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Industry Study

Final Report
Financial Services Industry

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Financial Services Industry Study Report: Executive Summary

The extensive media coverage of the 2008 subprime crisis, both domestically and abroad, drives home the crucial role that the financial services industry plays for not only individual Americans, but for U.S. national security. This is recognized in the 2006 U.S. National Security Strategy that designates as a priority the "pressing for open markets, financial stability, and deeper integration of the world economy."[1] This tenet of the National Security Strategy recognizes there is a direct link between our financial services industry and the nation's ability to engage across the globe in every area of national power to include military force projection, international diplomatic activities, economic aid, and humanitarian aid. Because of this correlation, any threat to the vitality, stability and confidence of the financial services industry ultimately affects U.S. national security.

In the first half of 2008, the U.S. financial services industry experienced unprecedented turmoil brought on by the subprime mortgage crisis that resulted in a record number of home foreclosures, falling home prices, a seizing of the credit markets, and has seriously threatened the solvency of financial corporate powerhouses like Citicorp and Bear Stearns. Although financial crises have plagued the financial system throughout history, the current crisis has rocked the industry unlike any other since the Great Depression. This event has required extraordinary action by U.S. financial system regulators, particularly the Federal Reserve, to contain the damage and maintain the viability of our financial industry. Referred to simply as the subprime crisis, this event involved a combination of low interest rates, easy access to capital, rapid appreciation in home values, real estate speculation and a breakdown of due diligence by lenders. In addition to these factors, unrestricted securitization, poor oversight by credit rating agencies and uninformed investors played a major role in spreading this crisis beyond the housing market and into the broader financial sector. This unique combination of factors created a "perfect storm" scenario that ultimately led to the economic woes of the mortgage sector, and by extension the larger financial industry.

Looking beyond the ongoing subprime crisis, an analysis of the U.S. financial services industry reveals challenges that can be grouped into the three broad categories of globalization, risk, and regulation. Globalization has effectively blurred what were once clear demarcations between regional markets into an international marketplace characterized by a rapid and seamless flow of capital across national borders where new international competitors are gradually emerging as peers to what used to be a U.S. dominant position. The increased competition spurred by globalization in turn increased strategic, systemic and capital risks as firms and individual investors were lured to new, innovative, and often very complex financial vehicles. In order to address the shortcomings of the free market, new regulatory oversight is needed that maintains public confidence in the financial sector while simultaneously allowing the financial system to function efficiently.

After considering these challenges, this assessment concludes that the U.S. financial services industry is not an industry in permanent decline. Though currently mired in a financial cycle downturn, the financial services industry will recover as the U.S. government takes action to preserve this tenet of our national security. This process should follow the Treasury Secretary's proposed *Blueprint for a Modernized Financial Regulatory Structure* as the way ahead for restructuring the government's regulatory oversight. Such an innovative and proactive approach will lead the U.S. financial services industry to recovery, restore confidence in the financial sector, and maintain a key component of U.S. national security.

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Places Visited

Domestic

American Institute of Certified Public Accountants (AICPA), New York, NY
American Securities Capital Partners, New York, NY
Bank of America, Washington, DC
Boeing World Headquarters, Chicago, IL
Brookings Institute, John L. Thornton China Center, Washington, DC
Carlyle Group, Washington, DC
Center for Strategic & International Studies (CSIS), Washington, DC
Chicago Mercantile Exchange Group (CME), Chicago, IL
Citigroup, New York, NY
Commodities Futures Trading Commission (CFTC), Washington, DC
Consumer News and Business Channel (CNBC), New York, NY
Federal Reserve, Washington, DC
Financial Industry Regulatory Authority (FINRA), Rockville, MD
Greg Wilson Consulting, Washington, DC
Inner City Venture (ICV) Capital Partners, LLC, New York, NY
Johns Hopkins University, School of Advanced International Studies, Washington DC
Legg Mason, Baltimore, MD
Lehman Brothers, New York, NY
Lockheed Martin, Bethesda, MD
Moody's Investors Service, New York, NY
New York Federal Reserve Bank, New York, NY
New York Mercantile Exchange (NYMEX), New York, NY
New York Stock Exchange (NYSE), New York, NY
Northrop Grumman Corporation (NGC), Washington, DC
Pentagon Federal Credit Union, Arlington, VA
R & R Financial Group, Washington, DC
Securities and Exchange Commission (SEC), Washington, DC
State Farm Insurance, Chicago, IL
Stifel, Nicolaus & Company, Incorporated, Baltimore, MD
Union Bank of Switzerland (UBS), Washington, DC
United Services Automobile Association (USAA), Washington, DC
United States Bankruptcy Court, Baltimore, MD
United States Treasury Department, Washington, DC
Vanguard, Washington, DC
WJB Capital Group, Inc., New York, NY

International

AIG General Insurance Company China Limited, Guangzhou, China
American Chamber of Commerce, Guangzhou, China
Asianomics Limited, Hong Kong
China Development Institute (CDI), Shenzhen, China
China Merchants Bank, Shenzhen, China
China Southern Fund Management Company, Shenzhen, China
Dailywin Watch Products Manufacturing Limited, Donguan, China
Guangdong Development Bank, Guangzhou, China
Hong Kong Exchanges and Clearing Limited, Hong Kong
Hong Kong Monetary Authority, Hong Kong
Luenthai Garment Company Limited, Donguan, China
Security and Futures Commission (SFC), Hong Kong
Shenzhen Stock Exchange, Shenzhen, China
Standard Chartered Bank, Guangzhou, China
Standard Chartered Bank, Hong Kong
United States Consulate, Hong Kong
Vision 2047 Group, Hong Kong
Yinda Guarantee Investment Group Company Limited, Guangzhou, China

Financial Services Industry: Background and Current Environment

Is America's Greatest Strength Her Weakness?

On September 11th, 2001 Terrorists masterminded an attack targeted at what they determined to be the United States' center of gravity: the American financial system. This attack on the World Trade Center and the New York financial district was arguably successful: causing over $27 billion in direct costs (buildings, cleanup, etc.), disrupting 200,000 jobs, destroying 30% of the New York's financial district's office space, closing the New York Stock Exchange (NYSE) for seven days (the first such disruption since 1941), and resulting in an estimated $500 billion in economic damage.[2] In spite of the attack's spectacular nature and its success in severely disrupting the financial markets that are the life blood of the nation's economic power, it failed to bring down the U.S. financial system. The very fact that Al Qaida chose to target the U.S. financial system attests to the critical role it plays in national security. As a result of recent events that limit U.S. ability to project influence through the military, there is compelling evidence that American economic power is now more than ever the engine that drives the nation and underpins the U.S. leading position in the world today. In turn, American economic power is based on its ability to efficiently allocate capital through its financial system—a robust, stable, viable and efficient financial industry is the fuel that powers the economy. Because the nation depends on its economic power, this report examines challenges to the U.S. advantage in the financial services industry that pose a threat to national security.

The relative strength of U.S. national security is inextricably linked to the strength of the American financial services industry. This linkage is clearly highlighted in the 2006 U.S. National Security Strategy that states "In our interconnected world, stable and open financial markets are an essential feature of a prosperous global economy."[3] It is the resource that ultimately gives the nation the ability to engage globally whether through military force projection or humanitarian aid. The key to financial well-being in the market place is managing the balancing act between laissez faire markets and regulatory control without adversely affecting the historical comparative advantage the U.S. has enjoyed in the global economy. As has happened in the past, the U.S. now faces challenges in both its comparative and competitive advantage in the financial services industry. Losing that advantage could weaken U.S. power and in turn threaten national security. To understand the impact that the financial sector has on American security in early 2008, this analysis focuses on three specific challenges.

Key Challenges to U.S. National Security: Globalization, Risk and Regulation

The first challenge facing the U.S. comparative advantage in the financial services industry is ***globalization***. Used in the context of financial services, there is an unprecedented flow of capital between nation states that is not only difficult to accurately monitor, but even more difficult for any single nation to control and regulate. As markets and capital flows between and across borders increase, nation states are losing their independent power and are becoming increasingly interconnected and interdependent.

The second challenge is ***risk***. Though risk can be defined in many different ways, this analysis focuses on risk in the context of the financial services industry and national security.

Risk is divided into strategic risk that addresses the relative strength of the U.S. economy, systemic risk that focuses on the inherent friction of trade and finance, and finally, capital risk that deals with the confidence that investors have in understanding the risk/reward on their investments.

