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**Вплив глобальних фінансових шоків на світову економіку / The Impact  
of Global Financial Shoks on the Global Economy**

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Дипломну роботу допущено до захисту

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## **ANNOTATION**

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This thesis is devoted to the study of scientific, analytical and theoretical aspects of financial shocks and the world economy. The concept of financial shocks and their impact on the global economy. The analysis of the effects of global financial shocks on the world economic development, this includes the transmission channels. The strategy regarding overcoming of financial shocks and crisis in the world and Gabon are revealed.

## **АНОТАЦІЯ**

БОБО-ЕЛІСА КАНДОЛО ЛУКАМПА Вплив глобальних фінансових потрясінь на світову економіку. - Рукопис.

Дипломна робота на здобуття ступеня магістра за спеціальністю 8.03050301 – Міжнародна економіка. – Тернопільський національний економічний університет. Тернопіль, 2017.

Дипломна робота присвячена дослідженню теоретичних основ вивченню наукового аналізу та теоретичних аспектів фінансових потрясінь і світової економіки. Розглянуто поняття фінансових шоків і їх вплив на світову економіку. Проаналізовано вплив глобальних фінансових потрясінь на світовий економічний розвиток. Виявлена стратегія щодо подолання фінансових потрясінь і кризи в світі і Габоні.

## РЕЗЮМЕ

**Дипломна робота** містить 128 сторінок, 10 таблиць, 14 малюнків, і список джерел з назвами.

**Метою дипломної роботи** є аналіз впливу глобальних фінансових потрясінь на світову економіку в цілому і економіку Габону, зокрема, виявити канали для міжнародної передачі фінансових потрясінь, і на цій основі розробляти рекомендації з питань політики в цілях зміцнення стійкості для габонської економіки до зовнішніх фінансових шоків.

**Об'єктом** даного дослідження є явища фінансових потрясінь і фінансової кризи в світовій економіці.

**Предметом** даного дослідження є вплив світових фінансових потрясінь на світову економіку взагалі і власної економіки Габону, зокрема.

**Ключові слова:** глобальні фінансові потрясіння, канали передачі, глобальна фінансова стабільність.

## RESUME

**Thesis contains** 127 pages, 10 tables, 14 figures, and list of sources with titles.

**The goal of this thesis** is to analyse the impact of global financial shocks on the world economy in general and the economy of Gabon in particular, to reveal the channels for international transmission of financial shocks, and on this basis to develop policy recommendations for strengthening the resilience for Gabonese economy to external financial shocks.

**The object of this research** is the phenomena of financial shocks and financial crisis in the global economy.

**The subject of this research** is the impact of the global financial shocks on the global economy in general and the economy of Gabon in particular.

**Keywords:** global financial shocks, transmission channels, global financial stability.

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## **INTRODUCTION**

### **ACTUALITY OF THE THESIS**

The role of international integration of economies has been necessary in order to boost the economy of one another worldwide and to strengthening weakness in the financial system, and the most important to achieve a global financial stability in the world. This integration brought a lot of changes in different countries. Recently, the financial stability becomes a priority in the world. It has very significant attention from economists, governments, financial institutions, scientists and so on.

The actuality of this research lies on the fact that a shock in the financial system of a country is contaminated to the rest of the world, such as financial shocks. Financial shocks are those shocks, which disturb the financial stability and lead to economic and financial crisis. This is because financial shocks affect easily any financial activity, and then go to the real economy.

The global financial crisis has increased a number of questions regarding the role of financial authorities in the field of financial stability. It hits a lot of countries and companies. Moreover, the consequences are nowadays hitting various economic activities in the world. The global financial crisis took the attention of the world recently due to its impact on the real economy.

### **THE AIM OF THESIS AND ITS TASK**

The aim of this research is to show the influence of financial shocks on the world economy. To determine types of financial shocks, a shock in one country or one sector of the economy can influence the global economy.

The global financial shocks are a short phenomenon, which contribute to the economic changes of a country due to the fact that financial shocks can be started from one company to another or from one country to the rest of the world. Furthermore, to achieve the aim of this thesis, this study regards on specific tasks like:

- ❖ To understand the concept of financial shocks, their types and implications of those shocks for the global economy

- ❖ To determine the international transmission mechanism of financial shocks and effects on the real economy;
- ❖ To evaluate the specific features of the 2007-2009 global financial crisis;
- ❖ To analyse the impact of 2007-2009 global financial crisis on the global capital flows, international trade and on the world economic development;
- ❖ To assess the impact of global financial crisis on developing countries;
- ❖ To investigate on the impact of global financial crisis of 2007-2009 on the economy of Gabon;
- ❖ To establish the policy of global financial stability major initiatives and points of concern;
- ❖ To propose improving the resilient to financial shocks in Gabon.

**The subject of this course paper** is financial stability shocks.

**The object of this course paper** is the transmission mechanism of financial to the real economy and the rest of the world economy.

**Novelty of the research** Based on the result of the research, financial shocks can be minimized through different factors to consider. Governments can regulate financial enterprises and investment companies; banks may monitor the exchange rate.

**Practical meaning of research:** The practical meaning of research lies in preventing the influence of financial shocks on the Gabon economy.

**Method of research** includes a lot of research documents such as books, articles, publications, and all types of documents related to the topic with excellent analysis. Moreover, the method also consists of universal scientific and special methods of research such as historical and logical, scientific analysis, induction and deduction, structural dynamic analysis, professional and official publications, calculations related to research of the topic.

**Structures of the thesis:** the report is organized into three parts. The first chapter demonstrates essence of financial shocks on the global economy. The second chapter analyses the impact of 2007-2009 global financial crisis on the

global economy. The third chapter describes strategy of overcoming financial shocks.

The written research of Master's thesis consists of three chapters, introduction, eight sub-topic, conclusions and references.



# CHAPTER 1: ESSENCE OF FINANCIAL SHOCKS ON THE GLOBAL ECONOMY

## 1.1 THE CONCEPT OF FINANCIAL SHOCKS, THEIR TYPES AND IMPLICATIONS FOR THE GLOBAL ECONOMY

Financial shocks are very important to consider in the world economy. They have significant role to play in the financial crisis. The financial shocks influence particularly the stability of global financial system. Those shocks are disturbance of the global financial stability. This is can be due to the fact that they are connected to the function of the financial system and more. Moreover it's necessary to know the financial shocks for a better understanding of economic and financial crisis and any phenomenon related to. The concept of financial shocks is mostly used when there's an unexpected situation in the economy, or finance due to changes in different sphere.

Furthermore, financial shocks affect firstly the stability of financial system, and affect other factors and sectors. The financial system is influenced by any financial shocks due to the fact that any shock changes the financial system and more further the financial stability, overall the global economy.

There are various ways to define financial shocks:

Table 1.1: Financial shocks and financial crisis

<b>Author</b>	<b>Definition</b>
Urban Jermann and Vincenzo Quadrini, year 2012.	“Financial shocks are perturbations that originated directly in the financial sector and started to be explored only recently. They are disturbance that affect the firms ability to borrow”. [1].
Frederic S. Mishkin, year 1992, 2001.	“Financial crisis is a disruption to financial markets in which adverse selection and moral hazard problems become much worse, so that financial markets are unable to

	effectively channel funds to those who have the most productive investment opportunities”. [2]
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Source: developed by the author

Financial shocks and financial crisis are usually confusing terms, however they both are contagion and affect the financial system and the real economy. Financial shocks lead to the financial crisis, after a shocks comes a crisis. Financial shocks are usually short-term events while the financial crisis are long-term events.

Financial shocks are those that disturb the financial stability and the financial sector then leading to economic and financial crisis. This is because financial shocks affect easily any financial activity. Nevertheless, the financial crisis interrupts the financial market making them to be worse. It combines different types of crisis.

A financial shock is a panic in the financial sector but the financial crisis is an event that is already there no need to panic but find a solution.

Financial shocks have a significant effect on domestic Gross Domestic Product; the bigger and the more exposed the domestic banking sector is to the foreign economy. Financial crisis affect not only the financial markets but the real economy as well. It arises when some financial institutions or assets suddenly lose a large part of their value.

Financial crisis are crisis that take place in an organization due to its existing financial situations such as losses, grow in costs, non-availability of funds, bankruptcy, unable to pay back loans and so one. In others words, financial crisis is a main interruption in the financial system, which handicap the economy’s ability to the intermediate between those who want to save and those who want to borrow and invest not strangely, given the financial system central role, financial crises have a deep macroeconomics impact. A lot of the deepest recessions have followed problems in the financial system.

It exists different types of financial shocks as mentioned in the figure below:

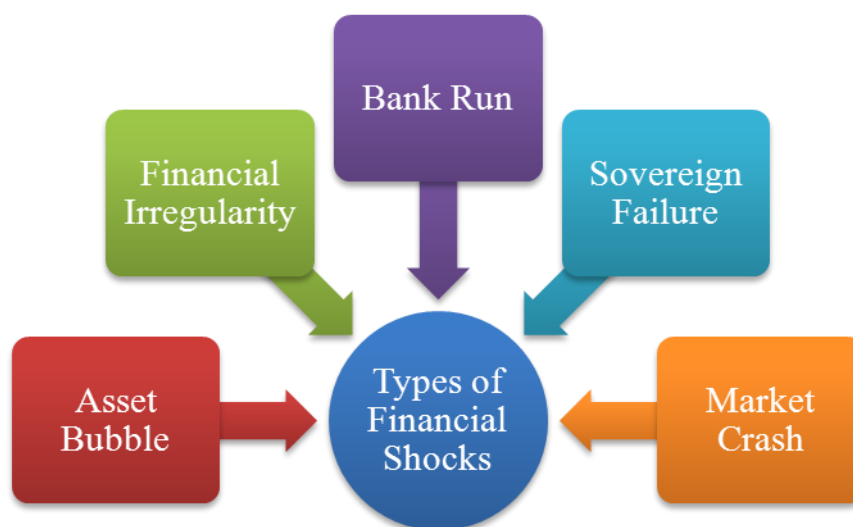


Figure1.1. Types of financial shocks done by author via [3]

➤ **Asset Bubble:** is when there is a pricing inflation and sudden collapse for a major sector or asset class. One of the examples is the dot-com bubble in 1999. It is important to remember that the dot-com companies are those companies whose operations are based on the Internet industry through a website. In others words conducting a business on the Internet such as Amazon.com, Pets.com, Google, eBay and more others. During the period of 1990's, this industry was growing faster. A time where most people created business with one goal to make money only. Furthermore, investors invested all their money into Internet startups hoping that in future it would be profitable and to gain from the boom. The commercialization of the Internet was so great at that moment. At that time it was new to have a business with a web address where these companies exited only online and warehouses. Those companies were doing successfully great. This was a short great period for youth people who wanted to start a business. Internet expansion and computers in people's daily lives characterize the dotcom bubble. It was a big opportunity for enterprises but no one was thinking about it to bust one day. Later dotcom bubble led to a bust and investors lost their money.

Here financial asset presents a bubble when its price surpasses the present value in the future income. The idea in the stock exchange is that individual buys stocks in order to gain from the income it creates. Moreover, some individuals buy stock to speculate the price, and wishing to see it a greater or higher price later. When most individuals in stock market buy speculatively, this will lead to a very high price of the stock. And if they want all at the same time to sell, the price will fall too. Buying when the price of a stock is more than its actual price plus dividends and interest, the stock is to be said exhibiting a bubble.

Moreover, the sub-prime property bubble 2008 is another example of the asset bubble. Where decreased of interest rate it means money is cheap plus leverage then plus financial innovation lead to asset bubble. Housing bubble begins with increased in demand. It is doesn't just mean high price. It is a situation as a result of unjustified speculation in the housing market leading to a quick rise in real estate prices. At the end of a housing bubble it is difficult to suggest or make a prediction. The housing bubble began in US since mid-90s. The stock wealth caused consumption boom and leading individual do buy bigger and or better houses, then people spend some of their new stock wealth on housing. Moreover the high levels of in demand leading to increase also in price. This can lead to the financial crisis in a country then to the globally within a year. Low interest rate environment experiencing the United States of America economy was due to large capital inflows from abroad. When there's drop in asset prices, financial institutions will gradually be destroyed at the same time, lending standards tighten.

➤ **Financial Irregularity:** can be defining as corporate or accounting fraud; different case such as the case of Rogue trading; Ponzi schemes or other major irregularities. The Financial Irregularity consists of theft or misappropriation of funds, when there are deliberate errors in the preparation of financial statement of a company, this can be due to false statements on financial reports. It normally leads to a scandal in the financial system.

For example Enron 2001, the American's Most Innovative Company was born in 1985 when Houston Natural Gas merged with Omaha-based IneterNorth,

the world's leading electricity, natural gas, pulp and paper. The company is among the biggest accounting fraud in the world. Enron was one of the American's largest corporations. Its fall affected the lives of thousands of its employees and lost their jobs consequently. The collapse of Enron nearly causes severe and disabling damage the energy industry; this shook and vibrated the markets and the world business as well.

Enron was using market-to-market accounting in order to hide financial loss or financial debt, making the company to be more profitable than it was. It had debts more than losses. Another problem is that Enron was having more liabilities than the company's assets. Enron invested in projects which demonstrated too risky, then they were not able keeping it up with debts obligations of the firms.

➤ **Bank run:** means when there's bank failure, including credit default for major banks, banking system or market participant. In others words, customers of a bank do not trust the bank anymore. Depositors or creditors are expecting a dramatic local economic crash then they lost confidence in banks by quickly withdrawing all of their funds and asking banks all their money, unfortunately for banks because they are unable to meet their obligations due to lack or insufficient of money in the bank. They are in worried that the bank go bankrupt or won't be able to give them their money in the next days.

Bank failure from the standpoint of financial shocks means bank failure as financial shock. Moreover, credit crunch is caused by bank failure because bank failure works as a financial shock, which leads to other events. Companies depend on bank finance. If bank fail no money goes to companies this is transmitted to the real sector, the real economy.

Banks are by birth fragile, make them subject running by depositors. Moreover, problems of personal banks can rapidly spread to the whole banking system. While public safety nets includes deposit insurance can reduce the risks, public support comes with falsification, which can currently raise the direction of a crisis. Institutional instability can also augments the risk of crisis. For example, banks massively depend on the information, legal and judicial environments to

make urgent investment decisions and obtain their loans. With institutional instability or weaknesses, risks can be increased. While banks crises have taken place over centuries and viewed some usual patterns, also their timing stays experimentally difficult pinning down. Banking crisis is when a bank endures a sudden rush of removals by depositors. In others words, it is a financial crisis which influences the activity of banks in how they control assets, liabilities and equity in their possession. During crises banks are opened to bank run phenomenon meaning that banks depositors unexpectedly hurry to withdraw their saving and capital. This is due to the fact that there is a panic generated in the financial market because depositors think that banks will soon bankruptcy and like a result depositors may surrender or waste even lose their capital accumulated over the years.

Examples of bank runs are what happened in Bank of America in 1931 and the case of British Bank Northern Rock in 2007. British government presented tension loans through Bank of England to close the short-term liquidity problems. However, it didn't assist improving and stabilizing the condition, and British government was imposed to nationalize Northern Rock Bank. Banks frequently determine deposits accounts where individual deposit their savings and has right to withdraw them at anytime. Banks use those deposits providing loans that are paid over a long time. Therefore, if all the depositors will like to withdraw their savings at one time, then bank will be in a condition where it is bankrupt because of absence of cash flow. This is the banking crisis. Additionally, banks may see the condition coming and try to prevent this situation, banks can then be afraid providing credit and loans to individuals because of the anxiety, which it may not have much cash to lend out.

Another example is the case of Lehman Brothers in 2008. The Lehman Brothers is the fourth largest investment company, global financial services firm in the United States of America and worldwide before its fall in 2008-09. Over more than 150 years, the Lehman Brothers have played a significant role in the financial and commercial history of the United States of America, American industry and

technology.

➤ **Sovereignty Failure:** is a debt default; currency devaluation; government failure and or government change. This means that a sovereign state is unable or refuses to pay back their debts. The government failed to its external sovereign debt obligations.

The sovereign failure happens also when a country is obliged to devalue its currency, because of that fact that the country is in the position not to pay its debts. When a country is not able or can't to pay its debts. When this happens, all countries, which were trading, with this specific country will be unfavorably or negatively affected. This lead to investors to lose the value of their investments because of the currency that applies will have lower much value. A declining in foreign capital inflows affecting the balance of payment system leads to monetary breakdown. A regime of monetary exchange has highlighted the weakness of the system and incapability protecting against speculative attacks. Important crisis has affected financial system and sovereign debt.

