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Sub-Prime – Background and Reserving Approaches

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Background

- A Sub-prime mortgage is a loan made to a borrower who does not qualify for the best or "prime" interest rates.
- Subprime lending expanded significantly in the mid-1990s and accelerating in the mid-2000s from:-
  - Innovations: technological advances in gathering and analyzing credit information and scoring;
  - Falling interest rates made the "American Dream" of home ownership realisable to more consumers, including those with less than perfect credit;
  - Mortgage lending moved outside the traditional financial institutions (i.e. banks and S&Ls) into "non-depository" financial entities like mortgage banks, and the mortgage broker rose to prominence as an intermediary to help consumers find favourable loan terms;
  - Homebuilders also became more involved in helping buyers obtain financing. These new players in the home mortgage sector brought new marketing and competition;
  - In addition, the continuing growth and development of the secondary mortgage market made funds readily available to lenders.

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Secondary market

- Historically, lenders held mortgages on their books until the loans were repaid; however, regulatory changes and other developments permitted lenders to sell mortgages more easily to financial intermediaries.
- The intermediaries buy the loans at a discount, and in turn pool mortgages and sell the cash flows to investors as structured securities.
- This process, known as "securitization", provides lenders with access to capital while allowing them to pass some or all of the risk of the subprime mortgage loans to investors.
- Subprime mortgage loans, with their higher interest rates, became particularly attractive.
- Securitization transactions vary in complexity depending on specific structural and legal considerations as well as on the type of asset that is being securitized.

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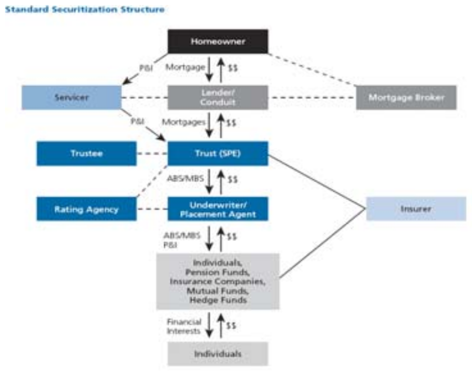

Market Size

- According to the Office of the Comptroller of the Currency, there was $10 trillion in outstanding mortgage debt at the end of 2006.
- Of this amount, subprime mortgage loans accounted for $1.4 trillion.
- Of the subprime amount, $1.08 trillion was securitized, leading one commentator to state: "…$1.08 trillion in securitized subprime loan exposure is *out there* somewhere, on the balance sheet of hedge funds, mutual funds, insurance companies, residential mortgage REITs, pension funds and God knows where else." (emphasis in original).

Sub-Prime – Market problems

- Delinquencies increased, especially adjustable-rate mortgages ("ARMs"), from 5% in mid-2005 to 15% in July 2007.
- Inability to meet higher monthly payment when the ARM reset.
- Borrowers were counting on refinancing at a lower rate before the rate on their ARM spiked, but because of rising interest rates were unable to do so;
- As housing prices softened, borrowers did not have enough equity in their homes to qualify for a refinanced mortgage;
- Local or regional economic downturns, such as increased unemployment in the auto industry;
- Borrowers did not fully understand the increased payment obligations under an ARM or other non-traditional payment programs (e.g. interest-only), or the additional payments required for taxes and insurance;
- Counting on a continuing increase in home prices, speculators entered the marketplace: typically these players purchase run-down and/or lower-priced homes, made marginal repairs, and attempt to sell the "rehabilitated" home at an inflated price – when the housing market turned and the homes could not be sold, the speculators, who do not occupy the homes, defaulted.

Market Problems Contd

- Questionable sales/lending practices and loosened underwriting standards led to the extension of credit to borrowers who were not qualified.
- As competition increased, lenders and brokers resorted to high pressure or even fraudulent sales practices including false or incomplete loan documentation, misrepresentations in the lending process, or inflated appraisals; the phrase "predatory lending" is often used to describe these and other abusive lending practices.
- Because of investor demand for MBS, lenders developed an "originate-to-distribute model," that caused a misalignment of incentives in the mortgage lending process.
- Because loans are packaged and sold on the secondary market, the players on the "front line" of the transaction, i.e. lenders and brokers, are either insulated from or farther removed from liability for default. For these players, the incentive to close the loan outweighs the incentive to ensure that the borrower would not default on the loan.

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Market problems…

- According to The Mortgage Lender Implode-O-Meter website, "276 major U.S. lenders have imploded since late 2006." A further 19 are on an ailing-watch list.
- According to the D&O Diary: 108 Sub-prime lawsuits, 68 filed in 2008.
- However, a view is that the main sub-prime circumstances are now nearing an end.
- Definitions of sub-prime – issue is the classification of claims from contagion in the credit market deriving from the subprime meltdown but with no ties to the subprime industry e.g. Northern Rock.