The final challenge comes from ***regulation***. In the financial services industry, there is a constant struggle to strike the perfect balance between unfettered market forces and over regulation while trying to maintain confidence that there is no abuse or malfeasance in the industry. Getting the right balance of regulatory oversight ensures robust and viable capital markets that in turn enhance U.S. national security.

Since the late 1990s the U.S. has depended on foreign capital inflows to fund its fiscal deficit and massive current account imbalance. This process is simply a result of supply and demand with debtor nations like the U.S. being funded by creditor nations like China, Japan, some European countries and oil rich Middle Easterners. To meet its capital requirements, the U.S. depends on the financial services industry—comprised of insurance companies, banks (both commercial and investment), pension funds, stock exchanges, regulators, private equity firms, and venture capital firms. To assess the financial service industry, this research team met with three distinct groups: users of capital (i.e. investors, consumers, government, and business), suppliers of capital (i.e. banks, private equity and venture capital firms), and regulators of capital (i.e. FINRA, SEC, Federal Reserve). This research reveals that the financial services industry and the liquidity it provides is like oil in an engine; ensuring that stable capital flows are available to support U.S policy. Though the 2001 terrorist attacks were devastating, the 2008 financial services industry crisis that has frozen credit markets and severely limited liquidity is arguably more disastrous than the hijacked planes crashing into the twin towers.

In studying the contemporary U.S. financial services industry, a public policy debate exists as to whether it is an industry in a permanent decline. Regardless of the severity of the 2008 financial crisis, it seems likely that when the dust settles, it will be viewed as another example of a short-term setback. Clearly much of the loss of confidence is due to the risky financial innovation that has rocked the industry to its core in the subprime lending debacle—the most serious financial crisis since the Great Depression. However, from a longer term perspective, it seems evident the current financial crisis reflects a capitalist phenomenon that has occurred throughout history where periods of booms precede inevitable busts. This is exacerbated by the current political environment where there is the popular expectation that regulatory and governmental action can moderate or even control the economic cycle. Even though economic theory states that markets will eventually self-correct absent regulatory oversight, such a self-correction can be turbulent, especially in contemporary society where turbulence is deemed politically unacceptable.

In order to set the stage for an examination of the financial services industry mired in the ongoing subprime mortgage crisis in early 2008, it is important to consider the factors that led to this point. Basic economics states that individuals invest in certain financial instruments with the expectation of future profits. Of course, knowing the future is uncertain, which leads to increasingly risky behavior such as speculation and higher leverage during booms. When the bubble inevitably bursts, a stampede ensues as markets seek to gain liquidity in order to lower risk exposure. Such was the case in the 1998 Long Term Capital Management crisis described in the *London Financial Times* as a mad dash for cash that scared the financial markets.[4]

The securitization of assets using a debt instrument with an expected cash-flow obligation allowed bundles of debt to be sold in a series of tranches with descending priorities of claims by the risk/reward ratio.[5] While innovative securitization increased liquidity in the mortgage market, it also led to lax due diligence. Recognizing this risk, in October 2007 Treasury Secretary Henry Paulson pointed out that financial innovation historically outstripped regulation and now required a shift to ensure regulation stays in step with financial innovation.[6]

Arguably, the housing boom can be viewed as a similar migration of liquidity away from the dot com bubble towards a perceived "safer" investment in the housing market.[7] Significant appreciation of real estate, which typically reduces affordability for new entrants, coupled with extremely low interest rates allowed the entry of speculators and less credit worthy individuals into the market. This housing boom was subsequently fed by four significant factors: massive flows of capital into the debt market, a global savings glut which allowed the Federal Reserve to keep interest rates at historic lows, the rise of the mortgage broker, and financial innovations in mortgage-backed securities.[8]

The U.S. financial system is predicated on efficient capital markets that allow users and providers of capital to interact. While the mortgage implosion is a concern, the resulting lack of liquidity poses the more significant problem. The inability to buy and sell financial assets was caused in large part by an inability to "mark to market" or assign a value to assets.[9] Since March 2007, the capital debt market has fallen by nearly 50% creating a liquidity problem affecting not just risky leveraged buy-outs but also the safest corporate and municipal borrowers.[10] Subsequently, highly leveraged financial institutions have been stuck holding illiquid assets with uncertain value while simultaneously seeking sufficient liquidity to meet their obligations to creditors.[11]

In the extremely complex financial services industry, there is an alternative view as expressed by George Magnus from UBS during the Russian financial crisis of 1998 – he tagged it a Minsky moment in honor of American economist Hyman Minsky who developed the Financial Instability Hypothesis (FIH) after the financial crisis of 1966.[12] Unlike classical economists, Minsky believed that while booms and busts are inherent to the capitalist system they create a genuine social problem since downturns are often associated with increased involuntary unemployment, eerily similar to the scenario which is now unfolding in our economy.[13] Initially borrowers are able to pay the interest and principle, but eventually companies must borrow just to make the interest payment—the collapse of Bear Stearns is example of this phenomenon.[14] However, after considering these alternatives, this paper supports the view that markets do work.

Globalization: Seamless Borders for Capital Flows

Since David Ricardo's analysis of the trade in Port wine and cloth, economists have attempted to explain the fundamental role that finance serves in providing the medium of exchange.[15] Adam Smith argued that he benefited from the "greed of the baker" because he was able to substitute his currency for the baker's labor and skills. Trade created wealth not just for individuals, but for nations—hence the short title of his seminal work The Wealth of Nations.[16]

This system of finance has grown from the earliest days of bartering at the village market to a truly globalized financial network that moves capital throughout the world at the speed of a keystroke.

Globalization Isn't New, but the Pace is Increasing

Even though the globalization label is new, the practice is not. Since the first ships sailed the Mediterranean Sea looking for new markets for their goods, trade has been global. It has also been cyclical with nations seeking trade during times of relative peace while favoring autarkic self sufficiency when national tempers flare. The current wave of globalization in financial services began soon after the Cold War ended when free markets emerged. Innovations in financial services were driven by simultaneous advances in information technology, and the need to move large amounts of capital into emerging markets. Financial services are more than merely a subset of the global market place for goods and services. Economic globalization is the interconnectedness of national economies into the global economy through exports, imports, foreign direct investment, and capital flows. The Asian financial crisis in 1997 quickly spread to all the major markets around the world and underscored the interdependent, globalized nature of the world's financial markets, as well as the increased risk and volatility. Since 1997, globalization has accelerated and world financial markets have become increasingly interdependent. Today anything more than an average downturn in one market sector creates a ripple effect throughout other markets. This is due not only to traders' instant electronic access to international markets, but also the increasing degree of correlation between markets.

The inexorable momentum of globalization affects almost all financial services firms. Quite simply, to compete in the long run firms must participate in the global marketplace. Cheap access to energy for transportation reduced the distance between producers and consumers; and overseas, lower cost wage advantages allowed new sources of manufacturing competition to emerge. Whether the Main Street shopkeeper realizes it or not, he is competing in an international market with firms from other nations for supply sources, logistic channels, and customers. To prosper in the 21st century, firms must be able to allocate capital efficiently, effectively, and expertly. Additionally there is a growing trend by financial firms for cross-border mergers, such as the New York Stock Exchange and EuroNext combination, which increase interdependence and will likely create international market efficiencies. Although the U.S. dominated the world financial system for the last century, the rise of globalization in the financial services industry has inevitably diminished the U.S. lead while Brazil, Russia, India, and China (the BRIC nations), have increased their share of the global capital pool.

Adding to this rapid globalization are advances in technology. Communications technology speeds responses from present and future competitors. Today's business leader or pioneer no longer benefits from the temporal response lag of the past. Furthermore, communications have allowed firms in one nation to easily find and advertise to other firms for the purpose of creating new business relationships and allowing corporate partnerships and alliances to reach across national boundaries.

