

MULTIDIMENSIONALITY OF US FINANCIAL CRISIS OF 2007-2009

Anjala Kalsie^{1*}, Ashima Arora²

¹Assistant Professor, ²Research Scholar, Dept. Of Management Studies, University of Delhi, New Delhi, India.

***Corresponding Author:**

E-Mail: kalsieanjala@gmail.com

ABSTRACT

A financial crisis of 2007-09 which started in advanced nation such as United States intersected with the freezing financial markets of the world economies and the suspended global trade, thereby transmuting into a global recession of intense gravity. The objective of this paper is to analysis the causes leading to such intense financial crisis which has hit the world at large. The leading indicators of financial crisis were securitization of mortgages, loose monetary policy stance adopted by the Federal Reserve, Basel norms which incentivized the investments in the mortgages, sovereign debt and GSE-sponsored mortgage backed securities more than the commercial and corporate loans, the rating agencies which awarded the lowest risk, high return ratings such as AAA to these assets, the inflationary pressure, substantial deregulation of the financial sector, bad computer modelling were the additional causes which helped in spreading the contagion of financial crises.

Key Words: *Financial crisis, Regulatory framework, Rating agencies, Subprime lending, Global imbalance.*

INTRODUCTION

Despite coming a long way since Great Depression galloping on the wave of robust growth and evolving wisdom to regulate the financial market, the financial instability and recessions occurring with greater intensity and frequency remains a hard hitting reality. Globalization, if had been a medium to promote mutual benefit to the nations of the world through increased integration of the capital, trade, labour, information and technology flows, the same medium had served as the channel of transmitting contagion from crisis originating hub of advanced countries to the non-participating developing and emerging economies. Thus, a financial crisis of 2007-09 which started in certain key advanced nations such as United States and United Kingdom intersected with the freezing financial markets of the world economies and the suspended global trade, thereby transmuting into a global recession of intense gravity. It is estimated that around 60 economies of the world with a high degree of financial deregulation and financially related with the Western financial market were impacted by the contagion from the crisis spread emanating from the few advanced countries owing to the collapse of credit from September 2008 onwards (Ariff, Farrar, & Khalid, 2012).

The paper is divided into following sections. Section 2 objectives of the paper section 3 analyses in details the causes of US financial crises and section 4 finally concludes.

OBJECTIVES

The nature and the implications of the US recession of 2007 compels the analysis of the dynamics that were either akin to the dynamics that were at work during the past crisis and were ignored in this event or emerges as some different dynamics that were novel to this specific episode. The paper is

divided into following sections section 3 lists the causes of US financial crisis of 2007-2009, section 4 finally concludes.

CAUSES OF US FINANCIAL CRISIS OF 2007

Loose monetary policy: The dot.com bubble bust resulting in the 2001 US recession led the Federal Reserve to adopt an accommodative monetary policy by lowering the interest rates from 2001 onwards to restrict the impact of 2001 recession on the economy. The Federal Funds Target Rate (FFTR) dropped to 1.75 per cent at the end of the year from the high of 6.25 per cent at the starting of the year 2001 only. It was slashed to the lowest level for half a century in June 2003 at 1 per cent which persisted for a year (Pruthi, 2011). The reins of the loose monetary policy¹ were pulled only since the mid 2004 which too was at a much diminished rate taking two years to touch 5 per cent from 1.25% in the year mid-2004. This loose monetary stance of the Federal Reserve for a prolonged period set the stage for the real estate boom by augmenting the demand and the supply of credit (mortgages) in the United States economy. This caused the ascent of the demand for the real estate resulting in the spiralling of their prices which reached its prime in 2006 in a short period of time in the economy.

