"BABEȘ-BOLYAI" UNIVERSITY, CLUJ-NAPOCA

FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION

DEPARTMENT OF POLITICAL ECONOMY

FIELD OF ECONOMY AND INTERNATIONAL AFFAIRS

DOCTORAL THESIS SUMMARY

SAVING- A SOURCE OF FUNDING AND ECONOMIC DEVELOPMENT. CASE STUDY: JAPAN

Scientific coordinator:

Prof.Univ.Dr. LUȚAS Mihaela

PhD Candidate:

Mihai Cosmin BOCA

Cluj-Napoca

2015

Table of Contents

List of Figures and Tables……………………………………………………………………3

Introduction……………………………………………………………………….………..4

Chapter 1. Saving – a brief introduction in the history of economic literature……………...9

1.1.Saving – a strong / powerful concept debated within the classical liberalism ideology………9
1.2.A different approach of Saving in the work of Keynes……………………………………...14
1.3. Neoclassical and neo - Keynesian approaches of Saving…………………………………...17

Chapter 2. The process of saving - conceptualization …………………..…..……………..23

2.1. Contemporary concepts of saving…………………………………………………………..23

2.2. The Sources of Saving Process……………………………………………………………..27

2.3. Saving in terms of National Accounts………………………………………………………29

2.4. The Link between saving and investment in an open economy…………………………….31

Chapter 3. The main economic models of the saving – consumption process……..…….34

3.1. Keynes' Saving Model……………………………………………………………………..34

3.2. Intertemporal choice developed by Irving Fisher………………………………………….39

3.3. Relative income hypothesis for James Duesenberry ……………………………………….43

3.4. The life cycle model of consumption and saving and the model of permanent income……48

3.4.1. Modgliani - Brumberg life cycle ………………………………………………….48

3.4.2. Milton Friedman permanent income ……………………………………………...54

Chapter 4. Causes and facts of saving ……………………….……………………………..59

4.1. Reasons for Saving………………………………………………………………………….59

4.1.1. Reasons that generate and increase saving………………………………………..59

4.1.2. Reasons that lead to decrease saving……………………………………………...63

4.2. Determinants of Saving……………………………………………………………………..65

4.2.1. Demography and demographic change……………………………………………65

4.2.2. Saving factors correlated to the income……………………………………...…68

4.2.3. Monetary factors group……………………………………………………………76

4.2.4. The group of fiscal factors and those belonging to the government's fiscal and budgetary policy………………………………………………………………………………84

4.2.5. Uncertainty and behavioral factors affecting savings……………………………..94

Chapter 5. The transmission channels through which saving provides finance and economic development...……………………………………………………..……………94

5.1. General considerations in the process of channeling savings to investment………………..99

5.2. The monetary market – interbank financial system………………………………………..101

5.2.1. Regulations of the banking system and their influence on Saving………………104

5.2.2. Financial competition between systems and its impact on Saving………………106

5.3. Capital Market – effective alternative channel of directing saving towards the financing of economic activities ………………………………………………………………………..108

5.3.1. Main characteristics of the capital market and their impact on saving…………..109

5.3.2. An effective financial intermediation on capital market increases saving contribution towards economic growth ……………………………………………………..115

5.4. The role of institutional investors or non-banking financial market components in channeling saving …………………………………………………………………………………..116

Chapter 6. Saving analysis in Japan's economy on and its correlation with the main macroeconomic indicators……………..……………………………………………………...120

6.1. Analysis of National Saving in Japan and of its components……………………………...120

6.1. The evolution of private saving in Japan…………………………………………..120

6.2. Public saving and its direct influence on Japan's government dynamics debt……..129

6.2. Correlation analysis between gross saving rate and the main macroeconomic indicators of economic growth and the Japanese economic labour……………………………………..133

Conclusions and proposals…………………………………………….……….………...138

References…………………….…………………………………………..…………147

Annexes………………………………………………………………………….…..…161

II. Key words: national saving, household saving, companies sector saving, public saving, disposable income, consumption, investment, saving behaviour, marginal propensity, financing, economic development, interest rate, transmission channel, financial intermediation, banking market, capital market, Japanese household saving.

III. Introduction

Nowadays global economic current is characterized by unpredictable movements of capital flows, generated by a high degree of uncertainty that currently accompanies the growth of global economy and underscores the importance that saving has in the financing and development of the national economy.

The importance of the chosen subjects is given by the implications that an appropriate level of total savings rate has on the macroeconomic situation, especially on households, among which we consider as the most important the following: financing of public and private investment by the aid of household capital, gathered as a result of saving (with direct effects on economic growth that comes from production increase, funding of research, development and innovation activities, the productivity and therefore the disposable income growth); the possibility of financing with internal resources of public debt, lower costs of financing of both investment and public debt and/or deficits, the development of financial sector development in general and the capital markets in particular, the decrease of dependence on inflows of foreign capital (either with public or private destination). At the microeconomic level, among the major influences of saving, we mention: the possibility of consumer leveling throughout the entire lifecycle and the possibility of avoiding difficulties that may arise due to a lower level of disposable income after retirement, financing the purchase of various goods without resorting to loans, the increase of financial assets held by incorporating earnings from savings, safety and personal financial stability.

With respect to doctrine, saving was a strong theme of debate both within the economical classical school and also between the advocates of the Keynesian economic theory.

The motivation that led to the choice of the present theme was to prove the usefulness and importance of saving in the finance and economic development, as well as the key role that accumulation of domestic capital, through savings, plays in ensuring the economic stability. Moreover, the idea that put the basis of this work was that of contributing to changing the paradigm of understanding the concept of saving, its importance in the overall process of macro and micro economy, starting with a very common criticism of it and following a more positive acceptance.

Therefore, the main objective of this thesis is to analyze in-depth the savings, which produce ideas necessary for an understanding of how accurate the process of saving and the implications that this process has on the optimal functioning of a national economic system, with transparent implications in the global economic system, and which to influence, hopefully, in a positive way the future economic development policies.

To achieve this goal we will pursue several hypotheses, which will be effected in the attempt to answer several questions, among which: *What are the most important economic theories that refer to saving? How can we define as correct and the same time, as current the saving? What are the sources saving process? How to show the correlation between saving and investment? What are the most important economic models of consumption and savings? Which are the reasons and determinants of saving? Which is the impact of determinants on saving, respectively, which is the correlation between them? How are the financial resources channeled through investment projects? How important is to achieve a structural balance on the financial market in channeling saving process? What prompted the change of saving behavior of households in Japan? Is still sustainable the high contemporary level of Japanese public debt in the context of recent macroeconomic developments? What lessons can be drawn from the evolution and current situation of savings and the main macroeconomic indicators in Japan*?

The thesis entitled "Saving - source of finance and economic development. Case study: Japan, aims to analyze the importance and central role of savings in the finance and economic development process, and completes this approach drawn from research related to case study, that target analyzing the evolution of gross saving in Japan and its correlation with the main macroeconomic indicators of the Japanese economy.

The research methods used in the development of this thesis: observation method – through which we conducted the recognition of the saving determinants and the way these affect its level; dialectical method - contributed to a critical analysis of causes and facts that led to changes in evolution of the saving rate; the historical and logical method – used to identify the main theories from specialized literature referring to the concept of saving, as well as the historical evolution of the saving components and the main macroeconomic indicators of the Japanese economy; the comparative method used to emphasize the saving rates of Japan, Italy and South Korea, as well as in the analysis of saving rates registered over different periods from Japanese households. Thus, the qualitative research of the saving economic phenomena and the related ones has been supplemented by an empirical research through a use of "time series" used in the elaboration of the case study. The analysis method was used in the individual research of components of the total savings, as subsequently through synthesis to be able to examine the formation and evolution of the aggregate savings. Through induction and deduction we managed to extrapolate the influence that savings and investments have in the process of economic development, and subsequently the effects that the economic growth has on saving level.

The limits of this research are given by the vast content of researches already conducted on some aspects of the process of saving and consumption, researches that specialized literature approach since the last centuries, that suppose a substantial and additionally work on a prior selection of bibliographical sources, mainly of scientific articles in order to identify those who are at a high level in terms of scientific content. Other limits come from the difficulty of obtaining statistical data concerning the development of certain economic indicators or, their absence in some periods, especially when taking into account longer periods of time, as well as the discrepancy between the levels of these existing values in various official data bases.

This paper is divided into six chapters, preceded by an introduction and followed by conclusions and recommendations, with a content of two tables and thirteen figures, the last chapter being dedicated to the preparation of the case study. In creating the case study we used data that had as sources the official institutions of the Japanese government, such as the National Bank of Japan and Ministry of Finance of Japan, and databases of major international organizations such as the Organization for Economic Cooperation and Development and the World Bank.