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Parties involved……

Shareholders	*Material misrepresentations and omissions in violation of the federal securities laws.*	American Home Mortgage, Countrywide Financial Corp., Fremont General Corporation, and IndyMac Bancorp, Inc
ERISA	*Employees of lenders have brought lawsuits alleging violations of the Employee Retirement Income Security Act of 1974 ("ERISA"). "radically altered the investment strategies of the Bond Funds," by, among other things, taking highly leveraged positions in mortgage-related financial derivatives.*	Prudential Retirement Insurance and Annuity Co. v. State Street Bank and Trust Co. and State Street Global Advisors, Inc
Derivative.	*filed against lenders for breach of fiduciary duty*	Countrywide Financial Corp
Borrower	*Facing foreclosure, the borrower/homeowner sues the lender alleging fraud, misrepresentations, lack of disclosure, or other improprieties in the lending process*	Ameriquest Capital Corp
Bankruptcy	*Claims wills be similar to shareholder derivative cases, and also can be expected to assert claims for preferential transfers or fraudulent transfers by insiders*	American Home Mortgage.
Regulatory Investigations/Actions/ Lawsuits.	*State and federal regulators have begun investigations into the practices of lenders. Lawsuits allege that defendant-lender did not have net worth or financial ability to close promised loans, and therefore violated Consumer laws and/or Mortgage Loan Acts.*	Fremont General, American Home Mortgage, New Century Financial Corp.
Securities and Exchange Commission.	*On September 19, 2007, the SEC's deputy director of enforcement confirmed that the SEC is investigating at least the following areas: • collateralized debt obligations ("CDOs"); • major Wall Street investment banks and their vulnerability to mortgage defaults; • the securities and operations divisions of Bear Stearns, Goldman Sachs Group, Lehman Brothers, Merrill Lynch, and Morgan Stanley; • evaluating regularly whether large securities firms are adhering to policies on the pricing of subprime mortgage debt; and • the role of credit rating agencies*	
Issuer Lawsuits.	*The agreement that places the mortgage into the pool typically requires the lender to buy back delinquent loans. Lenders either have refused to buy back such loans, or do not have the capital to do so because of bankruptcy or other liquidity problems.*	DLJ Mortgage Capital v. Sunset Direct Lending (S.D.N.Y.) an MBS issuer accuses Sunset of breach of contract because Sunset failed to repurchase loans that were 30 days or more delinquent within three months after they closed
Public Interest Lawsuits.	*The NAACP filed suit in Los Angeles federal court against 14 of the country's largest lenders, alleging "systematic, institutionalized racism in sub-prime home mortgage lending." A similar lawsuit was filed in Boston federal court by a putative class of borrowers against HSBC Finance*	HSBC Finance

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Typical Allegations…

- NYAG - filed lawsuit alleging collusion to inflate appraisal values of homes; violating federal and state laws; fraud, deception and unlawful conduct; Seek disgorgement, restitution equitable relief.
- NAACP – African Americans offered sub-prime mortgages even though qualified for prime loans; qualified for teaser loans but would not have qualified on the rates after teaser period.
- SCA – example class period : 1/8/2006 – 19/11/2007 harmed by material misrepresentations about the business – internal controls, risk management procedures, reserves for uncollectible loans = purchase shares at inflated prices. Losses from reduction in share price – s/hder derivative actions.

D&O Policy Wording

- Typically Each and Every and in the aggregate for the policy period.
- Limits typically include defence costs; but not usually a duty to defend.
- Retentions : (a) for non-indemnifiable losses (sometimes called Side A – typically applies in a bankruptcy/ insolvency situation or in a derivative action) (b) Security claims (Side C) and (c) side B – all other cases.
- Claims made (including any ERP, if any).

Perils covered

- Wrongful acts – actual or alleged breach of duty, neglect, error, misstatement, misleading statement, omission or act.
- Single retention for all claims alleging same wrongful acts.
- Loss definition – damages, settlements and judgements usually including claim expenses.

Exclusions

- Improper profit – if insured was not legally entitled may be excluded;
- Fraudulent acts – deliberate criminal acts excluded;
- Intentional violation of a statute; and
- Prior knowledge defences.

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Case reserves

- Discoverability aspects.
- Some benchmarking of historical SCA settlements - typically 1% to 2%.
- Establish ACRs where appropriate.

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Reserving Approaches

- We are faced with a situation where the underlying facts are unclear as to how insurance claims will evolve. This is likely to be the case for some time yet.
- Yet, we need reserving approaches for point estimates and also for ICA work.
- Here are two approaches to determine a point estimate:-
  - bottom up (exposure based); and
  - top down (market share).
- Accident vs underwriting year.

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Exposure based reserving approaches

- First step : broad sweep of policies potentially exposed – D&O, E&O, BBB, Other;
- Initially keep this as wide as possible;
- Second step : Grade policies using expert knowledge of underwriters, claims and legal eg no exposure through to very likely exposed;
- Take %age of each grade based on discussion = mean loss.

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Top down

- In a property event – market loss and market share available from various sources; then can model losses through cedant programmes;
- Can this be replicated for Sub-Prime?
  - Assume market losses of $x bn (multiple of S&L?);
  - Market shares available (brokers?) but can be out of date;
  - Assumption on frequency and severity required to model through insurance and reinsurance programmes;
- Compare with bottom-up results for consistency;
- Apply outwards reinsurance if any.

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Additional comments

- Exposure based approaches will evolve – a suggestion is that middle grades will move to top and bottom grades.
- Could set up a simple stochastic model with transition matrix between grades.
- Will need to allow for correlation between claims – jurisdiction etc.
- Useful way of confirming that reserving risk appropriate for the class of business.

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