

**MEMORANDUM**

**TO:** File No. S7-14-11

**FROM:** Jay Knight  
Special Counsel  
Office of Structured Finance  
Division of Corporation Finance  
U.S. Securities and Exchange Commission

**RE:** Meeting with Representatives of the Lighthouse Group

**DATE:** June 13, 2011

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On May 23, 2011, Jay Knight and David Beaning of the Division of Corporation Finance and Stanislava Nikolova and Eric Emre Carr of the Division of Risk, Strategy, and Financial Innovation met with Ryan Birtel and Max Anthony of the Lighthouse Group. The discussion included, among other things, the Commission's Proposed Rules for Credit Risk Retention. Handouts are attached to this memorandum.

Attachment



# Risk in Financial Markets

*A Presentation for the U.S. Securities and Exchange Commission*

Ryan Birtel  
Max Anthony

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- **Executive Summary**
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# Executive Summary

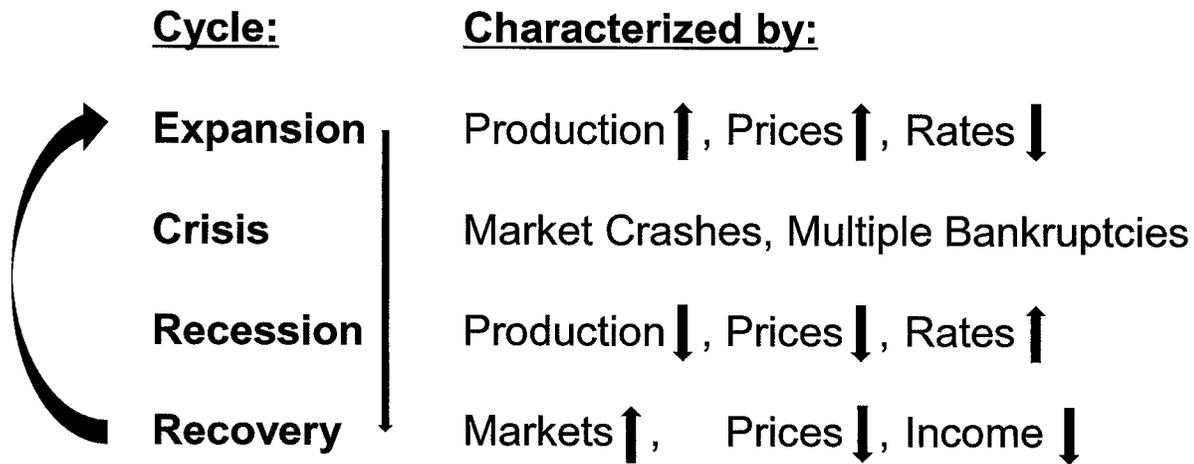
- **Must make the economic recovery sustainable**
- **Plan for a stable economic expansion through**
  - Stabilizing market prices
  - Incenting private markets to take risks they can manage
  - Protecting and charging private markets for risks they cannot manage
  - Reducing financial risks inherent in sensitive markets
- **Look to innovation that allows for the identification, isolation and transference of systemic financial risks**
- **Recognize systemic risk sharing through:**
  - Reduction of risk-weighted assets
  - Increasing Tier 1 & 2 capital ratios
  - **Risk retention exemption**
  - Lower assessment rates
  - Increased credit ratings

# Economy

## Economic Cycles- *Characteristics*

A simple model of economic cycles with noteworthy characterizations.

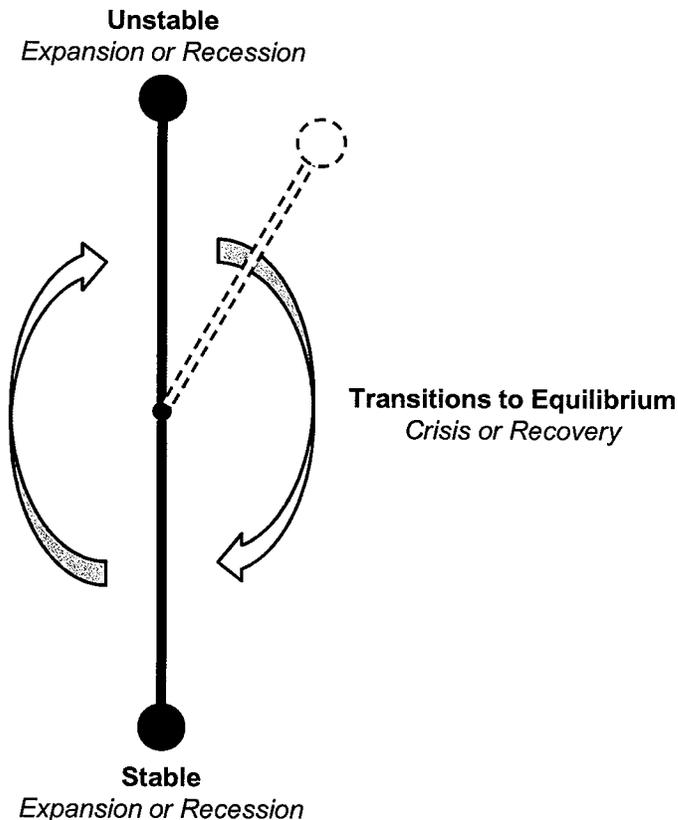
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# Economy

## Economic Equilibrium- *Stable vs. Unstable*

Complex, dynamic systems, such as the US and global economies, have cycles that can be characterized as either stable or unstable. Consider the pendulum analogy. Its range of motion takes it between two equilibrium points, one unstable (straight up), the other stable (straight down). System pressures will always push toward a stable equilibrium when shocked, and likewise will push away from an unstable equilibrium when shocked. Economic expansion and recession cycles can be either stable or unstable, the Great Depression being an example of the former and the early to mid- 2000's an example of the latter.



