

**THE EVOLUTION OF BANK ACCOUNTING DURING
FINANCIAL CRISES. A COMPARISON OF DEVELOPING
COUNTRY CRISES WITH THE UNITED STATES
SUBPRIME CRISIS**

Área de investigación: Contabilidad

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Abstract

During the late 1990s and early 2000s, many emerging market economies experienced financial crises. To a large extent, many of these nations were rescued by international financial organizations (IFOs), which required that the countries' financial authorities and institutions adopt "first world" bank regulation, including accounting standards and practices (similar to those used in the United States and Europe). The financial crisis of 2008, however, brought into question the efficacy of the IFO's own prescribed bank regulation and accounting reforms. Given the ineffectiveness of "first world"-prescribed accounting practices, this paper compares the events underlying developing nations' crisis of the late 1990s and the more recent U.S. crisis. Emphasis is placed examining how each (type of) nation's bank loan accounting standards and practices evolved during each crisis. The comparison shows that, in spite of differences in the complexity of banks' loan practices and portfolios, authorities and banks in each type of country used weak accounting standards which allowed banks to overstate loans. Moreover, developing nations' strong dependence on IFOs to bailout their financial systems may have forced those nations to undertake stronger accounting reforms than the U.S.

Keywords: Financial Crisis, Bank Accounting, Comparative Accounting





1.0 Introduction

Since the 1980s, nations in all regions of the world have adopted International Financial Reporting Standards (IFRS). This early movement toward IFRS, which started in the 1970s and 1980s, was led by the efforts of financial authorities in five English-speaking countries to “harmonize” their nations’ accounting standards [Street and Shaughnessy, 1998]. The nations succeeded in standardizing their accounting principles in a few general areas, such as the statement of cash flows [Street and Shaughnessy, 1998]; however, significant differences remained in more detailed reporting areas (e.g. pensions and deferred taxes). As a result, in the 1990s the nations’ authorities engaged in further efforts to standardize principals in detailed areas and to cooperate with the International Accounting Standards Committee (IASC) [Street and Shaughnessy, 1998].



These efforts toward harmonization were buttressed by the growing internationalization of capital markets; also, they were accompanied by increased research on whether companies operating in nations which adopted IAS had actually complied with International Accounting Standards (IAS). In general, researchers found significant non-compliance [e. g. Street et al., 1999]. Nevertheless, in perhaps the most important move toward IFRS, in the June, 2000 the European Union announced that, starting in 2005, it would require European companies to use IFRS (at that time IAS). Subsequent research [e.g. Larson and Street, 2004] identified possible impediments to the adoption of IFRS and suggested that IFRS might lead to a “two-tier” standard system in which listed companies would use IFRS while non-listed companies would use local standards.



Concurrent with the accelerated movement toward convergence in developed nations, in the 1990s developing nations emerged as a greater source of world economic growth. Much of this growth was initiated by economic and financial liberalization programs designed to attract foreign investment. In Asia, these efforts were led by the “Asian Tiger” nations (e.g. Korea, Thailand). In Latin America, these efforts were initiated by nations which adopted the neoliberal policies of the *Washington Consensus*.¹

In the mid/late 1990s, however, many of these countries experienced financial crises. The initial crisis, which has been referred to as the “first financial crisis of the Twenty-First Century,” occurred in Mexico (1994-1995). This crisis was followed by the Asian crisis of the late 1990s (e.g. Thailand, Indonesia, South Korea), the Russian crisis (1998), and crises in other Latin American nations (e.g. Argentina and Ecuador, in the very late 1990s and early 2000s).

¹ The Washington Consensus was a policy advocated by a group of Washington, D.C. based economists, which advocated that sudden “shock therapy”-style liberalization would lead to fast economic growth and development [Williamson, 2004].



While each of these crises had unique origins and characteristics, several were accompanied by credit and capital crises in the nations' banking systems. For example, after its 1994 peso devaluation, Mexico's banks experienced massive loan defaults which initiated a major recession. Banking crises were also experienced by many Asian nations during that region's crises of the late 1990s [Walter, 2008; Mishkin, 2000, 2006; Arnold, 2012].



In virtually every case of financial crisis, international financial authorities and researchers found that poor bank financial reporting standards and practices with respect to loans contributed to the commencement and magnitude of the crises. For example, prior to the 1994 devaluation of the peso in Mexico, Mexican banks used lax financial/auditing reporting standards and practices to accumulate (rollover) uncollectible loans and/or "inflate" the value of bad loans [Hazera, 1999; Desmet, 2000]. In Asia, many nations' banks accounting standards and loan valuation practices for loans and bad debts were weak [Goldstein, 1998, p.12]. As a result, many studies [e.g Goldstein, 1998; Rahman, 1998; Walter, 2008] concluded that these nations needed to substantially improve their financial reporting standards for bank loans.



This lack of regulatory structure, including adequate bank accounting, contributed to crises so severe that many of these nations were forced to seek international financial "bailout" packages to recapitalize and restructure their financial systems. For example, after its devaluation of December, 1994, Mexico was provided with approximately \$40 billion of financial assistance from the United States, the International Monetary Fund (IMF), and the World Bank [Wilson et al., 2000]. Also, during the Asian financial crisis of the late 1990s, several nations sought international bailout assistance from the IMF and World Bank to help recapitalize and restructure their financial systems [Walter, 2008].



