SOCIAL SECURITY ADMINISTRATION: TOWARDS ONE OF THE RESERVES OF SUSTAINABILITY

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1. Introduction

Social security especially in its forms such as pension and health insurance, is currently characterized by a financial imbalance of government obligations with financial revenues: insurance premiums, social taxes. This imbalance is characteristic of almost all countries with social insurance systems. In 2016, the twenty largest OECD countries together had 78 trillion. US dollars deficit in underfunding of solid-state (pay-as-you-go) and funded (defined benefits) state pension obligations, which is equivalent to about twice the collective national debt of these countries. The under reservation of private pension obligations is also insufficient, for example, private pensions in the United States are provided with only 82 percent of the reserves necessary for pension funds to fulfill their obligations, the deficit is about 3 trillion. US dollars. It is predicted that the average share of pension expenses in the GDP of countries in the world will grow, according to expert estimates, from 9.5% in 2016 to 12% in 2050 (City bank 2016). Health expenditures also show a significant upward trend, as the corresponding expenditures in OECD countries grew by 3.4% in 2016, which was the largest increase since the post-crisis 2009. At the same time, the share of health expenditures is also quite high with an average value of 8.9% of GDP for OECD countries in 2016, and from 17.2% of US GDP to almost 6% of GDP in Turkey and Mexico (OECD Health Statistics 2018).

Taking into account the demographic trend of aging and strengthening of digitalization on employment, it is obvious that this situation will continue in the future. One of the reserves for balancing the obligations of social insurance funds and reducing administrative costs is the improvement through the integration of administrative structures, the creation of unified centers for the provision of social services, and the widespread use of electronic forms of their provision. Criticism of the concept of social insurance, its lack of effectiveness in recent years is not always caused by global demographic problems or financial crises. In many respects, the inefficiency of social insurance is determined by the inefficiency of its management, while 'in debates on social insurance reforms, the inability to distinguish between management and conceptual issues often criticizes the principles of social insurance, when the main focus should be on weaknesses in the ways of administering such a system' (Gillion et al. 2001). On the whole, one of the main claims to increasing state social expenditures lies not in their size, but

in the requirements (requests of society, citizens) of the absence of losses, i.e. the effectiveness of their distribution, targeting, testing the need for social benefits. Losses as a result of this targeted redistribution should be minimized or generally eliminated as the consequences of the so-called 'leaky bucket', when a significant redistribution of resources is accompanied by uncontrolled 'leaks' (Okun 1975; Korpi 1985, 1996; Padovano and Turati 2012; Saltkjel 2017). The impact on the country's economy and its growth depends on the size of its social sphere, i.e. the larger the social system, the greater the impact it has. However, the vector of this influence depends on the effectiveness of the social sphere, its redistribution profile and administration (Cichon et al. 2004).

According to a number of estimates, unproductive administrative costs in the redistribution of social resources, for example, in the health sector, can reach almost 8% of all expenses in this social sphere, while the total pressure of administrative expenses is more than 30% of all expenses, of which a significant part is accounted for by private providers (Evans 2013). However, the loss of accumulated social insurance resources when they are redistributed between generations, income strata, and other categories of recipients of insurance payments, in our opinion, is not so much in increased administrative costs (which in state social insurance are usually from 1 to 4.5%), how much is the organization of the mechanism of social insurance itself, its compactness, economy, and efficiency (Stefan 2015). At the same time, administrative costs are always a potential source of inefficiency in the productive reallocation of resources (Cichon et al. 2004).

In this paper, we consider approaches, trends and expenditures in social security administration (SSA), mainly using the countries of the European Union. The potential of SSA in the current context are largely underestimated. We focus on the institutions and approaches in SSA, the comparative evaluation of expenditures and administrative costs of SSA in the EU countries, and related issues and challenges of SSA based on the comparison of different approaches. Drawing on this context, we define research questions as: What are the leading institutions and approaches in SSA? Whether and in what a reserve of SSA is present for social security sustainability? We use an analytic approach, data and assumptions about how SSA potential is influencing social security sustainability.

