Essays in International Financial Governance

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ABSTRACT

The 2008 financial crisis revealed systemic weaknesses in the global financial architecture, gave rise to the most severe economic collapse since the Great Depression and engendered a fundamental shift in the prevailing consensus on financial governance. It reminded us of the fragility of the international financial system and the politically unacceptable costs to society when it fails. This dissertation adds to the literature on the governance of private and public sector financial institutions. It presents a conceptual framework of linkage between the governance of financial institutions, systemic risk and financial crises. It is based on a review of the empirical and theoretical literature on the influence of financial regulation and governance on the stability of the international financial system. The dissertation examines the application of financial governance in three different contexts: (i) the introduction of a common regulatory framework for the European securities industry, known as MIFID; (ii) the introduction of a risk governance framework at a US federal agency, the US Export-Import Bank, and (iii) the introduction of performance metrics among Export Credit Agencies that operate within a common governance framework known as the Arrangement on Officially Supported Export Credits.

In addition, the dissertation provides specific policy recommendations designed to enhance the portfolio risk management practices of the US Export Import Bank. By extension, these recommendations are relevant to a wider audience of federal agencies with similar portfolio credit risks and may help inform the design of a robust risk management framework that is critical to the government’s ability to manage its burgeoning credit portfolio.

Mark Thorum is Assistant Inspector General for Inspections and Evaluations with the U.S. Export-Import Bank, Office of Inspector General. This dissertation represents the views of the author and should not be interpreted as reflecting those of the Office of the Inspector General of the Export-Import Bank or those of the management of the U.S. Export-Import Bank.
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## Glossary of Terms

<table>
<thead>
<tr>
<th>TERM</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>ALLL</td>
<td>Allowance for Loan and Lease Losses</td>
</tr>
<tr>
<td>BCBS</td>
<td>Basel Committee on Banking Supervision</td>
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<tr>
<td>BCL</td>
<td>Budget Cost Level</td>
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<tr>
<td>CDS</td>
<td>Credit Default Swaps</td>
</tr>
<tr>
<td>COSO</td>
<td>Committee of Sponsoring Organizations of the Treadway</td>
</tr>
<tr>
<td></td>
<td>Commission</td>
</tr>
<tr>
<td>ECA</td>
<td>Export Credit Agency</td>
</tr>
<tr>
<td>Ex-Im Bank</td>
<td>Export-Import Bank of the United States</td>
</tr>
<tr>
<td>FCRA</td>
<td>Federal Credit Reform Act of 1990</td>
</tr>
<tr>
<td>Federal Reserve</td>
<td>The Board of Governors of the Federal Reserve System</td>
</tr>
<tr>
<td>FDIC</td>
<td>Federal Deposit Insurance Corporation</td>
</tr>
<tr>
<td>FY</td>
<td>Fiscal Year</td>
</tr>
<tr>
<td>GAAP</td>
<td>Generally Accepted Accounting Principles</td>
</tr>
<tr>
<td>GAGAS</td>
<td>Generally Accepted Government Accounting Standards</td>
</tr>
<tr>
<td>IACPM</td>
<td>International Association of Credit Portfolio Managers</td>
</tr>
<tr>
<td>ICRAS</td>
<td>Interagency Country Risk Assessment System</td>
</tr>
<tr>
<td>LGD</td>
<td>Loss Given Default</td>
</tr>
<tr>
<td>LR</td>
<td>Loss Ratio</td>
</tr>
<tr>
<td>MIFID</td>
<td>Markets in Financial Instrument Directive</td>
</tr>
<tr>
<td>OCC</td>
<td>Office of the Comptroller of the Currency</td>
</tr>
<tr>
<td>OCFO</td>
<td>Office of the Chief Financial Officer</td>
</tr>
<tr>
<td>OIG</td>
<td>Office of Inspector General</td>
</tr>
<tr>
<td>OMB</td>
<td>U.S. Office of Management and Budget</td>
</tr>
<tr>
<td>PD</td>
<td>Probability of Default</td>
</tr>
<tr>
<td>PI</td>
<td>Predictor Interval</td>
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</table>
Chapter One: Introduction and Overview

Introduction

Throughout modern history, financial crises have been defining moments for the international financial system. A financial crisis may expose systemic weaknesses in the global financial architecture and result in significant costs to both the financial and real economies. This in turn may prompt action by interest groups, politicians, and regulatory bodies. On occasion, this momentum will engender new policies and may eventually lead to the reshaping of the financial regulatory and governance framework. The international financial crisis that erupted in late 2007 is a case in point. Arguably the most severe economic collapse since the Great Depression, the crisis highlighted the need for a new global regulatory framework to reduce the systemic risks in the international financial system. Measures of its severity span both the financial and real economies, as evidenced by a $4.0 trillion write down of the value of loans and securities that began in late 2007 (IMF, 2010). 1

Importantly, the crisis provoked a fundamental shift in the prevailing paradigm of financial governance, away from liberalization and deregulation, and toward international prudential financial regulation. In response, politicians and regulators from G-20 countries introduced a wave of new regulatory measures in an effort to strengthen international financial governance.

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1 According to IMF (2010) estimates, the total amount of the write off of loans and securities starting from when the crisis began in late 2007 until October, 2009 amounted to $4.0 trillion (US financial institutions accounted for $2.8 trillion). In addition, the global economy witnessed a 53% drop in global market capitalization from its peak on October 31, 2007 and a sharp decline in global output (IMF, 2010).
Some involved a tightening of existing regulations while other measures sought to enhance the regulatory architecture to reduce systemic risks.² Official pronouncements from the G-20 Summit in Pittsburgh underscore this shift: “Major failures of regulation and supervision, plus reckless and irresponsible risk taking by banks and other financial institutions, created dangerous financial fragilities that contributed significantly to the current crisis. A return to the excessive risk taking prevalent in some countries before the crisis is not an option” (G-20, 2009).

This dissertation explores the linkage between the governance of financial institutions, systemic risk and financial crises. It is based on a review of the empirical and theoretical literature on the influence of financial governance on the stability of the international financial system. The discussion begins with an introduction to several topics that are central to this research including financial crises, systemic risk, governance and financial regulation. Next, it reviews the unique characteristics of financial institutions that must be considered when assessing questions of governance. Finally, it posits the importance of financial governance and illustrates how the lack of financial governance played a pivotal role in the 2008 financial crisis and the East Asia financial crisis a decade earlier. Having introduced key concepts, the dissertation establishes a conceptual framework by reviewing relevant literature in several fields: the concept of good governance and its defining characteristics, the linkage between governance and the development and performance of financial markets, and the stability of the international financial system. The empirical literature discussed herein provides useful insight into the relationship between components of effective financial governance and the development and performance of financial markets and economic growth. In an effort to provide a theoretical

² For example the Dodd Frank legislation in the USA and the creation of the Systemic Risk Counsel in Europe.
foundation for the discussion, Chapter Two reviews several schools of international relations
theory including neo-realism, neo-liberal institutionalism, hegemonic stability theory and regime
theory. Together they provide a useful framework to understand the interaction of states as
market participants with the two global financial centers, and the development of governance
structures in the international financial markets. In addition, the chapter examines selected works
in the field of policy diffusion to understand how the regulatory regime was shaped by the
market leaders or “hegemons” and diffused to other market participants.

Chapters Three, Four and Five consist of three separate essays that examine the application of
financial governance in different contexts: (i) the introduction of a common regulatory
framework for the European securities industry, known as MIFID; (ii) the introduction of a risk
governance framework at a U.S. federal agency, the U.S. Import-Export Bank, and (iii) the
introduction of performance metrics among OECD Export Credit Agencies that operate within a
common governance framework known as the Arrangement on Officially Supported Export
Credits. Finally, Chapter Six closes with concluding remarks on the challenges faced by
regulators as they strive to introduce an optimum level of financial regulation. One that balances
effective regulation and supervision with sufficient flexibility to facilitate competition and
financial innovation on the other.

**Introduction to Financial Crises**

As the events of 2008 and prior financial crises have illustrated, the health of the financial
sector is essential to the stability and growth of the global economy. The services provided by
financial intermediaries are central to the real economy and create a fiduciary responsibility to
the public. As a result, regulators have traditionally imposed a greater degree of regulatory
oversight on regulated financial institutions in the form of laws, regulations and guidance on key
issues such as risk management practices (Stern and Feldman, 2004).

The failure of financial institutions may impose serious and politically unacceptable costs to
society due to their unique position in financial intermediation, capital allocation, and the
international payment system. Potential costs are often expressed as negative externalities to
society as they may engender systemic risk, contaminate other financial institutions, and require
extensive government intervention at the expense of tax payers. Indeed, research conducted by
Laeven and Valencia (2012) found that the fiscal costs of resolving banking crises approximate
13% of GDP across 147 banking crises over the past several decades. Moreover, research
conducted by Kaminsky and Reinhart (1999) confirmed the linkage between banking and
currency crises. They found that since the 1970s, half of the countries in their sample of Asian,
Latin American, and European countries experienced banking crises prior to suffering a major
currency crisis. The authors introduced the term “twin crises” to refer to a simultaneous crisis in
banking and foreign currency.

In describing the financial turmoil of the last four decades, Charles Kindleberger and Robert
Aliber write “The inference from the changes in asset prices, the changes in currency values, and
the number and severity of banking crises since the mid 1960’s is that the lessons of history have
been forgotten or slighted. These decades have been the most tumultuous in international
monetary history in terms of the number, scope, and severity of financial crises. More national
banking systems collapsed than at any previous comparable period” (p. 277). Research
conducted by Lindgren, Garcia, Saal (1996) supports this statement. They found that during the period extending from 1980 to 1996, approximately three-fourths of the member countries of the International Monetary Fund (IMF) witnessed substantial problems with their banks.

But financial crises cannot be viewed in isolation, nor are they random events. A substantial body of scholarly literature posits that financial crises have occurred with regularity throughout modern history, display common characteristics, and result in predictable negative consequences for the real and financial economies. Negative outcomes include a collapse in asset prices, a sharp decline in output, a rise in unemployment, a precipitous rise in government borrowing, and the threat of financial contagion (Kindelberger and Aliber, 2005) (Reinhart and Rogoff, 2009). Contemporary research and policy analysis have also provided valuable insight into the diverse group of factors that contribute to global systemic risk \(^3\) and may ultimately lead to a financial crisis. Chief among these factors is weak financial governance. Failures in governance at the level of the financial intermediary and the system may expose and exacerbate systemic vulnerabilities and result in unacceptable costs to modern society (OECD, 2010) (IMF, 2008). Indeed, weak financial governance played a critical role in precipitating both the 2008 global crisis and the East Asia crisis a decade earlier.\(^4\) As discussed herein, financial governance is of great relevance to both the individual institution and to the international financial system.

In addition to weak financial governance, recent literature has highlighted the importance of additional factors that may have contributed to the 2008 crisis. These include the financial

\(^3\) Systemic risk can be defined as the risk that the failure of a single entity or group of institutions will precipitate the collapse of an entire system or market, enabled by links and interdependencies.

interdependence of developed economies (Gilpin, 2001), excessive financial leverage (Reinhart and Rogoff, 2009), government failure to organize financial markets (Bernanke, 2009), pro-cyclical lending practices of financial institutions (Minsky, 1982) (Minsky, 1985), an over-reliance on quantitative risk analytics, and excess global liquidity, which helped fuel the U.S. housing bubble and the demand for riskier, high yielding assets (Reinhart and Rogoff, 2009).

Financial crises are not unique to either developed or developing economies. Nor are they the specific preserve of a given geographical region, culture, or type of economy. They can occur in various different forms including sovereign debt defaults, foreign exchange rate crises, and banking crises (Kindelberger, Aliber). One can also differentiate between a regional and global financial crisis. In defining the latter, Reinhart and Rogoff cite four characteristics: (i) the crisis spans two or more regions, (ii) the crisis has spread to at least three countries in each affected region, (iii) the crisis involves one or more of the dominant financial centers, which in turn negatively affects the ability of other countries to raise financing, and (iv) the level of global financial turbulence is materially higher. Using these defining criteria, the authors categorize the

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5 Robert Gilpin (2001) posits that the most significant change to the international economic order over the past several decades is the “globalization of the world economy” which has resulted in a more financially-interdependent world. On the one hand, it has facilitated international trade, economic development, and the free flow of capital. On the other hand, it has made all economies more vulnerable to the transmission of financial shocks through the phenomenon of contagion.

6 Authors Reinhart and Rogoff (2009) observed in their exhaustive study, “If there is one common theme to the vast range of crises we consider in this book, it is that excessive debt accumulation, whether it be by the government, banks, corporations or consumers, often poses greater systemic risks than it seems during a boom” (p. xxv).

7 Hyman Minsky’s (1982) work on instability and the link between the financial system and the real economy has gained significant traction over the past four decades. Minsky attributed the recurring crises to an intrinsic fragility within advanced economies with complex financial systems.

8 Financial institutions utilize quantitative models for a broad range of risk management applications including measuring portfolio risk, determining capital and reserve adequacy, valuing exposures, preparing financial forecasts, etc. Despite their benefits, the use of financial models poses certain risks including the potential for adverse consequences arising from faulty analysis. Financial models are simplified representations of real-world relationships among variables. By definition, they possess some degree of uncertainty and inaccuracy. Quantitative models may also fail to capture certain low probability/high impact events, known as “Black Swans.” The 2008 financial crisis illustrated that purely quantitative approaches to risk management were insufficient and that a more balanced approach that incorporates qualitative risk factors enhances a financial model’s explanatory power.
The 2008 crisis illustrated the speed and extent to which a financial shock can be transmitted across asset classes, financial institutions, markets and international borders. Financial institutions exhibit a high degree of inter-connectedness and are vulnerable to the effects of contagion. As such, the failure of one institution can put significant pressure on others that are perceived to have similar weaknesses, impairing their ability to obtain funding. A related type of contagion occurs when institutions that experience losses in one market fall prey to a “liquidity spiral.” As asset prices decline, institutions may be forced to sell off assets, thus exerting further downward pressure on asset values and impeding their ability to raise financing. Finally, it is important to note that these risks are interrelated. For example, the spread of negative news in one market may lead to a flight to quality that results in the contraction of credit and market liquidity along with higher risk premia (van Rixtel, Gasperini, 2013).

Recent empirical analysis also provides insight into the methods by which shocks are transmitted. Longstaff (2010) cites three principal channels of transmission: the correlated information channel, the liquidity channel, and the risk premium channel. The correlated information channel involves the transmission of negative news that affects the value of related securities in other markets through the price discovery process. As investors become aware of negative news and price declines in one market, they evaluate the potential for negative price implications for other related markets and asset classes. The liquidity channel refers to shocks that disrupt liquidity in one market and result in an overall flight to quality. Reinhart and Rogoff
also differentiate between a “slow burn” spillover and a “rapid cross border transmission.” Concerning the latter, Kaminsky, Reinhart, and Vegh (2003) refer to market shocks that spread “fast and furious” as negative news to other markets, thus directly influencing the value of related financial instruments and asset classes in other markets.

**Governance and Financial Regulation**

The concept of governance is multifaceted and is discussed throughout this dissertation in different contexts including global governance, financial governance, risk governance and corporate governance. Although it lacks a common definition, governance can be broadly understood as the establishment and operation of a set of rules of conduct that defines practices, assigns roles, and guides interaction in order to reduce uncertainty and to achieve a common policy outcome (Young, 1999). At the global level, governance seeks to establish a process of cooperation among various state and non-state actors to achieve a common goal (Boughton and Bradford, 2007). Governance as it relates to financial systems or “financial governance” involves three core principles: the effectiveness in devising efficient regulatory standards and rules, the accountability in the decision-making structure and hierarchy, and the legitimacy of the processes involved (Alexander, Dhumale and Eatwell, 2006). Risk governance relates to the policies and procedures through which the board and management identify, measure and manage risks (FSB, 2013). Finally, as financial stability is a global public good, states create regimes and governance structures to overcome the collective action issues of working alone to control systemic risk.

IPE literature suggests that institutions play a critical role in facilitating global governance:
they disseminate information, they establish norms and patterns of behavior, and they facilitate cooperation among actors (North, 1990) (Keohane and Martin, 1995). Adopting this position, a system of financial governance can be defined as the set of institutional arrangements that regulate financial markets. These institutions include legal, political and supervisory bodies that provide order and cohesion to markets (Claessens, 2009). Metrics for financial governance include the equitable functioning of the legal process, the degree of political stability, the level of systemic corruption, the level of transparency of disclosure and accountability, and the extent to which the regulatory framework promotes competition but controls systemic risk.

Principles of financial governance can be applied through the institutional arrangements, regulatory structures, and regulations that govern the financial markets. Financial regulation can be promulgated through different vehicles or actors both within a financial sector or externally imposed. Examples of the former category include private, non-governmental bodies, such as the International Swaps and Derivatives Association (ISDA) and financial market leaders in the form of best practices. Regulation may also be imposed externally by regulatory institutions, such as the Office of the Comptroller of the Currency (OCC) and the Federal Deposit Insurance Corporation (FDIC). Ciancanelli and Gonzalez (2000) argue that financial regulation imposed externally by regulators has four principal effects on a financial firm. First, the existence of regulation denotes the existence of an independent, external force that affects both shareholders and management. Second, regulations directed at the level of the financial markets implicitly create an external governance force on the firm. Third, the existence of regulators and regulation suggests that market forces will discipline both managers and owners in a different manner than
in unregulated firms. Finally, the existence of a prudential financial regulator often implies that an external party is sharing the bank’s risks.

The OECD (2010) defines corporate governance to include the processes and structure through which corporate objectives are set, achieved and monitored within the context of the legal, regulatory and market environment. In addition, standard agency theory defines the corporate governance challenge in terms of how equity and debt holders influence senior management to act in their respective best interests (Shleifer and Vishny, 1997). However, as will be argued below, the corporate governance of financial intermediaries is far more complex and reflects their unique characteristics and fiduciary responsibilities to society. As a result, governance structures in the financial sector are industry-specific and reflect the unique role financial intermediaries play in the real and financial economies (Adams and Mehran, 2003). Financial intermediaries include insurance companies, commercial banks, investment banks, pension funds, hedge funds and others. Of these, commercial banks play a particularly critical role in the real economy. Commercial banks provide a major source of credit to both the retail and wholesale sectors. They facilitate the flow of surplus funds from savers to investors, a process known as financial intermediation. In addition, they operate the domestic and international payments system, provide banking services that facilitate trade and a host of financial services (Berger, Molyneux, Wilson, 2009).
The Lack of Financial Governance Played an Important Role in the 2008 and East Asia Crises

The importance of a robust framework for international financial governance was amply illustrated by the events that led to both the financial crisis of 2008 and the East Asia crisis that occurred a decade earlier. Indeed, both crises stemmed from financial system vulnerabilities resulting from weak governance—not weak macroeconomic conditions, as was the case with the Latin American debt crisis of the 1980s. Second, both crises spread quickly to other countries through financial contagion. The Asia crisis began with a series of speculative attacks on the Thai Baht and quickly spread to other Asian economies that were perceived by investors to have similar weaknesses. The transmission of contagion resulted in severe financial crises in Indonesia, Malaysia, South Korea, the Philippines, and, later in 1998, Russia (Lane, 1999). The 2008 global crisis began in the U.S. subprime market in the summer of 2007 and quickly spread to various sectors of the global financial system.

It is also noteworthy that both financial crises followed periods of sustained economic growth. The Asian crisis occurred after several decades of strong economic performance. For example, during the period from 1990 to 1996 the average annual growth in GDP was 7.7 percent for Korea and 8.6 per cent for Thailand. Moreover, those countries maintained balanced government budgets as well as high domestic savings rates, ranging from the high twenties to the mid-thirties as a percentage of GDP. Equally compelling, those economies were successful in sharing the benefits of economic growth as evidenced by high per capita income growth (IMF). Similarly, the crisis of 2008 followed a sustained period of favorable economic and financial conditions, including historically low real interest rates, abundant liquidity, and lower market
volatility. Market participants perceived these favorable conditions as part of a long term trend, the “Great Moderation,” and responded by assuming a greater level of risk. That in turn led to a boom in credit growth and leverage in the financial system.  

In the summer of 1997, the Asian economic miracle came to an abrupt end with the economic and financial collapse in East Asia. The IMF (1999) attributed the crisis to a combination of inadequate regulatory supervision in the financial sector and poor governance rather than macroeconomic factors. Specifically, they cite the following factors: (i) poor management of financial risk that resulted in private sector borrowers raising large amounts of foreign currency debt that was short term and un-hedged, (ii) a lack of transparency in financial accounting and weaknesses in the financial systems and governance, (iii) unsustainable government policies such as the pegging of currency exchange rates to an appreciating US dollar, that made their exports more expensive, and (iv) weak export demand from developed countries, particularly Japan that was in the midst of a recession. The above factors led to speculative pressures on Asian currencies and the rapid repatriation of foreign investment capital.

The origins of the 2008 crisis can be traced to the collapse of the US subprime mortgage market that began in summer 2007. The deterioration in the subprime market resulted in large part from weak underwriting and credit standards coupled with declining housing prices. As the US housing market continued to decline and mortgage defaults increased, financial institutions recognized substantial losses on their mortgage-backed assets that threatened their very financial

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9 Rising financial leverage was particularly acute at the level of household debt as evidenced by a quadrupling of US mortgage debt between 1990 and 2008, despite only a modest increase in the number of US households. Expressed differently, the ratio of household debt to personal income rose from 80 percent in the early 90’s to 130 percent by mid-2006 (El-Erian, 2008) (Financial Stability Forum, 2008) (Reinhart and Rogoff, 2009).

10 Subprime refers to loans made to borrowers with weaker credit histories and higher debt to income ratios.
solvency. In response, banks were forced to de-leverage balance sheets and shifted to higher quality, liquid assets. Credit markets also became less liquid with the subsequent flight to quality by investors.

In retrospect, several factors may have directly contributed to the market collapse including: (i) financial regulatory practices that failed to provide adequate safeguards for investors, (ii) the lack of effective governance and transparency in structured financial instruments, (iii) inadequate risk assessment on the part of both rating agencies and investors. (The latter relied extensively on credit ratings and did not fully comprehend the inherent risks of mortgage-backed investments), (iv) the overheating of the US housing market, (v) the substantial growth of the less regulated “shadow banking” sector, (vi) a rise in global liquidity that created a demand for higher yielding assets, and (vii) an over reliance on short term funding by financial institutions.

The lack of effective regulation also enabled another disturbing development: the migration of US investment assets away from the traditional, regulated financial system to non-regulated, off balance sheet structured investment vehicles, known as “SIVs.” Those vehicles were viewed as an attractive regulatory arbitrage as they profited from the difference between short-term borrowing rates and the long-term yields on structured investment products. In time, those investment vehicles became an integral part of a growing “shadow banking system.” As FDIC Chairman Sheila Bair (2010) confirmed, approximately half of all financial services were carried out by institutions that were not subject to prudential regulation and supervision.  

