Financial Efficiency and US National Security

ICAF Financial Services Industry Study

Annual Report AY 2004-2005

June 2005

The Industrial College of the Armed Forces

National Defense University

Fort McNair, Washington, D.C. 20319-5062

Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE **JUN 2005**	2. REPORT TYPE **N/A**	3. DATES COVERED **-**
4. TITLE AND SUBTITLE **ICAF Financial Services Industry Study**		5a. CONTRACT NUMBER
		5b. GRANT NUMBER
		5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)		5d. PROJECT NUMBER
		5e. TASK NUMBER
		5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **The Industrial College of the Armed Forces National Defense University Fort McNair Washigton, DC 20319-5062**		8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR’S ACRONYM(S)
		11. SPONSOR/MONITOR’S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release, distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**	**SAR**	**44**	

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std Z39-18

FINANCIAL SERVICES

ABSTRACT: The U.S. financial services industry plays the leading role in providing the capital that fuels the world's largest economy. The industry includes those firms that provide financial services to organizations or individuals, the government agencies that regulate the industry, and the markets that facilitate the exchange of financial assets. Market confidence, continuous competitive innovation, and risk distribution characterize the industry in the U.S. and promote efficiency. Outside the U.S., excessive government involvement, corruption, and immature financial systems are prevalent and have prevented many overseas financial services sectors from achieving the same efficiency as the U.S.

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Carnegie Endowment; Washington, DC
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Executive Summary

The economy of the United States is dynamic, growing and is the principal engine that drives the world's economies. This economic strength is due, in large part, to the market confidence, competitive innovation, and risk distribution that are necessary to create the environment and mechanisms for the efficient movement of capital between users (buyers) and lenders (sellers). The financial services industry is a key component in the machine that rapidly and efficiently matches and moves capital from lender to borrower in support of the vast U.S. and global economy. The financial services industry plays a significant role in the U.S. economy, which in turn provides for the prosperity of our citizens and resources the industrial base that supports our National Security.

Over the last six months the Financial Services Industry Study has examined the industry to assess its current state within the context of its recent transformation, to appreciate its breadth and depth, to understand the role of regulation and rule of law, and to determine and contrast the U.S. industry with those of major and emerging world economies. The seminar visited fifty-eight industry participants in Chicago, New York, Baltimore, Washington, DC, Toronto, Tokyo, Shanghai, and Seoul. In our studies, we formulated opinions associated with trends within the industry and the issues associated with the state of the U.S., Chinese, Japanese, and Korean financial services industries.

The U.S. Financial Services industry is ubiqutous, affecting the day-to-day life of virtually all Americans. This includes the use of a debit or charge card, the purchase of a car through short-term debt, the mortgage of a home with long-term debt, selling bonds for a water project or the securitization of capital to fund military housing. All of these actions exercise the many system components whose principal function is to provide the means by which a market economy raises, allocates, and uses capital resources.

A comparison of the annual transactions of the industry with the combined gross domestic product of the world's major economies will allow a full appreciation of the magnitude of the global financial services industry. The total value of the transactions executed within the industry is estimated to be $900 trillion annually, whereas the global Gross Domestic Product is estimated to be only $30 trillion. Finally, by comparison, the annual transactions of the New York Stock Exchange are a mere $15 trillion.

Today the industry is in a state of flux due to innovation, competition, changing laws and regulations. Given long-standing legislation that often inhibited growth, and recent problems with corporate governance and transparency, Congress passed legislation to enhance industry integrity and mandate better corporate behavior.

This continually changing state causes numerous challenges for the financial services industry. Major challenges include: entrepreneurial risk, industry consolidation, technology deficiencies and vulnerabilities, crime, and personnel shortages. These challenges are significant and require careful attention so as not to undermine essential market confidence. However, we believe the industry will be able to successfully address and adapt to these challenges, and maintain its leading role in market efficiency.

Over the last thirty years, the source of capital in the U.S. has evolved from a bank-centric to an open-market system. Coupled with globalization, the interdependence of world economies and the implementation of government regulations, this transformation in the source of capital has contributed to the U.S. economy's dramatic growth in productivity (>3% today vs. <1% in 1970). Liberalization in the access to, and efficiency of, capital movement has created wealth, increasing the nation's productivity and allocating resources to our National Security.

To provide a context for our assessment of the Financial Services Industry, both U.S. and international, we built on the concept of *efficiency in capital markets* and defined it as follows:

> *The linking of diverse investors with emergent opportunities in a timely manner within an assured set of rules.*

Furthermore, we identified three critical components that support the manifestation of this concept in a free market economy: market confidence, continuous competitive innovation, and risk distribution. The role of these components in a market economy and their impact on capital efficiency are as follows:

Market Confidence: Market confidence entails trust, by both investors and creditors, in the system, and also in one another. Key parameters of market confidence are corporate governance, culture, rule of law, regulations and transparency. Diminished market confidence discourages participation in the market, thereby decreasing available capital.

Continuous Competitive Innovation: The necessity for market participants to continuously seek and develop new means to capitalize on all available profit opportunities to maintain competitive advantage, or be crowded out of the market.

Risk Distribution: Equitable sharing of risks, paired against desired returns, that would otherwise discourage market participation.

These three components are dynamically interactive and provide a basis for assessing and comparing the financial services industries of the U.S., China, Japan, and Korea.

Our assessment of the global Financial Services industry follows:

United States: The Sarbanes-Oxley Act of 2002 and other legislation address problems with corporate governance. The full effect of this legislation is still uncertain, and may adversely impact small business and expose further corporate abuses, undermining market confidence.

China: The government heavily influences the allocation of capital and every other aspect of financial services, causing major problems with transparency, corporate governance, corruption and culture. China's economic policies will have ever-increasing impact on global prosperity, stability and security.

Japan: Bank culture manifests itself in a reluctance to liquidate non-performing loans, inhibiting banks from issuing new loans, discouraging investment and retarding economic growth. The government's remedy is to expand its already huge bond debt—the largest of any developed economy.

Korea: Epitomized by the Korean discount—in short, a tax imposed on capital costs to account for uncertainty in and transparency of Korean corporate behavior. Practically, lenders will only supply about 85% of required capital to hedge against non-transparent financial dealings.

We conclude that efficiency and confidence in U.S. Financial Markets makes the U.S. more secure and competitive economically, wary that several factors could diminish market confidence. The interdependence of global financial markets promotes collective international economic and security interests. Though in a state of flux, the industry is adapting to challenges and leading the way toward even greater market efficiencies. Finally, our study of the Financial Services industry leaves us confident in its ability to resource the industrial base that supports our national security.

THE FINANCIAL SERVICES INDUSTRY

Introduction

The U.S. financial services system moves capital more efficiently than any other country's system. The prospect for profit encourages a global influx of capital that almost exceeds investment opportunities. Fortunately, American ingenuity is as prevalent in our financial services industry as it is in our other industries. Our investment managers continue to find ever-more innovative ways to match capital with those who need it. This system, in turn, helps fuel our economy, and contributes to our nation being the most productive in the world. Moreover, it has contributed to a continually improving standard of living, and provided the basis for our national security. As the driver of our economy and production capability, the financial services industry is at the heart of our national power and security.

Financial services is one of the world's largest and most far-reaching industries. This global behemoth moves up to three trillion dollars in financial transactions each day, fewer than two percent of which are related to the trade of goods and services. The Financial Services Industry supports all industry sectors, providing an efficient system to both distribute capital and allocate risk. This system provides the fuel that keeps the world's economic systems running. It reaches to the lowest levels of the economy by providing savings mechanisms for individuals and loans for small businesses, and it affects how multi-national corporations and global enterprises cooperate and compete. The industry moves vast amounts of capital at the speed of light, providing near-instantaneous results for those who engage in its limitless array of investment opportunities. Finally, governments play major roles through regulation and the execution of fiscal and monetary policy.

The financial services industry is the world's leading mechanism for enabling globalization. Individual countries all have unique systems, some better than others. As more of these systems become linked to the global system, greater levels of interdependence will be achieved, significantly improving our chances for global prosperity and security. Of course, the converse is true: most of the world's more dangerous regimes are the centers of the worst economic systems. Moreover, many of these systems are disconnected in some aspect from those in the rest of the world. However, as mechanisms and opportunities for global investment increase, our collective interconnectedness, prosperity, and security will follow.