The growth of this international trade has created the need for additional services. For example, international businesses rely on currency exchanges to price transactions. This foreign exchange function is particularly important to the U.S. as the dollar has served as the global reserve currency since Bretton Woods in 1948. The current credit crisis has fueled speculation that there could be a move away from the U.S. dollar as the global reserve, but as the American Enterprise Institute notes: "My money would be on the U.S. dollar remaining the world's great currency ten years from now. It is not that I particularly like the U.S. dollar's long-run external fundamentals. Rather, it is that I dislike even more the world's other major currencies' fundamentals."[17]

Global Competition Drove New and Riskier Financial Innovations

The increase in competition from more and more financial firms entering the global market has created new opportunities and risks. Just as international manufacturing competitors emerged to challenge the U.S. auto industry, other financial centers are evolving and challenging New York as the world's premiere financier. When Taiwan, Singapore, and Korea industrialized and moved into higher-end manufacturing, other countries such as China, India and Brazil found an opportunity to significantly expand their presence in the international market. In a similar manner, the U.S. financial services industry is being challenged today by Hong Kong, London, and Dubai, with Shanghai emerging as another source of competition. The need to make efficient use of capital in order to be competitive in a global market spawned financial innovations. In reaction to increasing competition, the financial services industry in the United States has experienced widespread volatility and sweeping change within the last few years. Capital has become a truly global commodity, enabling institutions and investors to take advantage of business opportunities around the world. This marked increase in available capital lured financial institutions into developing newer and more complex financial products in order to find returns in a world where spreads and interest rates were very low.

As a result of this increased demand to exchange currencies, the worldwide notional amounts of exchange traded and over-the-counter (OTC) currency derivatives have increased significantly during the last twenty years. Exchange-traded currency derivatives have tripled in the last six years to a total of $158 billion, and trades over-the-counter have gone up two and a half times to a total of $48 trillion[18]. These financial contracts allow companies to buy protection against defaults from a third party, who receives a periodic fee as compensation for taking the risk and in return it agrees to buy the debt if a default occurs. Derivatives not traded on exchanges over the counter are currently unregulated. Global financial services firms and regulators need to better assess the risk of these capital allocation products in order to bring "better and timelier pricing, more transparency, greater capital efficiency and reduced risk in the trades of these opaque securities."[19] Like derivatives, hedge funds present another innovative way to generate capital. These highly leveraged investment vehicles are only open to sophisticated investors with high net worth and have the potential for high returns, but with very high risk. The demise of Bear Stearns began in July 2007 when two of its hedge funds collapsed, showing the risk that these investment vehicles pose to the larger financial sector. Alarmingly, the potential for contagion is growing. Today hedge funds make up about 30 percent of all U.S. fixed-income security transactions, 55 percent of U.S. activity in derivatives and about 30 percent of equities.

As globalization matures in the financial services industry, U.S. firms must adapt to remain competitive. Global capital flows will inevitably grow as developing nations increase their wealth, and then redeploy their capital as future investments. Wealthy industrialized nations will also influence future capital flows, as demographics force redistribution of wealth due to aging populations. To compete, U.S. financial services must be flexible, innovative, and trusted. Unfortunately, the 2008 credit crunch that paralyzed the capital markets has damaged the world's trust in U.S. financial institutions. In response the Financial Stability Forum, a Basel-based working group, was charged by the G-7 with studying risk management, liquidity, valuations and credit-rating agencies.[20] Although gaining consensus is never easy among the G-7, it seems likely that the future globalized financial marketplace will be more regulated and transparent than ever before as an international solution is imposed for a uniquely American financial bubble.

Way Ahead: Embrace Globalization and Lead the Way

Globalization directly impacts our national security because to be considered a world power, the U.S. must maintain an influential role in the global marketplace through international trade and capital markets. To retain our competitive advantage in this era of rapid globalization, the U.S. financial services industry has to drive growth, improve customer loyalty, increase profitability, and optimize business processes and information architecture through a multitude of strategies. Particularly, the U.S. financial industry must embrace globalization by developing a roadmap and operational business model to stay ahead of global industry shifts through efficient asset management and capitalization of new markets. This also requires firms to leverage their competitive advantage in front-to-back office operations, internal controls, and technology solutions.

The financial services industry must also sustain wealth management by lowering costs and raising margins through new product offerings, channel management, new account opening and online wealth management. Furthermore, the industry should leverage capital markets by using its extensive experience in retail and institutional trading, prime brokerage and security master hubs across a wide range of financial instruments.

In the banking arena of the U.S. financial services industry, firms must drive down costs, increase growth, and stay ahead of regulatory scrutiny through risk-appropriate solutions in retail and wholesale banking. Similarly, the insurance sector of the industry must improve productivity and accelerate services, but leverage business processes, technology, architecture, and infrastructure solutions to achieve gains in the key functional areas of the value chain.

The financial services industry must certainly embrace U.S. comparative advantage in Information Technology (IT) to innovate, increase efficiency and control costs. This may require a move away from tradition to rapidly incorporate the many advantages of IT. For example, the Shenzhen Stock Exchange in Southern China, arguably the fastest growing exchange in the international marketplace, exclusively uses electronic trading while the NYSE continues to cling to a traditional and outdated floor trading system.

U.S. policy must recognize that globalization is inescapable and affects most firms. Companies are thrust into the international market by competition with foreign firms for financing, supply sources, logistic channels, and customers. To prosper in the 21st century, firms must adapt to the global forces that impact them. It is clear that domestic markets alone will not sustain a world power.

Managing Risk: The Challenge and the Opportunity

From its humble beginnings on the waterfront of New York, the Egg and Butter Exchange afforded producers with the ability to set prices based on supply and demand. As that exchange evolved into the New York Mercantile Exchange, innovations such as futures contracts mitigated the risk producers faced in bringing goods to market. Later options on contracts allowed buyers to hedge their risk against future needs. The introduction of financial innovations such as currency, self-regulation, banking systems and foreign exchanges are all designed to reduce the inherent risks involved in trade in order to instill the confidence shared by Smith and his baker that exchanging silver for bread was a fair trade for both parties. Throughout this global evolution the financial services industry served as the mechanism to establish confidence between traders and to derive mutually agreeable prices; in sum, to understand and mitigate the risk.

The financial services industry is the quintessential middle man, earning a profit by providing the 21st century global economy with the ability to price, manage, and mitigate risk. Accordingly, public policy makers that attempt to manage complex financial systems should be cognizant how their policy affects the financial markets' ability to manage that risk. At the macro economic level, there is strategic risk that addresses the relative strength of the U.S. economy. For regulators, there is the systemic risk inherent in the friction of trade and finance. Finally there is the capital risk of both public and private investors as more Americans trust their retirements to individual investments.

Strategic Risk: The Dollar Abroad

The U.S. emerged from World War II as the preeminent global industrial and financial superpower. Since the mid-1940's, the U.S. has enjoyed a hard-earned golden age of prosperity with its banks, security exchanges and multinational corporations dominating the world of finance and commerce. As an example of this prosperity, the United States, with just 4.6 percent of the world's population, produced 27.5 percent of global gross domestic product (GDP) in 2006.[21] The U.S. dollar is the world's common medium of exchange, unit of account and preferred store of value—a powerful testament to the global trust in the soundness of the U.S. economy. However, the financial, demographic and political trends detailed previously pose significant strategic risks to America's future in the hypercompetitive global marketplace—failure to address these trends may jeopardize American pre-eminence.

Of great concern is the national debt. Today, U.S. federal spending continues to exceed revenues by several hundred billion dollars per year resulting in almost $10 trillion of total debt, about one tenth of which is owed to the governments of Japan and China.[22] In a similar vein, entitlements continue to be very worrisome. Spending for non-discretionary government programs (e.g., social security, Medicare and Medicaid) has grown from 26 percent of the federal budget in 1967 to 53 percent in 2007.[23] As the "baby boom" generation ages and lives longer, spending for these programs will increase while the payroll tax base decreases.

Equally disconcerting is the amount of debt held by individuals. Today, two-thirds of annual U.S. GDP is attributed to consumer spending bolstered by ever-increasing personal debt loads. For example, the dollar value of outstanding revolving credit rose 127 percent, from $417 billion in January 1998 to $947 billion in January 2008. During the same timeframe, the dollar value of debt owed to consumer finance companies rose $550 billion or 169 percent from $325 billion to $876 billion. The result is that overall outstanding consumer credit doubled from $1.23 trillion to $2.52 trillion leaving the U.S. consumer with a negative annual savings rate.[24]

Certainly related is the large and growing U.S. current account deficit, which may soon exceed $1 trillion per year due to the growing imbalance between imports of merchandise, services, and financial investments and exports. Foreign governments, firms, and individuals are rapidly accumulating wealth from the U.S. international trade imbalance and they are using their newfound riches to buy pieces of American business and real estate. The $6.88 billion investment in Citigroup by a Singapore sovereign wealth fund in January 2008 is a prime example of this phenomenon.[25] Such investments are not bad per se, but do add strategic risk as investment decisions by foreign governments may diverge from U.S. interests.

