

Reasons for the operation of the social insurance system, including social insurance in agriculture

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Abstract

The problem of risk in agriculture affects, as in any other activity, many of its areas not only of an economic nature, but also of a social one. At a time of growing social crisis, the search for models for the functioning of the welfare state seems justified. One instrument that mitigates social risks so that they can be incorporated into the normal functioning of societies is social insurance. The purpose of this study was to identify the rationale for constructing universal insurance systems, with a particular focus on social insurance in agriculture. Underlying the design of insurance systems designed for agriculture are socioeconomic reasons (the strategic importance of the agricultural sector to the economy and the preservation of socio-environmental balance, the high uncertainty and unpredictability of the conduct of agricultural activities, and the large fluctuations in income), as well as political reasons, as explained by public choice theory.

Keywords: ENASP, KRUS, agriculture, insurance schemes, social insurance, social insurance in agriculture.

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Introduction

The world of risk has never been stable, for both objective reasons, related to the evolution of insurable material, and subjective reasons, which depend on risk perception. The problem relates not only to risks of an economic nature, but also, and perhaps especially, of a social one. Indeed, looking through the prism of growth in social risks (COVID-19 pandemic, war in Ukraine, changes in life patterns), and thus the emergence of completely new groups of social risks, the search for mechanisms that can mitigate the consequences of social risks seems justified.

One instrument that mitigates social risks, enabling them to be incorporated into the everyday functioning of societies, is social insurance. As Góra notes, the rationale for having a universal pension system, instead of leaving the problem of financing consumption in old age exclusively to individuals, is the benefits accrued to wider society in mitigating this problem¹. This boils down to the fact that from a certain age a person is unable to earn income and someone else has to share that income with them. The methods for making this division vary and can thus result in a variety of consequences. An important issue, therefore, is the search for rationales behind the separation of special systems for farmers from national insurance systems. This problem is important, as Jędrzejczyk notes², as farmers are a very distinct social group, forming a compact risk structure, and this is the key rationale for separating them from the universal social insurance systems.

The purpose of the study is to identify the rationale for constructing universal insurance systems, with a particular focus on social insurance in agriculture.

Economic rationale for the existence of social insurance

A review of the definitions of social insurance shows that it is a guarantee given to everyone that under all circumstances they will have an income sufficient to provide for themselves and their family with a decent life or at least at a minimum subsistence

1. M. Góra, *System emerytalny*, Warszawa, Polskie Wydawnictwo Ekonomiczne, 2003.

2. I. Jędrzejczyk, *Europejski Model Społeczny a krajowe i zagraniczne doświadczenia w kształtowaniu zabezpieczenia społecznego na wsi*, "Ubezpieczenia w Rolnictwie – Materiały i Studia" 2020, nr 2(74).

level³. This definition alludes to social and economic security, which is today counted among some of the most important factors in development. One might be tempted to say that in our societies, insurance is a primary good, as it is a condition for access to other goods to meet basic needs, such as housing, leisure, access to care, protection from natural disasters, etc.

In European countries, the operation of social insurance scheme is based on two models: the Bismarck and Beveridge models. These traditional models have not kept pace with changes in the labour market (including new forms of employment), and many experts note that reforms in social insurance systems are needed⁴. However, regardless of the need for reform, there are many reasons for the existence of social insurance systems.

The main justification for the existence of social insurance systems is related to social justice, freedom and security, but they also have many economic advantages. These include the prudence and propensity of individuals to save privately, smoothing consumption over time, offsetting the imperfections and incompleteness of private insurance markets, or improving the economic position of the elderly. Looking through the lens of agriculture itself, social insurance also contributes to improving the agrarian and generational structure of farms.