The low short-term rate, the core feature of the loose monetary policy resulted in the low cost of capital which stimulated the massive accumulation of the leverage by the financial intermediaries which included the banks as well. The major part in the

¹ **Loose monetary policy means low interest rates in short term. In monetary policy, the fed fund target rates are decided in its meeting which serves as the benchmark at which the inter-bank lending is carried out.**

chronicle of the real estate boom was played by the United States government by invigorating the demand for the real estate (Schwartz, 2008). The banks also played its part by assuming more risks especially the risk of the liquidity and the risk of the credit. The banks in its drive to create more business started offering cheap mortgages even to the subprime borrowers nevertheless at advanced rates where a product called “non-recourse mortgage” became one of the many facilitating factors. Non-recourse mortgage enabled the banks to link the value of the mortgage to the value of the asset (house) and not the income of the borrower. Thus, the home became the collateral for the loan borrowed where only the home was to be returned back to the lender in the event of default without being lumbered by any amount of debt. This gave birth to the speculative buying by people who were ill-equipped to afford a home on loan with the aim of making quick profit by selling their assets (home) at a higher margin in future when the prices of those assets rises in the market. This class of real estate investors were anointed as flippers.

Similarly, deposit-free loans and adjustable rate loans² with moving interest rate instead of being a fixed rate were the other factors enabling the credit drive to sub-prime borrowers. The loan repayment delinquencies were largely ignored which had started to build up since 2006 only by the highly leveraged borrowers with escalating interest rates. It was only in mid-2007 that the prices of the real estate started depreciating swiftly, initiating the burst of the housing bubble. This prompted the banks to end the teaser rates on their subprime loans and initiate summoning the debt payments from their borrowers. However, the downward spiral of the real estate prices had already given way to the escalating instances of loan payment delinquencies and defaults. Consequently, with rising mortgage delinquencies and defaults, apprehensions gripped those banks and financial institutions that were leveraged with colossal exposure to the derivative. Furthermore, owing to this, they found themselves cornered when the value of their assets started plummeting, as they had accumulated debt in off-the balance sheet³ with no sufficient capital provision in case of loss.

² The attraction for the adjustable rate loans was that the initial payment was kept abysmally low for the borrowers.

³ Off-the book or off-the balance sheet – When the financial transactions including asset, debt or other financial activities does not reflect on the company’s balance sheet, then it is said to enter into Off-the-balance-sheet. It includes the obligations of the unconsolidated subsidiaries, asset management services, brokerage services, etc.

Deregulatory Legislation: Post the episode of Great Depression of 1929-1933, one of the most prominent and an effective law amongst other laws was implemented with the aim of regulating the financial and the banking sector. This was the Banking Act of 1933 or the Glass-Steagall Act. The main contribution of this law to the American financial market was the separation of the commercial banking and the investment banking⁴. Erasing the separation line between the investment banking and the commercial banking permitting their reconsolidation, the Gramm-Leach-Bliley Act (GLBA) was signed into law in 1999, under the President Clinton’s administration by repealing the Glass Steagall Act. The new reconsolidation provision resulted in the fostering of debt securitization and structured financial instruments where the commercial banks became the new customers of the investment banks fiddling with high risk and high return securities that were earlier off-limit for them. There was no mandate requiring the different types of financial institutions such as insurance firms, commercial banks, investment banks and securities firms to remain as isolated entities by sanctioning their mergers.

Other than GLBA Act contributing to the crisis, the administration of the President Ronald Reagan passed two acts - tax reform Act, 1986 and the Garn-St. Germain Depository Institutions Act in 1982. These were enacted in order to revise the lending criteria by removing the constraints on the lending to the real estate, relaxing the limits on the individual borrower lending and sparing the minute under writing details such as the credit history, saving history and income verification. The tax reform was aimed at permitting the citizens to deduct the mortgage-interest payments from the tax amount incentivizing the home ownerships.

The boost to the housing bubble steadily in the making was provided by the enactment of the Financial Institutions Reform Recovery and Enforcement Act (FIRREA) under the President Bush’s administration in the year 1989. This law gave the boost to the American dream by re-commissioning Freddie Mac and Fannie Mae to facilitate loans for the low and moderate income borrowers and arranging more funds for such borrowers (Selig).

