



## ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES

ISSN 2345-0282 (online) <http://jssidoi.org/jesi/aims-and-scope-of-research/>

### PENSION SYSTEM DEVELOPMENT AND THE SUSTAINABILITY OF THE PRINCIPLE OF GENERATION SOLIDARITY

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Received 18 November 2013; accepted 15 January 2014

**Abstract.** The problem of pensions is one of the social topical issues because a complicated demographic situation makes it difficult to observe the principle of generation solidarity in long-term formation of the pension funds. The phenomenon of pension in its evolutionary development has been investigated with an attempt to assess its social significance and efficiency. The given article describes the results of the conducted research in which various pension schemes are compared from the point of view of their social worthiness. The suggested assessment of various systematized public old age pension schemes arranged chronologically, became the basis that allowed creating a short and the most popular assessment of the systematized public old-age pension scheme. It shows that the public old age pension system of this country is based on the principle of solidarity between generations and that this principle has started to use up its positive potential. It will also be the final conclusion. The article examines first forms of old age security; explores some features of systematized pension systems; describes a socially responsible approach to the problem of pension provision by the state; and assesses the principle of generation solidarity as a basis of pension capital formation, the consequences of this principle application, its sustainability and reliability.

**Keywords:** Pension development, social responsibility, principle of solidarity, old age security, potential.

**Reference** to this paper should be made as follows: Caurkubule, Ž.; Rubanovskis, A. 2014. Pension system development and the sustainability of the principle of generation solidarity, *Entrepreneurship and Sustainability Issues* 1(3): 173–186.

DOI: [http://dx.doi.org/10.9770/jesi.2014.1.3\(6\)](http://dx.doi.org/10.9770/jesi.2014.1.3(6))

**JEL Classification:** I38

## 1. Introduction

The current financial crisis has led to a number of serious consequences, which retarded secure and sustainable development due to numerous consequences (Balkytė, Tvaronavičienė 2011; Tvaronavičienė, Grybaitė 2012; Lankauskienė, Tvaronavičienė 2012. Vosylius *et al.* 2013; Tvaronavičienė *et al.* 2013; Tvaronavičienė, Grybaitė 2013; Mačiulis, Tvaronavičienė 2013.) Some of those consequence concern retirement. This raised much controversy in social perceptions of the nature of pension and of its role today. Normally any pension scheme involves employees and employers (both as contributors to pension funds), and existing pensioners (as pension receivers or pension fund spenders). Therefore it is necessary to examine the evolution of pension, to evaluate the sustainability of various pension schemes and to identify their major future developments. This study operates with the concepts of social security and social insurance. Both are the forms of social assistance. Social insurance is different from social security in forms of social recompense procedures and organization. Social security as it is completely excludes the participation of a worker and an

employer in the formation of the pension fund or in making any corresponding contributions to the state budget. Social insurance can be considered as a part of the social security system. The main focus of the article is concentrated on pensions among all other social security forms because pension benefits are significant and their payment can seriously affect the situation in the national economy. Pension systems and their operational principles in economically developed countries have developed worldwide. Therefore, their development and improvement, as well as the development of new principles are not easily determined locally in a single country. The presented guidelines for the pension system based on the principle of generation solidarity should certainly be pilot tested in at least a group of countries. Then they may contribute to the social welfare and provide sustainable solutions to the issue of pensions.

**Object:** pension systems.

**Subject:** the principle of generation solidarity.

**Goal:** to determine the potential of the principle of generation solidarity.

**Objectives:** to review the first attempts to solve the problem of old age insurance and the impact on subsequent processes; to explore systematized pension systems; to describe a socially responsible approach to the state pension issues; to evaluate the role of the principle of generation solidarity in pension capital formation and to assess the outcomes of this principle application.

## 2. The earliest perceptions of the social security at the old age

Perceptions of the socially secured old age have changed over time. In the ancient times old, vulnerable and incapable people were mainly provided by their families (clans, tribes, communes, etc.) and communities that developed later (guilds, associations, unions and other social formations) (Achinger 1953). However, according to the ancient folklore, for example, in the East, the chiefs of clans would often order to kill old people so that not to feed them. (Many Native American tribes destroyed their elderly women, because they could not bear children any more and so could not increase the number of the members of the tribe - interviewee: Wyatt Dulaney (37), the grandson of a woman belonging to Appalachian Cherokee Indian tribe (USA) and a Scott (interview on 15.08.2012.: Dulaney). Similar attitude is reflected in Latvian folklore – in winter old people used to be taken to the forest on a sleigh and left there to die. But later Latvian folklore tales suggest that old people were respected and valued, for example, in the “The Tale of the three loaves” - the head of the family would bake three loaves of bread, which were divided as follows: one loaf was lent, i.e., his children were fed by it, the second was for himself and his wife, and the third loaf was paid back as a debt, i.e., his parents ate it (Smits 1925).

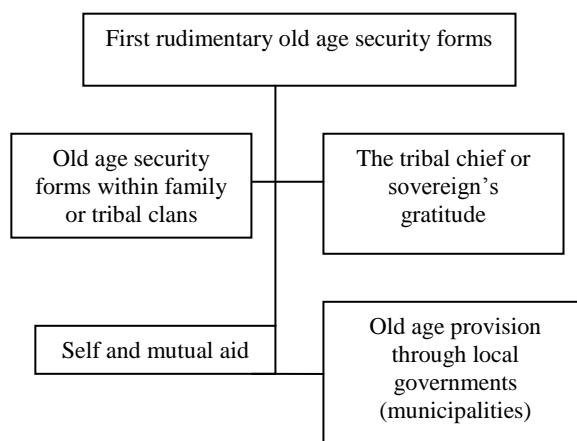
Examples of irregular and unsystematic forms of security in the old age in rare cases can be found in some ancient civilizations. Basically, it was a chief's or lord's gratitude for faithful service or some outstanding deed, such as the life saving of the chief himself or of people important to him. This gratitude could be manifested as granting of a position, or an estate without the right of inheritance; later a title, e.g. Earl (Latvian phrasebook-dictionary, VI volume), Baron (Latvian phrasebook-dictionary, 1 volume), etc., initially without but later with the property and the rights of the inheritance. Such cases could be defined as a kind of benefaction (Dictionary of Foreign Words 2008; The Hutchinson Dictionary of Ideas 1995). Nowadays aristocratic titles are awarded to:

1) Those who are entitled to them, e.g., to the members of the Royal Family, e.g. Diana Frances Spencer having married Prince Charles became the titles Princess of Wales, Duchess of Cornwall, Duchess of Rothesay, Countess of Chester and Baroness of Renfrew.