2. Assessment of indicators of the SSA in the EU area

The widespread increase in the social security expenditures is associated with general issues of the current state of society and economy: demographic and technological. Most of these changes lead to a transformation of the traditional employment model with the participation of the state, corporations and employers in these expenditures. The increase in the pension burden, health care expenditures and the growth of informal employment with the wide participation of non-state social service providers lead to a subsequent in government spending on social security, which increased by about 18% over the past 9 years, from 2008 to 2017 using the example of the EU countries (Table 1).

Table 1. Changes in social security expenditures and their administrative costs in total and per habitant, %, 2008-2017, (at constant 2010 prices)

	Total social security expenditures	Total administrative costs	Social security expenditures per inhabitant	Administrative costs per inhabitant
EU 28 countr.	17,7	15,2	7,6	5,4
Euro area 12 count.	16,5	13,8	8,9	6,4
Belgium	14,0	7,3	32,6	24,8
Bulgaria	38,7	46,8	14,2	20,9
Czechia	16,1	13,8	11,8	9,6
Denmark	21,7	16,0	50,4	43,3
Germany	24,4	23,6	26,3	25,5
Estonia	27,4	29,3	70,8	73,4
Ireland	18,5	10,7	28,8	20,3
Greece	-17,2	-14,7	-54,7	-53,3
Spain	4,9	3,5	-12,7	-13,9
France	21,3	16,4	7,8	3,5
Croatia	5,6	10,2	-34,3	-31,5
Italy	6,8	3,8	-12,2	-14,7
Cyprus	7,0	-2,1	1,7	-6,9
Latvia	27,4	42,8	2,8	15,3
Lithuania	2,2	15,6	-2,2	10,6
Luxembourg	35,4	10,9	25,6	3,0
Hungary	-7,5	-5,2	-21,4	-19,3
Malta	41,4	23,7	38,1	20,8
Netherlands	17,2	12,5	7,7	3,3
Austria	13,7	7,6	-3,3	-8,5
Poland	39,7	40,2	22,5	23,0
Portugal	7,9	10,6	-30,2	-28,5
Romania	27,1	33,2	95,0	104,4
Slovenia	12,5	10,0	-15,5	-17,4
Slovakia	27,6	26,2	4,0	2,9
Finland	22,6	18,3	-31,7	-34,1
Sweden	22,3	12,1	23,4	13,1
United Kingdom	18,0	10,4	-41,3	-45,1
Iceland	29,5	19,7	-23,1	-28,9
Norway	32,2	19,5	9,4	-1,1
Switzerland	35,7	22,8	40,8	27,4
Serbia	-5,1	-0,6	-30,3	-27,0
Turkey	79,2	58,6	96,2	73,5

Source: Eurostat, Social protection expenditure.

Such an increase (with some exceptions) is not uniform in different countries, which may indicate different efforts and reforms in the field of social security in depth and effectiveness. Compared with a smaller increase in administrative expenses, whose growth amounted to about 15% for the period 2008-2017, this difference is more likely to be characterized by improved SSA.

Despite the differences in changes in total social security expenditures and administrative expenses, in the latter show a downward trend in most developed countries, on the contrary, a tendency to increase administrative expenses is typical for countries where social security systems are still under construction. If developed countries have already formed their social security systems and are already implementing reforms in the field of their administration, then developing countries need first of all the formation of their social security systems and relevant institutions. Based on this, we can conclude that not only the formal framework as such, but also the period and quality of SSA affect its effectiveness in each country. The same situation is characteristic in the pair between total expenses and administrative expenses per inhabitant. There are more volatile and different situations that characterize the various consequences of the reforms of different countries when adapting social security systems to changing conditions of society and the economy. Since we have received confirmation that institutions and approaches in SSA have a significant role, which can lead to lower administrative costs, at least, it is important to compare some characteristics of such institutions.