In pursuing this assistance, these nations' desperate need for capital provided international providers of bailout assistance with substantial leverage to "condition" the transfer of bailout assistance on promises by the nations' financial authorities to improve bank regulation and accounting. For example, prior to providing Mexico with bailout assistance (1995), the country's primary international providers of capital (the United States and the International Monetary Fund (IMF)) encouraged Mexico to improve its bank regulation, including accounting. Also, after the Asian crisis, the IMF conditioned the transfer of bailout assistance on promises by some Asian nations to reform their financial regulatory and accounting systems [Walter, 2008].



Many of the "conditional" reforms imposed on these nations involved "standard" IMF and U.S. "reform" policies, including the adoption austerity programs, balanced budgets, improvements in tax collection systems, privatization of state-owned industries, and modifications to bank regulation, including bank loan accounting. The latter generally involved the adoption of



IFRS, as seen through the accounting regulatory prism of the Basel Committee [Basel Committee, 1998].

To a large extent, the adoption of international best practices was seen as a positive move toward enhancing the transparency in these nations' financial systems. Some observers, however, argued that IFOs and developed nations had engaged in "regulatory colonialism" by imposing rules on developing countries incompatible with the nations' stage of economic and regulatory development and designed to enrich investors in developed nations [Walter, 2008]. Also, the subsequent first world crises (U.S. (2008) and European (2008-) nations (including England, Greece, Italy, Portugal, and Spain)) revealed the policies' ineffectiveness in helping to present crises even in developed nations.



Given these assertions of unfair regulatory practices by IFOs, as well as the doubts about the effectiveness of "first world" accounting practices even in developed nations, in this paper we compare the evolution of the effectiveness U.S. accounting policies during the nation's "2008" subprime crisis with the similar experiences of developing nations. The latter is represented by the construction of a simple framework, based on Mishkin, [2006], which describes the relation between the recent financial crises on developing nations and the evolution those nations' regulatory infrastructures, including bank accounting.



The comparison of the U.S crisis and accounting with this model sheds light on the unique factors which impact the effectiveness of bank financial reporting in each type of nation; whether first world nations have unfairly imposed ineffective/incompatible standards on developing nations; and, how international "best practices" bank accounting should be adopted by both developing and developed nations.

The paper contributes to the extant literature on accounting convergence in two respects. First, the greater role of developing nations in the world economy has initiated more "country" studies on IFRS adoption in emerging markets. These studies, which include such disparate nations as Brazil [Rodrigues et al, 2012], India [Varghese, 2014], China [Ezzamel et al., 2007], Malaysia [Muniandy and Ali, 2012], Indonesia [Mu, and Murniati, 2012], and Vietnam [Phan and Mashitelli, 2014], generally examine how specific countries' political, economic, and cultural histories have affected their adoption of IFRS. However, few studies have examined IFRS adoption by banks during financial crises.

Thus, this paper helps to provide greater insight into the factors which may affect IFRS adoption by banks in developing nations' undergoing the reforms initiated by crisis. Second, this paper represents the first attempt to compare the evolution of bank loan financial reporting in a developing and developed nation.

The first part of the paper presents a brief four-step theoretical framework, based on Mishkin (2006), which has been used to analyze financial crisis in many developing nations. In the next section of the paper, the framework is





applied to the subprime and financial crisis in the United States of 2008. In the final section, a comparison is made of the experiences of developing nations and the United States during their respective crisis. Policy and Research implications are also provided in the final section.