On the regulatory front, U.S. Federal Reserve monetary policies enacted to manage the national economy have ripple effects that are amplified by today's efficient financial and mercantile markets. For example, historically low federal funds rates from 2002 to 2004 created credit liquidity that fueled a speculative bubble in the housing market. Likewise, recent Federal Reserve actions to allow the devaluation of the U.S. dollar fueled a speculative price surge in commodity prices contributing to disruptions in global food supplies.[26]

Probably the single most important factor currently impacting the global economy is the rising price of crude oil, a dollar denominated commodity. The price of a barrel of oil has increased five-fold since January 2002. Rising global demand is one reason, but devaluation of the U.S. dollar is another. As proof, the dollar price of oil has climbed 273 percent since 2003, while the euro price has risen just 146 percent. *The Wall Street Journal* reports that this is due to speculative gambling on dollar-denominated oil futures in the commodities market.[27] Higher oil prices are inflationary and contribute to global discord by increasing food costs for poor nations.

Systemic Risk: Mismanagement and Friction in the System

If assessing strategic risk is the campaign plan, then understanding the systemic risks inherent in the financial system is managing the battlefield. In a recent analysis of the structure and fragility of the global capital system, the World Economic Forum concluded that the financial services systemic risk has the potential for a "system-wide financial crisis, typically accompanied by a sharp decline in asset values and economic activity that involves the spread of instability throughout the entire financial system, resulting in significant impacts to the real economy."[28] The aftermath of the subprime crisis created volatility in the financial markets and has had global impacts through the cascading liquidity crisis. In general, the crisis has impacted every segment of the financial services industry from credit unions that typically transact with minimal risk, to commercial banks that offer medium risk financial products such as credit cards to investment banks that handle high risk products such as swaps and collateralized debt obligations. Understanding how these diverse financial institutions deal with systemic risk provides insight into their operations.

Systemic risk can no longer be viewed myopically as a set of specific risks for a discrete financial sector. Instead, it must be examined in terms of a globalized system that is impacted by mismanagement of risk from multiple sources. As a case in point, the subprime mortgage crisis demonstrated the interconnectivity of the world's financial systems. Investors suffered huge losses in the U.S. financial market, but the effects reverberated in financial markets around the world as a result of international investors who had invested in these U.S. securities. Key factors leading to this crisis included the lack of due diligence in risk management by financial institutions, ineffective or nonexistent regulation, inefficient risk rating processes fostered by inherent conflict of interests, and the ever-increasing complexity of the financial instruments. These factors combined to foster a complete loss of trust across the financial sector when they began to unravel. Additionally, the frequency of system-wide financial crises, such as the sub prime failure, is a metric that bears scrutiny. The World Economic Forum aptly points out that "in the past twenty years, only four other comparable events have occurred. They include the October 1987 equity crash, the Japanese asset price collapse of the 1990s, the Asian financial crisis of 1997, and the Russian default of 1998."[29]

With systemic crises, the challenge is in determining whether they are a natural result of international market forces or were precipitated by policy decisions, in essence, avoidable mistakes. For example, three significant government actions over the last 30 years in the U.S. banking industry fundamentally changed the financial industry. The first involved the 1978 U.S. Supreme Court ruling in the case of Marquette vs. First Omaha Service Corp. In this decision, the court determined that national banks could charge customers the highest allowable rate in the bank's home state. This drove banks to move headquarters to states with no rate caps (such as Delaware and South Dakota) and subsequently caused savings interest rates to soar.[30] The second government intervention was driven by the Federal Reserve Board action in December 1996. This landmark policy pronouncement allowed bank holding companies to not only own investment bank affiliates, but to also increase allowances for securities underwriting from 10 percent to 25 percent. Finally, in November 1999, after 12 unsuccessful attempts in 25 years, $300 million in lobbying paid off as Congress repealed the Great Depression-era Glass-Steagall Act, an action supported by many as "the long-overdue demise of a Depression-era relic."[31] From a systemic risk perspective, these three government actions collectively changed the financial industry and subsequently allowed banks to move into more speculative business lines.

Capital Risk: In the Era of Financial Innovation, Whom Do You Trust?

In addition to the rather complex strategic and systemic components of risk, in the simplest terms, capital risk refers to the return on investment. In the current environment, capital markets that run on confidence crumble once that confidence falls apart. For investment banks, which prior to the Fed's bailout of Bear Stearns did not enjoy government bailout mechanisms, the rapid loss of access to capital can quickly spell the end. In the financial services industry, the concept of "too big to fail" is the basic notion that the failure of certain firms would have such a destructive impact on the overall system that they cannot be allowed to default and collapse. This condition introduces significant moral hazard risk for financial firms across the spectrum of services and for the regulators who attempt to compensate for this expectation. Innovations in the financial services industry over the past decade have significantly raised the level of capital risk.

In the first half of 2008, access to capital has largely seized up, and now, unlike the loose lending practices of 2002–06, lenders are overly scrutinizing potential borrowers for creditworthiness. The rating agencies are a major resource firms use to assess the risk to capital, yet they have suffered much criticism from the sub-prime mess for getting too close to the customers they are paid to rate. There is an inherent conflict of interest in the current structure where the rated party pays fees to the rating agency for their service. Some argue that the rating agencies, as a result of this relationship, overestimated their customers' credit worthiness. However, another view suggests that rating agencies did not rate the value of companies; rather they focused on rating the probability of default. Determining the totality of debt is a key problem in assessing the contemporary risk to capital. The challenge facing rating agencies is acquiring the requisite skills to rate new innovative products accurately because they cannot see what is really going on inside firms employing increasingly complex investment vehicles to generate capital.

Among the financial service firms in the industry, there are significantly different approaches to managing capital risk. At the retail banking level, the traditional spread between interest paid on deposits and interest received on loans is being squeezed leading to an emphasis on fee-based income and new products and, too often, in riskier loans. Smaller private equity firms are focused predominantly on growth through acquisitions, while some investment banks have risk exposure to large U.S. credit card holdings. These approaches seem fairly traditional and are relatively low risk approaches when compared to the newer and more imaginative ways much of the industry is generating capital. In the wake of deregulation, rapid financial innovation continues to exploit opportunities in a poorly regulated area of the financial services industry.

Securitization is an example of a financial innovation that lacks the requisite regulatory oversight. Though securitization has been around since the 1970's, it has recently come into vogue and played a key role in the mortgage crisis. Securitization in the most simplistic terms is a process in which a lending organization who originated numerous mortgages bundles those mortgages into a number of mortgage pools usually based on their credit risk. These small groups of mortgages are referred to as tranches and are sold off to investors as Mortgage Backed Securities (MBS). Typically, hedge funds seek higher returns by investing in high-credit risk tranches, while pension funds accept lower returns on the "safer" low credit risk vehicles.[32]

The increasing popularity of securitization is evident in the nearly $6.6 trillion of securitized instruments in 2003 alone.[33] Certainly, there are some aspects of securitization that made these financial instruments particularly attractive. Instead of holding onto a loan to maturity (typically 30 years), lending institutions could easily sell off their mortgages to free up capital to originate even more loans. Securitization not only created more opportunities for home ownership, but created an efficient method for raising capital that subsequently translated into lower borrowing costs for consumers.[34]

Lending institutions also benefited from shifting risk from themselves to MBS investors. This diversification of risk enabled a much deeper and more liquid market. Securitization is largely the result of lots of available capital chasing too few opportunities. As Jerry Webman so insightfully stated, “Your debt, which allows you to spend, is my asset, which allows me to borrow and spend, creating an asset that lets someone else borrow and spend, and so lower interest rates, increase money supply and stimulate both the real economy and the markets.”[35] Instead of having to maintain enough capital to cover losses on the loans they owned themselves, firms instead chose to keep only the most credit worthy parts of the securities they created, which allowed them to hold more assets with less capital. For example, in 2002, Citigroup held assets 12.7 times its equity, but by 2006 that number swelled to 19.3.[36] While mortgage backed securities may have lost their luster on Wall Street, the practice of pooling assets and converting them into investments with known returns through securitization is far from over.

