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# A study of the causes of the most important banking crises in the world and a comparative analysis with the causes of the Cypriot banking crisis in 2013

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**Neapolis University Pafos**

**School of Business**

**MSc in Banking, Investment and Finance**

**Title of Thesis**

«A study of the causes of the most important banking crises in the world and a comparative analysis with the causes of the Cypriot banking crisis in 2013».



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## **Abstract**

In this dissertation we have studied the main banking crises that took place in the past and affected the economies of countries around the world. We identified the main causes that caused each crisis as well as the impact they had. We also studied the case of the Cypriot economic crisis and its. In the end we made a comparative analysis of the causes that caused the banking crises of the past with the causes of the banking crisis in Cyprus. Concluding our work, we came to some general conclusions about the factors responsible for the outbreak of the economic crisis in Cyprus as compared to the factors that caused earlier international banking crises and the consequences of such crises.

## **Chapter 1**

### **The Most Important Banking Crises in the World**

#### **1.1 Introduction**

It is a fact that from time to time humanity has gone through many economic crises. Some of them affected all of humanity, while others were limited without causing significant changes in the structures of the economy. Financial crises can be classified according to their causes as well as the sector from which they erupted. In this dissertation we will deal mainly with banking crises. Crises of this kind are manifested due to the fact that banks are unable to meet their obligations because they do not have the necessary funds for various reasons.

In this dissertation we will study some of the major banking crises that have occurred from time to time around the world. Our goal is to study the case of each financial crisis separately and to identify the main causes that caused them. We will also study the case of Cyprus separately to find the factors that caused the crisis and to compare them with the factors of the other crises.

It turns out that the factors that cause an economic crisis are not much different from each case. Also the consequences resulting from the financial crises are similar in each case.

#### **1.2 Purpose of the Thesis**

The purpose of this paper is to draw some conclusions about the causes of the financial crisis in Cyprus through a comparative analysis with the factors that caused banking crises in the past in foreign lands.

#### **1.3 Structure of the Thesis**

This paper consists of five chapters. This chapter is the introduction and refers to the topic we will study as well as the purpose of our research.

The second chapter is the largest chapter of the study and is the bibliographic part where the extensive reference is made to the causes of the banking crises of the past.

The third chapter is that of the methodology and refers to the methodology that we will follow for our research.

The fourth chapter refers to the case of the Cyprus Economic Crisis and the factors that caused it.

In the fifth chapter we made the comparative analysis of the factors that cause the banking crises in relation to the case of Cyprus and we drew our conclusions in relation to this issue.

## **Chapter 2**

### **Causes and consequences of the most important crises**

At times, humanity has faced many banking crises. Each of them had different causes as well as different ways of dealing with them. Many of these crises have had irreparable consequences and have had a global impact as well as significant monetary costs for the affected economies. In this chapter of the literature we will study some of the most important banking crises that have taken place in the past. We will study the causes of these crises, the measures taken by the governments as well as the consequences caused by them. Our goal is to form a clear and comprehensive picture of the banking crises and the reasons why they broke out in each case, as well as the appropriate course of action.

#### **2.1 The Great Depression-The big Crash 1929-1939**

The great depression was a worldwide economic downturn that began in 1929 and lasted until 1939. (Kraner 2010) It was the worst economic catastrophe of the 20th century and will remain eternally etched in the world history. This crisis was characterized as "great" because of its long duration. Different experts offer different explanations for the Great Depression. Some historians have called the Depression an inevitable failure of capitalism. Others blame the Depression on the "excesses" of the 1920s: excessive production of commodities, excessive building, excessive financial speculation or an excessively skewed distribution of income and wealth. (Wheelock, 2007)

##### **2.1.1 How the Great Depression began**

By the end of World War I, the economy of the countries had begun to recover. The reason was that people began to engage in mass production. So shortly thereafter, thanks to America, Europe is experiencing great prosperity in the period 1923-29. But this prosperity was not sustainable because the products produced could not be absorbed by the world. This is due to the fact that most people were low paid and could not afford to buy the products. The increase in wages is much slower than the increase in production. So the products cannot be absorbed and their prices are constantly rising. So a little later almost all the economy relies on bank credits. All companies are expanding their activities so stock prices go up. Stock prices had risen more than fourfold from the low in 1921 to the peak reached in 1929. (Kraner, 2010)

After all this strong uptrend, stock market volatility in the New York Stock Exchange has been volatile. Some thought that this drop in share prices would be temporary and was due to diverging factors. On the other hand, others have said about a <<bubble>> ready to explode. At the same time, consumer products prices and profits from manufacturing activity had fallen well before the stock price plummeted.

On 3 September 1929 the Dow Jones Index reached its highest level at 381.17. But in October of the same year, financial circles, fearing a downturn in stock prices, began to liquidate. On October 24, 1929, 13 million shares changed hands, a record number for stock exchanges. Panic began to occupy investors and brokers. Great Wall Street players



have begun to buy the good cards, the so-called blue chips, in bulk in order to contain the fall or to speculate. The situation was constantly worsening. The index loses 12% of its value and 16.4 million shares change hands. (Ντατσόπουλος, 2016)

The day after, Wall Street collapses. \$ 30 billion was lost in two days. Banks go bankrupt because they put their clients' money in stocks to get more profits. At the same time they refuse to finance businesses and customers. On November 13, the stock price index is approaching its lowest level. (Ντατσόπουλος, 2016)

The great depression has had very devastating consequences not only for America but also for other countries worldwide. The recession widened because US banks withdrew their loans in the form of loans. By the end of the crisis thousands of businesses were shut down and millions of people were unemployed. Between 1929 and 1933, the quantity of goods and services produced in the United States fell by one-third, the unemployment rate soared to 25 percent of the labor force, the stock market lost 80 percent of its value and some 7,000 banks failed. (Wheelock, 2007) In some countries, many desperate citizens turned to nationalists, such as Adolf Hitler, and as a result the World War II start of. America did not completely overcome the Great Depression, however the outbreak of World War II in 1939 eliminated unemployment and fueled the growth, because of large military spending. (Ντατσόπουλος, 2016)

### **2.1.2 What caused the great depression?**

Many people argue that the Great Depression was primarily due to World War I that broke out in the late 1920s. Undoubtedly, the tragic effects of the war had affected the economy and made it more vulnerable. However, the turn of the economic cycle cannot be fully attributed to the war itself. But the truth lies in deeper causes. Many things were wrong, but the main points that appear to have had a particularly direct impact on the disaster will be discussed in detail below one by one.

#### ➤ The rule of gold

The Golden Rule was an exchange rate system, in which the currency was convertible into gold at a certain price and vice versa and allowed the free export of gold abroad. The currencies had a central exchange rate against gold and based on this exchange the bilateral currency rates emerged. That is, it was a system of fixed exchange rates. The US joined the system in 1879, which worked well until World War I.

When the World War I was over, Britain wanted to bring back the converting of the sterling to gold. So from the beginning of 1922, Britain has made an anti-inflationary effort in order to approximate the pre-war exchange rate of the sterling against the dollar. In April 1925, due to the instability and volatility of exchange rates, countries decided to reinstate the gold rule. The classic gold standard rule of the pre-war period worked quite smoothly and without a significant conversion crisis for more than thirty years. In contrast, the inter-war gold-exchange rule has been a timely and extremely ineffective scheme for ensuring monetary stability and achieving economic growth. It had

devastating effects, as America's attempt to help Britain grow, inflated the net inflow of gold reserves, and the economy later led to the Great Depression. (Kraner, 2010)

According to Kraner the post-war rule of gold, they had created some technical problems. The first was the asymmetry between the surplus and the deficit of countries in the required monetary response to gold flows.

In theory, according to the rule, central banks of countries experiencing gold inflows were supposed to assist the price specific flow mechanism by expanding domestic money supplies and inflating, while deficit countries were supposed to reduce money supplies and deflate. The second is that the Central Bank of America did not use the tools at its disposal to raise money in the market to save the smaller banks. The Fed's rules of procedure do not allow it to reserve more than 250% of its gold reserves. This limit had been reached by the central bank by the end of the 1920s. Further, the crisis had led citizens to redeem their banknotes in gold from the central bank. With the amount of gold held by the central bank shrinking instead of increasing credit to help the situation, it has had to reduce it.

➤ Speculative phenomena in stock exchange market

The market in the late 1920s has been becoming increasingly speculative. (Kraner 2010) There was confidence in the short-term situation of the rising value of the common stock. When those stocks fell, some were sold and so the reality of rising values was destroyed, with the sole effect of falling prices. The holders then rushed to unload the securities, with the sole consequence of the Great Crash of 1929.