2) Those who have performed special services or merits may be knighted or awarded titles. This has always been the way in which the sovereigns express their gratitude. For example, British Prime Minister Margaret Thatcher in 1992 was granted the title of Baroness and she became the title of Baroness Thatcher of Kesteven. On 12 March 1997 the famous musician James Paul McCartney was knighted for his contribution to the development of the British popular music, and he became the title Sir. Until today special particles in front of a family name remain in use, such as “von” in Austria, “de” in France, “van” in the Netherlands, “di” in Portugal, etc., which indicate that the person descended from the landed gentry. The titles of landed gentry in these countries are inherited. The first forms of one's welfare self-protection also in the old age emerged and started to develop due to personal effort and personal initiative, and might be described as forms of self-help. The oldest forms of welfare, their formation and consolidation, including old age provision, appeared and existed owing to personal effort and personal initiative. Those forms could be called self and mutual aid funds, where to its members made annual contributions. Then the accumulated capital of those mutual aid funds covered the costs of medical treatment and funeral expenses of their contributors. The principles of self-help may be found already in the Roman law, and they were also mentioned in the 19th century

legislation. These principles were gradually taken over by wider groups of the society - craft guilds, and later by free craftsmen associations and fraternities. Self-help saving funds used to be established, and their members made annual contributions thereto. Initially, the money from these saving funds covered the funeral expenses and medical treatment of their participants. Later, those funds supported financially the members who were injured at work, on case of death their widows and children. However, the benefits were not paid permanently and on a regular basis, but during some set period of time only.

However, those self-help saving funds cannot yet be perceived as some form of an old age security, or a pension. They were not pension funds yet. In the late 19th and early 20th century it became clear that because of certain social conditions some groups of the population were unable to protect themselves even by applying the principles of self-help, because those principles did not have a solid foundation. Therefore, the state had to intervene, and certain laws had to be issued for the protection of the vulnerable population. In Latvia at the beginning of the 19th century the parish poor were kept by the rich landlords in their estates for periods from one to three months. This maintenance of the poor was even somewhat honorable; as the landlords who could afford such assistance were recognized as prosperous. Later special houses for the poor were founded, where the parish poor and old people were given shelter, bed and food. The expenses of the poor houses were covered by a special parish duty paid by all capable landlords. The church also supported this cause. This approach is already seen in the first rudimentary forms of societal social responsibility. These examples may be described as first forms of social security in the old age. Today's attitude and practice of the provision of old people are the result of gradual development over thousands of years. Main types of first forms of old age provision are summarized in Figure 1.



**Fig.1.** First forms of old age provision

Source: author

These forms could be described as primary forms of old age security.

### 3. Pension systems development before Bismarck's social reform

Pension (from Latin. *pensio* - payment) is the money benefit paid regularly to the people of a certain old age, as well as to people who have lost the capacity to work completely or partially due to various reasons. Usually pensions start to be paid when one of the specified conditions has qualified. Early indications in the history of regular financial provision in the old age are traced back to Ancient Rome - 13 BC, when the first Roman emperor Gaius Julius Caesar August Oktavianus (August) (65 B.C. – 14 A.C.) pensioned his troops of legionnaires which had served him at least 20 years. The size of the pension benefit was from  $\frac{2}{3}$  to  $\frac{3}{4}$  of the earlier regular income. Those benefits were perceived as manifestations of the Caesar's gratitude to his legionnaires. The system existed for 27 years, but after Julius Caesar's death was forgotten or to be precise, eliminated. (Rulers had other ways to thank their soldiers for their faithful service. For example, later in the modern time, 18th century, the oldest representative of the monarchic family, the last East Georgian ruler Irakli II, granted land to his 300 faithful bodyguards-highlanders after the termination of their service, and this land gave rise to two villages.) Similar money benefits (people started to call them "pensions" in the 17th century) were paid in some European countries in the 16th century, since the professional armies were established, which used to be commanded by the retired military officers. Those pensions were granted after

officially stated period of service. In Russia it was Tsar Peter I who introduced pension benefits to the retired military officers (Pensions: from royal favor to natural right). Military officers of high ranks were awarded landed gentry titles, large plots of land and high military ranks. For example, Field Marshal, Earl of Boris Sheremetyev (1652-1719) (Latvian phrasebook-dictionary, XXI volume), who was widely known for his report to Peter I on the bloody and terrible ravages of Vidzeme "... there is nothing to take in Vidzeme any more ...". (Vidzeme had been devastated and burned, all the population had been practically destroyed or taken "captive").

For the first time people working in the public sector started to receive pension benefits in England in 1684. Their beneficiaries were the London Port Authority officials. The size of the pension benefit was one half of the retiree's previous salary, and this sum was paid to him by the person who started working in his place (Latvian phrasebook-dictionary, XVI volume). Thus, the state and the royal treasury did not have to pay a single penny for this form of old age security. This example shows that in London the public sector employees themselves became socially responsible and created the necessary funds, to which they themselves contributed. The state did not participate in either creation or contributing to those funds. The origin of the pension system as such, protected by the corresponding laws and as it is understood nowadays, can be attributed to the Great French Revolution. On August 22, 1790 the National Assembly passed a radical pension law, which was based on three principles:

- The nation's civic duty was to award their citizens for their work on behalf of the national well being according to the significance and the length of their service;
- The pension rights were to be awarded to all public sector employees;
- Labor in general was recognized to be socially meaningful and revered.

According to that law, pensions corresponding to the three principles described above were the state pensions paid from the state budget. Unfortunately they asked for too much money from the state. Soon it became clear that France could not observe its own law and failed to cover pension costs from the state budget as it did not have the necessary means. In the first half of the 19<sup>th</sup> century France, almost at the same time with other Western countries, maybe a little earlier, started to found pension saving funds, which financial assets consisted of contributions made by its members. (Similar pension saving fund had been organized in Riga in 1879; in 1921 its activity was renewed.) Quite soon it became clear that those saving funds were unable to fully implement their commitments and the state treasuries had to support them financially (Bernard Yves and Collie Jean-Claude, 1994). In the middle of the 19th century most Western countries sought to ensure the public employees retirement days, considering pension as a salary continuation. In 1831 France issued the Pension Act for the military and in 1853 for the civil servants. England adopted the Pensions Act in 1834, which applied only to certain groups of public servants, but the pension laws accepted in 1859 and 1887 already applied to all public servants. Prussia adopted the Pensions Act in 1872, which applied only to the employees of the public sector (Latvian phrasebook-dictionary, XVI volume).

