

Czech University of Life Science Prague
Faculty of Economic and Management
Department of Economics

Diploma thesis

**The impacts of banking sector malfunction on low
performance of US's economy during the 2008 crisis**

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CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

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DIPLOMA THESIS ASSIGNMENT

Hoang Long

Economics and Management

Thesis title

The impact of banking sector malfunction on low performance of US's economy during 2008 crisis

Objectives of thesis

The aim of this thesis is to analyze the connections, influences and impacts of banking sector's operations on the performance of the United States' economy during the 2008 economic recession.

Methodology

In this thesis descriptive and comparative methods will be used.

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2/2014- practical part
3/2014 conclusions

The proposed extent of the thesis

60 to 80 pages

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Bank, Financial Institutions, Mutual Funds, Financial Authorizations, Credit, Debt, Bad Credit, Bad Lending, Crisis, Recession, Stocks, Leverage, Mortgage, Bubble, Bear Market, Bull Market

Recommended information sources

SOROS, George.: The Crash of 2008 and What It Means, The New Paradigm for Financial Market. Public Affairs, New York, 2009

GREENSPAN, Alan.: The Age of Turbulence. Penguin, New York, 2007

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Declaration

I hereby declare that my diploma thesis which is entitled "The impacts of banking sector malfunction on low performance of US's economy during 2008 crisis" have been developed separately under the leadership of postgraduate work, using literature and other information sources that are cited in the work and listed in the bibliography at the end of the work. No further sources or aids were used than those explicitly stated. As the author of the diploma thesis I further declare my involvement to its creation did not violate the copyright of any other third parties.

Prague, 2014

Bc. Hoang Long

Adknowledegement

Above of all, I would like to express my sincere gratitude to my advisor Prof. Mansoor Maitah for his continuous support of my Master study and research, for his patience, motivation, enthusiasm, and immense knowledge. His guidance have helped me with all of the research and writing conducted in this thesis. I could not have imagined having a better advisor and mentor for my Master study.

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For any errors or inadequacies that may remain in this work, of course, the responsibility is entirely my own.

The impact of banking sector malfunction on low performance of US's economy during 2008 crisis

Vliv nedostatků bankovního sektoru na ekonomiku Spojených států amerických během krize v roce 2008

Abstract

Benefited from the avoidance of war destruction, the abundance of nature resources, as well as prosperity divert from the surplus of capital and innate notorious entrepreneurship, the economy of the United States had achieved splendid outputs prior to the economic crisis in 2008. Since the burst of information technology advancements occurred in late of 1990s the economy has rapidly changed with strengthened interconnection between banks, institutions, and other participations, hence the unique characters of the current financial crisis are unprecedented. This diploma thesis proposes to investigate trends and political acts within or from outside of the nation's financial system which have significant impacts on the malfunction of banking network that consequently leads to the unexpectedly astonishing collapse of several major institutions. By attempts to intervene consolidated data with descriptive and comparative methods, author of this diploma thesis supposes to come up with rigid conclusions on the subjective hypothesis from which possible adjustments to avoid similar cases in the future are derived.

Key words:

Bank, Financial Institution, Mutual Funds, Financial Authorizations, Credit, Debt, Crisis, Recession, Stocks, Leverage, Mortgage, Bubble.

Souhrn

Výhody z bez válečného ničení, hojnosti přírodních zdrojů, prosperujícího z přebytku kapitálu dospívala ekonomiku USA k dosažení vynikajících výstupů před ekonomickou krizí v roce 2008. Velký boom informační technologie v 90. letech zaznamenal v ekonomice výrazné rozdíly s zesílením propojení mezi bankami, institucemi a jiné subjekty, tedy znaky současné finanční krize jsou unprecedentní. Tato diplomová práce se zabývá zkoumáním trendů a politických aktů jak z vnitřního, tak i z vnějšího finančního systému země. Tyto trendy a akty mají významný dopad na selhání bankovní sítě, která následně vede k neočekávané ohromné zhroucení několik významných institucí. Pokus o zásahu konsolidovaných údajů s popisnou a srovnávací metodou se autor této diplomové práce snaží dospět k rigidním závěru, týkající se subjektivních hypotéz, ze kterých je možné se přizpůsobit za účelem vyhýbání podobných případů v budoucnosti.

Klíčová slova:

Banka, Finanční instituce, Podílové fondy, Finanční opávnění, Kredit, Kreditní úvěr, Špatný úvěr z kreditní karty, Špatné úvěrování, Krize, Recese, Cenné papíry, Pákový efekt, Hypotéka, Bubble

List of abbreviations

CDO	Collateralized Debt Obligations
CDS	Credit default swaps
FCIC	Financial crisis Inquiry commission
FDIC	Federal Deposit Insurance Corporation
FOMC	Federal Open market committee
FOR.....	Federal Reserve’s financial obligation ratio
GDP	Gross Domestic Production
The EU	The European Union
The U.S.	The United States of America
SIV	Structure investment vehicle
USD.....	United States Dollar

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Chapter 1: Introduction

1. Justification of choice of the topic

The world today that we are living in is extensively connected. In many senses, numerous of aspects in one's life are changing rapidly under the influence of common trends, which are easily to be identified due to their expansive impacts on the way people communicate, manage time and resources as well as sequence priorities. Among green energy development, demographic shifts of labor force, organic food and ecological issue escalating tension, technology rapid development and its extensive utilization was commonly recognized as the most crucial trend that reshaped the modern world. Computers and modern methods of telecommunication constructed foundation for the new era of globalization, hence the way people around the globe implement their business forever changed. Economies become more depended on each other and relationships between economic parties tightened. Financial sector, included banks, stock markets, financial funds, financial institutions are among economic participants those are most sensitive to these changes. The economic performance of the most advanced economy in the world deteriorated during the end of the first decade in 21th century consequently drives global economy into tremendous turbulences. This deterioration has provoked throughout the world of economists a new debate about the proper role of financial sector in the current world where advanced technologies made economies extensively integrated and dependent to each other and was considered by many as one unique opportunity to observe those relationships and to examine economic theories.

The understanding of how financial institutions' operations affect outcome of an economy is yet a controversy but indeed an essence knowledge that should be the pursuit of any economist.

2. Aim of the research

The presented paper work's purpose is to follow that pursuit of knowledge with focus on banking sector. Its main aim is to study the connection and evaluate influences to the overall performance of the United States' economy that caused by banking sector's operation during the economic recession period. The subsidiary goal, which can be

achieved after fulfillment of the primary goal, is to recommend possible solutions to improve efficiency of banking sector's operation with intention to avoid similar case in the future.

3. Hypothesis and methodology

Mentioned objectives will be achieved through implementation of data collection using theoretical method of economic analysis. Descriptive and comparative methodology will be applied for numeric collected data accordingly with the purpose of illustrating, supporting a hypothesis. Data compilation is contributed by wide range of financial indicators and financial leverages that are characteristic of the bank and commonly used to evaluate a financial institution's performance, based on four primary pillars of profitability, assets, balance and rentability.

Chapter 2: History of the most advanced banking system in the world

1. A brief history of US's free-trade based economy

Many economic intellectuals and experts admire the U.S. economy as one of the finest paradigms ever achieved that its structure and the interconnection of participants are results of years and years of development. The economy's roots trace back to the time period of the 16th centuries with opportunity seekers from Europe. The Columbus's land then progressed from a marginally successful colonial market to an independent economy and finally sky rocketed with industrializations. Along with this evolution in the pursuit of an ideal market place, complicated structures and bonds of complex financial institutions began to emerge.

Inhabited by Native Americans - who are believed to have traveled across a land bridge from Asia about 20,000 years earlier - organized in tribes and, in some cases, confederations of tribes. The economy at the very beginning was an autarchy, with almost no contact with peoples on other continents. This economic system was short-lived and later destroyed by the Europeans who settled their lands. Many economic historians argue that the first footprints from offshore people on the land are of Vikings around the year 1000 and the event went neglected. Most European communities at the time were firmly agriculture based and the backbone economic relationship observed was land ownership. Commerce had not yet assumed the importance that would provide an impetus to the further exploration and settlement of North America.

The common favorite milestone was 1492 when a visionary Italian explorer Christopher Columbus, who was sailing under the Spanish flag, set out to find a southwest passage to Asia and discovered a "New World." Following his path for the next decade, English, Spanish, Portuguese, Dutch, and French explorers sailed from Europe seeking for gold, riches, honor, and glory. But instead of that sparkling expectation, they faced North American wilderness with more hampers than gold, so most did not stay. The people who eventually did settle North America arrived later. Jamestown, the very first permanent settlement what was to become the United States was built up in 1607, by a group of men from England. The monument located in the present-day state of Virginia.

1.1. Colonization

Numerous of early settlers left their home land with that much of reasons. There are admired self-disciplined English capitalist wanted to escape religious persecution. Others are risk takers who believed that piety and profits went hand-in-hand and therefore were merely come looking for business ventures. Colonies derived from these dividends of reasoning. At the beginning, these colonial prosperities were resulted from fishing, trapping and furs trading. Inhabitants in general were self-sufficient and lived primarily on small farm. Very few and occasionally trades happen mostly in North Carolina, South Carolina, and Virginia, were dominated by necessities and virtually all luxuries were imported in return for tobacco, rice, and indigo (blue dye) exports.

Industries grew along with the development of colonies. A large number of specialized gristmills and sawmills appeared. On demand, fishing fleets and bigger trading vessels were made in American newly established shipyards. The also built small iron forges. Regional specialized development slowly reveal pattern of the economy. “The New England colonies relied on ship-building and sailing to generate wealth; plantations (many using slave labor) in Maryland, Virginia, and the Carolinas grew tobacco, rice, and indigo; and the middle colonies of New York, Pennsylvania, New Jersey, and Delaware shipped general crops and furs.”¹ Together with the withdrawal of European investor, these newly evolved industries became the privilege of only domestic entrepreneurs with high level of return that helps to boosted up standards of living in general, in some cases, even higher than in Europe itself.

By the time when North American colonies were ready to have their own independent government, both economically and politically in the late 1700s, disputes over taxation and other matters were being discussed with England with the hope that with necessary adjustment applied, somewhat modification of England long based and practiced regulations can be the right answer to Americans to address their problems. Hence exits the thread of an all-out war from the British against the independence of band of colonies.

¹ US History, Volume I: Pre-1492—1865

1.2. The New Nation's Economy

Still praised from the first adoption as an economic charter in 1787 until present-day for its ingenuity, the U.S. Constitution was in many ways a work of genius. The constitution suggests a single unified market with elimination of whatever kind of tariffs or taxes applied on interstate transaction. Interpretation of the federal government to the operation of the economy is in many ways a past over from the example of England. The government within its authority can regulate international and interstate commerce by setting laws, monitoring monetary policies, operating of public services, running governmental institutions and at a surprisingly early recognition, controlling regulations regarding procession of intellectual property.

Alexander Hamilton, one of the nation's first secretary of the treasury, suggested a strategy of economic development in which the state's infant industries would receive supports from the federal government through subsidies and imports protective tariffs. Also to assume the colonial public debts incurred in previous costly Revolutionary War, he forced the federal government to create a national bank. Despite of the skepticism of many American farmers that a national bank would serve the rich at the expense of the poor, the first National Bank of the United States was chartered in 1791.

1.3. Movement South and Westward

In 1793 a technology breakthrough in harvesting cotton by Eli Whitley, a machine that allowed highly efficient separation process of raw cotton seeds and other waste setup foundation for the next economy boomed burst. More lands brought by planters in the South triggered the nation's West expansion, together with cheap slave labor, these families gain their enormous wealthy.

When Andrew Jackson, the president idealized by many citizens from various walks of life, got elect for his second tenure of presidency, he gained consents from Congress to suspended Andrew Jackson's bank's charters from being renewed. He openly opposed his successor's ideology of the National Bank function, which to his believe, was favored interests of the East. His definitive interpretation shook the country's financial system and caused business panics.

Extensive international and internal trading gave momentum for capital recirculation within the newly emerge U.S economy. Investments harbor innovation and led to the

creation of new industries and new investing opportunities. As market getting bigger and bigger, people urged for transportation and logistics development. Together with the discovery of crude oil, steamboat creation, railroad construction, opened vast array of new territory for development and propelled the economy forward.

1.4. Industrial Growth

The Industrial Revolution first evolved in Europe in early 19th centuries, and then rapidly placed its influences to the United States. By 1860, when Abraham Lincoln was elected president, 16 percent of the U.S. population lived in urban areas, and a third of the nation's income came from manufacturing. The Northeast was the only area in the country with access to urbanized industries. Leading sensation was at cotton processing, the manufacture of shoes, woolen clothing and a fraction of chain manufacturing machinery construction.

Large part of the labor force was new immigrant. They arrived mostly from Europe at the rate of 300,000 annually, resided and worked in cities in the East coast, while the South remained focusing on rural segment and relied on the North for manufactured amenities. This was the time when the economy revealed one of its very first interests conflict. Economic interest of the South, including slavery, could and only be assured when protected by the federal government with control from Southern people. The formation of Republican Party, which represented the industrialized North, really putted pressure in the matter. Hesitant in talking but more consistent and determined on policy was the Republicans president Abraham Lincoln at that particular period of time.

Northern victory in the U.S. Civil War (1861-1865) diverted the nation's economy and also its future. Prohibitions came into practice terminated the use of slave-labor. This abolishment cause profitability of cotton planation plummeted creating the edge for- previously powered by the war-Northern industries spread wider and more rapidly into almost every aspect of the nation's life.

1.5. Inventions, Development, and Tycoons

Given momentum by the Civil War and the wide spread spirit of entrepreneurship which for long had become American well known character, the nation's economy skyrocketed. With the groundwork laid out for industrial businesses, together with inventions and abundance of capital at the same time with day by day new discovery of oil, coal, and

gold mines causing such profound structure changes in the economy, or in more common term: the second industrial revolution. Series of breath taking innovations were introduced afterward, affecting people daily life in numerous ways. The typewriter was developed. Refrigeration railroad cars came into use. The telephone, phonograph, and electric light were invented. And by the dawn of the 20th century, cars were replacing carriages and people were flying in airplanes. Mass-production methods were developed, as industry grew larger, pioneered by Henry Ford's moving assembly line. Workers were paid more due to his/her increasing productivity.

More and more financial empires appeared as people started to idealize the businessman stands behind them. Their enormous success came from many market segments, and mostly due to their gifted ability to foresee the long-range potential for a new service or product. Names like John D. Rockefeller, Henry Ford, Jay Gould became national sensation, they were fierce competitors, very consistent in their pursuit of wealth and power. They set out frameworks and inspirational examples that embrace the idea of entrepreneurship, which later turn to a symbolic national character. While European at that time hesitated and looked on commerce with disdain, Americans were much more enthusiastic with the idea of money making through exchange and joyfully lived the higher living standard.

While some of these tycoons exposed perhaps the most flamboyant of entrepreneurs, lavished his/her assets in luxuries like yachts, treasures, art from Europe, parties and gamble... others are in contrast. Men such as Rockefeller were known for his puritanical quality by remaining their humble character and life-style. They devoted vast proportion of their fortune to charity in the sense of responsibility to others.

1.6. Government Involvement

In the early years following its establishment, the federal government and politicians remained distant and tried to avoid too harsh intervention toward private sector's activities. The concept of laissez-faire was known as doctrine opposing government interference in the economy except to maintain law and order. However this attitude slowly faded as more and more classes of workers, small businesses and farmers asked political leaders to help them out of unequal competition with large businesses latter in 19th century. During the first half of the following century, congress enacted and putted in to force the new law

regulating railroads² and law against industrial monopoly³. However these regulations were not strongly enforced until Theodore Roosevelt's and Woodrow Wilson's presidential tenure, with the creation of many today's U.S. regulatory agencies.

Many of today economic relationship between participants of the economy can be traced back to the New Deal era. Within this legislation the influence of federal government toward segments like agriculture, banking and welfare is extended. Minimum wages and working hours were also established together with programs and agencies that is the backbone of today economy, such as; the Federal Deposit Insurance Corporation, the Social Security system, and the Securities and Exchange Commission.

1.7. The Postwar Economy: 1945-1960

The United States' economy had been through the best scenario that could happen to any post war economy. Despite of the skepticism of a subsequent decline in military spending might eventually cause the economy to plummet, consumer demand actually increased and fueled up the economic growth in that period. The automobile manufacture industry astonishingly converted to satisfy the market demand on home vehicle. Aviation and electronics took steps in transforming peoples' life. Easy accessed mortgage market meets thousands of veterans came back from battlefield urging for a place to settle with their family added to the expansion of middle class American.

The government meanwhile recognized the urge to restructure monetary system and the United State's critical role and their utmost long-term benefit of spearheading the formation of IMF and WB, reshaping and ensuring international monetary system.

Domestic businesses entered a period which dominant trend was merging and acquisition. Enormous national conglomerate were created during this time period. American workforce has changed dramatically. In the 1950s, the number of employees working in service segment rose to equal and eventually surpassed their peers in manufacturing. And as in 1956, the majority of American workers were addressed as white-collar rather than mere manual labor. Unions achieved long-term labor contracts and many other benefits for their members.

² 1887 (the Interstate Commerce Act)

³ 1890 (the Sherman Antitrust Act)

Farmers, on the other hand, faced with difficult times. Increased productivity leads to overproduction of agriculture products, as farming became mass-produced and technologies revolutionized. Small family farms find it increasingly difficult to compete, and more and more farmers leave the land. As a result, the number of people working in the agricultural sector specified in farming, which in 1947 peaked at 7.9 million, started to gradually decline to a record low of 3.4 million farmer in 1998.

1.8. Years of Change: The 1960s and 1970s

The 1960s and 1970s was a time of major political and economic changes. New emerging countries strike with one object in mind to overthrow the current government. Other country gathered their inner economic strength to rivaled United States, predominant idea of military expansion favored in the pervious decade as the only means of growth slowly subsided and replaced by economic relationship.

As President John F. Kennedy sought to speed up economic growth by increasing government spending and provided more tax favors, and he pressed for medical assistance for the elderly, aid for inner city, and increase funding for education. Kennedy also strengthened America's space exploration.

Money supply for American's presence in Vietnam exhausted the United State's economy by the end of 1960s. What started as a minor military act under Kennedy had quickly and uncontrollably evolved into a major military involvement spreading several presidency tenures, and simultaneously forced the Americans to cope with both offshore war and the war on poverty at home. Addition to that turmoil, oil embargo from the Organization of Petroleum Exporting Countries pulled crude oil price rapidly higher and energies shortages puzzled domestic businesses, raised inflation and consequently resulted in high figure of unemployment and imbalance of trade deficit.