Way Ahead: Effective Risk Management Can Bolster U.S. Comparative Advantage

From a strategic risk perspective, U.S. financial policy needs to address the growing non-discretionary fiscal concerns—of primary importance is the national debt and the impending train wreck posed by exponential growth in entitlements. Beyond confidence in just the American financial services industry, the U.S. must maintain confidence in its fiscal status. This requires reducing the enormous current account deficit by increasing exports of goods, services, and capital while reducing imports. Equally important is using policy to incentivize personal savings to increase the dismally low U.S. savings rate. Finally policy must ensure the financial health of the economy by keeping inflation under control in the face of sharply higher commodity prices—particularly for food and fuel. The U.S. financial system depends on our overall fiscal health as its foundation. There are clearly a number of difficult challenges that must be addressed to ensure the future vitality of the national economy.

Systemic risk is no longer isolated to individual financial sectors within a market or even within the borders of a single nation. Financial services industry experts readily agreed the case *de jure* is that the recent subprime mortgage and corresponding liquidity crisis created a systemic risk management crisis with global implications. With the inexorable movement towards global capital markets, the friction inherent in the financial system requires transparency, flexibility, and trust to operate. Focus should be on the fundamentals of understanding and appropriately pricing risk into complex financial products rather than the present strategy of selling-off risk through securitized debt. Closely related to understanding risk is reviewing the current architecture for rating risk. The ratings agencies must address the introduction of new and complicated financial products such as derivatives, hedges, and swaps where accurately rating the risk is exceedingly difficult due to their complexity and the lack of historical data. If trust is not re-established, there is a great risk of further disruptions in the flow of capital.

From a capital risk perspective, government oversight may be required to regulate several areas of innovation to prevent a recurrence of the sub-prime meltdown or other shocks to the financial services industry. There is still plenty of capital on the sidelines, and with the oncoming retirement of the U.S. baby boomer generation, investments with fixed returns will only increase in popularity. Innovations in financial products will continue. Maintaining the U.S. competitive advantage in financial services requires that not only the leaders of the industry, but also the public policy elites understand the sources of that competitive advantage; from the overall positioning and direction of the organization to the detail of operations and distribution. The financial services industry has to better integrate technological advances, incorporate regional expertise and a strategic vision of industry, in order to operate successfully in this increasingly competitive and challenging global market place. Securitization is likely to undergo significant government regulation in an effort to prevent a repeat of the sub-prime mess, but some argue that it has enabled firms to significantly leverage needed capital.

Lastly, in a new “innovation” at the public policy level, investment banks can now go to the Federal Reserve as the “lender of last resort.” The Fed’s recent decision to underwrite the JP Morgan purchase of Bear Stearns is an unprecedented action to “save the system.” Because this policy choice set a precedent of government intervention in a previously unregulated industry, the financial press was awash in articles criticizing the Fed for overstepping its mandate by bailing out an investment bank. However, the chorus supporting the Fed was equally adamant that Bear Stearns was too big to fail because of the impact that its failure would have on the global capital market. Either way, this action has increased the moral hazard risk to the capital markets and emphasizes the need for regulation to catch up with current practice. The Fed’s activist response to the liquidity crisis underscores the continuing debate about the role of government in financial services.

Clearly there is strategic risk for the U.S. in an interconnected global economy; and complex financial innovation is increasing systemic risks, which places personal capital investments at risk. The most interesting observation from this financial disaster is that the risk management actually worked—the fallout was spread around the globe and not concentrated. As public policy is developed to mitigate the risk of future systemic failures, policy-makers must manage expectations that any solution will reduce future risk to zero.

Regulation: Instilling Confidence in the Financial Services Industry

Finding the balance between government regulation and the free market is a reminder that “all government is but an imperfect remedy for these deficiencies.”[37] The issue of regulation, although frequently debated, rarely achieves consensus. The debate has generally distilled into three broad schools of thought regarding the appropriate level of financial sector regulation: a rules-based stance with restrictions, a laissez faire approach with free markets, and a self-policing methodology. This assessment concludes that the optimal approach recognizes regulation as a necessary evil that must exist in order to provide stability and confidence against the extremes of the markets while avoiding excessive regulation that inhibits efficient markets. The dilemma for America lies in the fact that U.S. regulation sets its markets apart from the rest of the world and is its greatest strength in making markets a safe haven in turbulent times, yet it is also a barrier for entry in competing with other nations that are regulated differently.

The need for regulation arises quite simply from the fact that while the marketplace is amoral, its participants may be immoral. Therefore, regulation must bind those who possess asymmetric information or whose moral compass is off azimuth so that they cannot unfairly take advantage of others and destroy the trust and confidence required to operate an efficient market. The U.S. government is inherently responsible for providing a combination of rules and punishments that comprise the necessary backbone for the financial markets to operate efficiently and effectively. Without such backing, the U.S. financial system would lack the necessary credibility to be a world leader in this industry. Government regulation is aimed primarily at accomplishing two main objectives: providing stability to the U.S. financial system and instilling confidence in consumers (domestic and international) so they can fully participate in the market with reasonable certainty it is neither corrupt nor unfair. For example, one of the root causes contributing to the subprime mortgage crisis was a lack of regulation of mortgage brokers.[38] These mortgage brokers processed loans for the purpose of quickly bundling and selling them to other investors without regard for the creditworthiness of the loan applicant.[39]

The following examples highlight the reactive nature of regulation across differing policy options since the turn of the century. Highlighting once approach is ENRON, who in 2000 recorded revenues of $111 billion, but in 2001 collapsed and filed for bankruptcy leaving thousands of employees and shareholders destitute. Illustrating another stance is investment giant Bear-Stearns who collapsed in 2008 because it was unable to raise sufficient capital after a run on the firm due to excessive leverage in illiquid assets. Finally, a third view is underscored by Odyssey Marine who was embroiled in an insider trading scandal in 2007 after the treasure-salvage ship discovered the “Black Swan” shipwreck. Each of these examples illustrate improper actions by trusted market participants that regulators addressed through regulatory tools ranging from the accounting requirements of Sarbanes-Oxley, to the laissez-fair approach supported by the Gramm-Leach-Bliley Act, to the self-regulating approach of the Financial Industry Regulatory Authority (FINRA). The results in each case were the same: individuals and companies were punished in order to protect investors and restore market confidence. This is precisely the role of regulation; to create a fair and transparent financial services industry that provides long-term stability and confidence without curtailing corporate growth and individual investment. This section will examine the sordid financial system abuses of ENRON, Bear Stearns, and Odyssey Marine and how regulators reacted to achieve to restore confidence in order to maintain effective and competitive U.S. capital markets.

Rules-Based Approach: Sarbanes-Oxley (SARBOX)

SARBOX is an excellent example of government intervention in reaction to a significant market failure. Following the financial scandals of ENRON and WorldCom that rocked the industry in 2001-2002 and severely shook investor confidence, very few financial pundits expected President Bush and Congress to take swift corrective action. The extensive media coverage of the dramatic and sudden failure of two Fortune 500 companies created a public outcry against lax corporate governance and poor accounting procedures. This market crisis spurred the Federal government into action with the timely passage of the Sarbanes-Oxley Act on July 30, 2002 to implement tough statutory guidance in order to ensure effective corporate governance and transparent accounting controls.[40] The goal of SARBOX was clear and straightforward—to bolster public confidence in the financial markets. As a result, SARBOX mandated accounting accuracy and transparency practices within corporate financial reporting to reduce the asymmetric information advantage between the principal-agent.

The SARBOX statutory legislation fundamentally changed corporate governance processes and financial internal controls. The most contentious aspect of SARBOX, Section 404, Management Assessment of Internal Controls, directs management to establish and maintain adequate control structures and specifically requires firms to develop procedures for financial reporting. As added security, this section also mandates that an outside auditor attest to and report on management's assessment. Most analysts agree that SARBOX regulation was necessary to improve financial transparency and to promote more efficient markets, yet this progress came with a significant cost of compliance. The Government Accountability Office (GAO) reports that SARBOX internal controls audits cost companies with less than $75 million in market capitalization of 0.64% of revenues in 2003 compared with 1.14% in 2004, while companies with more than $1 billion in market capitalization paid 0.07% in 2003 and .013% in 2004 respectively.[41] Clearly, although the SARBOX legislation accomplished the goal of restoring investor confidence in the markets, it did so at a significant cost to firms.

