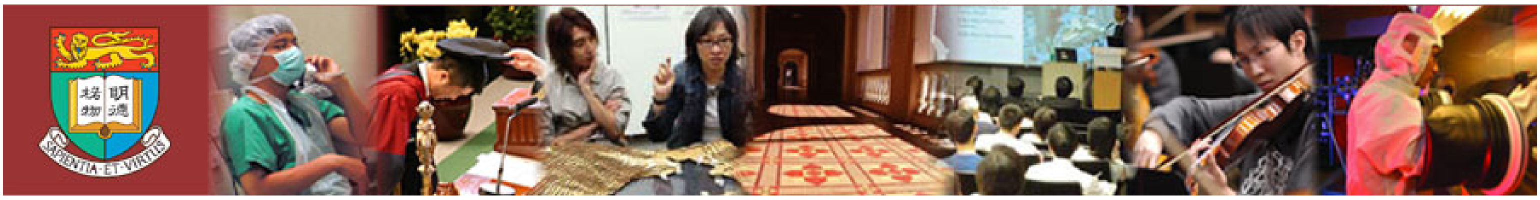

Case Study on the Basel II Implementation in the United States

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Abstract

Basel Accords issued by the Basel Committee on Banking Supervision of Bank for International Settlement ("Basel Committee") are considered as the most important banking regulatory frameworks that are widely accepted and adopted globally by both developed and developing countries.

Basel II is one of the Basel Accords which was published by Basel Committee in 2004. It aimed to improve and strengthen the over-simplified rules that were set by Basel I. Many committee members and the European Union implemented Basel II in or before 2008. Although the United States took a leading role in drafting the Basel II, the ratification and implementation of Basel II lagged behind. Despite the fact that various regulators in the United States agreed on most of the terms of the Basel II, the actual implementation of Basel II by financial institutions of United States has never started. Regulators of the United States did not provide final approval on the internal risk models that developed by banks. Without the approval on the necessary internal models, banks cannot implement Basel II.

The paper aims to investigate the reasons why the Basel II was ratified much slower in the United States than rest of the world and what caused the impediment of the implementation process. The followings are the four key factors identified.

1. Fragmented regulatory frameworks in the United States
2. Diverse interest of the banking industry and bifurcated approaches of Basel II implementation in the United States
3. Complicated structure of the legislative process & check and balance mechanisms
4. Lack of political will

It is argued that the above four factors have hindered the implementation process of Basel II and made negotiations very difficult. As a result, no final agreement was made and Basel II was not actually implemented in the United States.

This research is important and has broad impact. The lessons learned in the implementation of Basel II can help different stakeholders to understand, and hopefully help them better position themselves on the coming Basel III implementation as most of the issues and circumstances are similar. As not many studies were conducted to examine the obstacles encountered during the implementation process of Basel Accords, this paper may be beneficial to this field of study.

Background

The background information is mainly written for those who are not market participants and readers who are less familiar with the Basel Accords. Understanding the background is essential as the discussions below involve technical terminologies and knowledge on some of the aspects.

Basel I

Basel I, the first Basel Accord, was developed in late 1980s by the Basel Committee on Banking Supervision with two main objectives,

" 1. framework should serve to strengthen the soundness and stability of the international banking system.

2. framework should be in fair and have a high degree of consistency in its application to banks in different countries with a view to diminishing an existing source of competitive inequality among international banks." [1]

Basel I is important as it attempts to establish a global standard for the banking industries and tries to prevent regulatory arbitrage and maintain a level-playing field for banks in a

[1] Basel Committee on Banking Supervision. *International Convergence of Capital Measurement and Capital Standards.* Standards, Basel: Basel Committee, 1988. P. 1

global context. More than one hundred countries or jurisdictions implemented the Basel I or similar rules and regulations by mid 1990s. [2]

Under this framework, banks have to maintain a minimum level (ratio) of capital with reference to the amount of risk-weighted assets that they hold. The logic and concept behind is simple, the riskier the assets a bank hold, the more capital the bank has to keep in order to absorb the potential loss (e.g. the default of the borrowers).

$$Tier\ 1\ Capital\ Ratio\ = \frac{Tier\ 1\ capital}{Risk - weighted\ assets} \geq 4\ \%$$

(Source: Basel Committee. *International Convergence of Capital Measurement and Capital Standards* (1988))

First, the nominator of the formula will be studied. Basel Committee defined Tier 1 Capital as the sum of "paid-up share capital / common stock" and "disclosed reserves".[3] This is relatively simple and it basically refers to the tangible shareholders' funds that are readily available to absorb the potential loss for holding different assets (e.g. residential mortgage).

For the denominators, it is the "risk-weighted assets" that are hold by individual banks. The reason why the assets have to be "risk-weighted" is that the risk profile for different assets varies. Put it in other words, different assets are associated with different level of risks. For example, the risk of holding cash and government bond is much lower than the uncollateralized lending to individuals. Assets are classified in one of the five "risk-weighted" categories that are set by the Basel Committee, from 0% to 100%. For example, cash and government bonds are weighted at 0% as they are not risky while lending to the private sector is weighted at 100% given its riskiness.

[2] Tarullo, Daniel K. *Banking on Basel: The Future of International Financial Regulation.* Washington DC: Peterson Institute for International Economics, 2008.
[3] Basel Committee on Banking Supervision. *International Convergence of Capital Measurement and Capital Standards.* Standards, Basel: Basel Committee, 1988. P. 17

Development of Basel II

Basel I was widely adopted by over 100 countries in 1990s. [4] From this aspect, it was a phenomenal success of a standard that was set by an international organization, which does not have any power to force sovereign states to adopt the rules. Yet, the over-simplified framework of Basel I had its drawbacks and limitations. Moreover, with ever-changing financial environment, the framework was no longer able to cope with all the issues that emerged.