IV. Chapter Thesis Summary

Chapter 1. Saving – a brief introduction in the history of economic literature

In the first part of this chapter it is briefly presented the contribution that the representatives of the classical economic liberal school have on the concept of saving, starting with the famous Scottish economist, philosopher and politician Adam Smith, considered to be the father of economy and founder of classical economic school and continuing with other prominent representatives of the same economical thinking.

The second part of the chapter describes the main theories of saving that belong to the work of the great English economist John Maynard Keynes, the initiator of some new economic theories that are most often in opposition to the classical school and about which we can state that revolutionized the science of economy, generating many polemics debates of economic interest.

The last part of the first chapter captures the main approaches of saving belonging to the Neoclassical school and the new born concepts of Keynesian philosophy, according to Herman Minsky and Paul Krugman, economists considered the belong to the neo -Keynesian economic thinking.

We can notice not only that the importance of accumulation of capital through saving and its central role to the economic growth was known from the time of Adam Smith (1723-1790), but also the need for some facts and countercyclical policies, where funds, in times of prosperity, to be used to support the economic activity in recessions.

John Stewart Mill (1806-1873) sets out a fundamental theorem of capital, namely its sources, more precisely, the saving. According to Mill, the concept of “saving” does not imply that what is saved is not consumed, not being at all required the postponement of consumption; just so that, if immediately consumed, it is not mandatory to be consumed by the person who saved it. (Mill, 2009:92).

The passage quoted above is an axiom that we consider of great importance in understanding the concept of saving, which could be totally or not at all understood by the great economists, either predecessors or our contemporaries, and this is the saving approach, almost correct and real, even if it lasts from the late nineteenth century.

We say “almost”, because referring to the concept of "saved money " the situation does not necessarily reflect a decrease in consumption but eventually we could accept the idea of a short postponement, or more accurately stated, its shift to a more productive consumption.

A paradigm shift that occurred in the science of economy started with the work of John Maynard Keynes, one of the most influential economists of all time. His main work "The Theory of employment, interest and money," first published in 1936 (during the Great Depression), represented a revolution in the streams of economic thinking and a dominant vision on the economic theories that followed.

Saving, as a singular concept, but especially as part of the binomial saving-consumption, is one of the concepts Keynes gave special attention in his work. Keynes stays in opposition to the classical theories on saving and the role they play in economic activity, rather considering saving a source of restriction and not a source of stimulating the economic activity, if it is not immediately followed by an investment process.

It is believed that the classical liberal economic theories start from Say’s postulate: "The supply leads to its own demand" a very contradicted and debated theory, even by famous members of the classical economist school. This theory can be considered as true but only if we refer to the concepts of supply of capital. Saving, as the one that generates available funds, more precisely, supply of capital, determines the development of investments (and here we refer to funds obtained at a lower cost) in creative capacities, and results in an increase of jobs, income and last but not least, of aggregate demand, as consequence of increasing the supply. It is from this point of view that we could understand why and why not, Say's theory is valid.

Austrian economic school, through its representatives Eugen Bohm-Bawerk Vohn, Carl Menger, Ludwig von Mises, F.A. Hayek, Joseph A. Schumpeter and Fritz Machlup has built its economic doctrine starting from the ideas of classical-liberal economists and focusing on savings and on capital formation.

According to Herman Minsky (1919-1996), a prominent American economist (author of the famous "moment" that bears his name and whose work has received the deserved gratitude only after his theories were confirmed by the latest economic and financial crisis), who continued and developed the Keynesian economic theories, claims as essential in Keynes's economic theory the following: "increasing government spending and cutting taxes in an exaggerated way, will stop an impetuous decline of the economy" (Minsky, 2011:92)

Saving could negatively affect the overall performance of economy if we were in the situation that Paul Krugman noticed in the very beginning of appearance of the economic phenomenon called "liquidity traps", exactly, being in a situation of zero interest-rate policy (zero interest loan), the individuals show themselves "collective reluctant to buy as much as they should be willing to produce. Moreover, the amount that people are willing to save exceeds the amount that companies are willing to invest". (Krugman, 2012:174)

Chapter 2. The process of saving – conceptualization

The concept of saving represents, regardless its public or private origin, the remaining funds coming from the available income, after it has previously been reduced by the amounts necessary to cover consumer spending.

A concise and comprehensive definition of saving is given to us by the World Bank "gross saving is calculated as a difference between gross national income and gross national consumption plus net transfers. "[1]

We consider necessary to make a clear distinction between the concept of saving and savings. The process of savings is identified within a time period and it is seen as an evolution, therefore, it is a flow variable. Unlike savings, as a result of the saving process represents a total value (stock) of funds (income) gained after a period of time, thus a stock variable. A similar example of a stock variable is - national wealth or well-being, defined as floating at a given point in time.

National saving is the sum of private savings and public savings. Private saving is, at its turn, made up of total household savings and corporate savings.

In the household saving, this represents the income that remains after the fees' payment and the cover of consumption expenses. It is the most important source of funds necessary to cover the demand generated by the investment process.

Companies' saving is represented by those profits that have not been distributed to shareholders as dividends, which are intended to be kept as a future source of funds for investment. In the present case we also make reference to the amount that left after paying taxes, thus dividends are a concept of net revenues.

The difference between budget revenue (fees, taxes collected to the state budget) and budget expenditure (expenditure on procurement, payments transfer and capital expenditure) represents public saving. If the state budget revenues exceed budget expenditures, we have a budget surplus or we can say that we record a positive public saving.

If included in the analysis of saving sources also the "imports" and "exports" of total domestic savings funds, the saving equation (ETD) is according to Kaplan (2002):

[1] http://data.worldbank.org/ accessed on 7.07.2015

(3) Etd = Ep + Eg + Esn where

SFN, saving foreign net is the difference between money entering the capital markets or other national markets that borrow funds and money leaving the origin country, exactly, the internal subjects that save and place their saved amounts on foreign capital markets in the search for higher output and can record both positive and negative values.

We find that saving is, on the one hand, the first domestic source of funds for investments carried out in the national economy, and on the other hand stands as source of funds invested abroad, as an expression of either current account surplus or deficit, the latter, when to cover the investment needed, it has been made use of an import savings from abroad.

The investments are constituted in the formation of gross fixed capital i.e. the amount of expenses that are made for the purchase of capital assets, working capital or fixed capital.

Chapter 3. The main economic models of the saving – consumption process

Chapter three presents the main patterns of saving encountered in science of economy. A brief presentation of Keynes's saving model is presented in the first part of this chapter, followed by the subsections where are presented four other major economic theories in economic literature representative for analysis of consumption and saving, as follows: intertemporal choice model of Irving Fisher in 1930, relative income hypothesis of Dusenberry performed in 1949, the life cycle model of consumption and savings created by Modigliani and Brumberg in 1954 and the permanent income hypothesis, which belongs to Milton Friedman and dating from 1957.

From the relationship consumption - income the saving function resulted, which in this case, is a function of income and consumption. It is however important to note that Keynes links the consumption and saving with the available current income.

According to Keynes, the consumption function is identified with the famous fundamental psychological law: "people tend to increase their consumption as their income increases, but not with the same amount the income is increased", briefly: if Cw stands for consumption and Yw for income (expressed in wage units), $\Delta Cw < \Delta Yw$ both with positive values. Or the relation DCW / dYw is positive and sub unitary (w expressed in wage salary) (Keynes, 2009).

Non-confirmation, especially on long term, of the empirical studies of those times on the hypothesis of Keynesian theory, constituted in fact the fundamentals of appearance of the intertemporal choice theory and that led to a new theory of consumer behavior and saving, theory belonging to the American economist, Irving Fischer (1867- 1947).

Unlike the model of consumption and saving according to Keynes, where variable income is reported at the present time (current income), Fischer's model starts from the idea that rational people base their decisions of consumption and savings on the current income and on future expectations of the potential income. The goal is to maximize the usefulness and optimize satisfaction of the whole life cycle.

The two time periods characteristic for Fischer model (which is also called the model of the two periods) correspond to the present time, the years of work, or the future time considered to be the retirement age, against whose income levels are related the decisions of consumption and saving of the individual.

Basically, Fischer's intertemporal choice model of (1930), is based on the analysis of income constraints (budget) and consumer preferences that people face in different time periods.

The theory of relative income of Duesenberry James (1918-2009) is founded on two key assumptions characteristic for the model, namely: the individual bases the consumption decisions on a historical behavior of its own consumption and also on consumption behavior of other individuals with whom he is in contact.

An important idea which comes from the theory of relative income with respect to consumer behavior, namely savings, is the so-called "ratchet effect".