3. Institutes and approaches in SSA: recent trends

To what extent social insurance is associated with the provision of social assistance, it is embedded in the tax and budget systems of the country, non-state providers are involved in the provision of social services, and representatives of trade unions and employer associations are involved in management – these and other issues determine the features of its administration institutions. The main tasks of SSA include, in our opinion, the following: (1) collection or accumulation of insurance premiums (social taxes); (2) investing funds; (3) performance of social functions: from the provision of social services to the calculation of insurance benefits; (4) financing SSA. To solve these and other tasks in the practice of SSA, different levels and institutions are used. Classically, the SSA is carried out at the state level with responsibility in the status of ministries: finance and social relations (labor). In addition, social insurance can be partially or fully managed by additional social and economic institutions (partners, providers), acting state and non-state structures. There are also structures reflecting the interests of social participants; employers and workers. An approximate classification of SSA institutions with the functions they perform is presented in the Table below (Table 2). The presence of identical functions performed by different institutions in SSA determines the variability of its administration. Moreover, the same functions can be performed simultaneously by different institutions, for example, for different types of social insurance, and in different forms: as cash payments or the provision of social services, for example, medical care.

Table 2. The relationship between functions and institutions of SSA

Functions /		State			Non-state	
Institutions	Financial	Insurance	Insurance	Providers	Insurance	Providers of
	institutions	(budget)	agencies	of social	companies	social services
	(tax,	funds		services	(funds)	(health care,
	financial or			(health care,		employment
	treasury)			employment		instit.)
				institut.)		
Collection	X	X			X	
(accumulation)						
of insurance						
premiums						
(social taxes)						
Investing of	X	X	X		Х	X
insurance						
reserves						
Performing			X	X	X	X
Social						
Functions						
Calculation of	X	X	X		X	
insurance						
payments						
(insurance						
rights)						
Making	X	X	X	X	X	X
insurance						
payments						
(pensions,						
benefits); social						
function						
financing						

Source: authors.

If we consider such administration in the initial order, from the receipt of contributions (insurance premiums, social taxes), then they are collected, as a rule, in two main forms: tax, financial or insurance. In the first case, administration of the contributions is carried out by the tax (financial, treasury) services of the country, in the second – through insurance institutions (funds, cash desks) of both state and non-state forms. One of the common examples of tax administration of collection of payments is the United States, where social contributions for wages are accumulated by the Internal Revenue Service as branches of the Ministry of Finance (or the State Treasury of the country) and then distributed to social security funds (for pension insurance, loss of breadwinner, disability) and medical funds. Such funds are managed by the Treasury Department, in which all receipts to the funds are recorded and assets are accumulated. The balance of SSA under the law is invested in the country's securities, the additional income from which forms the accumulation of such funds. Social insurance is administered by the state Social Security Agency. Insurance payments, for example, pensions (a number of federal benefits) are made by such an Agency through individual social accounts that each recipient of such payments has. Thus, the SSA in the

United States is closely integrated into the tax system of the country. Among the countries that have a similar tax- and centrally-oriented SSA with some additions, it should be noted Iceland, Hungary, Canada, Great Britain, Norway, Sweden, Italy, Ireland, Estonia, Latvia, Croatia, Romania, Albania, Montenegro, Russia, Slovakia, Slovenia, Australia, New Zealand, Argentina, China. At the same time, many countries, such as Russia since 2017 or China since 2018, have changed the insurance administration to the tax administration.

In Germany, there is another option for the SSA with the central responsibility of insurance organizations (providers). The insurance contributions of employers and workers for all types of social insurance are collected (accumulated) by medical insurance organizations (sickness funds), which then transfer funds to the following areas: providers of medical and nursing care, health care facilities (for health insurance and long-term care insurance); federal employment agency (unemployment insurance); state accident and health insurance providers; to federal pension insurance; to the artist insurance fund. That is, the central link in the administration of social insurance in Germany is the public or parastatal organizations that collect insurance contributions, and taxes are levied by the local tax authorities. At the same time, medical insurance companies (about 132 organizations in 2014), which administer the collection of insurance premiums, form a national association with broad powers. Such administration through social insurance (security) institutions is present in Belgium, France, Germany, Poland, the Czech Republic, Georgia, Lithuania, most republics of the former Soviet Union, as well as Japan, South Korea, the Philippines, Thailand, Brazil, Mexico, Uruguay. This is the so-called parallel option when tax and insurance administration of fees is carried out separately.

There is also an alternative in the case of accumulative financing of pension insurance, an example of which is in countries such as Malaysia, Singapore, Chile, El Salvador, Peru. Such funds, as a rule, accumulate contributions, manage investments and make payments. On the one hand, they are public institutions, but they also have much in common with private sector systems based on fund management (Barrand et al. 2004).