From an economic point of view, the basic rationale for introducing social insurance systems is the foresightedness and propensity of individuals to save. There are many definitions of saving in economic theory, highlighting its ambiguity and multi-facetedness⁵. At the heart of these definitions is the theory of rational choice, upon which consumer behavior is seen to be based and from which many savings models are derived (Life Cycle Hypothesis) – the works of Ando and Modigliani on the Permanent Income Hypothesis – the works of Friedman or the behavioral life cycle hypothesis, referring to the theory of self-control and decision-making with deferred consequences – the works of Shefrin and Thaler⁶. The motives

3. A. Grzebieniak, *Polski system ubezpieczeń społecznych – zalety i wady*, "Studia Gdańskie. Wizje i rzeczywistość" 2007, nr 4; W. Sułkowska (red.), *System ubezpieczeń społecznych*, Kraków, Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie, 2014; G. Szpor (red.), *System ubezpieczeń społecznych. Zagadnienia podstawowe*, Wydanie IV, Warszawa, Lexisnexis, 2011.
4. A.B. Atkinson, *Nierówności. Co da się zrobić?*, Warszawa, Wydawnictwo Krytyki Politycznej, Wydanie 1, 2017.
5. I. Fisher, *The theory of interest*, London, Macmillan, 1930; J.M. Keynes, *A Treatise on Money*, Vol. 1 and Vol. 2, London, Macmillan, 1930; J.M. Keynes, *The General Theory of employment, interest of money*, London, Macmillan, 1936; L.J. Kotlikoff, *Saving* [in:] *Concise Encyclopedia of Economics*, 2nd ed., ed. D.R. Henderson, Library of Economics and Liberty, Indianapolis 2008.
6. T. Zaleśkiewicz, *Psychologia ekonomiczna*, Warszawa, Wydawnictwo Naukowe PWN, 2011; K-E. Wärneryd, *Oszczędzanie* [in:] *Psychologia ekonomiczna*, red. T. Tyszka, Gdańsk, Gdańskie Wydawnictwo Psychologiczne, 2004.

for accumulating savings are explained by the Life Cycle Hypothesis, which is fundamental to the perception of the savings process. Under the assumption that individuals are rational and there is no uncertainty, that interest rates are 0% and households do not inherit assets, its authors concluded that the main motive for saving is the desire to smooth consumption over the life course. In particular, individuals save during their working lives in order to finance consumption in retirement. As a result, continuous proportional consumption of income (as a sum of income) is possible. This hypothesis is supplemented by Friedman's theory of permanent income, which assumes that the amount of savings depends on the difference between current income and permanent income, i.e. income that reflects the expected value of income. This means that a person spends less in times of "prosperity" in order to be able to maintain a given standard of living in times of hardship. The Behavioral Life-Cycle Hypothesis, in its most contemporary iteration, refers to psychological assumptions: the theory of self-control, the system of mental accounts, the phenomenon of framing (formulation effect, framing). This theory indicates (as does prospect theory) that people's choices reveal a tendency to violate the principles of rational choice theory, including the principle of constancy of preference in discounting future income and consumption. While overlooking the many drawbacks of these theories, they have practical applications and provide a basis for creating state economic policy, especially in the areas of designing social transfers, better anticipating and addressing social needs, shaping social policy, including pension schemes and savings programmes. These programmes can aim to provide adequate security in retirement, taking into account differences in individuals' income and savings capabilities.

A review of the above-mentioned theories indicates that the basis for the development of insurance systems is knowledge of the motives underlying saving, analysis of which has made it possible to distinguish three types of saving: contractual, voluntary and residual⁷. This approach is based on the fact that people differ in their ability to cope with scarcity of goods now and in the future. They also differ in their level of wealth and savings to provide for future needs⁸. Hence, the search for saving motives can be helpful in constructing solutions to ensure adequate levels of consumption for all people at different stages of their lives. Smith's research⁹ indicates that it is inherent in all people to seek to improve or secure a better future, which can only come about through effective accumulation (the desire to save and accumulate

7. G. Katona, *Psychological economics*, New York, Elsevier, 1975.

8. K-E. Wärneryd, op. cit.

9. A. Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, Vol. 1 and Vol. 2, Indianapolis, Liberty Classics, 1776.

money). As Katona notes¹⁰, one of the primary reasons for saving is to abstain from current consumption in favour of deferred consumption, indicating that our savings depend on both opportunity and propensity to consume, which can be measured. An important role in the saving process is played by awareness of future risk, and thus the uncertainty associated with it, which can be the basis for constructing insurance systems¹¹. One should also point to the ability of people to perceive future needs and formulate expectations, without which savings would not be created¹². An important feature in making savings choices is life expectancy, which is today widely used in the design of insurance systems. A review of the works of early economists on saving allows us to construct a set of the most important psychological ideas/motives for saving, among which are:

- 1) the widespread desire for effective accumulation and improving the future;
- 2) foresightedness and saving habits;
- 3) self-control and willpower as determinants of foresightedness;
- 4) the uncertainty of the future and the role of expectations;
- 5) selective perception and limited cognitive abilities;
- 6) time horizon or attitude toward the future.