The "ratchet effect" on saving is manifested by a corresponding decrease of medium propensity to save, a phenomenon explained by increasing the consumption proportion in the value of income.

The two models, the life cycle one and the permanent income, start from traditional assumptions of rational calculation and from utility maximization theory and not from empirical observations coming from surveys on population behavior; the idea standing for the two theories, was the assumption that rational individuals, as consumers, will attempt to maximize utility by allocating the whole revenue stream of the entire lifecycle in an optimal model of consumption. (Curtin, 2000).

In the life cycle model, Modigliani underscores the idea that income varies systematically over the entire life of individuals and saving allows them to pass income from periods of time in which it was raised in periods when revenue recorded lower levels, this interpretation of the individual consumer behavior being the starting point in the construction of the model (Mankiw, 2009).

In another interpretation of the model, we can consider that young people that are in the first model cycle invest or consume on credit or through loans (consumer, studies or real estate investment), the financial resources saved by individuals already placed in the second cycle of active life.

Mankiw (2009) considers the hypothesis of permanent income of Friedman completes the life cycle model of consumption and saving of Modgliani, both starting with the theory of consumption hypothesis of Irving Fisher, stating that not only current income generates the consumer decision, and unlike the life cycle hypothesis, which starts from the idea that income follows a constant pattern over the life of the individual, permanent income hypothesis emphasizes that individuals experiencing temporary and unexpected changes in their income from year to year.

In fact, we can consider the permanent income hypothesis as complementary and as an improvement of the life cycle hypothesis of Modgliani and only in terms of income as variable that records significantly different level values throughout the life cycle.

Total income is considered the sum between permanent income and transitory income. Permanent income is considered to be the average income that population expects to obtain in the future. Total consumption or the current consumption on a certain time is the sum between the transitional and permanent consumption.

Similar to the concepts of income, permanent consumption is the one found to population expectations, while transitory consumption deviates from population expectations may record either negative or positive values.

Chapter 4. Causes and facts of saving

In the first part of chapter four we intend to analyze the reasons underlying the saving behavior (referring both to the reasons that initiate and increase the saving, and reasons that led to its decline) in the second part of the present thesis being presented the main determinants of the saving process.

The reasons why individuals or households save, differ due to several features related to behavioral profile of each individual and social structure from which they come from, but a summary of saving can be included in the following main categories: the first category is given by a primary reason i.e. consumer leveling; the category precautionary reasons; the need to purchase durable goods or real estate, is another category of reasons generating savings; retirement age, inheritance, wealth and capital accumulation.

On the other hand, we believe that a brief analysis must be performed also on the reasons or causes that may lead to a decline in saving rates, and we include the following: high confidence, another reason that may discourage saving is the lower yields that can be obtained from the saved amounts, through policy of encouraging excessive consumption, the so-called "cheap money" is another reason for discouraging saving.

The main factors that influence the saving process can be grouped into five categories, corresponding to the following five chapters in which they will be analyzed in details: the category of demographic factors and demographic changes, income category, the category of monetary factors, factors which belong to the category of fiscal policy - the government's budgetary and behavioral factors and the uncertainty category.

Demography and demographic changes play a vital role in shaping the overall rate of saving of a nation, especially in his most important structure namely, saving households. In this sense it becomes determining the age structure of the population, an economy with a high share of active population where revenue is at its maximum, it records high savings rates.

Economic growth as a determinant of savings can influence the level obtained through increasing the size of disposable income. Economic growth will lead in the end, to an increase of household disposable income, which will generate according to economic theory[2], an increase in the saved amounts.

Income is certainly a crucial factor in the formation of aggregate saving rate. From our point of view, income is the main determinant of saving, reported at its current level, but especially to the expectations of future income levels that could record and depending on which, subjects could model their own behavior of saving.

Profitability can record a significant share in the composition of private saving, and hence the national saving, reaching significantly higher levels in periods of uncertainty and non-confidence in the economic area, times in which companies avoid reinvesting profits earned and keep them in banks or in other financial saving instruments.

"Terms of trade" is a factor whose various shocks present a stronger influence on national saving, especially in countries whose economies are based on the existence, exploitation or development of natural resources, namely of the level and income variation from these activities.

A higher interest rate will increase the attractiveness of saving, which is reflected in the increased supply of funds, but on the other hand will cause an increase of credit and a decrease of yield investment and a decrease in demand for funds.

A lower interest rate will cause an increase in demand from companies, but due to lower yields, will result a decrease in the propensity of households to saving, that will decrease the supply of funds that can be borrowed. In this case, the regulating mechanism of the market will lead to an increase of the interest rate.

Inflation, another monetary factor, negatively affects in the erosion aspect, including saved amounts that are prospected to the retirement age, but due to their generally long periods, which saving that has as aim to provide income in retirement entails, the negative effect of the devaluation of amounts saved is even strongly felt.

A low tax earning from saved funds, as stimulation for the savings process, or tax coming from interest earnings on deposits, dividends, etc.), capital accumulation in general, will increase the supply of capital.

---

[2] We refer in this context to model of saving and consumption at Keynes, according to which the income growth will cause a decrease in the marginal propensity to consume, and an increase in the marginal propensity to saving

The inefficiency of the public health system may lead to additional expenses that reduce households' disposable income and consequently adversely affect saving. A low confidence in the ability of the public retirement fund system to cover the expenditure necessary to ensure consumer health at retirement age, on precautionary principle that may cause an increase in the amounts saved.

The workforce could influence the aggregate saving by increasing its total number. It is obviously that a high degree of workforce employment, respectively the higher the workforce is, the higher the aggregate of revenues is, and therefore the saving aggregate rate is higher.

The way budget deficit influences national saving could be deduced from the general savings identity: $S = Y - C - G$.

Financial regulations influence savings mainly through the channel of liquidity constraints and they represent an effective tool of control that the state has at its disposal to restrain or expand private consumption, thus having the possibility to exert an indirect influence, but of major importance, on the level of household savings.

Within the specialized literature it is recorded as a high degree of uncertainty, due to various factors, causes a change in saving behavior of households, respectively an enlargement of a precautionary behavior that actions to extend the average propensity towards saving.

We consider as necessary an analysis of how various human behavioral activities influence, through various factors, the saving behavior of the population.

Among the behavioral factors with the greatest impact on saving behavior of the population, we count their habits, namely their persistence, confidence and safety.

Chapter 5. The transmission channels through which saving provides finance and economic development

We state that savings or the capital supply provides the funding needs of gross fixed capital formation, i.e. the demand for capital, through two main channels corresponding to financial market: capital market - stock markets and monetary market, financial – banking system. Also, the financial capital can be invested directly through the two main channels mentioned above or can be mobilized (saved) via intermediary financial institutions, institutional investors (that belong to non-bank financial markets, which on their turn invest the collected money through two main channels (but not limited to only these two)in order to obtain the highest possible financial returns.

The banking system is the main classical channel through which savings are, predominantly transformed into investments, and therefore in productive capital. The role of the transmission channel of the banking system is stronger in countries where capital markets are not sufficiently developed to provide an alternative financing solution.

The banking sector is made up mainly of, but not limited to: commercial banks, savings banks, credit unions, investment banks, mortgage banks.

We believe that as competition is necessarily in defining the characteristic of any economic sector that belongs to a functional market economy, the financial sector cannot hide from this rule. Therefore, the banking sector must discover in the capital market a strong competitor, so that both components of the financial market, both the banking sector and the capital market, to properly be able to structure the activity for the benefit of beneficiaries of financial products, whatever these are: households, companies or the state.

The capital market is an essential component of any national financial system, essential in a process of effective financing of economic activity and should be considered a viable alternative of the banking sector.

Capital market channels financial funds coming from domestic and foreign saving (private and public) more precisely, the capital supply towards covering the investment needs from private demand and government capital, activity of financial intermediation which should be characterized by a high degree of transparency and financial efficiency.

The main features of a developed capital market, with a direct impact on its ability to efficiently channel financial resources coming from savings towards the productive investment projects, are given by: the size of the capital market, liquidity, market depth, volatility, degree of regulatory and market infrastructure, market segmentation, degree of integration into global capital markets, macroeconomic and political stability, taxation attributable to capital market and last but not the least, confidence.

We support the idea that on a capital market sufficiently well-developed, the selection function is a main attribute, directing the available and saved resources to those projects with higher investment yields and that have come to the forefront of investors through capital market filters. Higher financial yields supplement the saved funds, increase the potential size of the financial resources for gross fixed capital formation, and thus they are accelerating growth. Moreover, a capital market will develop, effectively fulfill the evaluation of listed companies, providing public information required to mobilize the saved resources, providing prerequisites for the optimal ongoing of another feature of the capital market, that of channeling funds to gross fixed capital formation, key in any market economy to ensure sustainable economic growth rates.