Different examples can illustrate the sovereign failure, such as Greek sovereign debt crisis in 2010. There are different reasons why a government can take loan it may be building the infrastructures in order to attract and motivate foreign investors and improvement of the country. The Greek government used the strategy of paying debts by debts, meaning that asking for a loan in order to reimbursed another loans and so on and so on, doing the same thing lead to the accumulation of debts. That's why the country was unable to meet its debts. It's still owes various international institutions such as International Monetary Funds, European Central Bank etc.

➤ **Market Crash:** means there's extreme correlated mass movement of share process, possibly driven by information or perception about economic fundamentals. In others words, it indicates the quick down in security prices in the market.

A financial asset presents a bubble when its price surpasses the present value in the future income. The idea in the stock exchange is that individual buys stocks

in order to gain from the income it creates. Moreover, some individuals buy stock to speculate the price, and wishing to see it a greater or higher price later. When most individuals in stock market buy speculatively, this will lead to a very high price of the stock. And if they want all at the same time to sell, the price will fall too. Buying when the price of a stock is more than its actual price plus dividends and interest, the stock is to be said exhibiting a bubble.

The May Flash Crash in 2010 also called the flash of 2:45 is a good example of market crash. During that period, Europe was slapped by the Greek crisis. At the same time, in the market something happened which was a rapid drop and recovery in securities prices shortly. The events caused a lost of confident in the price information for the different market participants.



## **1.2 THE INTERNATIONAL TRANSMISSION MECHANISM OF FINANCIAL SHOCKS: MAJOR CHANNELS AND EFFECTS FOR THE REAL ECONOMY**

The international transmission of financial shocks increases when there's a bigger openness to trade in goods and services, unfortunately the internal responses of the terms of trade and the real exchange rate, tend to low the transmission mechanism. The transmission mechanism can be defined as the procedure via which central bank interest rate changes and financial shocks affecting the real economy.

There is a link between the financial integration and the international transmission mechanism of financial shocks. At the same time, the international transmission mechanism of financial shocks can be stronger between financial integrated economies.

Financial shocks have the form of losses acquired by the global bank from holding an external high-risk asset.

United States financial sector can be seen as one of the major international transmission channels whereby the United States financial shocks transmitted to others countries during the financial crisis. At the same period, the more a country's banking sector was exposed to United States financial assets, the more coordinated its business cycle was with that of the United States of America. United States monetary shocks trigger important fluctuations in the world. The financial channel have significant role in the transmission.

There are potential crucial channels through which financial shocks can be transmitted between economies.

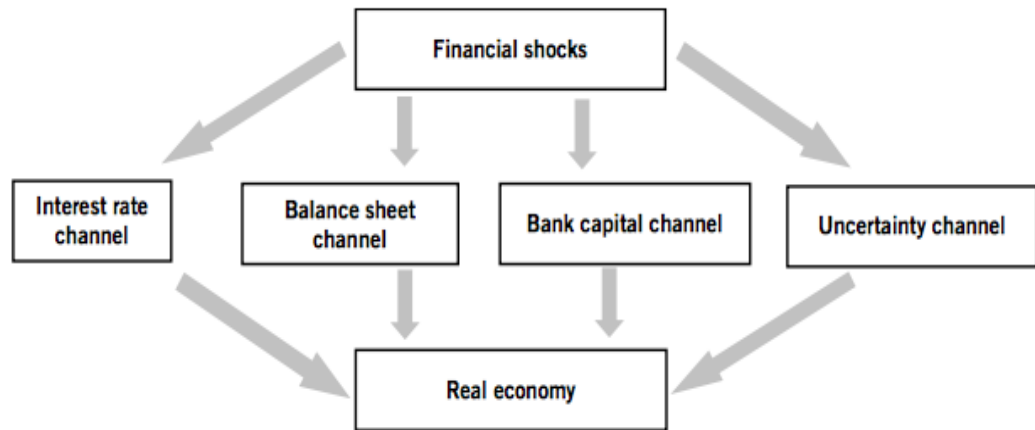


Figure 1.2. The transmission of financial shocks to the real economy [4]

The transmission mechanism of financial shocks is divided into four channels as mentioned in the figure 1.2. Showing the four channels and their impact and spread on the real economy.

The interest rate channel describes in this figure is the first channel of the transmission mechanism which has effect for the real economy. Connected to the monetary policy, interest rate channel can be linked also to the exchange rate. The transmission of financial shocks to the real economy varies depending on the channels. Financial shocks connected to the interest rate channel lead to real economy, the same is done with the uncertainty channel. However, other ways of the financial shocks to affect the real economy are through the balance sheet and the bank capital channel before getting to the real economy as demonstrated in the figure 1.2.

Furthermore, when there is rise in central bank policy rate, it leads to an increase in market interest rates, making the financing costs for banks higher, as it becomes more and more expensive to borrow. Banks raise the rates of lending facing by businesses and households by the same amount meaning that the differences between lending rates and market rates do not changed. When the interest rate increases, the savings of the households raise and decrease their consumption. For businesses, their investments fall. Furthermore, higher market

rates may lead to a negative impact on the price of financial and real assets due to the present value of future returns when assets reduce. Consumers decrease resulting from this wealth effect.

From the interest rate channel two effects can be observed. The first is when money supply increases, the real interest rate decreases and the investment increases, leading to increase the output. The second is that increasing the money supply, raise the expected price level and the expected inflation, while the real interest rate will decrease, increasing the investment, and lead the output to rise.

Moreover, the balance sheet channel is where the financial accelerator acts. The decline in economic agents balance sheets triggers the initial shock spreading. The less the banking system is capitalized the more bank lending, leading to output and inflation respond to shocks.

Economic disruptions may be magnified and spread by financial accelerator including all shocks such as change in productivity, in aggregate demand causing decline in money supply and in foreign demand, changes in the value of economic agents illiquid asset may arise because of the change in interest rate or change in asset prices both may be caused by actions of economic policy makers or changes in the expectations on future economic performance and so on.

The balance sheet channel occurs when investments are financed through the external funds instead of personal funds. The creditworthiness is connected, in order, to the borrower's income, expenditure and balance sheet. Normally, when borrowing on the market the borrower's assets are used as assurance. A change in monetary policy affects the balance sheet net worth of firms. And if there is a change in the balance sheet their borrowers are affected and the overall aggregate economic activity as well.

Financial shocks may lead the value of borrower's assets to decline while the value of loans won't change. And the balance sheet of the borrower will look unfavorable than expected. Responding to that, lenders can apply stronger guarantee requirements while to rise their lending rates compensating for the risk to increase. The borrower may choose to payoff part of its debt if more than

expected the funding cost raises. Meaning that a big share from the income of the borrower will be going to payoff instead of consumption and investment during a coming period. If the households and companies are satisfied with the levels of their debt then they returning to consumption and investment will be at a normal rate. Financial factors for the real economy were affected by the financial shocks. Asset prices have usually impacts on the real economy as well. Financial shocks have large impacts on output. [5]

The financial accelerator defined as one of the financial theory saying that a small change in the financial markets can produce a large change in economic conditions and create a feedback loop. [6]. It can help in the clarification of the causes of the booms and bursts of the business cycle. The financial accelerator effect on household spending happened due to the fact that, households as well as firms finance some of their expenditures through borrowing. Households normally finance their investments in housing and purchasing of other durable goods by raising funds in credit markets. Financial transactions here are featured by asymmetric information problems, which can be between the borrowers and the lenders, knowing that the borrowers here are the households while the lenders are the banks. Aoki et al. (2004) explained the financial accelerator effect on household spending saying that a positive shock to economic activity causes an increase in housing prices, which leads to rise in homeowner's net worth. This reducing the external finance premium that leads to increase house investments and spilling over into consumer demand by spending on durables. [7].

The financial accelerator effect is the main mechanism where the credit channel is based, which consists of the bank lending channel and the balance sheet channel.

The tightening monetary policy decreases banks' lending capacity, which causes decline in loan supply and/or tightening the conditions of lending and reducing in overall economic activity.

Bernanke and Gertler (1995) state that there is a sensitivity of bank lending to changes of interest rate. For instance, increases in interest rate low the value of

securities. This leads to decrease banks' capital and impacts their ability to attract funds in negative ways. Mostly, deposits have short time duration than bank loans, meaning that interest rates on bank loans can be slow to adjust to changes in the interest rates than interest rates on their liabilities due to the fact that on average loans are less usually negotiated or renegotiated. [8]

The fall of the subprime mortgages market in September 2007 can be considered as the initial economic or financial shock, then this shock is classified as large. However, the size of subprime mortgages market was big in total terms of \$0.7 trillion which was less than 0.5% of the size of United States financial markets. The down of the United States subprime mortgage market obliged financial intermediaries to write off or cancel hundreds billion of dollars in bad loans which triggered an erosion of their capitalization. The collapse of intermediaries' balance sheets harmed their ability in raising funds that decreased their capacity of lending. Hence, there's a decrease in lending standards that non-financial borrowers facing tightened and loan supply. Credit crunch has impact on investment, property prices and consumers, which are sensitive to the free flow of lending standards. Reduction in house and real estate prices leads to erosion of households and companies' net worth and decrease the capacity of their debts. Reducing the strength of non-financial borrowers capacity of debt further rising external financial premium and amplifying the existing decline of investment, consumers and output. Reducing the aggregate economic activity, the ensuing increase in unemployment and decline in housing prices increasing the amount of nonperforming loans. This decreased the profitability of intermediaries and far deteriorated their net worth with another pro-cyclical feedback into the aggregate economic activity. Overall, the initial shock to the financial sector itself seems to have caused and/or intensified the decline of the net worth of all three groups of economic agents and via the financial accelerator effect generating a grave and serious crisis. [9].

The bank capital channel says that banks may fulfill different requirements. One of them is that bank's equity level has to exceed certain share of total lending.

Credit rating institutions are usually higher than the regulatory requirements. Shareholder's can reduce because of the outcome of several risks such as market risk, credit risk, liquidity risk, all leading to solvency risks for banks. Resulting a down in firms to uphold enough high capital adequacy requirements, to force a bank to increase its rate of lending or decrease lending. The transmission channel goes through bank balance sheets contrary to the balance sheet channel that goes via the borrowers balance sheets.

The bank capital channel develops and transmits the effect of financial shocks on investment, output, bank lending including inflation as well. With the bank capital channel active, the peak decrease in bank lending is two times big and reduces in output in much pronounced. Moreover, the adverse productivity shock has longer lasting impacts on the economy. Because the decline in bank lending is bigger in the bank capital channel, this aggravated the impacts on output and inflation. Loan losses can cause a decrease in bank capital, which will lead the banking sector to be in more strict and tight conditions in its own markets. This disturbance and interruption in financial intermediation lead to a fall in output, asset prices and investment.

The impacts of financial shocks can reduce the net worth of banks, because shocks could result from a down in the perceived quality of their assets. [10]

The credit crunch straight affects investment expenditure within the economy and asset prices come under pressure. Decline in investment spending and asset prices will lead to decrease in income such as household income; aggregate output including business profits through economic standard multiplier and wealth effects.

These negative influences then affect loan values and bank capital, stimulating a further round of deleveraging. So because of this unfavorable feedback loop, the final impact of a negative shock to banks' balance sheets on aggregate economic activity may be seriously and persistently bigger than the initial direct impact. [11]

The bank capital channel, firstly highlighted by Van den Heuvel, is the channel whereby monetary policy actions and other shocks impact bank lending through their effect on bank capital. This channel focuses on how balance sheets of banks restrain the supply of credit. [12]. This means that actions of the monetary policy including financial shocks influence the bank capital channel via the bank capital. Bank capital is defined by the value of the bank's assets minus its liabilities or debts. Assets include cash, loans and securities, while liabilities cover customer deposits, including money owed to other banks and bondholders. [13]. Meaning the difference between assets and liabilities of a bank is the bank capital.

Bank capital affects the economy due to the fact that, when there is a negative capital shock, it is followed by a decrease in the capital adequacy ratio, which will lead to increased tightening of loan standards and a reduction in loan supply, expenditure and income. For instance, the reduction in income is directly connected to a decrease in the capital adequacy ratio and asset prices but a rise in loan standards. The fall in expenditure leads to a fall in asset prices and vice versa. This fall in asset prices is interconnected to the decline in expenditure, loan supply and income, which will be followed by a decrease in capital adequacy and an increase in loan standards. [14].

Additionally, the uncertainty channel is when there is a direct link between uncertainty in the financial market and the real economy, which functions through prices, or quantities in the financial system. Firms and households are affected by greater volatility in financial markets. Crucial fluctuations in asset prices, exchange rates and interest rates are examples of this. Higher uncertainty raises the value of waiting in firms. A greater level of uncertainty can result in firms postponing some of their investments. Furthermore, when there is a higher uncertainty, it is usually followed by layoffs and unemployment. Households act in response to the increased risk of unemployment and to the higher uncertainty in financial markets. The overall impact is due to the fact that households increase their preventive savings for instance by reducing their consumption including less investment.

Moreover, national markets are connected to divers degrees by such as common currency, trade, cross-border investments, globalization and more. That is why events in one national market have some effects in another market leading to valuations of stocks in that market to change. And can be linked by economic fundamental as well like trading of goods and services, or by individuals and including companies. Also, countries began to borrow and lend money to other countries. Theses connections has grown stronger with emerged joint stock firms with limited liability protection that authorized individuals and institutions investing in real assets and financial assets in other countries and all around the world. Leading to multinational trade agreements and more.

Further, large amounts of direct and indirect investments flow around the world. Companies in one country can invest in real assets or more in another country even acquire firms. When investments cross border, the cash flows of parent company become dependent on more than one unit that is spread across various countries. At the same time, negative financial shocks to the cash flows of subsidiary in a country will definitely affect the parent country's cash flows, this may lead to reduce the parent company's stock price. Moreover, a shock in one country is spread to another via a channel called the financial channel of across-ownership. For instance, In the United States, more than 2,000 foreign firms have listed their stocks in the form of American Depository Receipts (ADRs). According to a study by Jaiswal-Dale and Jithendranathan (2009), the shocks in the listed countries affect the returns and volatilities of these depository receipts. The cross listing can thus transmit shocks from one market to another. [15].

In addition, another channel where shocks may be transmitted can be the indirect investments because a lot of stock markets are opened to foreign investors in the world. When a crisis happens investors in that country can reevaluate their portfolio holdings and can decide to transfer their assets to safer assets. When there is a decrease in foreign holdings, the stock markets in others countries may be affected.



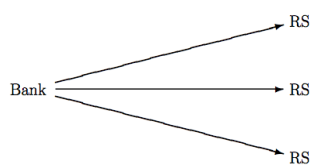
Furthermore, real sector linkages between countries can be seen as the economic relationships such as trade. Financial shocks in one country may be transmitted to its partners easily and rapidly. For instance, Canada and United States of America are linked through bilateral trade. Meaning that United States economic and financial shocks usually have main effects on the Canadian economy. A bilateral trade agreement is the strength of trade links between countries due to the fact that it help and contribute easier movement of goods and services between countries. North American Free Trade Agreement (United States of America, Canada and Mexico) is a good example. A multilateral agreement is also a transfer of shocks from one country to others.

Additionally, when a group of countries agrees in forming a political union such as political links, this can increase linkages between the financial markets of the member countries. For example the European Union whereby a financial shock in one country will deteriorate others and connect to the rest of the world. A channel that moves for example from United States to Asia and Europe then the rest of the world. The connection and transmission will be strong in case of a common currency because in the common currency areas shocks to any one of the economies may rapidly affect other countries. For example the Greek financial crisis, the Greek debt crisis affected others regional economies such as Portugal, Spain Italy and more. Balkans countries were also affected via the banking system because Greek banks have a major presence in that region, and any failure of these banks will affect the Balkans region.

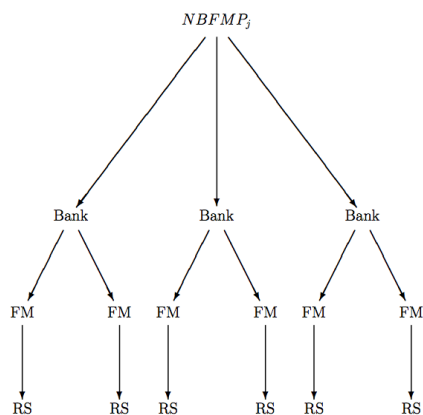
Furthermore, the shocks to the financial market affect the co-movement of markets. If all investors are rational including the same set of information, they will value the stocks based on the information that mostly focus on economic fundamentals. Therefore, if investors in a market have information on the way the events in another market will have effect on the economic fundamentals in their markets at that time prices should show this information. If there is existence of information asymmetry, the full extent of the effects of external shocks to the economic fundamentals of a country cannot be known to the investors. Thus, they

can look at the external market by trying to get the information content from the change of price in the market. Mistaken price movements by this mechanism such as in October 1987 crash of the United States stock markets may be spread to other markets happen in a contagion. Also, Herding occurs when there is existence of information asymmetry between informed investors and uninformed investors. Also known as unknowledgeable investors may not have the resources acquiring the information and so they are trying to imitate or copy actions of the informed investors. The prices of financial assets are usually resulting of an unconscious, subjective evaluation procedure depending on the overall mood of the market. [16]. When the market participants have positive thinking concerning the future like in the tech bubble in the 1990's, stock prices may increase and the reverse is true when the market mood is negative or expecting bad outcome.