#### **4. Bismarck pension system: its emergence and development**

The need for social security or pension provision in the old age for the private sector employees gradually started to be recognized. Therefore, at the end of the 19th century and at the beginning of the 20<sup>th</sup>, laws on disability, death, accident and old-age social insurance with a corresponding pension provision were accepted in a number of countries. Many countries accepted the system when pensions were provided by the state or from local government budgets. Corresponding laws on the social insurance in old-age were accepted in Denmark in 1891, in New Zealand in 1898, on old-age and disability in France in 1905, on old-age in Australia in 1908, on old-age, disability, and death, in Uruguay in 1919, and on old-age in South Africa in 1928 (The history of pensions). At the time of World War I some countries suspended their pension systems. Later social security systems in such countries were transformed into the systems of state benefits, e.g. in Australia and New Zealand, where this is their principal form of social security even now. A rudimentary forms of a general pension system for old-age first appeared in Germany in 1889. It provided for elderly representatives of working population with very low incomes, and did not include people working in agriculture. These first forms of pension schemes are associated with the name of German Chancellor Otto Edward Leopold, Prince von Bismarck (Bismarck - 1815-1898) (Encyclopaedic dictionary, 1 volume, 1991), the so called Bismarck social insurance program. The principles of Bismarck pension system were subsequently accepted by some other Western countries. The system included social insurance against accidents at work, illness, disability and old-age. In the period from 1891 to 1894 workers of the tobacco and textile industries were also included in-to groups of socially secured people. Social security payments were

made by both employers and employees. In 1889 a statutory old age security was introduced, which provided for the groups of industrial workers with a very low income, but excluded agricultural workers. Those groups of workers reaching the age of 65 and on condition that they had been paying the corresponding taxes became eligible to receiving a pension. (Average life expectancy in Germany of that time was only 45 years). Social security payments were made by both employers and employees (The handbook of economy knowledge B.d.7., 1988). Bismarck pension system principles were subsequently taken over by other Western states - Bismarck social insurance system was gradually introduced in the period from 1883 to 1889. It included insurance against accidents at work, illness, disability and finally - old age security in the form of a retirement pension benefit. Bismarck pension system was the first evidence of emerging employer's social responsibility, which expressed itself in the form of contributions to the social insurance funds. Bismarck social insurance institute changed such previously applied concepts as "assistance" and "responsibility" into "official" and "mandatory" benefits. These benefits were meant to compensate for the complete loss or reduced income in the case, for example, of the employee's injury at work (The Hutchinson Dictionary of Ideas. 1995).

Although many principles of Bismarck pension system were accepted by a number of Western countries in the late 19th century, national pension systems developed unevenly. For example, France introduced social security against accidents in 1898, but social insurance in cases of childbirth, disability, old age and breadwinner death only in 1928 – 1930. Family benefits were introduced in 1932 (The Hutchinson Dictionary of Ideas. 1995). In the late fifties of the last century a situation had established when the periods of time during which social security contributions were made by the employees in the public and private sectors were different. That created privileges for the public sector workers – their period of social security payments was significantly shorter than that of the workers in the private sector. These imbalances are now eliminated. In Anglo-Saxon countries, the introduction of Bismarck pension system developed in its own way. There are authors who use the term German pension system for Bismarck pension system, and American pension system for Anglo-Saxon. Anglo-Saxon or American pension system was aimed at poverty reduction, but Bismarck or German pension system was generally directed to assist working people in maintaining their social status and quality of life after the loss of working capacity due to old age. Anglo-Saxon system was focused on the principles of liberalism, when the state intervened with providing care only to those individuals who were unable to take care of themselves, such as the disabled, or supporting with benefits the poorest layers of population. Mostly this system relied on the population self-sufficiency and mutual support institutions (The history of pensions). In the second half of the previous century, these two systems gradually converged. Nowadays, there is a following change in the trend of pension funds formation: the number of people willing to be employed is increasing, but the number of employers is decreasing. Today, the main trend in the development of social security systems is to provide for a wider range of people who need to be socially protected, including those people who are not salaried.

## **5. Market economy countries approaches to pension systems**

In the market economy countries three types of applied social security systems may be distinguished: social insurance, state benefits, and general pension system. Social insurance is the most widely applied system. It is based on mandatory insurance payments as a percent of earnings to the social security budget. These payments give right to receive a pension and other related benefits if the social insurance payment record and age correspond to regulations and other conditions are observed. The size of a granted pension or benefits does not depend on the financial situation of other members of the beneficiary's family. State benefits are paid entirely from the state budget. But these benefits are granted selectively, not only to those who are not capable to work due to disability, but also after the assessment of their family's income and financial state. Then the authorities concerned decide whether to recognize the person officially as having no means of subsistence. Many countries use the system of benefits as auxiliary means, when social security system does not provide a sufficient level of subsistence. However, in some countries, such as Australia, New Zealand etc. it is a principal social security system arrangement. In Australia retirement pensions are one of the state social assistance instruments. They are given to those people whose wealth and annual income do not exceed a certain threshold of the general living standard (Pensions in foreign countries – the truth and myths). The general pension system recognizes the right to receive a pension by all citizens who have reached the retirement age, become disabled or lost their breadwinner. According to this system a pension is paid monthly as a fixed payment. Pension funds are formed from a social security tax paid by all working population from their first day to the day of retirement, i.e., the principle of generation solidarity is respected. This pension scheme is accepted in all Nordic countries and in some other states. Many market economy countries take a

socially responsible approach in their attitude to pension provision. Socially responsible countries are not only those that pay pensions from the state budget. Historical records show that the law of the state responsibility regarding pensions, adopted by French National Assembly in 1790, failed because of the lack of money in the national budget. Today socially responsible countries are those that developed a system providing its residents with social security guaranteed by the state. Such systems include corresponding social funds, or treasuries that are formed from payments made by employees, employers, and by the state. Some recognized socially responsible countries are the Scandinavian countries, Germany, Great Britain, etc. These countries even allow receiving several pensions, e.g. in the United States, when the appropriate criteria are observed. These may be social pensions, the retired military ranks may receive a military pension, or a pension for fighting in the Vietnam War, company employees may receive corporate retirement pension, etc.