Furthermore, more amendments and more laws were passed to accommodate the home ownership dream of America by provisioning the transfer of the portion of the subprime mortgages risk to the government sponsored enterprises (GSE) namely,

⁴ The functioning of the commercial banking included the day-to-day banking - collecting and managing the deposits whereas the investment banking was involved in the speculation of the private wealth or money investing in the complicated financial products.

Fannie Mae and Freddie Mac. This law was passed by the congress in 1992 under the name Federal Housing Enterprises Financial. In order to promote liquidity in the mortgage sector and lending to low to moderate income borrowers by the financial Institutions (FIs), the GSEs liberated the liquidity of the banks by purchasing the residential mortgages from the lenders and securitizing them. Subsequently, another law mandated Fannie Mae and Freddie Mac to sponsor a particular percentage of mortgages lying under the class of underserved, and special affordable mortgages. With such liberating regulations, the real estate market took a steep upswing.

Government-Mandated Subprime Lending: Politically motivated US Congress facilitated the lowering of the mortgage standards creating a political clout in Washington. The factors central to the lowering of the mortgage standards were the increasing share of mortgage extended to the lower income groups propelled by the federal policies that escalated the competition among the lenders in the mortgage market riding on the swelling wheels of securitization of the mortgage debts and forcing the financial institutions to engage in imprudent mortgage lending in its progression.

The mortgage lending standards were lowered by the banks to comply with the CRA 1995 (Community Reinvestment Act) which required the banks to cover the low-income and undeserving borrowers in their mortgage lending portfolio (Holt, 2009). The failure to comply with these laws had the repercussion in the form of refusal to the merger or consolidation applications. The government state enterprises (GSE)⁵ through various legislations were also directed since 1990s to outspread its services to the lower, moderating and undeserving class of income borrowers. This prompted again to reduce the lending standard to suit the capability of these low-income borrowers w.r.t down payment and the income prerequisites. GSE together with FHA, Federal Housing Administration securitized a large volume of these subprime mortgages buying them from the originators and selling to the financial institutions including banks and investors. The precise targets were given to the GSE by the department of Housing and Urban Development (HUD) in 1996.

The catalyst in this new lax disposition exhibited by every participant particularly the financial institutions in this lending-borrowing cycle was the innovated practice of originate-to-sell in contrast to the traditional custom of originate-to-hold. After the securitization of the loan, the originator of the loan used to sell them in the capital market, bought usually by the investment banks. These securitized loans were then bought in thousands and collated under a

common roof called “pool” against which the bonds were issued to the investors. The source of capital to be distributed as income to the investor by the issuer was the sum of principal and interest pouring from the underlying mortgages. These pools were divided into different tranches offering different risks or default conditional to the priority of imbursement in the event of default. These pools were rated by the rating agencies which were then sold to the investors. Thus, the originator of these loans in reality was not holding these toxic assets but was passing on further, thereby having little to be bothered about the quality of these loans. The same was true with the investment banks as they were not holding a single mortgage loan but a whole pool where the default on some couldn't have impacted the quality of the whole pool.

Furthermore, the rules of the Basel accord were leveraged to encourage the investments in GSE sponsored asset backed securities, mortgages along with the preference to independent loans compared to business loans which were designated as relatively five times more risky by mandating capital provision from the financial institutions w.r.t the type of risk undertaken. The capital provisioning condition was exploited to drive the bank's capital towards housing backed bonds that were either issued by the GSE or were rated as investment grade securities. For this, the Basel rule was supplemented in its efforts to outline and encourage the investment in asset backed securities by the Recourse Rule in year 2001 that mandated only 2 per cent capital provision for the triple-A rated, double-A rated or plainly GSE sponsored MBS, mortgage backed securities.