11 For more information on structured investment vehicles see the following article
http://www.ft.com/intl/cms/s/0/8eebf016-48fd-11dc-b326-0000779fd2ac.html#axzz3Hk1RbQbNn
In belated recognition of the inadequate governance and regulatory supervision, former Federal Reserve Chairman, Alan Greenspan admitted that lending institutions could not regulate themselves. At a hearing before the House Committee on Oversight and Government Reform, he commented, “Those of us who have looked to the self-interest of lending institutions to protect shareholders’ equity, myself included, are in a state of shocked disbelief….This modern risk-management paradigm held sway for decades….The whole intellectual edifice, however, collapsed in the summer of last year” (WSJ, 2008).

Prior efforts to Establish Global Financial Governance were primarily event-and issue-driven.

The need for a global regulatory framework for the international financial markets derives from the complex interaction of numerous factors: economic globalization and its attendant effects, the rapid growth of structured products and derivatives, the inability of national regulators to keep abreast of financial innovation, the increasing number of financial institutions with global reach and systemic importance, and the growing role played by less-regulated entities such as the structured investment vehicles (IMF, 2008). Finally, the significant cross-national variation in the regulation and supervision of financial sectors may also give rise to the need for a global governance framework. Financial regulators differ in terms of their levels of independence, relations with regulated firms and political leaders, policy preferences, and statutory authority. Absent a global framework for the international markets, those differences may result in divergent policy outcomes, facilitate regulatory arbitrage, and contribute to systemic risks (Mosely and Singer, 2011). A more defined regulatory regime at the international level would allow regulators to identify, measure, and deal more effectively with global systemic
risks. As the former FDIC chairman, Sheila Bair (2010) argued, the historical absence of an international framework or common understanding on how to dismantle large financial firms deemed “to be too big to fail” has forced the government to step in at the expense of the taxpayers. A firm agreement on certain core principles would allow for the dismantling of a systemically important financial institution without provoking greater uncertainty for the markets and years of litigation.

The current framework for global financial governance dates back to the end of the Second World War with the creation of the Bretton Woods institutions—the World Bank and the IMF and the General Agreement on Tariffs and Trade (GATT). The institutional framework was fragmented and highly specialized, and it lacked an over-arching authority. The lack of a comprehensive system of governance gave rise to a succession of ad hoc groups of states that met periodically to address key global issues including the state of the international economy. For example, The Group of Ten (“G-10”) main industrial countries formed in 1962. A subgroup emerged in the 1970s as the G-5, which broadened to the G-7 in the 1980s and to the G-8 in the 1990s. Later in 1999, the G-7 invited a number of emerging market developing countries to join them in a new G-20 grouping.

Similarly, prior efforts to harmonize the regulation of financial centers were also event- and issue-driven, with national regulators working on narrowly-defined issues rather than a

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12 The “too big to fail” problem takes place at both the national and international level. Certain financial institutions by virtue of their size, scope of operations and complexity present regulators with a true dilemma. If the institution is allowed to fail it could have unacceptable consequences for the international financial system, particularly with respect to the other banks that have a large amount of financial exposure to the failing institution. This in turn could cause other firms to fail and result in a flight of capital out of the banking sector, resulting in financial contagion.
comprehensive regime. As Beth Simmons (2001) observed, “There is neither a single venue nor a unitary process for hammering out a regime for regulating international capital markets. No ‘world capital organization’ parallels the World Trade Organization, nor have international rules been approached comprehensively, as was the case with the Law of the Seas in the 1970’s. … Legally binding conventions are rare outside of Europe. Rule development has tended to involve small numbers of national regulators working briefly but intensively on relatively narrow issues, and producing non-binding agreements” (p. 592). This issue-driven approach to financial regulation at the international level closely mirrors the historical practice in the United States. Indeed, the US regulatory framework was largely constructed as a reaction to either an existing financial crisis or major changes in the financial markets (Bentson, 1994). For example, the Federal Reserve system was created in 1913 largely as a result of the financial crisis of the early 1900s. The Glass-Steagall provisions of the Banking Act in 1933 were passed to separate commercial and investment banking activities in an effort to prevent another financial collapse. The thrift and banking crisis of the Eighties culminated in the passage of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 and the Federal Deposit Insurance Corporation Improvement Act of 1991. More recently, the Financial Services Modernization Act of 1999 (FSMA) was designed to allow bank holding companies to engage in non-banking activities such as insurance and investment banking. The FSMA repealed many of the prior Glass-Steagall provisions and reflected the growing convergence of banking, insurance, and investment banking activities. Finally, the 2008 financial crisis gave rise to a number of banking mergers and the Dodd Frank legislation.
In the aftermath of the 2008 crisis, the G-7 and G-20 members recognized the need to reexamine global financial governance and actively debated the merits of several alternative models. For the purposes of this dissertation, Table 1-1 codifies these discourses into the following four approaches and attendant characteristics.

Table 1-1. Global Financial Governance Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Characteristics</th>
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<tbody>
<tr>
<td><strong>Event/ Issue -Driven Model</strong></td>
<td>This approach reflects the status quo and perpetuates the asymmetrical distribution of financial power with New York and London as global financial hegemons. As such, regulatory coordination is top down and issue specific in nature. The primary actors are the national regulators from G-7/G-20 countries.</td>
</tr>
<tr>
<td><strong>Enhanced Bretton Woods Model</strong></td>
<td>This approach seeks to modify the existing Bretton Woods institutional framework by granting the IMF additional supervisory powers with respect to monitoring systemic risks to the international financial system as well as the activities of those financial institutions with global reach and systemic importance. In essence, the IMF becomes a systemic risk regulator.</td>
</tr>
<tr>
<td><strong>Regulatory Harmonization Model</strong></td>
<td>This model involves the creation of a new multilateral regulatory framework resulting in a partial loss of sovereignty for national regulators. It emphasizes the harmonization of national regulatory practices as common, agreed-upon regulations are incorporated into the national legal framework of each member. Enforcement occurs at both national and international level. National regulators remain the central actors. Recent examples include (i) the EU initiative to coordinate the European securities industries, The Markets in Financial Instrument Directive and (ii) the Basel Accords, a set of agreements set by the Basel Committee on Bank Supervision, which prescribe recommendations on banking regulations related to capital risk, market risk and operational risk.</td>
</tr>
<tr>
<td><strong>Super Regulator Model</strong></td>
<td>This approach provides an institutional focus with the creation of new entity that is less prone to political interference from member countries. The goal is to create a “WTO” equivalent for the international capital markets. As such, national regulators assume a subordinate role to the new global regulatory authority.</td>
</tr>
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Literature on Governance

*Pre-crisis literature evaluated the corporate governance of banks in the same principal-agent paradigm as non-financial institutions.*

Despite the centrality of commercial banks and other financial intermediaries to the economy, scholars have remarked that the pre-2008 crisis literature did not adequately focus on the corporate governance of commercial banks, their unique attributes that further complicate corporate governance issues, and the role financial governance may play in averting a systemic crisis (Caprio and Levine, 2002) (Adams and Mehran, 2003) (Mehran, Morrison, and Shapiro, 2011). The authors argue that financial intermediaries possess special attributes that intensify standard corporate governance problems. For example, Caprio and Levine cite the following factors: (i) financial institutions are less transparent than nonfinancial firms, giving rise to greater information asymmetries between insiders and outsiders. Moreover, the reduced transparency makes it difficult for minority shareholders to exercise their rights; (ii) financial institutions are heavily regulated, potentially reducing competition and impeding certain corporate governance mechanisms; (iii) government ownership of banks in certain countries may influence lending activities and fundamentally alter governance practices; (iv) financial institutions have a broad array of stakeholders, including depositors, borrowers, investors, and financial regulators at the state and federal level; and (v) certain external or market-driven governance mechanisms such as the threat of a hostile takeover are less common in regulated financial sectors. Indeed, many countries explicitly limit the possibility of hostile takeovers of commercial banks by requiring prior approval from the host country’s bank regulator (Laeven and Levine, 2009).

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13 The authors offer several examples: (i) regulatory restrictions on market entry, hostile takeovers, and bank activities may reduce competition, thus reducing market pressures on management to maximize profits, (ii) deposit insurance provided by the FDIC may increase the incentive for management to invest in riskier investments, and (iii) bank regulators may pursue policy objectives that do not coincide with the maximization of shareholder value.
Mehran, Morrison, and Shapiro (2011) support Caprio and Levine’s proposition. They explain that the prevailing view prior to 2008 was to consider the corporate governance of banks in the same principal-agent paradigm as non-financial institutions. They posit that banks and other financial intermediaries are distinct, both in their responsibilities as financial intermediaries and their unique characteristics. When compared with manufacturing companies, financial firms are more complex and far more leveraged, with debt levels approaching 80-90 percent of the balance sheet. ¹⁴ Second, since the passage of the Gramm-Leach-Bliley Act in 1999, banks have become much larger in size, scope, and complexity, offering a broader array of financial products across a large number of countries. ¹⁵ Similar to Caprio and Levine, the authors emphasize that banks have a broader array of stakeholders including depositors, creditors, and financial regulators that both insure deposits and help safeguard banks from negative externalities. Finally, Adams and Mehran (2003) attribute the dissimilarities in governance structures between bank holding companies and non-financial firms to two factors: dissimilar investment opportunities and the presence of regulation in the banking industry.

Empirical analysis provides useful insight into the relationship between components of effective financial governance and the development and performance of financial markets and economic growth.

¹⁴ Commercial banks utilize financial leverage as a factor of production: they borrow as cheaply as possible and on-lend the proceeds at a higher contractual rate.

¹⁵ The Gramm-Leach-Bliley Act in 1999 is also referred to as the Financial Services Modernization Act. It repealed many of the restrictions on commercial banks related to investment banking services that had been implemented under the Glass-Steagall Act. For more information see http://www.gpo.gov/fdsys/pkg/PLAW-106publ102/pdf/PLAW-106publ102.pdf
Empirical literature on the benefits of sound governance can be codified into two approaches, or theories of governance: the economic theory of governance, and the political economy theory of governance. Economic theories emphasize the optimal outcome of economic transactions. They argue that strong financial governance can facilitate economic growth and the development of financial markets in several ways. Those include broader access to financing, lower transaction and agency costs, lower cost of capital, reduced risks of financial distress, and the equitable treatment of debt and equity holders (Claessens, 2003) (Hooper, 2009). On the other hand, political economy theories stress the linkages among socio-political variables and the economy in determining governance outcomes (Redak, Schuberth and Weber, 2004). This dissertation builds on the economic theory of governance and draws from two bodies of work that are particularly relevant to this study. The first describes the defining characteristics of good financial governance while the second offers empirical analysis on the relationship between components of effective financial governance and the development and performance of financial markets and economic growth.

Research conducted by Das and Quintyn (2002) posits the importance of good financial governance for financial system stability and the functioning of the non-financial sector. The authors cite four critical elements that underpin good financial governance: independence, accountability, transparency, and integrity. They argue that these elements are mutually reinforcing. Their research provides useful metrics of sound financial governance that can be used to assess the quality of governance of different institutions. Leveraging this earlier work, Das, Quintyn, and Chenard (2004) provide empirical evidence that the quality of regulatory governance implemented by financial regulators has a direct and significant influence on
financial system soundness. The authors construct indices of financial system soundness and regulatory governance, utilizing country data collected from the IMF’s Financial Sector Assessment Program.

Barth, Caprio and Levine (2012) acknowledge the importance of the factors that contributed to the 2008 financial crisis, but they focus on systemic weaknesses with the governance of financial regulation, “the system associated with designing, implementing, assessing and reforming financial policies.” The authors posit that the crisis was not an accident, but rather the result of the policy choices national regulators made that increased the fragility of the international financial system. They argue that the current governance framework does not provide sufficient checks and balances to safeguard financial stability. The authors contend that regulatory authorities are not immune from short term political influences, nor sufficiently independent from the influence of the financial markets. In addition, financial regulatory bodies do not possess sufficient authority and expertise to demand and analyze information on the private financial markets.

Haque, Arun, and Kirkpatrick (2008) develop a conceptual framework to analyze the influence of corporate governance on both the development and the financial performance of capital markets. They posit that the quality of a firm’s corporate governance is largely dependent on institutional mechanisms and market governance, particularly as it relates to legal and market standards. Gilson (2000) and Claessens (2003) observe that corporate governance shapes a company’s access to external finance and capital market development through protecting the rights of minority shareholders and enhancing investors’ confidence. Erkins, Hung, and Matos
(2012) examine the influence of governance on financial firms’ performance during the financial crisis of 2008. Drawing from a sample of 296 financial firms from 30 countries, the authors conduct a regression analysis of stock returns and three governance factors: board independence, institutional ownership, and the presence of large shareholders. The authors conclude that corporate governance had an important impact on a firm’s performance during the financial crisis primarily through the firm’s risk management and funding policies.

In the wake of the 2008 crisis, national regulators and politicians argued for stronger governance in the international financial system. Stijn Claessens (2009) posits that a new international governance framework is needed to meet three core objectives: (i) to reduce the systemic risks in the international financial system; (ii) to improve financial intermediation; and (iii) to adjust the perimeter of the regulation and supervision of the largest systemically important financial institutions. Claessens notes that the systemic nature of the crisis suggests that current policy approaches often lag events. Financial innovation and the integration of markets have increased the speed and extent to which shocks are transmitted across asset classes and countries, between systemic and non-systemic institutions. He poses several core challenges that global regulators must consider as they formulate new regulations:

- to address transnational differences in regulatory practices;
- to design liquidity mechanisms on a global scale to avoid financial contagion;
- to ensure better coordination when systemically important financial institutions fail;
- to introduce effective regulation that does not impose an unnecessary burden and stifle innovation.
In an earlier work, entitled “Corporate Governance and Development,” Claessens (2003) describes several channels through which effective governance can positively affect the growth of national economies, financial markets, and firms. These include broader access to financing, lower cost of capital, reduced risk of financial stress, and more favorable treatment of corporate shareholders. In their article “Financial Dependence and Growth,” Raghuran Rajan and Luigi Zingales (1998) establish the linkage between the size of the stock market and availability of credit and economic growth. Their study suggests that the development of the financial markets has a positive influence on the rate of economic growth by reducing the cost of external finance to financially dependent firms. They argue that financial intermediation through the financial markets reallocates capital to the highest value use without substantial risk of loss through moral hazard, adverse selection, or transactions costs. They conclude that this process efficiently promotes economic growth.

Research conducted by Daron Acemoglu, Simon Johnson, and James A. Robenson (2005) suggests linkage between sound financial governance and the ability of economic institutions to foster growth. The authors set out to identify the key explanatory variable(s) that determine cross-national historical economic growth and to develop a theory of national economic growth. They compare and empirically test three “fundamental” explanations of economic growth: economic institutions, geography, and culture. They posit that economic institutions are important as they influence the structure of economic incentives in society and have distributive consequences that actors recognize and will pursue. Geographic factors are essentially elements of the natural and man-made environment including climate, resources, and disease. Cultural factors include religion, social values, and colonial history. Their research suggests that the
ability of economic institutions to foster growth is largely defined by two pillars of good financial governance: the security of property rights and relatively equal access to economic resources to a broad cross-section of society.

John Goodell and Raj Aggarwal (2009) observe that strong financial governance helps shape national preferences for a market-based system. They analyze the effect of several key metrics of financial governance on the development of the financial system. Those metrics include political stability, transparency, and legal protection for shareholders. They note that both bank-based and market–based systems must address similar challenges of asymmetric information, adverse selection, and potential agency costs. Moreover, they argue that factors such as a nation’s legal environment, ethical structures, and social and cultural norms determine a nation’s ability to meet these challenges.

Approaching the financial governance question differently, research done by Kwok and Tadesse (2006) indicates that cultural dispositions towards risk can influence the development of the financial markets and play a significant role in explaining the cross-country variation in financial governance architecture. They posit that countries with national cultures characterized by high uncertainty avoidance tend to have bank-based financial systems, while those with a greater risk tolerance tend to have market-based financial systems. However, their work suggests an interesting question of causation that merits further research. Specifically, do cultural dispositions towards risk directly influence the development of a country’s financial governance architecture as they suggest? Or, does the existence of sound financial governance and its defining characteristics of transparency, legal protection, and effective regulation allow for a broader range of risk preferences and greater risk tolerance?
Focusing on the interrelation between financial governance and the performance of the financial markets, Vince Hooper (2009) uses asset pricing models to examine how the quality of governance affects stock market performance. The empirical results demonstrate a significant positive association between stock market performance measures and the quality of the institutional environment. Specifically, countries with efficient institutional environments have higher stock market returns and lower levels of risk. Second, levels of total risk and country-specific risk are lower in countries with better governance ratings, supporting the notion that institutional foundations lower the level of uncertainty in an economy. In addition, he finds the quality of governance to be negatively associated with both systemic and idiosyncratic risks. He concludes that better governance can increase returns to shareholders by reducing both transaction costs and agency costs. Hooper selects two returns-based measures of equity performance, average monthly stock index excess returns and Sharpe ratios, as his dependent variables. As illustrated in Table 1-2 below, he constructs six governance indicators as the independent variables. The indicators are grouped into three distinct governance clusters to measure different aspects of governance. Finally, he uses regression analysis to examine the impact of the quality of governance on the cross country variance of stock market performance.

16 The concept of excess return refers to the incremental return from a security or portfolio that exceeds an established index with a similar level of risk. Excess return is also known as alpha. The Sharpe ratio is used to characterize how well the return of an asset compensates an investor for the risk taken. It measures the excess return per unit of risk in an investment asset.
Table 1-2. Governance Clusters and Related Metrics

<table>
<thead>
<tr>
<th>Governance Cluster</th>
<th>Governance Metrics</th>
</tr>
</thead>
</table>
| Methods of selection of managers of government institutions and the degree of stability | Voice and Accountability  
Political Stability                                    |
| Ability of organizations to develop and implement regulatory change                 | Government Effectiveness  
Regulatory Quality                                           |
| Respect for the institutions that govern transactions                             | Rule of Law (enforceability of contracts and property rights)  
Control of Corruption                                                   |

Another important component of financial governance is the rule of law and legal protection of minority and outside investors. In their essay “The Economic Consequences of Legal Origins,” Rafael La Porta and Silanes de Lopez (2007) put forth the premise that the legal protection of outside investors is an important predictor of the development of the financial markets. The authors begin by summarizing their earlier contributions to the literature: (i) legal protection for investors can be measured and coded for most countries using national corporate and bankruptcy laws. Their research showed that the degree of legal protection of outside investors varied substantially; (ii) they documented empirically that legal rules protecting investors vary systematically among legal traditions or origins with common law countries providing more protection for investors than civil law countries; (iii) legal traditions were largely exogenous as they were primarily introduced through colonization; and (iv) legal investor protection is a strong predictor of financial development. Their subsequent research indicates that the influence of legal origins on laws and regulations is far greater than just finance and
spans a broad range of issues including labor regulation, military conscription, ownership and control of the media, etc. Second, they find that common law is associated with lower formalism of judicial procedures and greater judicial independence—both are associated with better contract enforcement and protection of property rights. Finally, they posit that common law represents a strategy of social control that supports private market outcomes (dispute resolving), whereas civil law supports state desired allocations (policy implementing).

Although incomplete and reductive in nature, the above summary of empirical literature provides useful insight into several concepts that are core to this dissertation:

- The relationship between components of effective financial governance and the development and performance of financial markets and economic growth.
- The unique attributes of financial intermediaries that must be considered when addressing questions of financial governance.
- The linkage between the governance of financial institutions, systemic risk and financial crises.
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Chapter Two: Theoretical Framework

Chapter Two consists of two components, each addressing a distinct field of literature. The first provides a theoretical construct for the dissertation by reviewing several schools of international relations (“IR”) theory. Drawing upon the primary tenets of neo-realism, neo-liberal institutionalism, hegemonic stability theory and regime theory, it provides a framework to understand the interaction of states as market participants with the two global financial centers, the United States and the United Kingdom, and the development of governance structures in the international financial markets. The second component of this chapter examines selected works in the field of policy diffusion. The literature offers additional insight into the processes through which the regulatory policies adopted by a select group of countries or institutions spread or “diffuse” to the peripheral countries. A diffusion perspective on financial markets governance argues that the regulatory order and market best practices are first implemented by a select group of hegemonic states or market leaders and subsequently diffused to the remaining market participants.

International Relations Theory

Our point of departure is to recognize the importance of the school of “neo-realism” as the predominant school of international relations since the end of World War II (Donnelly, 2000). This school provides a systemic approach to the study of international relations. The underlying premise is that competition among states is due to the lack of an overarching authority in the international system (“anarchy”) and the distribution of power within the system. Anarchy, neo-realists argue, dictates that states focus on relative power, security, self-help, and their own survival.
Kenneth Waltz (1995) is largely credited as a founder of the neo-realist school. He writes that the international system consists of three elements:

- Organizing principles: The international system is based on anarchy, and a hierarchy of states based on the distribution of power.

- Differentiation of units: The primary actors are sovereign states. By extension, all states can be treated as like units.

- Distribution of capabilities: The distribution of power in the international arena is the primary determinant of foreign policy outcomes.

The neo-realist school departs from traditional realism in that it places greater emphasis on the structure of the international system, namely anarchy and the distribution of capabilities. Second, although realists believe that power is an end to itself, Waltz defines power as the combined capabilities of the state; moreover, power determines a state’s position in the international system—and that position influences its behavior. Third, the two schools differ on the topic of anarchy. For the realists, anarchy is a defining condition of the system; states react to it according to their size and power. Although neo-realists agree that anarchy defines the international system, they ascribe greater flexibility to the actions of states.

Although neo-realists acknowledge that regimes exist, they downplay their importance and argue that regimes have no independent power over states. In contrast to regime theory (discussed below), neo-realists argue that cooperation among states is difficult to achieve for several reasons. As sovereign entities, states are primarily concerned with their own security in
an anarchic international system. Second, states focus on relative gains. To the extent that states cooperate, it is to prevent others from gaining at their expense. As John Mearsheimer (1995) suggests, a state’s participation in a regime reflects its own calculations of self-interest and concerns for relative power. States use regimes to increase their share of power relative to other states. Finally, certain neo-realist scholars including Joseph Grieco (1995) offer a power-based approach to regimes using hegemonic stability theory. This theory contends that international economic cooperation and stability are more likely when there is a single dominant state, or “hegemon.” Second, dominant states create regimes to serve their own economic and security interests.

*Neo-realism and hegemonic stability theory offer valuable insight when examining the development of the international financial markets.*

Supporting the neo-realist view that nations operate in a state of “anarchy” due to the lack of an overarching global authority, the international capital markets have historically operated in the absence of a comprehensive regulatory regime. Prior efforts to harmonize the regulation of financial centers were typically ad hoc and issue-driven with national regulators working on narrowly defined issues, rather than a comprehensive regime (Simmons, 2001).