In the USA it makes the difference whether a person worked in the state (national) sector, in a state (local, of a separate US state) sector or in the private sector. In the first case retirement pensions are quite substantial and are paid from the national social security budget. Governmental and municipal employees (except military) retirement pensions are divided into:

- The federal government pensions (paid from the federal funds).
- Separate state and local government pensions (paid correspondingly from a state and from local municipalities' funds).
- Social pension, which size is dependent on deductions from wages and salaries, and in some cases also on employer's contributions. Social pensions in the USA are recognized as rather small in comparison to the existing living standard.

Retirement pensions in the private sector depend on how much employees were able to save in the private pension fund during their working life without the employer's contributions. However, in the USA, instead of guaranteed payments to private pension funds companies prefer various retirement plans when payments are deposited in the private pension fund, but are invested in stock exchange. If employees think that the employer's contributions are too small (typically 3.0% -5.0% of salary), they may themselves add the desired extra (Kenins-Kings G., interview on 10.09.2009.). People working in the public sector can also save in private pension funds. Social security system in the USA is considered to be a socially fair system, because it provides also for the part of population, which have not made any significant social security contributions. Employees do not make any contributions for a retirement pension, state pension or occupational pension. In addition, these pensions are granted without regard to age qualifications, but only according to the retirement pension criteria such as the required length of service, or the period of teaching at universities for the academic staff, etc. (Interview on 10.09.2009.: Kenins Kings Gundars Julians (born in 1926) (Encyclopaedic dictionary, 1 volume, 1991)), the U.S. Dr. phil. (Doctor of Philosophy), Latvian Dr. habil. oec. (Habilitation Doctor of Economics), a foreign member of the Latvian Science Academy (Kenins 2004).

In the UK two pension systems are accepted: one is provided from the state budget, the other from private funds. The size of a state pension depends on each individual's contributions to the social security fund (*National Insurance Contribution*), which are accumulated during at least 30 years. The sum of about 50% from the state pension is also paid to a spouse if contributions to the national insurance fund have been not made on their behalf. The state pensions are rather small according to the living standard recognized in Great Britain. Therefore, certain people are entitled to receive special benefits, e.g. for the payment of rent. Private pensions are paid out to those who made respective contributions to the private pension funds. The period of time during which such contributions may be made is not limited. The sums of such contributions are larger than the national insurance contributions, so private pensions are usually higher than the social security pensions. Pensioners living in the UK and receiving a basic pension from the state have their pensions increased (positively indexed) every year. Similarly, these pensions are indexed for British pensioners living in other countries, where a corresponding social security agreement has been signed. All market economy countries, especially socially responsible ones, accept the pension system based on the generation solidarity principle, i.e. the combination of all current taxpayers' attitude and working activity, when all currently employed working people in a state voluntarily support and pay their social security tax and other payments in order to provide their compatriot retirees with pensions. This means that current retirees' pensions are provided by currently employed people paying corresponding taxes.

However, the principle of intergeneration solidarity has the following major disadvantage: it is working beneficially for the society only when the population reproduction rate is high (i.e. the birth rate exceeds the mortality rate). The population of the developed market economy countries has already been ageing for a

long period of time (i.e. the birth rate has been lower than the mortality rate). This social phenomenon has created a situation when the number of people paying the social security tax is decreasing. In addition, the life expectancy has increased, which consequently increased the period during which people receive pensions. All that together has led to specific challenges, mainly related to the retirement age, and to the expansion of the labor market in order to provide people of pre-retirement age with employment. The principle of intergeneration solidarity, when the existing taxpayers provide the state and local government pension recipients with pensions, resembles the notorious financial investment pyramids. In both cases the higher layers of the pyramid live at the expense of the lower layers. The process when financial pyramids start experiencing the lack of investors (payers) goes much faster, because the number of investors (payers) is much lower than the number of social tax payers in a state. The financial investment pyramid can exist as long as the number of investors (payers) grows.

## 6. State Pension Systems in Western Europe, Far East, Africa and Asia

In the countries of Western Europe the main problem of the state pension system based on the principle of generation solidarity is explained by a negative demographic situation affecting the number of population who today pay pensions to existing pensioners. Some solutions of the state pension system problems in the EU leading countries are explained below. The industrially developed countries of the Far East, such as Japan, South Korea, Singapore, etc. are notable for relatively low contributions to pension funds (hence small pension benefits), but other countries do not form pension funds at all, so there are no retirement pensions whatsoever.

**Great Britain.** The current pension system in the UK has the following disadvantages:

- About 7 million of economically active population do not make any contributions into the social security funds.
- A younger working population will have to pay off the current debt.

To improve the situation, it is proposed that from 2020 men and women should retire at the age of 66, and gradually the age of retirement should be prolonged to 68 years. Currently the British government is considering a unified pension system. The main beneficiaries of such pension system would be women, low-paid workers and self-employed, as well as those who are currently entitled to a pension, but for some reasons postpone to retire and receive it. Some experts have calculated that women in the UK receive on average about two thousand pounds a year less pension money than men. This phenomenon has a number of objective reasons, e.g. women take care of children and may work less than men or not work at all (The pension system of Great Britain).

**France.** A new pension law in France has reduced the privileges of workers in the public sector by increasing the number of years during which contributions should be made to the state social security fund. This new law is more consistent with the demographic situation in the state and with the economic reality. The length of time during which contributions are to be made to the pension fund has become at least 41 years from 2012, and will be 42 years from 2020. Besides that, on October 26, 2010, the French Parliament passed a law that increased the age of retirement from 60 to 62 years (On the pension system of France).

**Germany.** At present Germany have the following kinds of pension:

1. disability pension;
2. company (occupational) pension if a person has worked at least 10 years at a certain company, so there may be several such pensions;
3. State old-age pension, which the German citizens living in Germany receive in full 100% volume, but those who live abroad get 70%.

These pensions are awarded if certain requirements are met. German pensioners get other social benefits, such as covered surgeries and associated costs, medicines and medical prescriptions, the cost of dentures and other medical devices, e.g. orthopedic shoes, crutches, canes, etc. These expenses are also covered to those German citizens who do not reside in Germany (Interviewee on 08.04.2013.: Kalējs Jānis (born 1925)), a citizen of Germany, living in Latvia in his family real estate and receiving all three indicated kinds of pensions with compensations for surgery covered by the German social security; interviewed the day before his endoprosthetic surgery (Kalejs). At the moment a range of structural reforms in the systems of retirement, pensions and health care, similar to those accepted in France, are being considered in Germany (The pension system of Germany).

**Italy.** The retirement age in Italy is 61 years in 2013 and it may be gradually increased up to 66 years (The pension system of Italy).