Among the advantages of using tax agencies to collect social contributions are noted such as (1) synergies between organizations and their main functions; (2) possible reductions in administrative and regulatory requirements; (3) more efficient use of resources, reduction of administrative costs (infrastructure, IT labour costs), (4) improvement of intra-governmental coordination (Barrand et al. 2004). At the same time, social insurance agencies in the form of insurance structures (funds, cash desks) are more targeted and focus on establishing individual rights to receive benefits and pay them to recipients. At the same time, there is some conflicting responsibility of such agencies for collecting (accumulating) insurance premiums and providing benefits to recipients of insurance payments (Rofman and Demarko 1999).

The investment function in the SSA, its effectiveness is, in our opinion, one of the key reserves of its financial stability. The significance of investing in social funds is determined, firstly, by the expansion of individual accumulative and professional

(corporate) insurance programs as a result of the influence of demographic factors, in particular, for defined benefit plans, such investment requirements are unconditional. Secondly, unlike social support, which provides assistance in both monetary and non-monetary forms, social insurance, as a rule, provides for cash payments. In this connection, the cost of money is not only accumulated, but also paid, i.e. invested is important (Andersen 2012). Thirdly, social insurance funds are, in essence, a deferred part of employees' wages; these are, as a rule, compulsory savings made in order to receive 'profitable' payments in the future. At each moment of time, the balance in the individual retirement account belongs to the depositor as his personal 'wealth', even if he or she does not have the right to use it for purposes other than social security. This implies both the availability of these funds in absolute terms and their maximization, as well as long-term guarantees (Cichon et al. 2001). Fourth, social insurance funds are financial resources, in the monetary form of which the theoretical requirement of their investment and obtaining additional investment income has already been laid, and therefore the current deficit of such funds requires its placement in those types of assets that are in line with national interests. These and other reasons determine the accumulation by national social insurance systems of potentially significant amounts of money that are collected today to finance future obligations, especially in pension insurance. In this regard, questions arise of appropriate investment, financial planning, investment strategies, permitted types of assets, guarantees, i.e. generally appropriate investment policy.

What institutions and approaches are common in the implementation of investment policies of social insurance and SSA? The investment functions of social insurance, reflected in Table 2, can be performed both by insurance structures (funds, cash registers) of state and non-state forms, and by financial and tax departments (services). Thus, institutions where the insurance fund is an independent organization with legislative (legal) powers and its own management service are present in Denmark, Finland, Hungary, Italy, Japan, Norway, Poland, the Netherlands, Switzerland and as insurance offices in Austria and Germany. In contrast, a contractual insurance fund consists of a separate pool of assets without legal personality and is managed by a separate financial organization: a bank, insurance or management company. The governing body of the fund is usually present as the board of directors of such a managing financial organization. Examples of contracted pension funds include Spain, the Czech Republic, Mexico, Portugal, Slovakia, Turkey, and open-ended funds in Italy and Poland. The third common form: trust funds have both institutional and contractual (contractual) characteristics. Trustees legally owning the assets of the funds transfer them to management in the interests of the participants (beneficiaries) of the investments. Although the function of trusts is similar to the function of funds, trustees are not a legally significant part of such trust (trust), while there is fiduciary responsibility of both managers and proxies. Examples of such funds are present in the USA, Great Britain, Australia, and Ireland (Stewart and Yermo 2008). Thus, in the implementation of the investment function in the administration of social insurance, the leading role is assigned not to a specific institution (as in the case of collection of insurance premiums), but rather to the format of investment

management, investment strategies, state regulation of investment activities of social insurance funds (Tessaromatis 2013; Stewart and Yermo 2008; Cichon 2004; Tamagno 2001).

The social service in the SSA is carried out by various state and non-state institutions, the question of attracting the latter to participate in such public administration can be considered a definite and confirmed practice. Nevertheless, the presence in recent years, in particular after the 2008 crisis, of a contradictory tendency: both to strengthen the state position in social services, and to expand the participation of non-state providers in it, determine the current significance of this issue. Arguments in favor of engaging non-governmental, private institutions in the provision of social services include arguments such as a more effective assessment of moral hazard risks and adverse selection, often over-insurance in case of unemployment and disability insurance (Koning 2006; Dixon 2002). On the other hand, public administration is less costly than the costs of private insurers and provides a more uniform and universal social service. The compromise between the extreme positions is to allow a mixed model of public service, using the advantages and limitations of state and non-state forms with the state (government) as a regulator (Galazoulas and Tsetoura 2014; Vonk 2010; Koning 2006).