Interpreting Waltz’ definition of state power to include economic and financial market position provides a theoretical framework to analyze both the behavior of the two global financial market hegemons (US and UK) as well as the development of the current governance structure of the international capital markets. By virtue of their dominant position, the two financial centers are in a unique position to promulgate their regulatory reform and market practices to the smaller markets as
the hegemon(s) or market leader typically defines “best practices” in the industry. If lesser players do not adopt these practices they could experience a competitive disadvantage and risk being marginalized in the international capital markets. Second, the free markets act as an independent force that can reinforce the policies of the market leader. Once the market leader articulates the new standards or “best practices,” market participants (both issuers and investors) will pressure other states to adopt them as well. A case in point was London’s liberalization of its financial markets, the “Big Bang” in 1986, which was followed by the French “le petit big bang” in 1988.

Elements of hegemonic stability theory can also be seen when analyzing the development of the current governance structure of the international capital markets. The current structure reflects a fundamental asymmetry in financial power between the two financial hegemons on the one hand, and the other state actors on the other. It is also characteristic of a “top down” approach to governance as financial regulation is promulgated at the national level by the two hegemons and introduced to other markets. Historical efforts to coordinate regulation were often based on a bilateral consensus as the two financial centers shared a common “Anglo-Saxon” view of the international capital markets. That said, the hegemon must always anticipate the consequences of enacting reforms given its privileged position in the international system. Policy reform can have three outcomes: (i) it provides incentives to other countries to emulate the reform; (ii) it provides incentives for other states to diverge from this policy—typically as a result of the perceived cost; and (iii) it provides no incentives for action (Simmons, 2001). Depending on the level of externalities, the hegemon will attempt to adopt the most cost-efficient method.
As discussed below in Chapter Three, Neo-realist behavior on the part of EU member states frustrated the EU Commission’s initiatives to introduce a common regulatory approach to the European securities industry for several decades. More recently, the inability of European governments to forge a common response to the financial crisis in 2008 is a second case in point. Focusing on national interests and short term relative gains, certain member states opted for national policies that proved counter-productive to a “European solution.” For example, in the thick of the 2008 crisis, the Irish government announced it would guarantee deposits held at Irish financial institutions. It made the decision without fully consulting other EU members. The result was a massive outflow of capital from UK banks to Irish banks that further exacerbated the loss of confidence in UK institutions that had begun with the Northern Rock problems (FT, 2008). The French government announced stimulus measures for its economy while the Germans were more concerned with inflation. Concurrent with these national efforts, EU institutions were drafting their own response to the financial crisis.

As national self-help polices proved ineffective against a global financial crisis, G-20 nations recognized the need to work together to maintain financial stability and to rebuild the global governance architecture. Second, certain principles of neo-realism had become anachronistic in a world where interdependence has made countries more vulnerable to the transmission of financial and economic shocks as well as the speed at which financial contagion can spread. Indeed, in a financially interdependent world, political leaders cannot pursue economic policies in a vacuum.
Neo-liberal Institutionalism, complex interdependence and the interaction of sovereign states.

A second school of IR theory, neo-liberal institutionalism (“NLI”), offers a theoretical construct to understand the interaction of sovereign states in a financially-interdependent world. NLI agrees with the neo-realists that the international system is anarchic and competitive in nature but disagrees in terms of the outcome. In contrast to the neo-realist focus on power and relative gains, neo-liberals recognize that states have become more interdependent and seek ways to cooperate on specific issues. They are more issue driven and seek ways to solve these issues through mutual collaboration.

Keohane and Nye (1995) have defined this increased interaction as “complex interdependence.” They posit that although states are the primary actors in the international system, non-state actors including non-governmental organizations, multinational corporations, and multilateral agencies are important as well. Second, given the absence of a clear international agenda, states have a number of competing domestic and international interests. Security is always an issue but not in the forefront. Finally, the use of military power is less relevant in an interdependent world. Drawing from this paradigm, NLI offers several observations that help explain the interaction of sovereign states in a financially interdependent world and the development of governance structures:

- States will cooperate to solve mutual issues. Cooperation begets further cooperation as success in one issue area spills over to another. In time, states will focus on absolute gains more than relative gains.

- States will create organizations and regimes to address market inefficiencies and to pool resources.
• Regimes crystallize cooperation; they define norms, procedures, and behaviors for a specific issue area. Over time these rules will influence the behavior of states and engender a convergence of behaviors around the issue.

• With appropriate governance structures in place, states are inclined to cooperate because they are less concerned with cheating and defection by other members.

• Hegemons continue to exist but will pursue objectives that are beneficial to all members.

• The balance of power is no longer a function of military strength, but rather asymmetries in interdependence.

Regime theory also offers a valuable tool to analyze the interaction of states or “cooperation under anarchy” (Oye, 1986). According to this theory, states collaborate on specific issue areas when they perceive the costs of national self-reliance to be excessive. This motivates states to work together in areas of common interest to achieve economically efficient outcomes (Haas, 1980). The process is reinforced by a convergence of expectations among member states. As Oran Young (1982) observed, “We live in a world of international regimes…. Regimes vary greatly in terms of functional scope, area, domain, and membership…. Far from being unusual, they are common throughout the international system.” Young offers the following classic definition of a regime: “Regimes are social institutions governing the actions of those interested in specific activities….They involve recognized patterns of practice around which expectations converge” (p 332).

At the heart of every regime is a collection of rules and rights. Rules are defined courses of action or standards. Rules contain a subject group’s prescription of behavior and the specific
circumstances under which the rule is operative. Regimes utilize rules to govern activities, establish the extent of liability, and define the rights of their members (Haas, 1980). A related corollary is that regimes influence the behavior of states. A regime establishes a common platform of correct actions and behaviors for a specific issue area. This platform is defined by the rules and regulations of the regime and backed by the converged expectations among its participants. Over time these actions signal that individual states are abiding by the rules, thus promoting further cooperation among regime members.

Robert Keohane (1995) argues that international regimes can increase the likelihood of cooperation among members by performing the following tasks: first, by monitoring the actions of its members and reporting on compliance; second, by reducing transaction costs and market inefficiencies by institutionalizing cooperation; and third, by promoting cooperation among members. The development of a regime often involves intense negotiations among its principal actors. Indeed, this was the case with the development of MIFID in the European Union, which took nine years to formulate. Regimes are created to address substantive areas in international relations and arise from the recognition that individual states cannot obtain desired outcome on their own and the costs of national self-reliance are excessive. Eric Haas (1980) defines regimes as “norms, rules, and procedures agreed to in order to regulate an issue-area.” Norms reveal why states collaborate; rules define the collaboration and the underlying issue; and procedures state how states will collaborate. Although political compromises may render a regime relevant, long term success is determined by the extent to which its members benefit from this interaction.
Policy Diffusion and Financial Markets Governance

The study of policy diffusion offers additional insight into the processes through which the regulatory policies adopted by a select group of countries or institutions spread or “diffuse” to the peripheral countries. A diffusion perspective on financial markets governance argues that the regulatory order and market best practices are first implemented by a select group of hegemonic states or market leaders and subsequently diffused to the remaining market participants. Diffusion can be defined as “the process by which the adoption of innovation by members of a social system is communicated through certain channels over time and triggers mechanisms that increase the probability of its adoption by other members who have not yet adopted it” (Levi-Faur 2005; p. 202). It depicts an increasingly interdependent world and results in the transfer of institutions and knowledge. Its central premise is that national policy choices are interdependent; governments decide on policies in response to the policy initiatives of others. Diffusion builds on the empirical observation that nations choose similar institutions over a defined period of time resulting in both temporal and spatial clusters of policy reform. Zachary Elkins and Beth Simmons (2005) describe this outcome as “clustered policy making.” They observe that the process is often coordinated by a hegemonic power or international organization. This may be a vertical process such as coercion or a horizontal process such as learning. In addition, they argue that policy diffusion may also result from an uncoordinated interdependence which they define as “a set of processes characterized by interdependent but uncoordinated processes.” David Levi-Faur and Jacit Jordana (2005) posit that diffusion should not be viewed as a smooth, mechanistic process. International integration engenders processes of convergence and divergence at the same time. Convergence argues that growing international
integration will directly affect the formulation of domestic policy. On the other hand, a divergent outcome predicts that international integration is insufficient to alter historically rooted trajectories or path-dependent behavior. From this perspective, diffusion leads not to convergence but increased variation of policy.

Diffusion literature distinguishes between three approaches to policy diffusion: horizontal, top-down, and bottom up. Horizontal refers to an interdependent decision process wherein the decision to adopt financial markets reform is taken collectively by an interdependent group of regulators. Typically, they face similar incentives to cooperate and are influenced by the actions of the others. Successful policy reform in one sector increases the likelihood that similar policy measures will be replicated by other nations’ regulators. The bottom up explanation reflects a domestic dialogue among different interest groups and national regulators. Finally, the top-down approach explains national regulatory reform as a response to exogenous pressures. Similar to hegemonic stability theory, top down policy diffusion gives prominence to the asymmetrical power relationship between the “market leader” in the core and the “market follower” in the periphery.

Beth Simmons (2001) contributes to the debate by constructing a conceptual framework to explain the interaction between the financial hegemon and the financial regulators of other countries on the issue of regulatory reform. She posits that Neoliberal institutional theory and other economic theories such as “racing to the bottom” are less effective in explaining the outcomes of this interaction. Simmons remarks that according to the tenets of liberal institutionalism, the international capital markets would have made a good candidate for institutionalization. That said, there is no established
regime that could serve as the WTO equivalent of the capital markets. She proposes therefore to focus on the mechanisms of harmonization instead and provides a four quadrant taxonomy that incorporates the concepts of externalities and incentives to emulate. According to Simmons’ arguments, the financial hegemon enacts financial regulatory reform based on the needs of its domestic political economy, not the needs of the other states. By virtue of being hegemonic it would be more costly to change its market policy to suit other countries. It must, however, always deal with the consequences of enacting this reform given its privileged position in the international system. Policy reform can have three outcomes: (i) it provides incentives to other countries to emulate the reform; (ii) it provides incentives for other states to diverge from this policy—typically as a result of the perceived cost; and (iii) it provides no incentives for action. Depending on the level of externalities, the hegemon will attempt to adopt the most cost efficient method. Simmons’ quadrant one represents the scenario where there are high incentives for the others to emulate the financial innovation of the hegemon and high externalities for the hegemon if the policy is not implemented. As such, there is typically a lot of cooperation on these issues and the hegemon leads by enacting the innovation first. Simmons includes capital adequacy in this quadrant, arguing that non-hegemons had a significant interest to emulate this innovation to keep their banks on a level playing field with the hegemon banks. Not to do so would make the non-hegemon banks appear riskier than the hegemon banks and put them at a competitive disadvantage. The high externalities of this particular example derive from the systemic risk of a weaker bank becoming insolvent and dragging down the other banks. Quadrant two reflects a “high externalities but low incentive to emulate” scenario. The author places anti-money laundering in this quadrant as it is more important to the U.S. than many other countries that may not have similar legislation. In this scenario, there is initially less cooperation among the hegemon and other states as the costs may appear to outweigh the benefits of compliance. As a result, the hegemon will typically
seek a political solution and exert influence through an international organization/regime structure.

Quadrant three reflects low incentives to cooperate and low externalities, while quadrant four reflects high incentives to emulate with low externalities. In the last quadrant the hegemon may not bother pressuring other states toward compliance as the issue is less important to the hegemon and other nations should follow as it is in their interest to do so. Simmons allocates the adoption of international accounting standards to quadrant four.

In a later article, Beth Simmons and Garrett Dobbin (2006) describe the diffusion of liberal economic policies as a defining feature of the late 20th Century. They offer several competing interpretations: (i) the spread of neo-liberal doctrine through the institutional framework the United States helped to create; (ii) the influence of global ideologies; and (iii) through economic globalization. In addition, the authors offer several different mechanisms through which decision making in the context of policy diffusion takes place:

- Coercion: Hegemonic countries influence the decision making process of weaker nations by manipulating the opportunities and constraints encountered by weaker nations—either directly (bilateral agreements) or through the governance structures they create and influence. The weaker nations are forced to “adapt” to the hegemon’s policies.

- Competition: In a more decentralized system, governments compete with each other for a greater share of mobile capital. Policy choices are designed to make local markets more attractive, cut taxes, simplify regulations, etc. From a regulatory standpoint, these choices may weaken the governance framework and lead to a “race to the bottom.”

- Learning: A change in beliefs results from exposure to new evidence, new theories.
• Emulation: Public policies become socially accepted and may be based on support from public intellectuals.

Braun and Gilardi (2006) provide a similar description of the different diffusion mechanisms: coercion, competitive interdependence, and interaction among policy actors which engenders common norms of action and policy choices.

In his article entitled “The Institutional Foundations of Regulatory Capitalism: The Diffusion of Independent Regulatory Agencies in Western Europe” Fabrizio Gilardi (2005) studies the widespread establishment of independent regulatory agencies (IRAs) throughout European countries and in various sectors during the 1990s. He views these institutions as a core feature of the governance structure for regulatory capitalism. Gilardi attributes this diffusion to several factors: the creation of IRAs was an attempt to demonstrate commitment to policy reform and to enhance governance; second, the EU agenda called for creation of independent regulators; and third, policy decisions by states are interdependent. He concludes that the widespread establishment of IRAs reflects the diffusion process and that individual state decisions have been interdependent.
Summary

The above discussion draws on several schools of IR theory to provide a framework to understand the interaction of states as market participants in the global financial system, the development of governance structures in the international financial markets, and the spread of regulatory best practices. Models of policy diffusion offer valuable insight into the processes through which a select group of countries or institutions spread or “diffuse” regulatory best practices to the peripheral countries. For example, both the European Union’s attempt to implement a common regulatory platform in European markets (MIFID) and the market leader’s introduction of market best practices can be viewed as examples of the top-down model of policy diffusion. This model recognizes the asymmetrical power relationship between the “market leader” in the core and the “market follower” in the periphery. As will be discussed below in Chapter 3, member states were forced to adapt to the market policy changes introduced by the financial market leaders and the EU Commission, albeit through different mechanisms. In contrast, the horizontal policy diffusion model is more appropriate to explain the sharing of best practices observed by the Export Credit Agencies. Agencies adhere to a common governance framework negotiated by OECD members. Known as the “Gentleman’s Agreement,” it is legally non-binding to its members.

In reviewing the literature on neo-realism, one observes several interesting parallels. Similar to the neo-realist view that nations operate in a state of “anarchy” due to the lack of an overarching global authority, the international capital markets have historically operated in the absence of a comprehensive regulatory regime. Second, the neo-realist notion that international
economic cooperation and stability are more likely when there is a single dominant state, or “hegemon” can be applied to the financial markets. The two financial centers are in a unique position to impose their regulatory reform and market practices on the smaller markets as the market leaders or “hegemons” typically define “best practices” in the industry. Moreover, historical efforts to coordinate regulation were often based on a bilateral consensus as the two financial centers shared a common “Anglo-Saxon” view of the international capital markets.

Although neo-liberal institutionalism and regime theory offer a useful model to understand the interaction of sovereign states in a financially-interdependent world, they were of limited value to this research. According to these theories, state and non-state actors will cooperate to solve mutual issues, including market inefficiencies. Over time, the cooperation crystalizes and develops into regimes or governance structures that define norms, procedures, rules, and behaviors for a specific issue area. Given the size and importance of the international financial markets, NLI theory would predict the formation of an international institution to regulate the capital markets. In contrast, the current governance framework is fragmented, highly specialized, and it lacks an over-arching authority.
References


Chapter Three: The Markets in Financial Instrument Directive: Developing a Post-Crisis Agenda

ABSTRACT

The creation of a common regulatory platform for the financial sector has been a top priority for the European Union for over three decades. Despite the markets’ convergence toward Anglo-American standards, substantial differences existed between the domestic regulatory practices in the various member countries, a problem exacerbated by the addition of new members that lacked well-developed capital markets and securities regulatory frameworks.

Introduced in 2007, the initial Markets in Financial Instrument Directive (MIFID) underscored the European Union’s strategy to create pan-European capital markets. Its overarching objective was to create a single European securities market for financial instruments. Prior efforts to coordinate securities regulation were largely unsuccessful as EU member states opted for regulatory protectionism over effective market integration.

The financial crisis of 2008 exposed systemic weaknesses of the European Union’s regulatory architecture, requiring national governments to step in to fill the void. In tandem with the G-20 initiatives, the EU refocused its strategic priorities away from the liberalization and harmonization of securities regulation to macro supervision. MIFID remains an important component of the European Union’s financial strategy, but its focus has changed to reflect the EU’s post-crisis agenda.

This article provides an overview of EU initiatives to coordinate the regulation of the European securities sector ranging from the 1996 ISD Directive, to MIFID I in 2007, to the proposed MIFID II. It reviews key provisions of MIFID, its expected benefits, and its potential costs. Finally, the article offers several potential explanations for MIFID’s protracted evolution including competing national agendas, protectionism, and divergent patterns of state involvement.
Introduction

The financial crisis that erupted in 2008 exposed systemic weaknesses in the global financial regulatory framework and engendered a broad refocusing of the European Union’s (EU) strategic priorities. For many, the crisis challenged a long-standing consensus on the merits of EU financial integration modeled after the U.S. capital markets. Whereas the EU’s pre-crisis agenda sought to both liberalize and integrate its national financial markets, the post-crisis agenda emphasizes the need to bolster macro prudential financial supervision and the EU’s institutional architecture (European Commission, 2010). Statements made at the Pittsburgh G-20 Summit confirmed the shift in sentiment: “We are confronted with the greatest challenge to the world economy in our generation….We want growth without cycles of boom and bust and markets that foster responsibility not recklessness….We will not allow a return to banking as usual” (G20, 2009).

This paper traces the evolution of EU initiatives to coordinate the regulation of the European securities sector ranging from the 1996 Investment Services Directive, to MIFID I in 2007, to the proposed MIFID II. The discussion is divided into four parts. Part one reviews the prior history and objectives of EU financial integration. Part two provides an overview of the principal features of MIFID together with anticipated benefits and potential costs for member states. Part three discusses the political economy of MIFID. It offers several potential explanations for the circuitous and protracted reform process, including competing national agendas, protectionism, and divergent patterns of state involvement. Finally, part four concludes the discussion.
During the twenty-year period leading up to the crisis, Europe sought to both liberalize and integrate its national financial markets, following the blueprint outlined in the 1999 Financial Services Action Plan (FSAP). Together with monetary union, the creation of a pan-European financial market was a central tenet of the European Union’s integration platform. Expected benefits included more cost-efficient capital markets, a growth in securities issuance, and higher GDP growth (European Commission, 2002). Highlighting its importance, the EU’s single market agenda specifically addressed the need for an integrated securities market: “regulatory reforms are necessary to produce an integrated securities market, which would yield significant economic benefits to Europe. The Committee believes that the shortcomings of European regulation are one of the contributing factors to the current lack of an integrated financial market” (European Commission, 2000).

In spite of the rhetoric, prior efforts to liberalize and harmonize national EU financial systems did not follow a consistent approach and were largely seen as a failure. To begin with, the dominant member states, Britain, France and Germany failed to develop a pan-European agenda in the early years. These countries not only dominated the debate, their financial institutions represented approximately three quarters of the total banking assets of the top twenty European Financial Institutions. Indeed, European finance during this period could best be described as a union of fragmented national markets with the separate and distinct Euromarkets operating in London (Walter and Smith, 1989).

The lack of a common European approach was also mirrored at the international level where efforts to coordinate the regulation of financial centers were typically issue driven. As one
international economist observed, “There is neither a single venue nor a unitary process for hammering out a regime for regulating international capital markets. No ‘world capital organization’ parallels the World Trade Organization, nor have international rules been approached comprehensively, as was the case with the Law of the Seas in the 1970s…. Legally binding conventions are rare outside of Europe. Rule development has tended to involve small numbers of national regulators working briefly but intensively on relatively narrow issues, and producing nonbinding agreements” (Simmons, 2001, p. 592).

The Need for a Coherent Plan

An important first step in the implementation of the integration agenda was the promulgation of the 1993 Investment Services Directive (ISD). The Directive set the legislative framework for investment firms and securities markets in the EU. Among its provisions it established a single EU-wide “passport” for a limited number of financial instruments and investment services. The passport concept was an important milestone as it allowed firms to provide financial services throughout the EU under the aegis of the local regulatory authority. This measure precluded restrictive legislation at the national level that could frustrate cross border activity.

While the Directive is credited for achieving limited progress, the integration of Europe’s financial regulatory framework continued to be an elusive objective with key member states failing to implement ISD provisions. National governments were able to circumvent implementation by exploiting the “minimum harmonization and mutual recognition” concept imbedded in ISD. This doctrine allowed securities firms to follow their local practices and avoid
EU rule harmonization. It later became a loophole for those firms that opted for regulatory protectionism rather than market integration. In addition, ISD provisions concerning the division of responsibilities between the home and host-state regulators were viewed as ambiguous, engendering much debate between member governments (Story, 1997). In an effort to regain momentum, the European Commission formulated its Financial Services Action Plan (FSAP) in 1999. The plan sought to establish a single market for both retail and wholesale financial services over the 2002-2005 period. FSAP proposed an ambitious agenda and incorporated a broad range of reforms:

- To create a single wholesale market, enabling corporate issuers to raise debt and equity financing on competitive terms throughout the EU;
- To provide investors unfettered access to all EU financial markets from a single point of entry;
- To provide a sound legal environment for the sales, trading and settlement of securities;
- To create a transparent and sound retail market with appropriate safeguards for individual investors;
- To promote efficient cross border retail financial services;
- To implement prudent regulatory supervision on a pan-European basis.

Faced with a three-year time frame to implement FSAP provisions and the lack of cooperation among certain EU members, the European Council decided it would streamline procedures for implementation. In 2001 it adopted an innovative regulatory process created for
EU securities legislation called the “Lamfalussy Process.” As outlined in table below, this approach consists of four separate steps.

Table 3-1. Lamfalussy Process

<table>
<thead>
<tr>
<th>Step</th>
<th>Required Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level One</td>
<td>Core principles are agreed upon by the European Parliament and European Council</td>
</tr>
<tr>
<td>Level Two</td>
<td>Implementing Measures to render the Level One principles operational are adopted by the European Commission based on the technical advice of the Committee of European Securities Regulators (CESR). Both the European Parliament and the European Securities Committee maintain the right to provide input as well.</td>
</tr>
<tr>
<td>Level Three</td>
<td>The CESR issues non-binding guidelines for member states.</td>
</tr>
<tr>
<td>Level Four</td>
<td>EU member states are required to transpose the guidelines into national law. Non-compliance can invoke infringement proceedings from the European Court of Justice.</td>
</tr>
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</table>


Underpinning the EU’s drive toward financial integration was a growing consensus among the European political elites on the advantages of pan-European financial integration and the need for EU legislation to promote this agenda (Donelly, 2010). Studies conducted in 2002 on behalf of the European Union argued that integration would serve as a catalyst for economic growth across all sectors of the economy, boost productivity, and provide lower cost financial products for consumers and enterprises (European Commission). They concluded that the

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17 The Lamfalussy Process provides several benefits over traditional lawmaking, including a more-consistent interpretation and convergence in national supervisory practices. It consists of four levels, each focusing on a specific stage of the implementation of legislation (Financial Services Authority, 2003).