Looking through the lens of the motives underlying saving, which also translates into the need to construct insurance schemes, it can be seen that the behavioural responses of different groups of people can vary widely. As Kulawik and Soliwoda note, there is a tension built into every PAYG (*pay-as-you-go* pension) system, whether based on the Bismarck or Beveridge model, between forced saving and redistribution, followed by differential attitudes of individuals toward private savings for old age¹³. This is confirmed by Bouchard St-Amant and Gardona's research¹⁴, which shows that each person has a certain preference for self-control, and thus a certain mechanism of engagement to protect them from various temptations. Most people defer decisions to save voluntarily in favour of current consumption, which is immediate and quick gratification. This is also confirmed by the research of Marchal¹⁵, who notes that people tend to save for a specific purpose in the near future, thus skipping regular savings for old age. Elster¹⁶, on the other hand, notes that people

10. G. Katona, op. cit.

11. W.S. Jevons, *The theory of political economy*, 4th edition, Macmillan and Co., London 1871/1911.

12. E. von Bohm-Bawerk, *Positiv theory the Kapitales*, Dritte Auflage, Zweiter Halbband, Innsbruck, Verlag der Wagner'schen Universitäts-Buchhandlung, 1888.

13. J. Kulawik, M. Soliwoda, *Ubezpieczenia społeczne w ekonomii [in:] Ubezpieczenia społeczne rolników a teorie ekonomii, finansów i wyboru publicznego*, red. nauk. J. Kulawik, Warszawa, IERiGŻ PIB, 2019.

14. Ibidem.

15. A. Marshall, *Principles of economics: An introductory volume*, 8th edition, London, Macmillan, 1890.

16. J. Elster, *Ulysses Unbound*, New York, Cambridge University Press, 2000.

often take anticipative actions relating to future events, which he called voluntary enslavement. This concept is somewhat broader than self-control not least because it is not limited to the actions of individuals, but entire societies. Voluntary enslavement can provide a rationale for the development of insurance systems, as it protects against so-called hyperbolic discounting¹⁷, such that the choice of transfers over time is secured by means of a properly structured contract. These arguments support the need to construct models along the lines of the Bismarck model, in which self-control is taken over by the state and justifies the operation of insurance schemes, including in agriculture. However, it should be borne in mind that the systems currently in place, despite their undeniable advantages, require intervention in new design solutions that arise from and should meet current labour market conditions. After all, this problem is not the subject of this study.

Another argument underlying the design of insurance systems is stabilising their consumption over time. Consumption smoothing involves reducing consumption in years when relatively high incomes are earned in order to raise consumption during periods of low income. This is closely related to the saving process discussed above, i.e. setting aside a certain portion of current income for the future, which is also explained by the theories described above. The simplest mechanism that enables equal consumption, and therefore equal social insurance utility over a lifetime, is so-called annuity. According to Kulawik and Soliwoda, this is an insurance plan in which one pays a certain contribution, receiving, in the future, in return regularly specified benefits until the end of one's life¹⁸. The rationale for state intervention in the area of introducing such social insurance systems is the imperfection of private insurance markets. Difficulties in the functioning of the insurance market include primarily: asymmetry of information between seller and buyer (hiding information, e.g., about one's own health status) and the associated adverse selection of annuity buyers (an information advantage of the potential security buyer over its provider). The second phenomenon, also an offshoot of information asymmetry, is moral hazard, i.e., a reduction in motivation by the insurance buyer to be diligent in counteracting the effects of a risky event. In addition, many people, especially at a young age, may downplay the problem of saving for old age, illness or the purchase of annuities (as a form of social self-insurance), which is a natural behaviour and results from

17. Hyperbolic discounting can be described as a reward for immediate pleasure, a type of economic irrationality involving obtaining quick gratification in exchange for the loss of tangible benefits in the future. Many vices can be blamed for the effect of hyperbolic discounting, among them an unwillingness to save. On the other hand, it manifests a kind of specific rationality related to the uncertainty of the future, rejecting future profits in favor of current consumption.