Jimmy Carter, president from 1977, tried to use intensive government spending to strike high unemployment rate and economic weaknesses. He also introduced voluntary wage and theory of inflation control by price guidelines and harvested some initial successes implementing them. Another significantly effective but less dramatic policy acts against inflation involved the deregulation of several transportation industries which were before tightly regulated by fares and commute regulations from the government. But arguably the most recognized move against inflation came from the Federal Reserve in 1979 to

immensely cut short the money supply and eventually caused interest rate to climb up. The economy consequently fell into a deep recession soon after as consumer spending and business borrowing rapidly decelerated.

1.9. The Economy in the 1980s

Follow up policy changes made in the late 1970s, the nation endured a deep recession in 1982 with large amount of established business that went bankrupt. Farmers struggled with plummeting crop prices, and decreasing exports with high interest rates. But while economic adjustments for a sharp slowdown weren't favored by majority of the economy participants, against critics and hatreds they indeed did protect the economy from a further recession. Started in 1984, inflation was more stabilized and easier to control, sales and public consumption slightly recovered, and the United States entered a new period of sustained economic growth.

The economic program of the President Reagan (1981-1989) based on the theory of supply-side economics, which widely supported tax reduction with benefit of using private saving to paddle the economy. The theory went as lower tax rates will encourage people to work harder in a longer period of time, and in turn as a consequence public saving and investment will rise, eventually results in more capital inflow for expanding industries and stimulates economic growth. While the Reagan tax cuts mainly serve to benefit the rich, the economic theory behind the argument was that benefits from tax reductions would eventually extend to vast population with lower incomes due to the fact that higher investment will lead to new employment opportunities and higher per-hour wages.

Despite of all the efforts to built up steam for the economy, still there were many other problems the nation's authorities have to deal with in the late 1980s, when the nation's mid-section struggled to make living while suffered catastrophic droughts, almost immediately followed by severe flooding. In other case, some local bank faltered from bad lending procedures know as saving and loan associations shook banking sector. The afterward shut down of many of these institutions had added immense costs to the federal government.

1.10. The 1990s and Beyond

The 1990s with the collapses of the Soviet Union and Eastern European communism had brought a new era of expansive cross-borders commerce and trade opportunities. Revolutions in computing and information technologies provided the edge for the development and appliance of a variety of sophisticated new electronic products. The newly spawned computer hardware and software engineering industry revolutionized the operation of numerous establish industries and at the same time gave birth to many others, new materials manufacturing, for instance. The economy was growing rapidly, and corporate profits as well as the stocks market skyrocketed. Inflation fluctuation restrained at low level combined with low unemployment reading provided thrust and confidence to boost performances of many economic sectors, adding substantially to the wealth of many people.

Birth and death of many industries resulted in remarkable changes in labor force structure. There had been a historical trend of declining number of people those who committed their career with agricultural activities. Americans once again observed the declination of number of farmers in their work force, but this time with unprecedentedly high rate. A small portion of them landed jobs in manufacturing industries, others cramped in service sector.

Many economists share a common belief that the global economic integration benefited everyone, however dislocation in the world economy within this particular period was also vivid. People who employed in the bursting high-tech and computing industry found themselves fared quite well, in the mean time competition from offshore countries dampen wages of their peers working in traditional manufacturing industries. Faltered Asia economy in the late 1990s sends shock waves throughout the world's financial network and also jeopardized American domestic economy. Still, with the momentum given by newly emerged industries combined with well-known entrepreneurship, American's businesses had expanded the economy for a longest period of peacetime, a complete decade continuously since 1991. Within this period of time unemployment peaked at just 4.1 percent in November 1999, the lowest number recorded in almost 30 years. Consumer prices index (CPI) slightly rose by 1.6 percent in 1998 (the smallest changes since 1964) and only faster increase by October 1999.⁴

⁴ An out line of the U.S economy – Christopher Conte - 1981

Beside of impressive numbers and indexes that went along with the rise of the United State in the world economy, this period of thrive and prosper provided conditions and opportunities for the consolidation of “world class” financial system. Although the appearance and formation of this system was dated far back in the past at the beginning of the nation, but critical components such as financial institutions, banks, funds, market places, market regulators, legislative platforms and so forth haven’t been properly regulated as well as effectively operated until the 1900s. More importantly before the 1990s the bonds between those financial parties haven’t ever been consolidated in such rapid manner with edges provided by the superior of technologies development and global integration. The advance of the nation’s financial system gave momentum and more capital for other fundamental industries and provided a solid underpinning for subsequent development.

The majority of America kept in their mind current of thought in the early 2000s that recessions and economic downturns were belonged to the past, but shortly afterward they had to face with upsetting figures from the economy performance in addition to massive destruction from the historical terrorist attacks. Since December 1999, net job creation stand at zero, in the analogy with five decades prior to the time mentioned, none of which had job growth less than 20 percent.⁵ Output of the economy lost the flavored momentum from the 1990s, increased at lowest rate since the 1930s.

Adjusted for inflation, incomes generated by median household in 2008 were much less than what they were able to accomplished in 1999. Since the first time such a set of information was compiled in 1962, this was the first decade in which the declination in value of this particular index observed.⁶ In another record, American’s household net worth after adjust for inflations also dropped in compare to the previous five decades. Eventually this is the numeric result of a fairly long time of bad lending practices that led to an economy heavily relied on borrowed money. The widely discussed housing bubble poured trillions of dollars into real estate investment and thus distorted the first part of the decade economic activities. People started to rumor the enormously profitable housing market and borrowed risky money to buy assets that are in many ways beyond affordable

⁵ RITHOLTZ Barry, *The U.S Economy’s Lost Decade*

⁶ The United State Census Bureau

to them. Total household debt, according to the Federal Reserve peaked at almost fourteen trillion dollars in 2008.

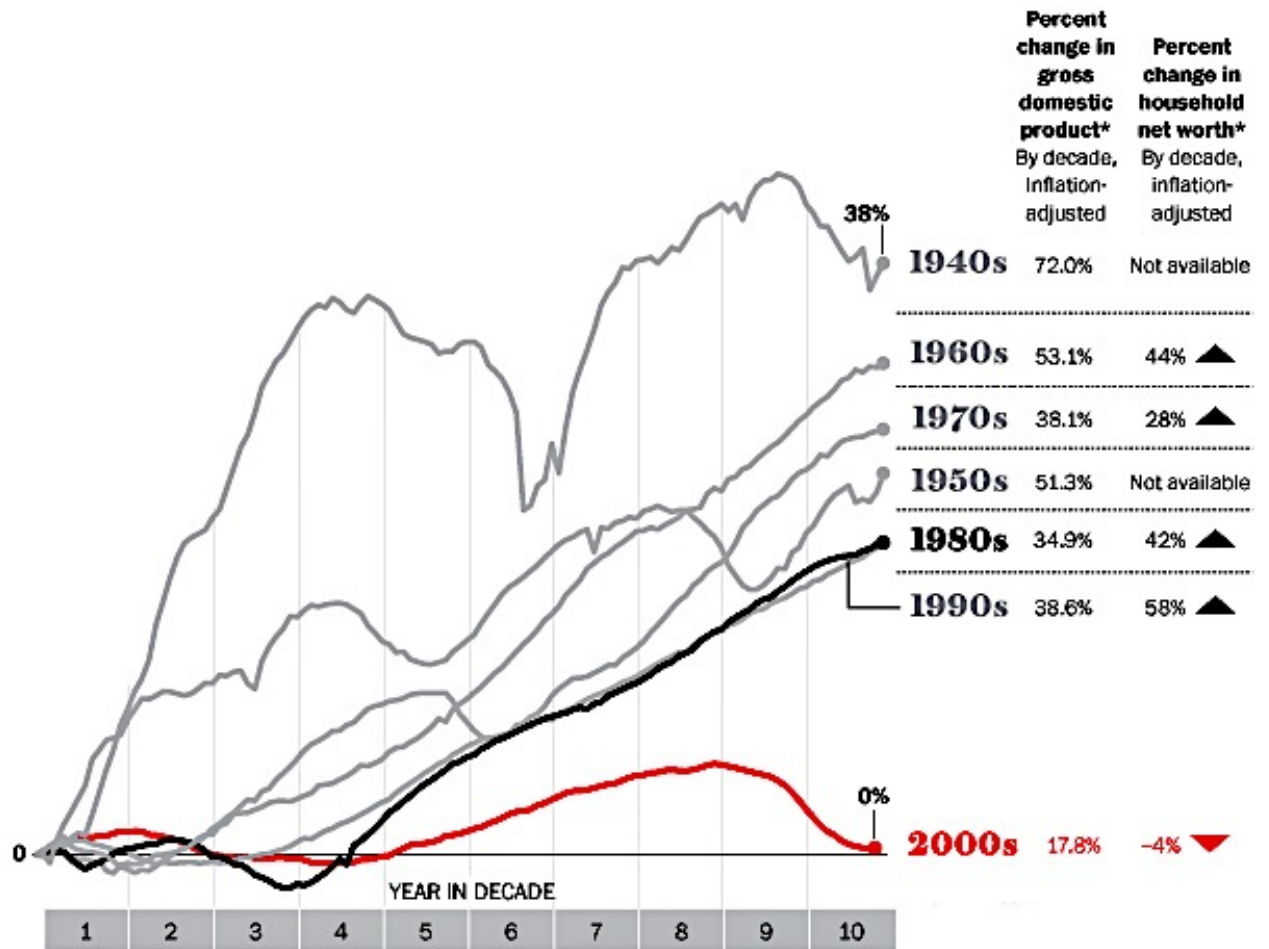


Figure 1: Jobs growth in the United State by decade, percent change in total non-farm payroll environment

The economic experiment eventually came to an exceptionally bad ending, with the burst of housing and credit bubble catastrophically diminished many corporation’s market value, wiped out several largest and highly respected financial institutions and pushed unemployment rate to a record high level of 10.2 percent in the third quarter of 2009. Information about the meltdown widespread and caused a new wave of financial crisis in many other leading countries in the world.

2. Banking sector, the birth and the development

This section is intended to study the emergence of the United State banking sector as well as its connection with the nation's financial system, the one that was recognized as "world class" for its extensiveness and having massive influence upon the performance of the world economy.

2.1. Definition and major functions of a bank

There are various ways to determine what is called a bank and what it does, varied from country to country. Among them some are more widely used and agreed on than others.

Under the English common law, a bank is defined as; "A financial institution and a financial intermediary that accepts deposits and channels those deposits into lending activities, either directly by loaning or indirectly through capital markets."⁷

2.1.1. Business model

A bank has a many ways to generate profit. The most common method is via interest applied on capitals lent out to customer, others include transaction fees, fees from advisory services and incomes from investment activities, foreign exchanges, etc.

The difference between the expenses banks have to pay for the borrowed capital and the loan interest rate is referred as "spread" which is the most traditionally fundamental source of income for a bank. Heavily relied on borrowed capital to be able to operate, bank's operation is therefore cyclical and strongly influenced by supply and demand of public saving, which in turn, varied with the economic cycle. Fees and incomes from advisory services are more stable revenue stream however relatively smaller than the incomes from lending money and smooth flow of revenue are critical for banks to finance their activities.

2.1.2. Functions

⁷ English Court of Appeal

There are countless functions of a bank that have significant impacts to the performance and development of an economy. They are divided into two groups, economic functions and practical functions.

2.1.2.1. Economic functions

A banking system in general and any distinctive bank regardless of its operational and financial objectives, has two core economic functions, which are operator of the payment system and the economy's financial intermediation.

In many aspects, the first function of a bank as an operator of a payment system is crucial to the operation of any economy, in other words, a modern economy cannot exist without an effectively functioning payment platform that stand in-between businesses and their clients. Modern methods of payment such as checks, LCs, bills of exchange provide capital liquidity to the global market. Mean while personal banking services namely saving accounts, online banking payments, and credit cards gives edges to increase commercial transactions between domestic economy participants those who are often at the end of a trade lines and play the role as the main drive of the economy. The fact that all of the above mentioned economic transactions are based on an intermediate value measurement knew as money, which is issued and guaranteed in term of value by the bank, thus give a government bank yet another credit as a conservator of the economy. Most common forms of money like Federal Reserve Notes and coins are just legal tender. People in a country accept and exchange their currency and currencies from other nations with regard that the bank represents for the government who protect the value of their legal tender. And that medium of payment is in any case, recognized and protected by law or legal system to be valid of meeting the requested financial obligation.⁸

The second economic function of a bank is the economy's financial intermediation. Banks use their credibility to attract capital logged in public saving and relending or investing that money with determination of seeking profitability. In term of business practice, banks are just the same as other common enterprises with its shareholders and investors who initially accumulated the start up capital

⁸ "[Legal Tender Guidelines](#)". British Royal Mint. Retrieved 2007-09-02.

needed to open business. Banks generate their profit via the spread between the sum charged on borrowers and expenses paid for depositors who possessed a saving account. This second economic function is crucial for the prosperity of the economy in the long run since it helps to finance start-ups, embraces the idea of entrepreneurship as well as established companies that are seeking venture capital to expand their operation.

2.1.2.2. Practical functions

Beside economical functions, one other way to study banks operation is to look at the practical functions they have, briefed as follow:

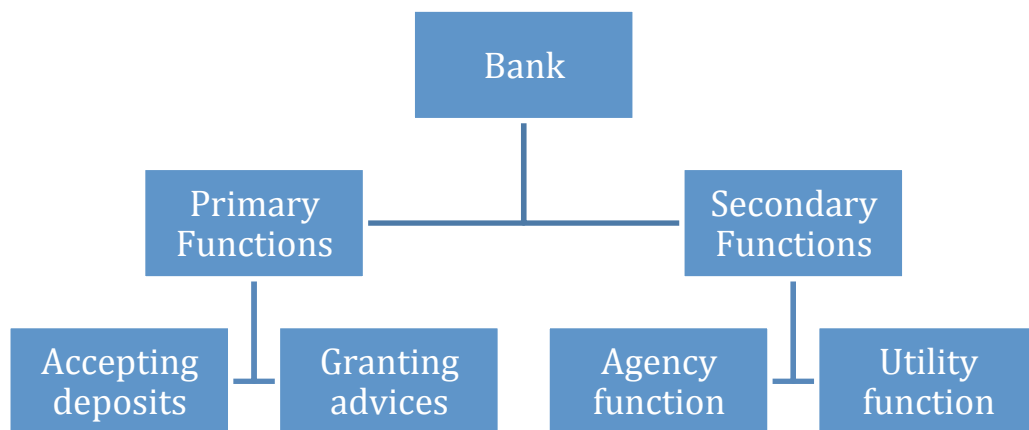


Figure 2: Hierarchy of bank function

a. Primary function banks are:

- Accepting Deposit

One critical and foremost activity performed by banks are accepting deposits as the main stream of capital inflow that support other followed up banking activities.

- Saving Deposits

This is deposits encouraging the savings habit in public with low interest rate. Withdrawals of deposits have certain restrictions. This account is consistent with wages and salaries earned and can be opened in a single name or the name of the joint.

- Fixed Deposits

Predetermined sum is deposited at the same time at a specific period. Higher rate of interest is paid in accordance with the change in time deposits. Withdrawals are not permitted before the end of this period, and this account is designed for those who are in surplus of funds.
- Current Deposits

Entrepreneurs often operate this account. Withdrawals are allowed freely without conditions. No interest is paid, and service fees included. Account holders can receive the benefits of an overdraft facility.
- Recurring Deposits

Salaried workers and small traders run this account. A certain amount is deposited in the bank periodically. Withdrawals are allowed only after maturity with a higher rate of interest.
- Granting of Loans and Advances

Loans from banking system advance the business community and other members of the public. The rate charged for borrowing money is higher than what is paid for. The difference in interest rates (lending and deposit rates) is profit.

 - Overdraft

This financial benefit is given to account holders those who don't maintain a single account. All items are made in the current account. Interest is calculated on the actual amount recovered. A line of credit granted against collateral securities. Entrepreneurs and firms are sanctioned when objective to this account.
 - Cash Credits

Customers are allowed to credit ceilings on specific predetermined cash. It can be given to all current accounts as well as for those who have a bank account. Cash Credit accounts are maintained separately. Interest is calculated on the amount withdrawn exceeds the limit. Cash credit is given against the security of property and / or tangible guarantees. Progress occurs over a longer time and a larger amount of loan approved overdraft

- Loans

It is normal for a short period such as a year or medium term says a period of five years. Nowadays, banks lend money to make the long-term benefits. Compensation can be in the form of contributions spread over a period or in a lump. Interest is calculated on the actual amount sanctioned, whether or not revoked. The interest rate may be slightly lower than what is charged for overdrafts and cash credit. The loan is secured normal for the tangible assets of the company.

- Discounting of Bill of Exchange

The bank may lend money by discounting bills or buying the currency bill in both foreign and domestic exchange markets they then pay the amount of the bill in the drawer or payee of a bill reducing costs by subtracting the normal price. At maturity, the bill is presented to the drawee or acceptance of bills, and the money is collected.

b. Secondary Functions of Banks

Beside of primary functions explained above banks also perform secondary functions also called non-banking functions.

- Agency Functions

The bank acts as an agent of its customers.

- Transfer of Funds: Funds are transferred branch to branch and place to places.
- Collection of Cheques: Banks collect money of the cheques and also bills of exchange by accounting practices with their customer's accounts within the system.
- Periodic Payments: On behalf of their clients and act under their instructions, banks systematically conduct periodic payments concern bill, rental payment, etc.
- Portfolio Management: Banks also implement typical portfolio management practices namely acquirement and selling shares or debentures on behalf of third parties' account.

- Periodic Collections: On behalf of their clients and act under their instructions, banks systematically collect salary, pension, dividend, etc.
- Other Agency Functions: Banks also under the law and on behalf of its clients act as trustees, executors or financial advisers. In many other cases, banks act as representatives of their customers.
- General Utility Functions

Many general utility functions are provided as adjusted services by banks, namely; drafts issue, letter of credits issue, locker facility provider, underwriting of shares dealing in foreign exchange, adviser and conductor of project reports, social welfare programmers and other utility functions.

2.2. Types of bank

Commercial banks mainly related to the management and deposit withdrawals, and the granting of short-term loans to individuals and small businesses. Consumers mainly use the bank to conduct their daily fundamental transaction with savings accounts, certificates of deposit and occasionally for home mortgages. The second type that is investment bank primarily aimed at providing services such as underwriting and reorganized the company to institutional clients. While traditionally many banks remain both real world offices and online presence, there are more and more banks nowadays focus solely on their online presence. Online only banks often give consumers higher interest rates and lower costs. Convenient interest rates and fees are the determining factor in the decision of consumers in the bank to do business. As an alternative to banks, consumers can choose to use a credit union.

3. US's banking sector's elements and participants

3.1. Board of Governors

Board of Governors, based in Washington, DC, provides leadership for the system.

The first and most important organization of the system is the board of Governors also known as the Council of the Federal Reserve, the national component of the Federal Reserve System. Board of Directors consists of seven governors who were previously delegated by the president and confirmed by the Senate. The tenure of a governor is 14

years. The President and Vice President shall be appointed for a term of four years with possibility of reappointed limited time.