The Financial Services Industry Defined

The primary purpose of the finance department of any organization is to provide and manage capital to fund the organization's investments and operations. This capital may come from internal (retained earnings) or external (debt or equity) sources. Since capital is the lifeblood of most organizations, the finance function is critical to successful operations.

As a testament to the criticality of the financing function, an enormous industry has developed around the provision of capital. The financial services industry is diverse and includes retail and commercial banking, insurance, investment management, portfolio management, securities analysis, securities sales and trading, and corporate treasury operations. The influence of retail banking has waned over the past 30 years as the industry transformed from a saving-centric model to an investment-centric model. This is a competitive business, and the larger banks have pursued a consolidation strategy in order to develop the scale they need to compete with credit unions and savings and loans for customers' business. Some banks have started private banking operations to attract wealthy potential customers who will pay extra for services that are not offered to less well-to-do customers. The growth of the investor class has led to the growth of financial services firms (discount brokerages, mutual fund companies, investment management companies) that cater to individual investors who seek a higher investment return than they can receive from a bank.

Although corporations today have more financing options available to them than 30 years ago, they still require traditional banking services and commercial banking is still a viable business. The development of capital markets over the last 30 years has expanded the pool of capital to fund business growth and operations. The advent of innovative investment products (e.g., derivatives, collateralized bond obligations) has enabled organizations to tap new sources of capital from investors with different risk tolerances. Large pension funds, insurance companies, hedge funds, private equity funds, and venture capital funds represent some of the new sources of capital available today.

To provide a context for our assessment of the financial services industry, both U.S. and international, we built on the concept of *efficiency in capital markets* and defined it as follows:

> *The linking of diverse investors with emergent opportunities in a timely manner within an assured set of rules.*

Furthermore, we identified three critical components that support the manifestation of this concept in a free market economy: market confidence, continuous competitive innovation, and risk distribution. The role of these components in a market economy and their impact on capital efficiency are as follows:

Market Confidence - Market confidence entails trust, by both investors and creditors, in the system, and also in one another. Key parameters of market confidence are corporate governance, culture, rule of law, regulations and transparency. Diminished market confidence discourages participation in the market, thereby decreasing available capital.

Continuous Competitive Innovation – The necessity for market participants to continuously seek and develop new means to capitalize on any available profit opportunities to maintain competitive advantage, or be crowded out of the market.

Risk Distribution – Equitable sharing of risks, paired against desired returns, that would otherwise discourage market participation.

No discussion of the industry would be complete without an understanding of the concept of moral hazard in the financial markets. According to Mishkin and Eakins, "moral hazard… is the risk (hazard) that the borrower might engage in activities that are undesirable (immoral) from the lender's point of view because they make it less likely that the loan will be repaid. Because moral hazard lowers the probability that the loan will be repaid, lenders may decide that they would rather not make a loan." (p. 24) While this definition refers to borrowers and lenders, for this industry, this concept extends to a myriad of paired parties whose respective financial well-being depends on their abilities to successfully exploit opposite sides of financial transactions. Such paired parties include investors and public company management, specialists and securities buyers and sellers, and securities analysts and parties to securities transactions. The U.S. regulatory framework over the financial services industry has largely been driven by the government's desire to protect consumers and assure market confidence from moral hazard.

The development of the investor class and innovative financial products would be meaningless without an organized method to buy and sell these innovative products. The major securities markets (e.g. Chicago Board of Trade, Chicago Mercantile Exchange, New York Stock Exchange, American Stock Exchange, and NASDAQ) bring together buyers and sellers and provide the liquidity investors require.

The U.S. financial services industry would not have developed to the extent it has without the involvement of government entities and regulation. Regulators protect the investments of small and large investors and act to ensure the transparency of the system. Government regulation is often an outgrowth of financial services industry scandals or excesses that harmed investors. Agencies that grew out of the financial chaos of the Great Depression include the Federal Deposit Insurance Corporation that insures bank deposits and the Securities and Exchange Commission that regulates the securities markets. More recently, in the wake of the scandals at Enron and WorldCom that cost billions of dollars in shareholder value, the U.S. Congress enacted tougher financial accounting regulations via the Sarbanes-Oxley legislation.

Today the financial services industry is more global than ever. Organizations everywhere require capital. Technological advances have almost made the location of the organization that requires funding immaterial. Because of the internet and the increasing connectedness of global societies, investors can learn of overseas investment opportunities and quickly act on those opportunities. On the other side of the coin, an organization in one part of the world can access the capital markets in another part of the world and secure new funding sources. The technologically-enabled globalization of the financial services industry facilitates the diversification of investment portfolios across geographic boundaries and increases the pool of capital available to support business expansion.

Current Conditions

Introduction. The U.S. financial services industry is the most mature and healthy in the world. With a history that includes crises and regulatory reactions, for the most part, the industry has been allowed to evolve under market forces, which yielded a robust, efficient, and transparent system. Supported by a progressive legal system, a healthy level of regulatory balance, and the market confidence that results, the system allocates capital more efficiently than any other in the world. The opportunities for tremendous profit amid intense competition drive the system that provides the fuel for the U.S. economy. As the U.S. financial services system permeates every other industry, including the defense industry, it is one of the main pillars supporting our national power and security capability. Much of our power derives from the strength of our economy, and the financial services industry plays a significant role in enhancing our productivity and economic strength. However, the U.S. financial services industry is currently in transition due to market innovations, opportunities, technological advances, the security environment, and regulatory changes.

Strengths. The greatest strength of the U.S. financial services industry is its efficiency. The availability of capital throughout the system ensures that almost any potentially profitable venture can receive the funding it requires. Such capital availability results from many factors, especially the system's efficiency, the continuous flow of foreign capital into the U.S., and market confidence in the industry. Innovation is particularly prevalent in the financial services industry. Investors and managers create a mechanism to fill any opportunities for profit, no matter how narrow the niche. A myriad of mechanisms exist to move capital, regardless of the size of the enterprise. The robustness and diversity of this system enhance productivity at virtually every level of our economy.

While much of the system is driven by people's willingness to accept risk commensurate with a potential level of return, one of the key strengths of the current U.S. system is its capacity to spread and mitigate risk through a vast array of financial instruments. Derivatives (futures and options), hedge funds, and mutual funds are all products the industry has developed to respond to the customers' desire to mitigate risk and to generate profits. One recent financial innovation has been tiered structuring of government bond issues. This innovative approach reduces the overall cost of financing as compared to equivalent bank debt by splitting the issue into tiers with distinct risk/return profiles, thus allowing investors to match their desire for profit with their willingness to accept risk. This innovation recently played a key part in financing privatization of military housing. The government plays an important role in this risk distribution by insuring numerous reasonable investment mechanisms while balancing the concern of moral hazard with the need to maintain market confidence in the industry.

The U.S. financial services system is backed by a strong legal and regulatory framework that is grounded in the rule of law. This framework gives financial services consumers the confidence to deal with firms in the industry through enhanced transparency, accountability, and fairness. This confidence, in turn, drives broader market participation, increasing both liquidity and the availability of capital. More sophisticated players now routinely use complicated investment vehicles, such as derivatives, hedge funds, and venture capital funds. Their willingness to flow capital into such seemingly high-risk investments increases overall capital availability, reduces average capital costs, and spreads risk more equitably throughout the system. This, in turn, feeds additional growth and confidence. This positive feedback loop inherently encourages market growth, which could lead to "bubbles" such as the conjectured housing bubble. Nevertheless, an increasing number of investors are participating in these markets. The federal regulatory system strives to ensure the transparency, accountability, and fairness of investment opportunities throughout the country. Moreover, this system ensures the full investment power of the nation is available to U.S. capital markets. While there are still state and local laws that put parts of the national system in exclusion or conflict, the more significant market makers tend to err on the side of implementing the higher standards. As an example, most securities firms voluntarily follow the guidelines for conflict, disclosure and responsibility promulgated in recent New York State court rulings.

The U.S. financial services industry enjoys a significant advantage in the small business development and housing markets over its global competitors. In the U.S., the industry has played an instrumental role in the growth of the small business sector. The system is distinguished from others by an advanced credit evaluation system, a robust bankruptcy system, and a history of success. The small business debt market is complemented by a myriad of private capital sectors, including a networked venture capital system, partnerships, corporate structures, and other private financing systems. In addition, public financing is available to the most successful of these ventures. Similarly, the U.S. housing market enjoys both significant capital availability and low cost financing. The residential mortgage sector is supported not only by a mature collateralization and credit evaluation process, but also by mechanisms that insure against default (i.e., Fannie Mae) and allow loan consolidation and bundling.