Free Market Posture: Gramm-Leach-Bliley Act

In contrast to SARBOX is the Gramm-Leach-Bliley Financial Services Modernization Act passed in 1999 that attempted to reduce regulatory barriers and promote free-market financial reforms by repealing the depression-era Glass-Steagall Act of 1933. The Gramm-Leach-Bliley Act (GLBA) encouraged competition in the financial services industry among banks, insurance companies and securities firms by enabling banking and financial institutions to offer diversified investment and insurance products to their customers.

The GLBA provided a unique opportunity for many firms to increase their earning power by offering a myriad of financial services under a single corporate entity. For example, many large banks realized that in addition to providing traditional banking services to their customers, they could profit by offering new services like insurance coverage or investment vehicles. Specifically, some analysts point out that GLBA encouraged Citicorp to merge with Travelers Group Insurance to form Citigroup—a financial holding company that could offer a broader range of financial products than a traditional bank.[42] Aside from the obvious benefits of new services, many industry experts point to the current subprime crisis as the downside of this legislation. GLBA encouraged investment banks such as Bear Stearns to market the mortgage-backed securities and collateralized debt obligations that eventually led to the current sub-prime mortgage debt financial crisis. The resulting implosion of Bear Stearns is an example of the free market self-regulating a firm that disrupted market stability and shook investor confidence. This was the invisible hand squeezing the life out of a venerable firm who lost its competitive advantage. However, to protect the viability of the entire financial system, the U.S. Federal Reserve ensured the process was orderly and predictable to the markets. Therefore, the free market, even in the absence of regulation, still has a powerful role in maintaining the vitality and efficiency of the financial system.

Self-Policing Methodology: Financial Industry Regulatory Authority (FINRA)

FINRA perhaps provides a good example of regulatory oversight that strikes a balance between direct government intervention and the free market forces. FINRA is a nongovernmental, self-policing regulatory authority who oversees 5,000 brokerage firms, 172,000 branch offices, and 676,000 individual registered securities representatives with a mandate to provide investor protection and market integrity.[43] Using highly sophisticated, in-house software, FINRA, monitors activities of every security firm and investor doing business in the U.S public markets, and even extends it reach overseas through cooperative agreements with almost every other global securities regulator.

For example, in 2007 the media reported that Marine Odyssey, a publically traded ocean treasure exploration firm, had made a spectacular shipwreck find near Spain that caused its stock price to soar. After observing this report and knowing from past experience that such dramatic stock swings on company news are traded illegally, FINRA opened an investigation through their full access to market data and discovered that in fact trade volume did surge before news of the find was released to the public. They also found that the ship's captain and other individuals with inside information began buying unusually large amounts of the stock before the story was released. As a result of their investigation, FINRA turned the case over to the Securities and Exchange Commission for criminal prosecution that led to the conviction of Captain Ernesto Tapanes and fines of over $220,000, double the amount of his profits.[44]

In another FINRA case, John Mullins, a registered broker from New Jersey was investigated for misappropriating $400,000 from a 97 year-old widow who had been a client for over 20 years. After being notified of potential wrongdoing, FINRA discovered that Mullins improperly used the client's checking account, ATM and debit cards. Although this case is still pending and all punitive options are under consideration to include fines, censure, suspension, and disbarment, this is another example of the power of an agency like FINRA to enforce the rules and maintain investor confidence in the face of greed and avarice.[45]

Although the discovery mechanism varied between these two cases, the results from both examples improved the industry. By focusing on stability and investor confidence through dedication to the investor, FINRA makes the entire U.S. securities industry stronger. Investors know they have an independent party monitoring firms to not only catch misdeeds, but as an alternative for justice in cases where individuals have been harmed by the abuse of market trust. By keeping avoiding its own onerous regulations while aggressively monitoring and policing its own members, FINRA provides balance that is essential to a healthy market.

The marketplace continues to react to U.S. regulatory actions. As mentioned earlier, these market reactions have often come in the form of unintended consequences. The subprime crisis and subsequent liquidity crunch suggest that for every rule that regulators devise, the market will innovate to adapt to those rules. Some have suggested that the increased number of rules in the U.S. financial regulatory regime is costly and has caused the U.S. financial industry to lose some of its competitive advantage. As previously noted, some industry experts argue cumbersome U.S. regulations are resulting in a reduction in Initial Public Offering (IPOs) in the U.S. as listings increase in overseas markets like London and Hong Kong. However, there are alternative explanations that point to the litigious environment that exists in U.S. markets, coupled with the considerable earnings pressure faced by publicly-traded companies. At the same time, a number of overseas exchanges have simply become more mature and thus compete more effectively. Even though some U.S. regulation is viewed as cumbersome, the world has seen its value in creating stable markets with confident market participants. Part of the increasing foreign market competitiveness is the result of better regulation in foreign exchanges that has increased stability and confidence in those markets and brought them closer to the U.S. standard. Secretary of the Treasury Henry Paulson describes the optimal regulatory balance as a situation that marries "high standards of integrity and accountability with a strong foundation for innovation, growth, and competitiveness."[46] The challenge for regulators is to reduce oversight to a level that promotes financial vitality and overall U.S. economic growth yet maintains sufficient regulation to decrease risk to the U.S. economy resulting from individual and corporate self-interest.

Way Ahead – Methodical and Measured Approach to Regulation is Preferred

The January 2007 Bloomberg-Schumer Report noted that the "U.S. financial regulatory system, and the legal system on which it is based, is stifling innovation and reducing the ability of financial services firms to serve consumers effectively and efficiently."[47] Many of the same concerns are echoed by the Financial Services Roundtable in their 2007 Blueprint for U.S. Financial Competitiveness.[48] Both bodies have recommended a change from the current rules-based regulatory regime to a principles-based structure. Many feel that the myriad and complicated rules in the current regulatory structure cause too many institutions to simply "check the block" to meet the legal letter of the law, rather than follow sound principles and ask the big-picture question of "Are we doing the right thing?" As Secretary Paulson states, "Our rules-based regulatory system is prescriptive, and leads to a greater focus on compliance with specific rules. We should move toward a structure that gives regulators more flexibility to work with entities on compliance within the spirit of regulatory principles."[49]

Following the publication of the 2007 Bloomberg-Schumer Report, the Treasury Department released its *Blueprint for a Modernized Financial Regulatory Structure*.[50] In this document, the Treasury Department lays out a plan to realign the U.S. financial regulatory system in a more holistic manner. The plan proposes three main agencies that would ensure market stability, protect consumers, and provide overall prudential governance of the financial services industry. What is encouraging about this plan is that although its timing is coincident with the ongoing subprime credit crisis, it was begun over a year before the crisis. In formulating the Blueprint, Treasury began with a blank slate to identify long-term regulatory objectives in light of modern market conditions.

Given the difficulty of enacting such far-reaching reform, the plan lays out a gradual and logical approach, beginning with short term goals that enable intermediate goals--which in turn enable long term objectives. The short-term plan includes expanding the President's Working Group on Financial Markets (PWG) to increase their ability to coordinate regulation across the U.S. financial services industry, creating a new Mortgage Origination Commission charged with evaluating the states' ability to license and regulate mortgage broker and lenders and expanding certain Federal Reserve powers. These short term reforms are designed to enable intermediate goals of rationalizing current regulatory agencies and functions and aligning them to more comprehensively oversee the industry. This rationalization has already sparked considerable debate as it calls for merging the Securities Exchange Commission (SEC) and Commodity Futures Trading Commission (CFTC) to regulate securities and futures. In a similar move, the

Office of Thrift Savings (OTS), The Office of the Comptroller of the Currency (OCC) and the Federal Deposit Insurance Corporation (FDIC) would be streamlined. Given the political climate in Washington, changing these bureaucracies will likely be a difficult battle. The ultimate vision in the Treasury's Blueprint would create a Market Stability Regulator, a Prudential Financial Regulatory Agency and a Conduct of Business Regulatory Agency. While this plan is not perfect, its importance lies in the fact that it will, as Assistant Secretary for Financial Institutions David G. Nason said in remarks to a London audience, serve as the "…beginning of a journey to more fundamental change regarding financial services regulation."[51]

The Blueprint reflects the globalized marketplace and the need to recognize the impact the U.S. financial regulations have on the international economy. Treasury officials, who espouse the concept of "too big to fail", refined the notion into "too interconnected to fail". In pursuing regulatory reform, the Treasury, as part of the President's Working Group, has consulted extensively with the Financial Stability Forum—a body that includes finance ministers, regulators and central bankers from major countries and international financial institutions. The imperative for any regulatory reform is to consider the role of international norms and regulations in order to maintain U.S. competitiveness and market balance. The move toward a more international emphasis is apparent as the U.S. transitions from U.S. Generally Accepted Accounting Principles (GAAP) to the International Financial Reporting System (IFRS) in order to increase accounting efficiencies and interoperability with foreign markets. Use of IFRS, a principles-based set of accounting standards, will need to be reconciled with the largely rules-based U.S. system. However, this process has already begun as the Financial Accounting Standards Board (FASB) incrementally adopts IFRS principles.