➤ The bad structure of the banking system

Bad structure of banking system was one of the causes of the Great Depression. There were many small banks that could not cope with a crisis. When one bank went bankrupt, the assets of other banks were frozen, while depositors of other banks were given a warning to go and ask for their money. Indicatively, in the first six months of 1929, 346 banks went bankrupt in various parts of the country, with total deposits of about \$ 115 million. (Ντατσόπουλος, 2016) When the banks went bankrupt the central bank did not save them. So the citizens panicked and ran to take their money. A banking panic arises when many depositors lose confidence in the solvency of banks and simultaneously demand their deposits be paid to them in cash. Banks, which typically hold only a fraction of deposits as cash reserves, must liquidate loans in order to raise the required cash. (Romer, 2003, Kraner, 2010) After that many banks were closed and lending stopped. By 1933 the money stock in the US economy had shrunk to 2/3 of 1929 levels causing a huge recession. (Ντατσόπουλος, 2016)

➤ Over-Lending

Another cause of the big crash was the over-lending. Many people have invested their money in stocks to make a profit. When an investor believes he can make 100% profit per year by borrowing at 6% interest rate, he will be tempted to borrow, invest and make

money with this money.(Kraner, 2010)As a result the banks that had financed the over-indebtedness collapsed as borrowers were unable to repay their debt.

### **2.1.3 The great depression impact**

According to Calvin Juvenali many businesses closed after they went bankrupt. This has resulted in many people losing their jobs. Also the standard of living and world production have dropped dramatically. Unemployment rates have been booming. Indicatively, the unemployment rate at the beginning of the crisis was 3.2 percent. By the time the crisis came to an end, it had reached 24.9 percent. Almost 15 million people lost their jobs. (Juvenaly, 2019) Half of the nation's banks went bankrupt and depositors lost their money. World trade was down 65 percent. Deflation has hurt farmers, businesses and homeowners. Many of them went bankrupt and lost their homes. In less than a year, 23,000 people committed suicide due to this condition.

### **2.1.4 Measures to address the crisis**

The laws that were passed from 1929 until the end of 1932 and the regulations made by the FED proved ineffective and worsened the situation. (Ντατσόπουλος, 2016) One of these laws that implemented was the Smoot-Hawley Tariff Act in 1930, which led to the deterioration of poverty due to the reduction of international trade and the application of reciprocal tariffs in other countries.

The situation began to recover when Franklin Roosevelt took over the presidency. Roosevelt initially abolished the gold standard. It banned the possession of gold in bars and coins by individuals after declaring them illegal. This measure has helped countries increase their stock of money in their economies without restrictions. This increase in the money stock has helped the central bank channel money to commercial banks, thereby helping the market come out of the crisis. Soon after, President Roosevelt announces his new policy, the so-called "New Deal". The New Deal was a set of pieces of legislation that were voted to increase government spending to stimulate economic activity. It also focused on the execution of public works, which would again employ the unemployed. The New Deal policy had immediate effect. As he says David C. Wheelock under the New Deal, the government put in place many programs of relief and recovery that employed thousands of people and made direct cash grants or loans to individuals, firms and local governments. However, at least in the first few years of the New Deal, federal government spending did not increase substantially.

In 1935 a second New Deal was announced with the implementation of a social security scheme with unemployment benefits. Furthermore, the federal government set up a temporary system of federal deposit insurance and followed up a year later by creating the Federal Deposit Insurance Corporation (FDIC) and a permanent deposit insurance system. Thus banks would not use their clients' money in the stock market and if they needed urgent liquidity they could now obtain it. Roosevelt's policies restored confidence in the banking system, and money poured back into the banks. The money stock began to expand, which fueled increased spending and production as well as rising prices.

Economic recovery was slow, but at least the bottom had been reached and the corner turned. (Wheelock, 2007)

Finally, one of the most important measures was taken, was the enactment of the Glass – Steegall. This law imposed strict restrictions on the operation of banks. It divided the banks into two categories, commercial and investment. The commercial banks accepted deposits and lent, while the investment banks traded and did not accept deposits. This has especially helped to protect customer deposits and improve the functioning of the stock market.

## **2.2 Savings and loan crisis 1980**

### **2.2.1 Historic recursion-How the crisis starts**

The 1980 crisis named “The Savings and Loan Crisis”. Took its name from the Savings and Loan Institutions that were created to receive deposits and use them to make home mortgage loans.

The Great Depression of 1929 changed the structure of the US banking system. Among the reforms made was the reinstatement of the Glass-Steagall Act. This law was reinstated with some important provisions such as Regulation Q and the creation of the Federal Deposit Insurance Corporation (FDIC). Regulation Q set limits on the interest rates that banks could offer on deposits. Because of these interest rate limits, there would be no competition between the interest rates offered by the banks, so they would not increase too much. However, there was an exception for bank institutions that specialized in mortgage lending and in particular the savings and loan organizations. Deposits in these companies had a quarter of a percent advantage over other consumer deposits. This was done in order to encourage the flow of money to the housing sector. This system was introduced in 1932 by the Federal Housing Bank Act as a source of liquidity and low-cost financing for S&L.

These institutions were originally organized by groups of people who wished to buy their own homes but lacked sufficient savings to purchase them. In the early 1800s, banks did not lend money for residential mortgages. The members of the group would pool their savings and lend them back to a few of the members to finance their home purchases. As the loans were repaid, funds could then be lent to other members. (Federal Reserve history [https://www.federalreservehistory.org/essays/savings\\_and\\_loan\\_crisis](https://www.federalreservehistory.org/essays/savings_and_loan_crisis) )

This system included 12 regional mortgage banks under the supervision of FHLBB. The regional banks were funded by the federal level, but belonged to the members of their institutions, through shares. FDIC, was a system created to provide federal deposit insurance for consumers.

Everything was going well until the late 1970s, when inflation was very high and S&L was specializing in short-term deposits and long-term mortgages, and as a result there was a mismatch in S & Ls' liabilities.

Due to this the S&Ls started losing money. During first three years of 1980s, 118 S&Ls with \$43 billion in assets failed, costing the FSLIC an estimated \$3.5 billion to resolve. In comparison to the previous 45 years the number of failures in the period from 1980 to 1982 was more relatively. From 1980 to 1982 there were 493 voluntary mergers and 259 supervisory mergers in S&L institutions. The tangible worth for the S&L had fallen from 5.3% of assets in 1980 to only 0.5% of assets in 1982. (Sonam Bhati,2014)

### **2.2.2 Causes of the crisis**

According to the Federal Deposit Insurance Corporation the rise in the number of bank failures in the 1980s had no single cause or short list of causes. Rather, it resulted from a concurrence of various forces working together to produce a decade of banking crises. First, broad national forces economic, financial, legislative, and regulatory established the preconditions for the increased number of bank failures. Second, a series of severe regional and sectorial recessions hit banks in a number of banking markets and led to a majority of the failures. Third, some of the banks in these markets assumed excessive risks and were insufficiently restrained by supervisory authorities, with the result that they failed in disproportionate numbers. (Federal Deposit Insurance Corporation, 1997)

In addition, some of the banks, because they took excessive risks and were insufficiently limited by the supervisory authorities, this resulted in them failing in disproportionate numbers.

But the main causes of this crisis were high inflation and high interest rates. As mentioned above, S&L specialize in short-term deposits and long-term mortgages, and as a result there has been a mismatch in S & L asset liabilities.

Another cause of the crisis was the lack of oversight. FHLBB had weak practices before the 1980s because S&L associations had limited powers and relatively few failures.

But after 1980, new data, high inflation and high interest rates required more drastic practices, which FHLBB did not do. The practices he followed were inadequate and he did not have qualified examiners.

Examiners preferred banking agencies to S&L because they were paid more and FHLBB had limited resources and responsibilities. As a result, when many S&Ls faced insolvency in the early 1980s, their examination force was inadequate and poorly trained for the new environment with limited responsibilities and resources. Specialized examiners were difficult to recruit and retain since a government recruitment freeze in 1980-81. Banking organizations generally hired the highest quality candidates at all levels because they paid 20-30% higher than FHLBB. ( Federal Deposit Insurance Corporation, 1997)

Later, due to the fact that the FFHLB did not have much power, they were supervised by Examiners. However, the examiners focused more on identifying and complying with the rules and regulations than on safety and correctness. This was because most of S&L's assets were fixed-rate mortgages and the problems of quality- credit was low. Thus, the

FFHLB had only adopted policies that made it impossible for an institutional body to challenge a case due to a lack of resources and a limited number of law enforcement officers. (Sonam Bhati, 2014)

### **2.2.3 Measures that taken from the Government and how effective was**

One of the first things the government did to deal with the S&L crisis was deregulation. Two important laws have been passed on this period. The first was the 1980 Disciplinary and Monetary Control Act (DIDMCA) which reduced net worth claims and replaced the previous net worth claims by 5 percent of insured accounts to 3-6 percent. The other law was the Garn-St Germain for the 1982 custodians, which concerned capital tolerance. This law relaxed the capital requirements for S&L and also authorized FHLBB to implement a Net Worth certification program for S&L. These two new laws had a positive effect on the situation at the time. First, they gave freedom to S&L by giving them new and expanded investment forces and eliminating the deposit limits.