18 In a 2005 speech, Charles McCreevy, the EU Commissioner for Internal Market and Services, stated “MIFID dramatically increases levels of competition among and between execution venues and investment firms. It will definitely increase cross border competition and lower costs for issuers and investors of accessing capital markets” (McCreevy, 2005).
integration of EU financial markets would create more efficient and liquid markets resulting in cheaper financing costs, increased usage of corporate bonds over bank debt and reduced settlement charges for new issues. As a result of the reduction in the cost of capital, real GDP was forecast to increase by 1.1% over the course of a decade while total employment would increase by 0.5% (European Commission, 2002). The advent of the European Monetary System also served as a catalyst for financial integration and regulatory harmonization. The elimination of currency risk and the attendant decline in issuance costs provided a major incentive for large financial intermediaries to push for the development of pan-European capital markets.

The Lamfalussy Process eventually proved fruitful and gave rise to the new Markets in Financial Instrument Directive (MIFID). It was adopted in April 2004 by the European Council and the European Parliament, but took over three years for members states to finalize the draft EU Directive. Contributing to the delay was the initial unwillingness of certain countries including France, Spain, and Italy to drop the domestic monopoly of their national exchanges (Boyfield, 2007).

In addition to the long gestation period, the deadline for compliance was extended twice due to substantial lobbying efforts from member states. As MIFID is an EU Directive, it needed to be incorporated into the national legislation of member states pursuant to Level Four of the Lamfalussy process. This proved problematic for many countries that grappled with MIFID’s complexity. Indeed, in spite of the extended time frame, many states fell behind in the implementation processes and continued to debate certain provisions of the Directive, including the consequences of missing the deadline and which regulatory authority (national or EU) had
the authority to monitor compliance.\textsuperscript{19} Finally, after nine years of preparation, MIFID took effect on November 1, 2007. But, as anticipated, ten of the twenty-seven EU countries failed to meet the deadline and were required to implement temporary measures (FT, 2007). Later in 2008, the European Commission referred three member states, the Czech Republic, Poland, and Spain, to the European Court of Justice for non-implementation of MIFID.\textsuperscript{20}

**Key Features and Objectives of MIFID**

MIFID replaced the former Investment Services Directive as the core component of the European Commission’s Financial Services Action Plan (FSAP). With 73 articles, MIFID is detailed, prescriptive, and comprehensive. The Directive covers substantially all tradable financial products excluding certain foreign exchange transactions. Thirty countries participate in MIFID, including the 28 EU countries plus three non-EU countries (Iceland, Norway, and Liechtenstein). MIFID’s cardinal objective is to create a single European securities market for all financial instruments through the harmonization of the regulatory regimes of its thirty members. To this end, MIFID provides detailed provisions governing the organization and conduct of members. Key objectives include:

- To broaden the range of financial services that can be pass-ported across borders.
- To enhance competition among financial intermediaries.
- To stimulate regulatory cooperation and rule harmonization and to clearly delineate the allocation of responsibilities between home and host state regulatory bodies.

\textsuperscript{19} In response, the European Commission sent warning letters to twenty-two EU countries in June of 2007. McCreevy issued a warning to member states to meet the November deadline: “The Commission will launch immediate infringement procedures against any member state which fails to transpose on time. There will be no exceptions.” (McCreevy).

- To introduce best execution requirements and to improve market transparency.
- To provide better investor protection.

Table 3-2. Key Features of MIFID

<table>
<thead>
<tr>
<th>TERM</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>Scope</td>
<td>A broad spectrum of financial institutions including investment banks, portfolio managers, commercial and retail banks, futures and options firms.</td>
</tr>
<tr>
<td>Authorization and Regulation</td>
<td>Firms are authorized and regulated in their home state by their national regulatory authority as opposed to the member states in which business is conducted. This provision reversed the ISD’s host state rule, which required compliance with the local regulations where business was conducted.</td>
</tr>
<tr>
<td>Pass-porting of Services</td>
<td>Authorized by its national regulator, a firm uses the MIFID passport to operate throughout the EU under the continuing regulation of that regulatory body.</td>
</tr>
<tr>
<td>Best Execution</td>
<td>MIFID requires firms take all reasonable steps to obtain the best execution of a client’s order. Criteria include speed of execution, price, risk of execution, and costs.</td>
</tr>
<tr>
<td>Elimination of Exchange Concentration Rules</td>
<td>MIFID abolished the monopoly national exchanges exercised in their markets.</td>
</tr>
<tr>
<td>New venues for the trading of shares</td>
<td>Systematic Internalizer (SI): SI executes orders for clients against its own book or against orders from other clients. SI is considered as a “mini-exchange” for shares that it trades, subject to the same pre/post trade transparency requirements. Multilateral Trading Facility (MTF): MTFs bring together third-party buyers and sellers of financial instruments. They are typically electronic platforms that match buyers’ and sellers’ orders.</td>
</tr>
<tr>
<td>Pre and Post Trade Transparency</td>
<td>MIFID introduced specific measures to enhance market transparency.</td>
</tr>
<tr>
<td>Regulatory Protection</td>
<td>Clients are categorized as retail, &quot;eligible counterparties,&quot; and professional, with different levels of regulatory protection. Firms must have established procedures in place to categorize clients and to ascertain the appropriateness of different investment products.</td>
</tr>
</tbody>
</table>

The reformulation of MIFID reflects a change in the prevailing paradigm of risk governance.

The failure of the EU’s supervisory framework to address the 2008 financial crisis led to a resurgence of national governments in the area of financial crisis management. EU institutions such as the newly created Committee of European Banking Supervisors (CEBS) and the Committee of European Securities Regulators (CERS) were largely marginalized as national governments formulated rescue packages for their banks and adopted stimulus policies for their faltering economies. The lack of a concerted response to the 2008 crisis led to inter-state competition for depositors, with certain EU countries partially undermining the policies of others (FT 2009). Recognizing the need to reformulate its road map for financial market integration, the EU established an expert working group under the former president of the IMF, Jacques de Larosiere. The group concluded that the financial crisis exposed important failures in financial supervision both at the national and international levels (De Larosiere, 2009). Of particular concern were the financial firms that operated across borders. Second, the current supervisory architecture proved incapable of “preventing, managing, and resolving the crisis.” Finally, the crisis exposed serious failings in the “cooperation, coordination, consistency and trust between national supervisors” (Commission, 2009). Reiterating the need for greater market transparency, Commissioner for Internal Market and Services Michel Barnier argued that certain financial activities had become too complex and opaque to be effectively regulated. Second, he asserted that financial markets should serve the real economy – not the other way around. Against this backdrop, the EU shifted its financial regulatory focus from harmonization and de facto liberalization to one of macro prudential supervision. Supporting the G20 commitment, the EU sought to enhance transparency, mitigate systemic risk and protect against

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22 Enhancing transparency better informs investors, facilitates price formation and assists firms to
market abuse. A key focus is to improve the “stability, transparency, and oversight” of the OTC derivatives markets by requiring that derivatives trading be conducted on exchanges or electronic trading platforms (European Commission, 2010). To this end, The EU Commission sought to revise the original MIFID and to enact a new EU Regulation – the Markets in Financial Instruments Regulation (MiFIR). Together these initiatives provided additional rules of conduct for financial intermediaries and the effective operation. Table 3-3 below outlines some of the principal changes in the scope and objectives of MIFID.

Table 3-3. MIFID II: Principal Changes in the Scope and Objectives

<table>
<thead>
<tr>
<th>TERM</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope</td>
<td>The scope of MIFID II was extended to cover additional firms, including certain commodity firms and data providers, and new instruments such as structured deposits. In addition, MIFID II requires the trading of certain derivatives on MiFID-compliant trading platforms.</td>
</tr>
<tr>
<td>Authorization and Regulation</td>
<td>National regulators will have the authority to ban certain financial products in coordination with the ESMA and to set position limits for MIFID firms. In addition, MiFID II brings new controls on algorithmic trading and improved governance.</td>
</tr>
<tr>
<td>Third Country Firms</td>
<td>MiFID II introduces a harmonized approach to the treatment of third country firms trading in Europe. This was previously at the discretion of national regulators.</td>
</tr>
<tr>
<td>New venues for the trading of shares</td>
<td>MiFID II provides a new category of trading venue called Organized Trading facilities (OTFs).</td>
</tr>
<tr>
<td>Pre and Post Trade Transparency</td>
<td>Under MiFID II, transparency requirements are extended to additional financial instruments including bonds and derivatives.</td>
</tr>
<tr>
<td>Investor Protection</td>
<td>MiFID II provides further restrictions on firms providing independent investment advice.</td>
</tr>
</tbody>
</table>


provide best execution to their clients.

23 The September 2009 G20 summit concluded that all standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms (where appropriate) and cleared through central counterparties no later than year end-2012.
In addition, the EU implemented a new supervisory structure consisting of four new bodies with greater oversight authority. Whereas the predecessor institutions were consultative bodies among national regulators, policy pronouncements from the new entities share the legal status of a Regulation for member states. The new entities included the European Banking Authority, the European Insurance and Occupational Pensions Authority (EIOP), the European Securities and Markets Authority (ESMA), and the European Systemic Risk Board (ESRB). Later at the 2012 EU Summit, the EU announced its intention to enhance the supervisory powers of the European Central Bank. 24

The MIFID Debate

Proponents of MIFID posit the enhanced supranational governance has benefited both investors and issuers alike. First, the implementation of a common regulatory platform for securities trading has resulted in lower transaction costs, more efficient markets, and closer alignment with Anglo-American best practices (Romero, Torrijos, 2013) (Commission, 2010). Second, MIFID has engendered greater transparency of price quotes both pre- and post-trade. 25 Third, there is a greater degree of investor protection with detailed requirements governing the organization and conduct of business of investment firms. Finally, MIFID affords domestic firms the ability to “passport” financial services within the EU.

MIFID’s critics argue that those achievements have come at a substantial cost to the small and mid-size firms of member states. The increased competition among trading venues combined

25 Pre-trade transparency refers to the availability of information on outstanding orders or dealer quotes before orders are submitted. Post-trade transparency refers to the availability of information on executed trades.
with the substantial infrastructure requirements make it difficult for these firms to compete with the larger European firms domiciled in the UK, Germany, and France (FT, 2007). Among their concerns they cite:

- **Projected cost of implementation:** Critics argue that the EU Commission did not complete a thorough cost-benefit analysis beforehand. Early estimates forecasted implementation costs across Europe of Euro 4 to 6 billion with the UK accounting for Euro 1.5 to 2.0 billion (FT, 2007). Another analysis prepared by JPMorgan Securities concluded that the projected cost of implementation and compliance would reduce earnings and wipe away Euro 19 billion of market capitalization among eight leading European banks (JPMorgan Securities, 2007). More recent estimates provided by the EU Commission estimate the one-off cost for investment banks operating in Europe at 0.68% of total operating spending while ongoing compliance costs were estimated at 0.17% of total operating expenditure (Commission, 2011).

- **Concentration of regulatory oversight to three EU countries:** Under MIFID, responsibility for regulating securities activities transferred from the national regulatory authorities where the services take place to the home state of the securities firms. As the majority of large firms are based in three countries (UK, France, Germany), regulatory responsibility transferred to these member states.

- **Consolidation in the securities industry:** As expected, MIFID has led to greater consolidation in the European securities industry as smaller, less-developed firms are less able to meet compliance costs and compete. This in turn has led to further concentration
in the industry with the primary financial centers, London and Frankfurt, reaping the benefits (Commission, 2011).

- Administrative burden: MIFID introduced substantial changes to the way financial institutions conduct business, both in terms of the new regulations and compliance. Massive investments in IT are required. Smaller firms that do not reap the benefit of economies of scale will be forced to outsource compliance or be acquired.

- Regulatory compromise toward the lowest common denominator: In striking a consensus among member countries, EU regulations may reflect the lowest common denominator and may not be sufficient to fulfill their envisioned task. Indeed, the MIFID initiative is the product of numerous political compromises between two coalitions within the EU—those that favored implementation, including Ireland, the U.K., the Netherlands, and Sweden, and other EU countries (France, Spain, Italy) that were generally less supportive. The negotiated agreement between the two opposing blocks to move forward with MIFID resulted in 71 optional amendments. These amendments can be applied by member states at their own discretion and impose additional obligations on financial service companies beyond the initial MIFID guidelines (Boyfield, 2007).  

- Loss of revenues for the national exchanges: Competition from new trading venues has resulted in a loss of revenues and declining margins for the national exchanges. This has

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26 It is interesting to note that the optional amendments may have contributed to the cost of compliance by member states.
led to greater consolidation of national exchanges (Commission, 2011).

**The Political Economy of MIFID**

When evaluating the implementation of the EU’s financial regulatory agenda, it must be borne in mind that the EU is primarily a political union of sovereign states. In many respects, it is a unique phenomenon marked by the complex interaction of supranational agencies, committees, national governments, and pan-European interest groups. Indeed, as the EU grows in size with an increasingly diverse group of countries, further progress towards regulatory unification may be frustrated by the resurgence of national agendas. 27 The financial reform process is no less complex with both legally-binding Directives and Regulations and non–legally binding Recommendations and Communications. Directives are incorporated into the national legislation of member states and can be modified to a certain extent by the nation’s legislative bodies. This puts a greater burden on the Commission as it has to track both the transposition of the Directive and the implementation by the local regulatory authority. On the other hand, Regulations are directly binding on member states. The Commission may also issue Recommendations and Communications which member states may or may not adopt.

As an EU Directive and regime structure, MIFID reflects principles of liberal institutionalism. The regime substantially increases the interdependence of member states in the area of securities regulation. Second, MIFID has led to greater rule harmonization, resulting in a greater convergence in EU regulatory policies and less regulatory competition. Examples of this

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27 On May 1 2004 ten new member states joined the EU including Estonia, Latvia, Lithuania, Poland, Hungary, the Czech Republic, Slovenia, Slovakia Cyprus and Malta. In anticipation of their accession, these countries initiated major reforms in their banking systems (Roland, 2005).
complex interdependence are provided below.

MIFID requires member states to surrender a degree of sovereignty as concerns regulatory practice and supervision. To begin with, common principles and standards are adopted by each member state and are codified into the national legal system of each member. As such, national regulations converge toward a common platform. Second, regulatory supervision is now largely the responsibility of the home country regulator—not the jurisdiction where the securities activity takes place. For example, a UK domiciled firm would be largely regulated by the FSA, irrespective of where its foreign subsidiaries conduct business in the MIFID zone. To control cheating and the inevitable “race to the bottom,” MIFID created a structure to supervise the activities of its members. This function was shared among the Council of Economic Securities Regulators, member state regulators and other EU entities (European Commission, 2006).

MIFID requires its members to focus on longer term absolute gains, rather than short term relative gains. The underlying rationale for MIFID is to create pan-European capital markets with a common regulatory platform. Potential absolute gains include stronger financial governance, deeper more efficient, competitive markets, lower transaction costs, greater transparency, larger market share, etc. Relative gains abandoned by members under MIFID include the loss of each member’s domestic monopoly on equity trading as the market concentration rules allowed under the former ISD have been eliminated. Second, the consolidation of the financial sector has resulted in the loss of small to medium-size national firms that can no longer compete.
MIFID’s protracted history and nine-year implementation process give rise to a basic question: If EU policy emphasized the importance of financial markets integration, why were member states unsuccessful in coordinating their respective policies? Which factors contributed to this outcome? One explanation for this phenomenon may lie with the asymmetrical distribution of power in the international financial markets. Both the international debt and equity markets have historically been dominated by two countries—the United States and the United Kingdom. By virtue of their respective market shares, internationalization of markets, and well-developed regulatory regimes, London and New York are the recognized global leaders in international finance and have traditionally defined “best practices” in the industry (LSE, 2013) (NYSE, 2013).

Reflecting the hegemonic power of these two financial centers, regulatory harmonization reflected more of a top-down scenario than a multilateral approach (Simmons, 2001). Rather than implementing a pan-European approach, EU member states were often obliged to follow Anglo-American practice. A case in point was London’s liberalization of its financial markets, the “Big Bang,” in 1986, which was followed by the French “le petit big bang” in 1988. MIFID supports the current asymmetric distribution of power in the financial markets. It does not call for the establishment of a super regulator that might conflict with the roles of the two hegemonic powers, the UK and the US. It requires further harmonization of regulatory practices, but these practices have already been largely established by the two financial centers. In essence, the MIFID regime provides a vehicle for the financial hegemons to implement “best practices” on a pan-European basis.
A second explanation for the lack of European regulatory harmonization can be attributed to divergent models of state involvement in the domestic economy. According to this theory, financial regulation reflected the specific concerns of a member state’s economic policies, rather than the broader EU agenda. Indeed, both France and Germany represent coordinated market economies with a tradition of government intervention dating back to the post-war era. As Christopher Anderson (1995) argues, during the post-war period a consensus as to the role of the state in managing the economy developed throughout West European democracies. The practice of state intervention varied considerably among European countries. France, for example, nationalized several of its large banks and played an active role in credit allocation, monetary policy, and the capital markets (Story and Walter, 1997). Although this practice has waned over the past two decades, the belief that the government is to play an important role in managing the economy remains today.

A third explanation posits that member governments may not have viewed rule harmonization to be in the best interest of their respective financial markets. Financial regulation and the regulatory function are matters of national sovereignty. National regulators are charged with the difficult task of safeguarding both the stability and competitiveness of their financial institutions. They must carefully assess the perceived costs and benefits of new regulation and anticipate the reaction of their lenders. As such, they are loathe to implement rules that would disadvantage their national firms and/or lead to a flight of capital to less regulated countries. Financial regulation can also be viewed as a regime of “taxes” and “subsidies” on the operations of financial intermediaries operating within a certain regulatory framework (Kane, 1987). Although the former increases the costs of financial intermediation and may make a firm less
competitive, the latter serves to decrease the cost of financial intermediation. The difference between the regulatory subsidies and taxes to a particular type of financial institution in any given jurisdiction is defined as the net regulatory burden (NRB). Table 3-4 below provides examples of each and their attendant effects.

Table 3-4. Regulatory Subsidies and Taxes.

<table>
<thead>
<tr>
<th>Regulatory “Taxes”</th>
<th>Regulatory “Subsidies”</th>
<th>Net Regulatory Burden (NRB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial disclosure.</td>
<td>Enhanced liquidity and market depth.</td>
<td>NRB can be defined as the difference between the regulatory “taxes” and “subsidies” faced by a particular type of financial institution in a given jurisdiction.</td>
</tr>
<tr>
<td>Accounting standards.</td>
<td>Symmetry of information flows.</td>
<td></td>
</tr>
<tr>
<td>Regulatory supervision.</td>
<td>Greater market efficiency.</td>
<td></td>
</tr>
<tr>
<td>Capital adequacy and liquidity requirements.</td>
<td>Stronger financial governance.</td>
<td></td>
</tr>
<tr>
<td>Limitations on business activities, market and credit exposures.</td>
<td>Reduced level of systemic risk.</td>
<td></td>
</tr>
<tr>
<td>Risk-based deposit insurance premiums.</td>
<td>Regulator–provided deposit insurance programs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Safety net for systemically-important institutions.</td>
<td></td>
</tr>
</tbody>
</table>
Summary

It has been argued that finance is not “just another industry,” but rather an integral part of the economic fabric that links advanced industrial societies. The implementation of MIFID is certainly no exception, and if history is a guide, the process of EU financial integration will continue as a protracted negotiation among EU institutions and member states. When evaluating the implementation of EU legislation, it must be borne in mind that the EU is primarily a political union of sovereign states. As the EU grows in size with an increasingly diverse group of countries, further progress towards unification may be frustrated by the resurgence of national agendas, protectionism, and divergent patterns of state involvement. The nine-year implementation process of MIFID only confirms this premise. Proponents argue that MIFID provides numerous benefits to issuers and investors ranging from greater transparency to better execution. Moreover, that it will promote further regulatory reform in the financial sector and stimulate economic growth. On the other hand, MIFID’s onerous costs, administrative requirements, and sheer complexity have led to further consolidation in the industry. Those EU members with less established capital markets and smaller firms continue to lose domestic market share to the larger, more-established financial centers, namely London and Frankfurt.

The global crisis of 2008 and the more recent European sovereign debt crisis exposed systemic weaknesses of the European Union’s regulatory architecture, with national governments stepping in fill the void. In response, the EU refocused its strategic priorities from the liberalization and harmonization of securities regulation, to macro supervision. It revised the original MIFID and enacted a new EU Regulation – the Markets in Financial Instruments Regulation (MiFIR). Together these initiatives will strengthen the rules of conduct for financial
intermediaries and refocus financial regulation to enhance transparency, mitigate systemic risk and protect against market abuse. Finally, in an effort to bolster its pan-European regulatory framework, the EU created several new institutions and enhanced the ECB’s regulatory authority.

The impetus to study MIFID spans several disciplines: First, MIFID can be viewed as a potential governance model for the international capital markets. The EU initiative is distinct from the collection of non-binding agreements at the international level in that its rules are legally binding among member states. As MIFID’s regulatory framework is codified into the legal code of all member countries it substantially increases the interdependence of member states in the area of securities regulation. The Directive engenders greater rule harmonization and the convergence of national regulations toward a common governance framework. Indeed, lessons learned from the EU’s implementation process might be instructive for a broader analysis of regulatory harmonization in the international capital markets.

An analysis of MIFID may also provide valuable insight from the perspective of IR theory. In exercising its mandate, the EU Directive requires member states to surrender a degree of sovereignty as concerns the regulation and supervision of certain financial intermediaries. MIFID’s protracted evolution highlights the struggle between principles of liberal institutionalism and the neo-realist behavior of member states with its focus on relative gains. It illustrates how the EU’s objective to establish a common framework of regulatory governance was frustrated by competing national agendas, protectionism, and divergent patterns of state involvement in the financial sector. In striking a political consensus among member countries,
the EU sought the lowest common denominator. The negotiated agreement weakened the EU Directive and resulted in 71 optional amendments that raise the level of complexity and costs of compliance for member states.