**Sweden.** Today the retirement pension guaranteed by the state is paid from age 65, which in Sweden is usually understood as the age of retirement. The pension system in Sweden is based on the following

approach: the size of a particular pension depends on the individuals' income during their working life and the total number of years that have been served in work. Primary pensions or pensions based on contributions made from the worker's income during the whole length of service are paid from the independent pension fund, which is completely separated from the state treasury (budget) while the minimally guaranteed pension is paid from the state budget. However, these pensions are essentially dependent on the current working population contributions which begin to decrease. The Swedish government considers that their pension scheme needs to be reformed, and the work environment should be reformed too. The goal is to reduce the load not only for workers who perform hard physical labor, but also for others, especially pre-retirement and retirement age workers. There-fore, much attention has been paid to provision of the workers of this age group with opportunities to raise their level of education and improve their skills. In Sweden in general the level of education is given a significant consideration. Today it is increasingly difficult to find a job for people with uncompleted secondary school education or lower. The Swedish government is also considering raising the retirement age qualification, but they are going to approach this issue with differentiation: the general retirement age and the retirement age for heavy physical work performers will be different. Currently the following point of view prevails: people performing heavy physical labor can not easily perform such work when they are older than 61. The increase of the retirement age qualification leads to the increase of the number of people active in the labor market. It also affects the involvement of young people and people with special needs into the labor market, which is a current challenge also in the EU. The problem of "people with special needs and their involvement in the labor market" is approached in the best way in Germany, where attempts are undertaken to interest the employers in offering jobs to such people. Sweden is trying to prevent situations when employees of pre-retirement and retirement age are discriminated and to deprive employers of reasons to fire such employees by way of providing these groups of workers with opportunities to retrain, to increase their level of education, and to improve their skills. In overall, the increase of the labor force available at the labor market asks for the increase of the national economic activity, which expands the total volume of production and provision of services in the country (The pension system of Sweden).

Many Far East countries, e.g. Japan, Korea, China, etc. do not have any developed social security systems for old age and retirement. Traditionally there is a general attitude that retirees and their provision in old age is a liability of their families. Existing pensions are small, especially in China. The same attitude characterizes many African and Asian countries, where pension systems do not exist at all. Elderly people when they are not able to work at all become a liability of their families, but governments do not form any social security funds from which their elderly population may be sup-ported. Maybe there are some people in Latvia who believe, like a micro surgeon Martin Kapickis does, that people in those countries are socially very responsible and themselves take care of their elderly, when they can, and when they cannot, their elderly relatives may just go out and beg, as this increasingly happens in India. Should such social security system be adopted as a paragon? The state having such a "system" is not socially responsible.

## **7. Pension system in the Soviet Union**

Many people believe that they should be grateful for the pension system to the Soviet Union, where it was developed according to the Leninist principles. Latvian SSR, as well as all other Soviet republics, did not have its own pension system, so we cannot speak about "the pension system during Latvian SSR" or use any other similar definitions. If one wishes to link the Soviet pension system with a particular personality, then in no way can it be linked with the name of V. Ulyanov - Lenin. Neither K. H. Markss nor F. Engels together with V. Lenin had written anything on the issue of pensions that would be worth mentioning. Consequently, there are no any Leninist principles in the Soviet pension system. Rather the creation of the Soviet pension system could be associated with N. Khrushchev's initiatives. Also during his time, namely since March 1956, the collective farmers (agricultural workers) started to be paid monthly and not annually. So the development of the pension system in the Soviet Union in 1956 and 1964 should be attributed to the personality of N. Khrushchev because he had taken active steps not only in the process of desalinization, but also cared for the well-being of the Soviet people, including securing them with a stable retirement income. According to the Leninist principles as applied to pensions, they may conditionally be attributed to the idea that workers had to be insured against all cases of earnings losses, without any kind of the workers' participation in contributing to corresponding funds. Here it can be seen that V.Lenin somehow considered and took into account the needs of the working class (although those principles had neither been applied nor taken into account before or after 1956), and nothing had ever been done for people working on collective farms. Moreover, each spring till 1957 collective farmers were made to buy public bonds of domestic borrowing from the government. Even the poorest collective farms were granted advance payments with prescription to purchase



the bonds, even though many collective farmers still owed to their collective farms and could not receive their earnings even once a year. Those advance payments automatically became debts and increased the debts of the previous years. Many collective farmers had not been able to get out of debt bondage for years. Such were “Leninist principles”. The founders of Marxism-Leninism and the Soviet Union cannot be attributed to the establishment of a modern pension system. In the former USSR the common pension law was passed only in 1956, but it did not provide for all working people, but only for workers and employees, including collective farm specialists. Since 1956 old age pension was provided for men from 60 years and women from 55 years old. The pension law providing for agricultural workers of collective farms was started to develop only in 1964. The years spend in agricultural work at collective farms were started to be included into the general working period or length of service entitling people to the retirement pension only in the 1970s. Generally the size of the retirement pension was 120 rubles in 1970-80s. If the length of service was uninterrupted during 25 years, the size was 10% bigger, 132 rubles. There were also special so-called nomenclature pensions for party executives, military ranks, etc, which were much bigger than 132 rubles. For example the retired highest members of the Communist party politburo received 500 rubles of monthly pension money. These pensions together with many other benefits were provided from the state budget (Oxford English-Russian and definition dictionary of business terms 1995). In the period from 1956 until 1967, when there were separate pension provisions for collective farmers and industrial workers, there were people receiving neither a pension of an industrial worker, nor a pension of a collective farm worker, because of changing jobs and not accumulating the prescribed years of uninterrupted length of service. In order to provide collective farmers with retirement pensions, a single centralized Soviet Union collective farmer social security fund was established in 1964. It was made up of deductions from the collective farms income and was also financed from the USSR state budget. State enterprises paid social security tax to the state budget (Great Soviet Encyclopedia 24. Book 1, 1976). The length of service then started to include also the time spent working on the collective farms and all collected social security taxes were included into the state social security budget. After determination of the whole length of service (it included also years of work on the collective farms), the fund was retained and included in the total social budget.