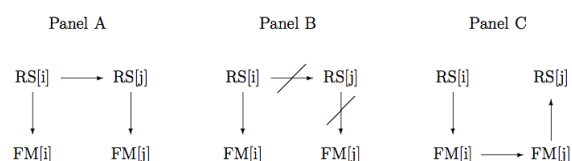
### 1. Propagation from Bank to Real Sector



### 2. Pyramidal shock propagation



### 3. Correlated information channel for contagion



### 4. Fragile and less fragile Financial Institution (intermediaries) linkages

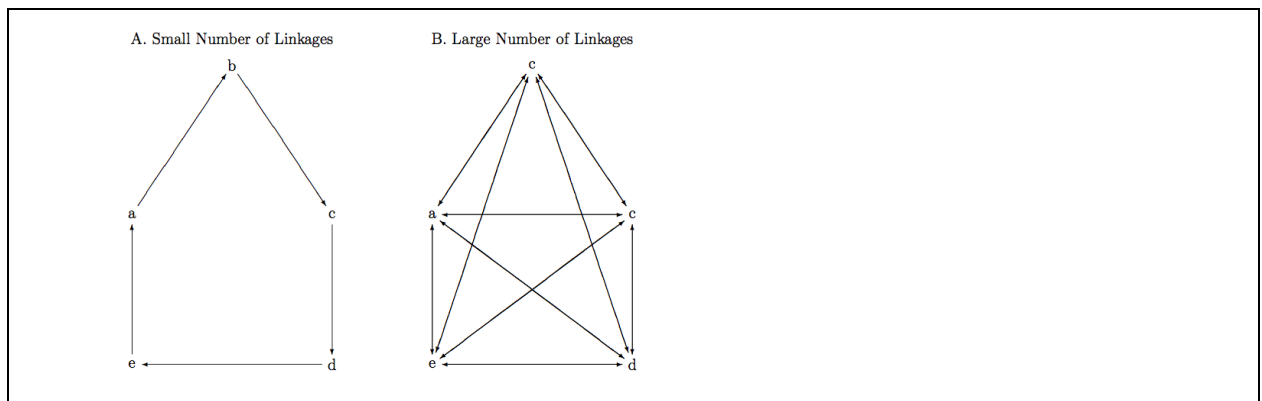


Figure 1.3. Different ways of transmissions [17]

This figure describes different ways that financial shocks can be transmitted in various ways. For example, a shock, which started with a bank, and the bank has operations in various countries, can be transmitted to the real sector of the economies of each of the countries (1). Additionally, from the nonbank financial market participant in country  $j$  (NBFMP  $j$ ) such as Long Term Capital Management knock by a shock, that shock can be transfer to the banks and investment banks, which lend to  $j$ , then followed to the financial markets (FM) whereby banks give liquidity, and finally to the real sector (RS) tied to the financial markets (2). Besides, the next one (3) shows that a shock in the real sector of one country can be transmitted to the real sector of another country. In panel A, shock is openly observed and transferred to  $j$  due to the fact that it has affected a part of the real sector of country  $i$ , which is connected to the real sector of country  $j$ . Also, in panel B, the shock is same has in panel A, but the shock has impacts on a part of the real sector of country  $i$  which is not connected to the real sector of country  $j$ . It important to notice that, the financial markets in country  $i$  was affected by the shock, however the shock doesn't affect the real sector or the financial markets of country  $j$ . Finally, in the panel C, the shock is only privately observable to market participants in country  $i$ , consequently, the shock propagates to the financial markets in country  $i$ , and then due to the fact that the price move in  $i$  can be relevant to the value of real sector claims in country  $j$ , it transfers to the financial markets of country  $j$  and then to the real sector of country  $j$ . Because the real shock in panel C could be of the type in panel B, the financial market may

transmit a shock from one real sector to another although based on public information the shock should be irrelevant. [17]. The last point (4) explains the set of possible connections between 5 deposits that take institutions represented by a, b, c, d and e. The arrows show deposits between the institutions. In panel A, each institution has deposits with one other institution. Institution a, has deposits with b, b with c, with d, with e, e with a, and so on. In panel B, each institution has deposits with every other institution. [17]

### **1.3 . THE EVOLUTION AND SPECIFIC FEATURES OF THE 2007-2009 GLOBAL FINANCIAL CRISIS**

The phenomenon global financial crisis is not new. The world economy has been touched by crises from time to time due to various reasons. The recent one, which is 2007-2009, might probably not be the last. However, various connected factors make one of the most several crises since the Great Depression 1930s, involving macroeconomic problems, loss in financial markets lacks in the implementation of policy. When the financial system creates drops it drive up the cost of assets considerably beyond their true value in bearing or keeping wealth. The rich people get richer and common people are left in a profound situation of indebtedness, poverty, and pressure to accomplish to the mind of financial masters. Financial crisis has caused unimaginable wealth losses, the failure of elite financial institutions, and global recession. [18]

The financial sector has become bigger with large actors, which makes it at times too big to control. Even the internal control of financial institutions themselves dropped in diverse cases. Governments and central banks have the responsibility to uphold financial stability through suitable supervision and regulation of financial markets and its institutions. Nevertheless, the supervisory structures in a lot of regions were divided which led to a lack of responsibility for

the system full risks. The supervisory and regulatory structure dropped to hold pace with the development of financial markets. Additionally, just after financial enterprises become very big in relation to the general economy, public finances are opened to big risks.

An event in the macroeconomic leads to a change in expected future cash flows of a company, which will affect the expected cash flows to investors, this can cause changes in economic activity and interest rates. For instance, the financial crisis of 2008-2009 originated with the weakness of the United States housing market, then rise in the default rates of home mortgages. Mortgage defaults resulted in big losses to financial institutions, which exposed to mortgage-linked derivative securities. From these losses started some of the main financial institutions collapse such as the Lehman Brothers that caused the credit markets to seize up. The credit market squeeze decreased the availability of credit to companies and consumers. The automobile industry that depended on the credit market in providing the financing to its consumption in buying its product was affected by the lack of consumer credit. Leading to bankruptcy of major automobile manufacturers such as General Motors and Chrysler. However, a microeconomic event is specific to a particular company that can affect future payouts to shareholders and can lead to its devaluation of a stock's price [19].

In the US, crisis began in the house market. The activity of construction failed greatly as the house prices come into existence to decrease. In the EU, affected by the disappointment of financial markets and drop in the US. Enterprises began to keep out fixed investment and households decrease their consumption. The financial crisis was hit in EU, which limited the means of entry to capital; the real economy was badly affected. There was a decrease in car sales, decreased in trade by dropping the volumes of export, and so on. This was due to two factors such as the amount of financial linkages and macroeconomic policies persevered earlier to the crisis. In the Asia, countries were less open to the financial stress due to the fact that their financial markets and investors are few integrating with the countries in the center of financial crisis. However, progression effects on the real

economy were hard due to big trade effects.

The important situation for a hard crisis to improve is that the immensely leveraged and interconnected sector of the economy, mostly the financial sector, be necessarily exposed directly or indirectly. Overall, the connection of leverage and risk to aggregate risk is sad and poor one, as it as the possible creating serious downward feedback loops. The crisis was a consequence or event of the interaction between macroeconomic and microeconomic factors. The macroeconomic view means that crisis has been apply to the perseverance of global imbalances, extremely accommodative monetary policy persist in main economies and absence of recognition of asset prices in policy formulation. The microeconomic perspective signifies that the crisis has been associated to the quick financial innovations with enough regulation, credit boom and decreasing of credit standards, incompetent or weak or poor corporate governance and not proper incentive system in the financial sector and general slack or careless oversight of the financial system. [20]

During the crisis, markets in the world experienced very large divisions, disruptions, and interruptions in asset and credit markets, massive deterioration of wealth, and unprecedented numbers of bankruptcies.

Bubbles characterize the evolution of global financial crisis during this period, which were led and followed one after the other. For instance, for the New Economy that is the arrival of Internet, communications and technology bubble, follow by the housing bubble, which led to the bubbles in commodities, and the stock market bubble as well. When one was burst it led to new bubble and so on.

After the dotcom bubble burst, the United States Federal Reserve had the easy money policy, which is connected to low the interest rates. This policy explains that bank here doesn't tight the money. In others words, the money is available for the borrowers to lend as much as they desire because the interest rates is low. The lower the interest rate the more the money is put in the speculation while the higher the interest rate, the more money is put in the transaction. Knowing that a low interest rates motivates banks to borrow from the Federal

Reserve and at the same time it attracts investments such as foreign capital inflows around the world in the country and more. When there is a lot of money in a country, people take loans with low interest rates. This leads government to increase the prices of houses making property speculators richer. When the demand for housing is higher it affect its prices by increasing it as well, or insufficient available housing in the housing market. Consumers invest in the housing market because they have a lot of money to spend and have the ability to spend more than their income at the others hands this is followed by inflation. [21]

During this period the housing market was the good investment opportunity due to the fact that expectation of people is that housing prices never fall.

The housing bubble burst due to the fact that borrowers were unable to pay back their debts. Banks were in troubled and most of them went bankruptcy including investors as well mostly those who invested in the United States housing market.

The commodity bubble burst in 2008 consisting of commodities such as oil, gas, wheat, soybean and gold. When there's increase in money creation and wealth is followed by the higher demand in all things that people are able to consume. The demand was going faster on the basic commodities, which is the feature of the bubble. Nevertheless, consumers were not able to pay back their loans originated from the mortgages meaning that they took loans in banks in order to buy a house but at the same time if you won't pay back the bank has the right to take over the property according to their contract. The commodities bubble was getting worse through the increase in foods and energy prices. Foods and energy are the main fundamental aliments that affect the consumption directly. The higher price on these commodities decreases the consumption due to the fact that they become more expensive which at long term may lead to inflation.

Concerning the stock market bubble, government printed a lot of money which causing to decrease the interest rates and motivate lenders to borrow. There are a lot of people, which are reaching to buy stock at low prices. Low price of a stock lead to increase the buyers then will be followed by increase of that stock

which after will lead to the panic in the market, because everyone will want to sell their stock.

It exists various symptoms of global financial crisis, which will be described below

Table 1.2. Symptoms of global financial crisis

Inflation
Domestic and sovereign debt
Currency debasement / exchange rate crashes
GDP first increases, then declines during crisis
Increased unemployment
Increased suicide rate
Decreased consumption
Decreased investment
Demand decreases
Supply decreases
Saving increases
Export-import imbalances

\*Source: Developed by author via [22]

The table above shows the indicators of crisis from inflation to import-export imbalances. Monetary policy is generally what determining inflation over the long term. When the prices of goods and services is higher or above when the inflation is above the central bank target. Inflation can be a sign of global financial crisis, because the prices of goods and services can change the condition of a country. When the prices suddenly increase, goods and services become expensive and the consumers are frustrated. Most of them find difficult to survive because wages are stable. Moreover, the demand decreases, and producers are affected



because consumers are not willing to buy or spend due to the lack of money. Moreover, the beginning crisis in Greece was due to the fact that the country was not able to meet its sovereign debt obligations in 2010. Followed by Ireland, Portugal, Spain and Cyprus in short term.

The characteristics of financial crisis are by certain type of shock, by its multiplication on how it circulates such as contagion, and extending impact. Some causes can be firstly microeconomic such as weak banking, another one is the first macroeconomic such as recession, then the first institutional like a bad infrastructure or inadequate supervision. Actual crisis were due to assets were generated, bought and sold which was like there were less risk than they truly were because of the low interest rates. Investors predicted the prices of housing to continue to be quickly high. The second initial critical situation is the evolution of securitization and which led to assets to be more complex on the balance sheets of financial institutions due to the fact that main improvements were in risky allocation, and securities were led by a big set of financial institutions which suggested that this consideration unsurely impacted a big amount of balance sheets in the economy. Another initial condition was the securitization and globalization, which led to high interconnection of financial institutions within and across economies. Moreover leverage rose within the financial system, financial institutions augmented their portfolio with less and less capital thus augmenting the rate of return on that capital. Bankers, rating agencies played a very significant role in the financial crisis. Decreased of interest rate means money is cheap plus leverage then plus financial innovation leading to asset bubble.

The features of global financial crisis 2007-2009 can be specifying through various reasons:

- ❖ Crisis is global and it has impacts on all countries in the world. This is done through the globalization of finance whereby economies are interconnected in the financial markets because of the globalization. Financial globalization brought much benefits, at the same time, it is a challenge for policy-making.

- ❖ The global imbalances, when there are countries that have more assets

than others may link to global financial crisis, for example the current account which determines the balance of investment and saving is deficit in United States of America and surplus in China including others Emerging Markets. Moreover the fact that monetary policy is loose because of the low interest rates that happened after the burst of the bubble IT.

❖ Shadow banking system gave a lot of securitization, more leverage and risk taking therefore it is a root of global financial crisis. It allowed a lot of securitization including more leverage and risk taking. The shadow banks act as intermediaries between borrowers and lenders or investors, they don't accept deposits and do not take prices like commercial banks. Shadow banking system is a complicate system, at the same time. They are non-deposits banks.

There are multiple examples to clarify the shadow banking such as finance companies, asset-backed commercial paper (ABCP) conduits, structured investment vehicles (SIVs), money market funds, government sponsored enterprises (GSEs), investment banks, hedge funds, non-bank financial institutions etc.

As intermediaries, the shadow banks provide credit and capital for investors, corporations, and their profits are from either the fees or the difference in interest rates payable to investors and receiving from borrowers. They operate without being subject to regulatory oversight for unregulated activities through the credit default swaps (CDS).

The institutional investors can want to lend their money via short-term. Then, the shadow banking institutions will take that money and give it to those who seek to borrow them for long-term like potential borrowers corporations. Around 2008, they could no longer borrow enough funds to operate. Lenders were scared of the credit risk; at the same time the shadow banks could no get funds from their falling investments in the mortgage-backed securities due the fact that no one wanted to buy the toxic assets. There was panic in the market.

❖ Originate-and-distribute banking model, banks originate credits and hold them on their balance sheet until their maturity in traditional banking. Over

time, banks began to replace the originate-to-hold model with the originate-to-distribute model, whereby they originate a credit and sell or securitize a portion of it at the time of origination or later. Banks began expanding their funding sources to include bond financing, commercial paper financing, and repurchase agreement (repo) funding [23, p 21-25]. Banks could transfer loans off the balance sheet.

Off-balance sheet is not just a tool to create credit but also a tool allowing shifting risk. The movement of credit risk by the originate-to-distribute channel makes easy the credit creation and moreover facilitates wrong spur to issue loans of bad quality (moral hazard). At the same time in the system the overall risk become higher. Taking off assets from balance sheet means that banks are still exposed to the risks connected to them.

❖ The burst of the United States housing bubble after a long period of firmly increasing house prices. As long as home prices were going higher, the more creative got in an effort to keep them more even higher, with an evidently complete ignore for the potential consequences. Nowadays due to globalization and the interconnected financial system, what started in United States because of lenders decisions has spread throughout the world, and menacing to fall the globe into another Great Depression. Loans to pay houses were cheaper.

A lot of families were being able to take out mortgages than before possibly. Lenders began to engage in practice a subprime lending, lending to risky borrowers that wouldn't generally be qualified for a mortgage to buy a house or home. Usually the subprime mortgages came with a lower interest for first few years and later a serious increase. During that period risks were typically not fully explained and several borrowers were told they could easily refinance the mortgage in few years keeping low their interest rate. Everyone was making money like construction companies, banks, materials firms, estate agent and more. To be a homeowner for the first time was the most important thing for consumers in their lives. That's what was called in United States, the 'American dreams'. The increase of the GDP is during the bubble after that it decline when there is crisis, because there is lack of money in circulation or in the market.

## **Summary of chapter 1**

This chapter is devoted to the essence of financial shocks on the economy, including its types as well and different channels where the financial shocks can be transmitted because financial shock doesn't stop in the financial sector or where ever it started. One of the type of financial shocks is the bank run, for example if many companies do not have access to credits, this lead to create liquidity shortage in the economy in total. The overall activity becomes a problem. Moreover, financial shocks are different from the financial crisis. In terms of time for example, financial shocks are unexpected and short-term events while financial crisis can be predictable and long term.