Second, they allowed savings and lending institutions to make high-risk loans. DIDMCA also increased its federal deposit insurance from \$ 40,000 to \$ 100,000 per account.

The government's deregulation has proved effective. The S&L industry underwent a rapid growth as a large number of deposits had entered S&L after deregulation. Another change was that S&L investment portfolios began to shift from financing mortgages to investing in new activities such as real estate, casinos, windmills and more. Indicatively, by 1986, mortgage loans constituted of only 56% of total assets of S&L associates as compared to 78% in 1981. (Sonam Bhati)

Then, during the Bush administration in 1989, a new law was passed by The Financial Institutions Recovery and Enforcement Act (FIRREA) to abolish the FSLIC, helping S&L to escape the crisis. Also, he created The Resolution Trust Corporation (RTC) to finance insolvent transactions and to transfer assets to FDIC.

Then, FHLBB was abolished and a new institution the Thrift Supervision Foundation was set up to deal with S&L industry issues such as dismantling and merging troubled institutions.

The new government's changes have paid off, helping 1,043 troubled savings and lending institutions to raise a total of \$ 874 billion in assets. The number of thrift institutions decreased from 3,234 to 1,645 institutions, i.e. around 50 percent fall. (Sonam Bhati)

### **2.2.4 Consequences**

Recovery has been time consuming but the industry has generally stabilized. Indicatively, according to Lanse Cassak from January 1986 to 1995, 1,043 institutions with assets of \$ 519 billion were closed and the number of thieves decreased from 3,234 to 1,645, almost 50%. In addition, some of the efforts to resolve the issue were condemned, such as in 1996, when the United States Supreme Court agreed with government agencies to sue the government, denying them the use of surveillance for which they had originally entered

into agreements with the FHLBB. The final cost was about \$ 153 billion: \$ 124 billion paid by taxpayers, \$ 29 billion paid by industry.

## **2.3 Asian economic tiger's crisis 1997**

### **2.3.1 A historic recursion**

In the 60's until 90's, the economies of Japan, the four Asian tigers that were Hong Kong, Singapore, South Korea and Taiwan and other emerging economies such as Indonesia, Malaysia and Thailand experienced great development where many economists have spoken of an "Asian miracle".

The Asian crisis began in Thailand, in the summer of 1997 and lasted for ten years. Thailand was renowned for its economy and its macroeconomic stability and was once described in the World Bank's Miracle Report 1993 as a model of economic growth. And then it appears as "the weak link in the Asian financial chain." Then, the crisis spread to the Philippines and South Korea and later to Hong Kong, Malaysia, Singapore, Taiwan, and Indonesia, which were considered quite "safe" as they had a continuous rapid growth and improvement in living standards. (Lauridsen, 1998)

This crisis has had an impact on the entire planet since it began in Southeast Asia, moved to Latin America and then visited Russia and returned to South America. Europe and the United States were also affected in August-October 1998. (Scholes, 2000)

### **2.3.2 How the Asian crisis starts**

The Asian crisis was the result of the depreciation of the Thai currency (baht). From 1980 to 1996, Thailand experienced steady GDP growth averaging 9% per year and inflation remained relatively low at 3.4% -5.7%, interest rates were high and there was a stable exchange rate policy linking the baht to the US dollar. (Lauridsen, 1998)

Because of this, foreign investors were willing to invest their money in Thai, borrowers who borrowed money in order to invest in Thailand and other markets, earning high returns by leveraging speculation.

Then, the countries lose their competitiveness because they have locked their national currencies at the dollar exchange rate. This resulted in a decline in the rate of exports. After that investors decided to leave Thailand and the Central Bank spent \$ 40 billion of its \$ 43 billion of its foreign exchange reserves. Finally, the central bank succumbs to the pressure of speculators and abandons the fixed exchange rate for the first time in 14 years. So the baht has depreciated. This also affected other Asian currencies, notably the Philippine Peso, the Indonesian Rupiah, the Malaysian Ringgit and the Singapore Dollar. By early December 1997, the baht, the rupiah, and the ringgit had each depreciated by about 60 percent; the peso by about 35 percent; and the won by 30 percent. (Hyeng Keun Koob, 1999) After that many researchers said that the "Asian miracle" is dead.

### **2.3.3 What are the causes of the Asian crisis??**

One of the main causes of the Asian crisis was speculative phenomena. The steady exchange rate encouraged banks and other domestic companies to borrow substantial amounts of dollars at lower interest rates from their home countries. In addition, a stable exchange rate gave borrowers a false sense of security, encouraging them to borrow in dollars. As the dollar fell, the borrowing going up, as did property and stock prices. Foreign capital became available at relatively low interest rates as investors in search of new opportunities shifted huge amounts of capital in Asia (Δάβνη, 2014).

Also many financial institutions in the region participated in speculative activities. Korea's merchant banks, for example, played very recklessly. They borrowed from foreign banks and bought large amounts of Russian and Ukraine treasury bonds, Brady bonds, and Thai and Indonesian bonds. Many of these merchant banks had no experience in international finance, since they were converted to banks from small finance companies only in 1996. (Y.-S. Kim, H.K. Koo, 1999)

Another reason was the depreciation of the Japanese yen against the dollar. This depreciation has caused foreign currency debt to swell and a wave of bankruptcies. Exports have also become expensive and uncompetitive, creating a large trade deficit and losses in the domestic market. In addition, lenders demanded their funds back from investors, leaving the central bank with no foreign exchange reserves.

In addition, lenders demanded their funds back from investors, leaving the central bank with no foreign exchange reserves. Some other causes according to Y.-S. Kim, H.K. Koo were government intervention in bank lending, lack of transparency in financial transactions, and agency problems. Japanese banks relied heavily on the government's signal in making their loans. Japanese financial transactions also lack transparency.

### **2.3.4 What measures did they take and how effective was?**

The first thing the authorities did to save their currency was to raise their interest rates.

Then, they asked the IMF for help. The IMF programs were based on the 1994 Mexico Model where they were successful. These measures included public funding to provide reserves to the central bank, restructuring the financial and business sectors to achieve a larger market, raising interest rates to defend and stabilize exchange rates, and setting a surplus state budget to secure adequate funds and in order to cover the expected cost of transporting the financial restructuring and the current account deficits. In addition, in an effort to protect the financial system and avoid systemic risk, the government decided it would not support failed businesses and merged the country's 39 finance companies into five large companies (Asia-Pacific Economic Cooperation Study Centre, 2000).

However, while some of these measures were effective, others exacerbated the situation. GDP declined sharply, mainly in Indonesia (-14.3%), rising unemployment and severe social unrest. (Δάβνη, 2014) With the increase in interest rates they were unable to attract



foreign capital. All they could do was bankrupt many local industries, which made the situation worse.

The withdrawal of foreign capital continued after IMF funding of \$ 110 billion came after banking reforms proved unsuccessful after the closure of credit institutions created a panic among creditors where they withdrew their funds. The devaluation of the exchange rates continued after the implementation of the IMF programs. In Thailand, the baht began to stabilize about half a year after the programs were implemented and reached 60% of the pre-crisis level. At the same time in Indonesia the rupee was volatile and stabilized a year after the programs and reached 20% of the previous level. The sharp decline in share prices continued. In addition to the massive outflows of funds from the banking sector, rapid depreciation of the currency, and sharp declines in the accumulated asset prices have caused a sharp contraction in the countries' economic activities. As the IMF itself pointed out in its preliminary assessment report, "the program projections badly misused the severity of the downturn". (Asia-Pacific Economic Cooperation Study Centre, 2000)

### **2.3.5 Consequences**

According to the Asia-Pacific Economic Cooperation Study Centre, the consequences of the Asian crisis for the economy of the affected countries were:

The slowdown in export growth. In 1997 exports accounted for 20.3% of GDP. Export growth began to decline in the second quarter of 1998, and by the end of the year they had a negative trend. They continued their negative course until the first half of 1999 and began to recover in the second half of the year. In addition, the capital flow was affected by the fact that after the crisis the lending conditions deteriorated and thus the concentration of capital in the international capital markets increased. Indicatively the foreign direct investment recorded US \$ 45.58 billion, a mere 0.6% increase over 1997, and one estimate placed illegal capital outflow in 1998 at US \$ 43 to 60 billion, which exceeded the amount of foreign direct investment for the year. Moreover, the slowdown in economic growth continued after the end of the crisis. Real GDP growth was declining as well as the general retail price index, indicating continued deflation in the overall economy.