What stage is the US economy in?

Where is the momentum pushing?

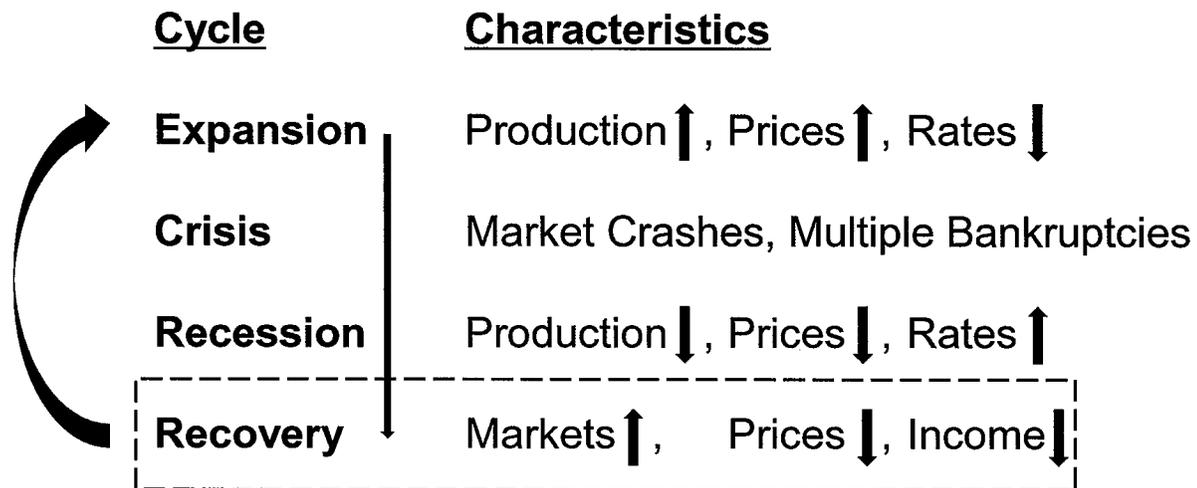
Which direction are the government and private market efforts pushing?

# Economy

## Economic Cycles- *Current State of Economy*

Our current economy is in a state of recovery but concerns over the legitimacy and duration remain strong. Government efforts to stave off a severe recession have worked as planned, however, what is the fundamental driving agent of the recovery? Have the issues that led to the instability of the recent expansion cycle actually been addressed or does the market simply believe they will be?

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# Economy

## Economic Cycles- *Role of Government*

As an administrator, it is the role of the government to study, understand and memorialize lessons learned during economic crises and subsequent recessions. Memorializing is achieved through education, legislation and regulation that identifies the problems and creates an environment that either prevents such problems from happening again or reduces the severity of future occurrences.

The Great Depression highlighted various shortcomings in the U.S. and global economic systems. In response to the stock market crash of 1929 and the subsequent impact on the housing markets the government passed legislation to:

- Curtail excessive risk taking by banking entities
- Maintain system liquidity through explicit federal guarantees of select assets (deposit, mortgages)

These measures, though not enough to break the economy out of a stable depression equilibrium (required WWII) or to prevent the most recent financial crisis, proved instrumental in preventing the most recent crisis and subsequent recession from spiraling into a similar depression.

What must be done to prevent:

- A relapse into another stock market crisis,
- A worsening of the current real estate market crisis, or
- A crisis in another financial market?

**What must be done to ensure the current economic recovery leads to a stable expansion period?**

# Risk

## Risk Management- *Crisis to Recession*

Less restrictive monetary policy, relative to that during the Great Depression, has made a clear difference in reducing the severity of the Great Recession, but at a cost of increasing the chances of crisis in other markets.

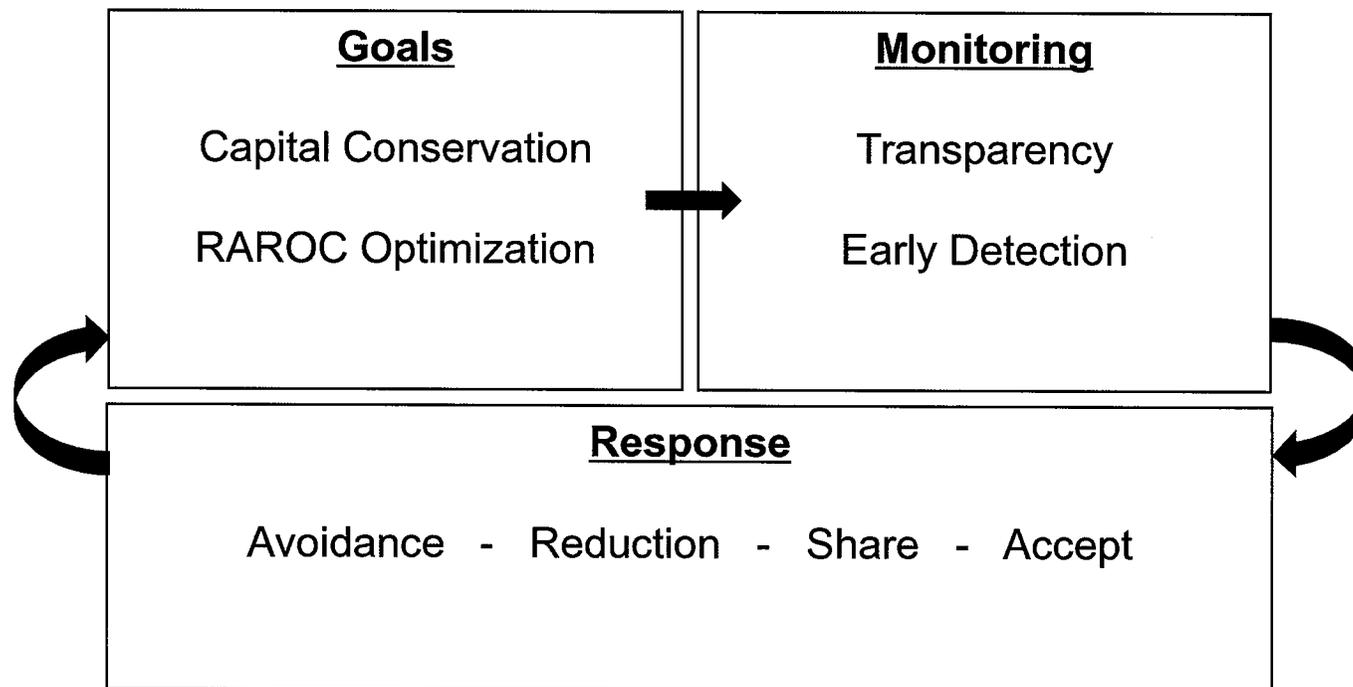
How is the government prepared to prevent another crisis, or reduce its severity?

