THE ANALYSIS OF SOCIAL INSURANCE SYSTEMS FOR FARMERS IN SELECTED EU COUNTRIES: LESSONS LEARNED FOR LITHUANIA

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Abstract
The social insurance systems for farmers vary greatly between EU countries. Many EU countries (e.g. Austria, Finland, Poland, etc.) operate separate social insurance systems for farmers, but Lithuania is an exception. The purpose of this paper is to evaluate the sustainability and adequacy of the retirement pension system of Lithuanian social insurance in the light of the countries with autonomous systems. Along with the analyses of solutions adopted by chosen countries, the paper provides grounds for determining certain directions for reforms in Lithuanian social insurance system.

Key words: *Social insurance, retirement pension for farmers*

1. INTRODUCTION

Relevance of the topic. The open coordination method, the main aims of which are to compare social security systems of states and to establish common aims for the opportunity analysis of pension system reform, requires modernizing and adapting pension systems to various career possibilities and social models.

The topic of pensions is researched quite often from the scholarly point of view; however, the pensions of farmers, as a distinct social group, are not usually analyzed. Social insurance of pensioners and its principles are often different from the general system of a country; therefore, a separate analysis is necessary. The following papers can be mentioned as more important research on this topic: Goraj (2010), Podstawka (2010a), Jagła (2011), Gołasa (2013), Pawłowska-Tyszko (2013). The pension systems of Lithuania have been analyzed by Lazutka (2002), Bartkus (2011) and Medaiskis (2011). However, these works do not focus on the pensions of farmers separately.

The aim of the research is to evaluate the sustainability and adequacy of the retirement pension system of Lithuanian social insurance.

In order to reach the aim, the following **objectives** have been formulated:

1. To analyse the social insurance systems applied for farmers in Poland, Finland, and Austria.
2. To analyse the weaknesses of the retirement pension system of Lithuanian social insurance.
3. To provide suggestions for the guidelines of pension system reform of Lithuanian social insurance.

Methodology of the research. The comparative analysis, statistical data analysis and generalization was employed to describe social insurance systems for farmers in Austria, Finland and Poland, analyze weaknesses of the Lithuanian social insurance system, and provide recommendations for reforming Lithuania's current social insurance system.

2. SOCIAL INSURANCE FOR FARMERS IN POLAND, FINLAND AND AUSTRIA

Social insurance for farmers in **Poland** operates as an autonomous insurance system. The current system was introduced in 1990. In addition, a new agricultural social insurance system, the Agricultural Social Insurance Fund (KRUS), was established. The Farmers' Social Insurance Act of December 20, 1990 distinguishes two types of insurance: (a) retirement and disability insurance; (b) accident, health, and maternity insurance. Both types of insurance apply to the persons who are not

subject to another social insurance and do not have a fixed right to retirement and disability pension, or the right to social insurance benefits. These persons are a farmer, the spouse of the farmer, and other members of the household. The persons who do not meet the conditions to be subject to obligatory insurance can insure themselves voluntarily. Such persons can be covered by insurance at the same time, i.e. an accident, health, and maternity insurance as well as retirement and disability insurance or only an accident, health, and maternity insurance.

The analysis below concentrates on retirement and disability insurance. A person who meets the conditions of being subject to retirement and disability insurance is obliged to pay contributions. Retirement and disability insurance contributions constitute 10% of the basic retirement pension. A farmer who owns a farm with an area of arable land over 50 conversion hectares pays an additional monthly contribution at the following level: from 50 to 100 ha – 12%, from 100 to 150 ha – 24%, from 150 to 300 ha – 36%, and over 300 ha – 48%. However, it should be emphasized that additional contributions cover a small group of farmers (approximately 1%). Monthly retirement and disability insurance contributions for farmers during the first quarter of 2014 are as follows: to 50 ha – EUR 19.68, 50 to 100 ha – EUR 43.39, 100 to 150 ha – EUR 66.87, 150 to 300 ha – EUR 90.58, and over 300 ha – EUR 114.30, whereas the monthly retirement and disability insurance contribution for a household member is EUR 19.68.

