b>	<b>-</b>	<b>26,535,112</b>	<b>50,343,308</b>	<b>70,679,628</b>	<b>87,910,838</b>	<b>-</b>
<b>Equity</b>						
Beginning Equity	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Net Income	-	1,851,046	1,880,845	1,889,877	1,882,646	1,848,644
Retained Earnings		4,769,301	11,855,710	19,008,747	26,169,864	33,253,591
Total Contributions		9,244,131	20,058,485	28,346,536	34,411,242	37,844,778
<b>Total Equity</b>	<b>5,000,000</b>	<b>20,864,478</b>	<b>38,795,039</b>	<b>54,245,160</b>	<b>67,463,753</b>	<b>77,947,013</b>
<b>Total Liabilities + Equity</b>	<b>5,000,000</b>	<b>47,399,589</b>	<b>89,138,348</b>	<b>124,924,787</b>	<b>155,374,591</b>	<b>77,947,013</b>

Purchase Price = 100bps +5bps/yr ♦ Debt Ratio = 60% ♦ Capitalization = 120bps ♦ Cost of Debt = 5.50% ♦ Earnings Rate = 2.50%

# PCI Return Analysis – Base Case Scenario

## Pro Forma Cash Flow Statement: Quarterly \$1 Billion Acquisitions

### Statement of Cash Flows

	12 Months Ended Year 0	12 Months Ended Year 1	12 Months Ended Year 2	12 Months Ended Year 3	12 Months Ended Year 4	12 Months Ended Year 5
<b>Operating Cash Flow</b>						
Net Income	5,000,000	6,620,347	7,116,207	7,162,070	7,153,887	7,049,725
Change in FMV	-	2,599,524	8,319,672	14,106,134	19,281,316	23,937,698
Unrealized (Gain) Loss on MSR Investment	-	(8,000,000)	(6,000,000)	(4,000,000)	(2,000,000)	-
Realized (Gain) Loss on MSR Investment	-	-	-	-	-	-
<b>Total Cash Flow from Operations</b>	<b>5,000,000</b>	<b>1,219,871</b>	<b>9,435,880</b>	<b>17,268,204</b>	<b>24,435,202</b>	<b>30,987,423</b>
<b>Investing Cash Flow</b>						
Purchase of MSR Asset	-	(40,000,000)	(42,000,000)	(44,000,000)	(46,000,000)	(48,000,000)
Sale of MSR Asset	-	-	-	-	-	171,755,655
<b>Total Cash Flow from Investment</b>	<b>-</b>	<b>(40,000,000)</b>	<b>(42,000,000)</b>	<b>(44,000,000)</b>	<b>(46,000,000)</b>	<b>123,755,655</b>
<b>Financing Cash Flow</b>						
Debt Financing	-	26,535,112	23,808,197	20,336,319	17,231,211	15,157,079
Equity Financing	-	9,244,131	10,814,354	8,288,051	6,064,706	3,433,536
Debt Repayment	-	-	-	-	-	(103,067,917)
<b>Total Cash Flow From Financing</b>	<b>-</b>	<b>35,779,242</b>	<b>34,622,551</b>	<b>28,624,370</b>	<b>23,295,917</b>	<b>(84,477,302)</b>
<b>Net Cash Flow</b>	<b>5,000,000</b>	<b>(3,000,887)</b>	<b>2,058,431</b>	<b>1,892,574</b>	<b>1,731,119</b>	<b>70,265,776</b>
<b>Change in Cash &amp; Excess Cash</b>	<b>5,000,000</b>	<b>(3,000,887)</b>	<b>2,058,431</b>	<b>1,892,574</b>	<b>1,731,119</b>	<b>70,265,776</b>

Purchase Price = 100bps +5bps/yr ♦ Debt Ratio = 60% ♦ Capitalization = 120bps ♦ Cost of Debt = 5.50% ♦ Earnings Rate = 2.50%

# PCI Return Analysis – Base Case Scenario

## Pro Forma Financial Ratios: Quarterly \$1 Billion Acquisitions

Ratios	Year 1	Year 2	Year 3	Year 4	Year 5	Year 5
					Beg. Q4	
Gross Margin %	75.4%	74.1%	73.8%	73.7%		73.7%
Net Margin %	190.5%	37.2%	24.0%	18.1%		14.6%
Debt/Equity	127.2%	129.8%	130.3%	130.3%	130.1%	0%
Debt/ Assets	56.0%	56.5%	56.6%	56.6%	56.5%	0%
Debt to MSR Market Value	58.4%	59.2%	59.4%	59.5%	59.6%	0%

Purchase Price = 100bps +5bps/yr ♦ Debt Ratio = 60% ♦ Capitalization = 120bps ♦ Cost of Debt = 5.50% ♦ Earnings Rate = 2.50%

# Other Considerations

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**Risks to Assumptions and Services  
Barriers to Entry**

# Other Considerations

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## Risks to Assumptions and Servicer

Rising unemployment and declines in property values

- May cause increased operating costs through delinquency, but not loss from default
- Current credit guidelines on new production should minimize this risk

Representations and Warranties made by the servicer

- Origination and servicing reps and warrants typically transfer to new FNMA/FHLMC servicer
- The GSE's have been stingy in allowing a bifurcation of these reps
- Risk is typically offset through indemnity by the counter party in the Pooling and Servicing Agreement

Illiquidity dissipates faster than economic return assumptions

- Model assumes that market vs economic disparity becomes neutral over 4 years

Changes in Fair Value

- The model shocks future fair value from 90% to 110% of the current estimate
- Hedging costs are not accounted for

Uncertainty Around New Legislation

- Foreclosure suspensions, cram-downs, required modification programs should have limited impact on new production

# Other Considerations

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## Barriers to Entry

### Knowledge, Logistics & Licensing

- PCI has a finger on the pulse of the entire industry. We can be a valuable partner by conveying our knowledge of this specialized asset.
- PCI is proactively searching for platforms available for sale and sub-servicing firms with which to partner for prospective new buyers.

### Volatility of the Asset

- Historically, servicing rights are volatile assets. They will continue to be in the future, but the current interest rate and underwriting environment provides for less negative convexity than we have seen in recent years.

### Accounting Implications

- PCI is uniquely poised to utilize our market knowledge to your benefit. We can assist you by fully outsourcing all FAS 156 reporting. Our hands-on trade information puts us in the best position to assess fair value.

### Competing Opportunities to Deploy Capital

- As with any investment decision, the asset needs to fit strategically within your organization's goals as well as garner an acceptable return. We are happy to adjust our analysis to facilitate your specific economics as well as discuss how MSR acquisitions could help achieve your mission.