2.0 A simple theoretical framework of financial crisis and bank loan accounting

2.1 Antecedents to Economic Reform

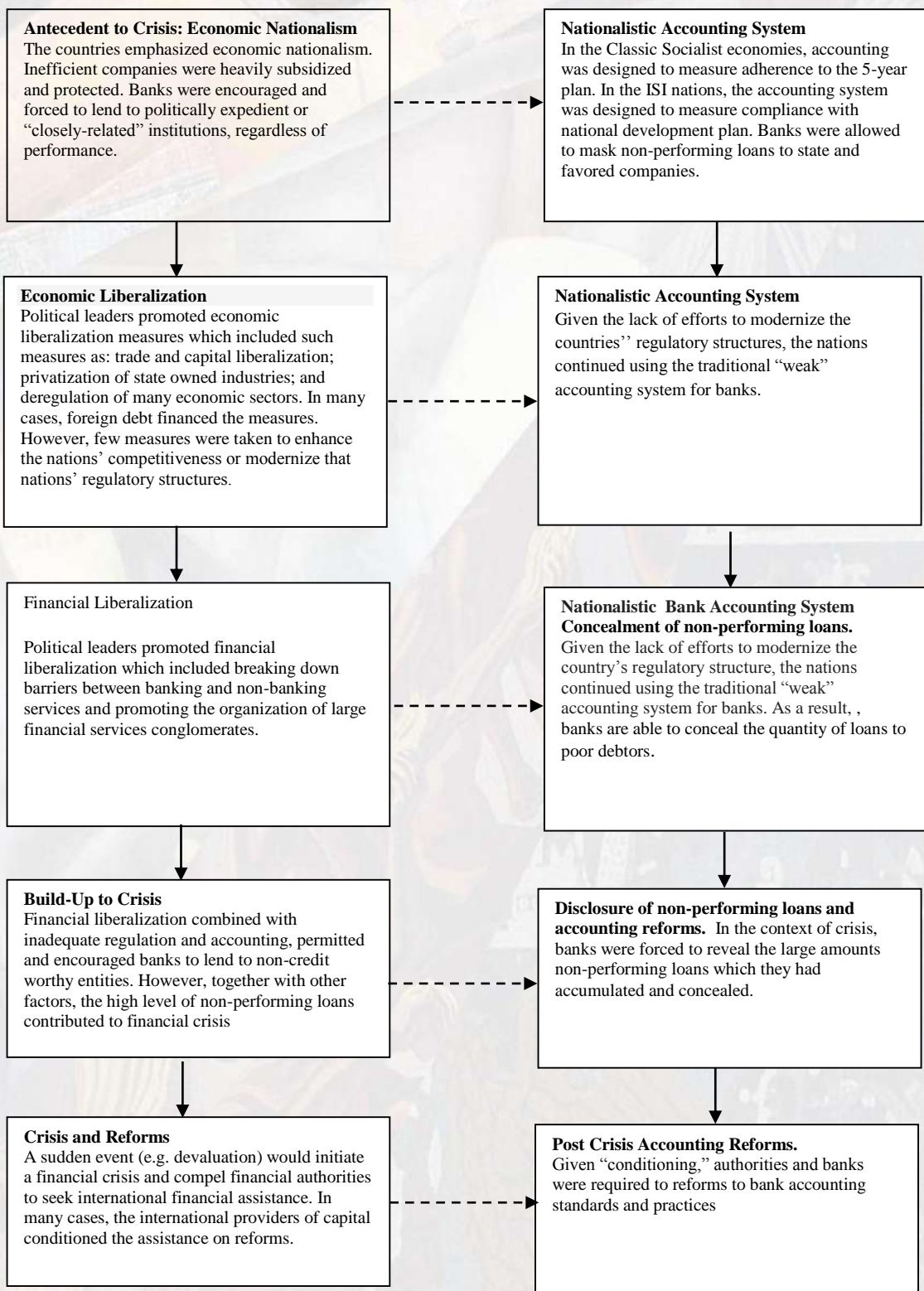
As noted above, the basis for the framework (Exhibit 1) developed herein focuses on 1990s and early 2000s financial crises in developing countries. Given this emphasis, an initial precondition (Exhibit 1, Antecedents to Crisis) for financial crisis is a strong history of economic/financial nationalism. In the 20th Century, this type of economic policy was practiced by nations which placed their countries' independence from international markets and multinational corporations above traditional economic objectives, such as growth [Burnell, 1986]. In support of these policies, these nations' authorities adapted protectionist measures which protected and subsidized domestic industries. These measures included tariffs and quotas on trade and direct foreign investment, subsidies to companies engaged in "favored," but unprofitable projects, and direct funding on favorable terms to companies in favored sectors.





Exhibit 1

A Model of Financial Crisis and the Evolution of Bank Accounting for Loans in a Developing Nation





The most extreme examples of economic nationalism were the “classic socialist” economic of Eastern Europe during the Cold War [Kornai, 1992]. These nations isolated their economies from the markets of the West; prohibited the ownership or private property; and, adopted “paternalistic” policies in which the government subsidized losses to most enterprises and controlled enterprises’ objectives through the “top-down” five year plan.

At a lesser extreme, economic nationalism was practiced by “post-colonial” developing nations which practiced import-substitution-industrialization (ISI). These nations, which included nations such as India, some Southeast Asian nations, and some Latin American countries, permitted the ownership of private property and practiced market economics; however, they attempted to “substitute imports” by subsidizing domestic industries, compelling banks to lend to domestic, but unprofitable companies, and erecting barriers to foreign trade and investment.



In the case of the “Classic Socialist Economies,” the objective of financial reporting was to measure enterprises’ adherence to the central plan (Exhibit 1, Nationalistic Accounting Systems) (Kornai, 1992, Ezzamel et al., 2007). In the case of ISI, financial reporting focused on assessing cooperation with the authorities’ development plans and the calculation of tax liabilities. Also, while ISI nations possessed stock exchanges, the small size and low liquidity of these markets created little investor pressure for listed companies to provide public, reliable financial statements. As a consequence, listed companies’ financial reports were frequently based on substandard local accounting/auditing standards and practices.



2.2 Economic and Financial Liberalization

In both types of nationalistic systems, excessive subsidies to inefficient enterprises gradually decreased the nations’ competitiveness and caused national governments to accumulate large deficits on subsidies to inefficient companies. Most notably, as described by Kornai [1992, 262-301], the official paternalism and government economic domination in the “classic socialist” economies resulted in consistent mismatches between the demand and supply for virtually all consumer goods, severe shortages in basic staples, and “pent-up” demand. Even the labor market, considered to be a strong benefit of socialism, suffered from a shortage of skilled workers.