Changes and Adaptations. While the U.S. financial services industry is the world's model for efficiency and effectiveness, much of its strength derives from the fact that it is a vibrant, adaptive system. Such a system is necessary due to a constant state of change in both its internal and external environments. Currently, many facets of the system are undergoing dramatic change. While these changes inevitably cause friction, they should help increase both confidence and efficiency in the system.

The financial services industry is rapidly changing the way it does business. Technological advances have significantly increased data processing speed, back office efficiency, and market opportunities. Traditional regulatory and technical barriers are quickly being removed to allow industry members to broach emerging and growing markets with the most up-to-date services and investment opportunities. The most significant regulatory change has been the repeal of barriers that previously existed between the banking, insurance and securities sectors. This repeal has greatly affected the way each sector, particularly the banking sector, conducts business. Banks are no longer able to compete working "bankers' hours" given the rising collection of all-in-one bankers, loan officers, fund managers, brokers, and financing experts who fill every capacity allowed by the law. Because of intense competition and generally low interest rates, banks' interest-rate spreads have greatly narrowed, reducing both the profit and incentive to make loans. Banks are now actively searching for opportunities to earn fee income, such as that generated by corporate debt underwriting, to replace income that has been driven out of interest rate spreads. In the securities and derivatives sectors, much of the growth of the last fifteen years has been driven by recently created "exotic" investments. Competitive forces and innovation have ensured that the industry quickly identifies profit opportunities in new niches.

The industry is also experiencing a significant amount of consolidation. While local, private, and regional banks continue to serve their communities, the removal of regulatory barriers between the industry's sectors has resulted in major corporations branching out or acquiring companies that allow them to provide the widest possible array of financial services. In spite of this consolidation, however, the financial services industry is still a non-concentrated, highly competitive industry. Paralleling the consolidation in the U.S. defense industry that has led to four industry giants, the financial services industry has seen similar consolidation activity that has created some large industry players. Part of this consolidation has included the creation of global enterprises, which, combined with the technology that drives transactions at the speed of light, has brought the world's systems closer together. As this consolidation continues, the industry will continue to change.

The financial services industry is not immune from crisis, and the industry has spent much time and resources responding to significant events that have eroded market confidence. Such events include:

- The 1929 Stock Market Crash and the Great Depression;
- The Savings and Loan Crisis of the 1980s - speculative investment and moral hazard;
- The 1997 Asian Financial Crisis - vulnerability to interconnectivity;
- The internet bubble - asset over-valuation;
- The terrorist attacks of September 11, 2001 - lack of system security and redundancy;
- The Enron and WorldCom crises - failures in corporate governance and oversight.

The industry has reacted to these crises by taking steps to restore investor confidence. By demonstrating responsibility and increasing transparency, the industry hopes to distance itself from and reinforce itself against the conditions that led to these crises. In doing so, it has been forced to make fundamental changes to its business practices.

Just as Congress passed the Glass-Steagall laws in reaction to events following the 1929 stock market crash, each recent crisis precipitated regulatory change designed to prevent recurrence. This tightening of regulatory restrictions has required the industry to adapt and conform to the changes, and occasionally to push back to Congress when laws or regulations require further adjustment. Since this recent round of crises happened during a time when many existing regulatory restrictions were being lifted, the industry has experienced a back-and-forth state of regulation.

The most significant regulatory changes, which are continuing to drive the most notable changes in the industry, are the three-decades-old deregulatory efforts to repeal much of the Glass-Steagall legislation. While Glass-Steagall, along with the Smoot-Hawley Tariffs and parts of the New Deal, might be considered a legislative over-reaction to the Great Depression, the fact that it took almost seventy years to repeal the market-inhibiting provisions of the Act show how the 1929 crash still permeates the industry's psyche. Since market forces are prevailing and opportunities are driving further efficiency, Congress has demonstrated willingness to allow continued innovation in the industry. With the exception of crisis-driven setbacks and changes driven by reaction to advancing technology and increased security concerns, major trends in the industry are towards exploiting every opportunity arising from deregulation. The industry's ability to quickly address these opportunities has been instrumental in achieving unprecedented levels of efficiency and effectiveness.

Industry Challenges

Introduction. Although healthy, the U.S. financial services industry faces many challenges. Some have always been part of the industry, some are caused by the changes the industry is experiencing, and some are unique to the industry's current position. The major challenges we discuss are those associated with risk, industry consolidation, technology, criminal activity, personnel, and confidence. There are also challenges, discussed later, associated with the government's role in the financial services industry, and with globalization.

Risk. There is risk associated with every entrepreneurial endeavor, and this is nowhere more apparent than in the financial services industry where the expected return increases with risk. Since it takes money to make money, investors continually leverage assets to create greater returns. While innovation has found increasingly clever ways to distribute, hedge against, and manage risk, without adequate regulatory oversight the industry can place itself in a position that can conceivably threaten major sectors, if not the entire industry itself—and hence the entire economy. The classic example of this is the Great Depression, but more recent examples include the Savings and Loan Crisis and the internet bubble.

The U.S. financial services industry exhibits no obvious warning signs of major risk; however, there are a few segments that require careful observation. First, many individuals and corporate entities have taken advantage of the period of low interest rates to leverage their positions in the financial markets. A short-term rise in interest rates, if large enough, could leave many investors over-leveraged. In addition, there is potential over-valuation in many U.S. markets, including housing, commercial real estate, and equities. For example, some corporate earnings from financial activities are outperforming their earnings from productivity, suggesting there may be risk associated with over-valuation.

Consolidation. While consolidation in the financial services industry has produced incredible efficiencies and economies-of-scale for the large players, there are several challenges associated with consolidation. First, there is the danger of creating entities that are "too big to fail." Since the government began removing the barriers between the financial services sectors, numerous public companies have become financial behemoths, and the failure of any one could be disastrous for the industry. There is a potential here for moral hazard, as the knowledge that a corporation is too big to fail could tempt that company to take on excessive risk, expecting government bailout in the event of failure.

Another danger of consolidation is that it has the potential to stifle the smaller industry members. While the large conglomerates will not permeate every sector of the financial services industry, the more profitable sectors, some of which are the "bread and butter" of the smaller companies, will certainly attract them. This has the potential to leave important niches unfilled, although the adaptability of American corporations and the strength of market forces have thus far prevented this. A greater concern with regulatory requirements, frequently in reaction to the crisis *du jour*, is that the administrative burden imposed on the smaller industry members may be insurmountable, crowding them out of the market. Sarbanes-Oxley and the privacy requirements of Gramm-Leach-Bliley are recent examples whose full effects are not yet completely understood.

Technology. Technology has fundamentally changed the financial services industry. Consumers can obtain cash virtually anywhere, can access account information at any time, and no longer need to contact brokers to buy or sell equities. While technology has made the financial services industry better, stronger, and faster, it has created some challenges for the industry as well.

First among these challenges is the security burden required on connected, automated systems. The industry not only needs to further develop the electronic media on which it operates, but it must secure these systems against cyber attacks, for which industry has yet to establish agreed standards. Since a critical component of the industry's strength is confidence in its data security, failure to secure the systems could be a disaster for the industry. Of course, technology does enhance the security of the industry against physical attack, as it has made it easier to back up data.

Technology has also adversely affected the industry's smaller members. The automated systems that the consumers expect are, in some cases, inaccessible to the smaller financial services entities. Of course, some of the industry's major players still resist bringing the latest technologies into service, evidenced by the fact that some major U.S. equities and commodities exchanges are still "floor" markets. While specialists at the New York Stock Exchange see themselves as market makers, others see them as market inhibitors who slow the pace and hinder trade transparency.

Crime. Like most other industries, financial services attracts its share of criminals. Unfortunately, the opportunities inside of the industry are sometimes too lucrative for even its members to pass on. Since criminal activity erodes market confidence, the core of the industry's strength, it presents challenges for the industry.