The main features of global financial crisis 2007-2009 are such as new financial innovation, which consists of the shadow banking system, the originate-and-distribute, new economy meaning internet, technology bubble, and communications. Moreover, the globalization of finance and the global imbalances as well contributed to the characteristics of the global financial crisis, without forgetting the housing market boom in the United States. With the new financial innovations, the originate-to-distribution model bank doesn't have to keep the loans or mortgages on its balance sheet however to sell them to investors. The house prices affect households and enterprises as well in their decisions making. The housing bubble is the liquidity to real estate bubble furthered by the United States Federal Reserve monetary policy. When the demand of the houses increases it lead to also increase the house prices and the mortgage repayments also.

The role of banks, financial institutions and credit rating agencies and more was very crucial in the global financial crisis 2007-2009.

The international transmission mechanism of financial shocks can be seen as a contagion, because this takes place when a shock to one country spread to other countries. In others words, a crisis spilled over to another country. This includes markets, institutions as well. Currency crises can be transmitted via direct economic links such as bilateral trade flows and more.

A rise or decrease in monetary policy interest rate lead to increase or decrease in the interest rates on the interbank market. Causing banks to increase or low their rates on credits and deposits. Resulting to a contraction or expansion of investment activity and the aggregate demand including eventually a weakening or strengthening of inflationary pressures.

## **CHAPTER II**

### **THE IMPACT OF GLOBAL FINANCIAL CRISIS ON THE GLOBAL ECONOMY**

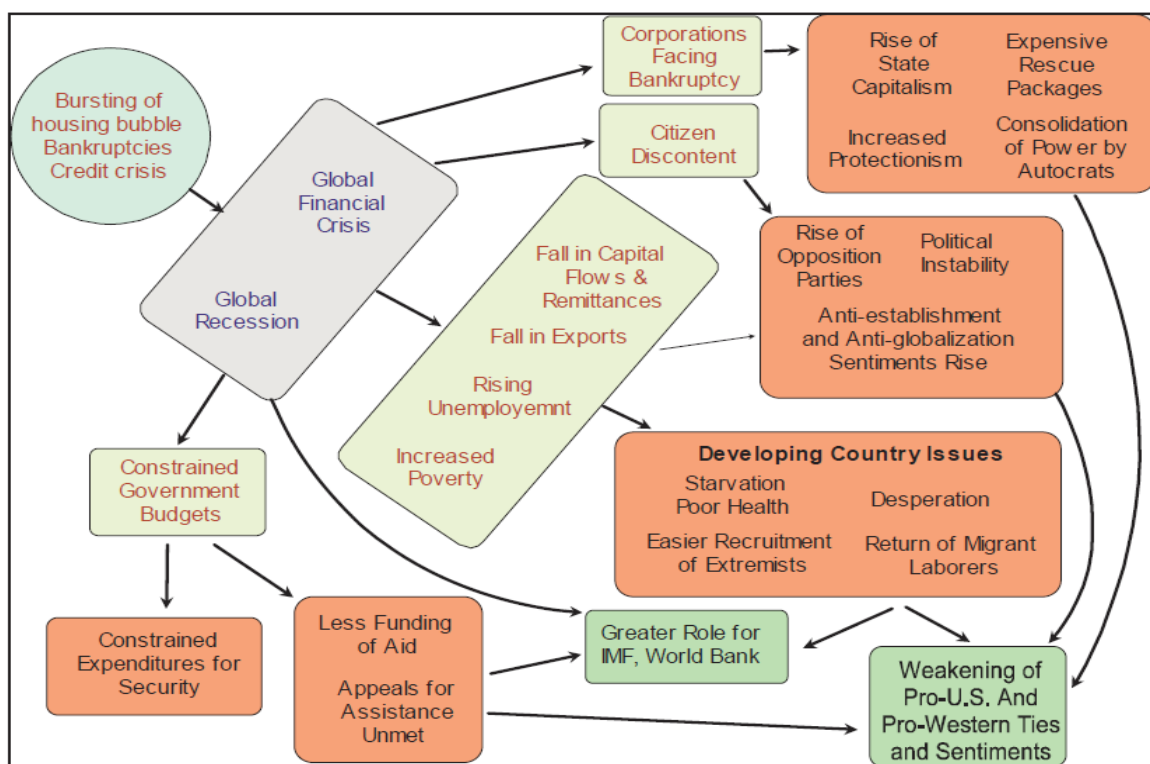
#### **II.1. Analysis of the impact of global financial crisis on global capital flows, international trade and world economic development.**

The capital flows and international trade were affected during the global financial crisis. Well known as the exchange of goods and services including capitals along international borders, international trade is significant for most of countries. The global financial crisis transmitted around the world caused influential deterioration in the world economy. The House prices in United States of America failed with losses of up to 2.4 trillions dollars affecting the entire financial sector of United States during the year 2008. The balance sheet of banks was exposed to the housing sector. Large number of balance sheets was affected as well.

The impact of the global financial crisis depends on the way different region responded to that situation.

The burst of the housing bubble affected the world economy and the capital flows, also the exchange of goods and services in the trade.

In its report, the Congressional Research Center projected the potential security threats with respect to developed and developing countries separately [24]



Source: Congressional Research Service

Diagram 2.1. Global financial crisis: potential security threats

This diagram describes the global financial crisis, the potential security threats. Every elements mention here is interconnected. From the bursting of housing bubble bankruptcies credit crisis to the weakening of Pro-US and western tied and settlements. The burst of house bubble bankruptcies credit crisis in followed by 2 events that are the global financial crisis and global recession. Both lead to varieties of stress in the economy such as decrease in capital flows and remittances because they disturb the functioning movement of capital flows and settlements or payments. They also cause a fall in exports and increasing the unemployment due to the fact that a fall in exports will affect the balance of trade and decrease the GDP. Additionally, one of the factors that contribute to the growth of the national economy and the expansion to the global market is export. More money is leaving the country when the export reduces. These will also declining the domestic economic activity, which later will lead to increase the unemployment. In addition, the rising in unemployment will increase the level of poverty. Further during a period of crisis especially when it is global, none of the

country is out of the journey. Moreover, after causing the fall capital flows and remittances including fall in exports, rising unemployment and poverty, the global financial crisis and global recession will then touches the developing country issues, which are desperation, return of migration laborers, starvation poor health and easier recruitment of extremists. The developing country problems will then lead the attention of greater role of international institutions such as International Monetary Fund and the World Bank. One of the roles of International Monetary Fund is to support its members by providing loans also in order to balance the balance of payments and secure financial stability. The World Bank assists and provides low interest loans, interest free credits and grants to developing countries, also reducing poverty. Both are known, as the Bretton Wood Institutions, intergovernmental pillars to support the structure of the world's economic and financial order. [25]

Moreover, corporations will be facing bankruptcy and citizen discontent due to the global financial crisis. The bankruptcy of corporations will rise the state capitalism, increased protectionist, expensive rescue packages and consolidation of power by autocrats. And when citizen will be discontent, the opposition parties will increase, and then there will be a political instability, leading to increase anti-establishment and anti-globalization sentiments. Then followed by the pro-U.S. and pro-Western ties and sentiments will be weak. When the citizens are not happy it can boost the trouble in the country or in the world, because they may decide to express their sentiments, based to that opposition won't hesitate to use that as an opportunity to raise citizens against the government in function.

In addition, the global recession directly lead to the greater role of International Monetary Fund and World Bank. A business cycle consists of a peak, a crisis and an expansion or growth. According to the business cycle crisis is followed by growth, maturity, recession or decline then crisis. Meaning that after a global recession there will be crisis. A global decline leads to global crisis.

The global recession means there is a drop in prices and in output, with high interest rates. This will be followed by constrained government budgets. Then



leading by contained expenditures for security, less funding Aid and appeals for assistance Unmet.

A budget consists of costs and income or taxes. When there income is greater than the costs there is budget profit or surplus. However, there is a deficit when the income is lower than costs. If the income is higher or costs decreases, it leads to consolidation then budget deficit later followed by decreased interest rates. And if the income declines or costs increases, in turn there will be expansion and resulting an increase of interest rates. Costs can be constant the results won't change.

Limiting the government spending leads to decrease the aggregate demand, then decrease the employment level. However, if government increases spending, it will increase the aggregate demand and increase the employment level.

When there is less funding for Aid, the greater role of International Monetary Fund and World Bank will be needed in order to support the government. Moreover, appeals for assistance Unmet lead to weakening of pro-U.S. and pro-Western ties and sentiments.

**The Goldman Sachs Global Investment Research in its report says that the Emerging Market wave is the third wave in the global financial crisis [26]**



Source: Datastream, Goldman Sachs Global Investment Research.

Figure 2.1. The Emerging Market wave is the third wave in the global financial crisis

This figure shows various financial crises in US housing crisis, European Sovereign debt crisis and the Emerging Markets wave. Emerging markets is third wave on the global financial crisis. The first is the US housing crisis follows by the European Sovereign debt crisis. The Emerging Markets waves correspond with the collapse in the prices of commodity lower. The US stage shows the decline from house crash. The stage of Europe is when United States transmitted the continent's sovereign debt. The United States Federal Reserve would increase interest rates for the first time in 9 years motivating a massive outflow of funds from emerging markets. [26]

There are 3 world stock markets indexes; the first is Europe's leading index blue chip index for Eurozone, the second represents the leading indicator of United States index of 500 stocks, and the third is the Morgan Stanley Capital International index of emerging countries. In 2009, all indexes declines due to the event before that is the global financial crisis.

The World Trade Organization recorded growth in volume merchandise trade and the real Gross Domestic Product statistical information with respect to developed and developing countries separately. [27]

The export and Gross Domestic Product in the world was also affected by the global financial crisis.

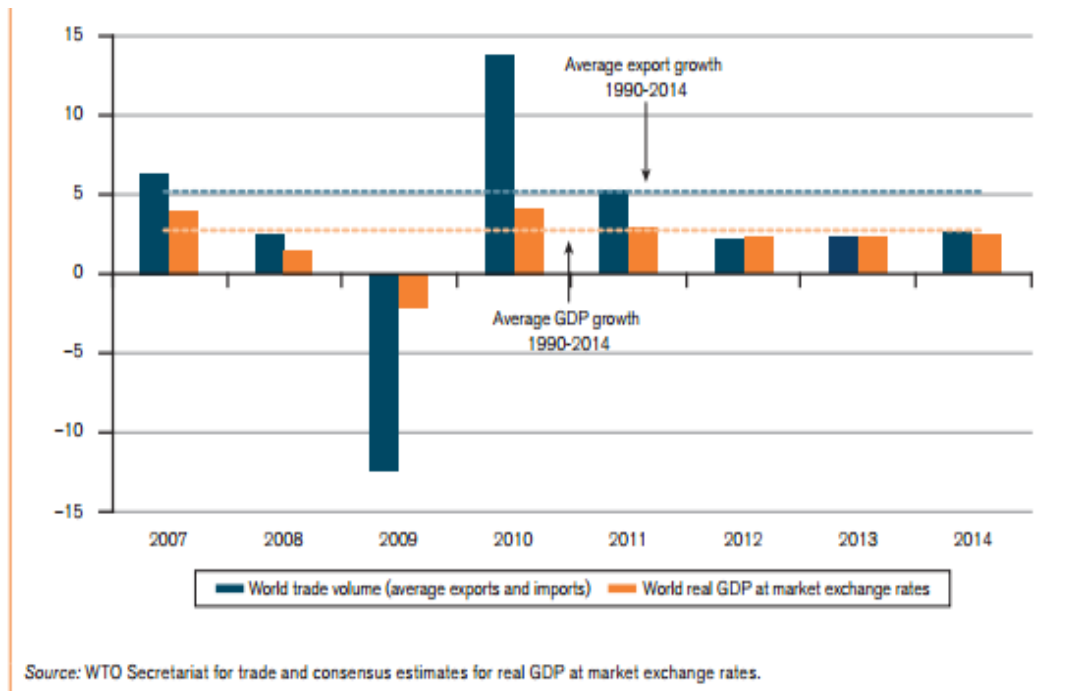


Figure 2.2. Growth in volume of world merchandise trade and real Gross Domestic Product, 2007-2014(annual percentage change)

This figure explains the world trade volume and the world real Gross Domestic Product at market exchange rates, including the average gross domestic product growth. World trade volume consists of the average exports and imports. The impact of the global financial crisis was so important that the world trade volume and the world real gross domestic product at market exchange rates are negative. Merchandise concerns only products goods not services.

In 2010, the export was twice as much as in 2007 by trying to recover from the global financial crisis. During the 7 period of the time, the global financial crisis that started in 2008 had effects in 2009 as see in the figure. Both indicators declines were negative in 2009 but the world trade volume drop more than world real gross domestic product.

The figure presents also the average gross domestic growth and the average export growth in 1990-2014.

The decline in world trade volume exports and imports is more than 10% in 2009 compare to the world real gross domestic product, which is less than 5%. See figure 2.1.

When the trade changes or growth faster than the gross domestic, that can be good because, export changes can impact the gross domestic product also due to the inter-production, employment, inter-trade, decrease of unemployment, between countries. And trade is easy to manipulate than compare to the gross domestic product. Trade can impact the gross domestic product growth.

There is strong relation between gross domestic product and trade due to the fact that when the gross domestic decline the trade also decreases even faster, and which is more dangerous situation. When export rise import too is rising, this can be due to the fact that they are correlated and the dependence on natural resources or agriculture for example.

The figure shows that the fact that trade move faster than gross domestic product can be because of the customer behavior, the manipulation of the exchange rate, and other reasons.

During the crisis trade decline faster than gross domestic product, maybe because of the subprime mortgages and most of people didn't ability to buy houses, purchasing power, and decrease of the currency of lost of countries. Supply goes higher than demand, leading to consumer that earn less will preferred to buy domestic product instance of foreign production. Domestic consumers somehow support the changes as well.

For example assuming that a country export 97% of the production goes abroad, it is good. Assuming that country A 97% of the production goes abroad or are exported to United States, and the crisis begins in the United States, this will affect country A and lead to reduce the production from that country less than the 97%.

The global financial crisis caused huge trouble in the banking system. Moreover, the financial crisis destroys the financial sector. Then later it is contaminated to the rest sector. Some countries take loans on foreign currencies and it is very risky.

The growth was normal before the global financial crisis. Decline can also be due to the fact that most of countries depend on the financial sector. Moreover,

the downturn of most advanced countries such as United States lead to affect the rest of the world because of the trade linked.

Biggest exporters in the world China follow by United States and others. Accounting, finance, IC, transportation are services that can be traded internationally.

Global financial crisis declines the foreign reserve, increases the foreign debt and so on. It makes weak the economic fundamentals and activities. The most obvious economic of connection between countries is the international trade. When in an economy there is not enough foreign reserve it lead to currency crisis. The global financial crisis affect the international trade due to the fact that countries are connected through trade. Financial crisis impacts countries imports and exports through the changes of exchange rates. Devaluating national currency will increase the volume of exports and decline the imports volume. Countries often experienced devaluation of national currency in the time of financial crisis [28].

Financial crisis impacts the banking and financial sector directly. Moreover, acting as a financial crisis, the banking crisis may affect the international trade through three channels such as: The first is the income channel, when a bank run happened, the bank has to put into liquidation the long-term investment before it develops and before all depositors losses. During the crisis and after the import and export decline. When income is low, the local agents demand for foreign goods decline as well. The second channel would be the foreign capital flow channel because bank runs lead patient foreign agents to withdraw early and decrease new foreign investment for the future. However when there is bank runs, patient foreign agents withdraw after the project matures, but the withdrawal would be offset by an inflow of not old but new investment made for the next generation of foreign agents. Here crises encourage exports only in the time of crises but decline the exports after the crises. And the third channel will be the investment demand channel. As long as investment declines, the input demand for foreign goods decreases as well. There is a negative long-term impact of banking crisis on imports via this channel. A banking crisis will motivate exports after crisis as a

result. The decline of foreign investment leads economy to export more local goods to import foreign goods as investment input [29].