It is impossible to consider the future of regulation in the light of global competition without asking the obvious question: should we reverse course and reduce regulation to become more competitive? The obvious counter-argument to tight regulation is the London Stock Exchange's (LSE) Alternative Investment Market (AIM).[52] The AIM is loosely-regulated based on a relatively small set of principles-based rules implemented using a "comply or explain" model that allows listed companies to either meet the regulation or explain why they don't. This model has been widely successful with over 2900 companies listing on the AIM since its introduction in 2005. However, it is not without considerable criticism from both inside and outside the LSE. Last year SEC commissioner Roel Campos caused a uproar at the LSE when he likened the lax regulatory environment of the AIM to "a casino".[53] In April 2008, the Association of British Insurers (ABI) called on the LSE to require companies to disclose what type of listing they have to combat "growing concern that London's reputation is being damaged by some foreign companies passing themselves off as having a primary market listing, when they may only have global depository receipts."[54] While defending the growth potential of the AIM, the LSE is equally concerned with its own reputation being sullied by association with companies who cannot meet the listing requirements of the LSE. Without much of a long-term track record to evaluate, the AIM experiment remains unproven, especially in difficult times. This model does not seem to fit U.S. investment practices, although *caveat emptor* underlies our markets, our society may be too litigious for an AIM. It is best for the U.S. to remain on the sidelines and allow others to provide this service.

If the U.S. is to truly reform its financial regulatory structure to maintain its global competitiveness, it must facilitate balance in the financial markets. There is a need for thoughtful and comprehensive regulatory reform to include embracing principal-based regulation in lieu of rules-based regulation. And while a principles-based system may be desirable, it will not be a panacea, nor would such a system be possible in the U.S. without significant legal reform. The key challenge will be to integrate the desirable features of a principles-based system with the needed structure of a rules-based system. The Treasury's "objectives-based" approach could serve as an effective middle ground from which to pursue meaningful reform and ensure that U.S. markets—and international markets by extension—remain balanced, stable and promote investor confidence. The U.S. has already seen a proven example that this can be done successfully in the CFTC's rules-based regulation of the futures markets. Feedback on this initiative from regulators, investors, and the exchanges themselves seems universally positive. Furthermore, U.S. policy should emphasize regulation to strengthen corporate governance and establish better accountability of firms in the financial sector as well as to account for globalization and the impacts of 24/7 trading fueled by technology, foreign markets, and the interconnectivity of the world's financial systems. The goal must be to use efficient regulation to ensure confidence and protection for the users of the capital markets while maintaining our competitive position in the global marketplace.

Conclusion: Beyond the Current Crisis, Recovery is on the Horizon

There should be little doubt that the relative strength of the U.S. financial services industry is inextricably linked to U.S. national security. The nation's ability to credibly project the elements of national power is built on a foundation of economic strength and well being. That relative strength is currently being challenged by a financial crisis that is not only impacting individual Americans, but is also reverberating throughout the nation and even the international marketplace. Certainly the housing crisis and liquidity crunch have played a significant role in this turmoil as the nation continues to struggle through this challenging situation. Though this crisis is often described simply as the subprime crisis, there are much broader challenges of globalization, risk and regulation that threaten the U.S. financial services industry and subsequently pose a threat to national security.

This examination concludes that this is not an industry in decline, although it faces formidable challenges that need to be addressed. This conclusion is based on an overall assessment of the financial services industry composed of users of capital, suppliers of capital, and regulators of capital. Financial cycles that inflate and crash—and we are now in the midst of such a crash—have not gone away. The culprit this time is financial innovation fueled by excess liquidity that quickly outpaced the ability of investors to accurately gauge the risk of the products. Pundits repeatedly warned that new loans were not being made, existing loans were not marketable, and confidence in the debt market was at historic lows. The financial system convinced itself that there was little risk in taking mortgages backed by real estate, bundling them, breaking them into tranches, and parceling them out to a wide swath of investors in the form of AAA-rated products. The fact that these mortgages were increasingly risky—provided to speculators and unqualified borrowers with little due diligence—was lost in a lucrative game of financial musical chairs where everything was fine until the music stopped. The system (minus Bear Stearns) remained solvent and continues to function in the face of the significant losses incurred in the global bond markets. Though the financial services industry will eventually turn the corner to begin a move towards increased prosperity, the recovery will be driven by the actions U.S. policy makers take to bolster the industry.

U.S. policy must address the impact of globalization on our national security. Since the end of the Second World War, the U.S. has enjoyed a dominant position in the world financial system. Although circumstances over time will inevitably erode this global economic power, the U.S. must maintain an influential role in the global marketplace through international trade and capital markets. Globalization is not new, but the increased pace and reach of globalization have transformed regional markets into a more cohesive, seamless and interconnected international marketplace. To retain our competitive advantage in this era of rapid globalization, the U.S. financial services industry has to drive growth, improve customer loyalty, increase profitability, and optimize business processes and information architecture through a multitude of strategies including asset management, wealth management, capital markets, banking, and insurance. As the U.S. adapts to the new global paradigm, it must recognize that the changes to the relative international balance of the financial system are not necessarily detrimental to the capital markets in the United States. Just as steel and auto industries were surpassed by foreign competitors as the global manufacturing competitive advantage shifted without a collapse of the U.S. economy, a reallocation of financial power such as a shift to foreign exchanges is not necessarily devastating to America. The U.S. must be able to rise above the political fray surrounding this shift and use prescient policies to harness this new economic force as we grow into the 21st Century.

The U.S. financial services industry, along with its global partners, faces a daunting task in providing the 21st century global economy with the ability to price, manage, and mitigate risk. Specifically, the financial policy must address three key risk areas: strategic risk, systemic risk, and capital risk. Strategic risk presents a macroeconomic-level challenge to the financial system as it addresses the relative strength of the U.S. economy, particularly the growing non-discretionary fiscal concerns. For regulators, there is the systemic risk as they strive to adjust to the friction of trade and finance. Finally there is rapidly-growing capital risk, especially as the American retirement system shifts away from public (Social Security, pensions) to private (IRAs, 401K plans). Inextricably linked with risk management is the notion that policy makers, both public and private, must be aware of the impact that policy has on the ability of users of capital and providers of capital to manage risk. Policy must address strategic risk by decreasing the fiscal shortfalls looming in the next decade, systemic risk by understanding and appropriately pricing risk into complex financial products, and capital risk by maintaining proper oversight of new financial innovations. These policies must not only focus on reestablishing trust in order to reduce the risk of further disruptions in the flow of capital, but also be cognizant of the moral hazard risk in the capital markets as policy-makers attempt to adjust to the global capital markets.

U.S. policy must incorporate regulatory reform that accounts for the role of international norms and regulations in maintaining U.S. competitiveness and market balance. Deregulation is not the culprit in recent oversight failures; rather it is vital that the reason for implementing regulations in the first place is not lost in the zeal to ease the regulatory burden. Regulators failed to keep pace with global financial integration in areas such as dependency and ownership of risk. The outcome was a blurring of the business lines between banks and brokerages as the competition for customers resulted in rapid financial innovation that added significant complexity to the system. In response to this lapse, Treasury Secretary Paulson proposed *Blueprint for a Modernized Financial Regulatory Structure* as a framework to radically restructure the U.S. regulatory bodies that oversee the financial services industry. This plan should be debated and implemented in 2008 using the subprime financial crisis as a catalyst to promote this needed change to our system. In addition, U.S. policy, both public and private, must include thoughtful and comprehensive regulatory reform to include embracing principal-based regulation such as IFRS in lieu of rules-based regulation. Regulatory reform must also consider the concept of "too big to fail" and incorporate mitigating factors to address this often unspoken factor. Finally U.S. policy should account for the impacts of technology, foreign markets, and the interconnectivity of the world's financial systems and strengthen corporate governance in order to maintain confidence in our capital markets in this era of globalization. The ultimate goal for capital markets regulation is efficiency, confidence in the financial system, and protection for the users of the capital markets while maintaining our competitive position in the global marketplace.