The main financial entities that literature includes in the category of institutional investors are: pension funds, mutual funds, insurance companies and sovereign wealth funds. Institutional investors are companies of financial intermediation that are part of institutions financial market, but they are not included in the structure of financial companies operating on the monetary market or capital market, but they are considered to belong to a separate component of the financial market, namely the non-banking financial market.

Currently, in some capital markets, pension funds have already become the most important institutional investor, as there is a number as high as pension funds on a national financial market, that is also an argument for the profit of beneficiaries, and also of population, competition between funds, which aims to attract a larger number of customers, that will lead to achieving higher yields and management fees and especially lower contributions.

6.1. Analysis of National Saving in Japan and of its components

Chapter six is dedicated to the case study, namely, saving in Japan, and aims through empirical data to analyze the situation and the evolution of savings, explicitly of the main components and correlations with key macroeconomic indicators: the deficit, public debt, GDP growth rate, employment rate of the population, unemployment and inflation.

Japan is the country that has been recognized in the past for its high annual rates of household saving, but also as the country that registered a change in saving behavior of households, considered by many economists as the least surprising.

In the 1960s and 1970s Japan recorded among the highest savings rate of households of OECD countries (being overdone periodically only by Italy and punctual, by South Korea in 1978 and 1979), the highest values being achieved in mid 1970s, when the rate was above 20% of disposable income.[3]

We consider important to emphasize the role of fiscal policies that the Japanese government has issued in the past to encourage saving behavior of households in Japan. They materialized through various schemes of tax incentives and tax exemptions, granted to savers within certain amounts.

A change in saving behavior of households in Japan started to occur since the 1980s but had been more dramatically felt after the 1990s, the downward trend in the saving rate of households being emphasized in the recent years and culminated in recording a negative yearly value of -0.151% in 2013.

We sustain that the radical change of the saving behavior that led to the recording of negative saving rates comes from the reversal of influence of the already mentioned factors (which, at that time have contributed in a positive and effective way to increase households the saving), namely: the economic growth, growth of disposable income, structure of the population according to age and financial system of exemptions and tax incentives.

The high savings rate of Japanese companies linked to a low level of investment, allowed the Japanese government to successfully finance the high annual budget deficits. The excess savings over investment, namely the record of a current account surplus, allowed Japan not only to

[3] source: OECD (2015)

finance its debts but to continue to further maintain its advantageous position of "net exporter saving".

A further expected decrease in the rate of saving of companies, accompanied by a continuous downward trend in the Japanese household savings, would create serious difficulties for Japanese government in financing internal deficits and also of a high worryingly public debt, which is unfortunately constantly increasing.

Analyzing the public debt of Japan, we can see that it increased in the recent years, reaching the value of 4.2% of GDP in 2009 (Annex 3), of which interest costs related to public debt have remained at a relatively low level of 2% of GDP (top of public debt during 1965-2009 was achieved during 2003-2005, when every year there has been value of 4.5% reported to GDP).

Following the research and the analysis of data, we note that the high value and the increase public debt in Japan has been and it is still supported by the high level of Japanese households savings from previous decades, namely the stock of financial assets amounted collected by these between 1960- 1980 (the level of households' financial assets for September 2014 stand to a record of 1654 trillion yen, while public debt for the same time, stood at 1039 trillion yen[4]). This high level of financial assets generated by households is the main factor that allowed the Japanese government, the same as in the past and still nowadays, to be able to massively finance the internal market (to this, it also positively contributed the high level of funds saved by companies). Until recently, although in Japanese household savings rates were fit within a downward trend, the accumulation of financial assets of households continued, but at a much lower rate.

After analyzing all these implications, namely the close relations that occur between the saving and debt level, we find once again the high level of importance of accumulation of domestic capital through the process of saving, especially through the component of household saving in the optimal functioning of an economic system.

V. Conclusion and recommendation

The research concretized in the content of this paper aims to highlight the indispensable role that national saving has in stability, funding and economic development of a nation. The theoretical aspects of the work were subsequently examined by a case study that followed the evolution and current state of savings in Japan.

We believe that in general, the most important economic theories, but also those referring to concepts of saving and consumption, can be synthesized in an older, present and probably eternal controversy between Keynesian and neo- Keynesian theories, starting from the idea that demand generates supply (stimulating consumption will lead to an increase of the output) and classical-

[4] Ministry of Finance of Japan, http://www.japantimes.co.jp/opinion/2015/02/13/editorials/negative-savings-rates-loom, online accessed in 22.08.2015

neoclassical doctrine i.e., those that start with Say's Law which states that supply creates its own demand (savings / investments that increase production respectively the supply of goods).

After examining the saving process concepts we believe that a possible current definition of savings could be the following one: saving is an act of human will which involves an intertemporal choice, preferences between current consumption and a future consumption, and the amounts deferred by consumption by a subject represent both an investment of the another, but also a future consumption of a better quality of the same subject.

We have also found a strong positive correlation between savings and investment, including in the framework of an open economy of foreign capital inflows (correlation reconfirmed when analyzing data for the case study).

In terms of total savings formation equation, we consider the component of households saving as the one towards political parties should shift with a high priority, because households are the ones who have to provide the necessary resources within the investment process. The role of companies is to capitalize on the resources saved by households, turning them into productive capital, and which ultimately should generate additional income to households that originally came from those funds. In the public saving, is highly preferable to avoid the negative influence that this may have in the equation savings total (i.e. avoid public deficits) and to ensure an adequate rate of public investment, especially in specific periods of economic conjecture that require partial substitution of private sector investment.

Knowing the patterns of saving and of the limitations that accompany them is essential in developing effective public policies that encourage saving, namely the economic development through investment, discourage saving, even if supported by many economists as necessary in certain economic period with a lower level of consumption related to population, we do not consider it convenient, at least in terms of diminishing financial resources necessary for gross fixed capital formation.

Among the most important reasons that determine the level of household savings, we noticed that there is the consumer leveling reason (acting for the entire life of the individual) and the precautionary reason (more visible in conditions of economic uncertainty).

Concerning the reasons that take into account the accumulation, wealth or inheritance, we have noticed, even in specialized literature some pros and cons on the intensity and direction of their influence on saving behavior. It was revealed, however, that in periods of economic growth or of safety related to the future income level, household behavior tends to a lower savings rate, the same trend is also reflected in terms of reducing liquidity constraints.

To determine the meaning and intensity of influence of the determinants factors of household saving becomes a priority of the process of elaboration of public policies conducive to stimulating a saving behavior.

Therefore we believe that at the core demographic policies whose effects contribute positively to an increase in the propensity medium towards the saving of population, there should be taken into account a lowest level of dependency of age groups that do not have income from work, either the youth or the elderly, and this goal can be achieved primarily, either by increasing the total number of population in general, or by increasing the number of the working population in particular.

No matter as many controversies exist in the literature on the influence that level of disposable income can have on household saving, we believe that this cannot occur only after ensuring a minimum level of consumption, considered to be the so called subsistence level. Only the proceeds coming from disposable income exceed this level and they may be directed to saving. Improving the "terms of trade", the profitability of companies, workforce employment, reducing unemployment or the growth that can ultimately raise the disposable income, it creates the prerequisites for a higher total savings rate.

Based on the analysis meaning of the influence that fiscal and monetary factors have on the level of household saving, we believe that fiscal and monetary policies should be developed and linked in order to stimulate it. Thus, fiscal policies should aim mainly tax exemptions, deductibility and tax incentives for savers, avoid excessive taxation of gains coming from savings and tax incentives of employers to encourage employees saving.

Monetary policies should be gathered towards targeting a positive moderate level of inflation, which together with a stable exchange rate, not to discourage the saving population through a potential loss in value of saved funds. Besides, monetary authorities have to ensure that the reference rate of interest finds itself at different levels, on the one hand, sufficiently high that people consider it attractive to boost savings and, on the other hand, low enough to allow running under the financial efficiency of investment projects.

Total employment of the workforce was, is and should be a main objective and a final purpose of any fiscal and monetary policies, consistently pursued by the competent institutions.

We believe that a priority of policy regulation and control of financial markets should represent the need to bring the balance of financing through bank market and respectively, the capital market, currently in use in many countries, among which we take into account also the highly industrialized ones, with a strong discrepancy to the detriment of the capital market.

The dominant position of the banking system creates a dependency on unproductive funding business environment, in particular within the sector of small and medium companies, even in conditions when they are financed almost exclusively from banking (capital market is generally not accessible to the sector) "benefit" of higher funding costs than large companies or government. Therefore, we believe that a more open capital market towards small and medium enterprises in order to ensure an alternative financing and in increasing the access of SMEs through the capital market for the financial resources saved, becomes imperative.