	Great Depression	Great Recession	Next Crisis (or Recession)
<b>Start</b>	Stock Market Crash of 1929	Housing Market Crash of 2007	Housing Market Double Dip? Commodity Market Bubble? Rate Increases / Inflation ? Sovereign Defaults on Currency Swaps?
<b>Environment</b>	Brokerage Houses offering 90% advance rates on equities	Mortgage lenders offering +90% advance rates on real property	
<b>Effects</b>	Investors default on margin calls Brokerage houses fail Banks fail Insurance fails Debt deflation Loss of consumer confidence Additional debt defaults Diminished consumer spending Monetary restrictions Foreign trade collapsing agribusiness Spike in unemployment- 25%	Homeowners default on mortgages Brokerage houses fail Banks fail Insurance fails Debt deflation Loss of consumer confidence Additional debt defaults Diminished consumer spending <del>Monetary restrictions</del> <del>Foreign trade collapsing</del> <del>—agribusiness</del> Spike in unemployment- 10%	
<b>Actions</b>	NYSE capping client margin lending to 50% of securities' value Glass-Steagall Act, 1933 Securities Exchange Act of 1933, 1934 National Housing Act of 1934 Creation of FDIC & FHA in 1934 Creation of FHLB in 1934 Creation of FNMA in 1938	Economic Stimulus Act of 2008 (tax rebate) Emergency Economic Stabilization Act of 2008 (TARP) TAF & TALF in 2008 American Recovery and Reinvestment Act of 2009 (Stimulus) Federal Reserve key rate cuts and public debt purchases in 2008, 2009 Dodd-Frank Wall Street Reform and Consumer Protection Act, 2010	

# Risk

## Risk Management- *Essential Disciplines*

To address the root causes of past and current economic stress, it is necessary to understand the basic disciplines of financial risk management.



# Risk

## Risk Management- *Failures in Discipline*

The causes and severities of both the stock and housing market crashes can be identified as failures to execute on the basic concepts of financial risk management. Some examples of actions preceding the housing crisis are listed below.

It is debated how much the repeal of portions of the Glass-Steagall Act had in increasing the likelihood or severity of the housing crisis, but it is without debate that government guaranteed commercial banks were directly exposed to the activities they were not capitalized to engage in. Where there were two sets of risk managers after Glass-Steagall there was one after Gramm-Leach-Bliley.

An important principle of finance is that **only appreciating assets should be leveraged**. Hence, a **fractional reserve banking model requires price stability** to prevent the need for drastic and dilutive monetary policies to re-inflate the failed cash reserves that resulted from poor risk management discipline and/or policy.

**A lasting lesson from the housing crisis must be in the awareness of counterparty risk, i.e. “promise to pay” risk.** “**Credit Risk**” is the focus of much debate. How can it be truly **Reduced** and **Shared** without faltering a fragile economic recovery that could result from taking the alternative **Avoidance** (low LTVs) or **Acceptance** (large loss reserves) strategies?

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### Notable Actions:

Gramm-Leach-Bliley Act

Government Reserve Policy

Counterparty Defaults

### Failed Risk Management Discipline:

Transparency, Avoidance, Reduction

Transparency, Early Detection, Share, Reduction

Transparency, Early Detection, Avoidance, Reduction, Share, Accept

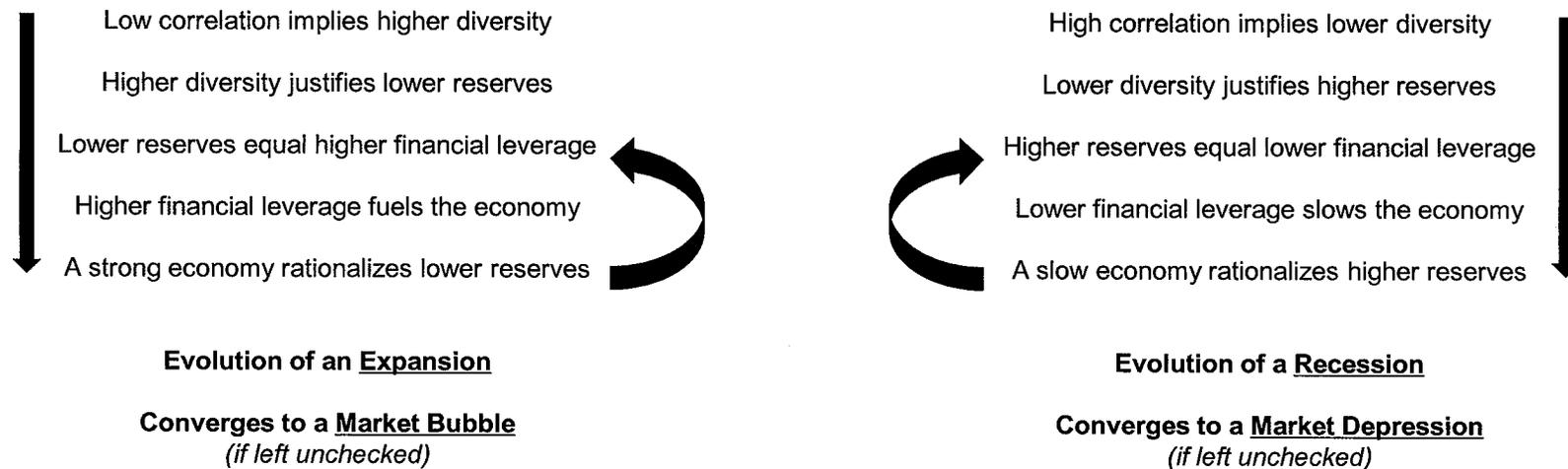
# Risk

## Risk Metrics- *Correlation & Diversity*

Modern credit portfolio management theory suggests that investment portfolios, and companies, with diversified sources of revenue ("Assets") should exhibit lower likelihoods of large scale losses.

This theory is quantified using a variety of mathematical methods for the purpose of determining loss reserve levels, credit ratings, relative value, etc.

Performance correlation between Assets is a key parameter input for the mathematical models, and represents the direct quantification of the 'diversity' concept. A higher performance correlation is indicative of a less diversified set of Assets, and a lower performance correlation is indicative of a more diversified set of Assets.



To prevent self reinforcing cycles from reaching extreme stages, there must be appropriate monitoring and response processes in place that can limit the likelihood of such an event occurring while also lower the severity should market momentum build to an economic breaking point.

*Hope for High Diversity, Plan for Low Diversity*

# Risk

## Risk Metrics- *Actual vs. Assumed*

Participation in the financial markets can be characterized by the extent a participant is “long” or “short” a market. Long participants have a view that their market is in or near an expansion phase and look to profit from increasing prices. Short participants have a view that their market is in or near a recession phase and look to profit from decreasing prices.

Advanced participants incorporate both views and look to profit from utilizing “long-short” strategies. The goal of a long-short strategy is to profit from the belief in either an expansion or recession market, but to limit downside risk by incorporating a strategy that will be profitable if the participant is wrong in its belief.

Such advanced strategies are used in many ways and are generally accepted as prudent methods for any financial participant to achieve the highest potential risk-adjusted returns. This is a style of financial risk management and utilized by virtually all major financial institutions, whether voluntarily or due to regulatory incentive.

The key to successfully executing a long-short strategy is to understand and predict the future performance correlation of the Assets involved. If the actual correlation differs from the assumed, when the strategy is executed, then the desired control on overall strategy volatility will not exist, leading to potentially catastrophic failures (Credit Derivatives, CDOs, AIG, etc).

Assets that exhibit performance correlation that changes over time (non-stationary) require a more refined risk management strategy.

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### New Risk Decomposition Methodology

Total Risk = Low Correlation Risks + High Correlation Risks  
= Specific Risks + Systemic Risks  
= Stationary Risks + Non-stationary Risk

# Risk

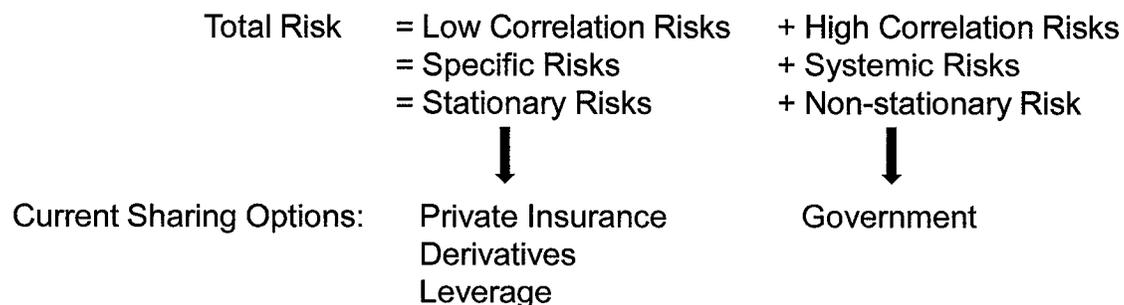
## Risk Sharing- *Reserves, Capital & Margin*

The traditional risk sharing processes within finance, i.e. insurance, derivatives, leverage, etc, rely on the ability to determine a static or dynamic capital commitment from any counterparty executing a promise to pay contract. This capital commitment represents, primarily, the credit risk of a specific counterparty and is computed such that in an event of default of that counterparty there exists sufficient funds to offset unwinding the transaction with zero-to-minimal losses to the non-defaulting counterparty.

These methods have proven to be adequate during stable economic expansions, but fail during systemic economic crisis, i.e. GSEs, private mortgage insurance, AIG, etc. In the most extreme events, these failures require the government to step in and absorb the shortfalls of the defaulting counterparties.

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### New Risk Decomposition Methodology

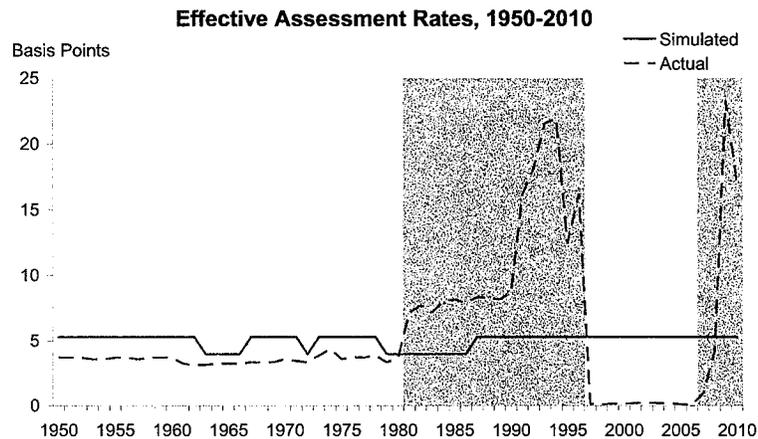


# Risk

## Risk Acceptance- Rates & Ratios<sup>1</sup>

Do the FDIC or FHA have any option other than to accept systemic risk and budget for extreme losses?