There are various actors that contributed to the global financial crisis 2007-2009:

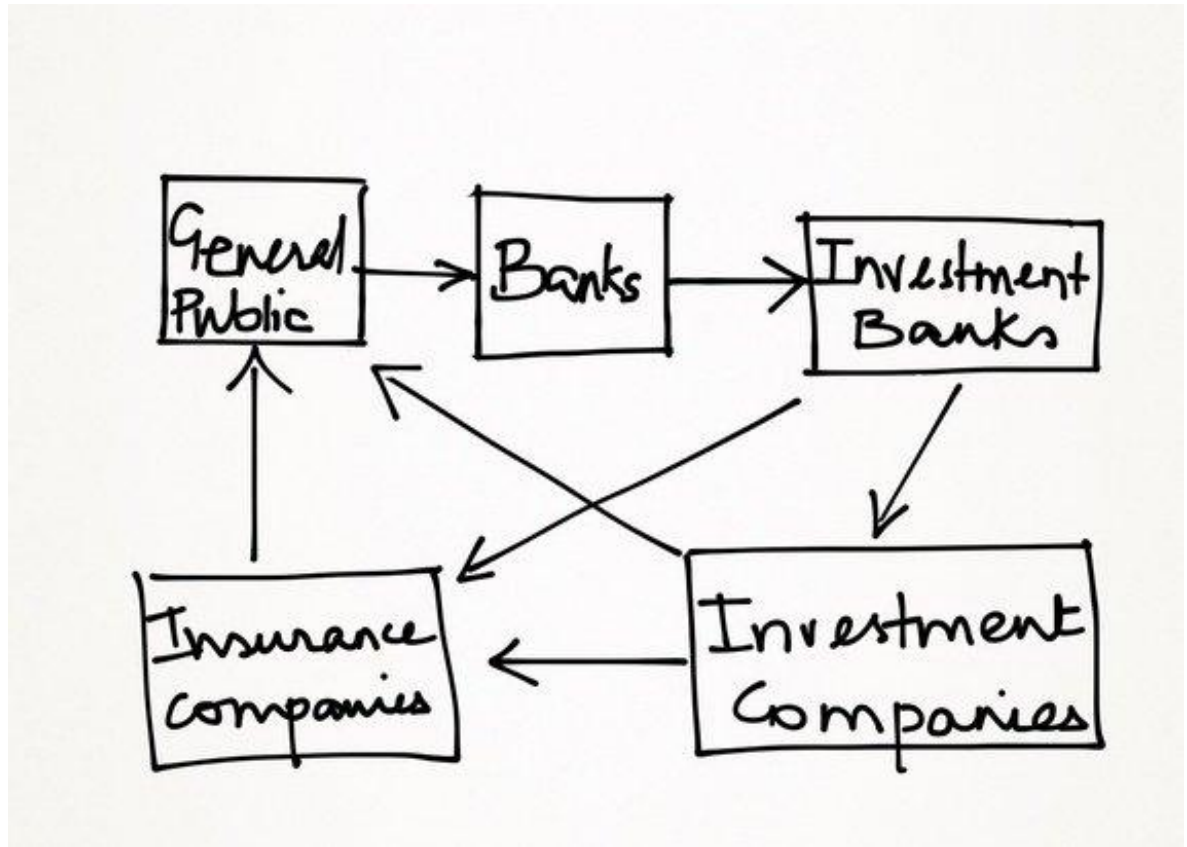


Figure 2.3. Actors to the financial crisis [30]

This figure presents different actors such as the general public, the banks, the investments banks, the insurance companies and investment companies. Each element here is interconnected one another. The general public represents innocent entity in the game, those that invest, deposits and borrow from the banks. While the banks here are the commercial banks and local banks, like those that received and gives loans. Moreover, the investments banks describe those that invest in the financial markets; the investment banks are directly connected to the investment companies and then to the insurance companies.

The cheap credits made easy to people in buying houses and make some investments as well. Because of that more money was created in the system. And

people wanted to spend all money by buying the same thing raising demand by causing inflation.

**The World Trade Organization projected the ratio of world merchandise trade to Gross Domestic Product with respect to developing and developed countries separately from 2005 to 2015. [31]**



Figure 2.4. Ratio of world merchandise trade to GDP, 2005-2015

This figure describes ratio of world merchandise trade to Gross Domestic Product from 2005 to 2015. The ratio is find by dividing merchandise trade is by the gross domestic product. Moreover, the ratio of merchandise trade to Gross Domestic Product has strongly decline in 2009 that follow the global financial crisis at that time because the effects of the crisis was large. Additionally every region in the world was impacted by this crisis. And then recovered rapidly in 2010-2011 because of the policy made by government after the crisis. Furthermore, in 2012-2014, it decreased gradually before dropping greatly in 2015. After the global financial crisis, the trade growth was weaker because of the drop in import demand and the slow Gross Domestic Product in different major developing economies including in the North America. This reduction in China and Brazil, for example, but in North America, Gross Domestic Product growth in developing countries and a slowdown in activity, which is experiencing a strong growth of imports from each region, due in 2014-2015. These are the reasons of the weak trade growth.

Since the global financial crisis, the trade grows slowly. According to the World Trade Organization, the forecast for 2017 has also been revised, with

trade now expected to grow between 1.8% and 3.1%, down from 3.6% previously. The global economy is finally stabilizing following the global financial crisis and Great Recession. The base-case outlook for average annual real growth between 2015 and 2020 is between 3 and 4 %. [32].

**In its report, St. Louis Federal Reserve recorded the housing bubble, US home price from 2000 to 2016 respectively with developed and developing countries separately. [33]**

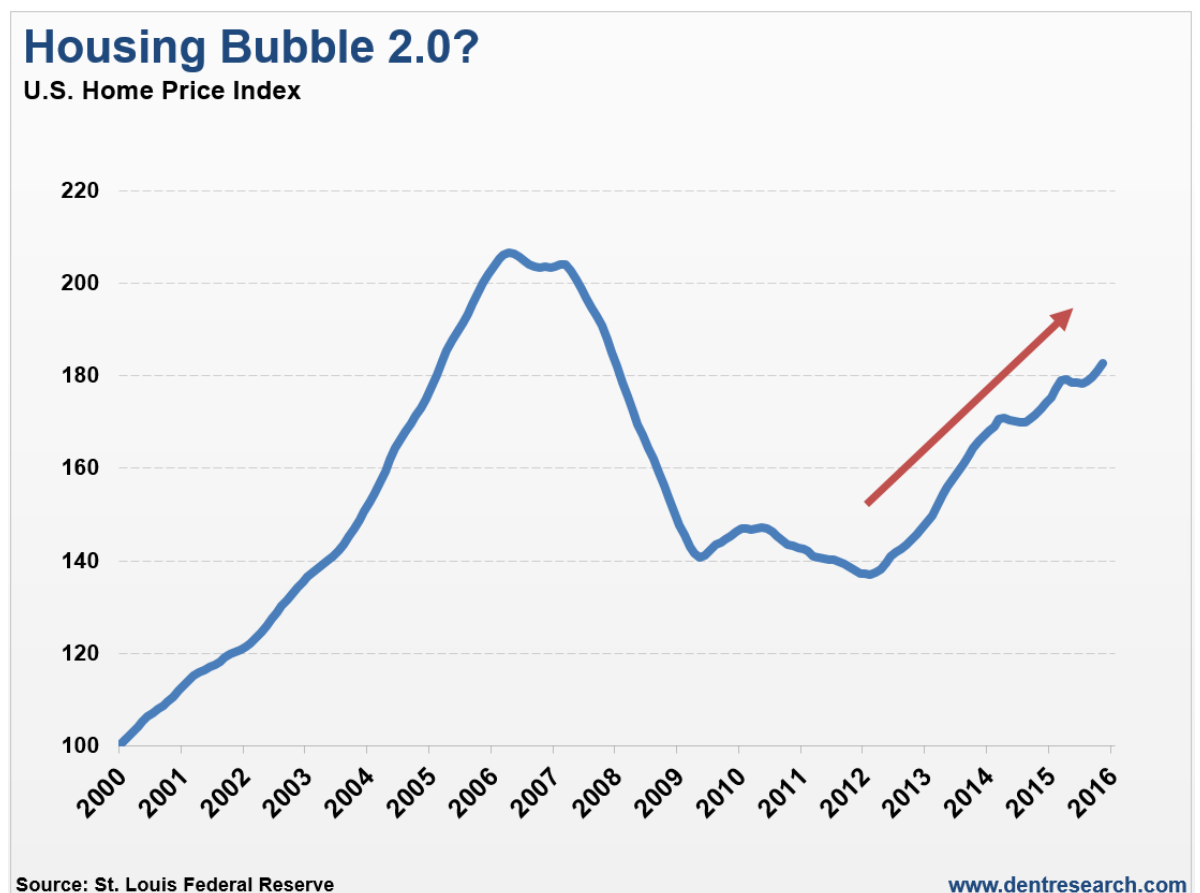


Figure 2.5. Housing bubble

Housing bubble begins with increased in demand. It is doesn't just mean high price. It is a situation as a result of unjustified speculation in the housing market leading to a quick rise in real estate prices. At the end of a housing bubble it is difficult to suggest or make a prediction.

The housing bubble began in US since mid-90s. The stock wealth caused consumption boom and leading individual do buy bigger and or better houses, then people spend some of their new stock wealth on housing. Moreover the high levels



of in demand leading to increase also in price.

Home price index also known as house price index measures the movement of single-family properties house prices in US. It is an indicator of house price directions. Providing an analytical tool or instrument to estimate changes in the rates of mortgage defaults, prepayments and housing affordability always published by the Federal Housing Finance Agencies.

After a peak in 2006, housing prices bottomed in 2012, and the hedge funds begins to buy single-family homes like investment properties. This begins the increase price, with a low interest rate.

Glenn Kelman, CEO of Redfin states "housing is the only consumer good where any price drop is universally viewed by the government as a calamity." housing is short supply. [34]

The international capital flows is composed of the foreign direct investment, reverses, financial derivatives, portfolio investment and others investments such as a broad residual array of transactions or holdings between residents and nonresidents, such as loans and deposits, trade credits etc. The down in capital flows reflects an active decline of the portfolio share of foreign assets by investors, and not just a portfolio adjustment following a decline in wealth. [35]. However, the international banking activity has a great role to play in the financial globalization. At the same time, the fact that the role of international banking increases in terms of stocks, this is also observed in terms of capital flows as well.

The current global financial crisis has destroyed solutions that have ruling the world economy since the mid-1980's. The crucial development of the second half of 2008 has been a tragic worsening of the first of the dimensions due to the accumulation of debt and also the recognition of the quantity of bad debt in the system was very larger than the previous. The fact that the banking crisis is the transmission of the financial crisis to the rest of the economy is very important and the interaction with countries. [36].

The financial integration significantly plays a great role during and after the crisis because the international financial integration has formed the effects of the

global financial crisis 2007-2009 on the capital flows and co-movements of asset prices. The financial shocks are particularly transmitted by the international integration between banks also through debt integration. [37].

## **II. ANALYSIS OF THE IMPACT OF THE GLOBAL FINANCIAL CRISIS ON DEVELOPING COUNTRIES**

The effects of the global financial crisis didn't leave developing countries behind the scene. However those countries were impacted as well. All was depending on how their connection to the globalization and international financial integration also. This crisis has been a macro economic challenge to developing countries because it created a downturn in developed nations. Further, there are various channels to which the global financial crisis affected developing countries.

The relationship that exists between the Organization for Economic Co-operation and Development gross domestic product and Africa gross domestic product has made the emergence of countries weak, country like China, including the structural changes in African countries.

The global financial crisis influences developing countries in different ways. Firstly, this can be done through the financial contagion and spillovers for stock markets in emerging markets. Stock markets place where securities are bought and sold such as shares, bonds, and more, also provide assets and capital. The stock markets can influence countries and ordinary people as well. For example when prices fall or increase in the stock market countries and ordinary people are affected including companies too. Additionally, via the stock market a recession or a crisis can be predicted. Moreover, in 2008, the stock markets in all over the world had dropped to a large extent including in developing nations. At that time, the Russian stock market stopped trading twice, in India the stock market felt in one day at the same time when the stock markets in United States of America and

Brazil dropped. The stock markets across the world can be interconnected each other, which will lead to the contagion effects across the markets because the world economies depend on one another mostly. For the United States economy depend on lot of developing economies at the same time, those countries depend on its economy too. For instance, most of known companies in developed countries offshore their manufacturing to developing countries. Example most of the IT products are manufactured in developing countries like China because of the cost of labor force that is known to be cheap and other reasons like the use of the natural resources. If United States for example is in crisis, China labor force will be affected because of the connected between both countries. This is the same as the stock markets. Another reason will be export and import between nations in the world.

Additionally, the currencies link world markets can be added as a reason to explicit the interrelated stock markets in the world. For example United States dollar has a great influence in the world markets, because the movement of dollar can deeply affect other stock markets.

More reasons can be the fact that some companies are listed in more than one regional market. For example, a company that is listed in the Tokyo stock exchange in Japan may also be listed in Nairobi stock exchange in Kenya. Therefore, any price movement can affect the company and for sure will have influence in all dealings connected to the stock in various markets. Also, the stock market can also affect the gross domestic product as well. Additionally, stock markets affect businesses and consumer confidence because they believe and trust the stock markets. And mostly, they invest their money or goods on the stock markets as well.

In 2007-2009, the global financial shocks affected developing countries through trade and financial channels. Those shocks were accompanied by rapid and harsh falls in commodity prices, which led to the expectations of a slowdown of the world economy and demand during that period. [38]. [40]

It exists different ways where the global financial crisis can affect the developing countries.

Table 2.1. The channels of impact on developing countries

<b>Channels</b>
Trade and trade prices
Remittances
Foreign direct investment (FDI) and equity investment
Commercial lending
Aid

\*Source: developed by author via [39].

The table above describes different channels whereby the financial crisis developed countries can have an important impact on developing countries and transmitted except from the main transmission channels mentioned in the first chapter, these channels are also to be explained.

Moreover, the trade and trade prices channel is due to the fact that countries export and import between each other. Changes in trade prices in one country or one region can affect its partners as well either the price fall or rise. And the most important thing to remember is that developing countries are also connected between themselves. For example a growth in China and India increasing imports and pushing up the demand for natural resources this will then lead to greater exports and increase prices, including from African countries too. Growth in those countries will knock on effects on other developing countries.

Additionally, remittances in the period of financial crisis can decrease in developing nations, because in that time, remittances meaning that the process of sending money or transferring money from one place to another become low due to the fact that volumes of remittances per migrant will be few. People may not be able to transfer money or even can be in difficulties to pay for their taxes and more. Remittances to developing countries declined. Remittances inflows to developing countries increased in beginning 2008 just before they crisis hit. Most of

developing countries that rely on inflows of worker remittances and tourism declined in the time of global financial crisis.

Furthermore, foreign direct investment and equity investment can be under pressure in the period of crisis. Companies that invest in developing countries for instance can have problems in transferring their assets for example. Equity finance constitutes of foreign direct investment, equity and the portfolio investment. The connection in the equity finance is based between companies and investors or individuals. All the components of foreign direct investments were negatively influenced. The global foreign direct investment inflows decreased at that time. [40, p.22]

In addition, the commercial lending channels. When banks are under pressure in developed countries, this means that they are not able to lend as much as they did before. And investor risk will increase. Leading the factoring in risk of most emerging market countries to default on their debt. All this events can later limit investments in developing nations.

Finally the next channel will be Aid flows decline. Some developing countries receive aid from developed nations. Moreover, during the global financial crisis, Aid budgets are under pressure due to the debt problems and making weak fiscal positions. When those that provide Aid are in trouble or face difficulties, it lead affects the recipients.

The global financial crisis has made some developing countries at low risk and others at high risk. For instance, developing countries depending on remittances, including those depending on Aid too can be at high risk. Economically, the effects can be low investment and growth rates, lost employment, including the fact that export revenues will be weak. Moreover, the social impacts could be that there could be low growth translating higher poverty, which will lead to high crime and health system may be weak as well.

Paul Collier in 2009 states that the reduction in price of commodity exports it very important for some developing countries because it is the main source of government revenue. Commodity exports are taxed in a diversity of several ways.

Most of governments depend more on commodity exports for revenue that they make. Remittances are significant for macroeconomic reasons because, remittances cushion reduces in commodity prices at the exception of oil. They can be rapidly sensitive to the real exchange rate and so the strong appreciation of the dollar relative to the currencies of most commodity exporters has probably cushioned the flow. India was not affected by the crisis due to the fact that they didn't have an exposed banking sector. India is an importer of industrial commodities and has benefited from the global financial crisis. Moreover, difficulties of Indian economy are from the domestic economic management than international exposure. [41]

Table 2.2. Economic impacts of the global financial

<b>Economic impacts of the global financial on developing countries</b>
Decline of economic growth.
Fall of exports
Decrease of foreign investment inflows

Source: developed by author via [42, slide 20]

The table above shows the various economic effects of the global financial crisis on developing countries. As the result, in developing countries the economic growth did slow but not as much as in developed nations. Because the financial systems in developing countries, United States and Europe is not closely linked that is why. And this recent crisis did not originate in developing countries too. Due to that the economic growth slow during that time but in developing countries it was worse. If the financial crisis originated from them the effects would have been more than worse.