The responsibilities of the board are to guide, to analyze the national and international economic and financial situation. The Commission decides on the current issues to consider, such as the law of the banking sector consumption and the actions of the monetary policy, commercial policies.

Board of Governors also has a wide supervisory control in the financial services sector, management of certain consumer protection, and supervision of payment systems in the country. The top council monitor the activities of the reserves banks, approved the recommendations of the chairman as well as of other members of the board of directors. Approvement of the board is a requirement for the validation of rate changes recommended by the Reserve Bank.

The Board finances its activities by assessing the Federal Reserve Bank and not by appropriation from Congress. An independent accounting firm holds responsibility of auditing an statement of financial position issued annually, and these accounts could also be auditted by the General Accounting Office.

3.2. Federal Reserve Bank

Under the general supervision of the Board of Governor, a network of 12 Federal Reserve banks and their 25 subsidiaries constructed the Federal Reserve System. The Reserve Bank is the agent of the central bank.

Each reserve bank serves 12 regions of the country, and all but one have other offices in their districts to provide services to certificated institutions and the public. Bank is named after the location of its headquarters.

Reserve Bank provides services to banks, the U.S. Treasury Department, and indirectly to the public and also called the "banker's banks" partly because they are in charge of storing currency and coins as well as monitors transaction processing and electronic payments. The Reserve Bank also supervises commercial banks locally. Treasury's payments, investments and cash management was among responsibilities that be handle by Reserve Banks as bank for the U.S government. They also conduct researchs

regarding economic issues from regional to international level as a critical tool that offer governmentors and policy makers a correct neutual view point about the current conditions of the economy. Presidents of those Reserve Banks also present results from researchs their bank have collected at the meetings to members of the Federal Open Market Committee.

Districts banks are satelies of Reserves Bank, they operate under the supervision of their local Reserve Bank and represent interests of their districts. The Reserve Bank's board of directors monitor all categories of activities of the District bank and since each District bank is unique in their interests and characteristic, directors from the board provides local business experience and leadership. The president and first president of the Reserve Bank are nominated by the board.

3.3. Member banks

About 38 percent of 8039 commercial banks in the United States maintain membership of the Federal Reserve System. National Bank is a mandatory o member, chartered by the state banks may join if they meet certain requirements. Although banks cannot trade their FEDs stocks, member banks are required to maintain a obligatory 3 percent of their capital as stock in their Reserve Banks.

3.4. Other American depository institutions and individuals

In addition to the participating banks, about 17,000 other depository institutions offer the American people checkable deposits and other banking services. Depository institutions include commercial banks, saving banks and credit unions that are not officially a member of the Federal Reserve System. These organizations also have access to the services of the payment system.

3.5. Federal Open Market Committee

Federal Open Market Committee, or FOMC, is the monetary policy maker of the Federal Reserve. This department is responsible for the formulation of a policy to promote price stability and economic growth. In short, the FOMC manage the money supply of the nation.

The Board of Governors, the Chairman of the Federal Reserve Bank of New York, and chairman of four other rotating Reserve Banks take part as voting meber of the FOMC.

All the presidents of the Reserve Banks discuss policy decisions made by the FOMC. Chairman of the Board of Governors leads those discussion.

One every eight years FOMC meets in Washington D.C to forecast the outlook for the U.S. economy and monetary policy options.

FOMC is an example of interdependency is built into the structure of the Federal Reserve. Expertises of all Reserve Banks is combine in the decision making process of the FOMC, this helps to provide local perspective to every policy voted by the FOMC.

3.6. Advisory Councils

The Board of Governors is assitted by three advisory councils which are he Federal Advisory Council, the Consumer Advisory Council, and the Thrift Institutions Advisory Council. These councils formed by members from the 12 Federal Reserve Districts. Each Reserve Banks also have their advisory committees as well, regarding thrift institutions, small business and agricultural matters.

Chapter 3: Economic analysis of the 2008 crisis

1. The role and changes of investment in the economy and capital distribution of the market prior to the crisis.

Most of the improvement in U.S. productivity came from an increase in know-how, contrast to many belief it is not from an increase in the capital invested per worker or an increase in the education of the workforce as well as other sources to improve productivity. Improving productivity secret rose twice as fast as they had in 1970 and 1980.

It's hardly just a coincidence that the increase in productivity coincided with development of such technologies such as Internet marketing and email. Most ideas come from a combination of the ideas of the previous novelty. The more communication, the more likely people are to explore the relationship between the values of ideas. It's no surprise that the trade center of Athens, Florence, London, Hong Kong, New York has been at the forefront of creative along the story ideas. Internet is the communications center today.

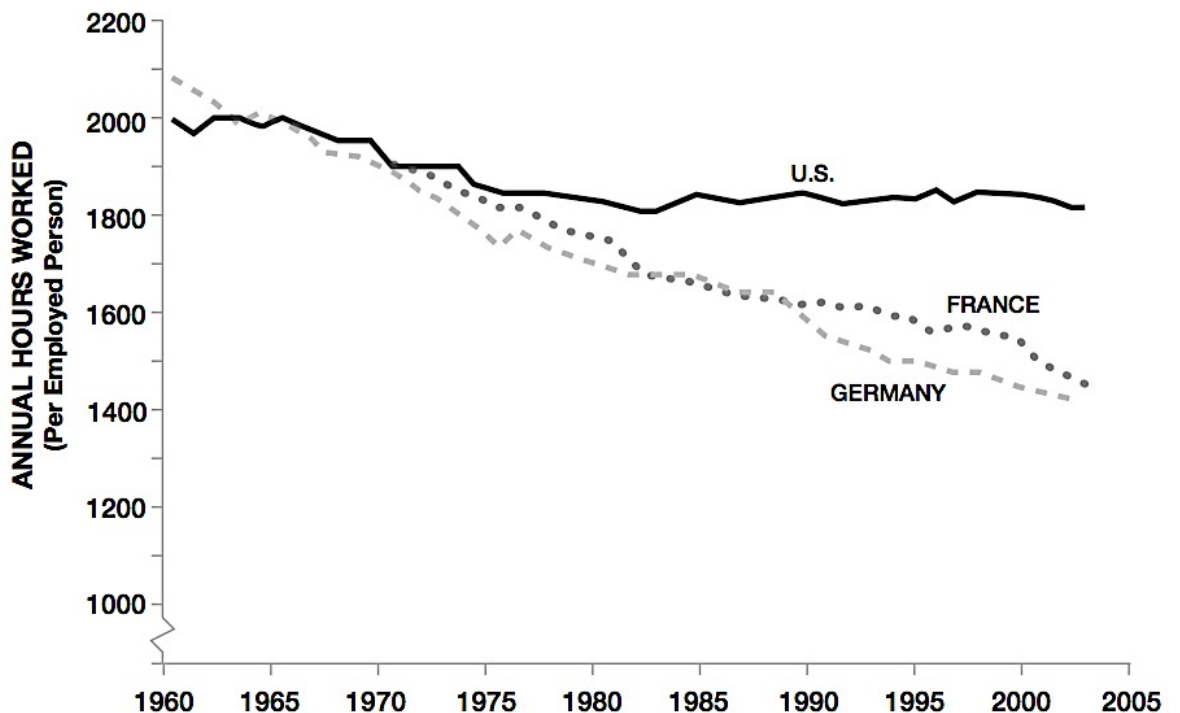


Figure 3: U.S. Hours Worked per Worker Relative to Other Developed Economies

Innovation like computer technologies rapidly increase U.S. total productivity

began to improve compared to Europe and Japan consider both of the two countries have access to the same technology. They have worker with the same education level. With a higher savings rate, Germany and Japan certainly has capital advantage to invest marketing and use of innovations. Both countries, however, chose to pour their capital into the United States. While American workers work hard for innovation, their colleagues in other continent like Japan and China slowed their work effort with higher competition yet with their competitive advantage rooted from technologies advancement from America.

Despite the seems to be abit unfair to American worker however, not only U.S. productivity increased but income has increased too. Since 1980, the average income has grown for each demographic of the U.S. workforce. At the same time, the composition of the demographics of the workforce in the United States has moved to lower incomes

DEMOGRAPHIC	1980*		2005		REAL INCREASE IN INCOME
	PERCENT OF WORKERS**	MEDIAN INCOME	PERCENT OF WORKERS**	MEDIAN INCOME	
White Men	42%	\$30,700/yr	37%	\$35,200/yr	15%
Non-White Men	7	19,300	12	22,300	16
White Women	43	11,200	39	19,600	75
Non-White Women	8	10,200	12	16,500	62
Total	100%	\$25,000/yr	100%	\$25,700/yr	3%
1980 Income @ 2005 Demographic Mix		\$19,600/yr		\$25,700/yr	31%

*2005 Dollars

**Includes Part-time Workers

Figure 4: Effect of Science Test Scores on Productivity

Average earnings increased by 30 percent on average across all demographic groups. Wages reflect productivity. This suggests that productivity growth may exceed 30 percent compared with seems to be due to the reported data do not account for demographic changes to lower productivity.

And the income growth as reported here doesn't include benefits, which have gain in value about 15 percent since 2001. This fact can be translate as productivity and the real economic income it produces have grown significantly more than the 30 percent growth in

cash incomes. The growth of average wages and benefits does not reflect the average wage growth, including growth in expenditure was significantly higher. Half of the jobs created by the United States from 1983 to 2005 was created at the upper end of the salary scale, doctors, lawyers, managers, scientists, etc. Before 1983, this work realizes a 23 percent of the labor force.

Skeptics said the development of the economy from an increase in consumption once financed by an unsustainable increase in debt, obviously cannot continue forever. They noted that the rate of household saving has fallen to record lows, while households accumulate a growing mountain of debt. The economy fueled by debts temporarily inflated the value of assets, and when those debts stop increasing, asset prices fell, causing the financial crisis.

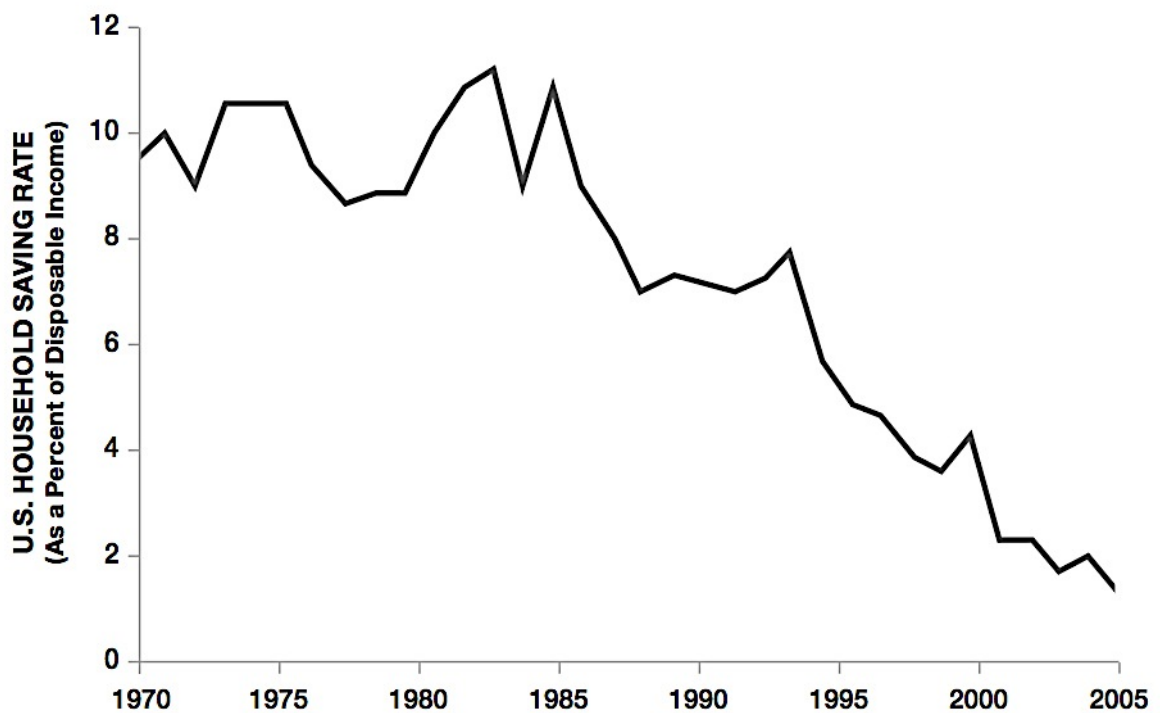


Figure 5: U.S household saving rate

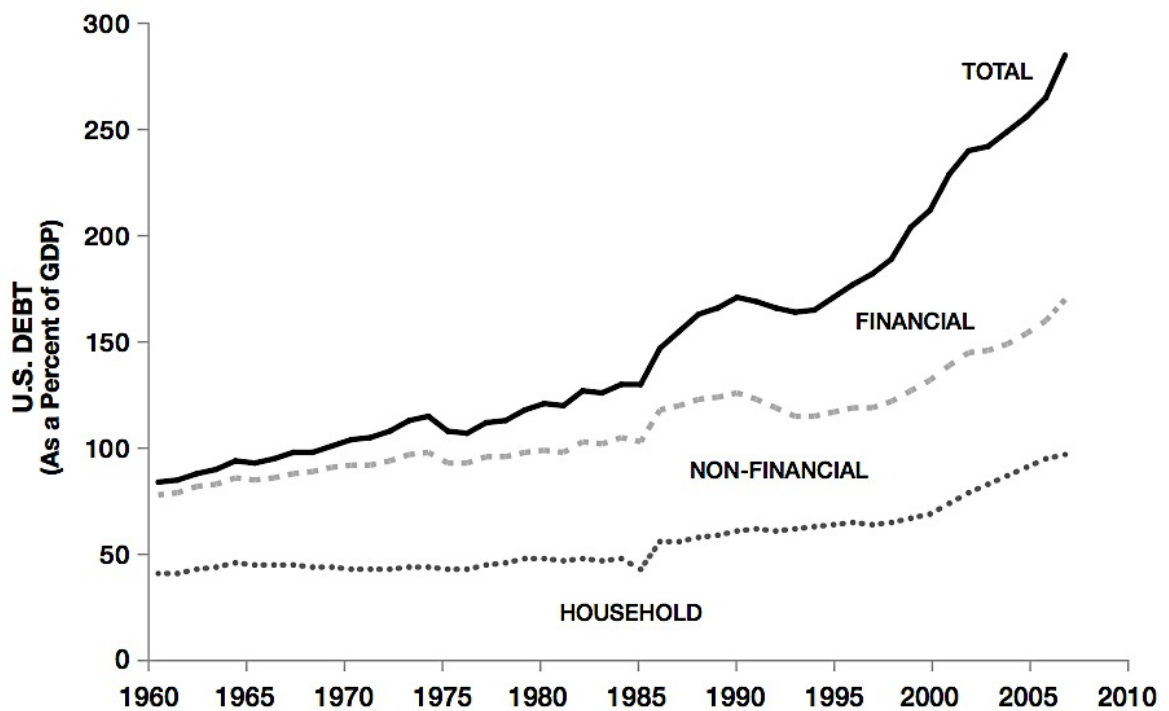


Figure 6: U.S debts relative to GDP

At some point, people have to recognize that consumption does not increase productivity, nor increase wealth as only investment and innovation success can do such things. Since 1991, the market value of U.S. companies has increased from 60 percent of GDP in the history of more than 100 percent, even in value after the economic crisis. Investors clearly believe the value of the company has increased. The bitter truth is that the market value is fickle and does not always reflect the real value. But the market value has proven to be the most reliable indication of the value we have.

Before the housing bubble, people accept as if it were a foregone conclusion that real estate, both residential and commercial, at any price, captures a significant share of the wealth and income of their tenants. As more tenants thrive they compete against one another for the most sought-after locations, and bid up prices. Despite the prosperity of the United States growing faster than the rest of the world having higher wages, housing prices in the U.S. increased more slowly than most other countries. And the house just doubled in value since mid- 1990s to a peak in 2007, while the Dow rose 370 percent over the same

period of 3800 in 1995 to 14,000 in 2007.⁹ Oil prices have increased sevenfold, from \$18 to \$125 per barrel. Ironically, the house is one of the worst performing asset classes.

Despite low savings rate, the value of household assets, in fact, even at the lowest point of the financial crisis, gains 60 percent since the early 1990s. Even with the crisis, the European sovereign debt looming on the world market, the value of household assets rose again immediately after the financial crisis at the same level reached the peak of the Internet boom in 2000.

We can say in all of these cases there is too much debt, economic proponents often add up total financial liabilities of households, businesses and public debt. This action double the total sum of debts in comparison with the total amount due if we put them in a closer examination. A bank, for example, borrows from depositors and lending to homeowners. That creates two debts-loans from bank depositors and bank housing loans. Just add the bank loan, and the homeowner with the right amount of outstanding debts doubled.

Modern finance created many new financial platforms that make this error even worst. Today, in the simplest case, the owner of a house provides broker a mortgage to borrow from a bank loan for a venture investment, financial institutions then provide a vehicle that securitizes loans and collects the needed funds from money market provided by other depositors. At the end of streams of financial actions a single home loan ends up with a possibility of five alternative intermediaries. If more debts is needed, an increase of two to three times is obtained, obviously, but nothing changed. Total wealth is still equivalent to a house. And finally, there is only one owner of the home mortgage loan. When the Federal Reserve creates the quarterly balance of the U.S. economy they don't replica make this mistake. It is a reasonable grid anyway.

In fact, total U.S. debt, with an overlap properly peel off, rose less than most advanced economies in the world. In the United States, government, business, banking and the combined household debt is 290 percent of GDP, about the same as the combined debt of the German savings, which is 285 percent of GDP. France has grown its combined debt

⁹ "House of Horrors, Part 2," McKiney

to 340 percent of GDP, and Japan and the United Kingdom to nearly 500 percent of GDP.¹⁰

Proponents who bare in mind the “too much debt” idea also tend ignores the fact that interest rates have dropped significantly over the last thirty years, making the cost of debt decrease. As a result, debt has logically risen as the cost has fallen proportionately. A not so popular way yet more accurately measurement of household debts is the Federal Reserve’s financial obligation ratio (FOR), which measures both mortgage payments and rental payments (as well as property taxes and auto and consumer debt payments) as a share of disposable income. The FOR rose only from 17 percent in the 1990s to 18.75 percent at its peak in 2007, about a 10 percent increase.¹¹ This is obviously no way at the arlarming level of increase as described by critics those who are too driven in to gross debt.

Unfortunately, finance as an product of human imagination, does not necessary obey the law of physic. In the real world, we cannot move everything from the future to facilitate spending today, but an household can easily borrow borrow against its future earnings from another household, spend too much today, and go broke in the future trying to pay back the loan. Some families did just that. They use no-money-down subprime mortgage lending value greater than at home and spent the proceeds on other things. Now they are carrying debt and reduce consumption. But households can only facilitate their borrow if in the same time there is another households decide to reduce consumption of themselves to become lender. In general, the two must balance. If the first households fail to pay back their first loan, the second borrower suffers. Again, future profits and losses to balance and there is no free lunch.