18. J. Kulawik, M. Soliwoda, *Ubezpieczenia społeczne (...)*, op. cit.

a preference for current consumption. It should be noted that most people – in their consumption decisions – are characterised by exaggerated time preferences, i.e. they use high discount rates for benefits and costs occurring at a distant time. This causes them to prioritize current consumption more over future consumption. It is therefore difficult to expect such people to change their time preferences and be ready to purchase private insurance coverage. Insufficiently low levels of private savings by citizens can also occur with an increased likelihood of financial support from the state. These problems can be partially mitigated by public insurance systems, which are designed on an actuarially sound contribution basis, allowing consumption to be reduced in favourable periods to protect it from worse periods.

Among the arguments in favour of paying an insurance contribution, and thus justifying the need to construct public insurance systems, are also: (1) higher expected utility of income when having insurance than not; (2) decreasing marginal utility of consumption with increasing risk aversion, which means that people with low risk tolerance are afraid of a decrease in consumption and, to this end, are willing to pay a higher insurance contribution to offset their consumption in the future, as well as (3) altruistic motivations. Undoubtedly, acquiring a policy is a cash drain for a risk-averse person. As Kulawik and Soliwoda note, this fact largely explains the widespread reluctance of farmers to be insured against many risks if extensive contribution subsidisation is not applied¹⁹. This may also explain the need for such high subsidisation of social insurance schemes. In addition, it should be noted that the low level of savings is a premise that explains the presence of compulsory social insurance systems. Indeed, this intentional lack of insurance boils down to problems of negative external effects (external costs) that can be neutralised by regulation in the form of compulsory insurance. With regard to the pension system, Holzmann put it as follows: “The compulsory (minimum) pension scheme is the state’s insurance against parasites”²⁰. This is also explained by Culyer²¹, who analyses the problem of altruistic motivations as a reason for the emergence of compulsory social insurance schemes. Zweifel and Eisen argue that an affluent person, due to the strong perception of negative external effects, is willing to pay some insurance contribution for an indigent person if another person finds themselves in a difficult situation. Nevertheless, their marginal willingness to pay contributions for another person, as opposed to self-insurance, declines, justifying the need to construct compulsory systems. They

19. Ibidem.

20. R. Holzmann, *Die Bereitstellung von Zusatzrenten: Ziele, Formen und Zwänge. Hintergrund und grundsätzliche Überlegungen für die Tschechoslowakei*, Internationale Review für “Soziale Sicherheit” 1991, No. 1–2.

21. A.J. Culyer, *The Political Economy of Social Policy*, St. Martin’s Press, 1980.

stress that with a high level of altruism and commitment from the affluent person, it is possible to achieve a social optimum in which both the indigent and the affluent person can benefit from the public good. Such a situation, however, results in a decrease in the level of protection of the affluent person and the appearance of the so-called “free-rider effect”, indicating that altruism may not be a widespread solution. According to Kulawik²², however, this is a strong argument for the introduction of compulsory social insurance schemes.