A developed capital market, as the empirical studies shows us, primarily involves a high national saving rate. It is highly preferred, given the fluctuations of foreign capital flow, that the domestic capital market is mainly driven by domestic capital, namely by a high saving and directed to the capital market.

In the case study we observed the behavior of some Japanese companies, specific for certain times of uncertainty and mistrust of the business environment in the future potential with respect to economic development.

Japanese lesson should make public policy makers think about it. As we have noted, the stability of the current Japanese economy, which records very high levels of public debt and budget deficit, is ensured by the possibility that few governments have, the one to blanket these high economic imbalances exclusively through financing domestic findings, protected by the unpredictable shocks induced by the evolution of external financial markets. The financing, that was and is still possible thanks to a very high level of households' financial assets, the resulted level coming from savings recorded in the past, over several decades, consistently high rates.

However, the strong downward trend of Japanese household savings rates from the past decades denotes the existence of inappropriate public policies that had as effect a change in the saving behavior of the population. Thus, we notice again, the importance of public policies concerning a favorable tax system, savings through tax exemptions, incentives and tax deductibility granted to those who save or contribute to funds saved, as well as additional taxation avoidance or double taxation of the amounts saved.

But at least as important are the demographic policies that need to avoid in the future the negative way of changing the population structure, which took place recently in Japan. The aging population and the decline of birth rates are among the demographic factors with an accentuated negative contribution of Japanese household savings levels.

In conclusion, we can affirm that saving is an "umbrella against the bad weather" that can occur at any time on foreign financial markets and an insurer's factor of financial independence that supports a vital technological progress for a sustainable and efficient economic development.

We consider that the final word should go to the economist Herman Minsky (2011), which in a few words summed up the purpose that any mix of public policies should persistently follow, namely: “a program directed towards a full employment, price stability and a higher degree of social justice, aiming at a common and primary goal, that of a humanist economy as a first step towards a humanist society."

VI. References

Books

1. Abel, B. Andrew ; Bernanke, Ben & Croushore, Dean Darrell (2011) – *Macroeconomics, 7th edition*, Editura Pearson , Boston

2. Akerlof, George A. & Shiller, Robert J. (2010) *Spirite animale -Despre felul in care psihologia umana influenţează economia şi ce inseamnă pentru capitalismul global*, editura Publica –Co.lecţia de economie, Bucureşti 2010

3. Akerlof, George A. & Kranton, Rachel E. (2011) *Economia identității - Cum identitatea ne influențează munca, salariile și bunăstarea*, Editura Publica - Co.lecţia de economie, Bucureşti 2011,

4. Dekle, Robert (2005) *Understanding Japanese Saving: Does population aging matter?,* first published 2005, by RoutledgeCurzon

5. Dobrescu, Emilian M. (2006) *Dicţionar de sociologie economică*, editura C.H. Beck, Bucureşti 2006

6. Fisher, Irving (1930) *The theory of interest, as determined by impatience to spend income and opportunity to invest it*, (New York: Macmillan, 1930, ediţie disponibilă online la http://files.libertyfund.org/files/1416/Fisher_0219.pdf

7. Friedman, Milton (1957) *A Theory of the Consumption Function*, Princeton University Press 1957, ediţie disponibilă online la http://www.nber.org/books/frie57-1

8. Henderson, John Vernon & Poole, William (1991), *Principles of macroeconomics* , D.C. Healt and Company, Lexington, Massachusetts 1991

9. Keynes, John Maynard (2009), *Teoria generală a ocupării forţei de muncă, a dobânzii si a banilor,* editura Publica, Bucureşti 2009

10. Krugman, Paul (2012) *Opriţi această depresiune- acum!,* Editura Publica - Co.lectia de economie, Bucureşti 2012

11. Mankiw , N. Gregory (2009) *Macroeconomics*, 7th edition, Worth Publishers, New York

Mill, John Stuart (2009) *Principles Of Political Economy*, The Project Gutenberg EBook of Principles Of Political Economy, editie disponibilă online la, www.gutenberg.orgfiles.pdf

12. Marshall Alfred (1890) *Principles of Economics* (8th ed.) The Online Library of Liberty A Project Of Liberty Fund, Inc, ediţie disponibilă online la http://files.libertyfund.org/files/1676/Marshall_0197_EBk_v6.0.pdf

13. Minsky, Hyman P. (2011) *Cum stabilizăm o economie instabilă,* Editura Publica - Co.lecţia de economie, Bucureţti 2011

14. Mises, Ludwig von (1998) *Human Action- A Treatise on Economics,* Ludwig Von Mises Insititute Auburn, Alabama - ediţie disponibilă online la http:smises.orgsitesdefaultfilesHuman%20Action_3.pdf

15.Parker, Jeffrey (2010) *Theories of consumption and saving,HEORIES OF CONSUMPTION AND SAVING*, Economics 314 Coursebook, 2010, cap. 16 , pag. 1-23, ediţie disponibilă online la http://academic.reed.edu/economics/parker/s11/314/book/Ch16.pdf

16. Ricardo, David (2001) On the Principles of Political Economy and Taxation, Batoche Books, Kitchener 2001, Ontario, Canada, ediţie disponibilă online la http://socserv.mcmaster.ca/econ/ugcm/3ll3/ricardo/Principles.pdf

17. Reinhart, Carmen M & Rogoff, Kenneth (2012) De data asta e altfel, opt secole de sminteală financiară, Editura Publica Bucureşti 2012

18. Scarlat, Emil şi Chirita, Nora (2001), *Macroeconomie Dinamică*, editura Economica , Bucureşti 2001

19. Schumpeter, Joseph A. (2011) *Poate supravietui capitalismul? Distrugerea creatoare si viitorul economiei globale,* Publica, Bucureşti 2011

20. Smith, Adam (2011) *Avutia natiunilor* Editura Publica - Co.lectia de economie, Bucuresti 2011

Articles

1. Agenor, Pierre-Richard & Aizenman, Joshua (2004) *Savings and the terms of trade under borrowing constraints*, Journal of International Economics 63 (2004) 321 – 340, accesat online la http://economics.ucsc.edu/research/downloads/agenor-aizenman-saving.pdf, ultima accesare la 3.07.2015

2. Adler, Gustavo & Magud, Nicolas E. (2013) *Four Decades of Terms-of-Trade Booms: Saving-Investment Patterns and a New Metric of Income Windfall,* IMF Working Paper Western Hemisphere Department, 2013 accesat online la https://www.imf.org/external/pubs/ft/wp/2013/wp13103.pdf, ultima accesare 01.10.2014

3. Bayoumi, Tamim (1992) *Financial Deregulation and Household Saving*, Bank of England and International Monetary Fund, accesat online la http://www.bankofengland.co.uk/archive/Documents/historicpubs/workingpapers/1992/wp05.pdf , ultima accesare 15.07.2015

4. Baranzini, Mauro (2005) *Modigliani's life-cycle theory of savings fifty years later* , BNL Quarterly Review, vol. LVIII, nos 233-234, June-September 2005, pp. 109-72 , accesat online la http://ojs.uniroma1.it/index.php/PSLQuarterlyReview/article/viewFile/9846/9731, ultima accesare 19.05.2015

5. Bekaert, Geert & Harvey, Campbell R. (1997) *Capital Markets: An Engine For Economic Growth, National Bureau of Economic Research*, Cambridge, Massachusetts May 7, 1997 , accesat online la https://faculty.fuqua.duke.edu/~charvey/Research/Published_Papers/P58_An_engine_for.pdf, ultima accesare la 9.08.2015

6. Bittante, Samuel (2013) - *What is "Ricardian Equivalence" and when can it fail?*, Macroeconomics (ECO-2A05) , Norwich Economic Papers Vol. 7 (February 2013) accesat online la https://www.uea.ac.uk/documents/953219/2651834/Vol+7_Samuel+Bittante.pdf/c08ffc44-b033-47a0-87e8-c0d87de4042d, ultima accesare la 21.07.2015

7. Boadway, Robin &Wildasin, David (1995) *Taxation and Savings: A Surve* , Fiscal Studies (1995) vol. 15, no., pp. 19 - 63 © Institute for Fiscal Studies, accesat online la http://davidwildasin.us/pub/Boadway-Wildasin-Taxation-Savings- Survey.pdf, ultima accesare la 19.07.2015

8. Boca, Mihai Cosmin (2015) *Analyzing the saving and twin deficits correlation: evidence from Romania*, The Annals of the University of Oradea - Economic Sciences Series TOM XXIV- 1st Issue / July 2015 391-398, accesat online la http://anale.steconomiceuoradea.ro/volume/2015/AUOES-1-2015.pdf, ultima accesare 21.08.2015