The analysis of the share of retirement and disability insurance contributions in the income of farmers reveals the problem of social injustice and inequality. In 2010 and 2011, the annual contributions of the largest farms (holdings with an economic size greater than EUR 500,000) constituted 1.4% of their income, and contributions of the smallest farms – 3.4% and 3.2%, respectively (Fig. 1). It should be noted that the current situation hampers all possible changes in rural areas. Moreover, low contributions are associated with a relatively low level of retirement and disability pensions. In 2011, the monthly average gross retirement pay financed from KRUS and Social Insurance Fund (ZUS) amounted to EUR 233.87 and EUR 395.82, respectively.

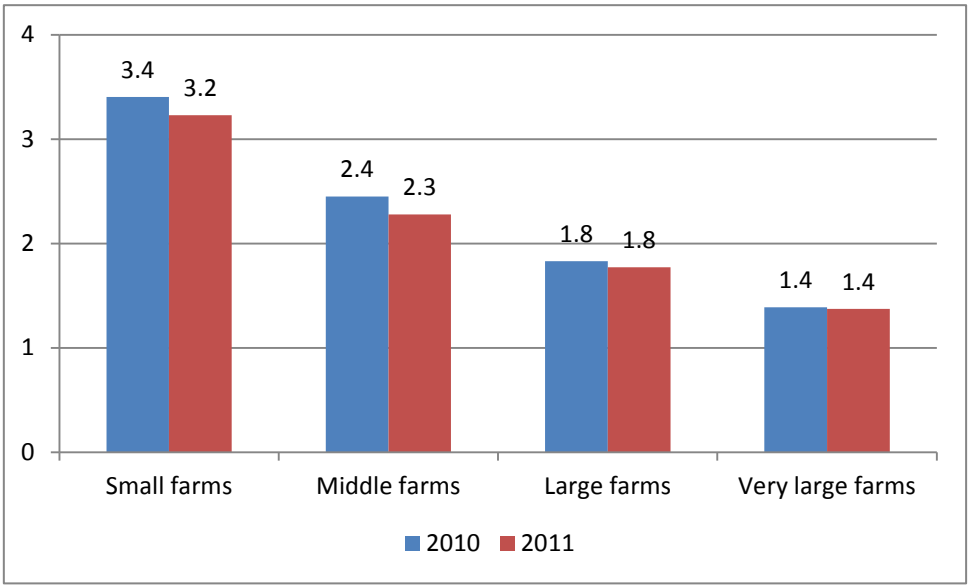

Fig. 1. The share of retirement and disability insurance contributions in income of farmers in 2010 and 2011, %

Source: Own calculations based on KRUS and FADN data, 2014.

The financial resources of KRUS are accumulated in five funds: Retirement and Disability Pension Fund, Contribution Fund of the Farmers Social Insurance, Administrative Fund, Fund of Prevention and Rehabilitation, and Motivation Fund. The Retirement and Disability Pension Fund (FER) is the

most important fund of KRUS. It is composed of contributions for retirement and disability insurance, refunds from the resources of the Social Insurance Fund for the coverage of specific expenditure, and supplementary subsidy from the state budget. The structure of the revenue of FER is presented in Table 1.

Table 1. The structure of revenue of the Retirement and Disability Pension Fund

Type of revenue	2007		2008		2009		2010		2011	
	EUR[1] mill.	%	EUR mill.	%	EUR mill.	%	EUR mill.	%	EUR mill.	%
Subsidy from the state budget	3,314	92	3,526	91.9	3,748	92.1	3,542	91.4	3,585	91.3
Farmers' contributions	0,284	7.9	0,290	7.6	0,308	7.6	0,319	8.2	0,335	8.5
Other revenue	0,004	0.1	0,022	0.5	0,014	0.3	0,013	0.4	0,006	0.2
Total revenue	3,602	100	3,838	100	4,070	100	3,874	100	3,927	100

Source: Own calculations based on KRUS data, 2014.

Table 1 shows that in 2011 total revenue of FER was EUR 3,927 million, whereas subsidy from the state budget amounted to EUR 3,585 million. This indicates that subsidy from the state budget is the most important source of revenue of the Retirement and Disability Pension Fund, and it is a considerable burden on the state budget (Fig. 2). The revenue from contributions of farmers in 2011 amounted to 8.5% of the total revenue of the FER. It should be emphasized that an increase in the revenue of the FER from contributions of farmers in 2010 is the result of additional contributions introduced in 2009.