Chart 1

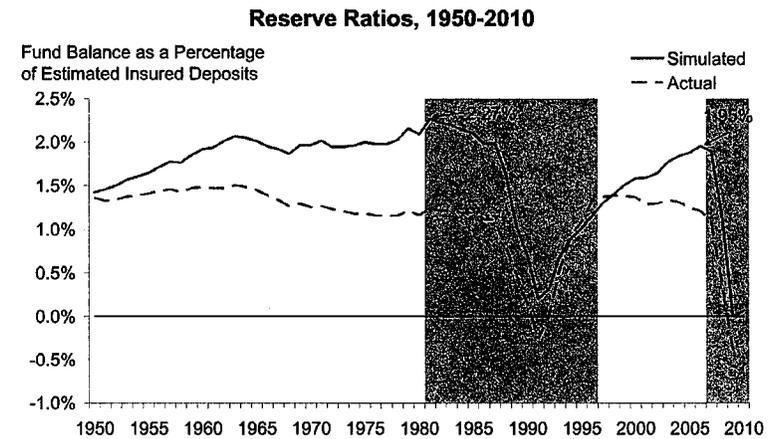


Source: FDIC, data through June 30, 2010.

Note: Effective assessment rate reduced by 25 percent when reserve ratio reaches 2 percent and 50 percent when reserve ratio reaches 2.5 percent, with 5.29 basis point average nominal assessment rate using new assessment base. Shaded areas denote periods of crisis and associated high assessment rates.

- Raising assessments during a stressed economic environment penalizes the healthiest banks for the practices of the failed banks.
- A flat assessment rate does not provide dynamic feedback to the banking community such that risky practices are penalized before escalating to bank failures.

Chart 2



Source: FDIC, data through June 30, 2010.

Note: Effective assessment rate reduced by 25 percent when reserve ratio reaches 2 percent and 50 percent when reserve ratio reaches 2.5 percent, with 5.29 basis point average nominal assessment rate using new assessment base. Shaded areas denote periods of crisis and associated high assessment rates.

- A reserve ratio calibrated to historically observed loss levels leaves no cushion for unforeseeable future shocks, UNLESS the major cause(s) of past losses have been identified and mitigated.
- Aggressive rebuilding of reserves DURING an economic shock limits availability of investable monies and can hinder breaking out of a downward economic trend.

<sup>1</sup> FDIC, 12 CFR Part 327. "Assessments, Large Bank Pricing; Final Rule", February 25, 2011

# Risk

## Risk Acceptance- Premiums & Limits<sup>1</sup>

Does the FHA have a more efficient option other than to accept or avoid systemic risk?

Table ES-1: Economic Value, Insurance-in-Force, and Endorsements For FY 2010 to FY 2017 (\$ Millions)

Fiscal Year	Economic Value	Insurance in Force	Volume of New Endorsements	Economic Value of Each New Endorsement	Investment Income
2010	-\$503	\$51,397	\$21,732	-\$772	-
2011	83	69,893	20,541	538	48
2012	704	88,542	21,885	594	28
2013	1,427	107,185	23,763	678	44
2014	2,308	127,325	27,786	806	75
2015	3,326	148,739	31,677	904	114
2016	4,475	171,607	35,924	988	162
2017	5,819	197,128	40,653	1,125	219

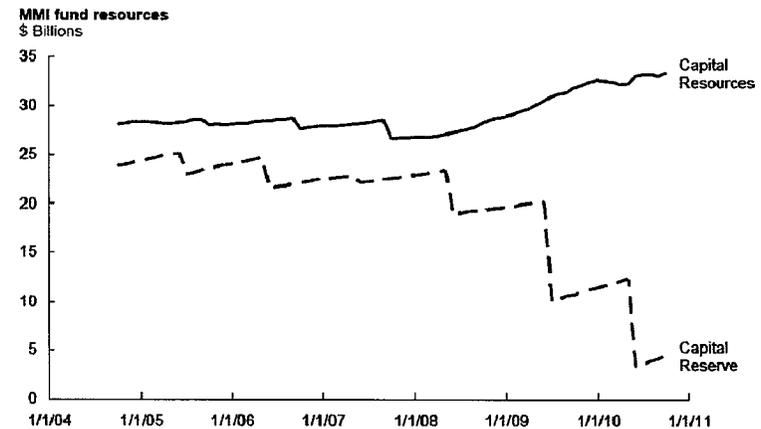
1. All values, except the volume of new endorsements, are expressed as of the end of the fiscal year.
2. Insurance-in-force is estimated as the sum of the maximum claim amounts of the remaining insured loans.
3. Projections provided by FHA. Endorsement amount is expected to decrease in FY 2010 and FY2011 due to the house price depreciation projection and the discontinuation of the temporary increase in the FHA loan limit.

- The performance of FHA's HECM portfolio (reverse mortgage insurance) illustrates a higher sensitivity to a **particular systemic risk** found throughout the agency's entire portfolio.
- In response, 2011 and later HECM borrowers will have their **principal limit factors reduced between 12% to 20%**, depending on age, as compared to 2009 and earlier levels.