Similar problems were encountered by nations which practiced ISI (Mosk, 1950, Nayer, 1989]. In these nations, authorities’ constant protection and subsidization of inefficient industries provided sporadic growth, but gradually eroded the nations’ ability to compete at the international level. In the financial system, banks continually made loans to politically expedient, but unprofitable companies; and, poor accounting/audit standards/practices allowed banks to overstate the value of their loan portfolios.





Accordingly, in both the classic socialist and ISI economies, inefficiencies gradually provided the nations with incentives to engage in economic/financial liberalization (Exhibit 1, Economic Liberalization). In the case of “classic socialism,” authorities engaged in “reform socialism” [Kornai, 1992]. The objective of these reforms was to open the economy to foreign trade and investment while maintaining the institutions which had traditionally allowed the authorities to control the economy. At the international level, these countries signed treaties with Western nations which facilitated trade and investment by Western institutions and borrowed large amounts from Western banks.



Correspondingly, authorities provided state companies, banks and other financial institutions with greater access to international money and capital markets (Exhibit 1 Financial Liberalization). However, most socialist nations’ liberalization efforts were not accompanied by attempts to improve bank regulation or create banking institutions which could screen and monitor projects and assign loans according to risk (Exhibit 1 Nationalistic Bank Accounting System). In spite of these contradictions, as emphasized by Kornai [1992, p. 553], Western credit raters initially considered these reform economies to be “low risk” investments; thus, the nations were assigned high credit ratings and encountered few demands by investors for improvement in the nations’ internal bank supervision.



In the ISI nations, reforms followed a policy known as the *Washington Consensus*. The program, which was designed by a “consensus” of Washington, D.C. policymakers [Williamson, 1989], encouraged developing nations to engage in drastic and sudden economic liberalization and reform measures, including free trade agreements, privatization of state-owned companies, the lowering of tariffs, and the liberalizing of foreign investment. This type of “big bang” reform measure, it was believed, would rapidly bring the nations the benefits generally associated with economic opening (e.g. rapid growth, lower inflation, increased productivity).



In many cases (Exhibit 1, Nationalistic Accounting System), however, the ISI nations undertook liberalization without attempting to either develop judicial systems or regulatory institutions which could oversee the new market oriented economies or adopting business practices which would enhance the competitiveness of local enterprises (Mishkin, 2000, 2006). As a result (Exhibit 1, Nationalistic Bank Accounting), financial regulators made little attempt to harmonize financial reporting standards with IFRS or to develop international quality bank supervisory agencies; banks continued to lend on the basis of loyalty to group companies rather than on the basis of quality and efficiency; and, banks made little efforts to establish adequate reserves or invest in loan screening and monitoring technologies.





2.3. Build-Up to Crisis

In the case of both the “Classic Socialist” and “ISI” nations, the incongruence between economic/financial liberalization and lack of reforms presented authorities in both types of nations with a classic “reform gap” (Exhibit 1, Build Up to Crisis). In the classic socialist economies, the economic opening resulted in greatly increased imports. Concurrently, the non-competitiveness of state-owned companies led the nations to accumulate large current account surpluses which were financed through increased borrowing from Western banks. In the domestic financial system, financial institutions continued to allocate credit according to the needs of the five year plan and directed little investment at developing loan screening and monitoring technologies. Correspondingly, financial regulators and banks continued to focus on overseeing banks’ compliance with the five year plan and made little effort to adopt IFRS or develop effective bank loan practices. Over time, these weaknesses allowed state banks to conceal vast amounts of bad loans.



As a result [Kornai,1992, p. 555]:

... a dangerous self-generation of the growth of debt set in. The greater the countries indebtedness, the less favorable the terms on which it is obliged to raise new loans. If difficulties arise in debt servicing-paying the installments due and the interest-its credit rating deteriorates, which makes it harder still to raise further loans and the terms of them becomes even less favorable. Although the debt began to mount originally because imports exceeded exports, the economy is now expected to yield a constant surplus to service the debt. Few of the reform economies manage that, and if they do, it is only for a short, temporary period.

Eventually, this accumulation of debt forced many stated owned companies to seek financial assistance beyond the capacity of either the government of its financial institutions to provide. As a result, many of these economies crashed amid deep recession and financial crises.

In ISI nations, adoption of the *Washington Consensus* resulted in economic crises involving massive bank runs, currency devaluation, high inflation, and deep recession. Similar to the Classic Socialist economies, the lack of competitiveness of the companies in the ISI economies led to large numbers of business failures and the accumulation of non-performing loans on banks’ books. In post-crises analysis of the policy, even the authors of the *Consensus* admitted that a lack of correspondence between rapid economic liberalization and the nations’ slow institutional development contributed to the subsequent financial crisis. Moreover, as in classically socialist nations, the traditionally poor bank accounting standards and practices allowed banks to hide large amounts of bad loans. Given the failings of the *Washington Consensus*, a more





gradual approach, termed the “evolutionary institutionalist approach,” was subsequently advocated [e.g., Gabrisch, H. and J. Holscher, 2006]. Under this perspective, economic liberalization would only be implemented when it was accompanied by a gradual development of the country’s legal and regulatory infrastructure [Mishkin, 2006].