9. Bodea, Catalin (2012) *Economisirea concepte, determinanţi şi evoluţii,* Banca Naţională a României, Elemente ale cadrului de analiză si prognoză al politicii monetare, Colocviile de politică monetară,ediţia a V-a Bucureşti, 5 iunie 2012, accesat online la http://www.bnr.ro/Elemente-ale-cadrului-de-analiza-si-prognoza-al-politicii-monetare-8192.aspx, ultima accesare 2.08.2015

10. Browning & Lusardi (1996) Household Saving: *Micro Theories and Micro Facts*, Journal of Economic Literature Vol. XXXI, pp.1797-1855, accesat online la http://www.nyu.edu/econ/user/bisina/browning-lusardi.pdf, ultima accesare 11.03.2015

11. Callen, Tim & Thimann, Christian (1997) *Empirical Determinants of Household Saving: Evidence from OECD Countries*, Working Paper of the International Monetary Fund,Asia and Pacific department December 1997, accesat online la http://www.imf.org/external/pubs/ft/wp/wp97181.pdf, ultima accesare 11.09.2014

12. Cannari, Luigi (1994) *Do demographic changes explain the decline in the saving rate of Italian households?*, Saving and the Accumulation of Wealth Essays on Italian Household and Government Saving Behavior , *Edited by* ALBERT ANDO, LUIGI GUISO, IGNAZIO VISCO, CAMBRIDGE UNIVERSITY PRESS 1994

13. Cantor, Richard &Drisckill, Robert (2000) *Effects on the Real Exchange Rate of Demographic and Fiscal-Policy Induced Changes in National Saving: Is the Conventional Academic Wisdom Always Right*? accesat online la http://www.vanderbilt.edu/econ/faculty/Driskill/NS4pdf.pdf, ultima accesare 8.07.2015

14. Carroll, Christopher D. (2001) *A Theory of the Consumption Function, With and Without Liquidity Constraints*, May 18, 2001, http://www.econ2.jhu.edu/people/ccarroll/ATheoryv3JEP.pdf , accesat 17.06.2015

15. Carroll, Christopher D & Weil David N. (1994) *Saving and growth: a reinterpretation*, Carnegie-Rochester Conference Series on Public Policy 40 (1994) 133-192 North-Holland accesat online la http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.208.7654&rep=rep1&type=pdf, ultima accesare 27.07.2015

16. Cherif, Monther & Gazdar Kaothar (2010*) Macroeconomic and institutional determinants of stock market development in MENA region: new results from a panel data analysis*, International Journal of Banking and Finance Volume 7, Issue 1 Article 8, 3-31-2010, accesat online la http://epublications.bond.edu.au/cgi/viewcontent.cgi?article=1024&context=ijbf, ultima accesare la 9.08.2015

17. Croitoru, Lucian (2015) *Paradoxul românesc (The Romanian Conundrum) (1)* , accesat online la http://www.opiniibnr.ro/index.php/macroeconomie/41-paradoxul-romanesc-the-romanian-conundrum-1, ultima accesare 17.08.2015

18. Crown, William H. (2002) *Life Cycle Theories of Savings and Consumption*, Encyclopedia of Aging 2002, The Gale Group Inc, accesat online la http://www.encyclopedia.com/doc/1G2-3402200229.html, ultima accesare 18.06.2015

19. Curtin, Richard T. (2003) *Unemployment expectations: the impact of private information on income uncertainty*, Review of Income and Wealth, Series 49, Number 4, December 2003, University of Michigan, accesat online la https://data.sca.isr.umich.edu/fetchdoc.php?docid=28779, ultima accesare 15.07.2015

20. Curtin, Richard T. (2000) *Psychology and Macroeconomics: Fifty Years of the Surveys of Consumers*, Telescope on Society: Survey Research and Social Science in the 20th and 21st Centuries, University of Michigan Press 2000, accesat online la https://data.sca.isr.umich.edu/fetchdoc.php?docid=24782, ultima accesare 13.06.2015

21. Dănilă, Nicolae (2011) *Economisirea şi perspectivele creşterii economice*accesat online la http://www.bnr.ro/Economisirea-si-perspectivele-cresterii-economice-6792.aspx ultima accesare 18.09.2014

22. Deaton, Angus (2005) *Franco Modigliani and the Life Cycle Theory of Consumption*, Research Program in Development Studies and Center for Health and Wellbeing
Princeton University, March 2005, presented at the Convegno Internazionale Franco Modgliani, Accademia Nazionale dei Lincei, Rome, February 17th–18th, 2005, accesat online la https://www.princeton.edu/~deaton/downloads/romelecture.pdf, ultima accesare 12.07.2015

23. Dempster, Gregory M. (2011) *Austrian Foundations for the Theory and Practice of Finance*, Journal of economics and finance education, volume 10, number 2, fall 2011, accesat online la http://www.economics-finance.org/jefe/econ/special-issue/Special%20Issue%20AE%20007%20Dempster.pdf, ultima accesare 12.07.2015

24. De Santis, Roberto & Surico, Paul (2013) *Bank Lending and Monetary Transmission in the Euro Area*, Working Paper SerieS NO 1568 / july 2013, European Central Bank, Eurosystem, accesat online la https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1568.pdf, ultima accesare 30.07.2015

25. Dobrinsky, Rumen (2005) *Domestic Saving and the Driving force of investment in the ECE Emerging Market Economies*, Economic Commission for Europe, Discussion Paper Series No.2005.2, September 2005, United Nations Economic Commission for Geneva, Switzerland, accesat online la http://www.unece.org/fileadmin/DAM/oes/disc_papers/ECE_DP_2005-2.pdf, ultima accesare 31.7. 2015

26. Doppelhofer, Gernot (2009) *Intertemporal Macroeconomics*, Forthcoming in J. McCombie and N. Allington (eds.), Cambridge Essays in Applied Economics, Cambridge UP , accesat online la https://www.nhh.no/Admin/Public/DWSDownload.aspx?File=%2FFiles%2FFiler%2Finstitutter%2Fsam%2Fcv%2Fpapers%2FIntertemporal_Macroeconomics.pdf, accesat la 19.06.2015

27. Dumitru, Ionut ; Romulus Mircea & Jianu (Dumitru), Ionela (2011) *Economisirea în România – evoluţii şi factori determinanţi*, accesat online la http://www.researchgate.net/profile/Ionela_Dumitru/publication/49913063_Economisirea_n_Romnia__evoluii_i_factori_determinani/links/0deec5317275d5db57000000.pdf, ultima accesare 12.07.2015

28. El-Wassal, Kamal A. (2013) *The Development of Stock Markets: In Search of a Theory*, International Journal of Economics and Financial Issues Vol. 3, No. 3, 2013, pp.606-624, accesat online la http://www.econjournals.com/index.php/ijefi/article/viewFile/489/pdf, ultima accesare in 3.08.2015

29. Emendorf, W. Douglas (1996) *The effect of interest rate changes on household saving and consumption: a survey* - Federal Reserve Board, accesat online la http://www.federalreserve.gov/pubs/feds/1996/199627/199627pap.pdf , ultima accesare 09.07.2015

30. Feldstein, Martin (1997) *Transition to a fully funded pension system: five economic issues*, National Bureau of Economic Research, Working Paper 6149, Cambridge Massachusetts, August 1997, accesat online la http://www.nber.org/papers/w6149.pdf , ultima accesare 20.07.2015

31. Feldstein, Martin & Horioka, Charles (1980) , *Domestic Saving and International Capital Flows* , The Economic Journal, Vol. 90, No. 358 (June 1980) pp. 314-329 Published by: Blackwell Publishing for the Royal Economic Society, accesat online la http://faculty.georgetown.edu/mh5/class/econ489/Feldstein-Horioka-Puzzle.pdf, ultima accesare 27.07.2015

32. Feldstein, Martin (2010) *Japan's Savings Crisis,* Project Syndicate, September 2010 accesat online la www.project-syndicate.org, ultima accesare 13.08.2015

33. Ferreiro, Jesus & Serrano, Felipe (2012) *Expectations, uncertainty and institutions. An application to the analysis of social security reforms*, International Review of Applied Economics 03/2012; 26(2):253-266

34. Garcia, Valeriano F & Liu, Lin (1999) *Macroeconomic determinants of stock market development*, Journal of Applied Economics, Vol. II, No. 1 (May 1999), 29-59, accesat online la http://www.ucema.edu.ar/publicaciones/download/volume2/garcia_liu.pdf, ultima accesare 3.08.2015