[1] 1 EUR = 4.2171 PLN, 2014-03-11

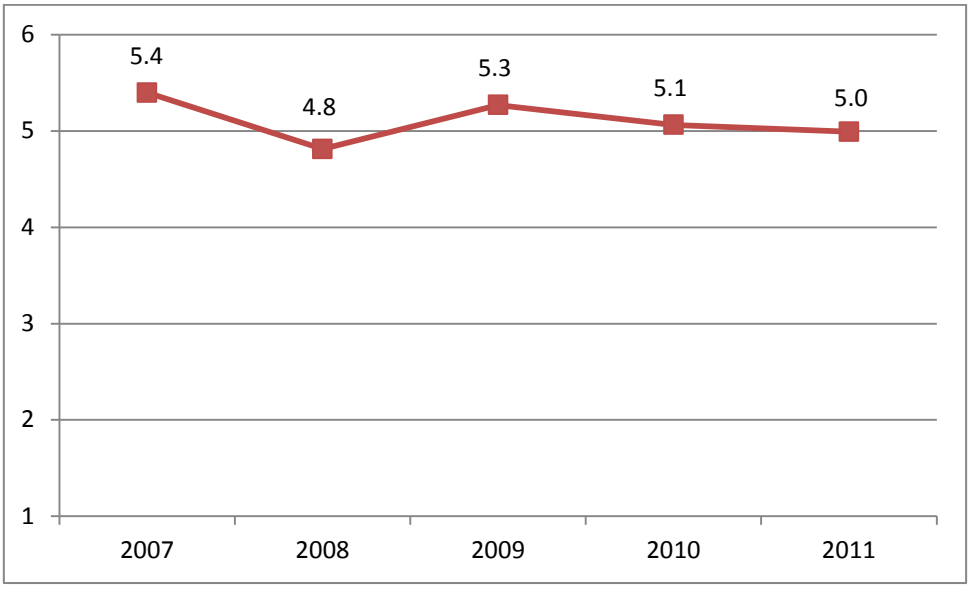

Fig. 2. The share of subsidy to FER in total state expenditures in 2007-2011, %

Source: Own calculations based on KRUS data, 2014.

In the social insurance of farmers in **Finland,** the Farmers' Social Insurance Institution (MELA) was established in 1969, which operates as an independent system. This institution is responsible for the retirement and pension protection, for statutory accident insurance, and for the holiday of farmers. MELA is concerned with individual farmers, including agricultural entrepreneurs, fishermen, reindeer breeders, foresters, fruit producers, gardeners, and their family members. It should be noted that the recipients of scientific or artistic grants and scholarships also fall within the scope of MELA from the beginning of 2009.

The Farmers' Pension Insurance (MYEL) is earnings-related pension insurance. The rate of contribution depends on the age of the insured and the amount of earnings. The earnings of farmers are determined on the basis of the cultivated agricultural and forest area, as well as related farming activities possibly carried out at the farm. In 2014, the average rate of contribution for farmers is estimated at 13.4%. MYEL insurance contribution rates in 2014 are presented in Table 2.

Table 2. MYEL insurance contribution rates in 2014, %

Amount of earnings	Under 53 years	Over 53 years
Annual earnings less than EUR 26,031.02	12.58	13.39
Annual earnings EUR 26,031.02-40,905.96	Contribution rises gradually	
Annual earnings exceeding EUR 40,905.96	23.30	24.80

Source: Finnish Centre for Pensions, 2014.

It should be emphasized that the state finances most pensions of farmers. The main reason is the high number of recipients in relation to insured persons. The number of farmers insured under MYEL is around 70,000, and the number of grand recipients is around 3,000, whereas the number of people receiving MYEL pension is around 140,000. In 2014, the share of state in the pension expenditure is

78% of the total pension expenditure. The share of MYEL pension expenditure in the total state pension expenditure in 2007-2011 is presented in Fig. 3.