In the Soviet Union, the source for state pension benefits payment was the state social insurance budget, which major component consisted of the pension funds formed by the deductions from the profit of companies, institutions and organizations that went to the state budget without direct deductions from wages and social security contributions of workers. Although the Soviet ideologists emphasized that the Soviet pension funds were formed without affecting the wage bill, such groups as collective farmers and related workers, as well as the enterprise workers who were “paid, depending on the yield”, were making contributions to those funds, which reduced their income. The deducted sums could have been used for material stimulation or generally for the increase of their wages. It is impossible to agree with the Ministry of Welfare Deputy Minister Maija Porshnova view that “young eastern republics made good contributions (to the social fund – the author’s note), and “older republics such as Estonia, Latvia and Lithuania got advantage of being able to pay from them” („them” – social funds – the author’s note) . Such an opinion could be somewhat justified if it were expressed by demographers, but the detailed analysis of the economic situation produces a different picture. As stated in the previous paragraph, pension funds were formed by the contributions of organizations and enterprises, plus social security contributions. However, the economically strongest contributors were industrially and agriculturally developed regions, to which Estonia, Latvia and Lithuania may be attributed in their own right. In per capita terms, those areas gave a greater contribution to pension funds than “younger” eastern republics, where there was even hidden unemployment (which could not be eliminated even by the repressive measures of the Criminal Code “for vagrancy” because there were no vacancies and no job places). In these republics employment was problematic especially among women.

## **8. Soviet ideological propaganda against Western pension systems**

The Soviet ideologically biased scientific publications wrote that:

- the provision of the population of the capitalist countries with pensions was limited (Soviet social security law 1982);
  - it was typical for the capitalist countries to compulsory deduct from workers’ wages (Oxford English-Russian and definition dictionary of business terms 1995); (Great Soviet Encyclopedia. 24. Book 1 1976).
- Such opinions circulated even in the 1980s, i.e., at the time of M. Gorbachov’s transition period known as “perestroika”. Similar views were held by V. Andreyev, G. Simonenko, V. Usenins, etc. In order to ascertain the truth of these allegations, let us not analyze the Nordic countries experience in provision of their

population with pensions, where this provision is the highest, but concentrate instead on the related experience of more conservative countries, e.g. Great Britain (Bernard Yves and Collie Jean-Claude, 1994). The following pension schemes are applied there:

**Retirement pensions** are usually paid by the state (65, 60 years), and it is received by a person independently of the fact, whether or not this person was fully employed prior the age of statutory retirement.

**Non-contributory pensions** are awarded unconditionally without any kind of person's previous contributions, when social security payments are made by the state or a company.

**Earnings-related pension** - the state pension pro-gram that focuses on:

- Balancing pensions with inflation, i.e. that the indexation of pensions;
- Women's and men's income equalization.

**Pension funds** – the public sector or private sector corporate contributions (membership fees). Usually, these funds are managed by individual organizations.

As follows from these four examples, workers do not participate in any of these pension schemes.

**Executive pension plan (EPP)** - the pension fund for senior executive managers and company directors, when a company or a corporation makes payments (membership fees) into a special pension fund. Companies and corporations may have other independent pension funds and their contributions thereto are tax-free.

As it can be seen, in this case, contributions to a pension fund are made by the employer.

**Contributory pension** – pension benefits are pay-able from the pension funds to which contributions have been made by both the employees and employers.

All these pension schemes may be supplemented at any time by private pension funds sourced by the participants' own contributions which ultimately will significantly improve their financial provision in retirement.

In the UK because of the significant national sup-port of the country's pension system, a situation has formed when the number of capable persons of working age has increased, who do not invest in the system of social security, namely the system of pensions. At the beginning of 2011, there were about 7 million of such people.

## 9. Overview of pension schemes

Overview of pension schemes can be seen summarized in Table 1.

**Table 1.** Summarized overview of pension schemes

N	Systems	The features of the system	Results (outcomes)
1.	The pension system of the French First Republic	Workers of the public sector receive retirement pension from the state budget	Finally was not implemented because of lack of budget funds
2.	The population self-formations (self support groups, sickness funds, etc.).	According to the goals of the formation, it partially performed for its members some social insurance functions	Failure to provide a general social security
3.	Bismarck pension system, gradually split into two systems:	At the beginning it provided for elderly representatives of working population with very low in-comes	System was the first evidence of emerging employer's social responsibility.
	a) German pension system	The system was more based on the principles of a socially responsible state	It was generally directed to assist working people in maintaining their social status and quality of life after the loss of working capacity due to old age
	b) Anglo-Saxon pension system	Public, i.e. state and municipal sector, provide its workers with sufficient pensions. Workers of the private sector receive their pensions from the retirement funds formed from contributions of employees and employers. Each country has its own system of benefits	The state intervened with providing care only to those individuals who we-re unable to take care of themselves, such as the disabled, or supporting with benefits the poorest layers of population.
4.	Pension system in the Soviet Union	The source from which pensions were paid was the State Social Security Fund, which was comprised of the public pension funds	The system was aimed to ensure a retirement per-son corresponding to a minimal standard living of a soviet citizen
5.	State Pension Systems in Far East, Africa and Asia	Most countries provide for elderly people even when they have families, but more often nor the state nor the family provided for them	To provide a minimal standard of living from the state, or the issues of social security will not be addressed at all

Source: author's construction

## 10. Brief assessment of the systematized state pension system

From the time of the first systematized pension systems, each subsequent variant covered ever wider range of population, and that served as the basis for further amendments to the pension system – de-fining the next exit points, i.e. including the assessment of the previous pension system potential. For example, population self-help groups partially sup-ported just a narrow range of their members. This system was unable to provide a high level of social security, including the required level of old-age pensions, not to mention the general social security. This system did not have any signs of social responsibility. The Bismarckian social reform had already had signs of social responsibility. Bismarckian public pension system and its variants created the pension intergeneration solidarity principle and contributed to its development. Pension systems based on this principle provided state pensions, which were covered by tax payments of the working population. In Bismarck's Germany it was ensured by the demographic situation, including also such a factor as low average life expectancy of the population.

Essentially the elements of the principle of intergeneration solidarity were put into the basis of the French First Republic pension system, which ultimately was not applied, because the state budget could not provide for it. Also the united pension system of the Soviet Union, introduced in 1967 was based on this principle, and the united pension fund was formed by contributions from the state budget, from the Centralized Soviet Collective farmers' Union social security fund, i.e. the deductions from the collective farmers' income, alongside with tax payments of businesses, organizations and institutions. In general, the intergeneration solidarity principle laid at the basis of the pension system pre-vented to introduce a united pension system in the USSR earlier due to the lack of budget funds as other sources had not been sufficiently developed yet.