First of all, the Basel I mainly focused on the credit risk. Although this is one of the most crucial risks that banks face, there are lots of other risks that have to be addressed, to name a few, market risk, foreign exchange rate risk, interest rates risk, funding risk and liquidity risk. Each of these risks is essential to the survival of banks. According to the research conducted by Han Hong from Standard University and Deming Wu from the OCC, it is noted that the "systematic funding risk" was the major leading indicator of bank failures. [5]

Second, the relatively straight forward "five-category" of risk-weighted was also criticized by the industry and regulators as it failed to recognize the difference between assets.[6] [7]Some observations are obvious. One needs not to be a financial professional to recognize that lending money to multi-national corporations (e.g. to Apple Inc., Boeing, General Electrics etc.) is, in general, less risky than lending money to mediocre small family-owned companies. However, the risk weighting classification of Basel I did not distinguish them and assigned 100% as risk-weighted. This was clearly a potential area for improvements. Under the Basel I

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[4] Tarullo, Daniel K. *Banking on Basel: The Future of International Financial Regulation.* Washington DC: Peterson Institute for International Economics, 2008. P65

[5] Hong, Han, and Deming Wu. *Systemic Funding Liquidity Risk and Bank Failures.* Financial Research Paper, Washington DC: Federal Deposit Insurance Corporation, 201

[6] U.S. Government Accountability Office (U.S. GAO). *Risk-Based Capital: - Bank Regulators Need to Improve Transparency and Overcome Impediments to Finalizing the Proposed Basel II Framework.* Report to Congressional Comittees, Washington DC: U.S. Government Accountability Office (U.S. GAO), 2007.

[7] See Table 4 for the five category of risk that proposed by Basel I. Information extracted from

- Basel Committee on Banking Supervision. *International Convergence of Capital Measurement and Capital Standards.* Standards, Basel: Basel Committee, 1988. P. 21-22 framework, it was also noted that risk mitigating actions taken by banks and agreed by their customers were not fully reflected in the risk-weight system. (e.g. guarantee and collateral are not taken into account although they help mitigate credit risk)[8] This created problem as the rules did not represent the real risk and thus may distort the market. Some argued that due to the inappropriate rules, there were rooms for Market participants to conduct "capital arbitrage".[9] Banks were more willing to buy riskier asset (in real risk term) under the same risk-weighted category as they were assigned with same "risk-weight" under Basel I. Banks were incentivized to conduct this kind of "capital arbitrage" as higher (real) risk is likely to generate higher return.

Amid these concerns, the first version of Basel II was published in 2004 by the Basel Committee. [10] In this revised and updated framework, the Basel Committee introduced the concepts of "three pillars", namely "Minimum capital requirement", "The supervisory review process" and "Enhanced disclosure". [11]

What's new in Basel II

In the above section, the problem of the oversimplified risk category has been illustrated. Basel Committee proposed three methodologies in assessing the genuine credit risk that was undertaken by banks.

- **Standardized Approach**

  Standardized approach is similar to the risk-weighting method which was adopted by Basel I, but with more detailed classifications and reliance on external credit

[8] U. .S. Government Accountability Office (U.S. GAO). *Risk-Based Capital: - Bank Regulators Need to Improve Transparency and Overcome Impediments to Finalizing the Proposed Basel II Framework.* Report to Congressional Comittees, Washington DC: U.S. Government Accountability Office (U.S. GAO), 2007. P.16

[9] Herring, Richard J. "The Rocky Road to Implemenation of Basel II in the United States." *Atlantic Economic Journal*, 2007: 411-429

[10] Basel Committee on Banking Supervision. *International Convergence of Capital Measurement and Capital Standards - A Revised Framework.* Framework and standard, Basel: Bank of International Settlements, 2004.

[11] Basel Committee on Banking Supervision. *International Convergence of Capital Measurement and Capital Standards - A Revised Framework.* Framework and standard, Basel: Bank of International Settlements, 2004.

rating. Methodology in assessing the treatment of new financial products that was not covered by Basel I was also introduced. E.g. assessing the risk-weights for the securitized products. [12] Please note that this method is not permitted by the US regulators.

- **The foundation Internal Ratings-Based Approach (F-IRB)**

  F-IRB approach is similar to the A-IRB, which will be further discussed below. The main difference is that F-IRB only relies on one of the risk parameters (i.e. Probability of Default") that provided by banks, for the rest of the parameters, e.g. Loss Given Default, it will rely on the input by regulator.[13] Please note that this method is not permitted by the US regulators.

- **Advanced Internal Ratings-Based Approach (A-IRB)**

The concept is logically sound and simple. Imagine you have to determine the potential loss for the lending to your friend. The following three elements need to be considered.

1. How much you have lent to your friend
2. The probability that your friend is not able to repay in full
3. The loss after the partial repayment, if any, you get from your friend

Of course, the maximum financial loss you may suffer is the amount that you lent to your friend ("Exposure at Default" a.k.a. "EAD"). However, as we know, most of our friends repay their debts, and thus we have to estimate the probability that he or she does not repay the debt in full ("Probability of Default" a.k.a. "PD"). At last, even if your friend does not repay in full, it is likely that he or she will repay part of the borrowing to

[12] U.S. Government Accountability Office (U.S. GAO). *Risk-Based Capital: - Bank Regulators Need to Improve Transparency and Overcome Impediments to Finalizing the Proposed Basel II Framework.* Report to Congressional Comittees, Washington DC: U.S. Government Accountability Office (U.S. GAO), 2007. P.17

[13] Basel Committee on Banking Supervision. *International Convergence of Capital Measurement and Capital Standards - A Revised Framework.* Framework and standard, Basel: Bank of International Settlements, 2004.

offset part of the debt. The loss after all these repayments is the net loss that you may suffer. ("Expected Loss Given Default" a.k.a. "LGD")

This is the basics of the Advanced Internal ratings-based approach.[14] All banks that adopt this methodology have to determine the EAD, PD, LGD and other risk parameters (e.g. correlation of their different assets) by using their internal model and infrastructure. The concept behind is simple but the implementation is definitely not easy. Empirical data and sophisticated mathematical modelling have to be used in order to come up with the estimates.