The long term impact of the current crisis is unknowable. The potential pitfalls are numerous including the collapse of the U.S. dollar, a reversal of globalization, and even financial meltdown. However, the Federal Reserve has already demonstrated it will provide a degree of stability to the financial system with its backing of JP Morgan's buyout of the Bear Stearns Company and that it will aggressively take extraordinary action to resolve this crisis. In addition, the U.S. financial regulators are fully prepared to implement extreme measures to prop up the financial industry until the crisis passes. Even in the midst of what can certainly be called a worst case scenario, such a financial crisis will not necessarily change the preeminent role that financial services play in U.S. national power. It will be our actions, or inaction, that will either reinforce the status quo or lead to changes over time in the global financial markets. Over the next decade there is no clear alternative to a world capital market structure with the U.S. as a key player. In the current crisis, the most serious threat to U.S. security is the seizing up of the debt markets and its subsequent dampening of capital flows. If this system does not function efficiently or at all, America will lose the ability to raise new capital for economic growth as well as to fund its current account deficit. Such an occurrence will diminish U.S. economic power and thus threaten U.S. national security. American strength is dependent on strong financial markets and sustained global growth.

The mandate in the U.S. National Security Strategy is clear: "We will also promote more open financial service markets, which encourage stable and sound financial practices."[55] In order to accomplish this, this assessment concludes that U.S. policy must address challenges from globalization, risk, and regulation that erode the U.S. comparative advantage in financial services and pose a direct threat to our national security. By adopting these considerations, the U.S. financial industry can optimize its recovery and put the nation back on the path of prosperity, strength and power required to maintain national power.

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12. John Cassidy, "The Minsky Moment," *The New Yorker*, February 4, 2008. Per the article…"… the five stages are: displacement, boom, euphoria, profit taking, and panic. A displacement occurs when investors get excited about something--an invention, such as the Internet, or a war, or an abrupt change of economic policy. The current cycle began in 2003, with the Fed chief Alan Greenspan's decision to reduce short-term interest rates to one per cent, and an unexpected influx of foreign money, particularly Chinese money, into U.S. Treasury bonds. With the cost of borrowing--mortgage rates, in particular--at historic lows, a speculative real-estate boom quickly developed that was much bigger, in terms of over-all valuation, than the previous bubble in technology stocks. As a boom leads to euphoria, Minsky said, banks and other commercial lenders extend credit to ever more dubious borrowers, often creating new financial instruments to do the job. During the nineteen-eighties, junk bonds played that role. More recently, it was the securitization of mortgages, which enabled banks to provide home loans without worrying if they would ever be repaid.

(Investors who bought the newfangled securities would be left to deal with any defaults.) Then, at the top of the market (in this case, mid-2006), some smart traders start to cash in their profits. The onset of panic is usually heralded by a dramatic effect: in July, two Bear Stearns hedge funds that had invested heavily in mortgage securities collapsed. Six months and four interest-rate cuts later, Ben Bernanke and his colleagues at the Fed are struggling to contain the bust…. According to Dean Baker, the co-director of the Center for Economic and Policy Research, average house prices are falling nationwide at an annual rate of more than ten per cent, something not seen since before the Second World War.

13. See Charles Whalen, "Understanding the Credit Crunch as a Minsky Moment", *Challenge*, Jan-Feb 2008: 95. Latest unemployment figures released on 1 May identified slightly more unemployed; however the actual unemployment of 5% came in slightly better than the prediction of 5.1% unemployment.

14. Charles Whalen, "Understanding the Credit Crunch as a Minsky Moment", *Challenge*, Jan-Feb 2008: 98.

15. David Ricardo was an economist who nearly 200 years ago demonstrated the benefits of trade. He used the wine producing capability of Portugal and the Cloth making capability of England to show how each could benefit by trading with each other.

16. Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations,* London: Methuen and Co., Ltd., ed. Edwin Cannan, 1904. Fifth Edition. The Library of Economics and Liberty available at http://www.econlib.org/LIBRARY/Smith/smWN.html.

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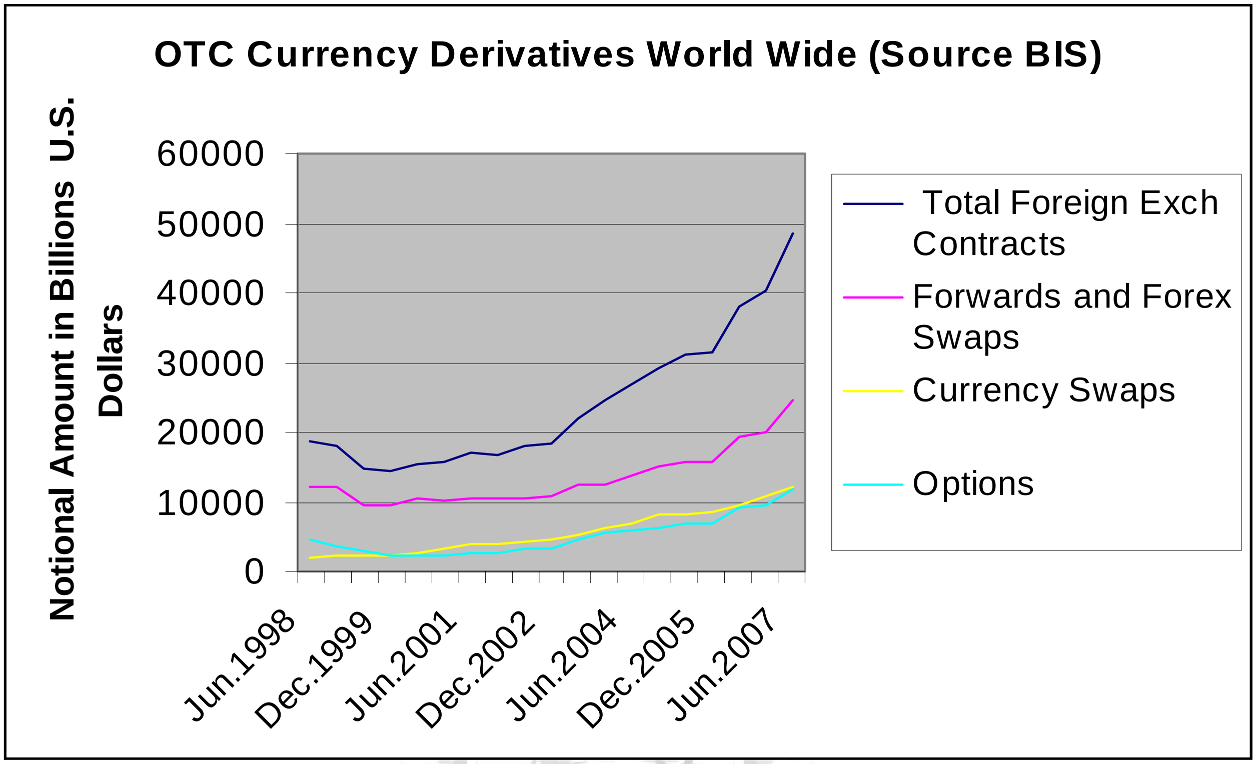
18. World wide exchange traded currency derivative use has increased significantly since 1993. As this chart highlights, much of the exchange traded currency derivatives are attributed to the North American Market (U.S. and Canada). It is reasonable to estimate that a large portion of this volume is part of U.S. markets.



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http://www.gic.com.sg/newsroom_newreleases_150108%20-%20GIC%20invests%20USD%206.88bn%20in%20Citigroup.htm.

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31. "The Long Demise of Glass-Steagall," *PBS – Frontline*, May 8, 2003, available at http://www.pbs.org/wgbh/pages/frontline/shows/wallstreet/weill/demise.html. The Glass-Steagall Act was enacted in 1933 after the Great Depression to prevent bank depositors from risk exposure to stock market volatilities. It protected bank depositors from the additional risks associated with security transactions. The act was dismantled in 1999. Consequently, the distinction between commercial banks and brokerage firms has blurred; many banks own brokerage firms and provide investment services. For more details on the Glass-Steagall Act see Investopedia at http://www.investopedia.com/terms/g/glass_steagall_act.asp.

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