## **2.4 The Greek Stock Exchange Crisis & the Big Crash 1999**

### **2.4.1 A historic recursion**

Greece had great economic growth during the 1990s until 2000s. The inclusion of the drachma in the exchange rate mechanism increased capital inflows into the Greek capital market. The placement of funds took place mainly in Greek government bonds and in shares, with the result that the drachma was appreciated against the new exchange rate. Also in 1998 many public companies were successfully privatized and the total value of the transactions more than doubled compared to 1997 and a large number of people ran to invest in the Stock Exchange. Even the great economic growth was connected with the

accession of Greece to the EMU and the undertaking of the Olympic Games in Athens in 2004.

So, many Greek and foreign investors have invested in the stock market. But the number of investors was high for the country. In many remote areas, offices for buying and selling shares had been set up, and many small companies had been listed on the Stock Exchange. In fact, many Greeks involved in the stock market believed that they had solved the financial problem of their lives. Many of the shares that had been listed on the Stock Exchange turned out to be "bubbles", that is, stockless shares with companies without a job, but only for the purpose of attracting the stock market.

On September 17, 1999, the general index of the Stock Exchange closed at its highest level ever recorded, setting a record of 6,355.04 points. At that time, at some point, it had risen to 6,484.38 points. The capitalization of the listed companies, ie the total value of their shares, reached 217.17 billion euros that day.

Soon after, the stock market burst. The general index of the Athens Stock Exchange landed at 1467.30 points on March 31, 2003, ie about 5,000 points less or a drop of 77% from September 17, 1999. Even lower prices were recorded in the summer of 2012. Specifically on June 5, 2012 the general index closed at 476.36 points, the lowest price since September 1999. The downturn of that day (September 17, 1999) was to be the beginning of a "downhill" that stopped almost four years later, March 2003. (Τσαγγάρη, 2016)

#### **2.4.2 Causes of the big crash**

One of the major causes of stock market crashes was poor investment education or rather its complete lack. Most of the investors were people who had no knowledge of the subject matter of the investment, not even a Bachelor's degree or even a high school diploma. They placed their funds without the advice of experts who could examine the risk they were taking. Investors were convinced of the positive performance of the Stock Exchange without some practical knowledge but based on instinct and experience. Most of the investors were so addicted to the stock market that they spent more hours per day than their profession.

Of course, there was also the legal framework in the country that allowed anyone to invest in the stock market, which is another cause of stock market crash. With the change of law many companies were listed in stock exchange market without complying with the necessary criteria. In addition, the Ministry of Finance, in cooperation with the chairman of the stock market, Mr. Kouniakis, lowered the daily limits from 10% to 8% and recommended its complete abolition. (Τσαγγάρη, 2016)

With the above and with such high stock returns, investors have become greedy. This has led investors to over-lend, one of the causes of the stock market bubble. They made loans (housing, consumer, etc.) to invest in the stock market. Banks had also increased their lending to the investors to buy shares that in many cases reach up to 50% of the value of

the securities. (Χαρίτος, 2013) Also, another reason was that the stock market ended up in "Gambling". Small investors wanted high returns but wanted them fast. They made short-term investments in stocks, even intraday trading. Due to speculation, investors started doing the then illegal "air" gambling they bought stocks without having the required capital without thinking about the subsequent consequences such as high interest rates on debt portfolios.

Another factor contributing to the stock market explosion was the so-called "Papagalakia" where the majority were small and inexperienced journalists. They were appointed by some major shareholders in newspaper columns to deliberately provide incorrect information in order to mislead investors and to serve their own interests.

Another reason was the unskilled manpower working in the stock market and various other agencies. Due to the urgent need companies they were forced to hire non-specialized staff especially in the positions of Brokers - Analysts. Most of them were staffed with no knowledge of not only the stock market but also how a company is managed. (Καρναχωρίτης, 2013)

In addition, poor supervision led to a large bubble. This has resulted in the appearance of illicit transactions in portfolio management, unbeknownst to the investor. At the same time, the Euro-elections 2000 through the pre-election speeches created a false sense of a healthy stock market, which resulted in the complete trapping of investors.

### **2.4.3 Measures**

According to Karnachoritis, after the break of the bubble, there were some changes in the administration and procedures of the stock market, such as the increase of its opening hours, by one hour with the meeting starting at 10.30 am and ending at 2.15 pm. Stock exchange's limit up to 10% from 8%, while on 31/7/2000 there was a new increase in the range from 10% to 12%. Also, the way of calculating the closing price of the shares has changed, where it is now calculated based on the transactions of the last ten minutes compared to the last half hour, and there was a reduction of the tax rate of stock trading from 6 thousand to 3 thousand in the past year. The Bank of Greece reduced its intervention rate to 8.75% from 9.25% and Greek bonds were upgraded by Salomon Smith Barney. In a short period of time, it proceeded with two interest rate reductions from 7.5% to 6.5% and after the signing of the agreement for the financing by the Third Community Support Framework, the Bank of Greece in Brussels proceeds with the last two interest rate reductions of 6.5% to 4.5%. Following the reduction in interest rates, the Bank of Greece announced a gradual reduction in the percentage of commitments made by commercial banks to 2% from 12% over a 2-year period. (Καρναχωρίτης, 2013)

Then there was an urgent need for liquidity, so the Minister of National Economy announced new measures to strengthen market liquidity. The most important of these measures were: Legislative regulation that would allow insurance funds to manage part of their disposal in commercial banks which would manage them, the introduction of favorable tax exemptions for long-term mutual fund investors, the possibility of optional

depreciation of the negative surpluses resulting from the shareholders' portfolios of companies within 3 years, the release of the management of the National and Commercial Bank by the public and the election by the General Meetings of shareholders, and the modernization of Postbank with developing new products and services and its integration in the banking system.

Subsequently, due to Greece's accession to the eurozone, the government submitted a stability plan for the four years 2001-2004, with the main focus on promoting structural change and in particular the liberalization of markets. The stability program aimed at strict income policy and large investments.

Also in the government's goals, was to increase growth rates with a perspective of 5.3% with an increase in employment to 1.5% and unemployment to 9.5%. The goal is also to reduce or stabilize inflation by about 2.7%.

As it turned out, these actions of the government have not been able to improve the situation to a large extent

#### **2.4.4 Consequences**

The explosion of the stock market bubble resulted in the reduction of investors' interest and reliability in the Stock Exchange Market. Trading and the turnover of the Stock Exchange decreased. The percentage of active codes was 10% or even 5% of all codes. Also, many listed companies withdrew or were removed from the stock market. More specifically, from 1999 until today, they left the stock exchange market for various reasons 149 listed companies and from 2004 until today 37 companies withdrew from the Stock Exchange due to merger, 15 due to public offer and 42 were deleted by the Hellenic Capital Market Commission due to years of absence from stock trading as they had serious financial problems. (Τσαγγάρη, 2016)

As for investors, they were faced with red codes. That is, the codes they owe to the stock market because they invested money they did not have. They are now being asked to repay their debts, but together with the high default interest rates to an exhaustive degree. Also, those who invested large sums of money, in the end, not only failed to take advantage of them and receive the respective salaries, but also lost the initial funds, from the hands of institutional investors. These large losses of investors had a negative impact on the real economy, due to the fact that real income decreased and consumption was greatly reduced.

In addition, households were led to an asymmetric increase in lending, which had an impact on their future living. The same was true for the companies because of corporate loans. In most cases of companies, their sales remained stagnant and their profitability decreased significantly. In addition, half of the listed companies reduced their equity in order to reduce the value of their portfolios. As a result, equity has fallen by more than 10%.