Basel II in the United States

International communities adopted and implemented Basel II in a very different manner when compared to the approach the United States had. First, most countries adopted Basel II rules in full and the rules applied to the whole banking industry. The United States, meanwhile, adopted a bifurcation approach, which only required "core bank" and financial institutions that had international presences to adopt Basel II. "Non-core" banks can continue to adopt Basel I rules without any explicit and clear transition plan to Basel II.[15]

In addition, the US regulators only intended to adopt part of Basel II rules to the "core banks" that were in scope. For example, in the Pillar I of the Basel II, which stipulated the requirements in minimum capital, there were three risk measurement approaches. Namely, 1) Standardized approach, 2) Foundation internal ratings-based approach and 3) Advanced internal ratings-based approach ("A-IRB"). US regulators only accepted the advanced internal ratings-based approach.

Third, the US regulators set separate requirements and rules in addition to the Basel II in order to mitigate some of the potential risks that aroused due to the adoption of Basel II.

[14] Basel Committee on Banking Supervision. *International Convergence of Capital Measurement and Capital Standards - A Revised Framework.* Framework and standard, Basel: Bank of International Settlements, 2004.

[15] Roger W. Ferguson, Jr. *Basel II.* Testimony, Washington DC: The Federal Reserve Board, 2004.

For example, the requirement of leverage ratio, which is a constraint to bank for the maximum ratio of their capital to total consolidated assets, would be kept to make sure the required capital ratio would not decrease significantly due to the adoption of Basel II. Details of the additional requirements will be further examined in the later section.

1. Fragmented regulatory frameworks in the United States

There were four key bank regulators in the United States when the Basel II was under negotiation, namely, Board of Governors of the Federal Reserve System (the Fed), Federal Deposit Insurance Corporation, (FDIC), Office of the Comptroller of the Currency (OCC), and Office of Thrift Supervision (OTS). Although the Office of Thrift Supervision merged to the OCC in late 2011, different objectives and interests of these regulators increased the difficulties in negotiation.[16]

On the contrary, the regulatory responsibilities on banking industries are usually concentrated by a central governing body in many international financial centers. Take United Kingdom as an example. The Financial Services Authority (FSA) was the central governing body to oversee all the banks in the country. [17] Similar centralized regulatory framework is adopted by other financial centers, including Hong Kong and Singapore. Monetary Authority of Singapore (MAS) and Hong Kong Monetary Authority (HKMA) are

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[16] Office of the Comptroller of the Currency. OTS integration. Jul 21, 2011. http://www.occ.gov/about/who-we-are/occ-for-you/bankers/ots-integration.html (accessed Jul 10, 2015).

[17] Financial Services Authority. *About the FSA.* Jun 14, 2014. http://www.fsa.gov.uk/about (accessed Jun 10, 2015).
Please note that the FSA was dividied into two seperately authories, namely the Finacial Conduct Authority and Prudential Regulation Authority after the Global Financial Crisis, but still the regulatory framework is still clearer in the United Kingdom.

responsible for the banking regulation and they drive the implementation of Basel Accords in respective territories. [18] [19]

It is of the utmost importance for us to understand the different objectives and views of these US regulators.

Federal Deposit Insurance Corporation (FDIC)

Created by the US congress back in 1930s, the objective of FDIC is to "maintain stability and public confidence in the nation's financial system". It is also responsible to insure deposit.[20]

In the joint-hearing, Thomas J. Curry of FDIC expressed that although FDIC agreed the objective of Basel II, (i.e. linking the risk undertook by financial institutions and required capital), FDIC had concerns over a few serious issues. [21]

First, it is noted that from their study that if the Basel II requirement was adopted, the preliminary capital requirement for half of the banks that participated in the study would decrease by over 25%. With over one fourth of the reduction in required capital, FDIC was right to point out the risk. Because if there is reduction in capital requirement, banks are likely to hold less capital as this will reduce the cost of doing business and hence increasing profitability to the shareholders. However, with less capital, if other things are equal, the risk of the banking sector is higher as the there is less room for bank to make mistake. [22]

Second, FDIC had concerns over the impact of Basel II to the competitive environment. FDIC believed that the bifurcated approach, which stipulated that only US Bank with USD 250

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[18] Hong Kong Monetary Authority. About the HKMA. Apr 27, 2015. http://www.hkma.gov.hk/eng/about-the-hkma/hkma/about-hkma.shtml (accessed Jun 10, 2015).

[19] Monetary Authority of Singapore. *About MAS.* Jul 14, 2014. http://www.mas.gov.sg/about-mas.aspx (accessed Jun 10, 2015)

[20] Federal Deposit Insurance Corporation. Mission. https://www.fdic.gov/about/strategic/strategic/mission.html (accessed Jun 20, 2015).

[21] Joint Hearing. *Basel II: Capital Changes in the U.S. Banking System and the Results of the Impact Study.* Joint Hearing, Washington: U.S. Government Printing. P.15-P.16

[22] Ibid.

billion in total assets or with foreign exposures greater than USD10 billion had to implement Basel II, would lead to inequality. FDIC was particularly concerned about the potential higher capital requirement for non-core banks when compared to core banks. [23]

Third, FDIC also raised their concerns over the willingness and readiness of banking organizations to establish infrastructure to support the "advance measurement approach" which was proposed by Basel II.[24]

Federal Reserve Board of Governors

In addition to the similar concern that FDIC had with regards to the significant reduction in required capital, Susan Schmidt Bies, one of the governors of the Federal Reserve Board revealed there was "a surprisingly wide dispersion in the estimates of the risk parameters that are used to determine regulatory capital under the proposal."[25] [26] Indeed, the lack of consensus and standard in the assumptions for assessing the risk of bank led to severe problems. According to a paper issued by FDIC, there were huge divergences in the estimated risk-weights that were provided by different participated banks. The regulator compared the risk weights provided by seven different banks on similar residential mortgage portfolios and it was noted that the risk weight ranged from one percent to over seventy present. It means that difference across the spectrum can be over 70 times.[27]

Bies also pointed out that there was inter-dependency between the postponement of the notice of proposed rulemaking ("NPR") and the delay of implementation by banking entities. They created a vicious cycle since without a concrete NPR, banks were less willing to invest