2.4 Crisis and Post Crisis Reforms

In both types of nationalist economies, the combination of liberalization and lack of reform compelled the nations’ authorities to engage in post-crisis reforms. In the case of the classically socialist economies, pressures to liberalize and enhance competitiveness led nations to join the European Union and adopt European-level regulation, including the adoption of IFRS for banks and other entities. In the ISI economies, several nations were forced to seek external financial assistance from international financial organizations (e.g. the International Monetary Fund; the World Bank). Frequently, providers of capital “conditioned” the assistance on economic and financial regulatory reforms [Brucker, et al., 2003]

For example, prior to providing Mexico with assistance in 1995, the United States compelled Mexico to promise to reform the nation’s financial regulatory system, including bank accounting/auditing standards and practices. As a result, by 2000 Mexico had brought several aspects of its financial regulatory system, including bringing bank accounting standards, closer to “international best practices” [Hazera, 2001]. By the early 2000s, many of its banks were adhering to these standards and publishing their monthly financial statements on the WEB. In a similar manner, after the Asian crisis of the 1990s, the G-7 nations developed the Financial Stability Forum [Walter, 2008; Arnold 2012]. This forum proposed a set of international reforms intended to reduce the likelihood of future crises. The reforms, which were generally neoliberal in nature, strongly focused on Asian countries. A decade after the reforms were proposed, many of the crisis nations had effectively implemented the measures.

3.0 A comparison of the framework with the evolution of accounting during the U.S. Financial crisis

The theoretical framework developed above is based on the premise that banking accounting improves as a nation opens its economy to foreign investment and competition. The framework was originally based on the experiences of developing nations which had engaged in economic/financial liberalization which had been followed by crises. However, it also reflects events during the U.S. financial crisis.

The roots of the U.S. financial crisis date back to the Great Depression of the 1930s and the ensuing economic and financial reforms advanced during