As the industry continues to evolve, the traditional function of protecting itself against theft has become significantly more complex. When cash and securities were kept in vaults and transported by vehicle, the matter of security was simple, although the potential for profit produced some elaborate criminal schemes. However, with financial commodities now stored in silicone and transported via fiber optics, and with the vast array of financial products available today, the challenges the industry faces to secure its media have become significant. An entire industry has developed around the need to secure financial transactions over the internet, and the financial services industry has to continue to stay a step ahead of its criminal attackers in order to preserve market confidence.

As we move on the scale of criminal activity towards internal industry threats, the industry has to secure itself against the same criminal problems that have always plagued it: theft and embezzlement. However, these activities have become more complex as well. Aside from simply stealing money, industry insiders have used fraudulent accounting procedures to over-value equities, and then sell them for significant profits, essentially stealing from the buyers. The same can be done with bonds or any of the exotic instruments. The criminal opportunities provided by irregular accounting practices present challenges not only for the industry but also for law enforcement and regulatory bodies as well.

The most important challenge for the industry is "insider" activity that straddles the divide between criminal acts and efficient market practices. There are certainly conflicts of interest when the issuer, regulator, evaluator, or broker of a security or commodity is also a personal holder of the product. Some regulations prohibit insiders from personally participating in the investments they manage for others, which may ultimately reduce market confidence. The industry needs to find the correct balance between consumer protection and market inhibition. Since consumers can suffer severe financial hardship from criminal activity, regulators tend to favor them. Moreover, regulators consider the preservation of market confidence, a public good, to be a primary goal that trumps most concerns about additional costs imposed by regulators on a highly profitable industry.

There exist criminal elements that use the financial services system to support illicit activities, such as laundering money and funding terrorism. Again, with the increasing complexity of the industry, such activities can find more innovative mechanisms to accomplish their purposes. However, the transparency the industry gains through connectivity can make these activities more detectable with the right programs. The challenge the industry faces here is to deny the use of its services to outside criminal organizations, while continuing to maintain the security and privacy aspects of its networks that are vital to market confidence.

Human Capital. Like many other industries, financial services has to assure it has an adequately trained workforce. As the industry becomes more complex, the spectrum of required skills will expand. Further, with the industry's cyclical employment cycle and tendency to "churn and burn" its employees, certain industry sectors may find themselves inadequately staffed. Fortunately, globalization has opened the industry up to the worldwide labor force and the industry should be able to overcome this challenge.

Confidence. Almost all of the challenges facing the industry come back to one core element—market confidence. A loss of confidence in the financial services system could be disastrous for the industry, as it was during the Great Depression. The breadth and depth of the industry today hedges against an industry-wide crisis, in that a disaster in one sector may not necessarily transfer to other sectors, although the industry's interconnectedness works against this dynamic. The lessons of the 1930s are still vivid. Since the nation learned that over-leveraging, over-valuation, bubbles, and bank runs could combine to affect the quality of life, a level of inherent vigilance exists to shield against another disaster of that magnitude. However, the industry cannot rely on the practical understanding of the American people to solve its problems. It needs to meet all of its challenges head-on in order to sustain a high level of confidence in the market.

The Government Role in the Financial Services Industry.

Introduction. In addition to participating in the financial services industry, the government is the primary regulator. Government regulatory policy can alter the face of the industry, and presents a significant challenge for our lawmakers. This section contains a brief history of the U.S. financial services industry's regulatory environment. It also examines some of the current regulatory issues and challenges, explores the government's two most recent regulatory decisions, Sarbanes-Oxley and Gramm-Leach-Bliley, and concludes with some observations on the government's industry participation.

History. Up until the 1930s, banking regulation was the domain of the states, emphasizing local interests. This situation was certainly consistent with the technology of the time, and the laws reinforced this by prohibiting interstate banking or insurance operations. There were some exceptions to these laws. For example, in 1863 Congress authorized nationally chartered banks; in 1913 the Federal Reserve was created; and in the early 1900s national brokerage firms traded securities in New York for customers in all states, even though the only securities laws were at the state level.

The decentralized banking system peaked in 1921 with 30,456, mostly small, banks in the United States. By 1933, thousands of these banks had failed, forcing Congress to pass the Banking Act of 1933. This act included the Glass-Steagall Act of 1933, which erected walls between commercial, investment, and securities activities. The Banking Act of 1935 strengthened federal regulation and restricted entry to the industry. The Securities Act of 1933, the Securities Exchange Act of 1934, and the Investment Company Act of 1940 started a new federal regime with the Securities Exchange Commission (SEC) as the regulator. While insurance regulation remained in the domain of the states, the Bank Holding Acts of 1956 and 1970 separated banks from their holding companies, from insurance underwriting, and from commercial activities. Federal banking regulation perhaps peaked in 1966 with the Interest Rate Control Act.

Starting in the 1970s Congress passed a series of laws that initiated banking system deregulation. Exceptions included the Federal Institutions Reform, Recovery and Enforcement Act of 1989 and the Federal Deposit Insurance Corporation Improvement Act of 1991, which addressed the Savings and Loan problems of the 1980s. In the 1990s a move to repeal the Glass-Steagall Act began with the Riegel-Neal Interstate Banking and Branching Act of 1994, and finally with the Gramm-Leach-Bliley Act (GLBA) of 1999.

Overview. As a benefit to the public good, the government has developed a complex set of laws and regulations to protect people from unscrupulous agents, which it enforces through regulatory agencies. Since the promise of untold riches has also attracted naïve investors interested in making a quick profit, the government has also instituted a regulatory framework to protect unsophisticated investors from themselves.

The key to effective government regulation is achieving the proper balance between consumer protection and free markets. The efficiency of any financial services system derives from this balance: too much regulation will impose artificial barriers to market forces while too little will permit abuses that erode confidence. Financial services regulation in the U.S. has always been at the center of the struggle between the government's desire to prevent the last crisis from recurring and pressure from the market to allow new opportunities. A third impetus for regulation results from fear of innovation, when lawmakers attempt to anticipate the consequences of a new investment mechanism or technology. Constant regulation and deregulation activities associated with these forces have been a contributing factor to the industry's current state of flux.

This regulation has insulated a number of sectors from competition by constructing barriers to entry, resulting in oligopolies within those sectors. Oligopolies work against the natural forces of the market, and in many cases the market has pushed back, either by creating other instruments, finding loopholes, or forcing deregulation.

It is clearly the case that a "few bad apples" can spoil the game for everybody. Some of the most recent regulatory decisions specifically targeted recurrence of such bad behavior even though the problems may not have been systemic. Unfortunately, the entire industry suffers because of the abuses of a select few. During our study of the industry, we found professionals who are committed to the highest levels of integrity and ethical practices, and who place their reputations with their customers at the forefront of their ethos. Certainly, the significant levels of competition in the industry have forced all of the successful companies to embrace the highest standards of ethical behavior, since anything to the contrary can have consequences ranging from fines to prison time to market exclusion.

Balanced regulation must address moral hazard. Since almost every financial investment involves some level of risk, the government must find the proper balance between allowing the companies an opportunity for profit without shielding them from the moral hazard associated with investing guaranteed capital. This thread has created another source of regulation and deregulation throughout the industry's history.

Another factor that places pressure on the industry and forces the government to interfere is litigation. People participate in capital markets, anticipating easy profits through the sweat equity of another party. When this capital disappears, unsophisticated investors become sophisticated litigants, demanding that the industry compensate them for their losses. The counter-argument is that when unscrupulous practices in the industry cause these losses, the industry should accept responsibility. Again, it is imperative that government acts to achieve the proper balance between intervention and allowing market forces to run naturally.

As noted before, the financial services industry is inextricably linked to our national security, and its efficiency is a major contributor to national power. It should come as no surprise that the Patriot Act and other security measures targeted the financial services industry. Unfortunately, this series of laws included industry mandates, but provided little guidance on how to uniformly execute the laws' requirements. Business has to balance the cost of complying with ill-defined requirements against the obligation to meet shareholder expectations and its ability to maintain competitive advantage. The best remedy for this challenge is standardized implementation processes that reduce subjectivity in execution. Industry must take an active role in defining implementation and execution standards by developing best business practices and coordinating them with government.