Financial Innovation Leading to Increased Openness: Rapidly changing financial system intensified the resale market for the capital escorting the proliferation of complex financial products and contracts such as ABS, asset backed securities and asset backed commercial papers (ABCP) and credit derivatives. Financial innovation concomitant with the overconfidence concerning the level of risk and the price of the asset along with the financial products emerged as a prominent factor leading to a US recession of 2007. The complex financial instruments innovated were used in conjunction with the investment instruments such as securities and derivatives to facilitate credit expansion leading to the crisis.

Derivatives in itself are not the risk creating instruments, instead are merely the tools disseminating the risk forward. The new financial product specifically, the complex credit products such as CDOs (collateralized debt obligation), MBS (mortgage backed securities), ARMs (adjustable rate mortgages) and CDS (credit default swap) were extremely opaque inducing informational problem and were lacking the appropriate risk assessment for their appropriate price determination (Sánchez,

⁵ GSE – was a name bestowed upon two government agencies - Fannie Mae and Freddie Mac.

2010). The crisis was an outcome of insufficient information divulged by the seller of these securities and failure of the buyers to satisfactorily performing their due diligence before investing in such instruments. The advent of the securitization⁶ replaced the long standing traditional mortgage lending model of originate-and-hold⁷ mortgage for the new model of originate-and-distribute⁸.

Global Imbalances and Savings Glut: The United States recession turned global recession of 2007 has turned the attention internationally towards the role played by the global imbalance in this episode. Global imbalance refers to the coexistence of current account deficits and the surpluses in the international economic setting of the world (Servén & Nguyen, 2010). Alternatively, global imbalance can be understood as a phenomenon which stems when the surplus net savings of certain countries of the world becomes instrumental in financing the consumption and investments of some other countries becoming a causal factor of their current account deficits. Even though global imbalance had surfaced as the factor contributing in the previous financial crisis such as the savings and loan crisis of 1980s and the Asian financial crisis of 1997, it was in this episode of US recession of 2007 that it made a widespread global imprint. In the Savings and loan crisis of 1980, though the current account deficit belonged to the economy of United States only, nevertheless, the deficit financing regions of the world were not the emerging economies but were the advanced economies of Japan (as a chief lender). Whereas, in the Asian financial crisis of 1997 Europe was the economy with the net current account surplus while the Asian and the American economies were left stranded at the other end of the rope having the negative current account of the balance of payments. However, despite of the similarities, the dissonance was written large between the past crises and this

event with the magnitude of the deficit and the geographical reach of the impact of the crisis traversing boundaries crashing the whole global economy (Servén & Nguyen, 2010).

China was singled out for channelling its huge current account surplus into the advanced economies specifically the US and singlehandedly causing global current account imbalance and thereby financial crisis of a global scale in 2008. Interestingly, the developing and the emerging economies were the net importers of the capital flows from the advanced countries while sustaining current account deficit until late 1990s. But the episode of 1997 Asian financial crisis in which the East Asian nations found themselves pleading for the assistance of the international financial institutions owing to their non-sustainable balance of payment issues, reversed their scenario. The result was the creation of current account surpluses (Lin & Treichel, 2012). These surpluses of East Asian countries and the Middle East countries, referred as 'savings glut' by Ben Bernanke, the chairman of the Federal Reserve System in his speech was exported to United State buying treasury (Pruthi, 2011). The United States emerged as the nation favourite for the global investors even though it was offering lower interest on investment was due to its stronger currency and a secure place of investment in the leading financial market of the world. The capital flows flooded the US and the advanced economies because of greater financial integration owing to the deepening of the global capital markets that permitted the economies to endure higher debt burden for a longer period of time. However, these capital flows hammered the global interest rates to its lowest which concomitant with reduced savings gave rise to the credit boom along with overindulging risk taking and subsequently success to the promising financial products which were highly complex.