<sup>1</sup> Reports from HUD:

"An Actuarial Analysis of FHA Home Equity Conversion Mortgage Loans in the Mutual Mortgage Insurance Fund Fiscal Year 2010", October 14, 2010, and "Annual Report to Congress Regarding the Financial Status of the FHA Mutual Mortgage Insurance Fund Fiscal Year 2010", November 15, 2010

Figure 10. MMI Fund Capital Resources and Capital Reserves Over Time



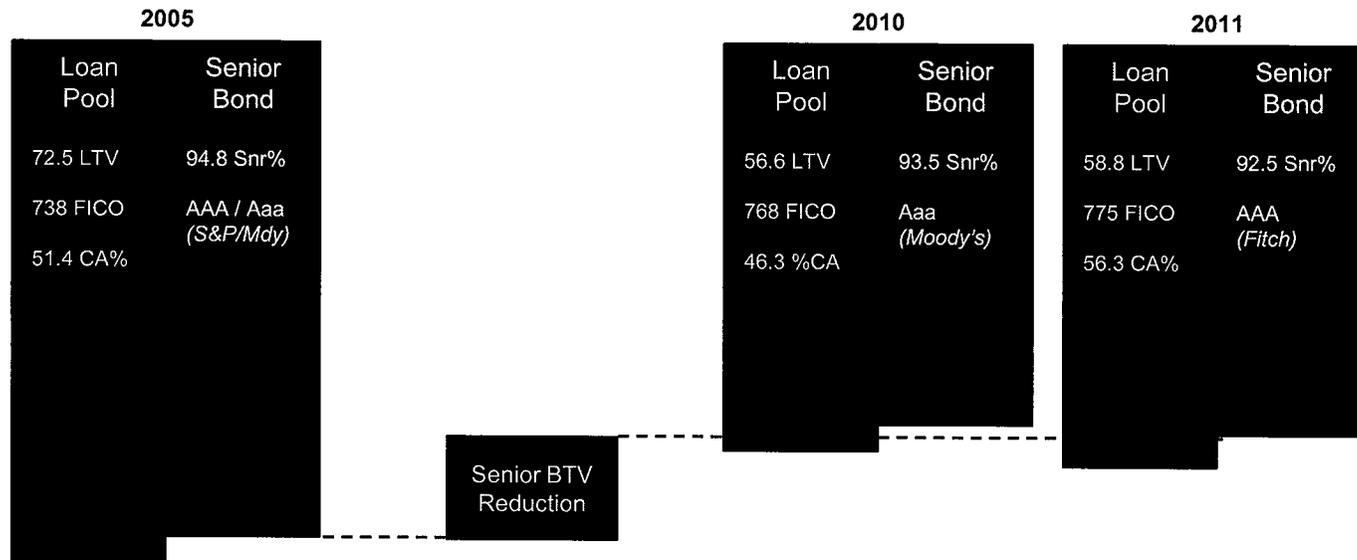
Source: U.S. Department of HUD/FHA.

- While reducing leverage on the HECM portfolio (avoidance), current product pricing has increased across all products to rebuild capital reserves (acceptance).
- Though FHA's capital reserves have proven sufficient to withstand the most recent economic crisis so far, there will be ramifications for future borrowers as **FHA balances between the extremes of acceptance and avoidance strategies**.

# Risk

## Risk Avoidance- *Bond to Value*

### The private residential mortgage securitization market pre- and post- financial crisis



- While no two mortgage portfolios are identical, a clear contrast can be found comparing the securitization treatment of private label mortgage backed loan pools during the pre- and post- financial crisis periods.
- These adjustable rate mortgage pools exhibit similar risk characteristics, i.e. borrower credit scores and geographic concentrations, except with respect to loan-to-value.
- As evidenced by the similar, but slightly lower senior percentages found in the 2010/2011 portfolios versus 2005, the statistical rating agencies are giving no benefit for either the 20% reduction in loan-to-value or the already drastic decrease in home values between the two periods.
- **Uncertainty around home values is leading to a near total avoidance of all real estate risk. Market recovery will require better tools to monitor and share that risk (stable) or a willingness to ignore it (unstable).**

# Risk

## Risk Avoidance- *Real Estate Market*

Of the many issues that define the Great Recession, the collapse of the private-label mortgage securitization business, the mass of delinquent mortgage borrowers, the glut of foreclosed homes and the drastic decline of home values, have had the most influence by leading consumers and institutions to avoid real estate risk.

Since reaching a twenty year low in 2006, the share of mortgage originations that are guaranteed by the U.S. government has risen from 42% to 94% in 2009 (and 2010)<sup>1</sup>. The once large network of private mortgage investment companies has been crippled by credit losses and the collapse of their sources of liquidity. Surviving mortgage investors, such as the commercial bank originators and mortgage REITs, rely almost exclusively on the government to insure the bulk of their investments, choosing to hold only the safest (highest FICO, lowest LTV) assets on their balance sheets unguaranteed.

Annual mortgage loan originations are currently about one-third the peak level in 2003 and about one-half the average annual levels over the last decade<sup>1</sup>, indicating both restrictions on credit and lack of consumer confidence in sustainable home equity.

The argument for sustainable home equity will not be made until home values have exhibited stability and begin to track popular upward trending econometric forecasts.

The return of private capital to the real estate market must be prefaced with actions by the government to regulate and memorialize specific lessons such that the remaining risks can be more accurately assessed and priced. Until then banks and other domestic corporations will continue to hold approximately \$2Trillion of capital that could otherwise be allocated.