Government regulation has not always kept up with innovation. The lines between the derivatives and securities sectors have rapidly begun to blur due to market consolidation and increasingly popular hybrid products, which has resulted in a regulatory overlap. For example, this relatively new derivatives market is regulated through a complex combination of institutional and federal regulations. The Commodities Futures Trading Commission (CFTC), SEC, Office of Comptroller of the Currency (OCC), and state banking and insurance regulators all participate in this regulatory regime. While organized derivatives markets suffer from over-regulation, OTC derivatives markets are largely unregulated. Likewise, financial services firms must bear overlapping regulatory burdens levied at the institutional level even though their non-financial counterparts are not subject to them.

The U.S. government should merge the CFTC and the SEC to streamline both regulation and oversight, and provide a single regulator with the ability to efficiently and effectively oversee our financial markets. A consolidated regulatory framework would remove excess burden from U.S. derivatives markets and participants, and alleviate a competitive disadvantage to less regulated overseas markets. The new framework should also expand to include currently unregulated aspects of the derivatives markets to address the pervasive risks derivatives pose to financial markets.

Gramm-Leach-Bliley. The Gramm-Leach-Bliley Act (GLBA) of 1999 ended a two-decades-old effort to deregulate the U.S. financial services industry, but more importantly, it lifted archaic constraints imposed by seventy-year-old regulation. The GLBA included several key provisions: facilitating affiliation among banks, securities firms, and insurance companies; changing the current governing regulations expand coverage for the new affiliations; and increasing the privacy and privacy-reporting requirements of the financial services industry. It left the industry still heavily regulated in terms of safety and soundness considerations, information disclosure requirements, and added privacy provisions. However, it greatly decreased the industry's regulatory requirements in terms of prices, entry, location, and activities. It also loosened regulation to accommodate the vast technological and innovative market-driven changes the industry had experienced in the decades leading up to the GLBA.

However, six years after the passage of the GLBA, the industry has not reached consensus on the effect of the act. There seems to be a consensus that the industry has not taken full advantage of the consolidation the GLBA allows, and that the privacy provisions, the most controversial and disputed during the GLBA debate, have caused the industry some complications, particularly for the smaller industry members. There is no general agreement, however, by the industry on the overall effect of the act. The problem is that for every benefit of the act, there is a special interest that has lost ground for its particular constituency, and the act as written simply cannot please everyone.

The GLBA has had some major effects on the financial services industry. First, it helped create some huge conglomerates, but a criticism along these lines is that the GLBA created within the industry institutions that are “too big to fail.” While the GLBA ended the separation of the banking, securities, and insurance industries, and it allowed financial institutions to offer real estate brokerage services, a provision that is still blocked by the Treasury and the Federal Reserve, it now requires banks that engage in securities activities to register as brokers. The Securities Exchange Act of 1934 prohibited banks from being brokers, although many found ways to engage in securities activities. The GLBA did, however, reaffirm the separation of banking and commerce, confirming California’s ruling that prohibited Wal-Mart from engaging in such an activity earlier in the 1990s.

The GLBA has not had a significant effect on the small banking and financial institution segments, although it increased competition from the conglomerates, allowed them to branch out somewhat, and added significant privacy and administrative burdens on these smaller entities. The major effects, on which most industry analysts and participants agree, are that the GLBA reduced protectionism after a two-decade effort, and that it encouraged flexibility, efficiency, and competition. Many claim that this would have happened without the GLBA, and that much of it was already underway due to market forces before the GLBA was ever signed.

The fact that you cannot please all of the people all of the time is true in terms of regulation of the financial services industry. The GLBA has a significant number of supporters and detractors. Various special interest groups are continually pushing for changes, either in relaxing some of its requirements, or strengthening or adding to some of its regulatory provisions. Despite its detractors, questions about its implementation, discrepancies between its intent and its effects, conflicts with state laws, and the fact that its only changes were really reactions to trends that had already started in the industry, the GLBA is certainly serving its purpose of modernizing the U.S. financial services industry. Its greatest accomplishment so far is that it lifted antiquated legislation that may have inhibited industry growth.

Sarbanes-Oxley. The Sarbanes-Oxley Act (SOA) of 2002 requires that a publicly traded company’s principal executive and financial officers certify their financial information and management controls. The SOA holds chief executives and chief financial officers directly, and potentially criminally, responsible for the accuracy of this information, calling for severe criminal penalties in cases of misdeeds or mistakes. It has had immediate impact on corporations, accounting firms, and shareholders. In addition, one could argue that it may impact both technological innovation and national security.

Financial Executives International, a networking and advocacy organization, said in 2005 that their survey of 217 publicly traded companies showed they had individually spent $4.4 million, on average, to comply with the SOA. This cost impact, however, may be only temporary as new automated systems and economies emerge to control those costs.

SOA has been a bonanza for the major accounting firms. They are being deluged with work, and are burning out their employees and replacing them at furious paces with new accounting graduates. It has not, however, been all smooth sailing for these firms. To comply with SOA, they have had to restructure themselves to separate their auditing—to provide an independent evaluation function—and consulting functions, and abandon long time clients to concentrate on more lucrative and consuming SOA work.

Regarding shareholder impact, the SOA is currently affecting corporations at the time many of them are experiencing market downturns, so the exact impact is difficult to estimate. A corporation's SOA difficulties, however, may reduce investor confidence over time, along with the price for its securities, while a positive SOA scorecard may generate the reverse. In addition, the costs of systems and controls to meet the SOA may reduce the corporation's operational capital balance, and may force it back to the markets for more capital. SOA disclosures and independent audit results are proving valuable for analysts, who evaluate and influence the capital markets.

The real SOA impact on national security and technological innovation is that it will, at least initially, force small innovative public technology and security companies to either liquidate or become private if they cannot bear the burden of the regulations. Demand for innovation will continue, but there may be a new place for it: we will still have larger firms that can weather the costs and burdens of the SOA.

The Government as a Participant. The U.S. government is not only the regulatory agent responsible for the U.S. financial services industry; it is also a participant in the industry as a member. The government maintains and guarantees the money supply, issues securities, controls interest rates, administers numerous pension plans, insures deposits, insurance activities and other pension funds, and more generally drives the nation's monetary and fiscal policies. The U.S. government is a major player in the global financial services industry and, as such, can play a major role in industry direction, not only through its regulatory activities, but through its actions as a borrower.

As one of the industry's biggest participants, the government must exercise fiduciary responsibility in order to maintain market confidence. In this case, consumers include every other industry member. Government activities that cause concern within the industry include the high level of U.S. national debt, recurring federal budget deficits, continual and worsening trade deficits, large foreign holdings of U.S. securities and dollars, and the current low value of the U.S. dollar with respect to many foreign currencies.

One problem is that no two analysts seem to agree on the probable effects of such overtly negative fiduciary practices. Pundits in Washington decry the budget deficit, the status of the dollar, and the U.S. dollar holdings of Asian countries, while some Wall Street analysts see a healthy, vibrant system. Whereas some see the shifting to the Euro as the currency of choice as a significant concern, others claim that this will not happen without those countries already holding dollars losing their current positions. Still others see the declining dollar as the solution to our trade deficit, while those calling for a balanced budget receive little or no attention in the current environment. All of these factors are linked in terms of economics, but their combined effect is an educated guess, at best. However, if the impression that the U.S. government is not exercising fiduciary responsibility becomes widespread, the ultimate fear is that market confidence will suffer. This, in turn, would threaten the health of the industry and our economy.

The Global Financial Services Industry.

Introduction. Globalization is a national security imperative. As the world's economies become increasingly linked, the likelihood of nations attacking each other decreases significantly. While globalization is not new, the efficiency with which commerce now takes place is unprecedented, and the rate at which global monetary transactions takes place has reached near maximum speed. Not only are the world's economies becoming more transparent, but the global network of financial services institutions has become an almost seamless web of international systems. While U.S. financial markets are dominant, they do not enjoy the hegemony over the rest of the world's systems that our military forces currently experience. In fact, while the merging of the world's economies is a positive step towards globalization and global security, it presents some significant challenges for the U.S. financial services industry, the international financial services system, and the United States.

The primary risk associated with the world's financial markets comes from the increasing interdependence of their constituent parts. As we saw with the 1997 Asian Financial Crisis, a collapse in one market had a domino effect on neighboring markets. Since the global financial services system is essentially a loose confederation of dissimilar individual systems, the weaknesses of the individual systems can permeate the entire system during a crisis. For example, during the Asian crisis, Thailand and South Korea experienced near financial collapse for a variety of reasons, including over-valued currencies, high levels of non-performing loans, excessive leveraging, and vulnerability to exchange rates.