This article contributes to the literature on financial governance and regulatory harmonization. It highlights MIFID’s protracted evolution and offers several potential explanations including competing national agendas, protectionism, divergent patterns of state involvement and consideration of the net regulatory burden to financial institutions. As the revised MIFID Directive enters the implementation phase in 2016, additional research is required to validate the extent to which the EU Commission has been successful in realizing its objective to create pan European markets with a common regulatory platform. The basic question remains, however: How far are member states willing to go to harmonize financial regulation? Where is the red line in terms of national sovereignty during a financial crisis? For supporters of EU integration, the creation of a single regulatory authority represents a logical “next step” in the creation of a single pan-European securities market. Recent initiatives to expand the ECB’s authority over Europe’s financial institutions may be a first step in that direction.
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Chapter Four: The U.S. Export-Import Bank: Observations on Portfolio Risk Management

ABSTRACT

Export-Credit Agencies (ECAs) face a diverse spectrum of risks ranging from credit risk to country risk to portfolio concentration risk. In response, ECAs have developed risk management governance and policies that reflect core institutional parameters including the ECA’s mission, level of government support, and market philosophy.

The U.S. Export Import Bank (Ex-Im Bank) is the official Export-Credit Agency of the United States. Ex-Im Bank was created in 1934 as an independent federal agency to aid export financing and support U.S. employment. In pursuing its mission, Ex-Im Bank has experienced rapid growth and emerging risk trends in recent years. These trends have resulted in higher portfolio concentration levels that represent greater risk to the U.S. Government, and ultimately U.S. taxpayers. Traditional risk management policies prescribed under the 1990 Federal Credit Reform Act and OMB Circulars rely primarily on historical, quantitative data. This framework does not provide sufficient guidance on portfolio risks and the use of qualitative risk factors in the loss reserve analysis.

This article examines the risk governance and portfolio credit risk management policies of Ex-Im Bank and benchmarks them against the policies of a select group of peer ECAs and the best practices observed by a broader group of public and private financial institutions. The article provides several policy recommendations that may be relevant to other federal agencies with similar portfolio credit risks.
Introduction:

Trade finance serves as the life blood of international commerce. Its principal purpose is to mitigate the risk and uncertainty of selling goods and services to a foreign buyer operating in a foreign legal jurisdiction (Amiti and Weinstein, 2009) (Taglioni and Zavacka, 2012). Indeed, it is estimated that more than eighty percent of exporting firms utilize some form of trade finance (Chauffer and Farole, 2009). Trade finance spans an array of products including direct credit to foreign buyers, credit insurance, loan and bond guarantees, and working capital financing for exporters. ¹ Although the private sector traditionally accounts for the preponderate share of trade finance activity, Export Credit Agencies (ECAs) have played an important role in facilitating international trade since their inception. A child of the post-World War I era, ECAs were created by state governments as part of a broader government platform of industrial policy, trade, and investment promotion.

The International Union of Credit and Investment Insurers, known as the “Berne Union,” is the principal organization for the export credit and investment insurance industry. Founded in 1934, the Berne Union’s fifty members provided $1.9 trillion of trade finance in 2013. ² The organization serves as a discussion forum for topical issues and the sharing of best practices. In addition, the non-binding “Gentlemen’s Agreement,” known as the “Arrangement on Guidelines for Officially Supported Export Credits,” provides over-arching governance and an institutional framework for officially supported export credits. Rather than competing on the

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¹ Trade finance can be defined as the use of financial intermediaries to mitigate trade credit and default risk.
basis of government sponsored financing terms, the 1978 agreement encourages competition among exporters based on quality and price of goods and services exported. The Arrangement applies to all official support for exports of goods and/or services which have repayment terms of two years or more. Participants in the Arrangement include Australia, Canada, the European Community, Japan, Korea (Republic of), New Zealand, Norway, Switzerland, and the United States.

ECAs facilitate exports in several respects. First, they can provide a “level playing field” to help domestic exporters match the financing terms of officially supported foreign credit competition. Second, they provide financing to foreign buyers when the private sector cannot or will not finance those export sales. Concerning the latter, ECAs complement private sector capacity by absorbing certain risks private markets typically shun, including longer final maturities, exposure to less credit-worth countries and technological risks.

ECAs have also become one of the principal policy tools governments may use to cushion the real economy from financial crises. For example, in the wake of the 2008 financial crisis, and more recently with the Euro sovereign debt crisis, many international banks reduced their trade finance and structured lending practices, exacerbating a decline in global trade flows (Berne Union, 2013). In response, G-20 governments stepped up their use of ECAs to enhance global trade.

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3 Although the Arrangement was developed under the auspices of the OECD, it is not an official OECD Act. For more information see http://www.oecd.org/trade/xcred/theexportcreditsarrangementtext.htm

4 The Obama Administration launched the “National Export Initiative” to double U.S. exports between 2010 and the end of 2014 and to support 2 million U.S. jobs through export promotion. For more information see http://www.trade.gov/neinext/
liquidity for trade finance, promote economic growth, and help restore global confidence.\(^5\) As Table 1 indicates, ECA coverage increased by 36 percent during the 2009-2013 period with the largest increase occurring in short-term coverage.

Table 4-1. ECA Coverage of Trade Financing

<table>
<thead>
<tr>
<th>Year</th>
<th>Short Term</th>
<th>Medium/Long Term</th>
<th>Investment Insurance</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>901,821</td>
<td>501,423</td>
<td>141,868</td>
<td>1,545,112</td>
</tr>
<tr>
<td>2008</td>
<td>907,619</td>
<td>523,704</td>
<td>145,580</td>
<td>1,576,903</td>
</tr>
<tr>
<td>2009</td>
<td>768,807</td>
<td>582,792</td>
<td>145,785</td>
<td>1,497,384</td>
</tr>
<tr>
<td>2010</td>
<td>836,573</td>
<td>593,089</td>
<td>193,368</td>
<td>1,623,030</td>
</tr>
<tr>
<td>2011</td>
<td>884,662</td>
<td>646,373</td>
<td>201,842</td>
<td>1,732,877</td>
</tr>
<tr>
<td>2012</td>
<td>1,032,223</td>
<td>687,679</td>
<td>221,898</td>
<td>1,941,800</td>
</tr>
<tr>
<td>2013</td>
<td>1,092,130</td>
<td>715,862</td>
<td>234,745</td>
<td>2,042,737</td>
</tr>
</tbody>
</table>


Although less tangible in nature, ECAs play an important role in reducing uncertainty in international commerce and enhancing confidence in the international economic arena, particularly during periods of economic turmoil. The importance of this role is addressed in a growing body of literature on international trade that provides insight on the effects of uncertainty and levels of confidence on international commerce. Taglioni and Zavacka (2012) assert that there is a strong negative relationship between uncertainty and trade, particularly with respect to trade in durable goods. The authors further posit the relationship is non-linear, increasing substantially when the shock is severe. Bertola et al. (2005) point to the macroeconomic implications of consumer uncertainty. Bloom (2009) highlights the impact of uncertainty from exogenous shocks on the real economy. Helpman (1988) discusses how trade patterns may vary due to uncertainty arising from country specific shocks. Finally, Amiti and

\(^5\) At the OECD level, G20 countries launched a $250 billion trade finance initiative at the London Summit to provide much needed liquidity. [http://www.ft.com/intl/cms/s/0/5378959c-aa1d-11de-a3ce-00144feabdc0.html#axzz2I7D5Iwse](http://www.ft.com/intl/cms/s/0/5378959c-aa1d-11de-a3ce-00144feabdc0.html#axzz2I7D5Iwse)
Weinstein (2009) demonstrate the linkage between export levels and the health of the financial intermediaries providing trade finance.

ECAs Face a Diverse Continuum of Risks

In fulfilling their core mission, Export Credit Agencies (ECAs) face a diverse spectrum of risks including credit risk, country risk, portfolio concentration risk, foreign-currency risk, interest rate risk, and finally, operational risk. In response, ECAs have developed risk management governance and credit policies that are key to their ongoing viability. These policies are not developed in isolation, but reflect core institutional parameters including the ECAs mission, level of government support, and market philosophy.

Table 4-2. ECA Risks

<table>
<thead>
<tr>
<th>Risk</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Risk</td>
<td>Credit Risk is the risk that an obligor may not have sufficient funds to repay its debt or may be unwilling to pay even if sufficient funds are available.</td>
</tr>
<tr>
<td>Country Risk</td>
<td>Country risk is the risk that payment is not made to Ex-Im Bank, its guaranteed lender, or its insured party. This may result from the expropriation of the obligor’s property, war, or inconvertibility of the obligor’s currency into U.S. dollars.</td>
</tr>
<tr>
<td>Portfolio Concentration Risk</td>
<td>Portfolio concentration risk reflects the risk of the credit portfolio composition as opposed to risks related to specific obligors.</td>
</tr>
<tr>
<td>Foreign Currency Risk</td>
<td>Foreign currency risk stems from an appreciation or depreciation in the value of the foreign currency in relation to the U.S. dollar. Foreign currency volatility may lead to project cost overruns and/or increase the amount of local currency required to service.</td>
</tr>
<tr>
<td>Interest Rate Risk</td>
<td>Interest rate risk reflects the potential for interest rates to rise after the initial rate setting by the ECA. Higher interest rates may increase the amount of required debt service under the credit.</td>
</tr>
<tr>
<td>Operational Risk</td>
<td>Operational risks include the risks related to the operational elements such as improper payments.</td>
</tr>
</tbody>
</table>
ECAs typically employ three primary strategies to mitigate financial risks. First, they avoid risk through due diligence, credit and legal analysis, and credit structuring completed prior to closing the transaction. Second, they can reduce exposure to a specific obligor, industry, or country through a loan syndication or the sale of risk participations to a third party. In addition, ECAs may co-finance a large transaction with other ECAs. Third, institutions may use risk mitigation techniques to reduce portfolio risks once the transaction closes and becomes part of their portfolio. Sound financial governance suggests that risk mitigation techniques should be congruent with the institution’s mandate and internal constraints (COSO, 1992).

A key consideration for an ECA is its business model which may range from lender of last resort to quasi-market player to industrial policy institution. Moreover, the operational objectives, risk appetites, amount of government support, pricing, and financial drivers associated with each of these models may differ. As a result, the risk mitigation practices of an ECA will vary in accordance with its mandate.

The Export-Import Bank of the United States

The Export-Import Bank of the United States is an independent federal agency and wholly-owned government corporation whose mission is to aid export financing to maintain or create U.S. jobs. The Bank accomplishes this task by assuming the credit and country risks that private sector financial institutions are unable or unwilling to accept. As Table 2 indicates, Ex-Im Bank is one of several U.S. federal agencies that promote U.S. exports.

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6 In 2010, Ex-Im Bank completed 34 co-financing transactions totaling $6.5 billion. Approximately 98% of these transactions involved aircraft financing. See U.S. Export Import Bank Annual Report 2011.
Table 4-3. U.S. Agencies Promoting Exports

<table>
<thead>
<tr>
<th>Federal Agency</th>
<th>Export Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Export Import Bank</td>
<td>Provides both credit and insurance to support manufacturing and services exports, including for exports by small businesses</td>
</tr>
<tr>
<td>Small Business Administration</td>
<td>Provides export financing for U.S. small businesses</td>
</tr>
<tr>
<td>Overseas Private Insurance Corporation</td>
<td>Provides credit and political risk insurance to support U.S. investments for projects in developing countries and emerging markets that may generate demand for U.S. exports</td>
</tr>
<tr>
<td>U.S. Department of Agriculture</td>
<td>Provides credit for export of U.S. agricultural goods</td>
</tr>
</tbody>
</table>


Ex-Im Bank’s Charter authorizes it to engage in “general banking business” (except that of currency circulation). Its core financing programs are direct loans, export credit guarantees, working capital guarantees, and export credit insurance. Its Charter requires “reasonable assurance of repayment” for all Ex-Im Bank transactions, which are backed by the full faith and credit of the U.S. Government. Ex-Im Bank has functioned on a self-sustaining basis since 2009, covering its operational costs and provisioning for expected losses through loan loss reserves funded by the fees and interest it charges its customers.

Over the past six years, Ex-Im Bank has witnessed a substantial demand for its programs with total new authorizations growing from $12.6 billion in Fiscal Year (FY) 2007 to a highpoint of $35.8 billion in FY 2012. Although new authorizations decreased to $27.4 billion in FY 2014, total portfolio exposure has grown to $112 billion as of Fiscal Year End (FYE) 2014, compared
to $75.2 billion on September 30, 2010. With the reauthorization of Ex-Im Bank’s Charter in May 2012, the bank’s authority to extend credit increased from $100 to $120 billion. The credit cap was raised to $130 billion in FY 2013 and $140 billion in FY 2014, provided Ex-Im Bank meets certain criteria - including a default rate of less than two percent and certain reporting requirements. Finally, in 2014 the Obama Administration requested a five-year extension through FY 2019 with a projected increase in its lending cap.

Figure 4-1. Growth in New Authorizations and Portfolio Exposure

Source: Ex-Im Bank annual reports. Public domain. Available at http://www.exim.gov/about/library/reports/annualreports/

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Emerging Risk Trends

In addition to its rapid growth, Ex-Im Bank experienced emerging risk trends and changes in the composition of its portfolio against the backdrop of a challenging economic environment, and a bid to increase export credit in support of President Obama’s National Export Initiative. As discussed below, these trends present additional risk to the U.S. Government and depart from the regulatory guidelines set for systemically-important financial institutions and credit portfolio management best practices observed in the private sector. Although not directly applicable to federal agencies, US and international regulatory guidelines for systemically-important financial institutions provide guidance on prudent banking practices. Specifically:

Decline in loss reserves from 2010 level

The FY 2010-2014 period witnessed a decline in the ratio of total loss reserves for loans, claims, guarantees, and insurance commitments to total exposure. At FYE 2010 Ex-Im Bank’s total loss reserve amounted to $5.1 billion or 6.8 percent of total exposure. By FYE 2014 the ratio of loss reserves to exposure had declined to 4.5 percent. See Table 4-4 below for a breakout of the annual figures. For comparison purposes, Basel III sets a new target capital ratio of 7.0 percent to be phased in from January 2013 through to January 2019. The new requirement consists of a core component of 4.5 percent and a new buffer of 2.5 percent to reserve for unforeseen losses. Those institutions whose capital falls below the 7.0 percent threshold will face limitations on paying dividends to shareholders. Despite its declining reserve position,

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9 On January 27, 2010, President Obama announced the National Export Initiative with the goal of doubling exports by 2015. Ex-Im Bank’s President is part of the Export Promotion Cabinet, in charge of developing and coordinating the implementation of the NEI. See Executive Order 13534, which can be found at http://www.whitehouse.gov/the-press-office/executive-order-national-export-initiative.

10 Basel III is a global regulatory standard on capital adequacy, stress testing, and market liquidity risk agreed upon by the members of the Basel Committee on Banking Supervision in 2010-11. U.S. banks will transition to Basel III
Ex-Im Bank returned $1,057 million and $804 million in funds to the U.S. Treasury during FY 2013 and FY 2014 respectively.

Table 4-4. Ex-Im Bank Loss Reserve Ratios

<table>
<thead>
<tr>
<th>(in millions)</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>BASEL Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserve</td>
<td>$5100</td>
<td>$4100</td>
<td>$4596</td>
<td>$4631</td>
<td>$5045</td>
<td></td>
</tr>
<tr>
<td>Exposure</td>
<td>$75214</td>
<td>$89152</td>
<td>$106646</td>
<td>$113825</td>
<td>$112008</td>
<td></td>
</tr>
<tr>
<td>Reserves/Exposure</td>
<td>6.80%</td>
<td>4.60%</td>
<td>4.30%</td>
<td>4.10%</td>
<td>4.5%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Source: Ex-Im Bank annual reports. Public domain. Available at http://www.exim.gov/about/library/reports/annualreports/

*Ex-Im Bank’s Portfolio is subject to significant risk concentrations.*

Ex-Im Bank’s portfolio is subject to significant risk concentrations arising from its global operations: by geographical region, by industry, and by obligor (debtor). For example, Ex-Im Bank’s country risk exposure remains concentrated in two geographic regions: Asia (41.1 percent) and Latin America (18.0 percent). These regions accounted for 59.1 percent of the total portfolio in FY 2014. Credit exposure is highly concentrated by industry, with three industries – air transportation (45 percent), manufacturing (18 percent), and oil and gas (15 percent) – accounting for 78 percent of total exposure in FY 2014. See Figure 4-2 below for the industry risk breakout for FY 2014.

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with the implementation of the Dodd-Frank Wall Street Reform and Consumer Protection Act. For more information, see http://www.bis.org/publ/bcbs189.pdf.
Single borrower concentrations are also significantly high when measured against the level of total assets and the level of total reserves. As illustrated in Table 4-5 below, Ex-Im Bank’s five largest individual obligor exposures total $18.8 billion or 373 percent of total reserves as of FYE 2014. These levels far exceed the 25 percent portfolio concentration limits recommended by US banking authorities. Finally, when assessing the Ex-Im Bank’s potential risk exposures, it is important to bear in mind that the bank’s current risk management framework does not provide for active portfolio risk mitigation.

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Table 4-5 One Obligor Exposures

<table>
<thead>
<tr>
<th>Obligor</th>
<th>Amount millions</th>
<th>Percentage Total Assets</th>
<th>Percentage Total Reserves</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEMEX</td>
<td>$5587.5</td>
<td>5%</td>
<td>110%</td>
</tr>
<tr>
<td>Sadara Chemical Co.</td>
<td>$4630</td>
<td>4.1%</td>
<td>92%</td>
</tr>
<tr>
<td>PNG-LNG</td>
<td>$3000</td>
<td>2.7%</td>
<td>59.5%</td>
</tr>
<tr>
<td>Australia-Pacific LNG Processing Ltd.</td>
<td>$2865.5</td>
<td>2.6%</td>
<td>57%</td>
</tr>
<tr>
<td>Ryanair Ltd.</td>
<td>$2750</td>
<td>2.5%</td>
<td>55%</td>
</tr>
<tr>
<td>Total</td>
<td>$18,834</td>
<td>16.9%</td>
<td>373%</td>
</tr>
</tbody>
</table>


Ex-Im Bank is exposed to exchange rate volatility from foreign currency transactions.

Although most of Ex-Im Bank’s financings are denominated in U.S. dollars, the bank guarantees notes denominated in foreign currencies. Non-dollar financings amounted to $7.3 billion or 6.5 percent of total exposure in FY 2014. Of this amount, approximately 70 percent is Euro-denominated. This practice allows certain obligors to borrow funds in the same currency as they earn funds to mitigate the risk of exchange-rate fluctuations.

That said, Ex-Im Bank does not hedge its foreign exchange exposure and is subject to market volatility on this portfolio of foreign currency outstandings. Foreign-exchange transactions are booked in U.S. dollars based on the exchange rate in effect as of the date of authorization. The bank adjusts or “marks to market” its U.S. dollar exposure at the end of each fiscal year based on the prevailing rates at that time. Gains and losses from foreign currency fluctuations are recognized at fiscal yearend and included in the Bank’s re-estimate process. Ex-Im Bank then adjusts the dollar value of the outstanding foreign currency balances. In FY 2014, the foreign
exchange adjustment resulted in a net increase in exposure of $164 million and $524.5 million in FY 2013. As indicated in Figure 4-3 below, the value of the Euro/dollar exchange rate has fluctuated substantially over the past fifteen years.

Figure 4-3 Euro Versus U.S. Dollar Exchange rates


**Shift from Sovereign to Private Exposure**

Credits guaranteed by foreign governments, or sovereign transactions, are less risky because the foreign government guaranteeing the transaction will step in to repay the credit if the original borrower defaults on its obligations. In the last several years, Ex-Im Bank has experienced a shift in its exposure from such sovereign transactions to transactions with private borrowers. Specifically, between FY 2007 and FY 2014, private exposure has increased from 58 percent to 69.3 percent of Ex-Im Bank’s total exposure.\(^\text{12}\) This shift in exposure may increase Ex-Im Bank’s inherent portfolio risk by increasing Ex-Im Bank’s exposure to credits not guaranteed by foreign governments. Table 4-6 below provides the

breakout of Ex-Im Bank’s public versus private exposure during the 2010 to 2014 period.

Table 4-6. Sovereign Versus Private Obligor Exposure.

<table>
<thead>
<tr>
<th>Year End</th>
<th>FY 2010</th>
<th>FY 2011</th>
<th>FY 2012</th>
<th>FY 2013</th>
<th>FY 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Obligors</td>
<td>67.2%</td>
<td>68.6%</td>
<td>69.3%</td>
<td>71%</td>
<td>69.3%</td>
</tr>
<tr>
<td>Public Obligors</td>
<td>32.8%</td>
<td>31.4%</td>
<td>30.7%</td>
<td>29%</td>
<td>30.7%</td>
</tr>
</tbody>
</table>

Source: Ex-Im Bank Annual Reports. Public domain. Available at http://www.exim.gov/about/library/reports/annualreports/

EX-IM Bank Loss Reserve and Portfolio Risk Management Policies

As a US federal agency, Ex-Im Bank is subject to risk management guidelines deriving from its Charter, federal legislation, and Congressional mandates, as well as guidance from the Office of Management and Budget (OMB). Although Ex-Im’s Charter does not specifically endorse or authorize a particular risk mitigation strategy, support for the risk mitigation function derives from several sources:

- **Broad banking authority:** Section 2(a)(1) of the Export-Import Bank Act of 1945 (the Act) confers broad banking authority to Ex-Im.\(^{13}\)

- **Reasonable provisions for losses:** The Act requires Ex-Im to make reasonable provisions for losses. This is also addressed in OMB Circular A-11.

- **The Federal Credit Reform Act (“FCRA”) of 1990:** FCRA directs policies used for the allowance for loan and lease losses (ALLL) -- originally referred to as the reserve for bad debts. ALLL is a valuation reserve established and maintained by charges against operating income. It is an estimate of uncollectable amounts used to reduce the book value of loans and leases to the amount that a bank expects to collect.

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• **OMB guidance**: OMB Circular A-129 directs agencies to analyze and control the risk and costs of their programs and to benchmark against current market practices.\(^\text{14}\)

**Federal Credit Reform Act**

Congress and the Office of Management and Budget (OMB) have created a framework used by federal credit agencies to calculate and measure risk and program subsidy cost. This risk measurement approach has been codified by the Federal Credit Reform Act (FCRA) of 1990 and implemented through OMB Circular A-136 (financial reporting requirements), OMB Circular A-11 (the primary guidance for calculating program costs associated with its transactions), and OMB Circular A-129 (credit default policy guidance). Recognizing the agencies’ expertise and responsibilities for administering their respective programs, OMB has delegated to the agencies, subject to OMB’s review and approval, the responsibility for developing the models and assumptions used to calculate program costs.\(^\text{15}\)

Ex-Im Bank reports under generally accepted accounting principles (GAAP) in the United States applicable to federal agencies. Ex-Im determines and calculates its finance programs’ costs and loss reserve provisions for expected losses, known as subsidy costs, in accordance with the FCRA and guidance offered by the Office of Management and Budget (OMB) Circular A-11 (Part 5-Federal Credit). This function is performed by Ex-Im Bank’s Office of the Chief Financial Officer. The process for determining the loan loss allowance for each fiscal year involves assessing the repayment risk of each individual transaction, which includes both

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\(^\text{15}\) For more information see [http://www.whitehouse.gov/sites/default/files/omb/assets/a11_current_year/s185.pdf](http://www.whitehouse.gov/sites/default/files/omb/assets/a11_current_year/s185.pdf).
commercial and political risk factors, then calculating the loss reserve based on the percentage of loss associated with the risk level assigned to the credit. In general, this loss reserve model process is retrospective in nature and based on quantitative, historical loss data.