Many tens of billions of drachmas were wasted on acquiring companies. So many start-ups companies had the control of many companies, with no real object and quickly became unnecessary. Thus, due to the pressure of obligations and the vertical increase of operating expenses, they proceeded to the absorption of their subsidiaries. (Καρναχωρίτης,2013)

The effects of the bubble were visible in all sectors of the economy. Sales prices had fallen sharply and profits from several strong companies fell sharply. Traffic on ferry lines decreased and hotel bookings fell by up to 10%. Stock exchanges shrank sharply, causing a loss of tax revenue of about 250 billion drachms. (Καρναχωρίτης, 2013) The state was deprived of significant revenues such as VAT revenues due to reduced consumption and limited spending. Unemployment approached 12% due to the fact that companies lost high amounts and did not have the opportunity to hire new human resources nor the ability to keep the existing one.

## **The Global Financial Crisis (2007 - 2011)**

### **2.5 The Crisis in the USA**

#### **2.5.1 How the crisis start**

The global economic crisis in 2007 had start from the United States and soon spread to Europe and the rest of the world. The Global Financial Crisis is considered to be the worst financial crisis since the Great Depression of the 1930s. In the years before the crisis erupted, the economy operated in an environment of unlimited optimism as in 2002-2007 the highest average global growth in the last 40 years was observed. (Δάνη, 2014)

The FED at that period time, kept interest rates low thanks to capital inflows from developing Asian countries and oil production. The 2007 crisis was described as subprime due to the development of a special category of mortgages, low-security loans which were granted with very loose credit criteria to borrowers who did not meet the necessary conditions and had a floating interest rate.

Also at that time, from 2002 to 2006, complex financial products were developed thanks to low-security loans, which depended directly on the ability to repay them. As a result, banks and investors around the world are investing in the US housing market. But a little later, in the summer of 2006, house prices began to fall and as a result, mortgage rates began to rise.

So most borrowers were unable to meet their obligations due to the fact that their home was now worth less than the loan amount. In August 2007, interbank interest rates in both the United States and Europe rose sharply and liquidity disappeared. (Δάνη, 2013)

Banks that were directly linked to low-collateral mortgages collapsed, while others were rescued by government intervention. International giants such as Lehman Brothers and

General Motors have also collapsed. International stock markets have also begun to be affected and the financial crisis has taken on global proportions.

### **2.5.2 Causes**

Due to the economic strength that prevailed in the early 2000s, banks began to provide loans for housing. This was done without assessing the borrowers' creditworthiness. They provided loans to the unemployed people without assets. Over time, these individuals could not repay their debt. In August 2008, about 10% of mortgage loans in the United States were either in arrears or in an auction, while a year before the banks seized about one million homes. (Νταουσόπουλος, 2016)

One of the main reasons was securitization. With this mechanism, mortgages were transferred from the balance sheet of commercial and savings banks to the balance sheets of other intermediary financial organizations. These organizations then issued securities based on loans, the Mortgage Backed Securities, in combination with other theoretically safe investment products and thus created investment packages. The debt guarantee, which consisted of the components of the investment packages, was evaluated by credit rating agencies (CRA). However, this rating was not objective as the banks managed to convince the organizations to rate the securities higher. This erroneous rating was due to moral hazard, a dependence relationship between the banks and the rating agencies. So they managed to mislead investors about the risk of the bonds they bought. From there, higher-priced investment packages broke into pieces to sell to potential investors, generating profits for banks and investors, provided the borrowers agreed to their obligations. With the securitization, the banker did not properly assess the borrower's credit risk since the risk was transferred to other organizations.

Another cause of the crisis was the high salaries-bonus of bank executives. Shareholders and executives were lured by incentives that led to the destabilization of the system. Their goal was high short-term rewards and they didn't care about the long-term performance of their choices. As a result, they did not realistically assess the type and magnitude of the risks they posed. Also, the distribution of risk throughout the banking system created the illusion of limiting the risk.

Furthermore, the liberalization of markets as a result of major structural changes in the 1990s, as well as new financial products, weakened the risk management process and increased the degree of leverage. The high bank leverage, especially with short-term borrowing, has shaken confidence in these markets as home prices and capital adequacy have fallen, especially for investment banks, making it difficult to renew their short-term financing capability, compressing their capital adequacy and real estate prices. (Δάνη, 2013)

The above reasons were also helped by the 'deregulation' regulatory framework where, due to the repeal of the Glass Steagall law, the doctrine of self-regulation of investment banks was adopted. This has led to easier borrowing and greater risk taking.

### **2.5.3 Measures**

Following the outbreak of the crisis in the United States in 2007, the central banks, the US Federal Reserve and the European Central Bank took some measures to address the crisis. Initially, they reduced key interest rates, in particular The Fed started an easing monetary process in 2007 and kept lowering the interest rate with constancy throughout the 2007 and 2008 (Govetto, 2009), perhaps the ECB with some delay.

However, the monetary policy transmission mechanism was, in particular, at the height of the crisis, virtually paralyzed. Then, FED then adopted large-scale conventional monetary policy measures. These measures were called "quantitative and qualitative easing measures". With these measures, the FED channeled liquidity into the financial system through the government bond market. This measures had led the Federal Reserve's assets more than doubled.

However, it also needed the help of international organizations such as the OECD and the IMF, which supported the economy with "fiscal packages" that included reducing taxes or boosting public spending to boost domestic demand, infrastructure to job subsidies and the provision of favorable loans and interest rates for specific industries.

Then, trying to act more vigorously, the US government set up a \$ 700 billion fund, the so-called TARP (Troubled Asset Relief Program), with purpose to buy the toxic products from the Ministry of Finance. This program proved inadequate and was replaced in February 2009 by the Financial Stability Facility (FSP) plan with an additional \$ 2 trillion in capital support for banks, securities markets, housing and consumer credit. (Δάνη, 2013)

Due to the global nature of this crisis, the G20 has raised \$ 1.1 trillion in international trade (\$ 250 billion), in the IMF (\$ 750 billion) and in the poorest economies (\$ 100 billion) helping to deal with the crisis.

Despite the above measures, the crisis intensified in the first months of 2009 and the fear of collapse continued. It had international implications that spread rapidly, but there was no a unified international policy to address it.

### **2.5.4 Cosuquences**

When the crisis broke out in 2007, it had dire consequences for the United States. Initially affected, the real estate market in the US with contractors and mortgage lenders. At the same time, a liquidity crisis erupted after the market stopped financing financial institutions and banks refused to lend to each other and reduced credit. They also stopped lending to anyone and raised interest rates.

Investors were now cautious in buying bonds, and prefer to buying government bonds for more security and as a result the yields on short-term interest-bearing bills had fallen below zero. (Νταλούκα, 2011) Risk aversion rates skyrocketed as investors moved away from the stock market and from the corporate bonds.

Financial institutions began to sell their assets to repay their liabilities, and this accelerated the liquidity crisis, resulting in a decline in international trade. So households and businesses reduced their activities and this reduced staff by raising unemployment, production and income fell. Lack of credit has led to a decline in consumer and business confidence, and this has led to a decline in investment activity.

Exports were reduced, as were tourist exchanges and shipping fares. In addition, some of the consequences of the crisis have had a positive impact. When they set strict regulatory frameworks and limited securitization and improved risk assessment models where this slightly improved the situation. Many of the companies restructured their capital composition and others proceeded with mergers and acquisitions, which improved the situation in the stock market.

## **2.6 Economic crisis in Eurozone**

### **2.6.1 Historic recursion**

The crisis in the Eurozone emerged shortly after the USA financial crisis in 2008. This was due to the fact that the economies of the countries made external openings and joined the international economy. The crisis spread very easily and quickly to almost all EU countries due to the interdependence of money markets and distribution networks between the EU Member States. Many member states which had no symptoms at all before the crisis, were affected, because there was interdependence between the financial markets, common business chains and there is a close connection with the euro.

Initially, the national financial systems were affected, the ones that had the most to do with the US financial market. Then the real economies of the countries were affected due to the reduction of international trade and investment, the reduction of active demand and the restrictive credit policy of the banks. (Καπλάνης, 2018)

### **2.6.2 Causes of the Eurozone crisis**

The crisis in the Eurozone was the result of many factors. The globalization of the economies of the countries and the international economic crisis of 2007-2008 were the trigger for the outbreak of the crisis.

Also during this period, low-security loans increased, where they invested in global capital markets in order to seek higher returns.

The laxity of control mechanisms worldwide has shaken the credibility of governments and banks. Due to the interdependence between the countries, financial pollution was caused and so the financial difficulties were transmitted from one country to another.