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[23] Joint Hearing. *Basel II: Capital Changes in the U.S. Banking System and the Results of the Impact Study.* Joint Hearing, Washington: U.S. Government Printing. P.15-P.16
[24] Ibid. P.15-P.16
[25] Ibid. P.9-10
[26] U.S. Government Accountability Office (U.S. GAO). *Risk-Based Capital: - Bank Regulators Need to Improve Transparency and Overcome Impediments to Finalizing the Proposed Basel II Framework.* Report to Congressional Comittees, Washington DC: U.S. Government Accountability Office (U.S. GAO), 2007. P.15
[27] Federal Deposit Insurance Corporation. *Key Aspects of the Proposed Rule on Risk-Based Capital Standards: Advanced Capital Adequacy Framework.* Financial Institution Letters, Washington DC: Federal Deposit Insurance Corporation, 2006. P.19

in required infrastructures and were less likely to be able to provide accurate data to government officials and regulators to conduct impact analysis. This, in turn, further delayed the drafting of NPR. [28]

Similar to the view of FDIC, Federal reserves expressed publicly that they are concerned with the competitive disadvantages which smaller banking entities may experience. It was because the calculation of risk-weight for residential mortgage was less in Basel II than in Basel I. [29]

Office of Thrift Supervision (OTS)

OTS, which was demised in 2011, specialized in the regulating institutions that were smaller in scale and involved more in the residential mortgage market.

Richard Riccobono, the acting director of OTS revealed in the joint hearing that the institution held strong belief of the essence to improve the existing Basel I as thousands of financial institutions would continue to be regulated under Basel I. They were keen on proposing and drafting a revised Basel I in order to improve the Basel I risk-weights framework, so it can be more sensitive and aligned with actual risk. [30]

After more than two years of discussion since the Basel II was first published by the Basel Committee, OTS was in view that the Basel II was still a "work in progress" and stressed that the politicians, congress and the Committee members on Financial Services of the United States shall consider if they were "moving too quickly". [31]

[28] Joint Hearing. *Basel II: Capital Changes in the U.S. Banking System and the Results of the Impact Study.* Joint Hearing, Washington: U.S. Government Printing. P.9-10
[29] U.S. Government Accountability Office (U.S. GAO). *Risk-Based Capital: - Bank Regulators Need to Improve Transparency and Overcome Impediments to Finalizing the Proposed Basel II Framework.* Report to Congressional Comittees, Washington DC: U.S. Government Accountability Office (U.S. GAO), 2007. P.10
[30] Joint Hearing. *Basel II: Capital Changes in the U.S. Banking System and the Results of the Impact Study.* Joint Hearing, Washington: U.S. Government Printing Office , 2005. P.11
[31] Ibid

As the main objective of OTS was to regulate residential mortgage related transactions, they were concerned about the impact of interest rate risk, which has significant impact on the above mentioned products. However, the forth quantity analysis (QIS-4) did not take interest rate risk into account. It was an issue as the measurement and management of this particular risk was less transparent. [32]

Although OTS emphasized again and again in the joint hearing that it did not intend to abolish the leverage ratio, OTS disagreed with the "one-size-fits-all approach" on the leverage ratio. The reasons behind were that it may fail to capture the real risk of individual assets and it may discourage prudential risk management. OTS also disagreed to impose "arbitrary floor and multipliers" into Basel II since this violated the goal of establishing a framework which reflected the real risk.[33]

Office of the Comptroller of the Currency (OCC)

In the joint hearing, Julie Williams, the acting director of the OCC stressed on the results from the forth quantitative study ("QIS-4"), which aimed to understand how Basel II implementation may affect the banking industry in the United States. OCC raised concerns on 1) the significant reduction in minimum required capital should Basel II be adopted 2) the diverse impacts of the Basel II to individual banks and 3) the drastic change in risk-weights as a result of the Basel II for credit card and mortgage business.[34]

As a result of the above findings, Julie Williams believed that delaying the whole implementation process was the only appropriate action. OCC believed a more comprehensive assessment on the results of QIS-4 would help regulators to further understand the implication of Basel II to the banking industry. OCC was also open to

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[32] Joint Hearing. *Basel II: Capital Changes in the U.S. Banking System and the Results of the Impact Study.* Joint Hearing, Washington: U.S. Government Printing Office , 2005. P.12
[33] Ibid.
[34] Ibid. P.13-14

changes and reiterated that they were willing to request Basel Committee to change the rules if that was necessary. [35]

Conclusion for Fragmented regulatory frameworks in the United States

From the joint hearing which we have scrutinized, there were material differences in objectives, priorities and concerns from the regulators. The diverse interests and objectives made the negotiation more difficult and complicated. Moreover, unlike the international negotiation which may have a dominant super-power in driving the negotiation, there is no dominant power within the negotiation between regulators. Government Accountability Office of the United States also held similar views, suggesting that the difference in regulatory perspectives was one of the reasons why the implementation of Basel II was delayed in the United States.[36]

2. Diverse interests of the banking industry and bifurcated approached of Basel II implementation in the United States

Diverse Interests

Being the world's largest economy and one of the most advanced financial markets in the world, the banking industry of United States is flourishing and diverse. [37] Different indicators also show that the United States has the most developed finance market. For example, the ratio of domestic credit provided by financial sector, is used extensively by the World Bank to assess the degree of development in financial sector. Over the past decade, the domestic

[35] Joint Hearing. *Basel II: Capital Changes in the U.S. Banking System and the Results of the Impact Study.* Joint Hearing, Washington: U.S. Government Printing Office , 2005. P.13-14
[36] U.S. Government Accountability Office (U.S. GAO). *Risk-Based Capital: - Bank Regulators Need to Improve Transparency and Overcome Impediments to Finalizing the Proposed Basel II Framework.* Report to Congressional Comittees, Washington DC: U.S. Government Accountability Office (U.S. GAO), 2007. P.71
[37] The World Bank. *Data.* 2015. http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG/countries (accessed May 3, 2015).

credit provided by financial sector in the United States is significantly higher than the rest of the World.[38] The market capitalization of listed companies of the United States is also the largest in the world, representing over 35% of Market capitalization of the whole world as at 2012.[39] (Please see Figure 1 and 2 for detailed comparison with other countries.)