American in fact decided to borrow from foreign lenders, the economy happens to participate in the same situation described aboved for an individual who decided to consume rather than invest their income and eventually face a poorer future as a nation

¹⁰ Alexander Kowalski and Ilan Kolet, “Productivity Is Not the Savior You Think It Is,” *Bloomberg BusinessWeek*, October 24-30, 2011: 15–16.

¹¹ Federal Reserve Board, “Household Debt Service and Financial Obliga- tions Ratios,” December 13, 2011, <http://www.federalreserve.gov/releases/housedebt/default.htm>.

(borrowing from China, for instance). But the money the U.S have borrowed from foreign lenders is relatively small when compare with the value of their assets increases. Since 1991, household assets increased 40 trillion dollars, while household and government debt has risen by only \$15 trillion. Eliminating the double counting effect explained above, showed household assets increased more than fourfold compared with foreign loans.

1.1. Equity Investment

It is widely recognized that the relationship between investment and productivity has been strong, and that relationship has remained in an extremely wide range. The country's GDP per capita corresponds to the amount of capital invested per worker. At the top of the spectrum, the United States and Japan invested heavily and as a result, GDP per capita is high. At the bottom, the underdeveloped economy like Nigeria less capital investment per worker, GDP lower productivity per worker. In the U.S., workers exploit with backhoe's body. In Nigeria, people still mostly dug with shovels.

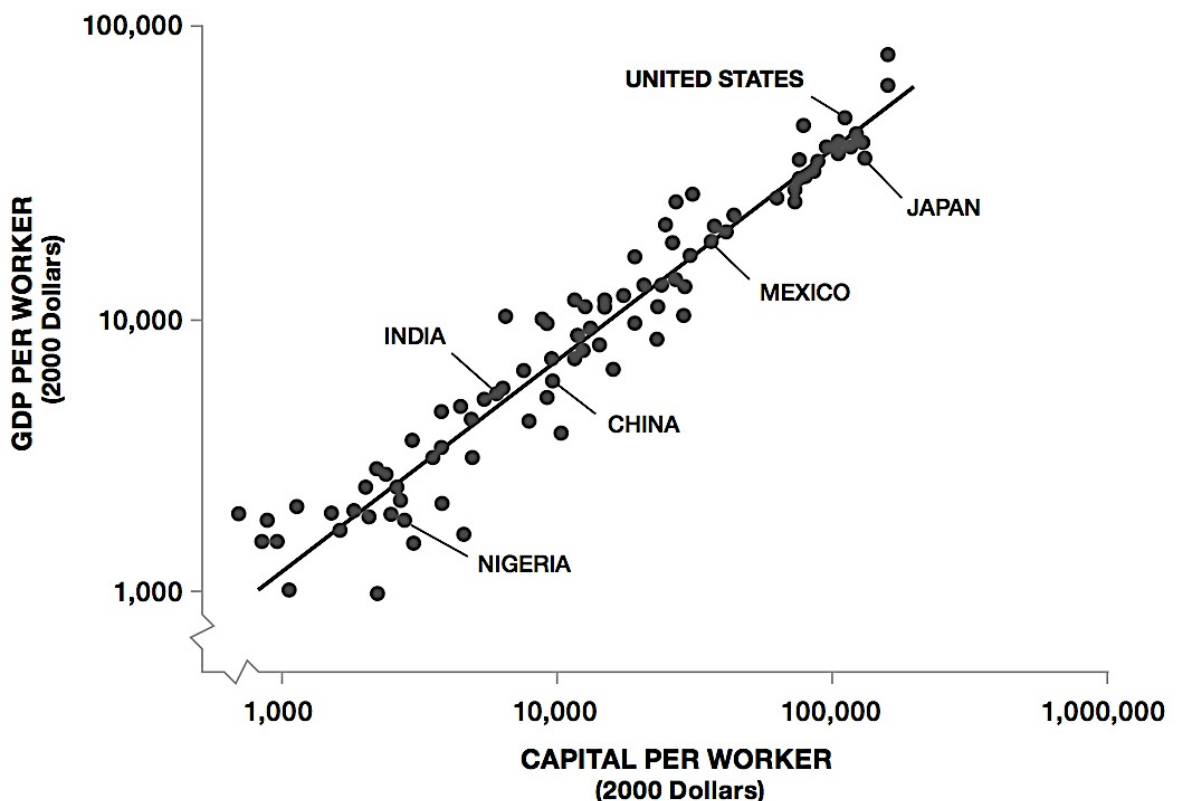


Figure 7: Effect of Investment on Productivity

A series of investments continue to drive productivity due to investment and risk-

taking, as a whole, is far below the optimal level. The work of Nobel laureate Edmund Phelps presents convincing empirical evidence that investment is a chronic shortage. Phelps's argument, very simple, said the economy all of its production to increase investment is allocated, but not the production of consumer goods, while consumption in the entire production will stagnate quickly. An economy somewhere in the middle of the chart provides enough capital for worker to maximize all future consumption. At the optimum, the ratio of investment per employee reasonably would not change, but the investment per worker moves away from the optimal point, which would be optimal. To maintain the optimum time, we should get a real return equal to the growth rate of the labor force in the highly developed economy by 1 percent to 2 percent per year. At that rate of profit, the amount of capital per worker will grow according to the labor force and maintain its optimum speed.

The U.S. trade deficit faces surplus in the short term in accordance with the underwriting of risk-averse funds available for investment. However, the United States continues to face a shortage of capital to ensure the risks associated with the investment. The risk of adverse equity financing in the short term will only invest if subscribed equity risk. As a result of these cases, it is more accurate to say that the United States and the rest of the world are no shortage of equity and risk-taking rather than a lack of funds more broadly. Thus, equity in the United States and around the world earn about 7.5 percent per year, indicating that the equity risk and subscribes missing and suboptimal.

It is not surprising to find justice in chronic shortage. At any given time, an economy that only a certain number of workers trained, the limit of the secret state, and a fixed amount of tangible production capacity. Resource availability limits production. Production limits can produce either consumption or investment. Because of these limitations, an economy must reduce consumption to raise capital to finance. Unfortunately, most employees either choice or necessity, consume almost everything they earn, no matter how high profit available for capital investment. They fiercely oppose cutting their consumption, and vote for politicians promising to improve their consumption by providing public services and benefits beyond the tax range. The investor gains wealth by taxing capital instead. Reduce public spending constraints on public spending and higher consumption. For anti-labor limited consumption reduction in available capital to

increase investment. The chronic shortage of social to private equity opportunity is ripe for the picking.

That does not mean that investment and risk-taking is a way. An economy can invest and take less reckless risks in the field of housing investment and mortgage risk, for example - but there are other parts of the economy or economy as a whole beyond the optimum time. Risks and benefits may be difficult to estimate. So, at great risk to the population, there will always be some risk reward mistakenly expect more is likely to happen. This group can continue to make risky investments far beyond the optimal point, even if the risks increase and profits decrease.

Government subsidies can also lead to taking risks beyond the optimum point. Government flood insurance cost benefits, for example, stimulates the construction of flood that might otherwise be uneconomic. Government Mortgage Subsidies artificially inflate the demand for owner-occupied housing, especially poor households who otherwise represent credit risk of uneconomic. The allocation of investment subsidies for high-risk mortgage sector, for example - with the total cost of investment in other areas.

Regardless of the presence of suboptimal bag, economies, including the U.S. economy The lack of large common shares and venture capital undersigned owners. As a result, increased investment and great risk to the performance benefits, on average, through the increased productivity and economic growth.

1.2. Effects of monetary policies

Printing money does not stimulate the economy by magic. Just do not take risks. Monetary policy allows the risks of lack of credit limits and probable risk of developing economic surplus available to generate further growth. The owners of the future cash flows (assets) can try to increase the level of risk that is separated by its future cash flow on stage so he could change the low risk of first a - friend - pay period (debt) with savings risk averse for the current production savings (savings income). Low risk merchant cash flow using the production (or the proceeds from the sale to buy real) risk that the owners do not like the current production risk will not go away. Bringing production storage to extend the use of the economy. The granting of credit is just a byproduct of this increased risk.

If the amount of credit available is limited, the risk taker cannot make deals with risk-averse savers because they cannot increase the number of first-to-be-paid batch of asset return. Credit constraints could happen if banks lent all deposits. Printing more money increase lendable deposit. Credit difficulties can also occur if the bank has used all its own resources to meet the capital adequacy requirements of the government for their current loans. In that case, the bank will not have the capital needed for extra credit. Lower interest spread banks earn short-term loans increased by short-term savings and long-term loans. This increases bank profits and grows their assets. Reduce the credit crunch grows the economy, if the economy is capable of producing higher demand.

Increase or decrease in optimism tends to create self-reinforcing feedback loop that monetary policy can allow or restrict. Since risk is increasingly optimistic development, property values increase. As asset prices rise, investors and consumers become more willing to take more risks. The willing to take risk of the economy expands the capacity of development. As developers take risks, expand the economy. When the economy is expanding, the values of investment and property development increased relative to the economy.

This information is often self-reinforcing feedback monetary policy wrong as its economic development, but this is not the case. If the Fed reduces restrictions on credit expansion, when there is unmet demand for credit increased risk taking will sit unused money velocity will be slower. This happens in a recession, when investors and consumers to develop risk aversion and store production. In such circumstances, reduce credit restrictions have little or no impact on the economy. Keynes described this as pushing on a string.

Seen from this perspective, printing money doesn't magically stimulate the economy. Only risk taking does. Monetary policy allows risk taking to grow when a lack of credit limits risk taking and the economy has excess capacity available to produce the increased growth. An owner of future cash flows (assets) may seek to increase the amount of risk he is taking by splitting his future cash flows into tranches so that he can exchange the low-risk first-to-be-repaid tranche (debt) with a risk-averse saver for the saver's current production (the saver's income). The seller of the low-risk cash flow uses that production (or the proceeds from the sale to buy production) to take risk that the current risk-averse

owner of the production is unwilling to take. Putting that hoarded production to use expands the economy. An expansion of credit is merely a by-product of this increase in risk taking.

If the amount of available credit is restricted, risk takers may be unable to make these trades with risk-averse savers because they cannot add to the amount of first-to-be-repaid tranches of financial assets. Constraints on credit may occur if banks have already loaned all the available deposits. Printing money adds to lend-able deposits. Constraints on credit can also occur if banks have used all their equity to meet the government's capital adequacy requirements for their existing loans. In that case, banks would not have the equity necessary to make additional loans. Lower short-term interest rates increase the spread banks earn by borrowing short-term savings and making long-term loans. This increases bank profits and grows their equity. Relieving credit constraints will grow the economy, if the economy has the capacity to produce the increase in demand.

Increases or decreases in optimism tend to create self-reinforcing feedback loops that monetary policy can either allow or restrict. As risk takers grow increasingly optimistic, asset values rise. As asset prices rise, investors and consumers grow increasingly willing to take more risks. As their willingness to bear risk expands, the economy's capacity to take risk grows. As risk taking grows, the economy expands. As the economy expands, investment grows and the value of assets rises relative to the economy.

This self-reinforcing feedback loop is often mistaken as monetary policy itself growing the economy, but this is not the case. If the Fed relieves constraints to the expansion of credit—when there is no pent-up demand for increased risk taking—credit will sit unused and the velocity of money will slow. This happens in recessions when investors and consumers grow risk-averse and hoard their output. In such circumstances, relieving credit constraints has little if any effect on the economy. Keynes described this as pushing on a string.

If the increase in consumption and investment is constrained by the production capacity of the economy, expansion demand will simply increase production rather than quantity. Under these conditions, if the Fed reduces credit constraints, increases the risk of participating in only pushing against capacity constraints and rising prices. The investment

can grow, but only when consumed reduced to compensate, and vice versa. Inflation mainly compensate and neutralize threats to keep the economy in limiting equilibrium. But inflation redistributes resources from harmful and unpredictable ways, but not necessary to increase uncertainty and destruction of value. Foreign capacity can help reduce manufacturing limitations, but some of the added value of the risk of losing the growth of overseas economies instead of the economies in the country.

Monetary policy affects the economy through the channel has little meaning other, mainly by extending the differential in interest rates between long term and short term, which could create a risk of property distribution of savers with risk aversion. The unexpected inflation can redistribute property, primarily lenders and investors to borrowers and consumers and the private sector to the public sector. But the fact of the matter is: printing paper does not grow the economy and increase the risk. If simply printing money can grow the economy, people have to print a lot of it. Innovation is no different from any other investment. Perhaps there is greater randomness in the production of new ideas than there is in growing corn or manufacturing widgets; but, on average, the key to finding good ideas is to have many ideas. The quantity of ideas, both good and bad, comes from systematic investment. As with any other investment, the economy must divert scarce resources—in this case, talented labor—from production for current consumption to the search for and implementation of new ideas. Much of this investment results in failure.

Innovation is no different from any other investment. Perhaps more randomized in the production of new ideas instead of corn or articles produced large, but on average, the key to finding a good idea is to have many ideas. The number of ideas, both good and bad, comes from investment system. As with any investment, the economy has to divert scarce resources from production to consumption today to find and implement new ideas. Much of this investment is in failure.

Antiquated accounting eclipse the relationship between investment and innovation rather than as an expense leverage innovation investment, especially the cost of failure. This creates the false impression that innovation randomly bubbles in the normal course of things, without the need to invest. But more careful accounting shows that, in fact, U.S. business investment has increased significantly with productivity.

From this perspective, it seems clear that the growth of productivity and the value of U.S. properties since the early 1990s come from the increase in investment relative to consumption. Finally, we have achieved the difficult goal of improving the old fashioned way by earning it. Business stored on behalf of the family. Business and economy transfer resources from production to consumption to investment in innovation.

2. The role of trade deficit

Investment U.S. has increased while household savings fell to almost zero before the financial crisis. How is that possible? A number of factors continue to allow the growth of U.S. consumption and investment despite capacity constraints and near full employment before the crisis. Most importantly, the U.S. economy reduces costs and transfer resources to the industries of business investment and domestic service. The most profitable business growth, productivity soared, and the value of U.S. assets to GDP rose. Accounting masks the increased investment.

When the U.S. economy moving production abroad, the trade balance would have required the U.S. to produce goods for export. Instead of selling to overseas manufacturers to the trade balance, we have to sell the property. This also allows the U.S. to use the remaining resources to increase production of domestic investment. Also, the redistribution of resources released by the service sector in the country.

The increased investment and higher productivity grow assets of the economy faster than the sale of service and assets for the economy to buy and consume import. While the economies of a large external debt, assets owned by Americans grew. Property values of homes increase. While we continue to produce goods faster we sell, trade deficits can grow forever. While U.S. continues to gain a higher rate of return on investment at cost to cheap foreign loans, this may still be the case, and likely to remain so in the future near future.

As the official measure of household saving excludes the added value of unsold properties, the house seems to have taken foreign manufacturers to finance increased consumption overseas. In fact, households owned companies have invested in the name and a value greater than the result. The most profitable large companies pour large amounts of money on investments. Statistics economic backwardness this investment

increases. Real Estate captured a significant market share of this growth as the tenant has grown more prosperous and offer prices of real estate.

Anyone who sees the value of productive innovation rather than consumer goods and savings of not buying the production of consumer goods can not see that in the long run, our design work from production to consumption to increase investment rather than reducing domestic employment. In fact, the increase is so great that the U.S. It has been used tens of millions of immigrants and foreign workers. Haven't ever any economy has done more for the poor. In a recession, when there is a pause on risk and rising unemployment and reduced wages, skeptics may mistakenly believe that aliens stealing our low cost manufacturers jobs and our wages reduced.

Despite increased investment, productivity and growth before the financial crisis, skeptics said that the trade deficit reflects an increasing lack of U.S. competitiveness. Far from showing a competitive deficit, trade facilitates increased investment in U.S. As economy moving production investment, it should increase the external debt to sustain consumption. If not, it will have to reduce consumption to finance investment.

2.1. Offshore capital and risk-averion effects

The concern that the export surplus like China does not want to lend money to the United States acknowledged unintentionally contradictory scenario that China still has a trade surplus in order to maximize employment by how to buy U.S. assets instead of products, but no longer want to own U.S. assets. Not willing by exporters to keep dollar assets in dollars will create a corresponding decrease in the value of the dollar or U.S. dollar assets. Dollar assets are sold at a discount would represent a further discount for goods previously purchased by the United States. The weak dollar will increase the price of its exports and reducing demand for them in the future.

In addition, the export surplus may request the purchase of shares rather than debt. If we have to sell equity instead of debt to finance the increase in consumption and investment, we will be able to reduce your investment risk. It makes no sense to sell the benefits of investment to fund further investment. It would be more reasonable to reduce investment to finance increased consumption. Investment Development is only valid if the

investors retain ownership of future profits.

The U.S. economy has benefited from the risk aversion of investors offshore. A priority for equity rather than debt limits the beneficial effects of trade deficit of the U.S. economy. Instead of selling the property in its entirety, including the rights to any growth in the value of property reinvestment, owners of U.S. properties (homes) were able to borrow assets and maintain their upward trend. If there is no pressure to sell, the right not to sell reverses its market value. In normal case, the desire to make loans may decrease the market value of debt and rising interest rates. But with the risk-averse exporters are willing to buy a trade surplus less risky U.S. assets, the debt has been paid, in which interest rates despite loan growth rate. Having the right to keep increasing its market value, investment demand and increased consumer response.

Risk aversion by foreign investors is rational. Foreign investors face considerable difficulties arising from asymmetric information. The relationship and the context provided a surprising amount of information. While foreign companies can hire local talent with experience through a series of acquisitions, the best talent is difficult to recruit and retain, and often

Instead of competing with national investors buy properties, foreign investors have reasonably chosen to remain on the front line loan repayment rather than on the back of the line as equity investors. This fit better for the benefit of investors and allowing foreign investors piggyback on knowledge of local investors.

The U.S. company, by contrast, have preferred to invest in foreign debt investments because they bring valuable brands as Coca -Cola and McDonald and technologies like Intel and Google them. Obviously, they want to continue to increase the use of overseas expansion of its intellectual property. The wealth of households in the United States also has foreign capital investments to diversify portfolios greater equity of your existing. Other countries have capitalization smaller than their economies capital. Relatively poorer households prefer low-risk debt than equity.

A capital flows with risk aversion, however, is not without consequences. Foreign investors have been reluctant to risk have mainly invested government guaranteed debt.