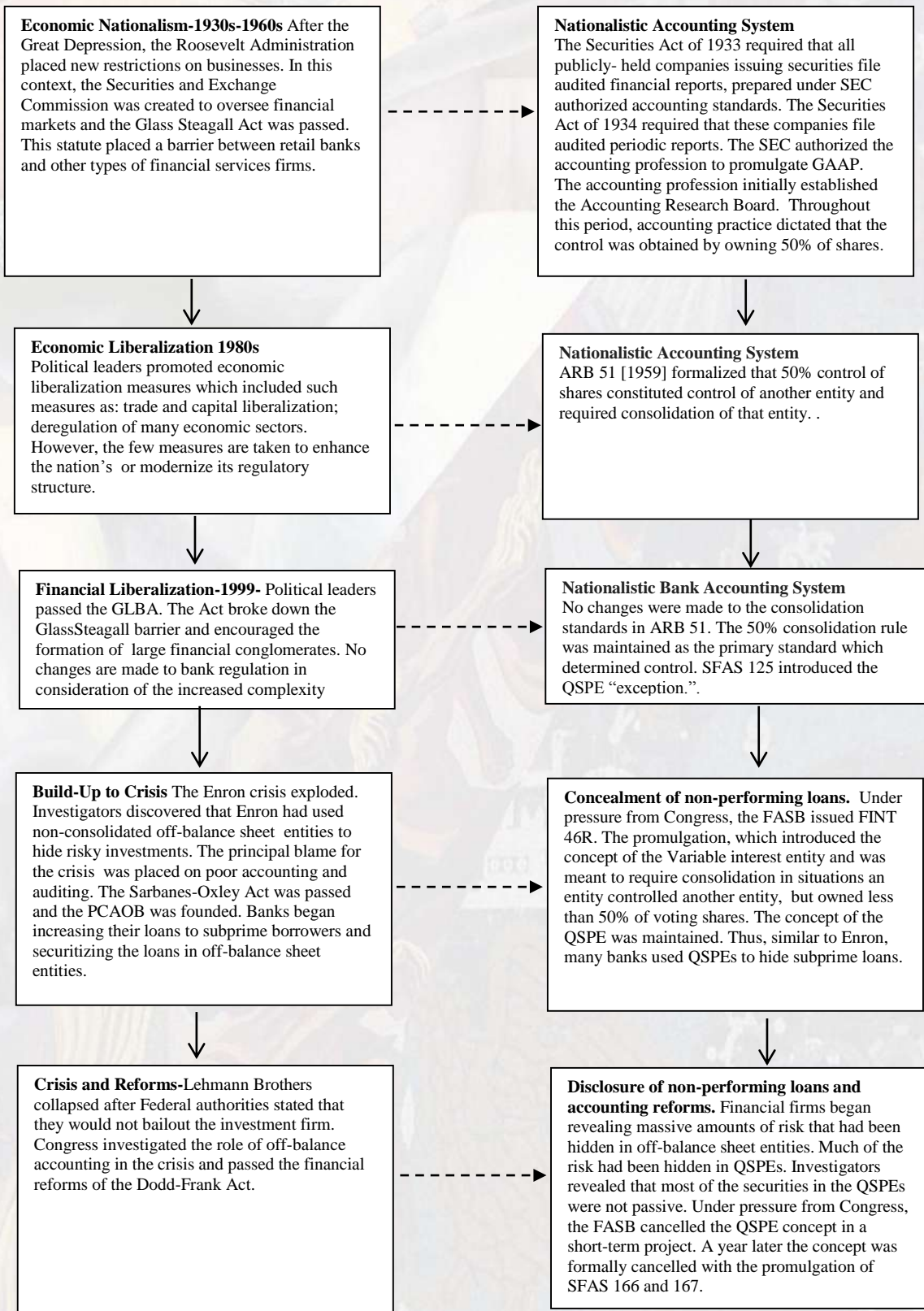


“New Deal” programs of the Roosevelt Administration (1933-1945) (Exhibit 2, Economic Nationalism). The former included programs (e.g. the Works Projects Administration and the Social Security program) designed to provide work to the unemployed and to protect elderly Americans from extreme poverty.





Exhibit 2 Financial Crisis and the Evolution of U.S. Bank Accounting for Off Balance Sheet Items





In the financial system, the administration proposed and implemented laws to increase the government's oversight of the U.S. banking and financial markets. Most notably, the Securities and Exchange Act of 1933 required that companies initially listing securities on a public stock exchange prepare a registration report which included financial statements audited by an independent CPA firm. The Securities Act of 1934 created the Securities and Exchange Commission to oversee U.S. securities markets and required that publicly listed companies file periodic reports which included audited financial statements.

Also, Congress passed the Banking Law of 1933. The most renowned parts of this statute, known as the Glass-Steagall Act, attempted to protect bank depositors' funds by strictly separating retail banking from other types of financial activities. In addition, the government created the Federal Deposit Insurance Corporation (FDIC) to protect depositors and aid in the prevention of bank runs.



In the decades following the depression, many of these measures were expanded. For example, the federal safety net was expanded in the 1960s (with the passage of Medicare and Medicaid). Also, the oversight of the financial system was expanded with the passage of the Bank Holding Company Act of 1956. This Act, which governed the emergence of Bank Holding Companies, limited the holding companies to ownership shares in retail banks.



Concurrent with the relatively simple organization structure imposed on Bank Holding Companies, U.S. accounting principles (Exhibit 2, Nationalistic Accounting), based on ARB 51 [1959 Para. 2], emphasized that:

The usual condition for a controlling financial interest is ownership of a majority voting interest, and, therefore, as a general rule ownership by one company, directly or indirectly, of over fifty percent of the outstanding voting shares of another company is a condition pointing toward consolidation.

In the 1970s, U.S. economic growth began slowing. Much of this slowdown was attributed to the drastic price increase of oil in the early 1970s as well as the emergence of economic competition from rising economic powers, especially Germany and Japan. As a result, the Carter administration (1977-1980) began to lighten the regulatory burden on business (Exhibit 2, Economic Liberalization).

This movement toward deregulation was accelerated by the election of President Ronald Reagan in the early 1980s.² This administration lightened the regulatory burden on business, shrank the size of non-defense governmental agencies, and lowered taxes of both businesses and individuals. In spite of these measures, the depression-era Glass-Steagall Act was not revoked. Also the

² For discussions on the legal and accounting events that took place during the U.S. financial crisis, see Quirvan et al [2014] and Hazera, et al. [2014], respectively.



simple 50% consolidation rule, as contained in ARB 51, continued to be emphasized (Exhibit 2 Nationalistic Accounting).

In the 1980s, however, financial institutions began offering securities which were prohibited by the Act.¹ Also, new types of non-traditional financial institutions not covered by the Act, such as mutual funds, began to appear. In the 1990s, banks gradually ceased carrying loans on their books and began selling them in securitized form to off-balance sheet “Special Purpose Entities (SPEs).”

In response to these changes, the accounting profession passed Statement on Financial Accounting Standard (SFAS) 125 (June, 1996) (Exhibit 2, Nationalistic Bank Accounting) to govern the transfer of financial assets to off-balance sheet entities. One of the Standard’s principal objectives was to outline the conditions under which the transfer of an asset would be treated as a “sale” to a third party. Such treatment would require derecognition of the asset on the balance sheet, the recognition of a gain or loss, and the non-consolidation of the off-balance sheet entity.

The principal rule criterion for determining the “sale status” of a transfer was whether the transferring entity had ceded control of the transferred asset. Control was relinquished, and consolidation was not required, if all of the following conditions were met [Kane, 1997]:

- The transferred assets, under all conditions, including bankruptcy of the transferor, have been isolated and put presumptively beyond the reach of the transferor and its creditors;
- The transferee obtains the effectively unencumbered right to pledge and/or exchange the transferred assets or the transferee is a qualifying special purpose entity (QSPE); and
- The transferor does not maintain effective control over the transferred assets through either a forward contract or an option, in the case of transferred assets that are not readily obtainable.

The second criterion above, which eventually became known as the “QSPE exception,” supported sales status if the transferee (i.e. “Qualifying Special Purpose Entity (QSPE)),” was an investment fund consisting of only “passive” types of financial instruments (e.g. U.S. government securities) which did not have to be actively managed.