Despite the more extensive options for public or private components in the provision of public services, there are currently no reliable empirical studies on the effectiveness of using one or another component. In our opinion, the social insurance service, because of its economic and social significance, is state-oriented both in terms of providing services and their control. Social service provides for significant investments in infrastructure, research with a rather uncertain outcome in the future that is not able to finance private institutional structures. The need to provide universal social insurance services also determines the activities of state providers. Another fundamental factor in the state-centralized social service is the receipt and use of information on the cost, recipients, conditions of social services, which may be limited in the case of private providers (Cichon et al. 2004).

In general, as with the implementation of the investment function of insurance, there are substitution effects: the absence of state social service entails its implementation by non-state market structures and, conversely, broad state social services reduce the participation of private providers (Andersen 2012).

The administrative expenses for social security do not directly correlate with any model of the welfare state, but are generally higher, for example, for the Scandinavian countries, i.e. administering more social redistribution. On average, in OECD countries, administrative expenses for social insurance ranged from 1% to 4.5% of GDP in 2016 (Stefan 2015). However, there are non-linear (but correlated) relationship between the amount or 'wealth' of social expenditures and administration cost per inhabitant (Table 3). It is worth to note that the most 'expensive' in administration are the countries with insurance-based financial approach in opposite to tax-based.

Table 3. The comparison of social security expenditures and their administrative costs per inhabitant in the EU countries, 2017, %

Country	Administrative	Country	Social
Country	costs in social	Country	security
	security		expenditure
	expenditures		s per
	per inhabitant,		habitant,
	%		Euro
Switzerland	6,0	Norway	18 763
Netherlands	5,0	Luxembourg	18 685
Ireland	4,3	Switzerland	16 511
Denmark	3,9	Denmark	15 338
France	3,8	Sweden	12 428
Germany	3,7	Netherlands	11 739
Belgium	3,7	Finland	11 248
Czechia	2,9	France	11 154
Bosnia and			
Herzegovina	2,7	Austria	10 727
Lithuania	2,7	Germany	10 716
Slovakia	2,6	Belgium	10 071
Poland	2,3	Iceland	8 940
		United	
Italy	2,0	Kingdom	8 687
Sweden	2,0	Ireland	8 660
Romania	2,0	Italy	7 765
Bulgaria	1,9	Spain	5 440
Austria	1,8	Slovenia	4 467
Turkey	1,8	Greece	4 438
Norway	1,7	Portugal	4 394
Serbia	1,7	Cyprus	4 279
Spain	1,7	Malta	3 525
Finland	1,7	Czechia	3 178
Croatia	1,6	Slovakia	2 564
Hungary	1,6	Poland	2 419
Estonia	1,6	Croatia	2 392
Slovenia	1,5	Estonia	2 383
Latvia	1,4	Hungary	2 230
Luxembourg	1,4	Lithuania	1 973
Portugal	1,3	Latvia	1 765
Cyprus	1,3	Turkey	1 420
Malta	1,1	Romania	1 239
Greece	0,9	Bulgaria	1 121
United Kingdom	0,7	Serbia	953
Iceland	0,6	Bosnia and	804
	<u> </u>	Herzegovina	

Source: Eurostat, Social protection expenditure.

4. Conclusions

The variability of social security institutions and their forms determine both the complexity of the administration process and its mixed forms. Despite the trajectories of the institutional environment in the SSA and social insurance, the state remains in the role of the main guarantor of the standards of social services, social policy in general. On the whole, different administrative structures provide different purposes, state control, redistribution, and intermediation. Since the SSA has additional potential for improving of social security and social insurance, thanks to its use it is possible to make guarantees, benefits, and services more efficient and provide better quality for citizens. This article is one of the first attempts to focus on recent trends in the SSA with its role as a reserve in social sustainability; promising research in this area may be associated with a quantitative assessment of the relationship between different forms of administration and the resulting achievements for social security.

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