Thus, in deduction, the factors that played dominating role in the financial crisis were- domestic policy of the United States including the loose monetary policies, encouragement to the financial deregulation resulting in inhibited growth of innovated financial instruments, unrestrained promotion of overconsumption and over indebtedness, its reserve currency status and persistent current account deficit (Martin, Milas, 2009 and Pruthi, 2011).

Shadow Banking System: The shadow banking was a term coined by McCulley for the non-banking firms that were out of the purview of the supervision and the regulation of the Federal Reserve but were performing the core functions of the regulated banking institutions. Encompassing a broader perspective on the shadow banking, the Financial

⁶Securitization is referred to as the system of pooling various types of financial assets such as loans, receivables, etc., where their cash flows are restricted in order to finance the imbursements on related securities (Pruthi, 2011). The concept of securitization is applicable to any kind of asset possessing a fair market value or a constant stream of cash flow in the future

⁷Originate-and-hold model- It is a model devised with the intention of holding the asset i.e., loan through the maturity by the lender. Since the loan is through the maturity, a prudential approach is adopted in underwriting by the lenders while assessing the risk.

⁸Originate-and-distribute model – is in contrast to the originate-and-hold model with the loan created with the intention of selling it further to other financial institutions or investors. The loans are not held through maturity and therefore are met with relaxed and lax underwriting standards. The lenders have no incentive to properly assess the risk and then engage in the lending contract.

Stability Board⁹ (FSB) defined the shadow banking system comprising of all the entities that were exterior to the regulated banking system but were performing the core banking tasks, credit intermediation which included maturity transformation¹⁰, liquidity transformation¹¹, leverage¹² and credit risk transfer¹³. Credit intermediation involves the practice of using the debt to buy the assets for the company i.e., the money from the savers are utilized to lend it further to the borrowers. Accordingly, the funds from the money market were borrowed on short term by the shadow banks which were then exercised in buying assets with maturities of long terms. Thus, the money market mutual fund, broker dealers, GSE, finance companies, investment banks, hedge funds, asset backed commercial papers (ABCP) conduits were all encompassed as the participants of the shadow banking system. The shadow banking system essentially comprised of two types of players, one that steered the financial intermediation directly which included entities like NBFCs and finance companies, and the other party was the one providing finance to such companies that included mutual funds.

The shadow banks played an active role in the securitization business of building securities from the home mortgages¹⁴. The securitization entailed SPE picking up a large number of mortgages by the financial institutions and collating them under a specific head called the “pool”. The securities were then issued against the pool of mortgages using the pool as the collateral and whose value (the value of the security) depended upon the value of the

underlying mortgage loans. The payment to the investors of these mortgage backed securities was derived from the received interest and the principal amount of the underlying mortgages. This equation was smooth and flourishing between the issuer and the investor of the securities till the housing prices were escalating in the economy. With the housing bust and the setting in of the financial crisis, the prevailing widespread panic and confusion prompted the investors and creditors run at these shadow banks. The mass withdrawal of funds cornered some of these shadow banks which were compelled to engage in deleveraging and mass selling of their assets at distressed rates in the market depressing the general value of these assets. This further created an uncertainty regarding the solvency of the shadow banking institutions as other shadow banks holding similar assets as they had too had to re-adjust the new depressed values of the assets in their balance sheet that exhibited lower market price.

Lack of Transparency and Accountability in Mortgage Finance: Though the collapse of the financial system of the US economy was a result of a confluence of many complicated and correlated factors, the rapid cessation of the conventional risk management activities in the financial sector contributed its bit to the problems in the system. The lack of accountability in the mortgage backed securities and the trading of the asset backed securities have been held accountable in furthering the financial crisis of 2007. The asset backed securities were spawned by undertaking massive risks by various financial institutions which were later traded in the non-transparent markets. The transplanting of the assets and their related risky transactions in the off balance sheet conduits from their on-balance sheet facilitated in concealing their highly leveraged position from the eyes of the regulators and their shareholders. It was the same lack of transparency and accountability in financial institutions that stimulated the over-borrowing by the debtors beyond their repaying capability. Moreover, since the loans were being offered with minimum of documentation requirements deprived of sufficient underwriting standards and decreased standard of documentation, the number of subprime mortgages swelled.