Moreover, the decline in exports is developing nations is because the exporter partners of most of those countries are developed countries. And most of those countries depend on export that is why developing group was chocked by the global financial crisis 2007-2009. The world trade volumes decrease by 14.4%. In

developing countries export values dropped to 31.1% in 2009 compare to the average fall worldwide 23%. When there is a decrease in US dollar it means that export growth can be low in the future also spending may be cut increasing savings.

Additionally, the decrease in foreign investments inflows will be the next impact of the global financial crisis. Developing countries experienced a growth in foreign investment inflows. But in 2009, the foreign investment inflows reduced to 27% as a result of the global financial crisis. Overall foreign investment flows slumped in Africa and investors moved to emerging countries. The foreign direct investment inflows to developing countries fall in 2008 and was expected to fall more in 2009. In developed nations the damage was more.

Furthermore, instant of decreasing, as a result of the financial crisis, poverty has increased in developing countries. According to the World Bank, the number of people that live with extreme hunger had surpassed 1 billion in 2009 for the first time.

Moreover, Africa was to a great extent saved from the global financial crisis because, of the low trade levels and the continent is little engaged with financial markets. But they experience high demand from Asia in commodity prices, which was high, and boost growth.

In addition, the contraction demand transmitted recession to developing countries was due to the retraction of global trade that later leads to cross border capital flows and unemployment. Followed by decline in remittances then decrease in labor mobility. [43].

Further, the table below provides additional information.

Table 2.3. Export of goods and services

<b>Export of goods and services as proportional of GDP</b>	
South Asian countries, exports of goods and services average 22 % of GDP	Exports as a proportion of GDP 15 % in Brazil
Latin America and the Caribbean the share is 26 %	23 % for India 28 % for Turkey

Sub-Saharan Africa 35%	30 % for South Africa
Eastern Europe and central Asia 40 %	31 % for Indonesia
East Asia almost 50 %	32 % for Mexico
	34 % for Russia
	40 % for China.

Source: developed by author via [44]

Table 2.3 presents export of goods and services as proportion of Gross Domestic Product. Gross Domestic Product is made by components such as consumer, investment, government spending, and export minus import. The level of the impacts of global financial crisis on developing countries depends on the significant of exports and capital inflows in their economies. For example country like Russia was significantly affected in that period 2008-2009. Developing countries are becoming more integrated into the global trade and finance. They weren't really affected because the global financial crisis didn't originate within their financial systems.

Moreover, It was expected that the real economy in developing countries would getaway undamaged and that growth in those countries would remedy to sustain the world economy, because it happened during the recession at the beginning of this century. The fell of demand in developed nations decreased the volumes and prices of exports from developing countries. This later led affected the export industries. The impact in export industries was followed by decline in employment and more. Although the recent financial crisis began in developed nations, it has decline foreign investment and decrease demand for imports of commodities and have profound impacts on developing countries. The fact that integration of world finance increasing it will lead to affect directly and indirectly on investment in developing countries. If foreign direct investment and foreign financial institutions withdraw their investments in developing countries stock exchanges, those countries will surely be affected. Due to the fact that decline in stock prices can hurt investment in developing nations. At the same time, because



developed and developing countries are linked, any policy in developed nations will influence developing nations as well. United States of America and European Union remain the most significant source of final export demand for most of developing countries. [45].

There was a sharp decline in demand for goods and services from developing countries, and a fall in demand for energy and mineral raw materials particularly in Africa. [46].

Financial inflows such as official development assistance, investments inflows like portfolio and foreign direct investment, trade credits and flows remittances were required by developing countries from the rest of the world. These flows were badly affected during the recent financial crisis. Decline in portfolio flows can affect government borrowing. [47,p.6]

BRICS countries such as Brazil, Russia, India and China experienced investment boom. However, developing countries can suffer from decreases in terms of trade particularly commodity exporters. At the same time, the global financial crisis may deal with a negative shock to investment in emerging countries. [48, p.5&10]

### **3.3. The impact of Global Financial Crisis of 2007-2009 on the economy of Gabon**

Actually, the effects of the global financial crisis of 2007-2009 have been different in every region of the world depending on the region and the country connection to various factors. Like any other sub-Saharan commodity exporters countries, Gabon also has been impacted by this crisis and through diverse channels.

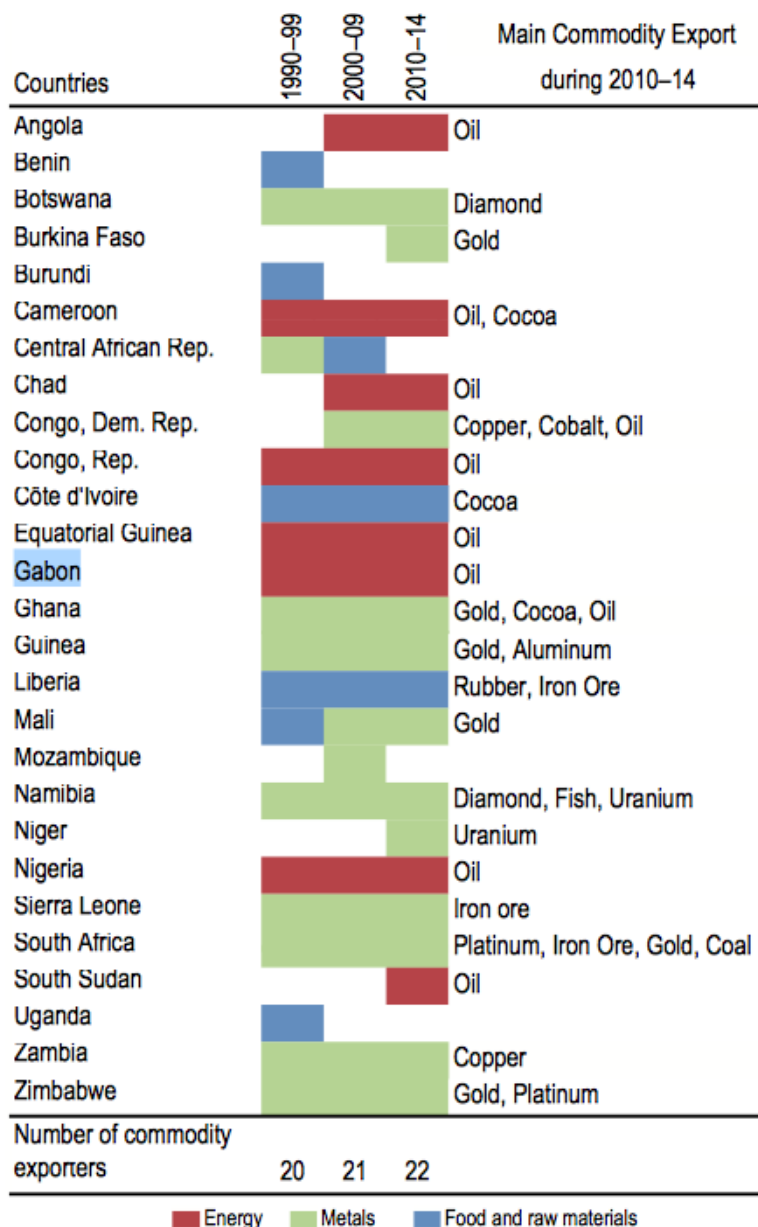
Gabon is a country situated in Africa, rich in natural resources as any other African countries. Colonized by French the country is still under their influences. In 1960, lots of African countries took their independences including Gabon 17<sup>th</sup> of August.

In 2009, the president Omar Bongo Ondimba died when exercising in the country after being more than 40 years in the power. Same year, his son took the

power still present, now in his second mandate, because it is possible to be in power for 7 years renewal as much as you want.

Recorded among those countries with trade surplus, because the economy of the petroleum exports in Gabon. That is why it is also a member of Organization of the Petroleum Exporting Countries. With a population of 1.723 millions in 2015 according to the World Bank, Gabon's main exporter are United States, Japan, China, South Africa, and importers are United States, China, France, Netherlands and more. Gabon exports main commodities such as oil (crude oil), timber, manganese, and uranium, imports commodities are chemicals, foodstuffs, petroleum products, machinery, equipment, construction materials, and capital goods. However, the country's economy depends more on energy industry.

In its report, the International Monetary Fund projected the Sub-Saharan African Commodity-Exporting Countries by Decade. [49]



Sources: IMF, World Economic Outlook database; United Nations, COMTRADE database; and IMF staff calculations.

Note: Countries are classified as commodity exporters if commodity exports constitute at least 25 percent of total goods exports and net commodity exports are at least 5 percent of goods trade (goods exports plus goods imports) in each decade. See "Commodity Classification" in

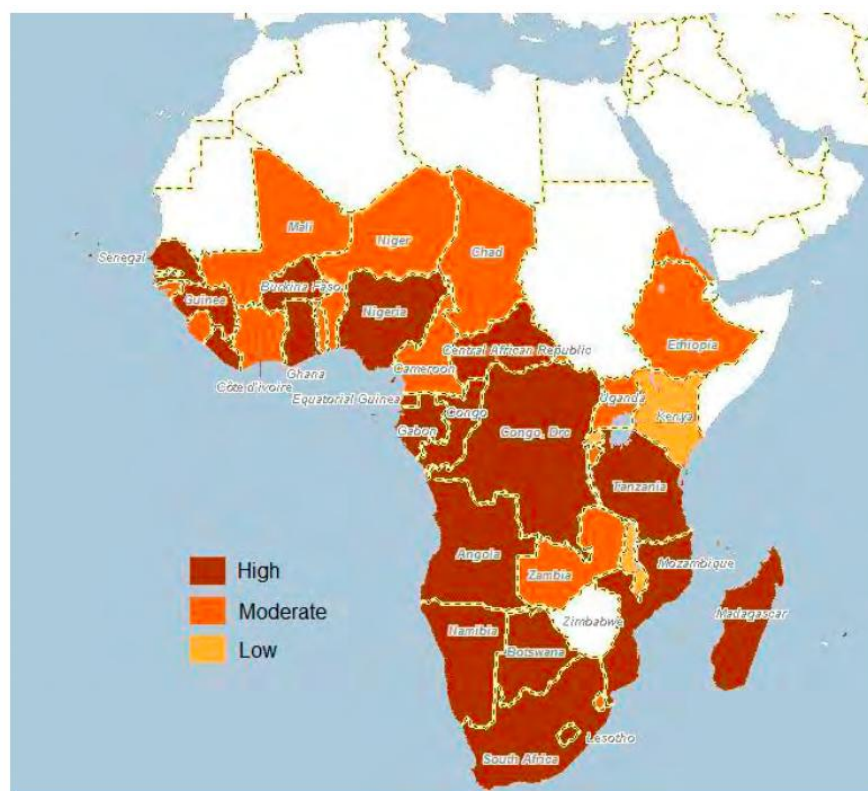
Figure 2.6. Sub-Saharan African Commodity-Exporting Countries by Decade

Source: International Monetary Fund (April 2016), Regional Economic Outlook - Sub-Saharan Africa, Time For a Policy Reset.

Figure 2.6 presents commodity-exporting countries in sub-Sahara Africa by decade. Gabon export more energy with is oil than other commodities. The dependence in Gabon economy on commodities is high for energy export. Because

the role of commodities is by far the largest among oil exporters due to the fact that net commodity exports ranges between 45% and 85% of Gross Domestic Product in sub-Saharan commodity exporters countries, and of course Gabon is among. The role of commodities in Gabon has significantly increased, which make the country highly dependent on commodity exports. Commodity is very important for the country economic growth. [49 p.27]

The International Monetary Fund reported the impact of global financial crisis on sub-Saharan countries on a map [50].



Source: IMF, African Department database.

Note : The country borders or names in this map do not necessarily reflect the IMF's official position.

Figure 2.7. Impact of global financial crisis on sub-Saharan countries

Source: International Monetary Fund (April 2009), Regional Economic Outlook - Sub-Saharan Africa, Time For a Policy Reset.

The figure 2.7 shows impact of the recent global financial crisis impact on sub-Saharan African countries in the International Monetary Fund report. This figure demonstrates lots of oil exporting countries like Gabon and those financially

developed markets can be highly and hardly affected by the crisis. In that regions export and import of commodity play a main role in their economy.

The International Monetary Fund divided those countries into groups of three, the highly impacted for the financial crisis, those with moderated impacts and some with low influence of the global financial crisis. Gabon is among those that a decrease in growth projections equal to or exceeding 2.5% and a worsening or decline in reserve coverage surpasses 2.5 month of imports, for the moderated is between 0.5 and 2.5% while low than 0.5% for the low impact countries. This region went through important decrease in terms of trade, including drop in main sectors of the economy and falling in exports volumes also the remittances considering also tourism during the period of the global financial crisis, for example, the declining in manganese in Gabon. African markets have low integration. Oil is the key export resources in most African countries and Gabon is part of them, they experienced a drop in production during the time of global financial crisis. [51, p.15]

Some factors are connected; the low global growth decreasing the demand for goods exported in Gabon for example or the whole African countries. When there is a decline of commodity prices and government revenues, the effects can lead to low the domestic consumers and the flows of remittances from abroad. [52]

African banks are not much connected to the global economy, including Gabon banks. Lots of banks have foreign attendance and accept assets of foreign countries this is the reason why they are more exposed to the global financial crisis, for example the case of Bank des Etats d’Afrique Central (BEAC) in Gabon. Countries with a financial system more developed were firstly affected followed by the rest.

Table 2. 4. Financial and real channels

Financial channels	Real channels
Banking sector	International trade or global trade

Reduction of financial flows in the county (Foreign direct investment decline)	Aid
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Source: developed by author via [53]

The channels mentioned in the table 2.4 are those through which Gabon can be affected by the global financial crisis. Financial channel is directs effects while the real channel affects indirectly the country. Theses effects go through banking sector, foreign direct investment, world trade and Aid. Anything finance involves money therefore, the financial channel consists of the banking sector, and the foreign direct investment. Further, the real channel is comprised of international trade and Aid.

The banking sector is due to the fact that, it is through the banking sector that government borrows from developed countries, or any international institutions or even a country. That is where all the transactions and the flows of the money borrowed will be registered.

Moreover, foreign direct investment again, as already explain how the foreign direct investment is a factor though what countries are affected due to a global financial crisis, the same is in Gabon too. The foreign investment flows in the country will decrease during a period of financial crisis. Investments in Gabon has offered divers opportunities as well as return rates higher than those in developed economies

Additionally, the world trade consists of export and import including the terms of trade in Gabon. The international trade, as any other country especially developing countries, their integration in the world trade is increasing gradually. Gabon already mentioned that is a commodity exporter country, meaning that the country depend more on export than import. Also, a decline and increase of commodity prices in the world market is surely leading to impact the country. As an exporting country, it has suffered from the sharp reduce of terms of trade. Moreover, most of Gabon's oil goes to the United States.

Furthermore, lots of countries receive supports from international assistance organizations, such as Official Development Assistance (ODA) that is mostly done by countries as well. In terms of trade, Aid and investment, the role of China and India was very significant in Gabon, because for example, China offered loans and grants to Gabon and planned to double aid to Africa in 2009. Moreover, both are largest trade partners and foreign investors in sub-Saharan African countries including Gabon. Unfortunately, both were negatively affected by the global financial crisis, which led to hurtful effects to those countries. [53, p.8]

The stock market in Gabon regrouped the Communauté Économique et Monétaire de l'Afrique centrale (CEMAC) members that means in English, The Economic Community of Central African States (ECCAS). Their stock exchange is Bourse des Valeurs Mobilières de l'Afrique Centrale (BVMAC), in English Central African Securities Exchange. And the problem here is that Cameroon, which is member, has national stock exchange Douala stock exchange, because there is two financial centers in a small market. [54].

Among the Oil producing countries, Gabon is in the sub-Sahara Africa region, with upper-middle income countries and has mostly for lending category the International Bank for Reconstruction and Development (IBRD). For example, in 2014, the Bank granted the country a loan of 9 billions FCFA for the president to continue in project of diversification of the economy and in order to reduce poverty and create jobs for the population. [55]

The most of foreign investment are from France followed by United States of America, also the main supplier of goods to Gabon is France, at the same time the country is the second largest recipient of Foreign Direct Investment in Africa. This can be due to the fact that France is the colonizer of Gabon, so both has strong relationship.

Gabon avoided the initial impacts of the global financial crisis unfortunately the country is felling the aftershocks from the global slump. And this may more hurtful after the Coup d'Afrique des Nations (African Nations Cup) 2017. World trade, capital flows including policy responses can be the networks.