Ex-Im Bank calculates the probability-weighted loss of each transaction separately, following a “bottom up” approach to risk measurement as prescribed by the FCRA. In general, this framework focuses on managing individual credit risks by assigning a risk rating to each transaction and reserving based on an expected loss reserve model that relies mostly on historical data analysis. This “bottom up” approach does not, however, provide specific guidance on measuring and managing risk at the portfolio level or the use of qualitative or “environmental” risk factors to account for such risk in estimating losses. Ex-Im Bank uses an “expected loss” approach to loss provisioning and re-estimates expected loss rates annually to account for actual activity and changes in the financial and economic factors that affect repayment prospects over time. The bank establishes a loss allowance through a provision charged to earnings. Subsequent write-offs are then charged against the allowance, while recoveries are credited back to the allowance.

The FCRA requires measuring the fiscal year subsidy costs of finance programs by estimating the cost of each individual transaction on a net present value basis. Ex-Im Bank loans, guarantees, and insurance result in a positive subsidy cost, that is, the Government incurs a cost

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16 See Appendix B for a more detailed discussion of this framework.
17 Recent modifications to OMB Circular A-129 cite portfolio risks including concentrations and market risks but do not provide specific guidance as to measurement and mitigation of these risks.
18 Under an expected loss approach, provisions are set aside to cover the expected loss before evidence of impairment. In this case, provisioning does not depend on any evidence of deterioration in credit quality and is unrelated to the actual occurrence of losses (Hillegeist, S. A., E. K. Keating, and D. P. Cram, 2004).
for extending credits to customers, when the net present value of expected cash disbursements (such as claim payments) exceeds the expected cash receipts (such as fees or loan principal and interest payments), excluding administrative costs. Conversely, when the expected cash receipts exceed the net present value of expected cash disbursements the subsidy cost is negative, and the transactions generate a positive return to the Government.

A central component of the FCRA is the Interagency Country Risk Assessment System (ICRAS). ICRAS is used to determine a common sovereign and non-sovereign risk rating which all U.S. Government agencies must utilize for their cross-border loan, guarantee, and insurance programs. ICRAS ratings, also referred to as budget cost levels (BCLs), reflect the risk that foreign governments and enterprises will not repay their debts to the U.S. in the medium term. ICRAS rates countries on the basis of economic, political, and social variables.

**Portfolio Risk and the Importance of Qualitative Risk Factors**

Portfolio risk can be defined as the maximum amount of loss in the value of a credit portfolio within a specified time frame and confidence level. It is largely determined using the individual asset volatilities and the aggregate asset correlations (the degree to which assets tend to behave in relation to each other) in the credit portfolio. Studies have shown that if financial assets are correlated (either positively or negatively), the probability-weighted loss of each loan calculated separately and then added together would not yield the same result as calculating the probability-weighted loss of a portfolio containing the same loans (OCC, 2011). For example, a negative correlation between two assets could result in lower total losses as the volatility of one helps to
offset the volatility of the other. Conversely, highly correlated asset and industry classes in the portfolio could result in higher volatility and higher losses. Therefore, it is important that financial institutions are able to measure and mitigate portfolio risk to manage portfolio volatility in the case of different economic scenarios.

International banking guidance has established the principle that banks should manage not only individual credit risks, but also inherent risks at the portfolio level. In its *Principles for the Management of Credit Risk*, the Basel Committee on Banking Supervision (BCBS), an international forum for regular cooperation on banking supervisory matters (including the Federal Reserve), states:

“Banks must have in place a system for monitoring the overall composition and quality of their credit portfolio. Traditionally, banks have focused on oversight of contractual performance of individual credits in managing their overall credit risk. While this focus is important, banks also need to have in place a system for monitoring the overall composition and quality of the various credit portfolios. This system should be consistent with the nature, size and complexity of the bank's portfolios.”

In addition, the importance of qualitative or “environmental” risk factors to account for portfolio risk in estimating loss reserves has been underscored by U.S. banking regulators. In a 2006 policy statement on the allowance for loan and lease losses (ALLL), U.S. banking regulators stated: “Estimated credit losses should reflect consideration of all significant factors.

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19 Basel Committee on Banking Supervision, “Principles for the Management of Credit Risk”, September 2000, p 16. This document can be found online at [http://www.bis.org/publ/bcbs75.pdf](http://www.bis.org/publ/bcbs75.pdf).
that affect collectability of the portfolio as of the evaluation date. Normally, an institution
should determine the historical loss rate for each group of loans with similar risk characteristics
in its portfolio based on its own loss experience for loans in that group. While historical loss
experience provides a reasonable starting point for the institution’s analysis, historical losses, or
even recent trends in losses, do not by themselves form a sufficient basis to determine the
appropriate level for the ALLL. *Management should also consider those qualitative or
environmental factors that are likely to cause estimated credit losses associated with the
institution’s existing portfolio to differ from historical loss experience*”\(^{20}\) OCC (2006).
(Emphasis added.)

The policy statement also advises financial institutions to adjust the historical loss experience
for the effects of such qualitative or environmental factors, such as the effect of any
concentrations of credit and changes in the level of such concentrations. Indeed, the Office of
the Comptroller of the Currency (OCC) has cited excessive concentrations of credit - “pools of
exposure” - as a key factor in banking crises and failures noting that “when exposures in a pool
are sensitive to the same economic, financial, or business development, that sensitivity, if
triggered, may cause the sum of the transactions to perform as if it were a single, large
exposure.” Therefore, the OCC advises that management implement “internal processes
designed to identify, measure, monitor, and control concentrations of credit” and that such

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\(^{20}\) Interagency Policy Statement on the Allowance for Loan and Lease Losses. The Office of the Comptroller of the Currency, the Board of Governors of the Federal Reserve System, the FDIC, and the Office of Thrift Supervision, National Credit Union Administration redrafted their 1993 policy statement on the allowance for loan and lease losses (ALLL) to ensure consistency with generally accepted accounting principles and recent supervisory guidance. This document can be found at [http://www.federalreserve.gov/boarddocs/srletters/2006/SR0617a1.pdf](http://www.federalreserve.gov/boarddocs/srletters/2006/SR0617a1.pdf)
analysis be addressed in a bank’s ALLL.  

Interviews conducted with foreign export credit agencies confirm the practice of identifying and measuring portfolio risk and adjusting loss reserve models to reflect a balance of quantitative and qualitative risk factors.  

An important lesson learned from the 2008 financial crisis was that purely quantitative approaches to risk management were insufficient and that a more balanced approach that incorporates qualitative risk factors enhances a financial model’s explanatory power and is generally preferable to purely quantitative approaches (Kick and Pfingsten, 2011). With the benefit of hindsight, recent literature offers several explanations. First, quantitative models may fail to capture the full extent of risk when the returns are not normally distributed. Indeed, certain key risks that reside in the tails of the distributions may be overlooked. Second, asset volatilities and correlations used in value-at-risk models are derived from empirical data that reflect “normal” market conditions. However, in times of a financial crisis, both volatility and correlation may increase substantially (Danielsson et al, 2001). In addition, previously undetected correlations among asset classes and the behavior of market participants can lead to financial contagion during a severe crisis. Finally, as quantitative models rely on empirical data, they may fail to recognize structural shifts in the economy and financial markets. Based on the above factors, best practices now require portfolio managers to adopt a disciplined balance between quantitative and qualitative risk factors for their analysis.

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22 ECA respondents included Export Development Canada (EDC), SACE, Euler Hermes, Ex-Im Bank, Finnish Export Agency (Finnvera), Atradius, UK Export Finance (formerly ECGD), Export-Import Bank of Korea (K-Exim), Export Guaranty and Insurance Corporation (EGAP), Eksport Kredit Fonden (EKF), and the Swedish National Export Credits Guarantee Board (EKN).
In contrast, FCRA guidance focuses loss reserve provisioning based on individual assets and historical loss data. This approach measures risk from an individual asset perspective but fails to address the incremental risks at the portfolio level. It presupposes no interaction among assets or credit risks within the portfolio during times of severe financial stress. Co-variance among assets, or the degree to which two distinct assets move together in any given economic scenario, and other qualitative or environmental risk factors, such as concentration risks, pose additional risks to credit portfolios that may not have been adequately priced or reserved for using traditional FCRA methodology. As a result, Ex-Im Bank’s loss credit model did not reserve for or price the incremental risk deriving from its portfolio concentrations. For example, although aircraft transactions represent almost 50 percent of the total dollar out standings of Ex-Im Bank’s balance sheet, each new airline transaction was structured and priced using the same criteria and minimum pricing guidelines as any other aircraft transaction.

In September 2012, the Office of Inspector General for Ex-Im Bank issued its evaluation of Ex-Im Bank’s portfolio risk and loss reserve allocation policies. The report cited several perceived deficiencies in the bank’s portfolio risk management practices:

- Ex-Im Bank lacks a systematic approach to identify, measure, price, and reserve for its portfolio risk including qualitative risk factors.

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• Ex-Im Bank lacks formal policies and procedures for its loss reserve forecasting model which clearly define roles and responsibilities and provide for independent validation of the model’s integrity.

• Ex-Im Bank does not conduct portfolio stress testing in a systematic manner to assess potential exposures under challenging economic conditions.

• Ex-Im Bank does not self-impose portfolio concentration sub-limits or thresholds either by industry, geography, or asset class as internal guidance to inform management on risk and determine exposure fees in new transactions.

Ex-Im Bank management concurred with several of the report’s findings and engaged the accounting firm, KPMG to advise on the use of qualitative risk factors in its loss reserve analysis. Ex-Im Bank agreed to implement various qualitative adjustments related to model risk, concentration risk, and global economic risk. As part of the 2013 re-estimate process, management applied the new qualitative factors to the bank’s exposure for the FY 1992-2012 period. As a result, Ex-Im Bank made an extra provision of $577.3 million which was received from the U.S. Treasury in FY 2013.  

**Policy Recommendation:*** Ex-Im Bank should continue to refine its portfolio risk management policies and procedures related to identifying, measuring, pricing, and reserving for qualitative risk factors. For example, Ex-Im Bank should incorporate the results of ongoing portfolio stress test analysis into its loss reserve allowance both retrospectively and prospectively. The

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former will ensure that Ex-Im Bank has properly reserved for existing exposure while the later will address future exposure.

*Model Risk Management*

Financial institutions utilize quantitative models for a broad range of activity including measuring portfolio risk, determining capital and reserve adequacy, valuing exposures, preparing financial forecasts, etc. Similarly, credit portfolio managers use a variety of quantitative tools including value-at-risk (VAR), Riskmetrics™, and risk-adjusted performance. For example, VAR models seek to quantify the maximum possible loss in market value of a portfolio within a specified time frame and confidence level. When considering interest rate and foreign currency risks, risk management may use VAR models to estimate the potential exposure of its portfolio to fluctuations in interest and exchange rates.  

Despite their benefits, the use of financial models poses certain risks including the potential for adverse consequences arising from faulty analysis and misinterpretations. Indeed, models are simplified representations of real-world relationships among variables and, by definition, possess some degree of uncertainty and inaccuracy. Modeling errors can occur at any point from model design through implementation. They can be systematic, such as the consistent use of incorrect formulae or random, such as the inputting of data incorrectly. Institutions conduct independent validations to avoid the use of partial or biased data that would impact the model’s reliability and to assure the integrity of the model and the data used.

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25 This involves three steps: (i) establish a base case by modeling all current interest bearing assets and liabilities and their modalities including principal, currency, tenor, coupon, amortization, etc., (ii) use the implied forward curves of each debt instrument to estimate future floating rates and related interest rate exposure, and (iii) use Monte Carlo simulation to simulate future possible cash flows by projecting historical volatility around the present forward yield curve.
U.S. financial regulators have cited components of a sound model risk management program, including:

- Sound model validation process, including the confirmation of conceptual soundness, ongoing monitoring, process verification, and benchmarking; and ongoing review of assumptions and an outcomes analysis, including back-testing.

- External validation of the model’s integrity, which is designed to confirm a model’s integrity and performance. (Validation requires a degree of independence from model development and use. Ideally, validation should be undertaken externally by competent, impartial sources not responsible for developing the model).

- A formal system of governance which establishes an effective framework with defined roles and responsibilities for clear communication of model limitations and assumptions as well as the authority to restrict model usage.

Policy Recommendation: Ex-Im Bank should design and implement a formal governance framework for the use of its loss reserve financial models. This framework should include policies and procedures for model-validation including external validation of the model’s integrity, model ownership, and testing.

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Portfolio Risk Management Best Practices

A Sound Risk Management Framework Begins with an Agency-wide Risk Assessment

Notwithstanding the different approaches to risk mitigation, financial institutions share a common point of departure: to identify and quantify the financial risks inherent in the core business activities. A sound risk management framework requires a holistic approach to risk, encompassing the risks across the entire agency. Having identified core risks, it seeks to establish potential linkages and co-variation among the risks. It redirects management’s focus from divisional structures and silos to a more process-oriented view of risk management. It provides timely, independent, and accurate information on the consolidated risk profile to senior management. Informed by this analysis, management can set prudent risk tolerance levels and select an appropriate mix of risk management techniques.

Agency-wide risk assessment was promulgated by the Sarbanes-Oxley Act of 2002 for use in the private sector \(^{27}\) and has become a best practice for risk management policy among both private and public institutions. Indeed, numerous organizations including foreign ECA’s, multilateral financial institutions, and certain U.S federal agencies including the Small Business Administration, FDIC, and the Department of Energy are strengthening the risk oversight function to include an agency-wide risk assessment. \(^{28}\) In general terms, risk assessments typically include the following six core components:

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\(^{27}\) With the passage of the Sarbanes-Oxley Act of 2002, U.S. publicly-traded corporations were required to implement an enterprise wide control framework in their internal risk assessments. Many companies opted for the internal control framework designed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) with additional guidance provided by the Securities and Exchange Commission and Public Company Accounting Oversight Board in 2007.

\(^{28}\) This practice was confirmed in the various interviews conducted by the author as well as the annual financial statements of these organizations.
Table 4-7. Risk Assessment Components

<table>
<thead>
<tr>
<th>Component</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal environment</td>
<td>Assess the agency’s risk management philosophy</td>
</tr>
<tr>
<td>Objective setting</td>
<td>Define business objectives including growth, profitability, leverage solvency, credit losses, US policy goals, etc.</td>
</tr>
<tr>
<td>Identify and assess risks</td>
<td>Define accounting and economic exposures, identify and quantify risks, and probability distributions.</td>
</tr>
<tr>
<td>Risk response</td>
<td>Establish agency wide risk tolerance levels.</td>
</tr>
<tr>
<td>Control activities</td>
<td>Implement policies and controls to enforce risk levels.</td>
</tr>
<tr>
<td>Evaluate and measure</td>
<td>Assess effectiveness and benchmark objectives against performance.</td>
</tr>
</tbody>
</table>

In addition, as stated by the Basel Committee on Banking Supervision, a risk management framework promotes additional objectives:29

- Sound risk assessment and mitigation are embedded into financial and non-financial management processes.
- There is a clear delineation of risk ownership within the institution.
- Financial governance arrangements are sufficiently robust and operating effectively.
- Financial reporting is accurate, appropriate and consistent with government accounting standards.
- The financial control framework is effective and adequately supported by an internal compliance culture.

The International Association of Credit Portfolio Managers (IACPM) publishes credit portfolio management best practices as observed by its member institutions. In a document

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29 For more information see Basel Committee on Banking Supervision guidelines at [http://www.bis.org/publ/bcbs195.pdf](http://www.bis.org/publ/bcbs195.pdf)
entitled *Sound Practices in Credit Portfolio Management*\(^\text{30}\), IACPM cites the following sound practices:

- Define the portfolio to be managed.
- Identify and aggregate all risks to be measured.
- Identify the role and mandate of the credit portfolio management (“CPM”) function. Clearly delineate roles and responsibilities of CPM management.
- Staff the CPM function with a combination of individuals who possess three core competencies: credit, quantitative analytics, and market/credit trading experience.
- Standardize risk measures and models.
- Make a commitment to data integrity.
- Understand economic value versus accounting value.
- Set limits and manage concentrations.
- Stress test the portfolio in a systematic manner.
- Align accounting conventions with portfolio management practices.
- Rebalance the portfolio to achieve strategic objectives.
- Utilize risk mitigation techniques consistent with overall strategy.
- Establish objectives and performance metrics.
- Be transparent in disclosures.

IACPM conducted a survey of its member institutions and asked which techniques they used to mitigate portfolio risk. The survey results are summarized in Table 4-8 below. The survey

\(^{30}\) For more information see “Sound Practices in Credit Portfolio Management.” This publication is available at [http://www.iacpm.org/about-us/IACPM_Sound_Practices.pdf](http://www.iacpm.org/about-us/IACPM_Sound_Practices.pdf)
reveals that managers typically use a combination of techniques. The use of portfolio discipline strategies such as sub-limits was the most frequently cited.

Table 4-8. Techniques Used to Manage Credit Portfolio Risks by Importance: IACPM

<table>
<thead>
<tr>
<th>Portfolio Discipline (Sublimits)</th>
<th>Credit Default Swaps</th>
<th>Loan sales</th>
<th>Transfer Pricing</th>
<th>Portfolio Securitization</th>
<th>Financial Guarantees</th>
<th>Options</th>
<th>Credit Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>88%</td>
<td>70%</td>
<td>53%</td>
<td>37%</td>
<td>35%</td>
<td>26%</td>
<td>25%</td>
</tr>
</tbody>
</table>


In addition, the author interviewed a broad group of twenty-five institutions including foreign ECAs, U.S. federal agencies, and multi-lateral financial institutions on portfolio risk management practices.31 Table 4-9 summarizes the results. As with the IACPM survey, the use of portfolio discipline on the front end was the most commonly cited technique.

Table 4-9. Techniques Used to Manage Credit Portfolio Risks by Importance: ECAs

<table>
<thead>
<tr>
<th>Portfolio Discipline (Sub limits)</th>
<th>Reinsurance</th>
<th>Loan sales</th>
<th>Credit Default Swaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>92%</td>
<td>62.5%</td>
<td>41%</td>
<td>21%</td>
</tr>
</tbody>
</table>

Source: Sources include 2011 annual reports. Public domain.

Together, the IACPM survey and the author’s research support several key observations:

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31 ECAs include Atradius, Spanish Export Credit Agency (CESCE), Compagnie Française d’Assurance pour l’Commerce Extérieur (COFACE), Exportní garanční a pojišťovací společnost (EGAP), Eksport Kredit Fonden (EKF), Swedish National Export Credits Guarantee Board (EKN), Euler Hermes, UK Export Finance (ECGD), Export Development Canada (EDC), Finnish Export Agency (Finnverra), Norwegian Export Credit Guarantee Agency (GIEK), Hungarian Export Credit Insurance (MEHIB), Export Credit Insurance Poland (KUKE), Austrian Export Agency (OeKB), Belgian Export Credit Agency (ONDD), Servizi Assicurativi del Commercio Estero (SACE), US EXIM Bank. Multilateral agencies include Multilateral Investment Guarantee Agency (MIGA), International Finance Corporation (IFC), Inter-American Development Bank (IDB). U.S. federal agencies include Overseas Private Investment Corporation (OPIC), U.S. Department of Energy (DOE), U.S. Department of Agriculture (USDA), Millennium Challenge Corporation (MCC), and the U.S. Small Business Administration (SBA).
• Risk mitigation practices typically reflect the particular characteristics of the organization, including portfolio composition, business model, access to capital, levels of government support, etc.

• Most institutions surveyed pro-actively address portfolio risk through a combination of techniques, with portfolio discipline on the front end cited as the most often used in both the IACPM and OIG surveys.

• Institutions use stress case analysis in a systematic manner to help establish the need for risk mitigation and to mitigate unforeseen risks and market shocks at the portfolio level.

• Many agencies have created a distinct risk management function to monitor and implement risk mitigation strategies.

Policy Recommendation: Ex-Im Bank should conduct an agency-wide risk assessment to identify and quantify the full spectrum of risks inherent in its core business activities. Informed by this analysis, Ex-Im management should formulate an over-arching risk management strategy and review various risk mitigation techniques to address these risks.

Policy Recommendation: Ex-Im should develop a comprehensive risk reporting system or dashboard that communicates aggregate levels of portfolio concentrations and related risks to senior management.
Summary:

The U.S. Export Import Bank is the official Export-Credit Agency of the United States. In fulfilling its core mission, Ex-Im Bank has experienced rapid growth and emerging risk trends that place greater risk on the U.S. government and ultimately U.S. taxpayers. The traditional framework used by federal credit agencies to calculate and measure risk and program subsidy costs falls short of portfolio management best practices and the guidance set forth by U.S. financial regulators for systemically-important financial institutions.

The formulation of an effective risk mitigation strategy begins with an assessment of current risk management policy, agency objectives, and agency–wide risks. This initial assessment provides the basis to establish portfolio discipline by setting prudent risk tolerances or portfolio sub-limits for the identified risks. A corollary objective for Ex-Im Bank is to establish a dialogue between the origination function and the portfolio management of the institution to ensure that Ex-Im is correctly pricing and reserving for the incremental portfolio concentration risks. To this end, risk management will need to create a dynamic risk reporting system or “dashboard” that informs senior management on its consolidated risk position in a timely manner.

Informed by this analysis, Ex-Im Bank can review various risk mitigation strategies, perform a cost benefit analysis, and select appropriate techniques that are consistent with the agency’s risk appetite and Charter. Sound financial governance provides that risk mitigation practices are consistent with the particular characteristics of the organization, including portfolio composition, business model, access to capital, and levels of government support. Risk management strategies are not static, however, and need to be reviewed against changing market conditions and the
results of stress case analysis performed in a systematic manner. Regulatory guidance for
systemically-important financial institutions and private sector best practices continue to evolve,
capitalizing on the lessons learned from the financial crisis of 2008. Together they provide
important guidance on risk management and offer federal agencies a base line for comparison
purposes.
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Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System,
Federal Deposit Insurance Corporation, National Credit Union Administration, Office of
Loan and Lease Losses.

Standard & Poor’s (2010, December 10). Basel’s global quantitative impact study exposes large banks’ regulatory capital shortfall.