Bifurcated approach of Basel II implementation

According to the Government Accountability Office of the United States, there were over 8,700 banks operating in the United States as of December 2005. Starting from the early stage of the Basel II negotiation, the Vice Chairman Roger Ferguson revealed that Basel II would only be implemented by "larger bank or internationally active banks", which was later defined as "US Banks with more than $250 billion in total assets or with foreign on-balance sheet exposures greater than $10 billion". [40]

Under this definition, US regulators estimated that only 11 large financial institutions would be required to adopt Basel II. As per the report conducted by Government Accountability Office and FDIC, these 11 banks, which were also known as "Core Banks", together controlled over 40% of total banking industry assets of the United States (i.e. over 4.8 trillion of assets). [41] It was estimated that the rest of the banks, which consisted of over 8,700 banks, held the rest (58%) of the assets. Please refer to figure 3 for details.

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[38] The World Bank. *Data - Financial Sector Indicators.* Jun 20, 2015. http://data.worldbank.org/indicator/FS.AST.DOMS.GD.ZS/countries/1W-GB-CN-DE-US?display=graph (accessed Jun 28, 2015).
[39] The World Bank. *Data - Financial Sector Indicators.* Jun 20, 2015. http://data.worldbank.org/indicator/CM.MKT.LCAP.CD/countries/1W-GB-CN-DE-US?display=graph (accessed Jun 28, 2015).
[40] Roger W. Ferguson, Jr. *Basel II.* Testimony, Washington DC: The Federal Reserve Board, 2004.
[41] U.S. Government Accountability Office (U.S. GAO). Risk-Based Capital: - Bank Regulators Need to Improve Transparency and Overcome Impediments to Finalizing the Proposed Basel II Framework. Report to Congressional Comittees, Washington DC: U.S. Government Accountability Office (U.S. GAO), 2007. P.24

Core Banks – Position

There were huge cost associated with the development of the infrastructure, database and expertise in adopting the A-IRB approach, the only approach which the US regulators agreed. It was also noted from the research conducted by Government Accountability Office of the United States that the cost associated with the development of Basel II related infrastructure was material. (Please refer to the Background Section for the two approaches which did not accepted by US regulators i.e. Standard Approach and I-IRB approach)

Benefits and cost for adopting Basel II by Core Bank

From the forth quantify impact study (QIS-4) conducted by the four US regulators between 2004-2005, it was noted that the expected median reduction of Tier 1 capital requirements were over 30 percent if Basel II was adopted. Theoretically speaking, this was the largest incentive for Core banks to adopt Basel II, as these banks can reduce their cost of capital by a significant amount. [42]

However, "corrective action" and "safeguards" that revealed by regulators canceled out the benefits. Regulators reiterated that the minimum leverage ratio requirement would be retained and "transitional floors" would be introduced to make sure the minimum required capital for these core banks would not be decreased materially. In the proposed rules on risk-based capital standards that released in 2006, all four regulators reached an agreement to set ten percent as the threshold for the maximum decrease in required capital. They also emphasized that the leverage ratio and other existing measures in mitigating the risk would be retained. [43]

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[42] Board of Governors of the Federal Reserve System , Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, and Office of Thrift Supervision. *Summary Findings of the Fourth Quantitative Impact study.* Joint Press Release, Washington DC: Federal regulators, 2006.

[43] Federal Deposit Insurance Corporation. *Key Aspects of the Proposed Rule on Risk-Based Capital Standards: Advanced Capital Adequacy Framework.* Financial Institution Letters, Washington DC: Federal Deposit Insurance Corporation, 2006.

However, the regulators did not further elaborate on how the "modifications" or "safeguard" would be introduced should the reduction be larger than 10 percent. Thus, it is next to impossible for these "Core Banks" to estimate the potential benefits for them to adopt Basel II. With unclear and capped benefits together with the real and substantial cost for adopting Basel II, it was not surprised that why some of the "Core Banks" pushed back the Basel II implementation. Indeed, in 2006, a few major banks, openly expressed their disappointment since additional measures reduced their benefits of adopting Basel II. [44]

Non-core Banks - Position

For the rest of the banks (there were over eight thousands of them), they basically were looking at the other side of the coin. They revealed serious concerns over the risk that non-core banks would operate in an inequity market environment. They were afraid that they would be placed in competitive disadvantage position due to the more stringent capital requirement of Basel I, which would be still used to monitor non-core banks.

According the QIS-4, there was over 74% and 61% reduction in the portfolio minimum required capital for home equity and residential mortgage respectively should Basel II be implemented for Core bank. [45] This meant that these non-core banks would be in a disadvantage position to compete with core banks. This was crucial as home equity and residential mortgage, the main source of income, were particular important to local banks. Moreover, there were few guidelines on how to develop the risk parameters for the residential mortgage. As noted earlier in the paper, from the research report issued by FDIC, the risk weight of a same retail portfolio can vary for more than 70 times. That had raised

[44] The Wall Street Journal. *Rules on Capital Roil U.S. Bankers.* Nov 1, 2006. http://www.wsj.com/articles/SB116234873761209749 (accessed Jun 5, 2015).

[45] Board of Governors of the Federal Reserve System , Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, and Office of Thrift Supervision. *Summary Findings of the Fourth Quantitative Impact study.* Joint Press Release, Washington DC: Federal regulators, 2006. P.7

serious concerns as there was impression that Core Bank may judgmentally provide data and estimates which were favorable to them.

Industry Group

There are many industrial groups from the banking sector that have political influence. American Bankers Association and Independent Community Bankers of America are two of the examples. They actively participated in policy making, including Basel II. According the OpenSecrets, these two trade associations together contributed over US$ 60 million in lobbying from 2000 to 2010. Individual banks also spent significant amount in lobbying. According to the data of OpenSecrets, over US$300 million was spent in lobbying by commercial banks during 2000 to 2010.[46]

Conclusion on Diverse Interest of the Banking Industry

From the above discussion, it is noted that both "Core" and "Non-core" banks did not advocate for Basel II.