The financial needs of the government leads to lend, not the needs of foreign investors. As the trade deficit increases, demand is increasing for a fixed amount of debt guaranteed by the government is low risk caused yield losses. Is likely to export surplus continued buying government guaranteed debt, although the relatively low output of the same, to maintain the lowest rate of change in order to keep their prices competitive goods. This needs to harmed investors do not like driving other risks and its capital in the private sector of the economy risky. Without government guarantee, investors do not like risk shortening their loan to reduce your risk. If the government takes the risk aversion operations capital growth will slow and unemployment will rise. If we spend to buy goods and benefits produced in the foreign country for the U.S. manufacturing to buy assets instead of the goods, then they have to take the proceeds from the sale of assets and used for consumption or investment. If people do not invest or consume the product of the American, people left without jobs.

Furthermore, the use of short-term funds to finance long-term investments is risky. In 2008, the default risk of spreading panic withdrawals subprime spinning wildfire has all the infrastructure of our financial insolvency. One of the only ways to minimize this risk is to short to sit idle capital available for withdrawals in the event of a panic attack. As a result of the financial crisis, money is now sitting idle and unemployment has increased.

Legislators have also used the abundance of capital to develop public spending, especially benefits. Loans for people in lieu of taxes are almost no difference in the economy. Taxpayers must reduce consumption or investment to purchase government debt. When politicians can increase costs without taxing or borrowing directly from citizens and foreign investors eager to purchase debt guaranteed by the government of risk aversion, have left little to limit government spending.

With the advent of Internet, the productivity of our scarce resources important talent, increased investment, innovation and productivity growth and rising asset prices relative to output prices. High expectations and asset prices has spurred investment and consumption. Without the availability of a foreign power wants to delay the sale of U.S. assets, U.S. households can not sell assets to finance consumption without lowering asset prices. If they do, the investment consumption as the economy approached full utilization is reduced. Instead, much cheap labor and capital at lower interest rates; asset prices rise, and reduce

production costs. This allows the development of investment and consumption. Goods abroad low cost have contributed to capacity building. The growth of the service economy in the country relative absorbance higher values idle resources - doctors, lawyers, teachers, drivers, clerks and assistants. Far from showing a lack of competitiveness, facilitate trade deficit increased U.S. competitiveness and is necessary for growth of the U.S.

With unemployment above 9 percent in the aftermath of the crisis, the people can ask whether the work would be greater if they do not move manufacturing jobs overseas, but this case is not the case. Economy before the recession will be less, and the unemployment rate would be worse now. Increasing productivity in manufacturing has accounted for two-thirds of manufacturing jobs lost since 2000. Increased productivity was the main reason for the slow growth in production, not imports. Labor Redistribution other sectors of the economy, the sector has grown faster than output, its value has increased relative to the cost of goods produced abroad. Today, only 10 percent of manufacturing jobs in the U.S. A small amount of growth in other sectors of the economy can offset a decline in production. Again, the United States grew 60 percent since 1991 while Europe and Japan grew only 20 percent to 30 percent.¹² Without this growth, unemployment would have been higher before the Financial Crisis. If anything has restrained lower-middle-class wages, it's likely an abundant supply of cheap immigrant labor.

Without this redistribution, withdraw from taking risks in the aftermath of the financial crisis could increase unemployment even higher a little groundwork. Reduced manufacturing jobs were more pronounced in this recession than in other sectors of the economy. Without work and professional management, not including production workers, 5 percent in 2008, a period when almost everyone lost their jobs after the crisis. Simple labour job production fell by 12.5 percent during the same period. Not only does the economy in Europe, in Japan than in the United States fell during the recession, with more rejection of small employment base and slower recovery. In a world full of seventy-five cents an hour labor, we can not increase prosperity through increased production back to return to the farm or settlement back the clock to improve productivity.

In the long term, the only way to support unskilled in the country, in a world flooded

¹² http://www.mongabay.com/reference/country_studies/japan/ECONOMY.html

with unskilled labor for production and redistribution of successful exit employees to other branches of our economy back wages. Then we had to walk up the demand in the sector of the economy in our country by increasing prosperity by continuing to innovate successfully. 10 percent of employees generate nearly half of the national GDP to create more value through increased productivity and risk tolerance. And we have to recruit idle resources to expand the ranks of the most efficient workers. Group must continue to innovate successfully, developing domestic investment and consumption and increasing pressure on domestic wages. Unfortunately, a global surplus of unskilled workers will be overseas manufacturing goods and production will become increasingly smaller percentage of jobs than us. Fortunately, it was small. Innovation is the only way to keep our economy in full use. And that's the only way to return to the heat level of employment and the growth of our economy reached before the financial crisis.

But let face the facts. An economy whose production skews toward investment is a more cyclical economy and more vulnerable to the ebb and flow of investor confidence. The increased use of risk-averse capital for the economy vulnerable risk aversion panic withdrawals. Failure to use these funds, however, the economy and slow growth shrinks.

2.2. Labor redeployment costs

The company assumes worker is subjective to the entire cost of human suffering due to layoffs. Perhaps the company will decide fairer society if employers bear the full cost of the shots, as they do in many other countries. Japan expects large enterprises to minimize layoffs, with lifetime employment. European governments for the company calculate the cost to society of layoffs. The United States, it is only a quarter to half of their annual salary. That makes the cost of European workers sacked 2-4 times than firing American workers.

As with the low cost tractor, displacing workers have a low cost alternative, redundancies and redeployments that create value for consumers, not producers, mainly shooting. Consumers capture the values of existing products and ultimately lower prices of products new value. Competition among manufacturers to avoid captures value from cost reduction. Production passes lower costs to consumers through lower prices.

Ironically, unless the company to capture the benefits of layoffs, manufacturers try to avoid layoffs and cost is not an issue for the social benefits, especially cost more pressure

on the dismissal of the government. One way to avoid the higher costs was dismissed by hiring workers fired at low cost, in the U.S. or Asia, for example. Redistribution costs more to slow the pace of change, reducing the return on investment, and promote investment and employment in the future of Europe and Japan.

Manufacturers find ways to avoid redeployment costs of labor, unless they can pass the cost of government applicable to consumers through higher prices. They can only do so if the government seal border trade, otherwise the manufacturer without imposing costs capture market share with lower prices. If the economy closed border trade should remove foreign labor and cheap capital.

One reason is that the government protects workers from layoffs to protect against the risk of new jobs for the redistribution of labor is less valuable than a job lost are created. In that case, redeploy workers to accept lower wages to fill the remaining positions economy. The logic behind the fear works as follows: All jobs are ranked in order of highest value to lowest value, the number of workers identified last work full welding work is less than the value of the filling. If innovation eliminates a job somewhere in the list of jobs filled, the next job is available for being filled by the end of the line is less valuable and less pay.

While this may be lurking like a theoretical possibility, after decades without a decline in unskilled wages is difficult to find convincing evidence for concern. Wages of unskilled workers in the United States appears to be flat, at worst, large increase in labor supply. In fact, revenues have grown dramatically across demographic at a time of high productivity growth in the past two decades and the economy has added tens of millions of Spanish immigrants Homes labor. In fact, lower costs increase the relative value of all jobs in the queue, including the tail end off, and innovation to help find new jobs to add to the queue at all levels both.

Because of a miscalculation, the law also plans designed to benefit workers create unintended consequences that hurt the workers more than they helped. Costs may impose layoffs has slowed in Europe and Japan but at a much lower employment growth. Major European unemployment and reduced working hours, mainly at the expense of workers in marginal youth, the elderly and women. Japan achieves higher employment, but only produces much lower GDP per hour worked.

With the cost of redistribution is lower, the U.S. actively implementing productivity improvements. Production is also used overseas to reduce costs and capacity constraints to

relax. When faced with foreign labor work seventy-five cents an hour, was redistributed to staff his talent for innovation and the rest of the labor force of economic services worth more now hours. The non-manufacturing sectors of the U.S. economy currently use 90 percent of workers.

While the United States has dominated the commercial Internet, Germany is scheduled profitable machine tools now used largely by the Chinese. Imagine trying to create the next breakthrough that does not have Internet access in the labor force Facebook, Google or Microsoft, and a host of spinoff of them. The essence of cumulative progress is difficult for candidates to reach the final and market knowledge necessary to overcome existing competitors.

At the same time, the success of innovation has driven the demand for services in the United States. The nation uses tens of millions of foreign workers to free workers ashore. It is not enough manpower to meet the needs of our development. Americans also work 20 million immigrants.

Ironically, Germany and Japan, growth in exports pursue employment and domestic demand to avoid the costs of redistribution of labor, but this slows their growth with respect to the United States and reduce job growth. Unlike their counterparts in Germany and Japan, the U.S. company to build low-cost factories overseas to compete internationally. Mostly keep cash flow from investments abroad to international finance and international development to avoid high U.S. corporate tax rate. Meanwhile, the growing international benefits raise the market value of U.S. multinational companies. Nowhere in the trade balance, the benefits of the stock market are recognized as cross-border flows. However, the benefits increase the real value of U.S. household. This increase provides collaterally for borrowing from foreign lenders increases. Households use loans to increase consumption and investment in the U.S. Unfortunately, the business strategy is more rational not allow Europe and Japan to avoid the cost of redeployment high

2.3. Distribution of income

It is unlikely that the high labor costs alone represent redistribution differences between Europe, Japan and the United States. In recent years, young European workers face high unemployment or jobs as temporary workers, so there is no cost for redistribution. These

unemployed and underemployed workers should have rushed to innovative startups, regardless of risk. Why are not creative and European investors take advantage of them this opportunity? Instead, innovative emerged in the United States and workers joined them, even if it means walking a great job at Google and Facebook to participate in new ventures with almost certain defeat loss.

Unlike diversified investors, most people only have a couple of opportunities to succeed - often only one chance in life, and only if they are lucky. While there are exceptions to the rule, the cause of failure in joint ventures and project failure is often fatal to a career employee is responsible. The young staff derailed "fast" can take many years to re-establish its credibility, while their colleagues have been successful and most sought even further exercises. There are no senior leaders rarely bargaining to regain power in the existing organization. New businesses outside the current power structure are rarely successful, and the need to feed your family quickly dependence on the required powers. Who ever fought for power and money underestimating the ferocity of the struggle? Talented workers with valuable career against more risks than most people think. Strongly exceed reasonable risk aversion recommended.

That does not mean that the State is the only reason, only money and status are strong momenta of economic risk, and the money is mostly how talented people pursue state. Very few people have enough to monitor the talent in different ways, and the economy does not offer such opportunities.

The number of students majoring in computer science rose from 2 percent to male students of 6 percent. Each seems to have a young talented friend get rich. Not achieve the same level of success to take crazily. Previously, very few have much interest in business endeavors. Risk Acceptance went through the roof because they can not bear the shame of being left behind.

Over time, success begets success. As the United States risks losing the most talented and successful growth, promote other people with the necessary skills to duplicate their success. The most talented students no longer aspire to become doctors and lawyers. A growing part of the best of the best business schools attending today. Workers responded by accepting more risk. This did not happen in Europe and Japan.

It is easy to see why this would make a big difference in the success of the economy of another family. Top 10 percent of income earners production 40 percent to 50 percent and 1 percent of GDP is about 20 percent of GDP. Not that the issue of hours of work, but the work they do and the risks creative entrepreneurs who have high income ensures the company's lawyers, for example. Working hours are, but manifestations of greater responsibility and risk talented employees have made.

Internet marketing and e-mail has increased the value of innovation compared to the daily work of the overall economy. As innovation has evolved comparatively more valuable, the tax rate on income produced by successful innovators grew naturally. This growing share of income indicates increasing success by U.S. innovators relative to Europe and Japan. Although not too much success in the 1 percent have lower average wages in the U.S. relationship with Europe or Japan. On the contrary, instead lamented the unequal distribution of income, we should celebrate the phenomenal success of the renewal of the U.S. relationship for the rest of the world and its beneficial effects on domestic employment.

Many skeptics against that if the marginal tax rate is higher than the growth rate is slow, why accelerated growth when the Clinton administration launched the marginal tax rate. Obviously, Internet propels growth despite higher taxes. So did the fall of the Berlin Wall. Oil twenty dollars a barrel - has not hurt either development. The fact that President Clinton could only increase the margin rate of 39 percent while Democrats had risen to 70 percent and more, could boost investor confidence also. Investors can boost investment and risk-taking that once limited to higher predicted.

In the United States, has reduced the marginal tax on the highest and where the creative economy of the United States spent most chance of success income, working hours of the highest labor productivity has increased. A study published by the National Bureau of Economic Research in 2005 showed that a part of American men work more than fifty hours a week increased from 15 percent in the highest quartile of employees in 1970 to 27 percent in 2006. At the same time, the unemployment rate among the lowest in South America who has worked for more than fifty hours a week has declined steadily from 22 percent in 1979 to 13 percent in 2006.

Investment and business development in the United States as a percentage of GDP, especially venture capitalists to produce innovation. Unlike their counterparts in Europe and Japan, the most effective American workers start working more hours - a strong indication that they were taking more risks and responsibilities. U.S. officials attended talented risk -ups and internal despite little chance of success projects. Success starts as Google, Facebook, Microsoft, Intel, Apple and Cisco support of U.S. job growth. Productivity growth increased from 1.2 percent per year by the mid- 1990s to 2.0 percent per year thereafter, with almost all the benefits of doubling the contribution of expertise. My thesis achieved despite the increased strength of less productive working population.

Europe and Japan have similar work training, access to the same technology, and an abundance of capital. However, they have created an astonishing lack of innovation. Their productivity is still mired in the growth rate by the end of 1990. With the cost of greater redistribution of labor, business leaders who fought to protect existing manufacturing from layoffs. They work to grow jobs in the export of manufactured goods. Efforts to divert attention from their talented staff away from the development of advanced information technology.

In the United States, information technology increases the productivity of labor and talent worth investing invisible. The cost of retraining and marginal tax rates was lower in high- return investment expansion. The prospects for success, and increasing the loss of the status of people who do not take risks necessary for success, motivation increased risk.

Risk Acceptance successfully created training services worth companies like Microsoft, Google, Facebook, and others that continue to strengthen the successful U.S. innovation at every step. These companies not only military training, but also to U.S. investors and encourage talented creative talent cloned and expanded its success. The lack of similar success in Europe and Japan excluded them from emerging opportunities. Reduce the likelihood of success in a reasonable manner to discourage risk taking by investors and talented staff.

Border trade openness enables access by U.S. for a world of no employer seventy-five cents an hour and save money lending risk aversion desired for the United States. This allows us to continue the development of investment and consumption, even when the

economy is near full capacity. The low-cost imports freeing resources for other things. Lower production costs and increase availability in capital asset prices and increased risk appetite.

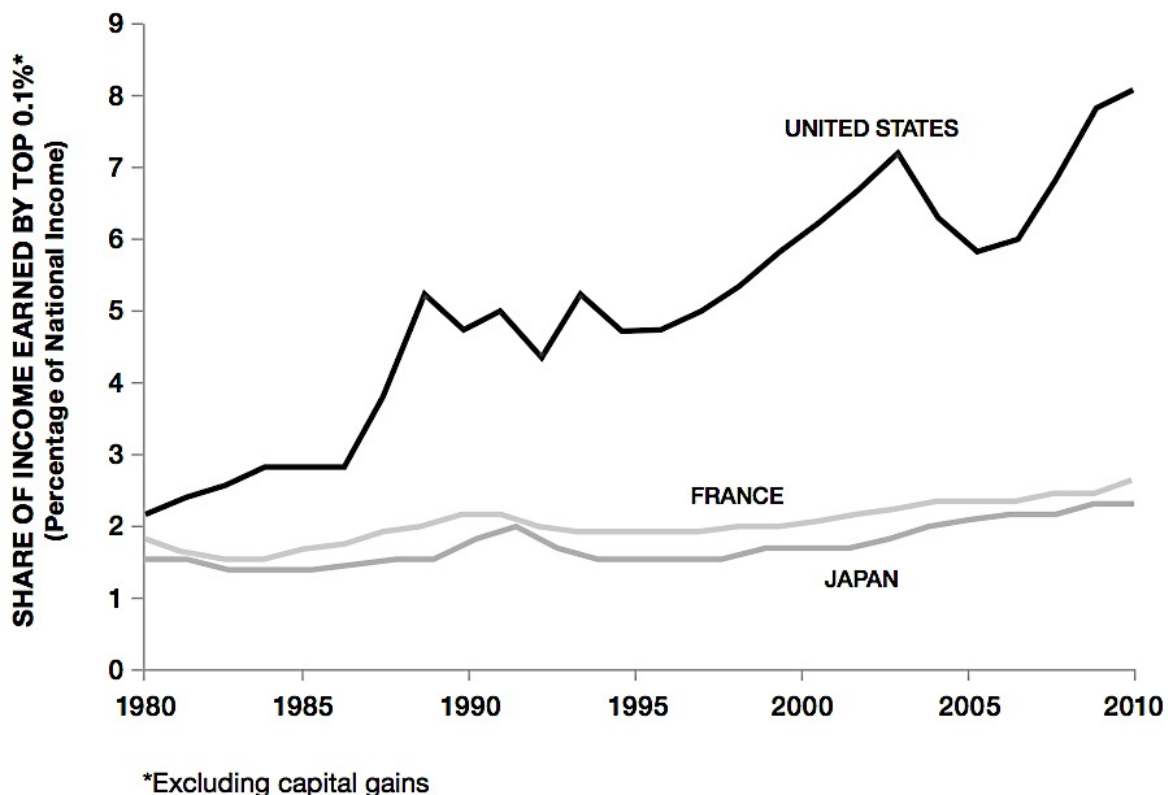


Figure 8: Share of Income Earned by Top 0.1% of U.S. Workers

It may be higher than the cost of the redistribution of growth slowdown only work in Europe and Japan, no doubt, is an important contribution. But by itself, does not explain why the leaders and their investors no risk to employers in the market with the highest unemployment and significantly higher than the U.S. underemployment. Here, skilled workers left the job opportunity to join a strong risk begins almost certain failure. They risked despite better employment opportunities in the United States elsewhere. In Europe, young workers facing high unemployment rates should have run to entrepreneurship.

It is also possible that the United States simply had a more entrepreneurial culture, although it did not produce different results before 1990. Perhaps the culture plays a role,

but the U.S. provides significantly better rewards for taking fortunate than Europe and Japan, which should be more dynamic risk used in the United States risks. Lower marginal tax rates, the cost of labor redistribution of first instance, more valuable on the job training related to the successful launch, greater loss of status, because there is no risk to the public and access easier access to capital markets, increase the margin here. Incentive program shareholder More positive bias for the management of severe feature pay for performance and significantly shorten the term of the Director General. These differences bring more capital into the hands of the successful candidate risks, which makes them ready and capable of underwriting risks. , Larger capital market more liquid may be better to sell and risk analysis for investors willing to tolerate. Particular political supporters brought economic policies for companies to reduce the role of the labor force in opposition and facilitate increased investment. And the open border trade costs, freeing resources to efforts that are of no value and ensure a low cost of capital flows. It's hard to believe that the strong incentives did not play a central role in the success of the U.S. economy and gradually formed their culture. Proponents of income redistribution can cavalierly continue to insist that the lower tax rate and the benefit usually not increase risk appetite, but his arguments would have more credibility if the results are similar to the U.S. Europe and Japan, however, significantly better.