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### New Risk Decomposition Methodology

$$\begin{array}{rcl} \text{Total Risk} & = & \text{Specific Risks} \quad + \quad \text{Systemic Risks} \\ \hline \text{Total Risk-Adjusted Price} & = & X\% * \$Y \quad + \quad (1-X)\% * \$Z \\ & = & ? \end{array}$$

where,  $X=0<?<1$ ,  $Y=?$  and  $Z=?$  until regulations are established

<sup>1</sup> BAML US Securitization Research, Conference Presentation. April 27, 2011

# Risk

## Risk Reduction- *Dodd-Frank & Regulation*

The goal of the Dodd-Frank Wall Street Reform and Consumer Protection Act is to reduce the level of risk within the financial markets. It draws attention to areas of past failure and requires effective interpretation, policy and enforcement to ensure the continuation of the current economic recovery and to create a stable expansion cycle afterwards.

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### Regulatory Focal Points

**Wall Street Transparency**

**Credit Risk Retention & QRM**

**Appraisal & Rating Standards**

### Correct Implementation:

Improved monitoring & response choices

Reduction, acceptance & sharing of risk

Improved monitoring & reduction of risk

### Incorrect Implementation:

New and repeat crisis

Private market avoidance & government acceptance

Repeat of crisis

# Regulation

## Wall Street Transparency- *Too Big To Fail Price*

The collapse of large financial institutions under the weight of complex, leveraged risks has driven a need for transparency within the financial markets, both at the corporate level and transaction level. It is the task of the Commodity Futures Trading Commission and Securities and Exchange Commission to regulate swap agreements, in consultation with the Federal Reserve.

Swap agreements are the preferred form of promise to pay contracts between institutions. This is evidenced by the \$583T<sup>1</sup> in derivative notional globally and \$231T<sup>2</sup> domestically. The related level of credit exposure funneled through only a handful of dealers and exchanges has created sufficient attention from regulators and lawmakers that efforts must begin to thoroughly understand the complexity and systemic nature of this risk.

- 
- Without a full understanding of the counterparty related risks in this market, how can financial market participants accurately price and use exchange-traded and over-the-counter derivatives?
  - How long will it take regulators and derivatives users to understand and price this risk? Does this delay place stress on a fragile economic recovery?
  - If existing methods of risk transfer are susceptible to failure and mispricing, what choices are available to the private financial market participants?
    - ✓ Cease engaging in business willingly (Unlikely)
    - ✓ Accept systemic risk and budget for losses (Only if Mandated to)
    - ✓ Accept systemic risk and not budget (Historically Observed)
    - ✓ **Innovate a New Method of Risk Sharing (Best Option)**

<sup>1</sup> \$231 Trillion Derivative Notional among banks as of 12/31/10. Office of the Comptroller of the Currency Administrator of National Banks, "OCC's Quarterly Report on Bank Trading and Derivatives Activities Fourth Quarter 2010," January 2011.

<sup>2</sup> \$583 Trillion Derivative Notional globally 6/30/10. Bank for International Settlements, "BIS Quarterly Review, March 2011"

# Regulation

## Credit Risk Retention & QRM- *Credit Risk*

The Dodd-Frank Act hopes to achieve a reduction in the credit risk of Asset-Backed Securities through an incentive-based plan following the concept of “skin in the game”. Through meeting stringent underwriting and origination standards (‘sweat equity’) a securitizer may receive an exemption from maintaining a direct capital investment in the assets to be securitized. In lieu of meeting stricter standards it is anticipated that the securitizer be required to cash fund up to 5% of the credit risk of the assets to be securitized.

- What should the standards of exemption be for the varying assets that can be securitized?
- What is the definition and measure of credit risk?

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### Generic Secured Lending Example:

Total Monies at Risk	= Loan Interest	+ Loan Principal
Total Risk	= Borrower “Promise to Pay” = Borrower Credit Risk	+ Collateral Value Risk + Collateral Value Risk
in Real Estate Market...	= Low Correlation Risks = Specific Risks = Stationary Risks	+ High Correlation Risks + Systemic Risks + Non-stationary Risk
Current Sharing Options:	Private Insurance Derivatives Leverage	Government Future Sharing Innovations

### Retention/QRM:

Strict borrower credit risk is comprised of loan interest plus any residual obligation after netting loan principal against collateral liquidation value. Loan interest risk fluctuates depending on the loan characteristics, i.e. maturity, prepay options, interest rate, etc. Collateral value risk has proved to be the risk least monitored and least prepared for.

**A loan that is insulated from collateral value risk, either through government guarantee or a future systemic risk sharing innovation, is a likely candidate for exclusion of the retention rules.**

# Regulation

## Appraisal & Rating Standards- *Hitting the Mark in Properties*

**Basic Example- The Correct Way**

Subject Property	Comp 1	Comp 2	Comp 3
Sale Date	4/10/2011	3/11/2011	2/9/2011
List Price	225,000		
Sale Price	267,500	212,500	180,000
Sqft	2,000	2,500	1,800
Sale Px/Sqft	107	106	100
BR	3	4	2
BA	2	3	2
Adjusted Value	204,000	207,500	207,500
Appraiser Valuation	207,500		

	Value	Adjustment Factors
Extra BR Value	7500	
Extra BA Value	5000	
Extra Sqft Value		107 106 100

List price is too high and property fails to appraise

**Basic Example- Hitting the Mark**

Subject Property	Comp 1	Comp 2	Comp 3
Sale Date	4/10/2011	3/11/2011	2/9/2011
List Price	225,000		
Sale Price	267,500	212,500	180,000
Sqft	2,000	2,500	1,800
Sale Px/Sqft	107	106	100
BR	3	4	2
BA	2	3	2
Adjusted Value	232,500	207,500	197,500
Appraiser Valuation	232,500		

	Value	Adjustment Factors
Extra BR Value	7500	
Extra BA Value	5000	
Extra Sqft Value	50	----- Subjective Assumption

Property appraises and a transaction ensues

- Comparable property #1 has a higher square footage than Subject Property and its sale price must be adjusted downward to match subject property's size
- Use of smaller squarefoot adjustment factor, i.e. \$50/sqft versus comparable's Sale Px / Sqft, leads to a higher Adjusted Comparable Value
- An appraiser's rule of thumb to use the most recent comparable in conjunction with point #2 creates a situation where a higher sale price for the Subject Property is justifiable. Appraiser may select comparable properties larger than the subject property to facilitate 'Hitting the Mark'.