Off-Balance Sheet Finance: The instrument which conventionally formed a part of the risk reduction strategy became one of the factors contributing to the financial crisis of a global magnitude. The off balance sheet (OBS used hence forth) used to be proved as a prominent tool for the companies intending venturing into some new business by instituting a new entity which was legally separated from the parent company. The role of this new entity in which the parent company kept only a minority stake was that it would bore the whole risk of the new

⁹ FSB- is an organization that houses the authorities of financial and supervision of some chief economies and financial institutions of the world.

¹⁰ Maturity Transformation- is the process where the entity invested in the long term assets by borrowing the short term funds.

¹¹ Liquidity Transformation – is the process of investing the highly liquid liabilities in the relatively illiquid assets (difficult in selling) such as loans.

¹² Leverage – is the use of debt in buying the fixed assets in order to increase the income from the investment which includes the losses as well besides the profits.

¹³ Credit risk transfer – is the transfer of the risk of the default of the borrower to another party from the originator of the loan.

¹⁴ Securitization business – started with the picking up a large number of mortgages by the financial institutions and collating them under a specific head called the “pool”. The securities were then issued against the pool of mortgages using the pool as the collateral and whose value (the value of the security) depended upon the value of the underlying mortgage loans. The payment to the investors of these mortgage backed securities was derived from the received interest and the principal amount of the underlying mortgages.

venture without jeopardizing the interest of the shareholders of the originating company. The rising prosperity in the mortgage backed securities market which had gradually been deregulated, changed the whole scenario by incentivizing the banks to create and prosper through OBS assets. These new entities were reduced from being an actual institution to being a mere book keeping and profit making entity for the parent company. Furthermore, the special purpose entities were being promoted by the Basel I accords which had duly reduced the capital requirement from the banking institutions if the assets were/ had been transferred in the off-balance sheet (FCIC, 2010). Whereas, if the banking institution has kept the asset in its balance sheet then according to the same Basel accord, it would have had to maintain 8 per cent (varying up to 10 per cent in US economy) capital as a buffer against its risk adjusted assets. Holding this much capital in buffer had always been a high cost for the banks in the form of unemployed, vacant capital. Thus came the rescuer in the form of securitization that enabled the banks to sell the loans originated on their balance sheet to others (namely SPV or off balance sheet conduit) and thereby transferring it into the OBS conduits or SPV, special purpose vehicle.

Rating Agencies: One of the major indispensable causes contributing to the financial crisis was the ratings issued by the credit rating agencies¹⁵ (CRA, hence forth) to the complex structured products. Their failure to correctly assess the risks innate in the securities and awarding of the investment grade ratings became the catalysing factor in the success of the subprime market capturing the financial market effectiveness. They had over valued the credit worthiness of the subprime securities and under estimated the credit risk inherent in them owing to which at the time of unfolding of the subprime crisis in US, countless individual and institutional investors were holding the mortgage securities that were conferred the investment grading including some having the highest credit worthiness ratings.

The structuring of the new asset backed securities required the thin slicing of the mortgage pool into tranches on the basis of the underlying risk of the mortgages collated to form the pool. The investors in the high risk tranches inferring the higher riskiness of the loans were entitled to higher returns and vice-versa. The tranches having relatively low risk were awarded as triple A rating by the CRA. However, interestingly this triple A rating was not

derived from the fact that the prime loans were collated to form the least risky tranches of the mortgage pool. These AAA rated tranche in truth formed the part of the numerous sub-prime mortgages that were bought by the investment banks to form a pool to be resold as a security. Thus, AAA rating signified only the high possibility of performance of these tranches in the form of continued premium payment delivery to its holder until all the sub-ordinate tranches of the mortgage backed security (High risk tranches with relatively low ratings) had ceased to work or perform (Acharya & Richardson, 2009). This error on the part of the rating agencies in deeply scrutinizing the securities brought the financial market of United States to its knees and mounted a colossal loss not only in financial terms but also in terms of confidence raising the question on their morality and effectiveness.