A further danger of the interconnectedness of the global financial services systems, particularly for the U.S. sector, is that our system is partially linked to those systems that do not share our transparency, rule of law, fiduciary responsibility, freedom to move under market forces, and market confidence. This linkage negatively affects both the free flow of capital and the opportunity for profit. Many foreign markets are providing significant returns today, but whether these markets have true underlying value or are being fueled by speculation remains to be seen. Furthermore, some Asian markets, particularly China's, are growing under the assumption that the shackles of the communist system will eventually be lifted. While the current trends all seem positive, much reform still needs to happen before the current round of speculation melds into true market confidence.

Globalization of the world's financial systems has left the U.S. dependent on a collection of foreign markets that simply do not share the strengths of the U.S. system. Many of these markets still have central controls that frequently work against market forces, either due to the need to maintain political control or to help local economies. Many Asian countries have economic policies patterned after the old U.S. system, i.e. under Glass-Steagall, and they are only now starting to deregulate, a process which the U.S. found to be fraught with speed bumps such as the Savings and Loan Crisis.

Problems with transactions in these countries must sometimes be addressed in court systems that are immature, corrupt, that lack sufficient regulatory controls, or even lack the rule of law or a common law basis. While a single incident will not ruin the system, it attacks fundamental market confidence, which can threaten the entire system.

A further challenge for the U.S. is that these international financial systems give many foreign entities potential leverage over it. The U.S. dollar remains the currency of choice for foreign government holdings. With a significant proportion of U.S. treasuries held overseas, these foreign governments may be in a position to apply economic leverage against the U.S. government. However, the increasing level of foreign holdings in U.S. equities, debt, derivatives and hedge funds is at least as important. Again, while this increased globalization bodes well for our national and global security, we are conceding an amount of leverage over our domestic financial markets that could increase our security risks in the future.

Economic Development. By connecting individual economic systems, the global financial services industry contributes not only to growth and security in developed countries, but especially to economic development of the world's more depressed regions. These areas desperately need capital to grow and develop. Moreover, nascent, but growing, economies are much less likely to serve as a source of radical extremism. The following is an examination of the financial services industry as an instrument of economic development and the role it plays in global security.

Evaluation of the role of finance in small business and economic development must include discussion of how new projects are financed, how systems that deliver essential financial services promote economic development, and how political systems can obstruct it.

Many developing countries experience very low rates of growth because their financial systems are underdeveloped. To operate efficiently, the basic problems of adverse selection and moral hazard in contract lending, i.e. asymmetric information in the market *before* and *after* a transaction, must first be addressed by a country's financial structure to ensure an atmosphere conducive to lending. The adverse selection problem is normally solved through the use of collateral, and the moral hazard problem through the use of restrictive covenants in contracts, but neither tool will be effective without a sound legal system and bankruptcy processes to enforce contracts.

The ability to write contracts and lend money with an expectation and enforcement mechanism that investment returns will be realized is only a first step toward building a financial structure that supports and encourages equitable economic activity. Beyond that, social and regulatory conditions must exist to create the right environment for financial risk taking. The most important aspects follow. First, property rights must be recognized and protected. Second, access to funding must be available. Third, a stable banking system must be willing to lend money to the most productive uses of capital. Fourth, accurate accounting standards are essential. Fifth, regulation must be adequate and fair, not interventionist. Sixth, the government must be stable. Seventh, markets must not be exclusive. Last, taxation must be fair.

Historically, economic development has endured in countries where property rights have been protected, where contracts have been enforced, and where stable, responsive and efficient governments have been in place. However, for much of the developing world, weak state capacity is responsible for persistent poverty, disease, drug and human trafficking, terrorism, and many other social dysfunctions. Where governance is weak and confidence in financial systems does not exist, risk taking and, therefore, economic development will not occur.

The development policy community recognizes that institutions matter and that good governance is a key part of any development strategy. Consequently, two types of reforms precede stable economic growth. First-generation reforms are straightforward because they include actions under the control of the government such as stabilizing macro-economic policy, reducing tariffs, privatization, and regulation. Second-generation reforms are more difficult to implement because they involve strengthening the state institutions that are both critical for a functioning economy and deeply rooted in the political nature of a society. Examples might include cleaning up a corrupt police force or reforming a legal system that has operated on bribes in the past. Clearly, such reforms threaten the interests of the wealthy and powerful elite.

It appears, then, that successful economic development must consider not only financing new projects and improving the systems that deliver essential financial services, but also the social-political aspects of developing nations. Financing through foreign investment provides funding for new projects. Good governance enforces the rule of law, adjudicates disputes, and establishes property rights as a basis of long-term investment and growth. Finally, civil society combats corruption, does not discriminate against women, improves education, connectedness and social responsibility, and resolves trade disputes, engendering the confidence to begin economic development.

The essence of economic growth and poverty reduction in the developing world lies in bringing resources to workers to make them more productive, including skills, education, technology and capital. While domestic savings and enterprise can provide some of this capital, the reality is that development will not occur without foreign investment. History has shown that nations open to foreign investment have grown more rapidly than those that attempt to exercise complete political power and control. China is, perhaps, the most interesting example as its economic sector transitions from autarchy to openness while the Communist Party strives to maintain complete political control.

The role of finance in small business development and economic development is not just about how to obtain working capital for new projects and ideas. It is equally important to have financial and legal institutions and a political environment that are conducive to stability and security in order to promote investment and risk-taking.

In the global economy, where all countries are our neighbors, the security and stability of their governments and economies ultimately affect the U.S. economy. It is in the interest of the United States, for our own security, to promote economic development in less developed countries. The lessons learned from our domestic small business development and institution building apply directly to those countries where people, poor and oppressed, turn to violence out of frustration rather than, hopeful and free, turning to innovation out of a sense of opportunity.

The role of finance in economic development is not only about finding efficient ways to put productive capital to work, but it is also about creating the institutions and culture to promote opportunity. As noted economist, Hernando De Soto said, “When people develop a taste for independence and faith in their own efforts, they will be able to believe in themselves and in economic freedom.”

International Financial Services. The global financial services industry is an amalgamation of numerous disparate systems, many of which maintain policies or regulations that contradict the tenets of other systems. In many cases, these contradictions create friction in international commerce, yet in other cases, the strength of the global network of economies can overcome these differences. Here we examine the strengths and weaknesses of a representative sample of international financial services systems to further highlight some of the strengths and weaknesses of the global system.

China. China's financial services sector is the antithesis of efficiency. Despite its state-controlled economy, China still expresses a strong desire for liberalized current and capital accounts, but not an adjustable currency exchange regime. In other words, it wants the benefits of free markets despite its closed political system. Unfortunately, its closed political culture still pervades its "open" economic system, bringing many attendant problems to an immature financial system. China's present economic approach, according to IMF economists, is a textbook recipe for financial crisis.

China is predicted to become the world's largest economy by 2040, but its banking system is immature and the rest of its financial services sector is embryonic. There are three key pillars that comprise any financial system: infrastructure; legal, regulatory and other institutions; and knowledge, education, skill and culture. China's financial industry consists of a large bank sector and embryonic security and insurance sectors. The bank sector needs significant reforms, and China's bankers do not have the experience, culture or discipline to control their lending, especially to inefficient state-owned enterprises (SOE). The government at every level still heavily influences the allocation of capital and every other aspect of financial services, causing major problems with transparency, corporate governance, corruption and culture.

China's entrepreneurial culture is far from developed. For example, China's banks, following government political direction, loaned to SOEs and accumulated stunning non-performing loan (NPL) ratios—over 20 percent by official estimates and realistically near 40 percent according to industry consensus. NPLs have been the Achilles' heel for Chinese banks, rooted in China's state-controlled culture and consequent inability to assess credit risk. It is virtually impossible to be efficient if the capacity for risk-based lending does not exist. The tie to culture relates to the banks' role as an administrative arm of government. Bankers simply never developed the sense of obligation to collect on the loans directed by the government. Likewise, SOEs never developed a sense of obligation to repay loans. Today, China is struggling to infuse those cultures and transform its banking system into a profit-oriented commercial enterprise.