Another reason was the imbalance in the dynamics of countries' economies. Indicatively, in the period 1999-2007, Germany recorded an increase in its trade surpluses as a



percentage of its GDP, while the countries that were "hit" mainly by the crisis, such as Portugal, Ireland, Italy and Spain, saw an increase in their deficits. (Δάνη, 2014)

In addition, the mismanagement of the government of the Eurozone has been one of the causes of the crisis. Initially, the protection of Eurozone Member States from speculation was incomplete after refusing to adopt the basic principle of operation of other major countries outside the Eurozone, namely that the ECB is the ultimate lender to Eurozone Member States in times of crisis and indirectly the guarantor of the nominal value of government bonds in domestic currency. (Μέτσιος, 2018)

Furthermore, it was unable to deal with the policy of the appraisal companies which, by degrading the Member States, were fueling speculative phenomena, and the ECB, due to monetary stability, was unable to deal with them. In addition, the stable monetary policy of the eurozone was a major problem as the common currency removed the option of devaluing it from Member States in order to make their products more competitive and thus increase their exports, as well as the ability to issue money to cover of their debts. (Δάνη, 2014)

One of the reasons was the fact that the Eurozone did not have a protection-defense mechanism for managing financial crises, which did it so late. Finally, many of the Member States did not meet the minimum requirements to enter the Eurozone, which, due to their weak economy, faced serious budgetary problems from the outset and ended up trapped in an endless debt and austerity crisis. (Μέτσιος, 2018)

### **2.6.3 Measures that taken by the government**

The first thing the Eurozone did was to lower interest rates and provide liquidity injections into the system to reduce market pressures. They then adopted some "fiscal packages", which included measures to ensure the stability of the financial system, reduce taxes or boost public spending to boost domestic demand. (Μέτσιος, 2018)

In addition, to meet the banking system's need for long-term capital, it has increased the frequency and amount of LTRO-Longer Term Refinancing Operations.

Then, increase the duration of the liquidity provided through inter-agency leasing operations lasting three, six, twelve and thirty-six months. The ECB also borrowed dollars from the Fed, which transferred them to the banking sector to promote the smoother operation of the transatlantic interbank market. Later, the ECB, through a series of co-operative measures, focused on credit expansion and the better functioning of the credit union in the eurozone (enhanced credit support program).

These measures included the conversion rate on refinancing operations from floating to fixed, conducting additional long-term refinancing operations, the expansion of assets were accepted as collateral by the Eurosystem in order to facilitate access to the refinancing operations of the Eurosystem and the liquidity administration in foreign currency in swap agreements agreed by the FED.

In 9 May 2010, all Eurozone countries agreed to establish the European Financial Stability Facility (EFSF) for a period of three years and to provide financial assistance to the eurozone Member States. At the same time, on January 5, 2011, the European Financial Stabilization Mechanism (EFSM), a temporary emergency funding program, was established. Was a temporary emergency financing program, which is based on funds raised from the financial markets and is secured by the European Commission, with the guarantee of the European Union budget. (Δάνη, 2014)

In addition, the ECB has launched a Covered Bond Purchase Program in the eurozone of € 60 billion, that is, long-term bonds issued by banks for the use and repayment of private and public sector loans.

Finally, in September 2012, the ECB decided to take more drastic measures in a new program of purchasing government bonds lasting one to three years (Outright Monetary Transactions) without a quantitative restriction to "ensure the implementation" of Euro-monetary policy in all EU countries.

It was later found that the way in which the ECB tried to deal with the crisis failed miserably, mainly because it overlooked the fact that the debt crisis and the banking crisis are substantially strengthening each other.

#### **2.6.4 Consequences of the crisis**

The economic crisis in 2007 had tragic consequences for almost all eurozone member states. Many people lost their jobs and became unemployed. Indicatively, since the end of 2008, unemployment has started to rise rapidly, as has the number of people living below the poverty line.

International trade, economic growth and employment have declined dramatically. In 2008, net total investment in the Eurozone fell to about 8% of GDP, up 4.5 percentage points from 2007. This has both slowed revenue and delayed the implementation of the private sector's investment plans. (Μέτσιοις, 2018)

Households are consuming more and saving less. The budget deficit also widened due to the fact that the states rushed to save the financial sector and part of the private debt was turned into public. (Greece, Spain, Portugal).

Funding and investment were almost impossible due to the inability to repay high-risk loans and government revenues are steadily declining due to the inability to collect taxes and reduce contributions.

Indicatively, the main consequences were high levels of debt and public deficits in some Member States, weaknesses in the European interbank system, severe economic downturn and high unemployment.

## Chapter 3

### 3.1 Methodology approach of the research object

This section describes the general methodological framework used in the thesis to approach research questions. Because the thesis consists of several types of research (primary and secondary) the individual methodologies followed are presented in their respective sections.

The concept of the methodology refers to the way in which we approach problems and gives answers to questions (*Talor SJ, Bogdan R 1984*) we ask. In order to approach the research questions they have developed different and distinct streams of thought in the social sciences (*Hopper T, Powell A.1985*). In the related research methodology literature clearly states that the boundaries between the different approaches are not strictly defined. Therefore, the methodology that a researcher has chosen to follow may contain elements of different types of research approaches.

The immediate objectives of the research, i.e. the Investigation, description, prediction, explanation and action, constitute the strategic framework for the formulation of questions and for the expected answers(*Dane WF, 1990*) In this paper, the research methodology that has followed it seems like the characteristics of "exploratory" research and contains explanatory information. The "exploratory" research reported in a subject area that is not adequately developed and designed to convert an unspecified problem in a defined situation and will consolidate the scientific process more clearly (*Φιλίας Β, 1996*). The "explanatory" research is used to promote relations between events as well as highlighting the importance of these relationships (*Marshall C. Rossman GB, 1999*).

Our goal is to study in depth the literature on the causes of the banking crises in worldwide that made from time to time. In particular, we will study the case of Cyprus and look for the causes of the Cyprus banking crisis. We will look for them through bank reports, government reports, from special investigation reports and from books that written on this subject.

This research will analyze the causes of the crises of the banking sector in the foreign countries. Subsequently, we will make a comparative analysis of the causes of the Cyprus banking crisis in relation to the causes of banking crises in other countries.

In this context and in accordance with the definitions set out in the previous paragraph, this investigation is classified as "exploratory" research. Under the "exploratory" research we will examine: a) the causes of the financial crisis in the foreign countries worldwide, b) a comparative analysis of the causes of the banking crisis between Cyprus and the other countries worldwide.

The "exploratory" research, results in specific recommendations / research hypotheses about the causes that can cause banking crises. Any help to the researchers, to the students and to the economists in order to find the reasons for which a banking crisis broke out, should be welcomed. Especially, when the contributions are from the academic community and are based on data and not on political considerations. For members of the government the study, will feed into their arms to push the authorities to solve similar problems in the future and to take appropriate measures.

The assessment of the relationship between the different causes and how to resolve the economic crisis depending on how the government and the central bank of the country reacted has led to the next stage in the achievement of the "exploratory" research. Consequently, the research is exploratory with explanatory elements and results in concrete proposals that are responses to our main research question.

### **3.2 Data collection method**

The two main methods of data collection are both the "quality" and the "quantitative research". The Quantitative research focuses on the measurement and analysis of causal relationships between variables (Denzin NK, Lincoln YS, 2000) while qualitative research focuses on the qualitative characteristics of the phenomena (Denzin, Lincoln, ibid Merriam SB, 1998). The methodology that followed in the thesis is based on quality research. The research object refers to the exploration of the relationships between the causes of the economic crisis and the measures that have taken from each country and I am going to analyze the processes that determine this relationship. For this type of investigation is not appropriate to conduct quantitative research (Denzin, Lincoln, ibid Merriam SB, 1998).

Note that, in this study I have used methods of exploratory data collection, such as the summary of the relevant subject with the research experience through secondary research. Data collection is carried out in two phases.

In the first phase, I have used the production method (induction) with the formulation of specific conclusions about the causes of the financial crisis in foreign countries worldwide and the measures that taken by the above countries through general literature reviews. In the second phase, the research is based on the deduction method and after through further study of the literature attempts to evaluate the conclusions of the first phase which have a greater effect. More specifically, the two phases of the survey are presented in the following paragraphs.

### **3.3 First phase-Summary of relevant experience and wording of the interim conclusions**

A characteristic feature of the exploratory surveys and therefore this research is the inability to make assumptions in the initial stage that could provide answers to the key research questions. When there is not enough research experience for possible ways to improve the banking system, it is not possible to formulate research hypotheses in the

initial stages of the thesis. For this reason it is necessary at first to investigate: the causes of the financial crisis. . In this thesis, the investigation carried out in the second chapter of the thesis by conducting primary and secondary research.