35. Garner, Alan C. (2006) *Should the Decline in the Personal Saving Rate Be a Cause for Concern?*, Economic Review (01612387). 2006 2nd Quarter, Vol. 91 Issue 2, p5-28. 24p. , accesat online la http://eds.b.ebscohost.com.web.bcucluj.ro:2048/eds/detail/detail?vid=4&sid=73279edb-0eb2-405f-a40e-e6fe7c87acd1%40sessionmgr115&hid=127&bdata=JkF1dGhUeXBlPXVybCxpcCxjb29raWUsdWlkJnNpdGU9ZWRzLWxpdmU%3d#db=bth&AN=21646933, ultima accesare 2.07.2015

36. Gerardi, Kristopher , Rosen, Harvey S. & Willen, Paul *Do Households Benefit from Financial Deregulation and Innovation? The Case of the Mortgage Market*, Federal Reserve Bank of Boston CEPS Working Paper No. 141 March 2007, accesat online la https://www.princeton.edu/ceps/workingpapers/141rosen.pdf , ultima accesare la 22.07.2015

37. Gramlich, Edward M. (1989) *Budget Deficits and National Saving: Are Politicians Exogenous*? Journal of Economic Perspectives—Volume 3, Number 2—Spring 1989—Pages 23–35 , accesat online la http://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.3.2.23 , ultima accesare 21.07.2015

38. Hayashi, Fumio (1986) *Why Is Japan's Saving Rate So Apparently High?* NBER Macroeconomics Annual 1986, Volume 1 MIT Press, pages in book: (p. 147 - 234) accesat online la http://www.nber.org/chapters/c4247, ultima accesare 17.08.2015

39. Honohan, Patrick (1999) *Financial Policies and Saving*, The Economics of Saving and Growth -Theory, Evidence, and Implications for Policy, CHAPTER 4, p. 71-106, CAMBRIDGE UNIVERSITY PRESS, New York

40. Hussain, Mumtaz & Brookings, Oscar T. (2001) *On the Determinants of National Saving: An Extreme-Bounds Analysis*, Review of World Economics Volume 137 issue 1, p.150-174, accesat online la http://www.jstor.org.web.bcucluj.ro:2048/stable/40440827 ultima accesare 24.09.2014

41. Japanese Public Finance Fact Sheet (2014) Ministry of Finance, accesat online la http://www.mof.go.jp/english/budget/budget/fy2014/factsheet2014.pdf, ultima accesare 20.08.2015

42. Kaplan, Jay (2002) *Unit 5 - Markets and Unemployment*, University of Colorado Boulder, accesat online la http://www.colorado.edu/economics/courses/econ2020/section5/section5-main.html, ultima accesare la 14.07.2015

Kaserer, Christoph & Rapp, Marc Steffen (2014) *Capital Markets and Economic Growth: Long-Term Trends and Policy Challenges*, Research Report, The Alternative Investment Management Association, March 2014, accesat online la http://www.aima.org/download.cfm/docid/5D6152C4-C9A0-4FDA-B2DD415168ED658B, ultima accesare 12.08.2015

43. Koçkesen, Levent (2008) *-Relative Income Hypothesis*, William A. Darity (Ed.), International Encyclopedia of the Social Sciences, 2nd edition (2008), accesat online la http://home.ku.edu.tr/~lkockesen/research/rel_inc_hyp.pdf, ultima accesare 23.06.2015

44. Koga, Maiko (2005) *The Decline of Japan's Saving Rate and Demographic Effects,* Bank of Japan Working Paper Series, accesat online la https://www.boj.or.jp/en/research/wps_rev/wps_2005/data/wp05e10.pdf, ultima accesare 18.08.2015

45. Kotlikoff, Laurence J (2008) *Saving* Library of Economics and Liberty, The concise encyclopedia of economics, accesat online la http://www.econlib.org/library/Enc/Saving.html#abouttheauthor, ultima accesare la 27.07.2015

46. Krugman, Paul & Wells, Robin (2009) *Savings, Investment Spending, and the Financial System*, Chapter 10, Worth Publishers 2009, accesat online la http://sandovalhernandezj.people.cofc.edu/fs.pdf, ultima accesare la 12.08.2015

47. Leetmaa P., Rennie H & Thirby B (2009*) Household saving rate higher in the EU than in the USA despite lower income*, Economy and finance, EUROSTAT, Statistics in Focus 2009, accesat online la http://ec.europa.eu/eurostat/documents/3433488/5280965/KS-SF-09-029-EN.PDF/69f10fe1-9252-423e-bd06-703bc6c8bbd1, ultima accesare 18.07.2015

48. Leland, Hayne E. (1968) *Saving and Uncertainty: The Precautionary Demand for Saving* , The Quarterly Journal of Economics, Vol. 82, No. 3 (Aug., 1968), pp. 465-473 Published by: Oxford University Press – IDEA

49. Levine & Zervos (1998), *Stock Markets, Banks, and Economic Growth*, accesat online la http://www.worldbank.org/html/prddr/prdhome/pdffiles/wp1690.pdf, ultima accesare 3.08.2015

50. Mason, Roger (2000) *The Social Significance of Consumption: James Duesenberry's Contribution to Consumer Theory*, Journal of Economic Issues (Association for Evolutionary Economics), 00213624, Sep2000, Vol. 34, Issue 3 , accesat online la lhttp://web.bcucluj.ro:2048/login?url=http://search.ebscohost.com.web.bcucluj.ro:2048/login.aspx?direct=true&AuthType=url,ip,cookie,uid&db=bth&AN=3538528&site=eds-live , ultima accesare 22.06.2015

51. Meghir, Costas (2002) *A Retrospective on Friedman's Theory of Permanent Income*, University College London and Institute for Fiscal Studies November 2002, January 2004, accesat online la http://www.ifs.org.uk/wps/wp0401.pdf, accesat 17.06.2015

52. Ministerul de finanţe al Japoniei accesat online la http://www.mof.go.jp/english/budget/statistics/200910/s200910_03b.pdf, ultima accesare 25.08.2015.

53. Modigliani, Franco (1966) *The Life Cycle Hypothesis of Saving, the Demand for Wealth and the Supply of Capital*, Social Research, extracted from PCI Full Text, published by ProQuest Information and Learning Company

54. Modigliani, Franco (1985) *Life Cycle, Individual Thrift and The Wealth of Nations* , Sloan School of Management, Massachusetts Institute of Technology, Cambridge, MA , *Economic Sciences 1985*

55. Montiel, Peter J. & Serven, Luis 2008, *Real Exchange Rates, Saving and Growth: Is There a Link?*, The World Bank Development Research Group Macroeconomics and Growth Team, accesat online la https://openknowledge.worldbank.org/bitstream/handle/10986/6698/wps4636.pdf?sequence=1, ultima accesare 08.07.2015

56. Niculescu-Aron, Ileana & Mihăescu, Constanţa (2014) *Modelling the impact of economic, demographic and social determinants on household saving rate in the former socialist countries (Central and Eastern Europe)*, 7th International Conference on Applied Statistics, accesat online la http://www.researchgate.net/publication/273865166_Modelling_the_Impact_of_Economic_Demographic_and_Social_Determinants_on_Household_Saving_Rate_in_the_Former_Socialist_Countries_(Central_and_Eastern_Europe), ultima accesare in 28.10.2014

57. Oppers, Stefan Erik (2002) *The Austrian Theory of Business Cycle: Old Lessons For Modern Economic Policy*? IMF Working Paper, Office in Europe, accesat online la https://www.imf.org/external/pubs/ft/wp/2002/wp0202.pdf, ultima accesare 6.07.2015

58. OECD (2013a), "Saving", OECD *National Accounts at a Glance 2013*, OECD Publishing, Paris, accesat online lahttp://www.oecd-ilibrary.org/docserver/download/3013021ec009.pdf?expires=1441202139&id=id&accname=guest&checksum=9FB4333C6F4D633AFE40376C9659D761 , ultima accesare 21.07.2015

59. OECD (2013b) *The role of banks, equity markets and institutional investors in long-term financing for growth and development* Report for G20 Leaders, February 2013, accesat online la http://www.oecd.org/daf/fin/private-pensions/G20reportLTFinancingForGrowthRussianPresidency2013.pdf, ultima accesare la 10.08.2015

60. OECD (2015) Stat - Economic Outlook No 97– June 2015 : *Household saving rates*, accesat online la http://stats.oecd.org/Index.aspx?QueryId=51648#, ultima accesare 16.08.2015

61. Oyama, Tsuyoshi & Yoshida, Kotaro (1999) *Does Japan Save Too Much? Or Do Other Major Countries Save Too Little? International comparison of savings rates from the modified golden rule approach*, Bank of Japan December 1999, Working Paper 99-5, Research and Statistics Department Bank of Japan C.P.O BOX 203 TOKYO, accesat online la https://www.boj.or.jp/en/research/wps_rev/wps_2000/data/cwp99e05.pdf, ultima accesare 18.08.2015