3. Structure of the legislative process & massive check and balance

Although presidential and parliamentary systems are both representative democracy, their structures of government are different which leads to the differences in legislative procedures. The passage of bills is more complicated under the presidential system than parliamentary system since the executive branch (e.g. the US government and the US President) are independent from the legislative branch. Though the US President has the right to pass or veto bills that are approved by the Congress, the US President does not form a part of the legislative arm. It takes more time and resources to pass a bill since supports from the Senate, the House of Representatives and the President are all crucial. Lots of

[46] OpenSecrets.org. *Lobbying - Industry: Commercial Bank.* Jun 31, 2015. https://www.opensecrets.org/lobby/indusclient.php?id=F03&year=2000 (accessed Jul 5, 2014)

checks and balance mechanisms are in place.[47] On the contrary, the executive branch is not completely isolated from the legislative branch under parliamentary system. For example, the Prime Minister of the United Kingdom has roles in both executive (the Government) and legislative branch (House of Commons).[48]

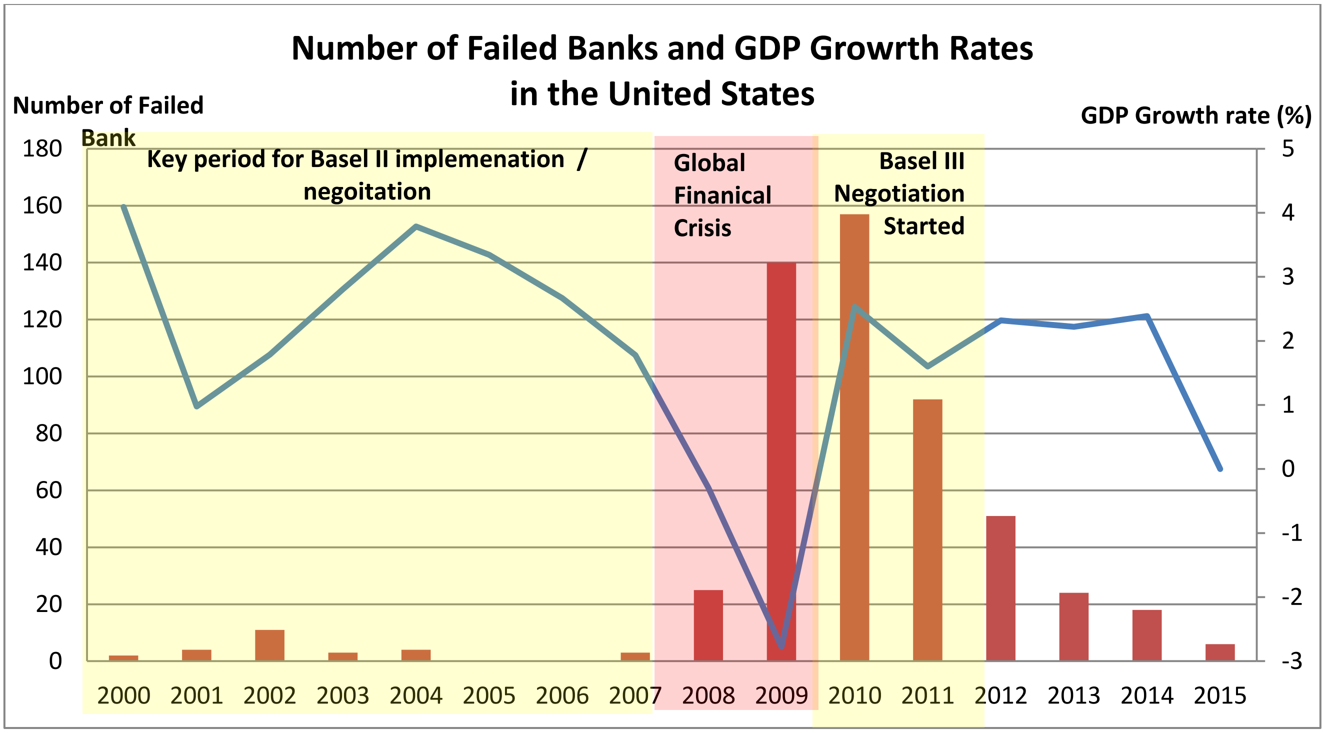
4. Lack of political will and financial shocks

The economy of the United States during the key implementation and negotiation period of Basel II were relatively good and the number of failed banks was at record low level.[49] According to the World Bank, during 2000 to 2007, the United States reported positive GDP growth for eight consecutive years with average of 2.65%.[50] Politicians have to be responsive to the demand of their constituency, but obviously with number of failed bank at record low level from 2000 to early 2007, it is not surprised that the U.S. citizens were not too concerned about the implementation of Basel II. In his book, *Congressmen's Voting Decision,* John Kindon, Professor of Political Science at the University of Michigan, revealed that "it is likely that salient issues, those which aroused considerable attention inside and outside of Congress and were much on congressmen's minds – are also those on which constituency intensity is the greatest, at least for congressmen in general."[51] From this definition, it is quite obvious that forcing the Basel II implementation is not typically a "salient" issue given that there was not urgency and the attentions from non-banking sector were not strong.

[47] The White House. *The Legislative Branch.* 2015. https://www.whitehouse.gov/1600/legislative-branch (accessed Jul 27, 2015).

[48] Gov.Uk. Ministerial role: Prime Minister. 2015. https://www.gov.uk/government/ministers/prime-minister (accessed May 20, 2015).