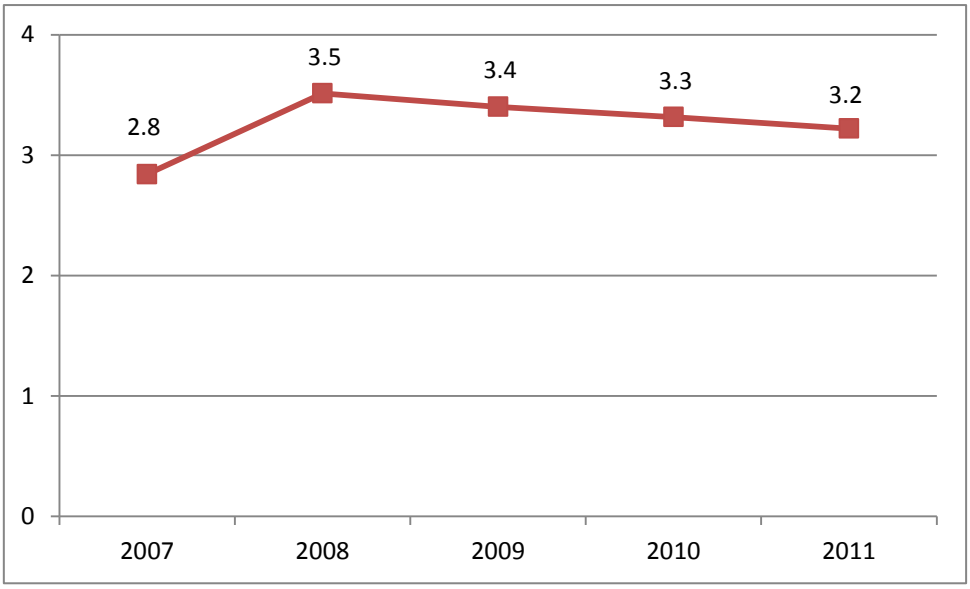

Fig. 3. The share of MYEL pension expenditure in total state pension expenditure in 2007-2011, %

Source: Own calculations based on Finnish Centre for Pensions data, 2014.

The efficient functioning of social security of farmers in **Austria** is ensured by Farmers' Social Security Authority (SVB) introduced in 1974. SVB covers health, accident, and retirement insurance for farmers and their families. Similarly to all social insurances in Austria, the social system for farmers is also based on the principle of compulsory insurance. This means that the insurance does not result from a voluntary application, but from the existence of a certain condition as defined by the law. Moreover, social security is characterized by the solidarity principle. This implies that most benefits are the same for all irrespective of the amount of contributions paid: benefits paid to economically weaker groups are partly covered by contributions of those at the upper end of the income scale. However, retirement insurance is related to the income situation.

The contribution basis for Austrian agricultural/forestry entities is derived from the assessed value (flat calculation), expressing the productive capacity of the entity. Additionally, if the farm manager's place of residence and business are located in Austria and he/she owns or utilizes agricultural/forestry areas in an EEA member state, these areas are also used in the calculation of contributions.

In general, the income generated from farming activities as ancillary work entails a higher social security contribution basis. There are two options for calculating such contribution basis. If the calculation is based on the income listed in an income-tax assessment ruling, income from all activities shall be applied as a basis. If, however, the farm manager decides to opt for a flat calculation, 70% of gross earnings are deducted as flat business expenses, and the remaining 30% are used to calculate the annual contribution basis. Both in the case of farming activities and ancillary activities there is a minimum and maximum contribution basis. The income exceeding a maximum contribution basis is exempt from social security contributions.

The contributions are calculated by using contribution rates. The current contribution rate for retirement insurance is 22.8%. One portion of this contribution is paid by the insured party, and the other portion is covered by the Austrian Federation in the form of the so-called "Federal Partner Benefit." In 2013, the insured party and Austrian Federation were liable to pay 16% and 6.80%, respectively. In July 2013, the contribution rate for a policyholder in the pension insurance plan

accounted for 16.50%. It will increase gradually until 2017, when it will reach 17%. The contribution rate for retirement insurance and contribution rates for health and accident insurance are presented in Table 3.

Table 3. Social security contribution rates of farmers, %

Type of insurance	Contribution rate
Health insurance	7.65
Accident insurance	1.9
Retirement insurance	22.8
Retirement provision for the self-employed	1.53 of the retirement insurance contribution basis

Source: Farmers' Social Security Authority data, 2014.

Due to a problematic demographic structure in agriculture, the Federal Government pays grants in the form of federal contributions for supporting the insurance system of farmers. In 2012, SVB was subsidized from the state in 72.1%. The subsidy amounted to EUR 2,202 million and equated to 4.8% of total state pension expenditure. The subsidy to retirement insurance accounted for more than 70%.