Whether incentives to contribute to the success of the United States, it is becoming increasingly important as the economy moved from a manufacturing economy based on the economy more dependent on venture capital necessary to explore the untested innovation. Voters elect legislators who share their beliefs, and legislators to act on their faith to guide economic policy. Strong employment before the U.S. financial crisis strengthens the middle class to bear lower costs of redistribution of work, more open borders and more unequal distribution of income despite the obvious pain caused by an increase in the rate of creative destruction. But the belief in the benefits of hard to understand the balance is fragile, and high unemployment rates as a result of the financial crisis shook confidence.

The poor and the lawmakers who represent them have seized this opportunity to appeal to redistribute more income without considering the long- term. They ask the wrong, corrupt Wall Street banks who then manipulate the market and the free market incentives do not work. They seek increased revenues through higher taxes successful

investors, spending more government, more and more commercial borders closed, and restrictions on banking and commerce. They justify this requirement, stating that culture, no incentives, mainly increased motivation to take risks. In an era in which the success of the United States requires that companies invest in venture capital to find innovative and proven, talented American personnel risk their precious time in her life, her career to lead this effort, and investor's will to defer underwriting risks consumption is dangerous to experiment with unique economic and unproven smart time.

3. The role of banks, financial institutions and regulators

Although the United States is starting 2000 with great offers strong development in the last decade. The value of subprime mortgages is small compared to the net worth of households - approximately \$ 3 trillion in 2007, compared with \$ 64 trillion in the value of household assets. Default has also proven to be surprisingly small. According to the FCIC, more than \$ 2.5 trillion in subprime mortgages were sold as securities or mortgage through mortgage obligations.

Opponents of government-subsidized housing blame well-intended but misguided lawmakers for increasing the supply of funding for risky, no-money-down subprime mortgages using government funding. Asked the government intentionally driving up the price of mortgages to increase the supply of private capital for subprime mortgages, said investors seeking momentum will increase the price of the shares. Fannie Mae and Freddie Mac use low-cost financing to buy a 30 percent to 40 percent of all mortgages vulnerable high risk defaulting risk. It is the large-scale government intervention. It does not seem accidental that defaults on subprime mortgages are the focus of what caused the financial crisis.

Proponents claim the government Fannie subsidizes the mortgage loans and Freddie innocently follows the example of the private sector. They do not realize that there is a financial crisis and banks were unwilling to participate in risky subprime loans. They also realize that the defaults of high risk could have weakened the bank, but its failure would not cause anywhere near the damage occurs. Teller returned panic insolvent long before homeowner's default. The fraudulent loans and securities regulation arbitrage, leveraged banks, and management agencies laissez- faire for banks weaken and cause its failure was blamed.

If banks had decided on funding loans with more long-term capital and less hair-triggered short-term debt, defaults would have been less likely to trigger withdrawals. If the government restricts the use of short-term bank debt at the expense of the economy, that is less than the cost of the recession, then politicians are primarily responsible for failed to prevent the crisis. Obviously, if lawmakers cannot impose reasonable restrictions, such restrictions might curb their political objectives, the political will to take the blame. If the bank is hampered reasonable restrictions in the economy, whether imposed or not, that would have prevented the crisis, the main bank responsible. If their limited authorities refused costs because the economy is greater than the benefits, then he could not control the triggers may have caused or contributed to the crisis. It is also possible that no one is to blame.

With the benefit of 20/20 hindsight, it seems obvious that the enormous cost of the crisis exceeds the cost constraints. But management agencies around the world are still reluctant to restrict the use of short-term debt aggressive enough to minimize withdrawals. Although the history is full bank run, politicians have concluded, perhaps erroneously, that the actual cost of this restriction is greater than the benefits of regular withdrawals and avoid the stress of the economy.

Misdiagnosing of the causes of the financial crisis fix the wrong cost benefits without problem. Any restrictions on the production risk both benefits and costs. May not be refined enough to have only a positive impact on the economy is simply too complicated. All cost constraints often have unintended costs. More importantly, failing to mitigate the true problem leave the economy exposed to the possibility of repeated failure. If the risk of causing unnecessary crisis investors and consumers should have the ability to dial, down risk tolerance and the economy will grow more slowly.

3.1. Reckless supervision of lending procedure and predatory lending

Without a top-down perspective to see the issues in their broader context, combine with a suitable professional knowledge, one can easily comes up with a long list of complaints from zero and an adequal lengthen of assumstion of someone's responsibility for making the wrong conclusion. The FCIC has significant anecdotal evidence of predatory lending and concludes, "The erosion of standards of responsibility and ethics exacerbated the financial crisis." Commissioners wrote disagreement as "compelling evidence of mortgage

fraud seriously ... the Commission heard you can not measure the impact of fraud in connection with teacher housing bubble... we probably have the housing bubble and the crisis occur even when there is mortgage fraud. " without the benefit of a top-down perspective, how can we adjudicate conflicting claims?

Complications with the design of a suitable mortgage for home ownership is low income makes it profitable for lenders, but also affordable for homeowners, despite the fact that loans to homeowners of low income is riskier and, therefore, more expensive loans homeowners income. Obviously, government repayment guarantees to help solve this dilemma, but not guaranteed by Fannie and Freddie all subprime loans. They picked and chose which loan to purchase and warranty.

The so-called 2/28 and 3 /27 adjustable rate mortgage (the numbers refer to the year and the amount of thirty years as a loan repayment over thirty years) meet the objectives of competition banks and homeowners. Banks make loans for homeowners with bad credit history who lack sufficient financial funds to finance the down payment or cannot fully document their income. These loans are usually paying a fixed low interest rate, pejoratively called " teaser rates " in the first two or three years before getting the heart rate loan fully compensate the real engine of loan risk. Both lenders and borrowers are expected to make regular mortgage payments and establish a better credit rating. They also expect an increase in the market value of the house will improve the loan rate and the value of the loan (the loan amount compared to the value of the house), effective for homeowner necessary capital for the initial payment in full, reduce credit risk through over collateralization (on the value of the house and the loan amount). If both occur, the borrower can refinance the loan at better terms before significantly higher terms reflect poor credit owners' kicks in. For decades, housing prices rose and homeowners have benefited from this arrangement.

Some critics realize that even if house prices fell, households benefit greatly offset those losses renters are homeowners. The owner of the house, after all, is the owner and tenant. The decline in real estate values dropped in the same rent. If the owners sell their homes at a loss, and rent (or buy) now cost less across the street, the savings from reducing the monthly payments will be almost equal to the value of residential property ownership lost equity. Reduction in monthly payment is approximately equal to the benefit of the

homeowners win if he had sent his heritage has been lost in the bank.

Profits and losses compensation, however, may vary considerably from other owners. A retirement plan to live in a part of the equity in their homes by selling and reduced their home, for example, will benefit from the reduction in income is just a cut in while I was lost on the way home larger. On the other hand, thirty- five percent of households in rent (but the desire to own your own home), so reducing prices and rents in their favor. In most cases, homeowners looking to buy larger homes as their families and grow their income benefited from lower prices too. The higher the discount is greater than his loss a little more.

Some owners bought at the peak of the housing boom that there may want to sell their homes or default on your mortgage and want to keep paying high monthly savings despite lower rent. The vast majority of homeowners, however, much before buying the highest and just suffered and lost on paper point. In most cases, the price has increased significantly, despite the crisis. On average, home prices are where they are now in 2004 and remains 40 percent compared with 2000. And many owners bought at the peak, can do so with little or no money down, and, therefore, had to cut short losses are much smaller than the savings from lower incomes best available. In fact, many owners of homes bought before the peak, refinancing their homes at the peak, the extraction and consumption of its benefits, and is now bankrupt mortgage, increased capture consumers and an increase in peak saving monthly rent after the trough. Of course, critics will point to the losers to make their case.

Sophisticated investors understand that it is prudent to reduce the amount of collateral threatening in this case, the equity in the home. Down payments protect lenders from losses. The best measure, then, if the homeowners were victims of predatory lending or the beneficiaries of the subprime mortgage is the amount of capital required to put at risk through your down payment. From 2005 to 2007, the percentage of mortgages originated from the loan to value ratio greater than 90 percent increases from 15 percent to 30 percent. Subprime adjustable rate mortgage, exceeding 80 percent of the origination of the loan and the value increased from 47 percent in 2002 to 64 percent in 2006. The proportion of subprime loans was made to borrowers with loans "piggyback" financing loan payments instead of homeowners have taken their equity risk - increased from 3 percent to 33

percent during the same period. This is not consistent with the idea that predatory loans caused the financial crisis. Change predatory lending risk from the lender to the borrower, and not the reverse.

Analysis Stan Liebowitz of the University of Texas foreclosures provides further evidence that, on average, homeowners are the beneficiaries of a specific liquid rules as credit, low down payments that transfer the risk to the lender and not victims of predatory lending. If they were mostly victims, the interest rate will be the main cause of default, but that is not the case. Liebowitz's analysis of loan-level data, including 30 million mortgages that resets responsible for only a fraction of foreclosures. "Loans with initial teaser rates had virtually no impact on foreclosures." In fact, "interest rate resets did not measurably increase foreclosures until the reset was greater than four percentage points," and "only 8% of foreclosures had an interest rate increase of that much."¹³

Instead, he suggests homeowners threatened with little capital removed from your home to capture the value of the lowest incomes. One of the research staff economists at the Federal Reserve Bank and a number of other studies reached almost identical conclusions. As Liebowitz Fed's research shows that, despite the fact that the natural default on their mortgages adjusts interest rates, low interest rates and do not reset the default rate increased significantly. Low interest rates and refinancing options mitigating factors. Clearly, reducing the risk of transfer payments of homeowners at high risk of insolvency of the bank. Promote defect in the face of reduced property prices, not interest rate resets.

The bank charges high initial rates of low risk; high prices do not reflect their higher risk. Also, the price difference between the risk and cost of government and standard mortgages narrowed considerably 2003-2007, the years before the financial crisis. Reduce the spread when facing a large increase in subprime loans suggests that the supply of loanable funds is greater than the demand for capital. This imbalance increases the bargaining power of the homeowner, not the lender.

However, it is also true that, in some of the mortgage transaction as a whole, the

¹³ Stan Liebowitz, "New Evidence on the Foreclosure Crisis," *The Wall Street Journal*, July 3, 2009.

extreme values are certainly disgusting. Arrange a mortgage is a complicated operation, such as buying a car or a house, leaving much room for negotiation between buyers and sellers. The competition between credit institutions in very narrow income, loans, as a matter of routine, not start offering the lowest rates for borrowers. Like buying a car, business loan can be a loan company together to negotiate the best possible terms. Loans paid commissioned sales agents - real estate agents and mortgages to increase profits at the expense of the buyer. All but the most naive buyers understand this. Loans considered unlikely to pay a higher interest rate, closing costs, prepaid or criminal - relationships. There are shysters in all businesses, including mortgage brokers, which make things worse for the innocent buyers. Critics, of course, only point to the examples. But on average, owners and lenders do not enjoy the absolute priority of the talks. From a top-down perspective, it is almost impossible to reach the conclusion that predatory lending and credit standards are not beneficial to the host, is a major contributor to the crisis.

3.2. Credit rating

The more pertinent question is why the bank made the subprime loans with low initial payments that transfer losses to the lender. The FCIC says banks made fewer loans to provide quality information, especially the provision of information through collateralized debt obligations, which allows banks to deceive the naive investors to buy risky loans.

Credit rating agency, said ranking is mistakenly thought to be supported and abetted fraud. Proponents of this argument, including the FCIC, point to the fact that banks - sellers of securities dealers pay by rank (a clear conflict of interest) and assessments to evaluate competing in the business of loosening sale classification. Proponents ignore the fact that managing and sophisticated investors have also failed to distinguish changes in how securities are valued, despite the fact that these changes must be clearly clear.

If banks were merely a scam innocent customers, why they have more than 40 percent of all mortgage loans and home equity on their balance sheets rather go through them to investors? The sudden closure of the stock market in the summer of 2007 began perhaps a third of the mortgages in the pipeline for the shares. But banks that have a clear guarantee on their balance sheets as investments, as they always have - banks profit from lending and default risk. According to the hypothesis of fraud, it makes no sense for them to be kept

mort - measuring equipment. To counter this objection, proponents claimed short-term incentives to promote investment bankers and other arrangements for the purchase of gambling internal incentive programs misrated values. To reinforce this statement ignores the fact that investors are not sophisticated control has acquired a high percentage of the stock price are identical.

Proponents argue securities fraud begins by noting that social investment authorized, mainly non-bank investors to make payments on behalf of homeownership. Stock split the cash flows from mortgage portfolios in the round, with AAA rated attack air, and accessories including mezzanine capital to absorb losses in before damage coordination round AAA rating - compared to any other function of serving owner's down payment. Organization of the AAA rating for a period not covered by the AAA phase of " first loss " rating by 20 percent to 30 percent of the loan, equivalent to 20 percent of homeowners down payment. From this perspective, the AAA rating is not unreasonable.

In fact, the only AAA-rated assets secure enough to keep the bank. Buyers of AAA qualifying session were not looking to prove homeowners to protect their investment, the market value of the house and the buffer (called capacity) of the low stage to absorb potential losses in the event of falling seeks market prices. Organizations often sell the lot released under risk to non- bank investors.

It is false to claim damages AAA rating is evidence of fraud or classification error. AAA rating is based on 20 percent to 30 percent over capacity. Investors know that if house prices fell similarly AAA phase lose their high ranking. It's simple arithmetic. With the benefit of consciousness, AAA ranges sufficiently to support the conservative financial crisis will have 50 percent of capacity necessary to survive a drop of 20 percent to 30 percent in real estate prices sufficient capacity to maintain its AAA rating. Worse, critics argue that management agencies, banks and investors underestimate the statistical risks of extreme events recognize that payments have to be significantly thicker than the historical decline of the market to ensure minimum risk classification. If the credit rating agencies have asked the owner or the lender make a 50 percent or greater equity payments, Americans will be able to find a low cost mortgage financing. The world will be very different - a place few politicians or voters could accept.

There is no serious left or right, except, perhaps, those who usually avoid demagogue public economics, economist will tell anyone that the system can anticipate the market, and certainly not enough of a significant margin. The market price of properties represents the market's consensus assessment of an property's value and the risk of the accuracy of that assessment. There is no investor may reasonably require either a different or more accurate than the market price evaluation.

Proponents argue scams access the information provided by investors described mortgage investors innocent people depends on the rating agencies and banks for risk analysis them. But mortgage buyers, especially buyers risk mezzanine and equity round, is anything but retail customers. Historically, Wall Street has packaged the mortgages on some of the complex financial products on the planet. Supervision mortgage became the purview of major investors - the largest and most complex bank, insurance companies, pension funds, sovereign wealth funds and hedge funds.

Banks, who represent the seller guarantee, the last owner was testing the limits of the purchase price and found that, for a price, investors eagerly buy batch under no down payment loans homeowners risk with bad credit and undocumented incomes. It shows that people buy, including retail purchase, do not understand what they are buying is far away. Lower payments are widely believed, and investors are often called loans without proper documentation of income as " liar loans " and loans "Ninja" no income, no job and no assets.

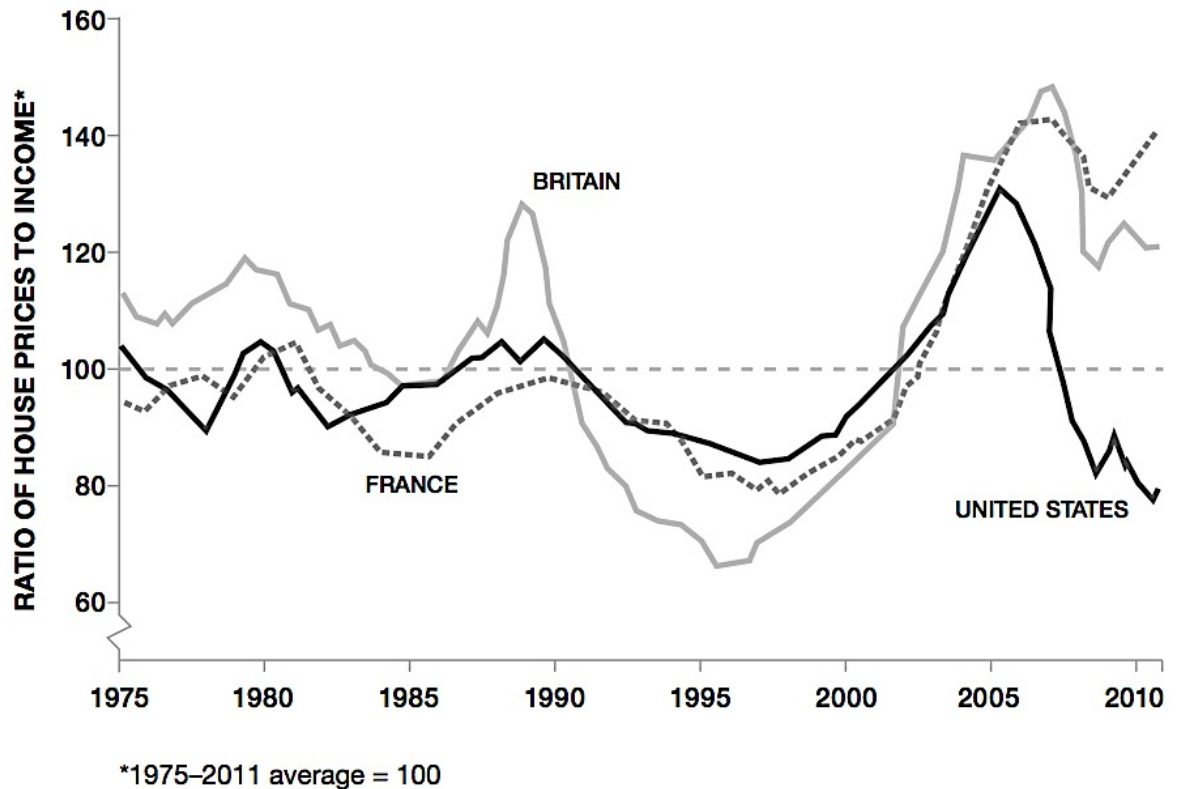


Figure 9: Home Price Appreciation Relative to Other Developed Economies

3.3. Collateralized debt obligations

Stock divides the cash flow of a pool of mortgages into tranches. With the increasing number of subprime risk even guarantee to pay the first-to-be -pay, would be able to pay increasingly likely - hence evaluate AAA. The lower risk of the first tranche is directly proportional to the increased size and risk of the subordinated tranches, which serve as additional collateral to the first tranche. This alchemy is simple math, a simple matter of proportion but created sophisticated confusion. In fact, banks will quickly price differences price levels. The FCIC noted that hedge funds often take compensated at different times of the same CDO positions. Active trade to take advantage of price differences between the tranches will eliminate mistakes.