[49] Federal Deposit Insurance Corporation. *Failed Bank List.* May 13, 2015. https://www.fdic.gov/bank/individual/failed/banklist.html (accessed Jun 23, 2015).
[50] The World Bank. *Data.* 2015. http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG/countries (accessed May 3, 2015).
[51] Kingdon, John W. *Congressmen's Voting Decisions (Third Edition).* Michigan: The University of Michigan Press, 1989. P.44



Source:

1) Number of Failed Bank – FDIC - https://www.fdic.gov/bank/individual/failed/banklist.html

2) GDP Growth Rate – The World Bank - http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG/countries

Moreover, even if some of the general publics were keen on improving the regulatory framework, given the complexity of the issue, their voices were usually discounted. In his book, *Representing the Advantaged: How Politicians Reinforce Inequality,* Daniel Butler conducted political experiments to demonstrate that there is a tendency for government officials to undervalue the opinion from low social economic status individuals as officials tend to assume these individuals are less capable of understanding the complex issue. [52] Starting from the late 2007, the global financial crisis started to emerge, politicians, central bankers and regulators were stretched to make every effort which can prevent the global financial system from melting down. For example, the Congress and the US president passed the Troubled Assets Relief Program (TARP) under Emergency Economic Stabilization Act in 2008 in order to stabilize the economy and financial institutions of the United States. The discussion on Basel III also started in response to the global financial crisis. The Basel III

[52] Butler, Daniel M. *Representing the Advantaged: How Politicians Reinforce Inequality.* New York: Cambridge University Press, 2014.P.43-61

framework was published by the Basel Committee in Dec 2010.[53] The regulators of the United States have started to work on the implementation of Basel III since then.[54]

Conclusion

As scholar Putnam put in his paper, *The Logic of Two-Level Games*, the negotiation made in international level has to be reconciled with domestic politics and demands so as to obtain domestic support for ratification.[55] From the study, four reasons of the delay are identified, 1) fragmented regulatory frameworks, 2) diverse interest of the banking industry and bifurcated approaches of Basel II implementation in the United States, 3) complex structure of the legislative process & check and balance mechanisms and 4) lack of political will.

Using Putnam's terminology, these four reasons significantly decreased the "win-set".[56] As a result, Basel II was ratified much slower in the United States and it has never implemented.

With better understanding of the obstacles of the implementation of Basel II, it is hoped that the government, politicians, and regulators can learn and coordinate better among themselves for the development of the Basel III.

[53] Bank for International Settlements. *Basel III: A global regulatory framework for more resilient banks and banking systems.* Dec 31, 2010. http://www.bis.org/publ/bcbs189.htm (accessed May 20, 2015).
[54] Board of Governors of the Federal Reserve System. *Press Release.* Jul 2, 2013. http://www.federalreserve.gov/newsevents/press/bcreg/20130702a.htm (accessed May 20, 2015)
[55] Putnam, Robert. "Diplomacy and Domestic Politics: The Logic of Two-Level Games." *International Organization*, 1988, Vol. 42, No. 3: 427-460
[56] Ibid.

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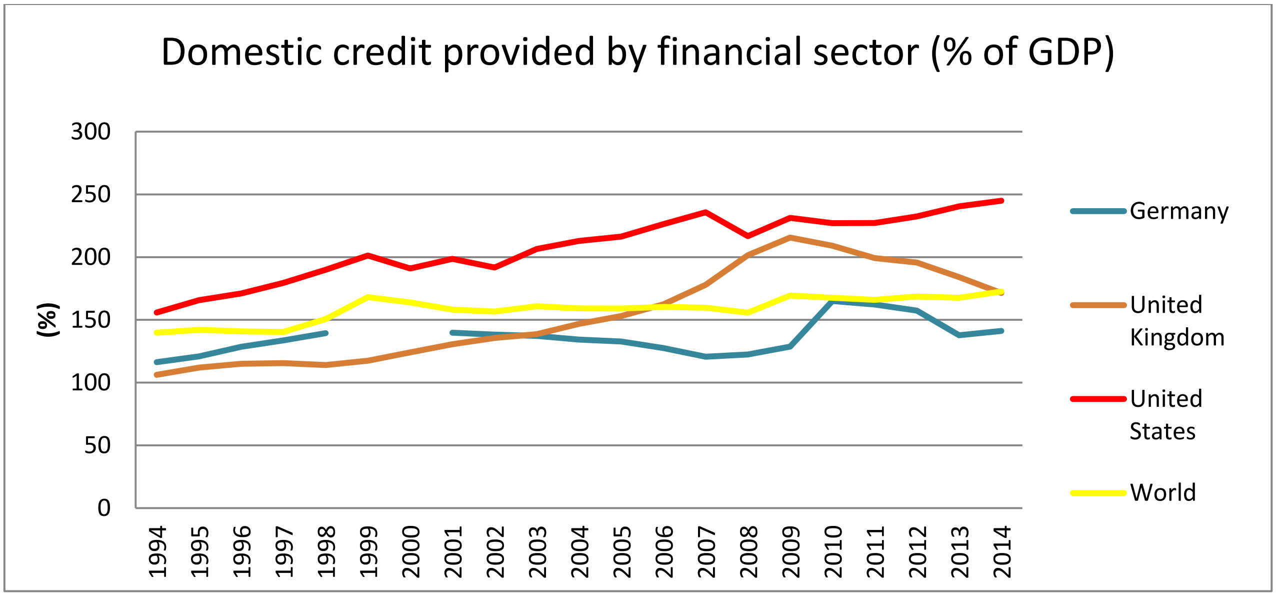
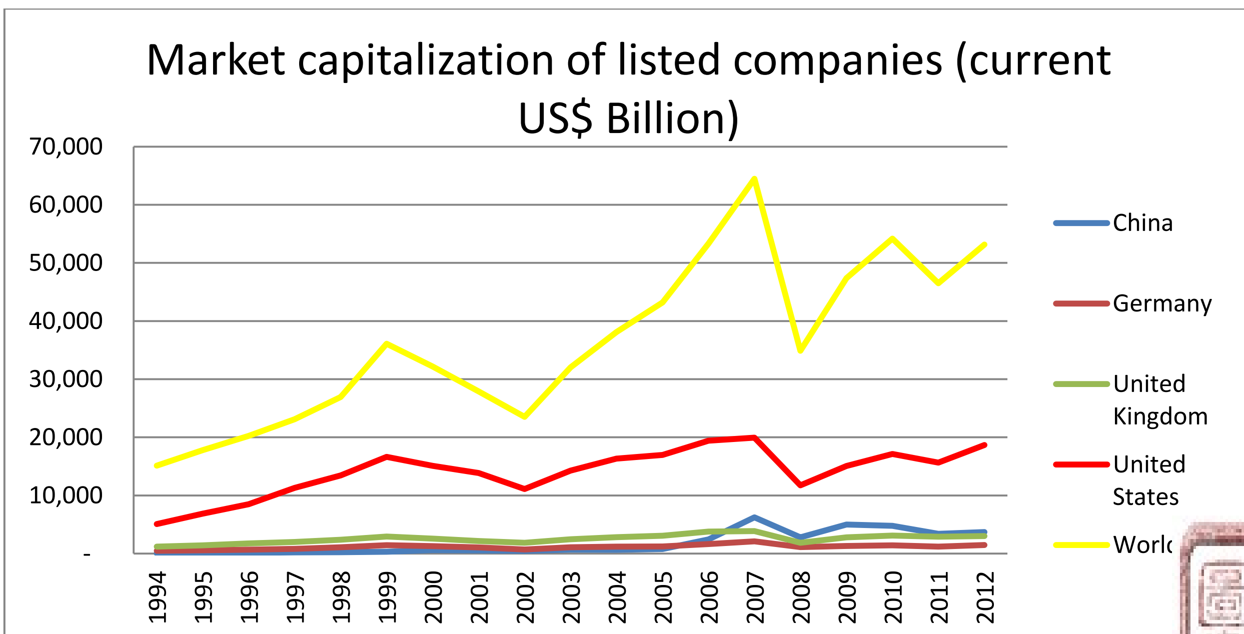
Figure 1