This is vital because the financial system is a critical engine of any economy, and banks must have adequate capital and liquidity to both fuel the economy and absorb financial shocks. High NPL ratios diminish capital adequacy and liquidity, putting the economy at risk of depression. Despite genuine efforts to reform their system in line with international standards, NPLs still vex China's banking system.

In response, China has developed new regulatory agencies and several bank asset management companies to assume the bad loans and improve bank capital adequacy. However, even with a reasonable set of capital reserve and risk assessment standards, training and inexperience in those fields is still lacking. As an example, Chinese creditors conduct field investigations—physically visiting potential credit recipients at proposed collateral locations—to assess risk. This illustrates the lack of even the most basic of risk assessment capabilities common in developed systems like those of the U.S. and Great Britain. Hence, the importance China has placed on partnering with "strategic" investors, not so much for their capital assets, but for their expertise in areas like credit risk assessment. This is a good initial effort and China needs to continue further on this path.

Inexorably linked to its financial system is valuation of China's currency, the renminbi (RMB), and China's exchange rate policy. The RMB is pegged to the U.S. dollar, and is considered by many to be undervalued, giving China an unfair trade advantage. Consequently, there is great external political pressure for China to either adopt a floating currency regime to level the playing field or face protectionist retaliatory measures. China claims such a move could adversely impact its already weak banking sector, destabilize its economy and bring on an economic crisis. This assessment has great merit.

Though there is some validity to assertions of an unfair trade advantage, and there is evidence that China has manipulated its currency for that reason, the impact may be less than supposed. China is a major assembler of imported components into finished products, so its exports have a fairly high import content. Therefore, China's advantage due to undervalued currency is less than it appears because of its higher-than-perceived marginal costs, and revaluing the RMB may not have as large an impact as argued. However, it would help the U.S. economy in other aspects and avoid messy political actions based more on emotion than on sound macroeconomic analysis.

Related to RMB value is the issue that other Asian currencies are also undervalued. As long as China maintains a fixed exchange rate, other Asian neighbors will be hesitant to revalue or float their currencies for fear of the advantage it would give to China. More importantly, speculation about RMB revaluation has sparked large capital inflows. The result is too much capital available to a banking sector unprepared to exercise lending discipline, exposing itself to more NPLs and a weaker financial position.

China's financial situation appears ripe for the classic remedy of rate appreciation. We concur with the suggestion to revalue the RMB by 15 to 25 percent while maintaining tight capital controls and continuing bank reform. In other words, China should delay capital account liberalization until the banks are ready to deal with fluctuations. Many economists recommend this course of action. By revaluing as a first step, China can continue its bank reforms and probably alleviate a source of NPL exacerbation—namely excess capital inflows due to currency speculation. With maturation of its new credit risk assessment regime and capital adequacy standards, China should be able to remedy its banking sector, provided its habit of political lending becomes less commonplace.

Further, revaluation may also cause China's neighbors to follow suit, which could yield some trade balancing in Asia more favorable to the U.S. Such a remedy also provides China some flexibility in monetary policy and affords some freedom for commercial enterprises from the yoke of government control. After bank reform achieves stability and aligns with international standards, China can move to a flexible currency exchange regime, and then to full capital account liberalization.

China's role in the globalized world is significant. All of the issues above affect the confidence of international players toward investing in China. Despite its problems, China is a huge market with burgeoning opportunities, and China's economic success is critical to the world economy. It suffers from many ills attributable to its authoritarian history and its immature market economy. Currently, market confidence is tenuous, and is detracting from China's ability to achieve its economic potential. The more efficient China can become, the greater confidence it will receive from investors. By gaining that confidence and improving efficiency, China, with the patience it has always demonstrated, could develop into the forecast economic superpower. Close cooperation by the U.S. and its Asian allies is essential to help China maintain economic viability and stability. If so, the ensuing growth will bring a great boon to global prosperity, stability and security.

Japan. The Japanese economy has suffered from an annual growth rate of merely one percent over the past ten years, in large part due to a banking system that has remained essentially unchanged since pre-World War II, when businesses obtained virtually all of their financing from banks—that is, banks owned equity in businesses. In contrast to the U.S. business model, which prohibits banks from owning equity in companies and which relies on diverse capital markets, the Japanese model primarily relies on bank lending to finance capital. The model remains intact today.

During Japan's recession of the 1990s, many businesses were unable to repay their bank loans. Because banks owned the indebted companies, they were reluctant to write off the associated NPLs. The problem has continued to persist. NPLs amounted to nearly 280 billion U.S. dollars in 2004. The banks' refusal to liquidate NPLs has disabled them from making new loans, thus discouraging investment and economic growth. In short, the Japanese banking system has failed to provide capital for creating new business and growing existing business, thus contributing to the country's economic stagnation.

The banking system's main players are the nation's commercial banks, the Japan Postal savings bank, the Bank of Japan, and the Financial Services Agency. Japan's commercial banking industry is composed of three groups of institutions: "city" banks—major banks that serve large corporations; "regional" banks, which serve small- and medium-sized companies in a particular geographic area; and "trust" banks—credit unions that provide long-term credit.

Japan's banking institution itself, rather than any particular group of banks or single bank, contributed to the banking crisis. The country's "main-bank" system fostered paternalistic relationships between banks and their clients, discouraging the effects of market forces and stifling new loans to spur the economy.

Japan has made progress in reforming the banking system, including the 1996 "Big Bang" initiative to de-regulate the banking industry. In 2002, Japanese Prime Minister Koizumi promoted a package that forced banks to make stricter assessments of NPLs. In 2004, former banking minister Heizo Takenaka set up a program to sell off NPLs. The government's goal is for banks to cut NPLs from the 8.4 percent in 2002 to 4 percent in 2005. The FSA enacted guidelines to deregulate the banking industry. In April 2005, Prime Minister Koizumi submitted a proposal to privatize the Postal Savings Bank by 2017. The major objectives are to force the postal service to compete on an equal basis with Japan's commercial banks and expand access to capital for these banks. While significant progress has been made in bank reform, much more remains to be done.

The U.S. has a stake in Japan's success and stability – economic and otherwise – because Japan's well-being is crucial to America's national security objectives in

Northeast Asia. Japan is a democratic society and America's most important ally in the region: the countries share a bilateral alliance, and more than 40,000 U.S. troops are stationed in Japan.

In conclusion, Japan has begun to take steps to open its banking system to market forces, to encourage competition and transparency by deregulating the banking business, and to allow foreign banks to compete on a more equal basis with domestic banks. The U.S., which has a stake in Japan's economic stability, continues to assist Japan in reform by means of diplomacy, as well as investment in Japanese banks. Given Japan's tradition for the long-term perspective and penchant for gradual change, the country will likely continue to muddle through the banking crisis.

Korea. In July 1997, the Asian financial crisis began after massive devaluation of the Thai baht. Some estimated that Korean financial institutions lost at least $2 billion between July and November 1997, resulting from stock and bond market collapses in the region. The rippling effect of the crisis, combined with growing deficits and bankruptcies of high-profile corporations, began large capital outflows from Korea. They were directly attributable to loss of investor confidence, especially from the foreign sector. The banking system collapsed when the Korean government devalued its domestic currency in November 1997. Korea's financial crisis encompassed a balance of payments crisis, a banking crisis, and a corporate sector crisis—all the result of previous economic policies that left the system too weak to absorb a shock like the baht crisis.

Starting in the early 1990s, Korea embarked on drastic, rapid, and extensive reforms to modernize its banking system, including financial liberalization and deregulation. After institution of the reforms, the Korean economy began to experience symptoms of financial crisis: lending booms, deteriorating bank lending portfolios, decreasing capital adequacy, insufficient loan loss provisions and increasing short-term foreign borrowing. Even with all these signs of financial frailties, one could argue that the fundamental cause of the crisis was decades of mismanagement of the financial system. This mismanagement resulted from the "catch-up economic model", a program the government set up in the 1960s to accelerate economic growth, which eventually accomplished the "miracle of Han river."

When General Park Chung Hee came into power in 1961, he implemented an economic development program based on a close collaboration between the state (the dominant player), banks, and the chaebols. Chaebols, large mostly family-owned conglomerates, were able to fuel a high level of economic growth in South Korea through aggressive expansion of their businesses. Capital for such expansion was possible through massive chaebol collusion with the government and South Korean banks. Unfortunately, due to these questionable loans and because of unfair intra-group transactions, many corporations were able to expand far beyond what they could afford to invest efficiently. This exacerbated the weak banking position and the decline resulting from the 1997 crisis.