Mezzanine tranches of securitizations were bundled into CDOs to create more AAA-rated debt by funding CDOs with additional equity and correspondingly less debt to increase the amount of collateral available to repay the CDO's debt. CDOs often also purchased credit default insurance to increase the amount of equity at risk to absorb losses.

Until 2007, rising home prices also improved the loan-to-value-ratio of the CDO's collateral between the time when underlying mortgage securities were first issued and rated and when they were repackaged into CDOs

The bank again increases significantly related CDO collateral assets to improve solvency underlying mortgage securities as market conditions become more dangerous. As demand in high demand with the underlying collateral values decreased respectively. It's simple arithmetic. Two values are acquired largely replaced investors. The FCIC ignored this link and declared that banks like Merrill Lynch misled investors use CDO as demand for the underlying securities decline. Since FCIC does not recognize the role of equity and mezzanine debt, nor is the replacement of the two values, you cannot see the banks are using CDO additional risk capital. As we increased the U.S. trade deficit Banks gradually expand the global distribution of mortgage securities and funds raised over nonbank investors.

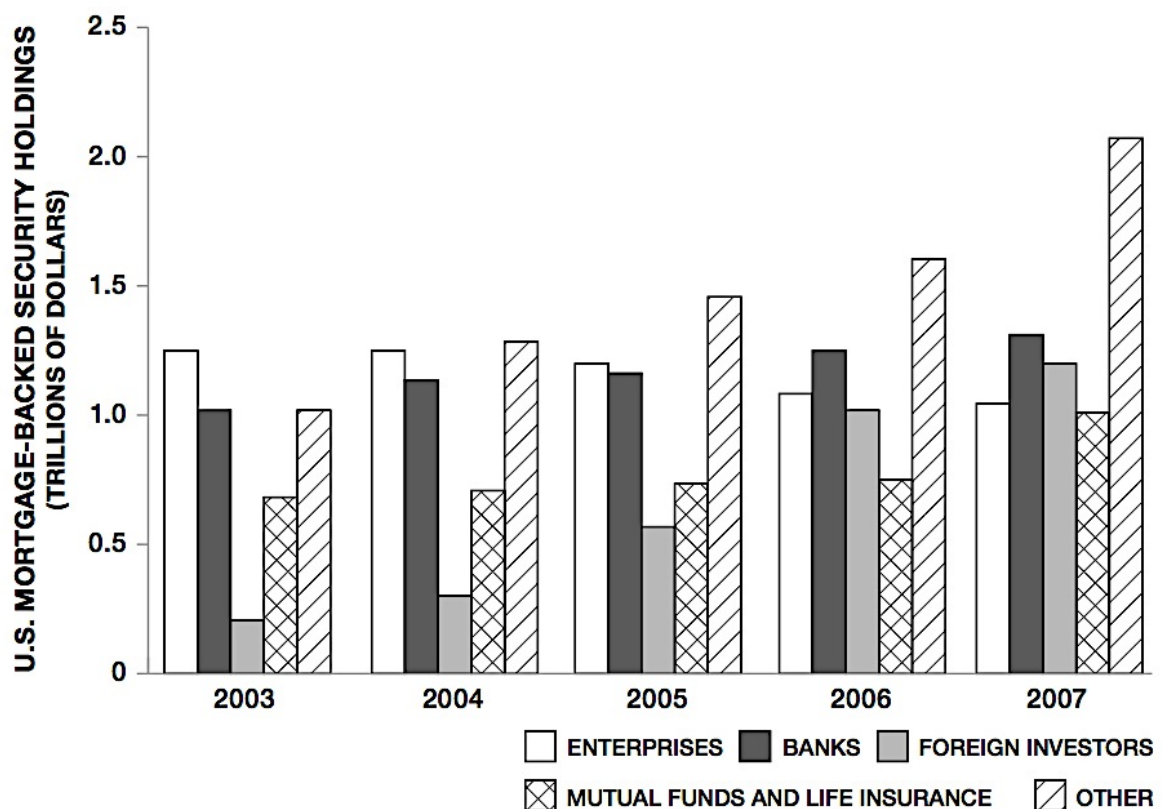


Figure 10: U.S. Mortgage-Backed Securities Holdings by Type of Investor

3.4. Incentives of wall street

When the FCIC fault as banks buy (and not the seller's agent), who blames the reasonable wealth, but very poorly constructed plans incentives that reward short-term performance and long-term risk management and corporate governance systems. Ironically, the liberal economist who advocated the redistribution of income and evidence that incentives do not motivate managers now insist that they do. Again, the report does not analyze or compare the incentive system. It is widely recognized that panic withdrawals left vulnerable to failure under economically reasonable management regime banks.

It is true that at some point, do not promote fear in the most competent people clearly reduce the risk. We can, after all, threat of jail for his error. Without a top-down perspective, it is impossible to know what price and with what likely not to be encouraged to work in different circumstances.

That's a shareholder - not the CEO and staffs act in their best interests, those requiring a greater risk. The sophisticated investor knows that almost all stems back guarantee system of market risk and non-market work better. Investors believe that the risk has been underestimated and push up share prices of financial companies take more risks. Rising stock prices of competitors took risks that threatened the permanence of executives who do not meet them.

3.5. The mismatch between short term deposits and long term loans

Each economy savers are reluctant to put their savings at risk, no matter again available. They will be ready for stuffing mattresses with cash and do not accept any returns for liquidity and capital preservation requirements. They are willing to deposit their savings in a bank or money market funds, government or bank guarantee of the value of their deposits and allow them to withdraw their money when they choose. The difference between interest rates on short-term deposits and interest rates low long-term risk of venture capital is not large enough to convince them to take long-term risks rather than providing short-term loans. Regardless can achieve protection, risk aversion almost never put their capital at risk.

For a 101 illustration of short-term capitals idle causing high unemployment. Consider a simple potato economy. People have two alternative choices of using potato, for eating and hoarding. Storing potato creates an economy with slow growth rate and more unemployment. Risk acceptance propels economic activities. Consumers are at risk by consuming a bigger portion of potato instead of accumulating them. Venture capitals from investing helps increase production reduce costs, create a new product and eventually expand the market as a whole, rather than simply hoarding assets in the form of stored potato. In the aftermath of a financial crisis, rising unemployment and slowing growth in consumption combine with investor fear to let the potato out of use, as described by Keynes a “paradox of thrift”. Rather than letting capital sit idle, loans and borrowings expand the output and increasing the size of the economy, growth and employment.

The bank is the primary means by which short-term savings are recycled back into investment and consumption. Families borrow to increase consumption needs for many years to earn enough to repay the loan. Similarly, a factory with many year loans had to produce enough output to return. Some critics blame the banks for loans and credits over the short term, but it is the purpose of the bank. Investors are willing to put their capital at risk and no long-term banks.

The economic benefits of borrowing and lending long to withdraw money at risk widespread panic in the short term. Withdrawals can be made for the entire financial infrastructure of the insolvent economy. When short-term depositors will rush to the bank to withdraw their money, they found the money in the basement. The banks lent out. To fund withdrawals, the bank must sell the property. In the case of a run on the bank mismanaged alone, banks can sell loans to other banks. But as a shock to the economy threatens all bank depositors can send a series of bank runs. With all the banks to sell loans with amounts drawn, and no one bought them, the market value of loans sank to fire sale prices. Low prices make it impossible for the bank to sell enough loans withdrawals. This makes banks insolvent.

The result of this positive feedback loop is clearly unstable. The panic can occur for no other reason than fear of panic itself. Depositors have no way to evaluate the possibility of other depositors panic and withdraw their hair necessarily change their demand to withdraw the money. Fear of panic can quickly increase to a high one hundred percent.

To resolve this adjustment is based on a network of two-level security to reduce the risk of withdrawal of panic, require lenders to maintain capital reserves large enough to finance unexpected default. Banks ask homebuyers to make payment of 20 percent, for example, to protect them from damage in case of similar size reduction in real estate prices. These winery investors, including lenders, responsibility for the risks they can control and reduce the possibility of damage withdrawals default activation. Increase the default related to increased withdrawals trigger default buffer.

The bank also has capital reserves to protect the security hole depositors. It is difficult, perhaps impossible, for banks to raise capital when investors are panic withdrawals. Potential investors rightly fear that the bank can retain information about their financial situation to improve their ability to increase capital, especially in the capital when they need it most. Great buffer to reassure depositors that banks can withstand unexpected additional capital without increasing losses or sell assets.

Because withdrawals will accelerate to nearly 100 percent during the panic, the buffer is large enough to finance unexpected defect reduce the probability of bank runs trigger, but can not completely reduce the risk of withdrawal once activated. Running happen many times, if there is enough time, no matter the size of the capital buffer available to cover losses. But long term the organization of idle capital cushion to fund large enough panic withdrawals, and not just by default, defeating the objective of providing working capital in the short term. The bank cannot idle short-term capital withdrawals in case of a panic attack because it would just panic and withdraw as the rest of the short-term financing. Why banks idle for long-term capital you are willing to take risk guarantees for working capital in the short term? It was recently long-term capital to labor and capital in the short term rather than sitting idle. But that, of course, defeats the purpose of offering short-term capital to work.

During the financial crisis, a fell of 30 percent in real estate prices caused panic withdrawals. Withdrawals reached \$1.5 trillion, a figure that is more than five times of the most negative estimation. Lender losses \$320 billion, among them, non-bank lenders largely suffered. Withdrawals reached this level despite \$15 trillion to \$20 trillion of explicit government guarantees. Obviously, the billions of dollars of costs of idle dollars of long-term capital that will be very high, higher than the cost of risk aversion short-term

debt treadmill.

To resolve this dilemma, the authorities have opted for additional buffer implicit and explicit guarantees the liquidity of short-term debt left sitting idle. In the case of a panic, central banks like the Federal Reserve, which acts as "lender of last resort." They sponsor withdrawals if they occur. In the chaotic after the Great Depression, for example, in 1934 the government established the Federal Deposit Insurance Corporation (FDIC) to guarantee all retail deposits. Government took the risks, but banks and deposit insurance costs. With the value of it's explicitly guaranteed by the government financial strength deposit, depositors have no reason to panic and withdraw their money, even when others panic or default if the banks were too big. There is no panic run on U.S. banks in the next seventy-nine years until the financial crisis.

Government is the only entity large enough to provide a reliable guarantee idles without large capital owners. When the government has guaranteed, in almost all of the U.S. economy to give.

In particular, the financial crisis showed the value of the government guarantee is very large, and the cost of the warranty is cheap because the government does not have to spend capital reserves to make large ensures reliable. The cost of providing a bank guarantee as low as only temporary panic, government purchase assets that investors panicked and sold at a profit when the panic decreases and prices recover.

The problem with insurance products is valued properly. One price does not fit all. If the use of funds to ensure the achievement above and avoid losses on the downside, an uniform price will encourage the use of the riskiest funds are insured. To reduce moral hazard, insurance companies and government insurance must be charged for the actual cost of the warranty. Must be based on the cost of the subscription of the risks of use. If Fannie Mae buys mortgages subprime risk, your insurance costs have increased to reflect this risk. Behave reasonably, the residents of New Orleans to pay a fair price to live there - a price that includes the cost of rescue and cleanup we have to pay for them. The real risk of bank performance is very difficult to determine. Because the government is the only entity large enough to credibly offer insurance, there is also no insurance market prices.

To avoid moral hazard in check, agency management has chosen to address complex issues of insurance rates, providing implicit rather than explicit guarantees and by charging to ensure potential threats rather than price obviously. This allows managers to impose premiums on banks after the fact to ensure absolute termination. During the crisis, to reduce the moral hazard of government to effectively classify - sorted operation based on the bank's risk of your business and let go one by one, until they Citicorp. They allowed the crisis to end the capital of banks like Lehman Brothers, Bear Sterns, AIG, Washington Mutual and Wachovia, banks take more risks than others. Also require banks to raise capital when their stock price is low, the dilute current shareholders ownership. Two years after the crisis, shares of Citigroup, for example, fell 95 percent in the rest of the market has fallen about 10 percent to 20 percent. Treasury to Fannie Mae and Freddie Mac and end its bankruptcy estate also.

As a matter of policy, the government has wisely chosen to allow banks to borrow short-term deposits to maximize employment and growth than they are to stand by and available to withdraw funds. We chose to use implicit guarantee is not clear safeguards to minimize the risk of runs on the bank. Make sure absolutely no success in the face of a 30 percent decline in real estate prices, despite the large reserves sufficient to absorb losses of capital.

At the same time, the company is becoming more profitable as Microsoft and Google hold large cash hordes, what they call investment. The government has never required or provided to banks to buy government insurance of deposits of companies and government agencies require banks to buy insurance from FDIC deposit sold odd. Money market savings families moving from bank deposits are insured are not insured institutions. Because of these changes, the quality of groundwater in the short-term debt grew significantly guaranteed. The rapid growth in the money market fund is one of the manifestations of these changes.

Today, the banking sector still looks like an old bank. Retail deposits, many of which are guarantees of the FDIC explicitly provide 80 percent of its capital. The availability of these funds is limited, however, and as a result, the banking sector remains small and local. Financing retail deposits is only a small part of the main accounts of the central bank's capital. The major part of their capital comes from institutional funds

uninsured. Increasing the size of the money market fund institutions allow financial institutions to develop large money center. Central bank money as capital investments cars short term insurance implicitly. Finally, creditors panic and flee

The short-term debt unsecured flowing in the commercial banking and investment in non-traditional ways, especially through the repo (repurchase) market. Through an acquisition agreement, banks and brokers to sell the mortgaged property, the financial assets of depositors, including the assets of banks to lend to an agreement to purchase the mortgaged property at a predetermined price to buy for separated.

Since the security of property lender, this is a very safe way for lenders to borrowers. There is no clear government guarantees, contracts, have become an important source of financing of risk aversion in the short term. At around 7 trillion dollar to 11 trillion dollar, repo market has become "one of the largest financial markets " and an important source of finance and banking

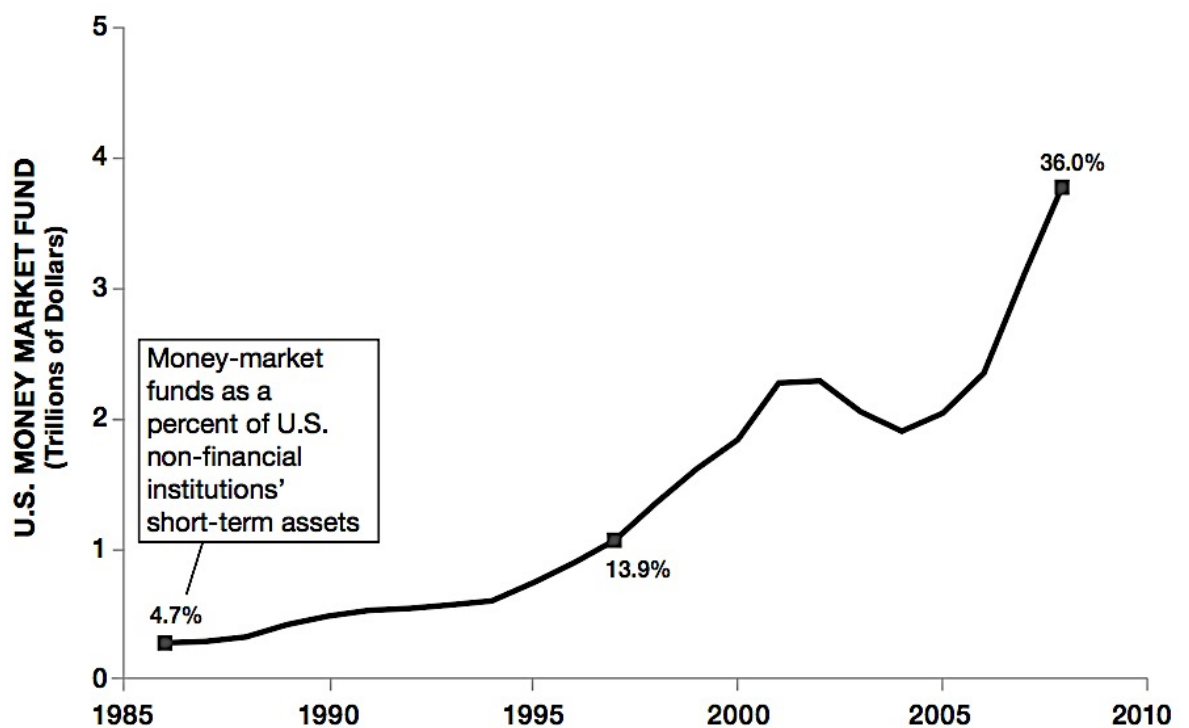


Figure 11: Growth of U.S. Money Market Funds

As in the purchase agreement, a number of holders of the securities, especially AIG, paying their values directly (instead of sending them to the bank) to borrow short-term funds. They used the proceeds of the loans to the liquidity of the investment. To drop the price, the lender of the borrower's new stock and solicit funds. As with banks, lenders require security retirement forced to sell assets to finance their investments.

The bank also uses the structured investment vehicles (SIVs) and conduits for short-term trading debt in the money market. Like banks, SIVs borrowed short to lend long. With so much dependence on short-term debt, loan capital has recovered quickly from the crisis, organized place. SIV has become a sign of panic and draws a lightning rod for critics banks, despite its small size relative to contracts and the fact that regulations across our government. U.S. SIVs and conduit assets peaked at \$400 billion to \$500 billion in the fall of 2007,¹⁴ and were relatively small compared to other forms of short-term lending.

3.6. The role of credit default swaps

Because the Financial Crisis stemmed in large part from a temporary lack of liquidity caused by panicked withdrawals and not by permanent insolvency from defaults, forward-looking equity markets stabilized in the weeks following the Lehman bankruptcy in early September 2008. The Dow stabilized at 11,000 despite political setbacks with passing TARP and extraordinary tumult in the financial sector. This turmoil included: the bankruptcies of Fannie Mae, Freddie Mac, and AIG; the acquisition and mergers of Merrill Lynch, Washington Mutual, and Wachovia; the nationalization of the British bank Bradford & Bingley and the major banks of Iceland; and the conversion of Goldman Sachs and Morgan Stanley into bank holding companies to gain access to emergency federal funding.

In the context of this crisis, investors became increasingly interested in trading credit default swaps (CDS), and the importance of the effects of banks also contributed to the risk and size of panic. Some investors mistakenly negotiate credit default swaps amplify loan losses. CDS also make it more difficult, perhaps impossible, for investors to

¹⁴ "The Subprime Panic," *European Financial Management* 15, no. 1 (2009)

identify the bank is exposed to the risk of misunderstandings. This is amplified and added to the panic. From that moment on, it is the race of panicked withdrawals that didn't subside only until the Federal Reserve guaranteed virtually all short-term debt. The amount of money government paid for those guaranteed tipped up at around 20 trillion dollar at the first quarter of 2009.