However, some countries have positive effects of the financial crisis while some heavily affected in Africa sub-Saharan countries, especially due the increase of prices in the international markets. The views on capital flows such as official aid, foreign direct investment, portfolio flows including remittances seems more in worry in long and middle term in Africa. Current debt issuance, heavy infrastructure and more move the boost in inflows. Moreover, Gabon had issued new sovereign bonds with success around the year 2007. As a capital network such as remittances has less attention than it should. The fact that most of people that works and send their money to their country, this has an important role to play in lots of country. In most of theses countries it is a source of capital, and it has main effects on their families income and lives too. This situation mostly happened to African countries including Gabon. According to the World Bank, there is fall in remittances because of the increase of unemployment in United States and Europe. [56]

More African countries including Gabon are integrating more with the world economy than before. That is why channels such as international trade, foreign direct investments, foreign aid flows, and private remittances including tourism as well, and most of them are mainly primary commodity exporters. That is the reasons why; their economies can be badly affected by global financial crisis because of the decrease in the world demand for commodities and prices. The economy of Gabon can be impacted by the global financial crisis directly via the financial channels. But it is may be difficult to analyze the transmission channels due to the fact that there is low degree of integration the financial sector into the complex global markets including tight control of capital. The reason is that in African banking systems have small exposures to the complex financial instruments like the one used by the developed countries including United States. When there the leverage in their financial institutions is low, this leads to reduce risks of potential financial losses. The prime impacts of the global financial crisis in the financial sectors of Gabon can be negligible due to the fact that there are limitedly expose to the international financial markets. However, the world



economy is completely connected in the real sectors. International trade has turned into the main source and means to boost economic growth in African countries including in Gabon. Gabon still maintained its current account surplus 2008-2009 as others oil exporting countries in Africa like Nigeria, Angola and more. [57]

The decline in the global demand in African exports especially in Gabon because of slumps in Europe countries and United States will lead to reduce commodity prices then later the government revenue will go down.

When there is a shift in demand in the international markets including the global decrease in commodity prices, this leads to affect Gabon exports because more percentage of their export goes to Europe and United States. It exists some factors that may be secondary channels such as:

- ❖ Health care sectors
- ❖ Labor markets
- ❖ Tourism as well.

These play an important role in the country economy. And they are necessary elements to consider in a country. Moreover, lots of economies depend on tourism. That is the reason why for example most of countries in Africa are members of the United Nations World Tourism Organization (UNWTO).

## **Summary of chapter 2**

Finally after analyzing the impacts of the global financial crisis 2007-2009 in the world economy, developing countries and Gabon, it is possible to realize and conclude that:

The global financial crisis has caused troubles in the movement of capital, the international trade including in the world economic development around different regions of the globe. The transmission of the global financial crisis influences the world economic. A bubble situation is always followed by a burst, has it happened in 2007-2009, the burst of the house bubble lead to the global financial crisis and recession and then follow by others events in the economy and in the world. When the government spending is limited, the aggregate demand will decline, leading to the increase unemployment by reducing employment and more. Different actors contributed to this crisis, such as the general public, banks, investment banks, investment companies and insurance companies as well. The ratio of world merchandise trade to Gross Domestic Product completely chute in 2009, the effects were huge.

The effects on the international capital flows will affect the foreign direct investment, the portfolio investment, including reserves as well, because they are the components of the international capital flows.

The global financial crisis affected heavily countries that are more integrated in international trade. Moreover, those depending on trade, also those with great international financial integration. A weak or collapse of the financial system, particularly the banking system, however, might make the country's export capability weak, because a weak financial system is a sign of trouble.

The effects of the global financial crisis in developing countries are different from each region due to the international integration of each country and more reasons. The impacts of this crisis on developing economies were in various ways, such as the stock market link, because the stock markets affect businesses and consumer confidence. And through channels such as trade and trade prices,

remittances, foreign direct investments, commercial lending and Aid too. Most of countries that receive aids are from developing nations in the world. Lost of developing countries was affected because of the international integration, trade of goods and services and more. Leading to the economics impacts such as the decline of economic growth, decrease in exports, decline in foreign investment flows to developing countries. Some of them benefit from the crisis but not all of them still due to the integration and globalization.

As regards of Gabon, the country is known for his rich in natural resources such as oil, timber, manganese, uranium, and more. Gabon is among the main export commodity countries in sub-Sahara Africa due to oil. Commodity plays important role in the economy of Gabon and most of countries in Africa, especially for economic development. The International Monetary Fund has classified the country among those with high impact of the global financial crisis. The economy of Gabon has high dependence in the natural resources, especially in the export of oil commodity in the world. Most of their oil goes to United States. Most of African banks are not really linked to the global economy. Being known as a developing country, the channels that developing countries can be impacted to the global financial crisis are same for Gabon including, the banking sector, labor markets, tourism and more.

## **CHAPTER III**

### **PERSPECTIVES IMPROVEMENT OF THE GLOBAL FINANCIAL CRISIS**

#### **II.1. THE POLICY OF GLOBAL FINANCIAL STABILITY: MAJOR INITIATIVES AND POINTS OF CONCERN**

Financial had become the main concerns of financial authorities after the damage caused by financial crisis. Topics related to the sustaining of financial stability have been receiving attention from policy makers all over the world. Defined as the lack of financial crisis, the financial stability is smoothing functioning of the key elements. Financial stability is when there is stability in the financial system in others words, the absence of financial crisis.

The main objective of financial stability policy is the resilience of the financial system, to manage the credit cycle and more. [58]

A stable financial system boosts economic performance in different ranges, while an unstable financial system is one that reduces from economic performance. Interruptions in the financial sector can have various unfavorable impacts on economic activity. Keeping up stability is hence a basic and main objective of financial authorities. There is not specific definition of the financial stability, reasons why lots of scientists and others including central banks differently define it.

For example European Central Bank defines financial stability as “a condition in which the financial system comprising of financial intermediaries, markets and market infrastructures is capable of withstanding shocks and the unraveling of financial imbalances, thereby mitigating the likelihood of disruptions in the financial intermediation process which are severe enough to significantly impair the allocation of savings to profitable investment opportunities”. [59]. In other words, it is when the financial system was able to resist crisis, or a situation where financial system is strong face to shocks. Moreover, Crockett in 1997 states that financial stability is “that the key institutions in the financial system are stable,

in that there is a high degree of confidence that they continue to meet their contractual obligations without interruption or outside assistance; and that the key markets are stable, in that participants can confidently transact in them at prices that reflect the fundamental forces and do not vary substantially over short periods when there have been no changes in the fundamentals”. [60].

**The World Applied Sciences Journal gives the information on the characteristics of financial stability with respect to develop and developing countries separately. [61]**

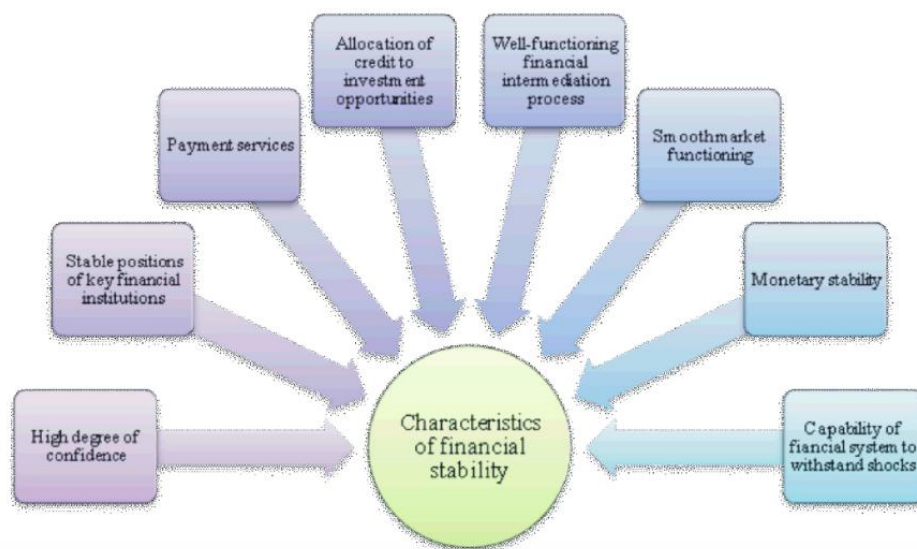


Figure 3. 1. The components of financial stability

It exists various components to identify the financial stability describing in the figure below. There are high degree of confidence, stable positions of key financial institutions, payment services, allocation of credit to investment opportunities, well-functioning financial intermediation process, smooth market functioning, monetary should be stable, capability of financial system to withstand shocks. All those element mentions are the main characteristics the financial stability. It is clear that figure 1.3 explains that the ability of financial system providing payments services or allocating credit to productivity investment opportunities, the ability to boost economic activity in providing an economy with well-functioning financial intermediation process, smoothing the market functioning and credit availability, the positions of key institutions in financial system is stable, strengthening a high degree of confidence in their ability meeting

contractual responsibilities, eliminating relative price movements of real or financial assets, a stable monetary, ability of financial system to resist shocks without outside assistance.

Boosting safety and soundness of the financial system is very significant in order to prevent future financial instability. Because if a financial crisis happened, the financial system requires to be restarted so that it can resume its job channel funds to those with productive investment opportunities. [62]

Financial stability needs the bank regulation improvement at the micro level, including margins of safety to be built up in better times and at large and related firms internalize their contribution to systemic risk at the macro-prudential level. Moreover, it needs macroeconomic policies such as the help of monetary policy. And also, to maintain financial stability international cooperation has a vital role to play. [63]

The key objective of the macro-prudential policy is to limit systemic financial risk to diminish the incidence of disruptions in the provision of the main financial services that could have serious consequences for financial markets and the real economy as well. Its goal is to reduce the building up of financial imbalances and so on. The monetary policy and the macro-prudential regulation are complementary by increasing the resilience of the banking and improvement of the performance of the world economy. [64]

The financial stability is important to central banks due to the aims of monetary policy and financial stability are connected, and because of they really care about financial stability. Moreover, the financial stability may affect the health of the real economy as well. Additionally, in 2010 the United States, the regulatory reforms promoted Dodd-Frank Wall Street Reform and Consumer Protection Act aim to increase the resilience of financial stability by reducing the probability of a financial crisis and lowering the costs imposed on the rest of the economy when a shock knocks the financial system. Policymakers need to consider the time inconsistency issues and moral hazard problems when designing how to resilient financial stability because they are significant factors that need to be taken into

account. Financial stability cannot be added as another aim for monetary policy, but it is necessary for policymakers to remain the awareness of the connection between financial stability and monetary policy goals. The aims of increase employment, price stability, and financial stability are complementary. [65]

Different policies focused at financial stability always include a trade-off between resilience and efficiency. It is suggests a risk and return judgment, which is difficultly making in a full objective manner. For example, in the domain of prudential policies where greater needs will decline the risk of a bank not being able to absorb an adverse shock but will also imply capital costs and foregone investment opportunities. Policy requirements for financial stability can be time unpredictable. [66]

Table 3.1. Policy Instruments for Financial Stability [67]

Tools	Prevention Implementing existing policies to safeguard financial stability	Remedial action Implementing pre-emptive measures to reduce emerging risks to financial stability	Resolution Reactive policy interventions aimed at restoring financial stability
Market disciplining mechanisms	Maintain, update	Strengthen	Discretionary measures
Self-regulation	Maintain, update	Strengthen	Discretionary measures
Financial safety nets	Maintain, update	Strengthen	LOLR, deposit insurance
Surveillance	Maintain, update	Intensify	Further intensify
Supervision/regulation	Maintain, update	Intensify	Discretionary measures
Official communication	Existing policies	Moral suasion	Restore confidence
Macroeconomic policies	Maintain, update	Reduce imbalances	Discretionary measures
Legal system	Maintain, update	Strengthen	Discretionary measures

**Note:** LOLR denotes lender of last resort

Table 3.1 presents policy instruments for financial stability, which includes tools, prevention, remedial action, and the resolution.

There are existence policies to maintain and update for structural changes preventing future imbalances. In itself, the surveillance of financial markets, institutions and infrastructure forms a significant element of preventative policy. When there is a tight surveillance, it will encourage a judicious management of financial risks. Close connection to the overall financial stability assessment.

Surveillance and other policy instruments like supervision, regulation, official communication and macroeconomic policies are the key to sustain a situation of financial stability (table 3.1). Support can be given to private sector initiatives that boost financial stability, example through self-regulation or improvement of financial infrastructure. The situation becomes different when the financial system is close to, or at the border of the variety of stability. For example is a sudden change in the external environment domestic financial system, because of the sovereign default by a neighboring country. Policy instruments like surveillance and supervision require to be intensified getting more grips on these developments. For avoiding risks connected to bank and liquidity runs, and contagion, it can be necessary to strength safety nets policy instruments and others. Moral suasion and adjustments in macroeconomic policies can be beneficial. The remedial policy is the most ambiguous stage, due to difficulties to as vulnerabilities that have not yet manifested themselves, also the hard situation to identify and encourage appropriate remedial instruments during the absence of financial stability, for example the buoyant Dutch housing market in the mid-1990s. [67]

The International Monetary Fund has a role to play in stabilizing the international financial system via crisis prevention and crisis mitigation. The International Monetary Fund surveillance, technical assistance, and information provision contribute to prevent crises. The surveillance has the form of regular reporting to Executive Board of the International Monetary Fund. It also provides technical assistance to its members that seek strengthening in different aspects of their economies, for example financial system, monetary policy, exchange rate system etc. [68]

The purpose of International Monetary Fund in the first Article of Agreement is "To give confidence to members by making the general resources of the Fund temporarily available to them under appropriate safeguards, thus providing them with opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity". Because in a crisis, private sector financing melt and countries are



forcefully taking hurt adjustment measures.

The fact that International Monetary Fund lending to countries in problem can create a moral hazard, the moral hazard refers to the situation where actors take on more risk because they are protected. It is very hard for the international community with the question on how to reduce the moral hazard. Private companies are obliged to close or to restructure and more. For example that is what happened to the Lehman Brothers bankruptcy. [69]

Table 3.2. Problems for International Policy and overcoming policies, [70]

Problem	Targets group	Actions Taken or Possibly To Take
Lack of consistency in regulations among nations and need for new regulations to cope with new risks and exposures	National regulatory and oversight authorities Bank for International Settlements International Monetary Fund Financial Stability Board (Financial Stability Forum)	1. Implement G-20 Action Plan (November 15, 2008 G-20 Summit) 2. Implement Basel II (Bank for International Settlements' capital and other requirements for banks) (in process by countries) 3. Bretton Woods's II agreement? 4. Greater role for the Financial Stability Board/Forum and International Monetary Fund (April 2, 2009 London Summit, June 17 Treasury Plan) 5. Establish colleges of national supervisors to oversee financial sectors across boundaries (November 15, 2008 G-20 Summit)
Countries unable to cope with financial crisis	IMF, Development Banks National monetary authorities and governments	6. Increased resources for the IMF and World Bank (April 2, 2009 London Summit) (H.R. 2346, provided for increase in quota and loans to the IMF) 7. Loans and swaps by capital surplus countries 8. Creation of long-term international liquidity pools to purchase assets?
Countries slow to recognize emerging problems in financial systems	National monetary and banking authorities Governments IMF Regional organizations	9. Increased IMF and Financial Stability Board/Forum macro-prudential/systemic oversight, surveillance and consultations (April 2, 2009 London Summit, June 17 Treasury Plan) 10. Build more resilience into the system?

		11. Increase reporting requirements? 12. Establish colleges of national supervisors to oversee financial sectors across national borders (Nov. 15, 2008, G-20 Summit)
Lack of political support to implement changes in policy	National political leaders	13. G-20 international summit meetings 14. Bilateral and plurilateral meetings and events.

**Note:** Those in bold are indicated as policy has been proposed but is still in development or not yet taken.

This table presents the policies made and can be done in order to maintain financial stability and to prevent financial crisis in the future. It describes main problems raised by the crisis, targets of policy and the policies that already being taken and possibility by different entities in response to the global financial crisis. This table consists of the international financial institutions such as the International Monetary Fund, regional organizations, International Settlements, Financial Stability Board (Financial Stability Forum).

Those policies involve not only the international organizations mentioned before but also, the contribution of governments, national banks due to countries that were unable to cope with the global financial crisis.

The G-20 consists of Argentina, Australia, Brazil, Canada, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Korea, Turkey, United Kingdom, United States of America, China, South Africa, and the European Union.