Appendix A: Ex-Im Bank Financial Model

Ex-Im’s financial statements are prepared in accordance with Office of Management and Budget (OMB) Circular A-136, Financial Reporting Requirements, revised as of October 27, 2011. In addition, Ex-Im Bank uses OMB Circular A-11 as the primary guidance for calculating program costs associated with its transactions, and OMB Circular A-129 for its default policy. These publications do not, however, provide specific guidance on portfolio risk matters. Following OMB Circular A-11, Ex-Im Bank determines its program costs by calculating the net present value of expected cash inflows (receipts) and cash outflows (disbursements) related to new authorizations. Receipts typically comprise fees, loan principal, and interest, while cash disbursements typically include claim payments and loan disbursements. A net outflow of expected funds results in a program cost or “subsidy,” while a net inflow of expected funds results in a “negative subsidy.”

Ex-Im Bank uses an expected loss credit model to determine the appropriate level of reserves needed to cover expected losses. The model utilizes an Excel-based, linear regression analysis that builds upon Ex-Im Bank’s historical loss and recovery experience for each risk rating and product line to determine the loss ratio (LR), the percentage loss that Ex-Im Bank can expect for each dollar of loan disbursement or guarantee provided. In general, Ex-Im Bank uses historical experience to estimate the probability of default as well as the loss given default. The probability of default (PD) is the likelihood that a transaction would go into default where the
loss given default (LGD) gives the estimated loss, net of recoveries and expenses, if a default occurred. Multiplying PD times LGD gives the LR.  

Probability of default (PD): The PD can be defined as the probability that an obligor will default in its payment obligations as contractually stipulated in a financing document during a specified time period. The probability of a default by a given obligor can be estimated from a historical database of actual defaults using common statistical techniques such as linear regression, or estimated from the current price data for credit default swaps, bond prices, etc. Another frequently used technique is to examine the historical loss experience of external credit ratings such as Standard and Poor’s and Moody’s.

Ex-Im Bank’s loss reserve model estimates the PD based on historical data as of the prior fiscal year for each Budget Cost Level (BCL) rating and for each of the following four product lines: long-term guarantees, medium-term guarantees, medium-term insurance, and short-term insurance. As there is insufficient empirical evidence to estimate the PDs for long-term and medium-term loans, Ex-Im Bank’s model uses the loss experience for the medium- and long-term guarantee programs as proxies.

- Loss given default (LGD): LGD can be defined as the credit loss incurred if an obligor defaults in its payment obligations. The loss amount is net of recoveries and discounted for the time value of money. It is dependent on both the cash flows from the borrower and the characteristics of the debt obligation including documentation, seniority,

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33 As prescribed by OMB’s Interagency Country Risk Assessment System (ICRAS), this is a rating that identifies the level of risk of each transaction in a sliding scale. This is further explained in Appendix B.
collateral (if any), etc. As with PD, the LGD is estimated for each BCL rating and for long- and medium-term guarantees, short- and medium-term insurance. The LGDs for medium- and long-term loans are derived from the LGDs for medium- and long-term guarantees.

- Predictor intervals (PI): Predictor intervals are used to express the likelihood that a future observation (in Ex-Im Bank’s case, the future probability of default of a new transaction with a given BCL rating) will fall within a pre-determined range of values, given empirical evidence. The range is defined by upper and lower bounds. Combined with a confidence level, the PI refers to the average predictive success of the model. For example, a 95 percent PI would imply that the future probability of default of a transaction with a given BCL rating would fall within these bounds 95 percent of the time on average.

For each transaction Ex-Im Bank authorizes, a specific subsidy is calculated on the basis of the transaction’s inherent risks. The subsidy component of a transaction is determined by the net present value of expected losses (i.e., costs) and fees (i.e., income) for that particular transaction. The former are largely determined by the ICRAS rating while the latter are largely determined by the Organization for Economic Co-operation and Development (OECD) Arrangements. Under credit reform, OMB is responsible for determining the expected loss rates associated with each ICRAS risk rating and maturity level.
Appendix B: Portfolio Risk Management Techniques

Portfolio discipline

“Soft” or “hard” portfolio concentration sub-limits can inform future pricing, risk management decisions, and business development strategies. As indicated above, portfolio discipline strategies rank among the most popular risk mitigation strategies with 88% of IACPM survey respondents confirming that they implement sub limits. Similarly, 92% of the OIG survey respondents responded affirmatively to the use of “soft” portfolio credit limits.

Imposing “soft” portfolio sub-limits allows management to systematically identify and manage credit exposure thresholds and to have the appropriate discussions between the relevant business units to determine how to appropriately balance the portfolio. Moreover, “soft” sub-limits would inform management on the pricing and reserving for incremental portfolio concentration risk. For example, although aircraft transactions represent almost 51% of the total dollar out standings of Ex-Im’s balance sheet, each new airline transaction is structured and priced using the same criteria and minimum pricing guidelines as any other aircraft transaction without taking into account the incremental portfolio risk in its pricing criteria.

Asset sales

Asset sales are a cost-effective mechanism to transfer risk from the original credit provider to a second financial institution. In essence, the selling institution sells a portion of its original loan or guarantee commitment on a non-recourse basis to another lender. This is often done via an
assignment or risk participation agreement. The original commitment of the selling institution is then reduced by an equal amount and loss reserves are no longer required for the portion that was sold to the purchasing institution. This is a widely-used strategy by institutions. For example, fifty three percent of IACPM survey respondents answered that they use asset sales to reduce risk exposures and 41% of OIG survey participants answered affirmatively.

Moreover, the OMB has provided guidance on this matter. OMB Circular A-11 applies to all programs that provide direct loans or loan guarantees to non-federal entities that are subject to the Federal Credit Reform Act (FCRA). Section 185.8 of OMB Circular A-11 provides that “agencies are . . . encouraged to explore selling performing loan assets to the extent that such sales would benefit the Government.” Moreover, OMB Circular A-129 states that “agencies conducting such . . . loan asset sales programs will consult with both OMB and Treasury throughout the prepayment and loan asset sales processes to ensure consistency with the agreed upon policies and guidelines.” Thus, to the extent that the Ex-Im complies with OMB and Treasury guidelines, it may be authorized to engage in asset sales.

Reinsurance

Reinsurance is insurance coverage that is purchased by an insurance provider (in our case the ECA) from another insurance company (the reinsurer) in order to transfer risk from the original provider to the reinsurer. Among the ECAs, reinsurance is one of the more frequently employed risk mitigation techniques as it allows a greater degree of flexibility. Approximately 62.5% of

the OIG respondents confirmed that they use reinsurance to reduce credit exposures. There are two basic methods of reinsurance: facultative reinsurance and treaty reinsurance. Under facultative reinsurance, Ex-Im cedes and the reinsurer assumes all or part of the risk assumed by a particular specified insurance policy. Facultative reinsurance is negotiated separately for each transaction that is reinsured. Facultative reinsurance normally is purchased by ceding companies for individual risks not covered by their reinsurance treaties, for amounts in excess of the monetary limits of their reinsurance treaties, and for unusual risks. Under treaty reinsurance, Ex-Im Bank would execute a reinsurance contract with a reinsurer to provide coverage for all transactions that fall within the defined scope of the contract. There are two basic methods of treaty reinsurance: Quota Share Treaty Reinsurance and Excess of Loss Treaty Reinsurance. The latter provides cost effective coverage while capping the amount of risk to Ex-Im Bank.

*Credit Derivatives*

A credit derivative can be simply defined as a bilateral financial contract in which the “protection buyer” pays a periodic fee in return for a contingent payment by the “protection provider” following a pre-defined “Credit Event.” Unlike a bond or loan, a credit derivative is not a “physical asset.” The price of the credit derivative is largely determined by the credit risk of the underlying asset.

Credit default swaps are the most common type of credit derivatives. An export credit agency would purchase a credit derivative to mitigate the credit default risk of a particular financial asset in its portfolio, or against a broader index of risks. Credit default swaps was the second most commonly used techniques among IACPM survey participants with seventy percent
responding affirmatively. In contrast, less than 25% of OIG survey participants, the group composed of ECAs and other U.S. federal agencies, responded affirmatively.

**Asset Securitization**

Asset securitization is similar to asset sales in that the underlying risk of a loan and/or receivable is transferred to a separate entity—typically a special purpose vehicle. These “assets” are then pooled together with other financial assets, underwritten, and sold in the form of asset-backed securities. This process allows investors to diversify their risk by holding a pro rata share of the underlying pool of assets rather than a single exposure. The seller of the financial assets benefits in several respects. First, the seller’s exposure to the loan and/or receivable sold decreases as the asset is sold on a “true sale” or non-recourse basis. Second, the asset-backed security may achieve a lower cost of funding for the seller due to structural enhancements. This technique has been widely used by commercial financial institutions in the past

ABSTRACT

Government agencies across the globe are under increasing pressure to improve public sector performance against a backdrop of budget cuts and a challenging economic environment. The new mantra of the decade has indeed become, “Do more with less.” The old paradigm that relates quality of service to costs incurred is no longer valid as public sector managers must learn to optimize costs, quality and customer service. The Export-Import Bank of the United States (Ex-Im Bank) is no exception. Tasked with promoting domestic exports, the agency must balance complex stakeholder considerations, competing Congressional mandates and an OECD framework for government-sponsored export credits. Although there is no single blueprint to enhance the quality of public service, the use of performance metrics and lean techniques to improve operational efficiency can play an important role in this process. By improving operational efficiency and adopting a more customer-centric approach, Ex-Im Bank seeks to better align scarce resources with the needs of its customers.

This article examines how Ex-Im Bank and peer Export Credit Agencies (ECAs) are using performance metrics, customer surveys, and “lean techniques” to improve the overall customer experience. It benchmarks Ex-Im Bank’s policies against the best practices articulated by peer ECAs and a broader group of public and private financial institutions. The author’s observations and recommendations are informed by a review of Ex-Im Bank’s financial reports, interviews with Ex-Im Bank staff and a survey of ECA peers on performance metrics for operational efficiency.

The ECA survey results confirm the importance of improving operational efficiency including transaction response time and its linkage with customer satisfaction. Second, that soliciting customer feedback in a timely and systematic manner provides valuable insight as to customer priorities and potential areas for improvement. Customer feedback informs future resource allocation as well as the selection of performance metrics to measure operational efficiency. A growing number of ECAs are implementing lean principles to streamline internal processes including the flow of information associated with these processes. Informed by the lean process, management can better align internal work processes with customer priorities and track progress in a transparent manner.
Introduction

Government agencies are under increasing pressure to improve public sector performance against a backdrop of budget cuts and a challenging economic environment. The new mantra of the decade has indeed become, “Do more with less.” Although there is no single blueprint to enhance the quality of public service, the use of “lean techniques” and performance metrics to improve operational efficiency can play an important role in this process. Moreover, soliciting customer feedback in a timely and systematic manner provides valuable insight as to customer priorities and informs future resource allocation.

At the heart of the issue lies the public’s rising expectations of customer service, fueled by technological advances and private sector best practices. The old paradigm that relates quality of service to costs incurred is no longer valid as public sector managers must learn to optimize costs, quality and customer service. The importance of this paradigm shift is underscored by President Obama’s 2011 Executive Order 13571 entitled "Streamlining Service Delivery and Improving Customer Service." Building upon earlier Federal initiatives, the order requires Federal Agencies (and requests that Independent Agencies, such as Ex-Im Bank) to develop customer service plans and standards that implement best practices from the private sector. The latter builds upon performance targets for customer service required by the Government Performance and Results Modernization Act of 2010 (GPRA).

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GPRA established the framework for results-oriented planning, measurement, and reporting in federal government agencies. The 2010 Act significantly revised the performance framework for federal agencies by defining a governance structure and by better connecting plans, programs, and performance information. In addition, the Act requires more frequent reporting and reviews (quarterly instead of annually) that are intended to increase the use of performance information in program decision-making.

Customer service plans are to outline an agency’s approach to three broad topics: “connecting with customers” by soliciting customer feedback and adopting customer service best practices; setting and communicating clear customer service standards; and leveraging technology and innovation. ³ In addition, agencies are to benchmark their performance against both internal standards and those of the private sector. Finally, the order requires agencies to establish a "signature” initiative for using technology to transform customer service.

On May 23, 2012 President Obama announced a new comprehensive strategy entitled, “Digital Government: Building a 21st Century Platform to Better Serve the American People.” The government-wide initiative provides a twelve-month road map to enhance the digital delivery of government data via mobile devices and web-based technologies, to develop new standards for making applicable Government information open and machine-readable by default, and to enhance digital services to protect information and privacy. ⁴ The Office of Management and Budget (OMB) provided additional guidance on the use of digital information and services.

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⁴ For more information see http://www.whitehouse.gov/sites/default/files/uploads/2012digital_mem_rel.pdf
This article discusses how Ex-Im Bank and foreign ECAs are using performance metrics to measure, benchmark, and improve the overall customer experience. It examines the metrics used by Ex-Im Bank and benchmarks them against those of a select group of peer ECAs and the best practices observed by a broader group of public and private financial institutions. Particular emphasis is placed on the management of customer response times and the use of both qualitative and quantitative factors to measure performance. Data used for this article were drawn from several principal sources including a review of Ex-Im Bank’s reporting systems and related management reports, interviews with Ex-Im Bank staff and ECA peers as well as a survey of ECA peers on performance metrics for operational efficiency and best practices. The survey focused on ECA best practices, such as the selection and measurement of performance metrics for operational efficiency, recently-introduced initiatives to improve customer service, and how institutions balance competing agendas of timely customer response and the need to complete satisfactory transaction due diligence.

In comparing Ex-Im Bank’s policies and metrics with those of other ECAs, one must recognize that other countries have different ECA business models ranging from lenders of last resort to quasi-market players to industrial policy institutions. Moreover, the operational

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5 Digital information is information that the government provides digitally. Information, as defined in OMB Circular A-130, is any communication or representation of knowledge such as facts, data, or opinions in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual forms. See http://www.whitehouse.gov/omb/circulars_a130_a130trans4 for more information.

6 ECAs facilitate a country’s exports by issuing loans, guarantees and insurance products to foreign governments and private corporations to purchase services and products from the issuing countries.

7 Survey respondents included Export Development Canada, SACE, Euler Hermes, Eksport Kredit Fonden, Export Credits Guarantee Department, Exportkreditnämnden, Export Credit Office, EFinnvera Oyj, Finnish Export Credit Ltd, Export Import Bank of Korea, Export Guarantee and Insurance Corporation and U.S. Ex-Im.
objectives, risk appetites, pricing and financial drivers associated with each of these models may differ. As a result, these ECAs may vary from Ex-Im Bank in various degrees including governmental objectives, institutional priorities, budget levels and staff resources.  

Nevertheless, benchmarking Ex-Im Bank with its peers provides insights on best practices in the competitive ECA sector. Many of these best practices derive from two overarching themes: the use of a balanced score card approach to performance measurement, incorporating both quantitative and qualitative metrics; and the use of customer feedback to inform resource allocation, customer service levels, and performance measurement.

The Case of the U.S. Export-Import Bank

Ex-Im Bank is the official Export-Credit Agency of the United States. Its mission is to support the financing of U.S. goods and services in international markets, thus promoting job creation in the United States. Ex-Im Bank accomplishes this task by assuming the credit and country risks that private sector financial institutions are unable or unwilling to accept. Concurrent with this mission, the bank must safeguard taxpayer resources by ensuring a reasonable assurance of repayment. Ex-Im Bank’s principal programs are loan guarantees, direct loans, export credit insurance and working capital guarantees. As a federal agency, Ex-Im Bank’s programs are backed by the full faith and credit of the U.S. government.

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Ex-Im Bank operates under a renewable charter, the Export Import Bank Act of 1945, as amended. The Bank recently received Congressional reauthorization through 2014. With respect to government appropriations, Ex-Im is self-sustaining and uses risk premia, or “exposure fees,” to offset losses on its portfolio.

Over the last five years, Ex-Im Bank has witnessed a substantial increase in new business with total new authorizations amounting to $27.4 billion in FY 2013. In addition, the level of employee efficiency – the average dollar amount of authorizations per employee – has more than doubled while the number of authorizations per employee increased from 6 to 10 during the same period. Concurrent with this growth, Ex-Im Bank has successfully implemented measures to enhance its response time performance in the Small Business Group and short term products, resulting in consistent improvement over the past three years. Notwithstanding this progress, response time performance in the long-term structured portfolio has been mixed as Ex-Im Bank staff and IT budgets have not kept pace with the growth in new business. Indeed, the number of long term guarantees and loans processed in FY 2013 rose almost 25% over 2010 levels without a corresponding increase in staff or IT budgets. As a result, response time for long-term loan and guarantee activities as measured by “Average Days to Decision” has increased since FY 2009 with substantial variance in the mean monthly scores.

Certain Ex-Im Bank stakeholders have expressed concerns about the approval times and process. For example, Donna Alexander, President of the Bankers’ Association for Finance and Trade and the International Financial Services Association (BAFT-IFSA), testified in Congress in 2011 that Ex-Im Bank “program processing inefficiencies are generally manifested by
inordinately long processing times for transactions and ultimately can compromise some deals. This is particularly true of some small business transactions, where the costs related to lengthy processing periods can cause difficulties in completing transactions.”

Ex-Im Bank’s Office of the Inspector General also received anecdotal evidence from stakeholders that internal processing inefficiencies are resulting in longer processing times for certain transactions. On May 24, 2011, the Ex-Im Inspector General, Honorable Osvaldo L. Gratacós testified before the Senate Committee on Banking, Housing, and Urban Affairs; Subcommittee on Security and International Trade and Finance (U.S. Government, 2011). The subcommittee hearing focused on stakeholder perspectives on the reauthorization of the Export-Import Bank. Mr. Gratacos’ testimony confirmed BAFT-IFSA’s concerns and highlighted several key areas to improve the level of customer service.

**Operational Performance through “Lean” Techniques**

Although ECAs may pursue different philosophical tenets and national policies, negotiations among G-7 ECAs have led to a convergence in program features, particularly with respect to sovereign transactions. The resulting Organization for Economic Co-operation and Development (OECD) Arrangements (OECD, 2011) establish a common framework for core financing elements, risk ratings, and minimum pricing levels. The underlying objective is to provide a level playing field for exports and to encourage competition among exporters based on the quality and price of goods and services, rather than on the most advantageous government-sponsored

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10 Mr. Gratacos’ testimony can be found at [http://www.banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=b5faa3bb-0292-41cb-a1c5-0f2b71b9ceaa](http://www.banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=b5faa3bb-0292-41cb-a1c5-0f2b71b9ceaa)
financing terms. Non-sovereign transactions, however, exhibit a wider divergence in fees and structures in the international arena. This is due in part to different approaches to risk mitigation and risk-rating methodologies.

The convergence in programs has also engendered a greater focus on operational performance to enhance ECA competitiveness and improve customer service levels. From the standpoint of the ECAs, performance metrics for customer service often focus on the following areas:

- Transaction response time: This includes the speed of application processing, decision making, and claims processing.
- Availability and knowledge level of staff to answer questions.
- Information requirements and supporting documentation for applications.
- Customer interface with IT platform. This includes the on-line application process, availability and quality of information, etc.

How can agencies improve customer service while facing the pressure of declining budgets and limited resources? One approach adopted by both U.S. federal agencies and certain foreign ECAs is to apply “lean techniques” to organizational processes. Originally designed for use in the private sector, these techniques challenge prior practices and refocus employees to deliver value from the customer’s perspective Lean involves a paradigm shift. It refocuses management’s focus from cost cutting and hiring freezes to the underlying processes, how work is designed and executed. (McKinsey,2002) (McKinsey, 2011). Lean acknowledges the inherent inefficiencies in the work place and asks, “How can I streamline the process to accomplish management objectives in less time with fewer resources.” It requires management
to reconsider what, when and how something is produced (Richard, 2006) (Maleyeff, 2007). Through implementing lean techniques, ECAs can improve operational performance by reducing non value-added process steps that have developed over time.

Implementing lean requires managers to take responsibility for the internal processes, to set internal service levels including turn-around times, and to become mutually accountable for the end product. Actual implementation involves several steps. First, management must align current resources including staff to improve the process flow and benefit the customer. Second, management invests judiciously in those areas that drive customer satisfaction. To do this, one must first identify the components of operational performance that correlate with higher levels of customer satisfaction. These components can be identified through customer surveys and focus group discussions and designated as potential “drivers” of customer satisfaction. Third, management should minimize wasteful spending by prioritizing these drivers in the budget allocation and performance review processes. The above results in a closer alignment among resources, customer priorities, and the budgeting process (Miller, 2006) (Miller, 2011). Informed by the lean process, management can define appropriate performance metrics to track progress toward its objectives in a transparent manner. In addition, metrics provide insightful data that can be utilized for a variety of purposes: to inform resource alignment, highlight potential problems and take corrective action, develop strategy, and to incentivize performance.

Customer Satisfaction is Key to Achieve Organizational Objectives

The importance of customer satisfaction resonates well with ECAs. Indeed, all survey participants responded that customer satisfaction was either “very” or “extremely” important in
achieving organizational objectives. A review of Ex-Im Bank policies reveals the need for a
more systematic approach to soliciting and measuring customer feedback on its performance and
the overall level of customer satisfaction. Indeed, prior to the 2012 survey initiated by the Office
of the Inspector General, Ex-Im Bank had not conducted a comprehensive customer survey since
2004. Soliciting customer feedback in a timely and systematic manner provides valuable insight
as to customer priorities, perceived performance, areas for improvement, and informs future
resource allocation.

Soliciting customer feedback in a timely and systematic manner provides valuable insight as
to customer priorities, perceived performance, areas for improvement, and informs future
resource allocation. Our ECA Survey results purport that agencies should be proactive and
survey their clients on a regular and systematic basis. Methodology used to measure customer
satisfaction differs among the various ECAs. On one end of the continuum, several institutions
employ an anecdotal approach and measure customer satisfaction infrequently. On the other end,
a majority of ECAs commented that they measure customer satisfaction at least once a year.

Best practices dictate that ECAs should be proactive and survey their clients on a regular and
systematic basis. But, collecting data can also pose challenges for many institutions. Differences
in definition and data collection procedures within an organization may generate ambiguous
results. Related questions include “what must be measured,” “how to measure it,” and “how
frequently?” “Which clients should ECAs approach?” “How can ECAs obtain a representative
sample and avoid selection bias?” Despite the challenges, customer feedback on operational
performance provides valuable insight on the alignment of resources and customer needs.
ECA respondents cited several practical suggestions. First, to imbed the solicitation for feedback in the overall customer experience, i.e., at the end of the transaction. This increases the response rate and may result in more accurate results. Second, to use focus groups to inform survey design. Third, to cross validate the results of survey analysis with focus groups and select interviews. Fourth, to utilize annual surveys to determine the current and future needs of their clients—an important initiative given the challenging economic environment.