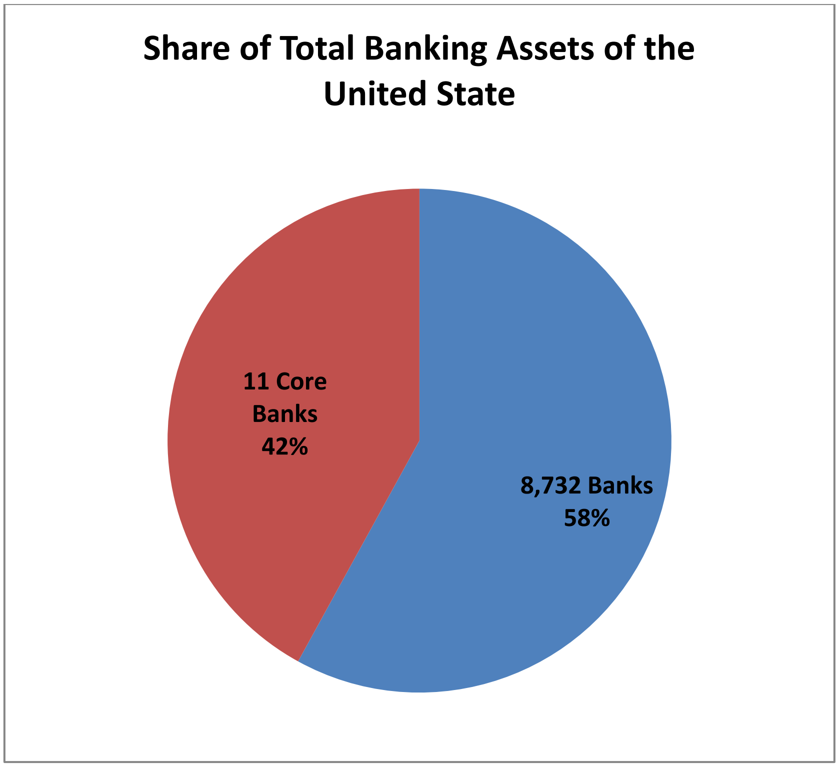
(Source: The World Bank - http://data.worldbank.org/indicator/FS.AST.DOMS.GD.ZS/countries/1W-GB-CN-DE-US?display=graph)

Figure 2



(Source: The World Bank - http://data.worldbank.org/indicator/CM.MKT.LCAP.CD/countries/1W-GB-CN-DE-US?display=graph)

Figure 3



(Source: GAO-2007-253, P.24 - http://www.gao.gov/assets/260/256634.pdf)

Table 4 – Risk Category of Basel I

Basel I - Risk Category	
0%	(a) Cash (b) Claims on central governments and central banks denominated in national currency and funded in that currency (c) Other claims on OECD central governments and central banks
0, 10, 20 or 50% (at national discretion)	(a) Claims on domestic public-sector entities, excluding central government, and loans guaranteed by such
20%	(a) Claims on multilateral development banks and claims guaranteed by, or collateralised by securities issued by such banks (b) Claims on banks incorporated in the OECD and loans guaranteed by OECD incorporated banks (c) Claims on banks incorporated in countries outside the OECD with a residual maturity of up to one year and loans with a residual maturity of up to one year guaranteed by banks incorporated incountries outside the OECD (d) Claims on non-domestic OECD public-sector entities, excluding central government, and loans guaranteed4 by such entities (e) Cash items in process of collection
50%	(a) Loans fully secured by mortgage on residential property that is or will be occupied by the borrower or that is rented
100%	(a) Claims on the private sector (b) Claims on banks incorporated outside the OECD with a residual maturity of over one year (c) Claims on central governments outside the OECD (unless denominated in national currency - and funded in that currency - see above) (d) Claims on commercial companies owned by the public sector (e) Premises, plant and equipment and other fixed assets (f) Real estate and other investments (including non-consolidated investment participations in other companies) (g) Capital instruments issued by other banks (unless deducted from capital)

(Source: Basel Committee. *International Convergence of Capital Measurement and Capital Standards* (1988). P.21-22 - http://www.bis.org/publ/bcbs04a.pdf)

Declaration Page

I declare that this Capstone Project Report, entitled Case Study on the Basel II Implementation in the United States, represents my own work, except where due acknowledgement is made, and that it has not been previously included in a thesis, dissertation or report submitted to this University or any other institution for a degree, diploma or other qualification.

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