Bad Computer Models: The factor of “Bad Computer Models” explains the situation in which none of the participants of the financial market that includes the regulators, mortgage brokers, investment bankers, rating agencies and investors could warn of the approaching storm. It is because both the regulators and other participants of the financial market, investment bankers specially, trusted the computer models to reveal the amount of risk undertaken by the financial institutions. The traders and the strategist have been supplemented with the complex mathematical computer based models in their efforts to predict the risk since 1990s. A very popular and dominating model of value at risk (VaR)¹⁶ has been instrumental for a very long time in predicting the net risk with 99 per cent probability communicating the worst case scenarios. These worst case scenarios were then contrasted against their actual capital determining the level of financial stress present in the firm¹⁷. Regulators not unfamiliar to the effectiveness of these models and their use by the financial institutions also relied on these models to assess the financial position of the firms.

The models are and were good until the dawn of the financial crisis where they failed badly, consequently crippling the whole of the economy. The problem with these models were that they were confined by the historical experience and data, and placed their bet on the belief that risk is randomly disseminated where the past event have no influence on the future event in a sequence.

¹⁵ Credit Rating Agencies are entrusted with the issuance of ratings for the securities after a thorough assessment of their credit worthiness. They largely follow an alpha-numeric framework where A symbolises a safe and credit-worthy asset, B symbolising an unsafe asset.

¹⁶ VaR- Each security in a portfolio is assessed by attributing a risk factor which are then aggregated and the net risk innate in the portfolio is deduced.

¹⁷ If the risk was lesser than the amount of the capital, then the institution was financially sound.

Short-Term Incentives: The exploration of the causes leading to the dramatic collapse of the financial sector, national economy of the United States and thereby the global economy pointed to the absence of the incentives for the banking executives to discount for the risk associated with the widely manufactured and peddled innovative securities. It is widely argued that in the phase steering up to the crisis, instead of being tied to the long term performance of the bank executives' decisions, they were increasingly being paid salary plus the performance bonuses¹⁸. The remuneration practices of the executives of the financial institutions have been accused for the global crisis of 2007-09.

Conclusions and Findings: The story of financial crisis unfolds with the United States changing its federal housing policy in 1990s bestowing housing subsidies and lenient regulations on its republic facilitated by the quasi privates, Government Sponsored Enterprises (GSE) and the government agencies such as Federal Housing Administration (FHA) which was in turn fuelled by the political philosophy of American dream of owning the home. Together the magnanimous securitization of mortgages by the GSEs and FHA and loose monetary policy stance adopted by the Federal Reserve triggered the credit amplification by the financial institutions and banks but with sub-standard underwriting level. In addition, Basel norms incentivized the investments in the mortgages, sovereign debt and GSE-sponsored mortgage backed securities more than the commercial and corporate loans. Authenticating the well promoted claim of otherwise sceptical loans to be good investments were the rating agencies which awarded the lowest risk, high return ratings such as AAA to these assets. The inflationary pressure constrained the Federal Reserve to raise the interest rates that in turn started resulted in rising debt repayment defaults translating into increase in the selling of real estate assets pulling down the prices of the houses and thereby decelerated the sale of real estate further. Substantial deregulation of the financial sector in the United States which closed its eyes to the amalgamation of savings bank with the financial firms that upped the risks of the savings banks with the coming on board of the high risk opaque products of the financial firms. Financial liberalization and respective financial reforms across the emerging and the developing economies of the world helped in spreading the contagion of financial crises.

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¹⁸ These performance bonuses were determined on the basis of the volume and profits earned for the company

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