Finally, there may be occasions when internal policies conflict with customer requests. This can be mitigated by transparency and good communication throughout the transaction cycle. Several ECAs commented that they have created dedicated “customer care centers” to resolve potential issues.

*The Use of customer satisfaction as an annual performance metric.*

Although virtually all ECAs commented on the importance of customer service, a majority responded that it is not a metric used in the annual appraisal process. This may be due in part to the inherent difficulty of measuring customer satisfaction objectively. Second, management may define success parameters largely in quantitative terms—touting the volume of exports financed, number of jobs supported, and revenues per employee. While these measures are important, they do not address the underlying issue of customer satisfaction.

Best practices suggest including customer satisfaction levels as a metric for performance appraisals and incentive compensation. For example, certain ECAs implement a balanced score card approach and incorporate customer satisfaction as an important metric for the appraisal process.
Performance Objectives and Metrics for Operational Efficiency

How do we determine performance metric targets? Do they address customer expectations? Operational performance metrics may reflect a number of factors including historical precedent, peer performance, government regulation, transaction complexity, or internal limitations. But, to what degree do they reflect customer expectations? Is there a hierarchy among customer service levels? How do ECAs balance competing agendas of timely customer response and the need to complete satisfactory transaction due diligence, credit analysis and policy compliance?

Most survey respondents confirmed that performance metric targets reflect internal policies and constraints but also the needs of their customer base. The mean score for both was 7.5. Second, practically all ECAs commented that performance metric targets are included as management objectives. Some referenced different performance targets across product lines. Finally, several highlighted the importance of transparency and communication throughout the transaction as effective tools to manage customer expectations. As one respondent noted, “We maintain a close dialogue with clients to communicate policy guidelines and to understand their timing constraints.”

Pursuant to the GPRA Modernization Act of 2010, Ex-Im Bank is required to prepare an agency performance plan to establish performance goals and indicators, describe how the goals will be achieved and measured, and describe major management challenges the agency faces along with planned actions to address such challenges. As noted above, Executive Order 13571
places particular emphasis on developing customer service plans and standards that implement best practices from the private sector.

Although Ex-Im Bank tracks select quantitative performance indicators such as the overall volume of exports financed, revenues per employee and the attendant job creation, the bank has not articulated qualitative measures such as the level of customer satisfaction. In contrast, the ECA survey revealed that a best practice is to include both quantitative and qualitative measures, such as customer satisfaction levels, as metrics in agency performance plans. For example, certain ECAs implement a balanced scorecard approach and incorporate customer satisfaction as an important metric for the appraisal process. Other qualitative measures cited in the ECA survey include:

- **Net Promoter Score:** This metric seeks to determine the degree to which ECA clients would recommend it to a fellow exporter.
- **Measure of Significance:** A metric that measures the level of significance of the ECA to a client’s operations.
- **Quality of Service:** A variable that relates to the perceived level of quality of a service provided.
- **Knowledge Level and Availability of Staff:** A variable that requests clients to rate the knowledge level and availability of staff to answer questions.

**Policy Recommendations**

- Ex-Im Bank should develop a systematic approach to defining and measuring customer satisfaction. An important component of this initiative is to implement a customer survey
on an annual basis to validate the priorities of its customers and to solicit feedback on Ex-Im Bank’s performance.

- Ex-Im Bank should participate in an inter-ECA dialogue on operational performance and customer service to learn more about ECA best practices.
- Ex-Im Bank management should implement a balanced score card approach, incorporating both quantitative and qualitative metrics in its agency performance plan. In addition, performance metrics should be published and progress tracked on Ex-Im Bank’s website in the interest of greater transparency.
- Ex-Im Bank should solicit customer input on its operational performance and revisit its metrics and customer service response time levels to reflect customer expectations.

Measuring Operational Efficiency Including Transaction Response Time

ECA’s view response time as an important factor in the ability of customers to win additional export business and to enhance ECA competitiveness. On a 1-10 scale, mean scores were 7.5 and 7.9 respectively. In addition, ECA’s felt that response time meets the expectations of our clients as evidenced by a mean score of 8.1. Finally, most ECA’s view response time as a shared responsibility with the client with a mean score of 7.8. Interviews conducted with Ex-Im Bank management indicate an inconsistent approach to measuring customer response time throughout the bank. Certain product groups wait for a complete application before tracking response time while others may start earlier but “stop the clock” while waiting for customers to respond to information requests. In addition, product groups may use different milestones to measure response time, including the following cycles: application to letter of interest, application to
credit approval/authorization, application to final delivery or closing, etc. Although differences in program features may suggest different approaches, operational performance metrics should be consistently defined and implemented throughout Ex-Im Bank. From a best practice perspective, it is important to remember that the customer’s view may not be point to point, but rather the “totality of the experience.”

Ex-Im Bank customer service metrics for response time largely reflect internal policies and constraints, with insufficient input from customers. Absent a consistent approach to solicit feedback, Ex-Im Bank management may only be privy to anecdotal comments and not to comprehensive customer priorities. Our ECA survey revealed that customer service metrics for response time should be established in accordance with the needs of the customer base. ECA survey respondents commented that performance metric targets for response time are set in consultation with the client and based on feedback from periodic customer surveys. Several ECAs highlighted the importance of transparency and communication throughout the transaction as effective tools to manage customer expectations. As one respondent noted, “We maintain a close dialogue with clients throughout the transaction to communicate policy guidelines and to understand their timing constraints.”

Ex-Im Bank needs to improve the monitoring of transaction response time for long-term guarantees and direct loans. As noted above, the CEO of BAFT-IFSA noted how various stakeholders believe that long transaction times can compromise deals. Similarly, Ex-Im Bank OIG continues to receive anecdotal evidence from stakeholders that internal processing inefficiencies are resulting in longer processing times for certain transactions.
Transaction response time contributes to Ex-Im Bank’s overall competitiveness and is a critical factor in its clients’ ability to generate new export business. Although revenues per employee have risen, response time for long-term products has suffered as Ex-Im Bank staff and IT budgets have not kept pace with the growth in new business. As a result, certain Ex-Im Bank clients have complained in the past about the approval times and process. Interviews with Ex-Im Bank product managers confirmed that customers’ feedback suggests the need to improve the response time of at least one of the following processes: application process, decision-making, and claims processing.

Our ECA survey revealed that ECAs view response time as an important factor in the ability of customers to win additional export business and to enhance competitiveness. In addition, respondents felt strongly that response time is an important driver of customer satisfaction and represents a shared responsibility with the client. When asked in which areas clients request better customer service, ECA survey responses identified transaction response time as the most frequently cited. Others included information requirements, availability, knowledge level of staff, and client interface with the agencies’ IT platform.

Policy Recommendation

Ex-Im Bank should implement improved monitoring procedures and appropriate response time targets for long-term guarantees and loans. Metrics should reflect the inherent complexity of long-term structured financings and should be established in consultation with clients to better understand their priorities.
Summary

Faced with increasing pressure to improve performance with limited resources, public sector managers must learn to optimize costs, quality and customer service. Important tools at their disposal include the use of lean techniques and performance metrics to measure and improve operational efficiency. In addition, soliciting customer feedback on operational performance can provide valuable insight on the alignment of resources and customer needs, as well as the drivers of customer satisfaction. Feedback may also inform future resource allocation, areas to improve and the selection of relevant metrics to assess operational efficiency.

This article incorporates the results of a survey of ECA peers and helps to define best practices related to measuring and implementing performance metrics for operational efficiency. It provides several policy recommendations for Ex-Im Bank including the use of both qualitative and quantitative measures for operational efficiency, developing a systematic approach to defining and measuring customer satisfaction; and using customer feedback to validate the priorities of its customers and to solicit feedback on the bank’s performance. Finally, Ex-Im Bank should define and publish performance metrics to track progress toward in a transparent manner. Informed by the above, agencies can implement lean techniques to improve internal processes and better allocate scarce resources to “Do more with less.”
References


OECD, Trade and Agriculture Directorate, *Arrangement on Officially Supported Export Credits*. September 1, 2011.


Appendix A– ECA Survey Results on Performance Metrics for Operational Efficiency

To what degree do the following phrases accurately describe your organization’s approach to setting performance metrics for operational efficiency? Please select a value from the following range: 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10 (with 10 = most accurately describes); don’t know: NA

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<th>RANGE</th>
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<td>Performance targets vary from product to product</td>
<td>1-10</td>
<td>8.4</td>
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<td>Performance targets reflect ECA best practices</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td>Performance targets are in line with ECA peers</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td>Performance targets reflect the needs of our client base</td>
<td>3-10</td>
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<td>Performance targets are included in the management objectives</td>
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<td>9.2</td>
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<tr>
<td>Performance targets are critical to achieving operational efficiency</td>
<td>3-10</td>
<td>7.2</td>
</tr>
<tr>
<td>Performance targets largely reflect our internal policies and constraints</td>
<td>5-10</td>
<td>7.5</td>
</tr>
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</table>

1) How important is customer satisfaction to achieving your organization’s overall objectives?

Please select one value: 

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<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely important</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Very important</td>
<td>7</td>
<td>Very</td>
</tr>
<tr>
<td>Somewhat important</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less important</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2) Please rank the relative importance of each operational factor as a driver of customer satisfaction. Please select a value from the following range: 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10 (with 10 = most important); don’t know: NA
<table>
<thead>
<tr>
<th>Service</th>
<th>Range</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall transaction response time</td>
<td>7-10</td>
<td>9.0</td>
</tr>
<tr>
<td>Speed of application processing</td>
<td>7-10</td>
<td>8.6</td>
</tr>
<tr>
<td>Speed of decision making</td>
<td>7-10</td>
<td>8.6</td>
</tr>
<tr>
<td>Client interface with IT platform/online</td>
<td>1-10</td>
<td>6.1</td>
</tr>
<tr>
<td>application process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of information on web site</td>
<td>5-10</td>
<td>6.4</td>
</tr>
<tr>
<td>Information/documentation requirements for</td>
<td>4-10</td>
<td>7.5</td>
</tr>
<tr>
<td>applications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speed of Claims processing</td>
<td>3-10</td>
<td>7.5</td>
</tr>
<tr>
<td>Availability and knowledge level of staff</td>
<td>7-10</td>
<td>8.6</td>
</tr>
<tr>
<td>Other, please specify</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3) How often does your organization measure customer satisfaction regarding operational efficiency by utilizing a systematic approach including surveys and/or questionnaires?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a year or more</td>
<td>5</td>
</tr>
<tr>
<td>Every two years</td>
<td>2</td>
</tr>
<tr>
<td>Every three years</td>
<td>1</td>
</tr>
<tr>
<td>Every four to five years</td>
<td>2</td>
</tr>
<tr>
<td>Ad hoc basis</td>
<td></td>
</tr>
</tbody>
</table>

We do not use survey techniques.

4) To what degree do the following statements accurately reflect your agency’s experience with transaction response time? Please select a value from the following range: 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10 (with 10 = most accurately describes); don’t know: NA

<table>
<thead>
<tr>
<th>Statement</th>
<th>Range</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response time is an important factor in the ability of our</td>
<td>5-10</td>
<td>7.5</td>
</tr>
<tr>
<td>clients to win additional export business.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response time contributes to our overall competitiveness.</td>
<td>5-10</td>
<td>7.9</td>
</tr>
<tr>
<td>Response time is actively monitored.</td>
<td>1-10</td>
<td>7.8</td>
</tr>
</tbody>
</table>
Response time is closely linked to our IT capabilities.  
Range: 1-10  Mean: 6.1

Response time is closely linked to individual accountability and the allocation of responsibilities within our organization.  
Range: 1-10  Mean: 6.4

Response time largely meets the expectations of our customers.  
Range: 7-9  Mean: 8.1

Response time is a shared responsibility with the client.  
Clients must submit a complete and accurate application on a timely basis.  
Range: 1-10  Mean: 7.8

5) Which of the following time frames is more commonly used to measure internal response time?

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Frequency</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>From submission of complete application to delivery of initial letter of interest.</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>From submission of complete application to final credit approval.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>From submission of complete application to delivery of proposed terms and conditions.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>From submission of complete application to transaction closing.</td>
<td>4</td>
<td>X</td>
</tr>
<tr>
<td>Other—please state:</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

6) Have you been encouraged by your customers to provide better customer service? If yes, in which area?

<table>
<thead>
<tr>
<th>Area of Service</th>
<th>Frequency</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information requirements for applications</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Documentation for application processing</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Access to online application process</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Speed of application processing</td>
<td>6</td>
<td>X</td>
</tr>
<tr>
<td>Speed of decision making</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Speed of Claims processing</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>Mode</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Availability of staff to answer questions</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Knowledge level of staff</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Availability of information on web site</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>IT platform</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Other, please specify</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

7) To what extent is employee performance dependent upon the degree to which operational efficiency metrics are met?

Please select a value from the following range:

<table>
<thead>
<tr>
<th>Range</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10</td>
<td>6.7</td>
</tr>
</tbody>
</table>

8) To what extent is operational efficiency defined by the following factors? Please select a value from the following range: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 (with 10 = most important); Don’t know: NA

<table>
<thead>
<tr>
<th>Range</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualitative (compliance with policy issues, due diligence, loss experience, etc.)</td>
<td>6-10</td>
</tr>
<tr>
<td>Quantitative (speed, number of applications processed, etc.)</td>
<td>5-10</td>
</tr>
<tr>
<td>Both Qualitative and Quantitative factors</td>
<td>5-10</td>
</tr>
</tbody>
</table>

9) Please describe any operational measures/performance metrics that you have recently introduced as well as initiatives to implement
Chapter 6: Concluding Remarks

“Crises are an inherent element of the market-based financial system, as we know it. They follow periods of rising fragility, created by the rise of apparently hugely profitable risk taking generated within the system. So it was this time. Success bred excess and excess bred collapse.”

Martin Wolf, 2014

Discussion

In the years following the 2008 financial crisis, academics, policy makers, and financial practitioners have sought to comprehend the events that provoked the worst financial turmoil and value destruction since the Great Depression of 1928. Their work provides valuable insight into factors that contribute to global systemic risk, their inter-linkages, and the need for a more robust system of regulation and governance for the international financial markets. The crisis reminded us, once again, of the fragility of the international financial system and the socially unacceptable costs when it fails. With the benefit of hindsight, the crisis confirmed the centrality of financial institutions and their corporate governance practices to the health of the international financial system. There is a greater appreciation for the unique characteristics of financial intermediaries and the need for a different paradigm of risk governance that recognizes the linkage between the governance of financial institutions, systemic risk and financial crises. A paradigm that relies less on self-regulation and provides appropriate management incentives to implement a robust risk management and governance framework.
At the heart of the issue is the unique position that financial institutions hold in the modern economy and their fiduciary responsibility to their stakeholders. Indeed, As Martin Wolf (2014) observed, no other single industry has the potential to negatively impact society more than the financial sector.¹ A manufacturing firm can fail, and its shareholders will lose their investment. Existing customers will simply purchase from a competitor. The failure of large financial institutions, however, poses systemic risk and results in unacceptable costs to both the real economy and society at large.

Informed by recent events, one might conclude that stricter financial regulation is the panacea for the financial turmoil we have experienced over the decades. Indeed, as discussed throughout this dissertation, ineffective financial regulation and governance contributed to systemic risk and the near collapse of the financial system. But, as Chapter Three observes, over regulation poses its own challenges. An onerous net regulatory burden increases the costs of financial intermediation, a core component of the financial system. It imposes opportunity costs in the form of the inefficient allocation of capital. Burdensome financial regulation may lead to a flight of capital to less regulated countries and disadvantage domestic financial institutions that compete in the global financial arena. Finally, and perhaps paradoxically, over regulation leads to additional financial innovation to escape the regulatory burden and may fuel the growth of the shadow banking system.

This phenomenon is often referred to as “regulatory arbitrage.” For example, in the years

¹ Martin Wolf (2014) argues that it is for this precise reason that no other industry benefits from such large implicit subsidies.
prior to the 2008 crisis, large financial institutions used structured investment vehicles or “SIVs” to transfer assets such as mortgage-backed securities “MBS” and collateralized debt obligations “CDOs” from a regulated entity to a non-regulated entity. This practice allowed large financial institutions to retain an economic interest in the assets and to reduce the costs of regulatory compliance by removing them from their balance sheets. At the height of this practice in 2007, assets held in SIVs exceeded $400 billion. 

National regulators are charged with a dual mandate: to safeguard the stability of the financial system and the competitiveness of their financial institutions. A key factor in achieving both objectives is the degree of financial innovation. Financial innovation is critical to economic growth and the long term viability of the international economy. As discussed earlier in Chapter One, financial innovation and well developed financial markets play a causal role in promoting the long term viability of the international economy. Indeed, a nation’s regulatory environment and net regulatory burden are key determinants for the successful development of its financial system. Financial innovation can also play an important role in risk mitigation. For example, financial innovation in the form of new credit risk transfer instruments such as credit default swaps created greater liquidity and resulted in a beneficial diversification of risk among financial intermediaries. The IMF (2006) echoed this sentiment and stated “There is growing recognition that the dispersion of credit risk by banks to a broader and more diverse set of investors, rather

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3 Levine (2005) explains that market inefficiencies in the form of transaction and information costs incentivize financial intermediaries to mobilize capital, to allocate resources and to promote the efficient exchange of goods and services
than warehousing such risk on their balance sheets, has helped make the banking and overall financial system more resilient.”

However, financial innovation can also increase systemic risk and lead to a Pareto reduction in economic welfare. As Allen and Carletti (2006) argue, financial innovation and systemic risk are two sides of the same coin. On the one hand, the diffusion of credit risk to the non bank intermediaries may contribute to greater financial stability and reduce the likelihood of systemic crises. On the other hand, the development of a parallel banking sector that lacked a competent regulatory authority led to lax credit standards as banks and non bank intermediaries competed for assets. The decade leading to the 2008 crisis witnessed rapid growth in both the credit derivatives and the shadow banking sector. The market value of credit derivatives grew from approximately $3 trillion to over $35 trillion while the shadow financial sector grew to over $13 trillion, exceeding the size of the total traditional banking system.

Recognizing the above, regulators face a daunting challenge—they must strike an appropriate balance between effective regulation and supervision on the one hand, and remain sufficiently flexible to facilitate competition and financial innovation on the other. They must provide an adequate safety net for depositors and society at large, but not encourage risky behavior on the part of the financial institutions they supervise. They must promote financial transparency and stability, but not disadvantage their financial institutions with over burdensome regulations. They

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5 See http://www.bis.org/statistics/index.htm
6 This is particularly relevant to commercial and investment banks whose losses are limited to the amount of their equity. The issue was also relevant to past financial crises such as the East Asia crisis of the late nineties. IMF critics charged that the IMF’s “rescue packages” were essentially bailing out the Western banks that had made risky loans. This in turn prompted further moral hazard and encouraged banks to behave irresponsibly.
must supervise an increasingly complex landscape of financial innovation, protect the financial and real economies from extreme market volatility and allow institutions adequate flexibility to innovate and compete on a level playing field with foreign competition. In seeking an optimum level of regulation, they must anticipate the unintended consequences of financial innovation and consider the systemic effects when deciding whether or not it is beneficial. Their task has only become more complex in recent decades with the rapid growth of financial derivatives, structured finance and the substantial growth of the shadow financial sector including the formation of massive pools of liquid capital held by the hedge funds. Finally, the regulatory structure in the U.S. is sub-optimal and characterized by a patchwork of overlapping federal and state regulators. These regulatory inefficiencies place a compliance burden on the financial services industry and may encourage a “race to the bottom” as institutions will transfer businesses to less regulated jurisdictions. It also frustrates the ability of the US to communicate a single coherent position on regulatory issues to other countries.

To address these challenges, financial regulators have employed an array of policy tools ranging from conducting bank examinations, imposing reporting requirements, requiring minimum reserve and liquidity requirements, restricting risky financial activities, espousing best practices and using moral suasion at a senior level. But As Edward Kain (2014) reminds us, effective regulatory supervision requires more than mandatory balance sheet requirements and scenario-based stress tests. What is needed is an improved framework of financial governance that provides the appropriate incentives along the financial –sector risk management process: “The Great Financial Crisis traces not so much to a breakdown of rules and requirements (such as loophole-riddled obligations to disclose adverse movements in a
As difficult as the challenges appear at the national level, financial regulation and governance at the global level are even more complex. Financial regulation and the regulatory function are matters of national sovereignty. Yet, large financial institutions compete for pools of mobile capital across legal jurisdictions and different financial markets. As a result, national regulators must be cognizant of the unintended consequences of financial regulation that may disadvantage their domestic institutions, provoke a flight of capital and result in regulatory arbitrage on an international level. The empirical literature reviewed in Chapter One posits that the absence of a global regulatory framework for the international markets coupled with the lack of harmonization of regulatory policies globally can result in divergent policy outcomes, facilitate regulatory arbitrage, and contribute to systemic risks. The unilateral attempts of EU governments to stabilize their domestic economies during the financial crisis and the resulting costs present a sharp reminder of the potential consequences when nations compete rather than cooperate during a financial crisis.

A more defined regulatory regime at the international level would allow regulators to identify, measure, and deal more effectively with global systemic risks. Global regulatory reforms should create a level playing field for financial institutions that compete cross border, yet allow for certain flexibility at the national level. As Chapter Three discusses, the EU’s
experience with MIFID is instructive and can be viewed as a potential governance model for the international capital markets. The EU initiative is distinct from the collection of non-binding agreements at the international level in that its rules are legally binding among member states. The regulatory framework is codified into the legal code of all member countries and engenders greater rule harmonization and the convergence of national regulations toward a common governance framework.

With over $15 trillion in credit exposure, the US federal government is the largest and perhaps most significant financial institution in the world. Its programs span traditional loan and guarantee programs for housing, education and farming to the behemoth government-sponsored entities (“GSEs”), Freddie Mac and Fannie Mae that support mortgage lending, to the recently expanded credit activities of the Federal Reserve and U.S. Treasury to combat the effects of the 2008 financial crisis. In addition to the longer-term credit programs, the federal government has selectively intervened and provided credit support to publicly-held companies including General Motors, Chrysler, General Electric, as well as other financial entities that were deemed “too big to fail” including AIG and the large commercial and investment banks. Given the size and scope of the government’s credit portfolio and the potential risk to taxpayers in the long term, it is imperative that the federal government implement a robust risk management framework across all federal agencies.

This dissertation contributes to the literature on risk governance and operational efficiency of federal agencies. By benchmarking the practices of the U.S. Export-Import Bank with private and public sector best practices, this research highlights those areas where government policies
may lag the practices and guidance set forth by US financial regulators for systemically-important financial institutions. In addition, the essays provide specific policy recommendations designed to address certain deficiencies with respect to Ex-Im’s current practices. By extension, these recommendations are relevant to a wider audience of federal agencies with similar portfolio credit risks and may help inform the design of a robust risk management framework that is critical to the government’s ability to manage its burgeoning credit portfolio.
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