The correlation of the results of the investigation leading to the formulation of the interim conclusions that serves as research hypotheses and answers to the key research question. In the second phase of the thesis, I attempt to answer the main research question by checking the research hypotheses that set out in Chapter 2. As already mentioned, the present study is exploratory with explanatory data, while the questions that asked to respond, that raised in the introductory chapter, refers to how and why.

### **3.4 Validity of Research**

In part of the secondary research and analysis of relevant data, the adequacy ensured from the breadth of references and other secondary sources used. According to this method should meet all those data that will enable the resumption of research in the future, in order to verify the final conclusions. Thereby seeks to ensure that if a researcher follow exactly in the footsteps of earlier researcher to conduct the research again will lead to the same conclusions.

### **3.5 The structure of the thesis**

Title of the thesis: «A study of the causes of the most important banking crises in the world and a comparative analysis of the causes of the Cypriot banking crisis with those countries».

The structure of research directly related to the research questions and results from their analysis. This thesis is structured in five chapters which are developed as follows:

The introductory chapter deals with the subject of research and documentation of the need for research in this field.

In chapter two, the bibliography chapter we attempted to analyze the content of the questions through secondary research. Specifically aims at: the search and analysis of the causes for which the financial crisis hit in the countries worldwide as well as the measures that taken from the above countries in order to address the economic crisis.

This chapter, which is Chapter 3, presents the methodology used to approach the research questions.

The fourth Chapter is a comparative study on the causes of the economic banking crises in countries worldwide with the Cyprus banking crisis causes.

The proposals set out in Chapter five are the possible ways of solving future problems in banking area and where the final conclusions of the study, including the recording of the final proposals made in response to the original research question.

## Chapter 4

### Causes of Cyprus economic crisis

In this chapter we will examine the factors that led the Cypriot economy to crisis. Many of the factors that influenced the crises of other countries also seemed to apply in Cyprus: conditions for crisis, transmissibility, defective lending, tacit controllers, lack of supervision, wasteful state, shallow state guarantee policy and a weak, incapable political system reluctant to act .(Zenios, 2013)

According to the former governor of the central bank Panikos Dimitriadis, in the period 2004-2010 the banks in Cyprus spread dangerously. Indicatively in 2009, the banking sector was equivalent to nine times the country's Gross Domestic Product.

One of the most important problems for banks was uncontrolled lending to households and businesses. Cyprus was first among the Member States of the European Union with a borrowing rate of 130% and 140%, while the EU average was below 75%. This percentage exceeded the needs of the Cypriot market and the resilience of the Cypriot economy. As revealed by the former chairman of the Cyprus Securities and Exchange Commission, George Charalambous, in the period 2006-2008, loans within Cyprus increased by more than 25% on an annual basis, while the absorption capacity of the economy, based on the growth rate, did not justify an increase of more than 10% . This was followed by a sharp rise in property prices as well as an increase in non-performing loans. So when real estate prices no longer corresponded to the real ones, the banking system was exposed and unable to cope with the large loan portfolio.

This huge credit expansion was fueled by the attraction of deposits, mainly by non-residents of Cyprus, mainly Russians, due to the low corporate tax rate combined with attractive deposit rates. According to Panikos Dimitriadis, the rich foreign clients were attracted by law firms which helped them to register companies in Cyprus and helped them with tax issues and their naturalization in Cyprus. Thus they managed to attract large inflows of foreign deposits which were facilitated by interest rates that were much higher than other Eurozone countries. Most of the foreign deposits were the result of money laundering. Investors laundered the money (mainly from Russia) and deposited it in Cypriot banks in order to earn higher interest rates. (Michailidis, 2016)

Due to the large inflow of deposits from abroad, the Cypriot banks gained a lot of liquidity. But this extra liquidity was not used for the domestic Cypriot market in the form of low-interest loans. Instead, they used this liquidity for a speculative expansion in the Greek bond market and for loans in the construction sector. (Chrysostomos, Emmanuel, 2014) The aggressive expansionist strategy followed by the Cypriot banks was a result of the rapid growth of assets, other than deposits.

Due to the Greek bonds, the Cypriot banks, especially Laiki Bank and the Bank of Cyprus, had acquired an important position in the Greek market, as a result of which they

are also exposed to the macroeconomic developments in Greece. (Holidis.2016) Their opening was of the order of 140% of the GDP of Cyprus. (Dimitriadis, 2017) The restructuring of the Greek public debt with the participation of the private sector, was a catalyst in the development of the Cypriot crisis as it caused losses to the economy that correspond to 23% of the country's GDP. No other European economy has suffered similar losses from the restructuring of Greek Government Bonds. As a result, the participation of Cypriot banks in the Greek PSI was, in proportion to GDP, twice that of Greece and 100 times that of other European countries. However, they had exposed both their shareholders, depositors, employees, and the Cypriot government to significant risks. (Zenios, 2013)

As the Greek economy was affected by the crisis, the creditworthiness of the Republic of Cyprus and the Cypriot banks was downgraded by the international rating agencies. After several successive downgrades, Cyprus was excluded from international markets. This was due to rising NPLs and steady outflows of deposits which negatively affected cash inflows and liquidity reserves in banks. So the system gradually eroded. This was because there were serious shortcomings in lending practices as well as in legal and regulatory arrangements. When the fall in property prices came, it affected the value of collateral, with a negative impact on the quality of the bank loan portfolio. . Moreover, the lengthy process of foreclosure and repossession of immovable property as well as the limitations of the legal framework, whereby banks were not given the right to take possession of the mortgage but could only force the sale of the property, created incentives for strategic default. The lax legal framework on foreclosures discouraged borrowers from repaying their loans and banks from taking legal action against them; thus, adversely affecting recoveries. Both these factors contributed to the accumulation of NPLs in the banking system. (Dimitriades, 2017)

Another cause of the Cypriot financial crisis was the public debt which when the crisis broke out did not exceed acceptable limits. Indicatively, since 2011 the public debt exceeds the limit of 60% of Maastricht with the only exception of the three years before joining the Eurozone. Public spending was rising due to the real estate bubble and left no room for government intervention when the crisis hit the Cypriot economy. Also, the assets of the Cypriot banks were 700% of the GDP and were concentrated in two systemic banks. (Bank of Cyprus and Laiki Bank). The banks had grown too large to be allowed to collapse in the event of problems, but they were too large to be rescued by the state. It was too-big-to-fail and too-big-to-save. None of these features of the banking system were a problem in themselves. The fact that most of the banks in Cyprus were Cypriot burdened the Cypriot government with guarantees to which it could not reliably respond. Also, the banking system was characterized by introversion and politicization and needed new faces, new ideas and international advice. Domestic banks were politically affiliated with law firms that acted as intermediaries for the entry of wealthy foreign clients into Cyprus. This resulted in the inflow of foreign deposits to the island which were facilitated by high interest rates compared to other members of the Eurozone. (Zenios, 2013)

It was a fact that the Cypriot economy would not be unaffected by the global financial crisis. Many imbalances had already occurred which the government did not address immediately despite the warnings. Warnings came from local institutions, including the Central Bank, political parties and technocrats at the Treasury. The Central Bank of Cyprus has expressed concerns to the government since 2009. (Orphanides, 2014) As the former Minister of Finance Michalis Sarris had stated: << We saw in the debt situation of the Cypriot economy, the size of the banks and the public financial conditions for the development of a major crisis: excessive lending, oversized banking sector to the capabilities of the economy and weak public finances. >> But no warning was taken seriously.

The government of the country was late in realizing the danger in time and due to indecision did not take the necessary measures at the appropriate time. Negligence, amateurism, tactical and political expediencies further aggravated the situation. (Orphanides, 2014)

According to Stavros A. Zenios, Professor of Finance at the University of Cyprus, a series of actions or omissions by the Government, Banks and Supervisory Authorities have led the Cypriot economy to this tragic situation. Some have attributed the problems to external factors of the international crisis beyond our control or even that the crisis will not affect us. The Cypriot economy also lacked competitiveness. As a result of reduced competitiveness the country has had a negative current account balance for over a decade. With our accession to the Eurozone, the situation has worsened as a result of the free movement of products, services and capital.