The principle of intergeneration solidarity as the basis of a pension systems has both positive and negative features. Its major positive feature is provision of a certain level of social security as manifestation of the social responsibility of a state. Its major negative features are the following:

1. It opposes retirees as partial consumers of the social tax and working population as tax payers, which opposition may create the social tension in the society e.g., in Latvia and Lithuania.
2. This principle functions successfully if a country has a positive demographic situation, i.e. when the birth rate outnumbers the death rate and GDP has a positive growth rate. These two conditions should be present simultaneously, and the total effect of their functioning should be sufficiently positive. Otherwise, working people may develop a perception that they will not have pensions in their due time because the-re will be no sufficient number of tax-payers. So they may conclude it is not worth to be legally employed and pay taxes, but better be employed not legally, i.e. in the "black" or "gray" sector of economy, and get more income (salary plus unpaid taxes) as instant gratification.

Even employers in socially responsible countries make advantage from the influx of migrant workers and a high rate of unemployment, and use such instruments of "gray" and "black" economy as "envelope wages", which cover partially and sometimes entirely everything that a migrant worker earns. No taxes are paid from such earnings. Basically "payment in envelopes" is not an invention of postsoviet countries, but an improvement thereto it may well be. In Latvia the notorious practice of "wages in envelopes" started with the appearance of Norwegian supermarket network *Rimi* at the Latvian market. Regarding the issue of secured retirement, employees in that case chose or agreed to a completely disadvantageous solution. Such a decision will adversely affect a secured and sustainable long term perspective of the old age.

Employees are indirectly encouraged to avoid paying social tax entirely or partially because of the "enterprise agreement" commonly applied in Latvia. Entering into this agreement, an employee becomes "a job performer" like "an enterprise", al-though working conditions and job responsibilities are the same as before for "the employee". The necessary taxes have to be paid by the enterprise – in this case by a job performer (oftentimes the actual employer does not notify "the enterprise" about this obligation). Frequently, such employees, treated as an enterprise, do not pay any social tax or pay just a minimum social tax rate. Therefore, they do not develop their pension capital sustainably, i.e., their pension capital does not grow. Summing up positive and negative features of the intergeneration solidarity principle, it can be concluded that it starts losing its potential. Therefore, the economic thought should develop the concept of new pensions systems, which will motivate a working person to save for his own retirement from the first day of his employment. This would also strengthen the sector of legal or 'white' economy. As can be seen from the economic experience of developed countries and the pattern of social trends, the principle of generation solidarity as the basis of a pension system is beginning to exhaust its positive potential.

## Conclusions

First rudimentary forms of old age security and some features of un-systematized pension systems became the beginnings of modern pension systems development.

The origin of the pension system as such, protected by the corresponding laws and as it is understood nowadays, can be attributed to the Great French Revolution. On August 22, 1790 the National Assembly passed a radical pension law, which was based on three principles: The nation's civic duty was to award their citizens for their work on behalf of the national well being according to the significance and the length of their service; the pension rights were to be awarded to all public sector employees.

Labor in general was recognized to be socially meaningful and revered. According to that law, pensions corresponding to the three principles described above were the state pensions paid from the state budget.

A rudimentary forms of a general pension system for old-age first appeared in Germany in 1889. These first forms of pension schemes are associated with the name of German Chancellor Bismarck, the so called Bismarck social insurance program. The principles of Bismarck pension system were subsequently accepted by some other Western countries.

Bismarckian pension system demonstrates the social responsibility of the employer. The principles of Bismarck pension system at the end of the 19 century and the beginning of the 20 were accepted by many industrially developed countries, and as a result two types of pension systems consolidated: German (Bismarckian) pension system and the Anglo-Saxon pension system.

Anglo-Saxon (American) pension system is focused on poverty reduction. This system is based on the principles of liberalism, when the state intervenes only to take care of those individuals who are unable to take care of them-selves, and to support the absolute poor part of population through the system of special benefits.

Bismarck (German) pension system as a whole assists the individual in maintaining their social status and quality of life also after the loss of working capacity due to aging.

In the second half of the previous century, these two systems gradually converged. It proved to be impossible to introduce a pension system paid fully from the state budget, according to the experience of France after the Great French Revolution, because the state budget lacked the necessary funds. Also in the Soviet Union after accepting the system of calculation of the complete length of service in 1967 the social budget fund failed to provide the necessary means. Therefore, the Centralized social security fund of soviet collective farms was preserved and integrated in the total social budget. Socially responsible countries today are those that apply systems providing its residents with the state social security.

Today the employee's social security tax, which forms the pension capital fund, is increasing, but the employer's share is decreasing. The obvious tendency in developed Western countries is the increase of age qualification for the recipients of state pensions.

Bismarckian pension scheme may operate on the principle of generation solidarity. The pension scheme based on the principle of generation solidarity presupposes raising the retirement age qualification.

Raising the retirement age qualification causes a number of problems for the labor market: the length of service of working people increases which in general aggravates the problem of employment for the young and reduces the involvement of individuals with special needs (the disabled) in the labor market.

The national economic activity should be encouraged in all ways, and at least should correspond to the labor market demand and to the current growth of labor productivity.

In order to make the increase of the retirement age qualification beneficial for the society it is necessary to perform a number of actions, among which the most important would be:

- provision of widely available opportunities for people of pre-retirement and retirement age in raising their level of education, retraining and improving their skills;

- encouraging initiatives in the national legislation which will motivate employers to employ people of vulnerable age groups, rather than dispose of them; as a result the age bias in the labor market will be eliminated;
- the national economic activity should be encouraged in all ways, and at least should correspond to the labor market demand and to the current growth of labor productivity.

The existing national pension systems based on the principle of intergeneration solidarity, although in many economically developed countries it shows a high level of social responsibility, has begun to exhaust its potential and is beginning to slow down the economic development, contributing to the “gray” or “black” sector of national economy.

As can be seen from the economic experience of developed countries and the pattern of social trends, the principle of generation solidarity as the basis of a pension system is beginning to exhaust its positive potential. Therefore, a new approach to pension schemes should be created, which will provide them with secure and sustainable development.

According to the economic features, the principle of generation solidarity laid in the basis of a pension system is somewhat reminiscent of the notorious multilevel pyramid operation. In both cases, the “pyramid” higher layers (in our case “pension beneficiaries”) exist at the expense of the lower layers (in our case “the tax-payers”). They both can exist only while the number of payers is increasing.

Therefore, a new approach to the pension system should be developed, which will motivate a working person to take care of his own retirement from the first day of his employment, and will provide him with confidence that he will have a proper pension in due time.