The analysis has revealed that Austrian, Finnish, and Polish systems are rather similar. The main problem of each country is a high number of recipients in relation to insured persons, and due to this, a high level of subsidy from the state budget is necessary. However, despite a considerable burden on the state budget, the systems analyzed perform a number of other functions, not only the social one. For this reason, they still operate. The analysis also shows that the systems analyzed will be subject to inevitable adjustment in the future in order to keep them secure and financeable.

3. SOCIAL INSURANCE FOR FARMERS IN LITHUANIA

A retirement pension is divided into three parts, i.e. main, additional, and bonus, depending on the years of service. The main part is designed to smooth the size of pension and redistribution. This pension is set equal to 110% of the flat rate of a pension if the person has the necessary years of service, i.e. 30 years. For a person who does not have the obligatory period the flat rate of pension is reduced proportionately.

An additional pension depends on previous earnings and plays the role of a substitute for the lost earnings. The additional part of a retirement pension should be calculated for persons with sufficient years of the state social pension insurance acquired during employment, membership, or service. Since 2013, calculations are made according to the formula 0.005 * S * K * D.

S is the experience gained while working under a contract of employment, membership, or service.

D is the insured income approved by the government for the month of the current year for which the pension is paid.

K is the income ratio of the insured person, the average of earnings ratio of the person with the same year average earnings in Lithuania.

The third part of retirement social security pension is a bonus for the years of service. The bonus should be calculated by multiplying 3 percent social insurance flat rate of pension of the number of each full social insurance record year before retirement in excess of 30 years.

The farmers whose holdings are equal to or greater than 4 ESU must pay social insurance contributions. Because of their contributions, the farmers are entitled to receive the retirement, loss of disability pension, and maternity and parental benefits. Contribution rate is set to 28.5% by 26.3% for

social security pension and 2.2% for sickness and maternity social insurance. In addition, the insured can pay 1% contribution to the pension fund. Contributions could be paid in two ways.

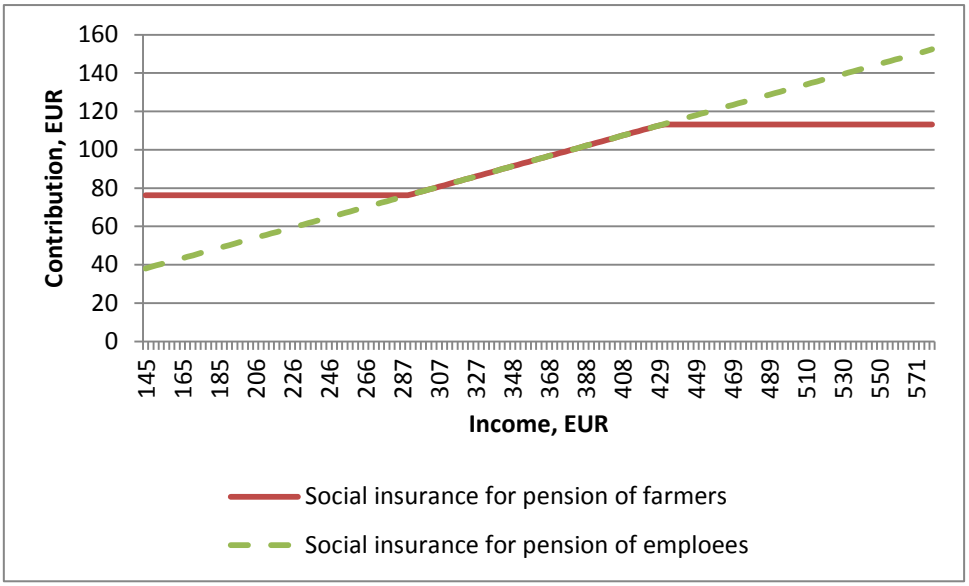

Fig. 4. Social insurance contributions

Source: Own calculations.