Today, there is still a real lack of transparency and the perception exists that corporate governance is highly questionable. As a consequence, what has come to be know as the "Korean Discount" came into effect. The Korean Discount is an unwritten rule followed by capital providers for investments in Korea. Because of the lack of transparency and questionable financial dealings of the chaebols, access to capital comes with a high premium. It amounts to about fifteen percent of the required money, i.e. if you need $100,000 in capital, the lenders will only provide $85,000 using the Korean Discount. Addressing the corporate governance issue remains a priority for the South Korean government, but it has yet to achieve significant progress in this arena.

On a positive note, the 1997 crisis led to thorough restructuring of Korea's financial system, including reforms in banking and corporate sectors. The effort transitioned to a British-American style system. In 2002, Korea's productivity grew 6% despite a sluggish world economy. Korea's restructuring yielded a more open, less regulated and more market driven. The future is relatively bright with the main concern being the system's ability to adapt to the changing economic environment without limiting growth.

Russia. Since the evolution of modern banking spans more than a century, it is not surprising that the development of a modern banking system in Russia has experienced some growing pains given its fourteen years of development. Despite its youth, Russia's banking system has weathered two storms and has had to mature quickly in order to survive. The Central Bank of Russia (CBR) is taking serious the need for continuous, albeit slow and deliberate, reform in order to raise Russia's system to meet international standards. Like an infant, memories of two specific tumbles are fresh in the banking sector's memory. It is the freshness of this pain that is serving as a catalyst for positive structural reform and is transforming a change in attitude towards banking throughout Russian.

Russia's post-Soviet banking sector suffered its first major crisis in August 1998 when the Russian government "involuntarily restructured", i.e. defaulted on its foreign debt and devalued its currency by more than 50%. This crisis was due to the fact that revenue was less than half of what was required for debt and domestic spending obligations. During this crisis, industrial oligarchs who aligned themselves with President Yeltsin were successful in protecting their interests at the expense of Russia's citizens and foreign investors.

Another mini-crisis in the summer of 2004 was actually triggered by positive steps on the part of the Central Bank of Russia. As a result of an investigation into money laundering a mid-sized Russian bank lost its license and collapsed within days. While the charges of money laundering were legitimate, the CBR's action triggered a mini-crisis due to rumors that other banks would soon lose their license because of anti-money laundering probes. As a result of a run on several banks, one major bank – Guta Bank- collapsed, while another bank, Alpha Bank, distinguished itself for responsibly handling the crisis. During the mini-crisis, the four major owners of Alpha Bank injected $800 million of their own personal liquidity to handle the outflow of cash and went on national television to assure their customers that their money was safe.

Despite the shakeout in the Russian banking industry as a result of the 1998 and 2004 crises, Russia still has 1,300 banks which is considered by Western standards to be 1,200 too many from a regulation standpoint. Fortunately, Russia's debt situation has substantially improved as a result of income and the CBR is taking additional steps to advance reforms to meet international banking standards. In fact, the Russian government has accepted Basel II as the path towards international banking legitimacy.

Current opportunities for foreign banks such as Citibank and Chase Manhattan are still limited to serving large corporate clients. The largest opportunities for growth remain consumer credit and retail banking.

We expect to see the CBR and the Ministry of Finance continue to introduce bank reforms to meet international standards. Specific reforms will be designed to address: transparency of governance and ownership, the introduction of deposit insurance, the introduction of international accounting standards, and the requirement for minimum capitalization to ensure financial strength. It is expected that these reforms will continue to drive weak players from sector through acquisitions, mergers, and additional collapses.

While growth and reform will result in additional pain within the Russian banking sector, there can be not substantial gains without it.

Chile. In the 1970s, Chilean economic reforms removed decades of trade protectionism and reduced the role government played in economic activity. The structural reforms implemented by the government liberalized the economy and transformed the Chilean financial system. During the last 30 years, Chile has faced several crises and challenges derived from both regulatory problems and external influences associated with integration into the world economy. In 1974, the government allowed the marketplace to establish interest rates. From 1981 to 1984, the Superintendence of Banks and Financial Institutions intervened in 14 of 26 banks and 8 of 17 finance companies. As a result, the government implemented reforms that permitted the development of the banking industry, and liberalized financial market operations. To accelerate Chile's integration into the world economy, overseas expansion and foreign direct investment were authorized.

The Chilean financial services industry has numerous participants ranging from government entities to banks and investment brokers. The Central Bank of Chile (BCCh) manages currency stability and issues rules for credit card companies and other similar systems. The Superintendence of Banks and Financial Institutions (SBIF) is an autonomous institution that supervises banks and financial companies. The Superintendence of Securities and Insurances (SVS) regulates stock corporations, third party fund management (investment funds, mutual funds, pension funds, housing funds, and the like), bank and financial institutions, insurance and reinsurance companies and the depository and custody of securities.

As of September 30, 2003, Chile had 26 banks of which 19 were Chilean, 6 were foreign-owned and one state owned. All these banks may receive deposits, provide current accounts contracts, issue bonds, make secured or unsecured loans, grant mortgage loans, carry out foreign exchange transactions, issue guarantee vouchers or deposits, receive securities and documents in custody, incorporate affiliates in the country, buy bonds, buy shares in banks or companies incorporated overseas, and issue and operate credit cards. Private bank institutions reached profitability levels of 20% over the last few years. In general, finance companies can generally perform the same activities as banks, except for receiving current account deposits, carrying out foreign currency or foreign trade transactions, or acquiring shares in companies engaged in the banking business.

In the Securities realm, the government acts as issuer of publicly offered securities, through the BCCh, the General Treasury of the Republic, and the "Previsional" Normalization Institute (INP). Private issuers are stock corporations, mutual funds, investment funds, banks and finance companies, and securitization companies. Securities intermediaries, including stockbrokers and securities agents, conduct activities such as securities custody, third party portfolio management, advisory and specific commission services for the purchase and sale of securities in foreign markets, and the provision of advisory services. Institutional investors are mutual funds, pension funds, investment funds, foreign capital investment funds, housing funds, insurance and reinsurance companies, banks and finance companies. Currently, there are three stock exchanges: the Bolsa de Comercio de Santiago, the Bolsa Electrónica de Chile and the Bolsa de Corredores de Valparaíso.

The Pensions Funds, Life Insurance Companies and the Mutual Funds are the most important non-bank financial institutions in terms of the amount of assets under management, accounting for 90% of GDP. The government's stability and regulation constituency are important factors that not only help the Chilean economy but also help the finance and banking sector. As a result of an open economy and recent trade treaties, the finance and banking sector has become attractive to foreign direct investment, resulting in a large influx of capital into the country. Consequently, the government has been conservative when making economic decisions and major economical policy changes are not expected. The financial system's integration in the global capital markets exposes Chile to externalities like recent Asian, Russian or Mexican crises.

The Chilean financial services industry stands as one of the most mature in South America. Although the industry is still experiencing growing pains from joining the world's economy, and is in a state of flux due to recent regulatory adjustments, it provides the Chilean economy with the mechanism to support its recent period of growth.

Conclusion.

We share the industry's optimism that it can continue to fuel the world's economy, and that it is well positioned to meet today's and tomorrow's challenges. The more efficiently capital is allowed to flow in global markets, the more productivity, innovation, goods distribution, and availability of services will continue to improve our lives. This is especially true in the U.S. financial services industry, where the world's most efficient capital markets have contributed to the world's highest quality of life. Fortunately, as the U.S. markets tend towards increased efficiency, the global markets are instituting like reforms, but are probably thirty years behind. In addition, many overseas systems are encumbered by political systems that inhibit the pace of reform and preclude the necessary institutional development essential to market confidence.

There are many challenges—some significant—for the U.S. and global financial services industries, but overall the financial sector is healthy, vibrant, robust, and moving in the right direction. Increased market efficiency and global interconnectedness are potentially strong drivers of global security. Market confidence in the system provided by transparency, corporate responsibility, and an efficient and effective industry structure promises to keep the system and the global economy it fuels operating smoothly. The government and the industry must remain vigilant in protecting the market confidence necessary to resource a strong economy and industrial base that sustains U.S. national security.

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