Also at that time we faced and still face the deficit financing of the pension funds and the social security fund. The governments of the Republic, over time, have been borrowing on favourable terms from the social security fund. Until recently, the government had borrowed around € 7 billion from the Fund, i.e. about 40% of GDP. But things have changed. By 2030 the social security fund will cease to be in equilibrium and employee contributions will be less than payments to beneficiaries. By 2050 the fund will not be able to meet its commitments and the longer the response to the problem is delayed, the more acute and difficult it becomes. (Zenios, 2013)

Shortly after the exclusion of Cyprus from the international markets, there was a catastrophic explosion at the Naval Base "Evangelos Florakis" in July 2011. The explosion resulted, in addition to the death of 13 people and the destruction of the naval base, the destruction of the largest power plant Cyprus station. This caused a significant reduction in GDP, as well as losses of capital of the Cyprus Electricity Authority, high increases in the price of electricity and consequent distortion of consumption and reduced household prosperity, with significant negative effects on the entire real economy, including retail and manufacturing. This greatly affected the economy as the cost of repairing the station amounted to 700 million euros. (Chrysostomos, Emmanuel, 2014)



Another cause of the crisis was the fact that critics failed to acknowledge that Capital Shortfalls were largely due to the rapid growth of bank balance sheets during 2005-2010. These shortfalls could have been much smaller if most banking risks had been handled prudently. Better regulation and more effective government oversight were needed. (Dimitriadis, 2017)

## **Chapter 5**

### **5.1 Comparative analysis**

In this chapter we are going to make a comparative analysis of the causes that caused the economic crisis in Cyprus in relation to the causes of the economic crises that occurred around the world in the last 25 years. We will study the case of Cyprus in relation to the other economic crises that have occurred in the past.

In Cyprus the economic crisis broke out around 2011. Earlier, the island had experienced a period of great prosperity. One of the main causes of the Cypriot economic crisis was the excessive openness of the banking sector. The banking sector of the island was expanded to an extent that it exceeded the needs of the Cypriot market as well as the resilience of the economy. The same thing happened in America during the Great Depression of 1929. There were many small banks that could not cope with the crisis. When the first banks went bankrupt, they influenced the other ones as well, as a result of which they also went bankrupt. Unfortunately, the central bank failed to save them. Also, as we saw in the savings and lending crisis in the 1980s, banks took excessive risks due to the lack of supervision by the supervisory authorities, resulting in a disproportionate degree of failure. In the Asian crisis, the banking sector was also heavily influenced by speculative phenomena, as many banks participated in speculative activities. They borrowed from foreign banks and bought large amounts of Russian and Ukrainian bonds, Brady bonds and Thai and Indonesian bonds. The same happened in Cyprus when the Cypriot banks bought the Greek bonds. Due to the Greek bonds, the Cypriot banks, especially Laiki Bank and the Bank of Cyprus, had acquired an important position in the Greek market, as a result of which they are also exposed to the macroeconomic developments in Greece.

Another major cause of the Cyprus crisis was uncontrolled borrowing. This huge credit expansion was fueled by the attraction of deposits, mainly from non-residents of Cyprus, mainly Russians, due to the low corporate tax rate combined with attractive deposit rates. Thus the Cypriot banks gave loans uncontrollably. This, was followed by a sharp rise in property prices as well as an increase in non-performing loans. So when real estate prices no longer corresponded to the real ones, the banking system was exposed and unable to cope with the large loan portfolio. We have seen this phenomenon happen in the crisis of 1929. Many investors borrowed from banks and invested them in shares to make a profit. In the end the banks that had financed these loans collapsed because the borrowers could not repay their debt. The same thing happened in the savings and loans crisis where during this period they created savings and loan institutions to take deposits and use them

to make mortgages. Everything was going well until the late 1970s, when inflation was very high and S&L specialized in short-term deposits and long-term mortgages, resulting in a mismatch in S & Ls liabilities. So the S & Ls went bankrupt.

We have seen the same thing happen in the stock market crisis in 1999 in Greece. At that time the stock market was going very well and so investors were borrowing money from banks in order to invest it in shares. The banks gave a lot of loans to invest them in the stock market. Many of the investors could not pay the instalments, and as result the non-performing loans were growing more and more and banks were slowly collapsing. The same thing happened in the 2007 crisis in America. Due to the prosperity that prevailed in the early 2000s, banks provided housing loans with great ease. They provided loans to low income individuals without assets. Over time the debtors failed to repay their debt resulting in these loans becoming non-performing. Uncontrolled borrowing was one of the main causes of the economic crisis in the Eurozone as well. Low-security loans rose, investing in global capital markets to seek higher returns.

Another cause of the Cyprus financial crisis was the mismanagement of the situation at that time by officials and the government of the country. They ignored warnings from local institutions, including the Central Bank, political parties and technocrats at the Treasury. Also, the Cypriot government was late in realizing the danger and due to indecision did not take the necessary measures at the appropriate time. The same happened in the Eurozone. The mismanagement of the Eurozone government has been one of the causes of the crisis. Initially, protection of Eurozone Member States from speculation was lacking as the Eurozone government refused to adopt the basic principle of operation of other major non-Eurozone countries, namely that the ECB is the absolute creditor to Eurozone Member States in times of crisis and indirect the guarantor the nominal value of government bonds in domestic currency. One reason was that the Eurozone did not have a defence mechanism to manage financial crises, which it did so slowly.

Another cause for the Cypriot economic crisis was speculative phenomena. Cypriot banks had invested in Greek bonds with the aim of speculation. The same thing happened in 1929 with the speculation of investors on the New York Stock Exchange. Speculative phenomena also appeared in the Asian crisis. Due to the fixed exchange rate, borrowers had a false sense of security, and this encouraged them to borrow in dollars. Also, many financial institutions in the area participated in for-profit activities. Korean commercial banks, for example, have played very recklessly. They borrowed from foreign banks and bought large amounts of Russian and Ukrainian bonds, Brady bonds and Thai and Indonesian bonds. Inadequate supervision and lack of transparency of the banking sector was one of the causes of the economic crisis in Cyprus. Deposits were attracted, mainly from non-residents of Cyprus, mainly Russians, due to the low corporate tax rate combined with attractive deposit rates. Most of the foreign deposits were the result of money laundering. Investors laundered the money and deposited it in Cypriot banks in order to earn higher interest rates. Also because of the free legal framework, the rich

foreign clients were attracted by law firms which helped them to register companies in Cyprus and helped them with tax issues and for their naturalization in Cyprus without any control by the authorities.

Lack of supervision was one of the causes of the savings and loan crisis. The FHLBB had weak practices before the 1980s because S&L associations had limited powers and relatively few failures. Examiners preferred banking to S&L because they were paid more and FHLBB had limited resources and responsibilities. As a result, when many S & Ls faced insolvency in the early 1980s, their testing power was inadequate and inadequately trained for the new environment with limited responsibilities and resources. The lack of transparency and banking supervision also existed in the Asian crisis as the financial transactions of Japanese banks also lacked transparency. The loose legal framework also existed in the financial crisis in Greece in 1999 where it allowed anyone to invest in the stock market. In addition, there was poor supervision in Greece. This resulted in the occurrence of illegal transactions in portfolio management, without the investor knowing.

Inadequate banking supervision is also evident in the 2007 US crisis. Due to the repeal of the Glass Steagall law, the doctrine of self-regulation of investment banks was adopted. This has led to easier borrowing and greater risk-taking. In addition, market liberalization as a result of significant structural changes in the 1990s, as well as new financial products, weakened the risk management process and increased the degree of leverage. Inadequate oversight and looseness of mechanisms were one of the causes in the Eurozone. The looseness of control mechanisms worldwide has hit the credibility of governments and banks. Due to the interdependence between the countries, economic pollution was caused and thus the economic difficulties were transferred from one country to another.

## **5.2 Conclusions**

From this comparative analysis of the causes of the economic crisis in Cyprus in relation to other economic crises in the past, we can reasonably conclude that an economic crisis in general may be due to the following factors:

1. Poor structure of the banking sector and its excessive spread in relation to the needs of the country
2. Uncontrolled lending and increase in non-performing loans by the use of loan funds by households and businesses
3. Inadequate supervision of the banking sector
4. A relaxed legal framework and market liberalization, concerning the control of the entire Global Financial Sector, and the adoption, in contrast, of the looser forms of control over the movement of capital
5. Speculation phenomena

6. Lack of transparency

7. Over-borrowing

8. Mismanagement of the situation by the government and officials

9. Looseness of control mechanisms

10. There were a large number of toxic (speculative) bonds in the portfolios of many banks, which were not serviced, putting many banks at risk of seeking government assistance in the form of government guarantees in the event of bankruptcy.

Regarding the duration of the financial crises we can say that they last about 7 to 11 years. Furthermore, the consequences that an economic crisis can cause for the most part are a reduction in GDP and in some cases its rate may be negative for many countries. Unemployment is also high and you are causing a reduction in loans to households and businesses from banks. Even the cost of borrowing by governments is rising, especially in countries with high public debt. Many companies went bankrupt and others merged. In addition, the countries' public debt increased due to high interest rates on government bonds.

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