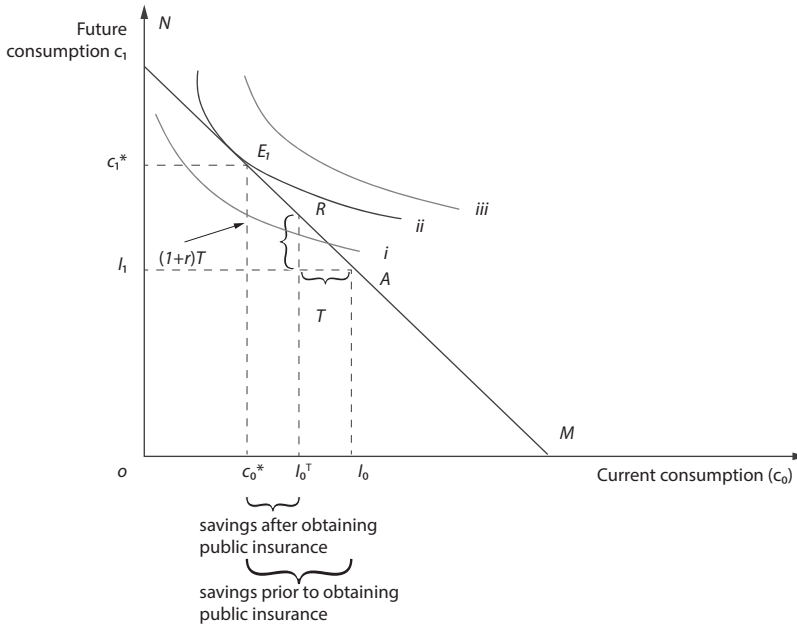
Another argument in favour of constructing public insurance schemes is the problem of private savings being crowded out by public insurance, where the benefits of such insurance exceed the current value of the contribution embodied in it. What is problematic, however, is the benefits that can be obtained through insurance – after all, it is uncertain in the long run. This is because, utility theory aside, every individual seeks to maximise their own utility. Utility, however, can vary depending on when a good is to be consumed. Both economic theory and common sense tell us that we should attribute more utility to current consumption than to the same one received later. This is due to two basic facts, namely: (1) uncertainty of the future, which means that we will not always be able to reap the benefits of deferred transfers, and (2) prioritising the present value of funds over their future value. However, it is possible to sacrifice the utility derived from current consumption in favour of the utility derived from future consumption. This happens, of course, when the utility from future consumption exceeds that of current consumption (when the amount consumed in the future is greater than at the present time, although other reasons for an increase in utility are also possible). This is explained by the budget constraint curve, which shows the exchange between current and future consumption.

This problem is presented in Figure 1 and explained in detail by Kulawik and Soliwoda²³ based on Rosen and Gayer’s research.

22. J. Kulawik, *Teoria wyboru publicznego jako narzędzie objaśniania genezy i rozwoju ubezpieczeń społecznych I*, “Ubezpieczenia w Rolnictwie – Materiały i Studia”, 2020, nr 2(74).

23. J. Kulawik, M. Soliwoda, *Ubezpieczenia społeczne (...)*, op. cit.

Figure 1. Effect of crowding out private savings by public insurance



Source: Own elaboration based on H.S. Rosen, T. Gayer, *Public Finance, Ninth Edition*, New York, McGraw-Hill, 2010.

The MN line denotes the budget constraint of an individual who is at point A . At point A , this individual can spend their income on future consumption (I_1) and current consumption (I_0). Alternatively, they can decide to consume T monetary units less than their current income, in which case they will be able to consume $(1+r)T$ monetary units in the future and will be at point D . If we treat T as having to pay a pension contribution (a kind of tax), then current consumption will undoubtedly be reduced from point I_0 to point I_0^T , but at the same time future consumption (consumption in retirement) should increase, by a stretch equal to $(1+r)T$ (r being the interest rate, i.e. the rate of return). In such a situation, the individual's future consumption will move to point R . However, if the individual could save and borrow at a rate of return r , the optimum between current consumption during employment and consumption in retirement would be determined by point E_1 . In the case of joining a pension system, an individual would have to save the amount $I_0^T - c_0^*$ in order to remain at the optimum point. And this means a lower value than they would have had to have saved before making social insurance contributions ($I_0 - c_0^*$). As a result, public insurance

is becoming a cheaper alternative to private savings, thus crowding them out. This situation also justifies the presence of social insurance in the public space.