**Basic Example- Evolution of an Increasing Price Market**

New Subject Property	Previous Subj Prop Comp 1	Previous Comp 2	Previous Comp 3
Sale Date	5/10/2011	11/3/2010	10/4/2010
List Price	195,450		
Sale Price	225,000	267,500	212,500
Sqft	1,800	2,000	2,500
Sale Px/Sqft	113	107	106
BR	2	3	4
BA	2	2	3
Adjusted Value	207,500	215,000	190,000
Appraiser Valuation	207,500		

	Value	Adjustment Factors
Extra BR Value	7500	
Extra BA Value	5000	
Extra Sqft Value	50	

Property appraises and a transaction ensues

- Although the new Subject Party exhibits the same characteristics as the original Comparable 3, its now justified by the appraiser for a list price 8.5% higher than Original Comparable #3.
- By using USPAP compliant methods an appraiser can move the market around at will and not be held accountable.

- Under Dodd-Frank, several federal agencies are tasked with evaluating appraisal methods.
- Fixing one simple flaw can reduce risk significantly.
- Valuation will always have subjective influence and requires continuous monitoring and response

# Regulation

## Appraisal & Rating Standards- Hitting the Mark in Securities

### RATING PROCESS- SIMPLIFIED

	SEMT 2011	SEMT 2010	BSARM 2005	
WaLTV	58.8	56.6	72.5	(%)
WaFICO	775	768	737	
WaBAL	978	932	462	(000's)
# Loans	303	255	3501	
% CA	56.3	46.3	51.4	(%)
Wa Homeowner Equity	686	716	175	(000's)
Wa Home Px	1,664	1,648	637	(000's)
Aaa Loan Principal Subordination	10.00	6.50	5.15	(%)
Non-Aaa RMBS balance	98	61	24	(000's)
Non-Aaa RMBS + Home Owner Equity	783	776	199	(000's)
<b>Aaa Home Px Subordination</b>			<b>31.2</b>	<b>(%)</b>

### SEMT 2011 MSA Exposure

Case-Shiller Index Key	Weighting <sup>1</sup>	Peak to Trough
PHXR AZ-Phoenix	1.08%	-54.46%
LXXR CA-Los Angeles	16.88%	-41.89%
SDXR CA-San Diego	11.25%	-42.31%
SFXR CA-San Francisco	28.14%	-46.10%
DNXR CO-Denver	2.83%	-14.31%
WDXR DC-Washington	0.65%	-33.91%
MIXR FL-Miami	0.48%	-48.72%
TPXR FL-Tampa	0.48%	-43.23%
ATXR GA-Atlanta	0.21%	-24.32%
CHXR IL-Chicago	1.21%	-29.00%
BOXR MA-Boston	4.94%	-20.07%
DEXR MI-Detroit	1.81%	-46.73%
MNXR MN-Minneapolis	0.25%	-36.52%
CRXR NC-Charlotte	0.32%	-16.01%
LVXR NV-Las Vegas	0.19%	-57.02%
NYXR NY-New York	9.55%	-21.74%
CEXR OH-Cleveland	0.00%	-21.56%
POXR OR-Portland	1.70%	-23.78%
DAXR TX-Dallas	1.89%	-11.24%
SEXR WA-Seattle	5.98%	-25.57%
CSXR Composite-10	0.00%	-33.52%
SPCS20R Composite-20	<b>10.15%</b>	<b>-32.57%</b>
<b>Total</b>	<b>100.00%</b>	<b>-36.48%</b>

- Under Dodd-Frank, the Securities and Exchange Commission is tasked with evaluating rating methods.

**Ratings = Pricing = Appraisal**

- Must insure SEC is sufficiently advised and that regulations for ratings are consistent with those for appraisal.

**Aaa HPx Subordination is comprised of:**  
**Historical Peak to Trough Home Px Drop + Fixed Loan Liquidation Costs**

#### From Rating Agency- SEMT 2011 Home Price Stress

Base	-6%	1Q12
Collapse	-36%	1Q13

Broker Commission	6.0%	% of Net HPx
Legal Fees	3.0%	% of Orig HPx
Maintenance	4.0%	% of Orig HPx
<b>Total Fixed Liquidation Costs</b>	<b>10.8%</b>	<b>% of Orig HPx</b>

Generic Assumptions often used in RMBS Valuation Exercises, referenced from Bank Research

Complete Collapse Loss on Liquidation **36.48%** % of Orig HPx

<sup>1</sup> LGI Approximation

Where does rating agency get this level of home price stress?

From the historical observation...

# Conclusion

- The global financial system is based on a promise to pay
- In its current form, the financial system behaves much like a pyramid scheme, where true risks are hidden and mispriced and where the consumers & taxpayers are the final recruits
- Only the private markets have the capability (*capacity + ability*) to make transparent the systemic risk within the financial system
- The private markets and government need to work together to reduce the amount of systemic risk within the financial system
- Private markets must pay for the level of systemic risk others take on their behalf (Short)
- Private markets must be incented to put capital to work such that they can afford to reduce and share systemic risks (Long)
- The government must create an environment that allows private markets to execute real long-short strategies as a way to move closer toward a stable economic expansion
- Optimum RAROC requires efficient and effective risk sharing processes
- Effective and efficient processes of sharing systemic risk must be counterparty risk-free and private market priced
- Capital adequacy standards and risk retention regulations must recognize such processes
- Does a counterparty risk-free and market priced process for sharing systemic risk exist?