In a time of crisis, not short-term depositors understand why AIG collapsed. They fear risk of credit default swaps default risk amplification and spread through the financial infrastructure undisclosed and unexpected ways. The short-term depositors rushed out of the way.

Some economists say the lack of transparency and trading credit default swaps exaggerated panic and CDOs contribute significantly opacity. Without transparency, investors cannot determine which banks fail, so they can panic easily and quickly to withdraw money from the bank. For more information, investors can see that the bank may be able to stand with - the default.

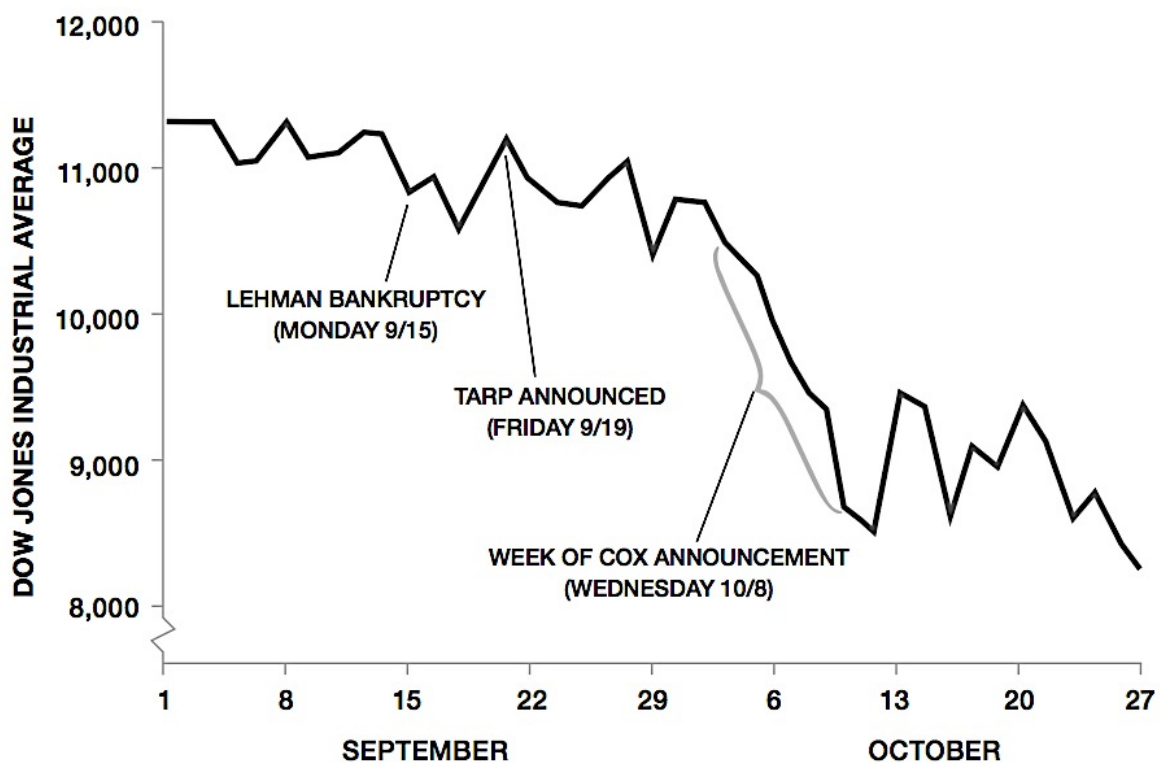


Figure 12: Dow Jones Average Following the Lehman Brothers Bankruptcy

It is likely, however, no amount of disclosure will mitigate panic withdrawal. Access to the underlying mortgages particular bank will not provide investors with sufficient information to assess risk. Before the crisis, investors underestimate the importance of declining real estate prices and the impact of unpredictable panic stories drawn. Increase visibility of mortgage-backed provide only a small part of the information necessary to determine the magnitude of these risks values, if they are identified at all. Investors and depositors have a crystal ball, no data, to look ahead and assess the value of real estate last unit size by default - show that the default value will be smaller than expected, and the size of bank runs predicted. With these factors cannot be evaluated rationally investors rush to withdraw.

To make matters worse, modern bank loan with collateral is passed between banks. If default threatens to withdraw credit or a bank run, bankruptcy proceedings can extend its banks reduce access to funds and other collateral. When that happens, or even threatening happens, the flow of loans and guarantees throughout the bank's network can be frozen and paralyzed traffic in crisis. To increase the ability to minimize the amount drawn, it must be shown that banks could withstand defaults, panic withdrawal, frozen liquidity, and the economy deteriorated rapidly. It is almost certain that few, if any, can the bank. In that case, the increased visibility is reduced panic.

And even if banks can withstand the harsh conditions, the short-term investment costs almost nothing to withdraw, while they have great risk if they invest. With the cascade effect is impossible to assess, rational investors rush to withdraw all bank depositors against the other, regardless of the level of visibility.

4. Possible solution to avoid another bank run

4.1. Banking re-regulation

As a result of the crisis, voters and lawmakers stressed the ability to avoid another crisis, require taxpayers to provide assurance that the investment banks and the implementation of it's rich can them from the wreckage. They demand compensation for these guarantees and a reduction in imprudent risk taking.

Two streams of thought have emerged to address these needs. Where current to reduce government guarantees, increasing the risk of default on the rear bank. If we allow banks to fail, probably accept a medium risk of causing the crisis. This philosophy is the basis has to reduce the size of the bank is "too big to fail." Another related line of thinking simply imposes more regulations on banks to reduce risk and increase capital cushion available to absorb losses. An auxiliary line of logic seeks to reduce the capital risk adverse short-term loans available to the international trade balance. The ability of the United States can only achieve this by restricting free trade.

A combination of three efforts to curb risk-taking, but the country can do this is with higher cost benefits. Lenders and borrowers assumed government guarantee will remain in place short-term deposits, as were seventy -nine. If the risk of damage pending retirement money, the economy had turned down the risk to offset this risk is now recognized. If investors hold shares of inactivity to reduce the risk of withdrawal, they cannot use it for other risk rescue efforts. The use of underwriting risk capital is zero-sum. In both cases, the economy is going down, growth will slow and unemployment will increase, exactly as happened. Cost of permanent slow growth and high unemployment is much higher than the temporal damage caused by frequent withdrawals.

To achieve full employment, the United States must use their securities underwriting risks of the use of risk aversion in the short-term savings abroad to acquire or invest funds instead of allowing fear to risk sitting idle. It is easy to convince homeowners with poor credit rating and no risk of mortgage loans and use of these funds. It may be more difficult to find alternative uses. Nothing is clear. It will take time to find them, but the economy has always found alternatives. Always more difficult task has been to convince investors to ensure the long-term risks of the use of these funds by placing a down payment on behalf of homeowners through its willingness to finance under the waves of the subprime securitizations are not rated AAA. Rising prices of mortgage securities, high family risk becomes easier. But rising prices are not unique to housing.

The government can make that guarantee lower that the private sector can cost. Because of its size, it is not necessary to maintain equity of inactivity to ensure reliable application. Because the withdrawal is only temporary, the government can expect to make a profit if default risk management of the bank truth, as it has to ensure that takes place

during the crisis and withdraw its funding. This makes the government guaranteed much cheaper than the alternatives, as long as they can effectively manage moral hazard.

4.2. Stronger underwriting of risk

Reducing the size and alignment of the banks will do nothing to reduce the risk of panic withdrawals. In a crisis, bank failures do not occur in isolation. Withdrawals will fragment industry a bank insolvency as easy as they would to a consolidated one, just as they rendered the fragmented savings and loan industry insolvent in the early 1990s.

Busting big banks only reduce the competitiveness of the economy. A fragmentation of the banking sector can work when the economy is highly regionalized, but today the world continues to evolve into a more integrated whole, with or without one. The world now shares everything from natural resources to multinational corporations, capital markets, media, communications infrastructure, environment, and law enforcement. To strengthen the country's leadership in the world, the United States should serve financial institutions can successfully lead, finance, and compete in the markets and the increasingly integrated evolution. And these institutions would necessarily be too big and too connected to fail.

Speculators have also benefited from the continued failure of the government to charge banks for government needs to liquidity risk. Bank increased self to take advantage of short-term financing is very low. Increased consumption rates, unrealized gains speculators, will ensure that inadvertently encourage speculation.

Regardless of the dangers of using short-term debt, every working economy requires on-demand liquidity and capital preservation. With a chronic shortage of equity underwriting risk, the authority must find ways to accommodate the needs of savers to recirculate their income as investment or consumption to increase employment and growth.

4.3. Improve the creditability of government guarranty

The economy is having a difficult time, perhaps impossible, to achieve full employment without putting risk aversion operation of short-term financing. Serious risk retreats mitigate risk and increase employment.

Regulations that leave liquidity risk mispriced require that risk be restricted in other

ways: by prohibiting proprietary trading and limit the credit default swaps, adjusting the rating agencies credit rating regulations, or bank, for example. The risk of unintended consequences of these regulations is particularly significant. Narrow returns relevant alternatives to the private sector banks, for instance, drains professionals required to manage complex risks on behalf of the banking sector economy. Free competition allows competitors as investment funds to recruit talent to compete more easily with them.

One alternative for pricing insurance is to sell a portion of each bank's coverage to the public. The amount of private capital at risk would only need to be large enough to provide an accurate price.

An alternative for pricing insurance is to offer as part of the coverage of each bank to the public, only to remain the amount of private capital at risk large enough to provide an accurate price. Financial institutions are too small to provide effective security prices may be required for short-term loans from larger banks. Investors underwriting credit risk will have to buy the insurance liquidity have been waiting for the right size of the credit from banks to insurance or written agreement guaranteeing the default risk online, but without the risk of liquidity.

Management agency may establish rules to increase the visibility of the risks banks take in order to increase the accuracy of the valuation of the insurance market of each bank. They can perform an audit and stressful to find and offer relevant information. They may require large banks to buy securities other insured bank. They can also use traditional forms of regulation, such as the rules and restrictions on ownership of capital adequacy of loan -default likely to reduce reliance on the accuracy of insurance rates.

Government insurers can adjust their base price according to various policy objectives. If the government charges ants the public's full cost of liquidity insurance, it will be the same scenario as pushing the cost onto the public by pushing the full risk onto the banks. Borrowers, especially homeowners, will have to bear high costs. The ownership of the house will be more likely to decrease.

Insurance limits the authority of the agency to punish the banks during the crisis. It allows regulators to respond confidently and with less interference by politician's misguidedly

second-guessing and limiting regulators' decisions. Convinced that the government will act boldly to short-term deposits held at its strongest place before the event that could otherwise cause withdrawals.

It will also reduce the effect on risk reduction in the consequences of such an event. Under this mechanism, the risk of moral right control premium prices is not guaranteed, and threat conditions imposed by the government after the fact. This prevents legislators and agencies managing the assessment of the balance between growth and moral hazard avoided until after the crisis. The failure to curb the risk adequately will require adjustments in future premiums. Increased premiums for risk control are a reasonable response and less damaging than bankruptcy risk confusion and consolidation as required by the agency and voters in crisis finance.

4.4. Other proposals

For the sake of political interests, politicians on the left and the right have tried to distract voters. Scapegoat for the left bank, the right to blame the government, and others believe that the government is simply not allowed banks to benefit the free market and the protection of taxpayers. As a result, most voters do not understand the importance of using short-term debt, the role of banks, the inevitability of the financial crisis, and the importance of the government guarantee either implicitly or explicitly. In the current environment of false belief, no politician can succeed reasonable suggestions for improvement. Political leaders play an active role in repairing misunderstandings, regardless of the political party. Armed with the proper knowledge, most voters may support a more muscular role for government and trust in banks. If a majority of voters support this functionality, improve and ensure the ability to reduce the probability of a bank run. Instead, political parties opposed to the opposite condition.

Improving the reliability of the government guarantee can reduce the risk of withdrawal, but also increases the risk of moral hazard. Capital reserves requirement strengthen banks and make them more accountable for the risks they cannot control. This better separation between default risk and liquidity risk guarantee of moral hazard is reduced. Even if having more equity at stake didn't rein in imprudent risk taking, more capital to absorb defaults would still reduce the likelihood of defaults triggering a bank

run.

Tight supervision of banks to finance loans predetermined stages AAA ratings easily. This limitation, however, can significantly reduce the funding for subprime loans. Proponents of ownership subprime housing loans are willing to avoid this result does not depend on the consequences for the economy. To keep open the possibility of easy new mortgage financing at high risk of bank defaults, we are trying to increase the risk of damage to the banks and the economy where stirring panic to reduce moral hazard. This imposes a huge cost to society. It's a slow recovery and rising unemployment.

Reasonable rules to support the bank's role has changed significantly in recent years from a fundraising money, capital, underwriting, risk taking and market today. It is a good idea to require all banks to take a long side of the trade. It would be unwise to limit most of the short side of the trade. Financial sophistication to realize that restrict short selling restrictions give the prices of financial assets, a higher probability of damage to investors holding the securities to maturity, and increase early Such agencies.

CONCLUSIONS

The U.S economy was in historically high performance prior to the catastrophic financial crisis with employment grew to peak at 140 million workers at 2007. Worker all around the world tried to become a part of the U.S workforce. The nation was also a leader in the world in innovations and technologies advancement. The inner spirit of entrepreneurialship helps to change the face of the world business with giant tech company like Google, Microsoft, Apple, Intel, Facebook. Oracle, etc. The growing value of innovation has been beneficial to the rest of the U.S. workforce and the trade deficit also contributed to growth by eliminating capacity constraints. American start to consume more than ever and in the case of unrepresented robust exports to offset imports, only successful innovation will drive up the demand and wages of domestic workers without reducing growth. In order to reduce high unemployment, the government must find ways to put the world's risk-averse savings to work prudently and they have long known they must allow the economy to use risk-averse short-term savings to fund increased investment and consumption rather than leaving the savings sitting idle available to fund withdrawals. This is especially important in a world economy filled with a surplus of cheap unskilled labor and risk-averse savings. But, again, allowing banks to borrow short and lend long exposes the economy to the risk of infrequent but highly unstable hair-triggered bank runs and in this case, it happened. Misguided housing policy deteriorated the risk of subprime defaults triggering a bank run. The growth of risk-averse domestic saving reached a limited amount of government debt pushed risk-averse short-term debt into subprime mortgages. The crisis happened after, clearly revealed that banks cannot hold enough equity to mitigate withdrawals. Contrary to regular belief reducing the size of banks that are too big to fail will do little, if anything, to solve the problem. If lawmakers want to put short-term savings back to work without idling more equity, they must reduce the risk of damage from withdrawals by strengthen rather than weaken government guarantees of liquidity. Regulators also need to charge banks for government guarantees based on the risk banks bear, this also make banks be more aware to the risks they take. Eventually a more visible risks will help market to price that risks more accurately. A requirement of increased capital adequacy reserves also make banks more responsible for the risk they bear.

Copping with unemployment in the aftermath of a crisis, lawmakers could use thoughtful immigration and trade policies to dampen unemployment by temporarily

exporting it, lower corporate tax rates to encourage domestic employment would also be an effective solution.

From a fair enough perspective, commerce is the salvation of the poor, not charity. It has been long history that successful risk takers put Americans, immigrants, and offshore workers to work. Decisions of the government to increase public expenditures which put risk takers under threaten with higher taxes won't put them back to work, at least not permanently. That merely hamper Americans transition to a more sustainable economy by slowing the accumulation of equity and discouraging risk taking.

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Resources:

1. HENRETTA, James; EDWARDS, Rebecca., *America's History, Volume I: to 1877*. Bedford/St. Martin, June 2000.
2. CONTE Christopher., *An out line of the U.S economy*. AIPI, October, 1981
3. RITHOLTZ Barry., *The U.S Economy's Lost Decade*. July, 2010. Available online at <http://www.ritholtz.com/blog/2010/07/the-u-s-economys-lost-decade/>
4. BERNANKE, Ben.: *What The Fed Did and Why*. The Washington Post, Washington, November 4, 2010
5. FORBES, Kristin.: *A Reassessment of the Relationship Between Inequality and Growth*. American Economic Review, Chicago, November 4, 2000
6. FRANK, Robert.: *Darwin, The Market Whiz*. The New York Times, New York, September 18, 2011
7. GOLDIN, Claudia., KATZ, Lawrence.: *The Race Between Education and Technology*. Harvard University Press, Cambridge, MA, 2008
8. GRAHAM, Benjamin.: *The Intelligent Investor, a Book of Practical Counsel*. Harper Business Book. New York, 2003
9. GREENSPAN, Alan.: *The Age of Turbulence*. Penguin, New York, 2007
10. HENRY, Emil.: *How to Shut Down Fannie and Freddie*. The Wall Street Journal, New York, November 11, 2010
11. SAMUELSON, Robert.: *The Great Inflation and Its Aftermath: The Past and Future of American Affluence*. Random House, New York, 2008
12. SCHWAGER, Jack.: *Hedge Fund Market Wizards, How Winning Trader Win*. John Wiley & Sons, Inc. Hoboken, New Jersey, 2012
13. SCHWAGER, Jack.: *Technical Analysis*. John Wiley & Sons, Inc. New Jersey, 2001
14. SOROS, George.: *The Crash of 2008 and What It Means, The New Paradigm for Financial Market*. Public Affairs, New York, 2009
15. JON, Bakija, BRADLEY T. Heim, "Jobs and Income Growth of Top Earners and the Causes of Changing Income Inequality: Evidence from U.S. Tax Return Data," *Department of Economics Working Papers*, 2009

16. ZINLIU, Hu.: *Stock Market Volatility and Corporate Investment*. International Monetary Fund Working Paper, October 1995 available online at www.imf.org/external/pubs/ft/wp/1995/wp95102.pdf
17. KIRKWOOD James,. *English Court of Appeal*. United Dominions Trust Ltd, 1966
18. British Royal Mint,. *Legal Tender Guidelines*. Retrieved 2007-09-02 Available online at <http://www.royalmint.com/aboutus/policies-and-guidelines/legal-tender-guidelines>
19. MCKINSEY,. *House of Horror, part 2*. The Economist, November 2011 available online at http://ww1.mckinsey.com/mgi/reports/pfs/gcm_sixth_annual_report/gcm_sixth_annual_report_full_report.pdf.
20. KOWALSKI Alexander; KOLET Ilan, *Productivity Is Not the Savior You Think It Is*. Bloomberg BusinessWeek, October 2011
21. Federal Reserve Board, *Household Debt Service and Financial Obligations Ratios*. December, 2011. Available online at <http://www.federalreserve.gov/releases/housedebt/default.htm>.
22. "The Subprime Panic," *European Financial Management* 15, no. 1. 2009