The International Monetary Fund's ability in maintaining a quick response and be effective is significant policy goal due to the fact that lots of countries members are at risks for the global financial crisis. Moreover, the International Monetary Fund is reviewing the resilience of the global financial safety net. The International Monetary Fund United States and are working together in order to sustain and strength the global financial stability. It also works with others international organizations in promoting stronger financial systems in the world. The IMF-World Bank Financial Assessment Program (FSAP) is a merged

instrument for financial sector surveillance and advice, with goal to stabilize the financial sector and boost the growth and development. In 2010, the International Monetary Fund decided to start financial stability assessments for jurisdictions with orderly important financial sectors that include the United States, every 5 years. [71, p.7]

Tobias Adrian and Nellie Liang (2016) mentioned that monetary policy could affect the stability in the financial system. Policies that affect financial conditions and vulnerabilities lead to negative shocks in the financial system. An inter-temporal trade off between financial conditions and vulnerabilities can positively affect the monetary policy. Monetary policy affects also the real economy. Furthermore, financial crisis was a failure of regulatory policies; monetary policy may focus on inflation due to the fact that inflation cannot forcefully impact financial intermediaries or asset bubbles. [72]

Moreover, the monetary policies followed by the Federal Reserve affected financial institutions risk taking, the mix policy instruments including a near zero federal funds rate. These policies have triggered concern for their impacts on financial stability. [73]

Policies can be implementing credible plans to low fiscal deficits at the middle term and main helpful monetary conditions, rebalance the global demand. The monetary and exchange rate policies may help to support the global rebalancing. It is necessary to accelerate the financial system reform as well. In order to support the future growth it is can be important to consider the global demand rebalancing and the key structural reforms too. [74]

International Monetary Fund has proposed large financing packages. However, the private market actors based in financial centers in the advanced economies had a role to play as well. Governments appointed to private market actors a high important role in the regulation and supervision of the financial markets, due to faith they have in the markets. [75]

Supporting initiatives such as among regulators and policymakers depend on at what cost and how the recent financial crisis is solved and. Financial supervisors

may impose high capital and reserve requirements on regulated firms, also can control the amount of leverage such companies extend to their unregulated clients. This may lead to economic and financial expansion. [76]

It exists a strong export relationship between the emerging and advanced economies that is making the high growth possible when only demand for their exports increase in countries such as United States and European Union. It is necessary to reliance current account balances between countries for the global financial stability. [77]

### **III.2. PROPOSALS FOR IMPROVING THE RESILIENCE TO FINANCIAL SHOCKS IN GABON**

The severity impacts of the global financial crisis triggered countries to elaborate different strategies and precautions. Various international institutions and governments have after analyzing the economic situation in Gabon proposing divers solutions on how to improve resilience to financial shocks on Gabon economy. Gabon government has also variety of tools that can be use to diminish the blow of financial shocks.

Most of African economies are not diversified, lead to the one of the first thing to do, which is to diversify the economic base. It can help the country to not relay only on one factor but more than one. The country depends mostly on revenue from the natural resources especially exporting oil energy resources.

Oil exporters countries in Africa represent about half of the region's gross domestic product, this include countries such as Angola, Gabon, Cameroon, Republic of Congo, Equatorial Guinea, Nigeria, South Sudan, Chad alone. Gabon is among countries at most risk during crisis.

Basically, Gabon needs to implement of macroeconomic policies and long-term structural policies. Gabon can remove oil subsidies and increase non-oil fiscal revenues, due to the down oil prices, also the fact that Emerging Markets have

slowed down and decrease demand for Africa's commodities. [78]

According to African policymakers, macroeconomic stability is the key to resilient to the African economies, also to ensure correct fiscal and monetary policies.

Diversifying Gabon economy can help in time of any financial shocks from developed nations for example. Because, Gabon can be able to focus or not only depending on one resources but more than that. This means that is time of financial crisis for example the shocks won't be too hurt for the economy of the country. When developing also for example on structural reform such as reforms of the energy, transport, logistics, and including the infrastructural sectors. Gabon can also adjust the main terms of trade shock via fiscal adjustment; also protect capital and social spending. The country may support tighter fiscal and monetary policies ensuring sustained capability of the monetary union. Moreover, undertaking structural reforms by promoting productivity and export diversification can be significant policy for the country. [79]

Moreover, Gabon may also have economic base proving a foundation for diversified revenue sources. Not only diversified the economy but including learn to tax it, because the domestic resources mobilization is slogan for the future. However, the increasing domestic revenue mobilization is important and will depend on the growing of Gabon economy, also expanding the non-oil sector.

Additionally, resilient the non-oil sector may also help Gabon. And this means that the requirement to increase investment and implement structural reforms by improving competitiveness, decline the infrastructure gap, boosting the quality and quantity in education and training by improving skills.

The local currency financing via the development of domestic capital markets and local institutions investors should have important role to play in case of infrastructure. Meaning that financing is necessary to achieve this.

The country can also need to implement pension reform in case of unsustainable pension system. And, increase the liquidity of domestic markets for the pension assets that exist. Well, as mentioned before that financial is necessary

but it is not the only way to do in order to increase investment. For example, important productivity gains which may be achieved via more efficient spending and better organization of line ministries and utilities. More, in order to decline the infrastructure-financing gap, it can be important to engage private sector including multilateral partners, they may help as well. [80]

The improvement of non-oil sector may involve economic and financial integration, including regional and global value chains. This means also, involving expansion of access to financial services and payment system. It involve also that the Gabon economy should adapt to climate change. Gabon external environment can have lows sportive of Gabon growth, because of the financial shocks and future global changes and uncertainties. The macroeconomic policies may help in short term to swallow the financial shocks and the reduction of commodity prices in the world. Moreover, Gabon should see challenges as opportunities to resilient the economy. Additionally, according to the Forum on China-Africa, China has decided to bet \$60 billion with supporting sub-Saharan Africa may ride the recent financial shocks and return to its previously high growth. [81]

Gabon can compose of foreign reserves, which are accumulated in good times by also including International Monetary Fund balance of payments support. The foreign exchange reserves may cover the market from harsh fluctuates in domestic currencies and help smooth regulations in the case of worsening in current account or any external price shocks. Additionally a safeguard of strategic food reserves can be important to consider here. Because when there is lack and possible starvation, the food reserves can support Gabon to maintain food security, and control inflation drivers in the country. Furthermore, a cushion of oil reverse can also be a way. Moreover, because somehow Gabon depends on commodity prices, the country can create a fund to smooth out commodity price cycles. When there is a lack of safeguard or cushion, what happened is that changes in commodity price always lead and followed by financial crises. [82]

Table 3.3. Resilience policy [83]

Objectives	Actions	Comments
Restore financial confidence	Monitoring, supervision and regulation of financial institutions; Recapitalization of banks where needed	Important in banking-exposed countries, such as Gabon and others.
Expand trade	Avoid protectionism Maintain competitive exchange rate policies; Obtain balance of payments support Obtain trade finance support Aid for trade	Both measures to support supply response as well as demand needed; Particularly challenging for oil exporters such as Nigeria, Gabon, etc.
Expand finance	Attract Foreign Direct Investment; Facilitate remittances; Stop and return illicit funds/flight capital; Attract finance for investment in infrastructure projects	Maintain commitments to aid; More aggressive marketing of opportunities in SSA needed.
Expand domestic demand	Undertake public works programs; Prevent unemployment escalating; Provide social security, for example, Cash transfers, school feeding programs; Consider tax reductions	Expand domestic resource mobilization
Absorb financial losses	Draw down reserves; Utilize short-term international financial assistance	
Expand self-employment	Relax business regulations	Support small business and informal sector activities – note the role of women herein
Export and production diversification	Expand South-South Trade; Promotion of manufacturing (for example, through agro-industries); Promotion of tourism; Infrastructure investment, especially in transport and business infrastructure	

Lots of objectives, actions and comments are describes in the table 3.3. These measures can be taken in Gabon in order to strengthen the resilient to financial shocks and economic as well. Moreover, this may also be applied to the sub-Saharan African countries too, because there are all somehow interconnected and have similar issues in the region. The trade expansion is due to the fact that oil-exporting countries such as Gabon and Nigeria have more challenges in this energy sector. Gabon has said before is a exporting oil country and its depends mostly on oil commodity. When expanding trade, Gabon will be less dependence on oil energy. This resilience may depend on the government as well, for example on how it managing its macroeconomic position in order to reduce the effects of

financial shocks on human development and economic development. These strategies need to be used appropriately.

Gabon can be noted high vulnerability because it is at medium risk of its better resilience. The country also can be classified by implication as at high risk, but the resilience of that Gabon may be seen as a factor that could diminish the effects from the financial crisis.

More factors such as government effectiveness, regulatory quality, rule of law and corruption control may also contribute in improving the resilience to financial shocks. Moreover, political stability but Gabon is among those countries in the sub-Sahara Africa, which are politically stable.

Gabon can also identify its common interests, establish a shared strategic vision by advancing its shared solution at regional meetings, because regional discussions would aim developing a shared regional mechanism for preventing financial shocks.

The country can also elaborate policy measures in order to promote the financial stability in the financial system as well. For example by strengthening the financial services regulation, establishing a micro small and medium enterprises fund, and so on. And by 2025, the vision for Gabon as an emerging economy is the where government is working on, how to diversify the economy. Three main problems Gabon today: accelerating economic growth and diversification of sources, reduction of poverty and social inequality, and sustainable management of resources for future generations. By placing people at the center of development, Gabon emergent aimed at sustainable development and prosperity for all by 2025 Appearance will be based on educated people. In 2025, Gabonese economy will no longer stay on the same footing, but on three solid pillars, Gabon Industrial, Green Gabon and Gabon of services. Summary Gabon industrial pillar requires better valorization Gabonese mineral resources, adding more value and development of local subcontracting. [84]



### **Summary of chapter 3**

Successful policies of global financial stability to limit the effects on shocks on the financial system and that the financial stability is hurt were analyzed in this part of the paper. However, the stability of financial system is very necessary because it means that there are not disruptions in the real economy. The financial stability has various components such as high degree of confidence, because players in the financial markets should have confidence to the markets actors. Also, the capability of financial system to resist shocks means that the financial system is stable. Others characteristics are monetary stability, stable positions of key financial institutions and more. The policy instruments of financial stability propose different tools, prevention, remedial action and resolution. After, during and after the financial crisis, various problem, and policy taken including target group were done by the international organizations such as the International Monetary Fund, government and more.

As regards to Gabon, there are lots of policies to implement in order to improve the resilient to financial shocks. Because the country depend more on one main natural resource that is energy, the diversification of the economy has to be done here. The government promotes a strategy Gabon an emerging economy, to sustain the development in 2025, pillars such as Gabon services, industrial Gabon, and green Gabon.

## CONCLUSION

Financial shocks keep looming on the global economy, boosting questions concerning the potential effects of global financial shocks on the global economy. It is very important to understand that shocks are unexpected event with large effect on the real economy. In others words, they are generally not expected, it happened in a surprise way quickly. External shocks are financial shocks, shocks from outside direct or indirect control. After analyzing this thesis, it is necessary to say that financial shocks are part of the financial market and international finance in general. Also, they have significant influence on the Gross Domestic Product and investment. They can be seen as unexpected changes of a financial condition index. Moreover, financial shocks are connected to economy, and directly to the leverage and credit creation. That is why no matter where they are originated, their reactions are global and their effects generally are transmitted. Additionally, financial shocks are part of financial stress accompanying by re-pricing. They are transmitted to exporters, reason why it is important to understand their impact on the economy. They affect easily any financial activity of a country or companies. The bankruptcy of the Lehman Brothers led to a global financial crisis, which was unexpected to the world economy.

There is a different between financial shocks and financial crisis. But it financial shocks generally lead to the financial crisis due to the panic in the financial system and economic activity. Financial crisis are always long term events while the financial shocks are short-term events. Financial crisis can be predictable but not the financial shocks. A financial crisis can run into an economic crisis.

The greatest financial crisis has generally hugging inspired literature to analyze its origins and specific policy answer. Financial crisis is the outcome of persistence macroeconomic imbalances.

The thesis examines various types of financial shocks, such as asset bubble, financial irregularity, market crash, sovereign failure, and bank run. The failure of a bank creates something called the credit crunch. If the bank failure causes the

credit crunch meaning that there is no access of credit, lack of credits. From the credit crunch it is transmitted to the real sector. If companies do not have access to credit then the costs of lending, the costs of borrowing increase, which lead companies to borrow less. The fact that they borrow less will lead to not expand their business activities. If they did not expand their business activities, they will reduce their production, this means that they have fewer goods to sell, less income and less money to start the reproduction process again, this will lead to deficit in the market and later there will be lack of financing, low investment, and recession, some companies end bankrupt in the process. Bank run, bank failure is a type of financial shocks because when the bank fail this means that the banks do not longer offer credits to companies. Bank is a financial sector and company is the real sector. When bank fails, this means that there is a problem in the financial sector, which is transmitted to the real sector because the problem who was initial for bank personal problem now become companies personal problems, due to the fact that they cannot borrow money, there is no money to finance investments, production, wages. Moreover, the company lack of finance lead to smaller output, no investment in fixed capital, no additional out payment. The company may not be able to take debt and payback.

If there is no money in the economy, all business activities become slower and harder to undertake. There is increase in bad debt, leading to recession or crisis; government must refinance the real sector.

The international transmission of mechanism shocks may be stronger between financial integrated economies. Financial shocks are transmitted to the real economy in different ways, for example, from the financial shocks through the interest channel then to the real economy, the second is from the financial shocks then the balance sheet will be affected follow by the real economy. The third way is that financial shocks may affect the real economy through the bank capital channel. Finally the fourth way is that financial shocks access the real economy through the uncertainty channel. Additionally, more transmitted channels will be such as the economic relationships such as trade, political links, markets, and so

on. Furthermore, it exists additional ways such as propagation from bank to the real sector, pyramidal shock propagation, correlated information channel for contagion and fragile and less fragile financial institution like intermediaries linkages.

Symptoms of the global financial crisis were also mentioned this includes inflation; domestic and sovereign debt; currency base/exchange rate crashes; increase first of the gross domestic product then declines during crisis as well; increased unemployment and suicide rate; decreases in demand, consumption and investment; decline supply; increase savings; and export-import imbalances. Moreover, features of the global financial crisis 2007-2009 may be specified through different reasons such as globalization of finance, global imbalances, shadow banking system, originate-and distribute banking model, burst of the United States housing bubble and so on.

Capital flows, international trade, the world development were affected by the global financial crisis 2007-2009 in different ways, decline in the world trade, and more. The general public, banks, investment banks, companies like insurance and investment were actors that contributed to the global financial crisis and each of them have a role to play. Also, the influences of the global financial crisis 2007-2009 in developing countries vary from regions because of the international integration of economies. For example, through the stock markets links, trade and trade prices channel, remittances, aid, commercial lending, and including the foreign direct investments. Furthermore, among the developing countries, Gabon was also affected by the global financial crisis like others developing countries through same channels of transmission. The economy of Gabon relies on export commodity such as oil, because the country is rich in natural resources like any other sub-Saharan Africa countries. Because of the influence of the global financial crisis on the world trade Gabon economy was hurt as well.

Financial stability is the central importance to competent functioning of the global economy. It defines the significant function of central banks and other public and financial authorities. Interruptions in the financial sector can have

various unfavorable impacts on economic activities. Additionally financial stability issues have never being neglected and ignored by different international organizations, national banks, and so on, reason why they have merged and become more effective and active. The World Bank and International Monetary Fund has presented a Financial Sector Assessment Program with goal determining frequently the strengths and weaknesses of financial systems of various countries. Keeping up stability is hence a basic and main objective of financial authorities. Financial stability is characterized by high degree of confidence, stable positions of key financial institutions, payment services, allocation of credits to investment opportunities, well-functioning financial intermediation process, smooth market functioning, monetary stability, capability of financial system to withstand shocks such as financial shocks. The policy instruments for financial stability are divided into tools, prevention means that implementing existing policies to safeguard financial stability, remedial action meaning implementing pre-emptive measures to reduce emerging risks to financial stability and finally resolution is reactive policy interventions aimed at restoring financial stability. The problems for international policy and overcoming policy consists of problem, target group, actions taken or possibly to take.

As regards of Gabon, is rich in natural resources such as oil, manganese, uranium, forest, and more others. The economy of Gabon depends mostly on energy resources such as oil. However, the country is politically stable in the region of sub-Sahara Africa. The global financial shocks are affected the country's economy and performance, but lots of strategies to resilient to the financial shocks were proposed by financial authorities, such as the international organizations and other countries as well. Gabon needs macroeconomic policies and long-term structural policies to strength to any financial shocks. In sub-Sahara Africa, the global financial crisis 2007-2009 hurt mostly exporting counties due to the commodity prices. Because of dependency on one source, it is necessary for Gabon to diversify its economy in order to improve resilient to financial shocks. Infrastructure is another problem in Gabon, it important to improve the

infrastructure in the country to attract more foreign investment. Infrastructure is the one of the main factor that attracts investors, and businesses to offshore their manufacturing. Moreover, Facilitating the firm entry and exit because in Gabon the investment climate is very poor and need lot of work. Improving the non-oil sector such as tourism and others will also are also significant strategies, this will lead to improve resilience to financial shocks.

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