In the 1990s progressed, large banks began further violating the GSA by proposing mergers with large, non-banking financial services firms. These mergers were supported by Fed Chairman Alan Greenspan and pushed in Congress by Senator Phil Gramm (R-Texas), Chairman of the Senate Banking Committee. The pressures culminated in the famed 1998 Citibank and Travelers merger, which openly violated the GSA (Exhibit 3 Financial Liberalization) and





was supported by the Federal Reserve on the assumption that the GSA would be repealed shortly.

In 1999 the Congress passed the Gramm Leach Bliley Act (1999) (Exhibit 2, Financial Liberalization). This statute not only eliminated the GSA barrier between banks and other types of financial services firms, but also established a new type of financial conglomerate which the Act termed “Financial Holding Companies.” The purpose of the Act was to create one stop “financial supermarkets” where consumers could purchase a variety of financial products under one brand name. In pursuit of this goal, the statute allowed former “Bank Holding Companies” to virtually declare themselves “Financial Holding Companies” which could own majority interests in all types of financial services firms, either as holding company affiliates or bank subsidiaries.



During the Congressional debates on the Act, regulators as well as consumer advocates expressed concerns regarding how the ultimate structure might allow the holding company or non-banking financial affiliates to expose the FDIC insurance net to non-banking risk. However, accountants and auditors were not allowed to testify on the proposed changes. Thus, in spite of the increased complexity of financial firms, no changes were made to accounting standards, such as ARB 51 and SFAS 125, regarding the transfers of assets to Special Purpose Entities (Exhibit 2: Nationalistic Accounting). Additionally, SFAS 140 [2000] enshrined the “QSPE exception” by requiring that any transfer to a QSPE be considered a sale, and thus not require consolidation.



In 2001, the Enron scandal exploded. To a large extent, investigators discovered that Enron had been able to move risky assets off its balance sheet by manipulating the ownership percentage in its associated SPEs, and thus avoiding their consolidation. Also, Enron’s auditors were seen to have overlooked, or even abetted, these distortions.

In response, in 2002 Congress held special sessions to consider reforms. Accountants and auditors were invited to testify. The sessions resulted in the Sarbanes Oxley Act and in the establishment of the Public Company Accounting Oversight Board (PCAOB). Also, the FASB was provided with assured funding and Arthur Andersen was forced into liquidation.

Under these pressures, the FASB undertook reforms to the rules for off-balance sheet accounting. The major reform was contained in Financial Interpretation (FINT) 46R, which introduced the concept of the variable interest entity (VIE) and raised the minimum “non-consolidation” percentage from three percent to ten percent. In spite of these changes, the QSPE exception to consolidation was maintained.

In the aftermath of the Enron debacle, the Federal Reserve began lowering interest rates in order to promote economic. This trend, combined with the





previous elimination of the GSA barrier, and a general federal reserve policy of financial regulatory forbearance, encouraged banks to lower lending standards and securitize record amounts of loans. Also, the number of unregulated mortgage companies increased tremendously.

From 2005 through 2007, these trends led to a growth in banks sale of subprime loans to off-balance sheet entities (Exhibit 3, Build-Up to Crisis). To a large extent, the banks remained liable for the loans and thus should have consolidated these as liabilities. In many cases, however, the institutions used the QSPE exception to not consolidate the loan, and thus understate their liabilities (Exhibit 3, Concealment of Loans)



In 2006, some economists warned that increases in housing prices would result in a serious real estate bubble. However, regulators generally ignored these admonitions and between 2004 and 2006 Congress did not hold any specific hearings on the possibility of a housing bubble.



In March of 2008, however, Bear Stearns went bankrupt and was sold to J.P Morgan in a government arranged transaction. Also, the financial press revealed that Citigroup had moved massive amounts of risky securities off its balance sheet. In both cases, the firms revealed that they had used the “QSPE” exception to justify the non-consolidation of SPEs. Also, in the case of Citigroup, by the bank’s own calculations, the fallacious use of the QSPE concept allowed the institution to substantially overstate its regulatory capital [Hazera, et al., 2014]. Finally, as in the Enron case, in spite of knowledge that the transferred securities did not resemble “passive investments,” the firms’ auditors signed “clean” opinions.

In light of these events, the Senate Banking Committee and the House Financial Services Committee held two sessions regarding accounting. In one session (9/18/08) the Senate Banking Committee investigated the accounting standards for off-balance sheet accounting. Members of the Committee scolded FASB for having kept the QSPE exception and forced the FASB to eliminate the concept both immediately and as part of a long-term project (SFAS 166 and 167). In the second session, the House Financial Services Committee investigated “Mark to Market” accounting and, at the behest of financial institutions, unanimously forced the FASB to change the definition of Fair Market Value.

Additionally, Congress began hearings regarding the post-crisis financial reforms. In spite of the importance of accounting standards and lax auditing in contributing to the crisis, as in the original GLBA hearings, no accountants were invited to testify. Correspondingly, given this opening, bankers took the opportunity to blame banks’ losses on Mark to Market loans on FASB standards and argued for a regulatory structure in which neither accountants nor the SEC would be involved in setting accounting standards which might affect systemic risk.