Lack of foresightedness and state paternalism is another argument for the existence of social insurance. In regulating markets aimed at protecting the consumer, consumer rationality is assumed. However, based on the assumption that people lack the ability to plan and set income for the future, or have a fairly clear view of the future, it appears that state interventions – especially in the area of social insurance – are necessary. The need for state action in certain markets is pointed out by Stiglitz²⁴, who argues that leaving consumers free to choose raises concerns that individuals may not act in their own best interests and, for example, may not insure themselves for old age. However, he stresses that under liberalism (protection of the free market), the state should not interfere in people's choices, because actions taken to help one person result in violating the rights of others. Meanwhile, Thaler and Sunstein²⁵ note that in many situations paternalism is difficult to avoid, and point to, among other things, pension plans, specifically the creation of incentives to save for retirement and contribute an appropriate percentage of one's income. This is because, given human preferences, as well as a lack of foresightedness, people save far less than society deems appropriate. Hence, the paternalistic state should support the rational choices made by individuals through the creation of a framework for those choices, incentives, warnings and disclosure of information. It should be clearly emphasised that state paternalism requires the state's involvement in providing adequate social insurance tools, among which social insurance plays an important role. The dogma for their existence is the lack of foresightedness, which in turn may create the conditions for the appearance of coercion. As Pacud points out, coercion is one of the main attributes of insurance system, its economic feature, and at a particular time it acquires a certain normative shape²⁶. However, it should be made clear that there is a discrete difference between coercion and dutifulness. Coercion in social insurance is becoming increasingly necessary due to the greater propensity to consume and use one's own resources rather than invest them and secure consumption for the future. This is due to the fact that people, due to the long-term prospect of pension accrual, tend to exhibit minimal foresighted.

An important rationale accompanying the construction of insurance systems and indicating the need for them is improving the economic plight of the

24. J.E. Stiglitz, *Ekonomia sektora publicznego*, Warszawa, Wydawnictwo Naukowe PWN, 2004.

25. R.H. Thaler, C.R. Sunstein, *Impulse. Jak podejmować właściwe decyzje dotyczące zdrowia, dobrobytu i szczęścia*, Poznań, Wydawnictwo Zysk i S-ka, 2008.

26. R. Pacud, *Rola przymusu w ubezpieczeniach społecznych*, "Ubezpieczenia społeczne. Teoria i praktyka" 2017, nr 3.

elderly. In recent years, there has been an increasing aging of the population. According to the European Commission, in 1960 people age 65+ made up less than 10% of the population. In 2015, it was 20% of the population. According to demographers, seniors will make up 30% of Europe's population in 2060. Data for Poland concur with these trends. Data from Poland's statistical office (GUS) indicate that the share of elderly people in the population of Polish residents is steadily increasing. At the end of 2021, the number of people aged 60 and over will be 9.7 million, up 0.2% from the previous year. The percentage of elderly people in the Polish population has reached 25.7%. According to a forecast by GUS, the population aged 60 and over in Poland is expected to grow to 10.8 million in 2030, and to reach 13.7 million in 2050. The elderly will make up about 29% and 40% of Poland's total population, respectively. There are currently as many seniors living in rural areas in the European Union as in urban areas. In Poland, this ratio is 42% (rural and urban-rural areas) and 58% (cities). The elderly, like the general population, are more likely to live in cities than in villages. The age structure of the urban population shows a higher proportion of elderly people than in rural areas. In 2021, there were 27.7% senior citizens among urban residents, while in rural areas the rate reached 22.7% (27.5% and 22.5% in 2020, respectively). In urban areas, the largest group of senior citizens were those aged 65–69 (25.8%), while in rural areas, those aged 60–64 made up 28.7% of the elderly.

These figures are not auspicious when looking at the sustainability of insurance systems, which, regardless of their design, always operate on the principle of transfers from working people to pensioners. Moreover, the main source of income for the elderly is pensions. In 2021, the average monthly gross pension paid from the non-agricultural social insurance scheme stood at PLN 2,623 per month and had increased nominally by 6.9% compared to 2020. In contrast, for individual farmers in the same period, they reached PLN 1,429, a nominal increase of 3.8%. Despite the increase in the average monthly gross pension from the non-agricultural social insurance system, its relation to the average gross remuneration in the national economy was at a lower level than in previous years. In 2021, the ratio was 43.8, compared to 48.7 in 2015. The situation was similar in agriculture, i.e. agricultural pensions accounted for only 23.8% of the average gross monthly remuneration in the national economy in 2021, and 28.9% in 2015. This is because the situation was slightly improving in H1 2023 – the average monthly pension and the average monthly gross pension from the non-agricultural system formed at PLN 3,274.65 and was 16.3% higher than a year ago, while the average monthly pension and the average monthly gross pension of individual farmers in H1 2023 amounted to PLN 1,779.71 and increased by 20.1% on an annual basis. Still, the average monthly gross pension from the non-agricultural social insurance system is only half of the average gross remuneration in the national