1. When farmers and their partners are not subject to income tax, over the years he/she must pay at least EUR 914[2] for social insurance pensions. The farmer must pay no less than EUR 76 *(290 x 0.263 = 76)* every month. The amount of income from which contribution is calculated is equal to the state minimum wage. As for today, it is EUR 290.
2. When the income of farmers and their partners is taxed at the personal income tax, the social security contributions base consists of the following: each person farming taxable income amount not less than 12 minimum monthly wages and no more than the 12 the government approved insured income for the month of the current year (i.e., no less than 290 x 12 = 3,480 and a no bigger than 431 x 12 = 5,171). Then the monthly payment cannot exceed EUR 113, while the annual EUR 1,359 regardless of income. It should be noted that other employees do not have a group contribution ceiling.

The present contribution system is rather unprofitable to farmers as they pay the retirement social insurance proportionately from their wage in a small interval of income, i.e. from EUR 290 to EUR 431. The limits of this interval are established by political decisions; therefore, they may not correspond to the market situation. The government has not changed the average prohibited income since 2009, even though the average wages increased in 6% during this period. This number is important not only because it is used in counting the pension contribution ceiling for farmers, but also because is used in the formula of counting sizes of pensions; thus, the sizes of all pensions of the residents depend on it. For the farmers who receive lower income, a much more important variable is a minimum wage, which increased in 25% during the last two years. The present contribution system is not balanced as the people who receive lower income have to pay more contributions to the pension social insurance fund.

It is also important to note that small farms dominate in Lithuania, and social insurance is applied only to farms with more than 4 ESU; in such a case the problem of scope arises. According to the data of

[2] 1 EUR = 3,4528 LTL

"Sodra", 14.1 thousand farmers and their partners paid social insurance contributions in Lithuania in 2012. This makes up 12% of all farmers.

Even though the social insurance of farmers is integrated in the whole system and its sustainability and state subsidies are not evaluated separately, it is possible to evaluate what part of pensions can be covered by the contributions of farmers. According to "Sodra," the contributions from farmers reach EUR 13.6 million annually. This sum would be sufficient in order to pay average pensions in Lithuania for approximately 4,700 people (an average pension is EUR 238). This number does not reach 1% of retired people in the country, while 8.5% of the working people work in the sector of agriculture. This means that even though there are no additional subsidies, reallocation is made from the people working in other sectors.

As payments of retirement pensions for farmers are calculated according to the same principles as for all working people but the contributions are smaller, this means that retired farmers experience a higher risk of poverty. As the amount of prohibited income from which contributions are paid is known, it is possible to calculate the sum of the pension for a farmer according to the present conditions. If a farmer receives income higher that the average prohibited income, his/her pension would reach EUR 165, if he/she has insurance for 30 years of service (*104+(30*0.005*431*1)*). If he/she receives income lower that the minimum wage, his/her pension would reach EUR 137 under analogous conditions (*104+(30*0.005*431*0.5)*). The coefficient of prohibited income would equal to 0.5 in this case, as a minimum wage in Lithuania comprised around a half of the prohibited income for a long time, and only during the recent years their ratio reached two thirds because of a quick increase in minimum wages.

In 2012, poverty risk limit was EUR 217 in Lithuania. This means that under the present conditions farmers cannot ensure a pension higher than the poverty limit. The pensions calculated taking into consideration the present conditions would be lower than the indicated poverty limit in the country.

4. CONCLUSIONS

1. The carried out analysis of social insurance systems for farmers in Austria, Finland, and Poland implied that the main problem of each of these countries is the high number of recipients in relation to insured persons, and, due to this, high level of subsidy from the state budget. However, despite a considerable burden on the state budget, analyzed systems perform a number of other functions, not only the social one. For this reason they still operate. The analysis also shows that the analyzed systems will be subject to inevitable adjustment in the future in order to keep them secure and financeable.
2. The analysis of the Lithuanian social insurance system suggested that the system is not sustainable. The amount of contributions paid to the social insurance system by farmers is sufficient for paying retirement pension for approximately 4,700 thousand persons. The main causes of unsustainability are small number of farmers who pay the social security contributions and the contribution ceiling.
3. Further analysis showed that the contribution ceiling leads to inadequate pensions. Moreover, the contribution ceiling is not determined for other groups of society. This problem indicates that the contribution ceiling should be abolished or increased. Furthermore, the average monthly insurable earnings are not indexed or otherwise related to country's economic situation. Therefore, it is necessary to introduce a mechanism which estimates insurable earnings using economic indicators, not just political decisions.

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