62. Pagano, Marco (1993) *Financial markets and growth An overview,* European Economic Review 37 (1993) 613-622. North-Holland Financial Markets and the Macroeconomy , accesat online la http://www.csef.it/pagano/EER-1993.pdf, ultima accesare 8.08.2015

63. Palley, Thomas I. (2008) *The Relative Income Theory of Consumption: A Synthetic Keynes-Duesenberry-Friedman Model*, Political Economy Research Institute,WORKINGPAPER SERIES , Number 170, University of Massachusetts Amherst, accesat online la http://www.peri.umass.edu/fileadmin/pdf/working_papers/working_papers_151-200/WP170.pdf, ultima accesare in data de 19.06.2015

64. Reinhart, Carmen ; Ogaki, Masao & Ostry, Jonathan (1995) *Saving behavior in low- and middle-income developing countries*, University of Maryland, College Park, Department of Economics January 1995, IMF Working Paper, International Monetary Fund , accesat online la http://mpra.ub.uni-muenchen.de/13757/2/MPRA_paper_13757.pdf, ultima accesare la 16.07.2015

65. Reinhart, Carmen and Ostry, Jonathan (1991) *Private Saving and Terms of Trade Shocks*, IMF Working Paper, accesat online la http://mpra.ub.uni-muenchen.de/13716/1/MPRA_paper_13716.pdf, ultima accesare, 01.10.2014

66. Rees, Daniel (2013) *Terms of Trade Shocks and Incomplete Information*, Research Discussion Paper 09 July 2013, Economic Research Department Reserve Bank of Australia, accesat online la http://www.rba.gov.au/publications/rdp/2013/pdf/rdp2013-09.pdf, ultima accesare 4.07.2015

67. Sandmo, Agno (1970) *The Effect of Uncertainty on Saving Decisions*, The Review of Economic Studies, Vol. 37, No. 3 (Jul., 1970), pp. 353-360 Published by: Oxford University Press- IDEA

68. Saito, Jun (2015) *The new era of negative household saving rate,* Japan Center for Economic Research, January 5, 2015, accesat online la http://www.jcer.or.jp/eng/research/pdf/saito20150105e.pdf, ultima accesare 17.08.2015

69. Schmidt-Hebbel, Klaus & Serven, Luis (1999) *Aggregate Saving and Income Distribution, The Economics of Saving and Growth -Theory, Evidence, and Implications for Policy*, Chapter 4 4, p. 71-106, Cambridge University Press, New York

70. Schultz, Paul T.(2005) *Demographic Determinants of Savings: Estimating and Interpreting the Aggregate Association in Asia*, Discussion Paper No. 1479 , accesat online la http://ftp.iza.org/dp1479.pdf, ultima accesare in 2.07.2015

71. Serres, Alain de & Pelgrin, Florian (2003) *The decline in private saving rates in the 1990s in OECD countries: how much can be explained by non-wealth determinants*?, OECD Economic Studies No. 36, 2003/1, accesat online la http://www.oecd.org/economy/monetary/33638821.pdf, ultima accesare 22.01.2015

72. Servén, Luis , Loayza, Norman & Schmidt-Hebbel, Klaus (1999) *Saving-what do we know, and why do we care*?, World Bank , PREM notes Economic Policy, August 1999, accesat online la https://openknowledge.worldbank.org/bitstream/handle/10986/11468/267110English0premnote28.pdf?sequence=1 , ultima accesare 17.07.2015

73. Sinn, Hans-Werner (2000) *Why a Funded Pension System is Useful and Why It is Not Useful*, International Tax and Public Finance, 7, 389–410, Kluwer Academic Publishers 2000, accesat online la https://www.cesifo-group.de/portal/pls/portal/!PORTAL.wwpob_page.show?_docname=1064126.PDF , ultima accesare la 20.07.2015

74. Skousen, Mark (2010) "*Which drives the economy: consumer spending or saving/investment? Using GDP, gross output and other national income statistics to determine economic performance*" , Initiative for Police Dialogue, based at Columbia University, accesat online la http://policydialogue.org/files/publications/GDP.pdf, ultima accesare 20.04.2015

75. Srinivasan, T.N. (1993), *The Economics of Saving, Saving in the development process*, edited by James H. Gapinski .Florida State University, Springer Science+Business Media, LLC 1993. New York

76. Stiglitz, Joseph (1999) *Foreword* , *The Economics of Saving and Growth -Theory, Evidence, and Implications for Policy*, Cambridge University Press, New York

77. Twu, Mia (2005) *Literature review of stock market* , accesat online la http://nccur.lib.nccu.edu.tw/bitstream/140.119/33947/6/93306406.pdf , ultima accesare 5.08.2015

78. Thaler, Richard H. (1997) "*Irving Fisher: The Modern Behavioral Economist"*, The American Economic Review, vol.87, no.2, Papers and Proceedings of the Hundred and Fourth Annual Meeting of the American Economic Association p. 439-441, accesat online la http://faculty.chicagobooth.edu/Richard.Thaler/research/pdf/IrvingFisher.pdf, accesare 19.06.2015

79. Thurston, Thom B. (1977) *The Permanent Income Hypothesis and Monetary Influences on Consumption*, Journal of Money, Credit & Banking (Ohio State University Press), November 1, 1977, accesat online la http://eds.a.ebscohost.com.web.bcucluj.ro:2048/eds/pdfviewer/pdfviewer?sid=57c71f25-0aa2-416a-9fff-f1b4ae13c946%40sessionmgr4004&vid=8&hid=4105 , ultima accesare 18.06.2015

80. Wray, Randall L. (1989) A *Keynesian Presentation of the Relations among Government Deficits, Investment, Saving,and Growth*, Journal of Economic Issues, Vol. 23, No. 4, Association for Evolutionary Economics;

81. Wolf, Holger C. (1997) *Savings, Credit Markets and Economic Growth in Europe*, Banking, International Capital Flows and Growth in Europe Financial Markets, Savings and Monetary Integration in a World with Uncertain Convergence, Springer-Verlag Berlin. Heidelberg 1997;

82. Wolla, Scott (2014) *Smoothing the Path: Balancing Debt, Income, and Saving for the Future*, Page One Economics Newsletter, November 2014, accesat online la https://research.stlouisfed.org/pageone-economics/uploads/newsletter/2014/PageOneCE1114NEW.pdf, ultima accesare la 19.05.2015

83. Yartey, Charles Amo (2008) *The Determinants of Stock Market Development in Emerging Economies: Is South Africa Different?*, IMF Working Paper - International Monetary Fund WP/08/32, February 2008, accesat online la https://www.imf.org/external/pubs/ft/wp/2008/wp0832.pdf, ultima accesare la 4.08.2015

Web sources

1. http://www.bloomberg.com/quote/CO1:COM , accesat la 12.08.2015

2. https://www.boj.or.jp/en/research

3.http://ca.reuters.com/article/businessNews/idCAKBN0OD14Z20150528 accesat la 17.07.2015

4. http://data.worldbank.org/ accesat la 7.07.2015

5.http://www.economicsonline.co.uk/Global_economics/Terms_of_trade.html, accesat 8.07.2015

6. http://www.economywatch.com/economic-statistics/Japan/Employment/, accesat online la 16.08.2015

7. http://europa.eu/rapid/press-release_MEMO-14-297_en.htm, accesat online la 12.07.2015

8. http://www.ifn-romania.ro/institutii-financiare-nebancare-p114.html, accesat la 30.07.2015

9.http://inflationdata.com/articles/2013/02/05/impact-inflation-savings/ , accesat la 14.07.2015

10. http://www.investopedia.com/terms/g/glass_steagall_act.asp accesat online la 3.08.2015

11.http://www.japantimes.co.jp/opinion/2015/02/13/editorials/negative-savings-rates-loom/ accesat online la 22.08.2015

12. http://www.mof.go.jp/english date 2014 si 2015, ultima accesare 24.08.2015

13.http://www.referenceforbusiness.com/encyclopedia/Fa-For/Financial-Institutions.html#ixzz3hHBun0Z3 accesat online la 30.07.2015http://www.oecd.org/, accesat la 20.07.2015

14. https://research.stlouisfed.org/fred2/series/JPNNGDP, accesat online la 22.08.2015

15. https://stats.oecd.org/index.aspx?queryid=350 accesat la 22.08.2015

16.http://uk.reuters.com/article/2015/06/08/uk-japan-economy-gdp-idUKKBN0ON18O20150608, accesat online la 23.08.2015