The hearings resulted in the passage of the Dodd-Frank Act (2010) (Exhibit 2, Post-Crisis Reforms). While bankers' extreme recommendations were not incorporated into law, the statute did provide for greater federal oversight of accounting standards and practices which might affect systemic risk (Exhibit 2, Post Crisis Accounting Reforms). Thus, in spite of the changes noted above, on a post-crisis basis banks gained substantial leverage while accounting standard setting was subject to additional Federal Regulatory Oversight.

4.0 Discussion and conclusion

As shown above, to a large extent, the financial crises in United States followed the four phase model described above. Prior to their crises, developing nations followed nationalistic economic policies in which their governments owned, protected, and subsidized many of the nations' basic industries. In a reflection of this nationalism, in general, the nations' financial institutions loaned to closely-affiliated companies and authorities openly encouraged banks to lend to "targeted" companies, regardless of efficiency. By contrast, pre-crisis economic programs in the United States were a result of the experiences of the Great Depression rather than economic nationalism. However, as in the developing nations, these programs incorporated more government regulation of the economy and included the Glass Steagall Act (1933), which prohibited banks from engaging in non-banking activities. This prohibition was later extended with the passage of the Bank Holding Company Act in 1956. During this period, the simple 50% majority interest rule was the accounting basis for all consolidations.

After these periods of relatively heavy government regulation, many developing nations experienced a period of poor economic performance in the 1980s. This led developing countries to promote economic and financial liberalization. The Classic Socialist nations engaged in "reform socialism." The Latin American nations followed the prescription of the *Washington Consensus* and undertook a far-reaching programs of economic and financial liberalization, which included privatization of state-owned industries and investment and trade liberalization (most notably through the negotiation of NAFTA). In the financial sector the governments passed financial laws which encouraged the formation of large financial conglomerates which could provide a variety of financial services under one name. Also, in some cases, new foreign investment laws allowed limited foreign investment in the nations' financial companies. However, few attempts were made in either classic socialist or ISI nations to reform bank accounting standards.

In the United States, the economic liberalization began with the Reagan administration's strong policies of deregulation and tax cuts. However, relatively little movement was made toward financial liberalization. During this period, however, the banks began offering new complex products and services which technically violated the GSA and attempted mergers which violated the





GSA. These activities, combined with political pressures, compelled Congress to rescind the GSA barrier between banks and other types of financial firms and pass a law which encouraged financial firms to form into “one stop” financial supermarkets. Also, similar to developing nations, only weak efforts were made to form accounting standards which could provide accurate information regarding the valuation of the financial conglomerates’ loan portfolios.

In both cases, the lack of adequate accounting and auditing facilitated the ability of banks to overstate their loans. In the developing nations, the accounting standards directly facilitated banks’ ability to understate both past-due loans and loan reserves. In the case of the United States, the QSPE exception allowed large banks to securitize loans and move large amounts of risky securities to off-balance sheet entities. Also, the complexity of the new instruments as well as the large numbers of subprime loans left traditional risk management models useless. As economic imbalances and poor loans accumulated, the lack of reliable financial reporting in both types of nations forced banks to reveal large amounts of poor loans.

In the post-crisis phase, both types nations modified their bank accounting standards; however, the rationale for the modifications differed greatly. In the developing nations,’ the urgent need for capital placed international providers of capital in a strong position to condition the release of financial assistance on improvements in all aspects of bank regulation, including adoption of international best accounting/auditing standards. By contrast, international financial institutions and foreign investors had little influence on U.S. accounting reforms. Rather the initiation of financial crisis and domestic political pressure from Congress forced the U.S. accounting profession to eliminate the QSPE exception. Also, even during the full brunt of the crisis, banks were able to lobby for weakening of market to market accounting and even for the elimination of the FASB from setting standards for matters concerning systemic risk.

Thus, at the nation level, a “too big to fail pattern” seems to have occurred during the crisis. Larger nations, such as the U.S., which have exposed the international financial system to greater risk, have been are provided with more regulatory tolerance than smaller nations. For example, in Europe, smaller countries, such as Greece and Portugal, have been under great pressure to adopt economic and regulatory reforms demanded by entities and nations which have provided rescue capital. By contrast, larger nations, such as Italy, France, and even Spain, have possessed greater bargaining power when negotiating reforms. At a larger level, this pattern is reflected in the case of the U.S., which financed its own financial recovery and faced little external pressure to adopt international standards.

In spite of this larger nations’ short-term advantage, the external pressure placed by IFOs on developing nations may have made those nations’ reforms more permanent and comprehensive, both in terms of the standard-setting





organization and the standards quality. This disparity is strengthened by the relative simplicity of the developing nations financial environment compared to the complex derivative-laded environment of the U.S. financial system.

Finally, the U.S.'s own accounting system was highly ineffective in helping prevent its own financial crisis. This shortcoming implies that simply imposing "shock therapy" post-crisis reforms on smaller and developing nations may only worsen their plight. Also, developed nations are still in need of formulating flexible financial regulations which can keep pace with the rapid changes in financial instruments and financial institutions. Given these risks, changes in both types of nations should not only be flexible, but should be implemented gradually and consider each stage of a nation's economic development and unique history.





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