## References

- Achinger, H. 1953. *Soziale Sicherheit: eine historisch-soziologische Untersuchung neuer Hilfsmethoden* [Social insurance: historical and sociological aspects. Recent studies of supportive methods]. Stuttgart.
- Balkytė, A.; Tvaronavičienė, M. 2011. The role of migration for sustainable developing economy: Lithuania in the EU context, *Journal of Security and Sustainability Issues*, 1(2): 133–145. DOI: [http://dx.doi.org/10.9770/jssi.2011.1.2\(6\)](http://dx.doi.org/10.9770/jssi.2011.1.2(6))
- Bernard Yves and Collie Jean-Claude. 1994. *Tolkoviý ekonomicheskij i finansovij slovarj. Tom II.* [Economic and financial definition dictionary, Volume II]
- Bizness: Oxfordskij tolkovij slovarj. 1995. [Oxford English-Russian and definition dictionary of business terms], Moskva.
- Boljšhaya Sovetskaya enciklopediya. 24. Kniga I. 1976. [Great Soviet Encyclopedia. 24. Book 1] Moskva.
- Enciklopēdiskā vārdnīca. 1991. [Encyclopaedic dictionary, 1 volume]. Rīga: Latvijas enciklopēdiju redakcija.
- Handwörterbuch der Wirtschaftswissenschaft (HdWW) B.d.7. 1988. [The handbook of economy knowledge B.d.7.], Stuttgart
- Istoriya pensii. [The history of pensions], Available on the Internet: [http://www.ng.ru/ideas/2004-07-13/10\\_histori.html](http://www.ng.ru/ideas/2004-07-13/10_histori.html).
- Itālijas pensiju sistēma. [The pension system of Italy], Available on the Internet: [www.darbaguru.lv/?s=itālijas%20pensiju%20sistēma](http://www.darbaguru.lv/?s=itālijas%20pensiju%20sistēma)
- Ķeniņš G. 2004. *Saimnieciskie apsvērumi Latvijas tālākai izaugsmei.* [Economic considerations for Latvian further development] Gulbene: Biznesa Partneri.
- Lankauskienė, T.; Tvaronavičienė, M. 2012. Security and sustainable development approaches and dimensions in the globalization context, *Journal of Security and Sustainability Issues* 1(4): 287–297. DOI: [http://dx.doi.org/10.9770/jssi.2012.1.4\(5\)](http://dx.doi.org/10.9770/jssi.2012.1.4(5))
- Latviešu konversācijas vārdnīca. I sēj. 1992 [Latvian phrasebook-dictionary, 1 volume] Rīga: Antēra
- Latviešu konversācijas vārdnīca. VI sēj. 2002 [Latvian phrasebook-dictionary, VI volume] Rīga: Antēra
- Latviešu konversācijas vārdnīca. XVI sēj. 2003. [Latvian phrasebook-dictionary, XVI volume] Rīga: Antēra
- Latviešu konversācijas vārdnīca. XXI sēj. 2002. [Latvian phrasebook-dictionary, XXI volume] Rīga: Antēra
- Lielbritānijas pensiju sistēma. [The pension system of Great Britain], Available on the Internet: <http://www.migrantworker.co.uk/benefits.asp?langu-age=2>

Mačiulis, A.; Tvaronavičienė, M. 2013. Secure and sustainable development: Lithuania's new role in taking the Presidency of the EU, *Journal of Security and Sustainability Issues* 3(2): 5–13. DOI: [http://dx.doi.org/10.9770/jssi.2013.3.2\(1\)](http://dx.doi.org/10.9770/jssi.2013.3.2(1))

Nemnogo istorii. [Some historical insights]. Available on the Internet: <<http://www.npfstroycomplex.ru/page.aspx?cid=1cb-ff97b-77d7-4f0a-b5c2-7f0d55d9232d>>.

Par Francijas pensiju sistēmu. [On the pension system of France]. Available on the Internet: <[financenet.tvnet.lv/.../338530-francijas\\_valdiba-\\_apstiprina\\_pensiju\\_sistemas\\_reformas](http://financenet.tvnet.lv/.../338530-francijas_valdiba-_apstiprina_pensiju_sistemas_reformas)>.

Pensii ot monarshey milosti k jestestvennomu pravu. [Pensions: from royal favor to natural right]. Available on the Internet: <<http://pensionary.ru/istoriyapensii>>

Pensii za rubezhom – pravda i mifi. [Pensions in foreign countries – the truth and myths], Available on the Internet: <<http://www.isramir.com/content/view/323/189/>>.

Pensiju sistēma Vācijā. [The pension system of Germany]. Available on the Internet: <[www.darbaguru.lv/?s=pensiju%20sistema%20vacijs](http://www.darbaguru.lv/?s=pensiju%20sistema%20vacijs)>

Šmits P. 1925. *Latviešu tautas pasakas un teikas. I daļa*. [Latvian folk tales and legends, Part 1] Rīga.

Sovetskoye pravo socialjnogo obespecheniya, 1982. [Soviet social security law], Moskva

Svešvārdu vārdnīca. 2008. [Dictionary of Foreign Words] Rīga: Avots.

The Hutchinson Dictionary of Ideas. Revised edition. 1995. Helicon Publishing Ltd. Oxford.

Tvaronavičienė, M.; Grybaitė, V. 2012. Sustainable development and performance of institutions: approaches towards measurement, *Journal of Security and Sustainability Issues* 1(3): 167–175. DOI: [http://dx.doi.org/10.9770/jssi/2012.1.3\(2\)](http://dx.doi.org/10.9770/jssi/2012.1.3(2))

Tvaronavičienė, M.; Grybaitė, V. 2013. Towards sustainable economic development: estimation of institutions' role in FDI attraction, *Contemporary Research on Organization Management and Administration* 1: 109–118. Available on the Internet: <<http://www.journal.avada.lt/images/dokumentai/CROMA2013str/10.pdf>>.

Tvaronavičienė, M.; Grybaitė, V.; Tunčikienė, Ž. 2013. Globalization drivers in developed and less developed countries: if consistent patterns can be traced, *Journal of Security and Sustainability Issues* 2(4): 5–11. DOI: [http://dx.doi.org/10.9770/jssi.2013.2.4\(1\)](http://dx.doi.org/10.9770/jssi.2013.2.4(1))

Vosylius, E.; Rakutis, V.; Tvaronavičienė, M. 2013. Economic growth, sustainable development and energy security interrelation, *Journal of Security and Sustainability Issues* 2(3): 5–14. DOI: [http://dx.doi.org/10.9770/jssi.2013.2.3\(1\)](http://dx.doi.org/10.9770/jssi.2013.2.3(1))

Zviedrijas pensiju sistēma. [The pension system of Sweden], Available on the Internet: <<http://www.articlesphere.com/lv/Category/Personal-Finance/122>>.

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