economy. Farmers' pensions accounted for only 28.0% of this remuneration during the period. Despite the relatively high growth in benefits and an improving ratio to the average gross monthly remuneration in the national economy, benefits are still at a relatively low level. This points to the growing problem of impoverishment of the elderly in both agricultural and non-agricultural pension schemes. It should also be added that the agricultural benefit is half that of the non-agricultural system, but nevertheless one should not expect the benefits in these systems to be equal, as it is necessary to take into account the way they are financed in both cases, especially the participation of the insured in the contribution. Moreover, the figures also do not indicate an improvement in the economic position of the elderly who become eligible for benefits. Nonetheless, if we go back to the described rationale justifying the need for insurance schemes, especially the design of the scheme based on universality, it can be concluded that the poverty effect of people who would never have the inclination to self-insure is eliminated.

The above rationale justifies the need for social insurance systems and can be the basis for the construction and operation of social insurance schemes in agriculture.

The rationale for the separate operation of pension schemes for farmers in the socio-economic space

It seems reasonable that the search for arguments justifying insurance in agriculture should begin with identification of the functions of the farm, which, as noted by Jędrzejczyk²⁷, have a resource, consumption, culture-forming, environment-forming, production-commercial, as well as investment character. Their impairment as a result of social risks (e.g., death of a breadwinner, work accident, old age, illness, maternity, incapacity to work) can have serious consequences for the operation of the agricultural sector. Hence, introducing solutions to reduce or offset the consequences of social risks is a necessity arising from basic human rights, as well as the economic and social functions of the welfare state. Thus, insurance is an instrument for compensating for damages or meeting certain increased financial needs of people who find themselves in difficult life situations, which can significantly undermine the execution of farm functions. From a social point of view, social insurance forms a kind of social safety net and stabiliser of the operating conditions of the farm and

27. I. Jędrzejczyk, *Europejski Model Społeczny a krajowe i zagraniczne doświadczenia w kształtowaniu zabezpieczenia społecznego na wsi*, "Ubezpieczenia w Rolnictwie – Materiały i Studia" 2020, nr 2(74).

households of farmers or individuals. Looking through the economic lens, this tool sustains farms and enables them to grow by maintaining their economic continuity and the regularity of their agricultural activities, as well as ensuring the living conditions of farmers and their families by minimising the consequences of fortuitous damage.

One may ask whether it is reasonable and necessary to introduce separate insurance systems for farmers? According to many authors²⁸, the creation of a separate social insurance system for farmers in Poland was enforced by Poland's postcommunist political transformation and had no objective rationale other than standardisation of the at-risk community. This is also emphasised by Kulawik, who pointed out that no school of economics or finance alone can explain the duration of special insurance systems in Poland. In his opinion, the only explanation for the development of such systems is public choice theory²⁹. In its simplest terms, the theory deals with the demand and supply of public goods, as opposed to traditional economics, which focuses on studying the demand and supply of private goods. It focuses on studying government behaviour and the influence of pressure groups. Instead, it is based on the assumption that individuals who make public choices do so primarily for their own self-interest, and moreover, governments (people) who decide on public goods are also guided by their own self-interest. One example is the introduction of the Act on the Social Insurance for Farmers in 1990, under which the Agricultural Social Insurance Fund (KRUS) began operating. It should be noted that Polish farmers were a marginalised social group until then and were the last socio-professional group to be covered by social insurance. Admittedly, prior to the establishment of the KRUS, there were two acts on social insurance for farmers (1962–1977 and 1977–1989), a feature of which was that the right to benefits depended on the transfer of land into state ownership or, in subsequent years, the production of agricultural products and their sale to state-owned companies. These schemes were therefore not universal and exclusively social, but aimed at socialising agricultural ownership, changing the area structure in the countryside and promoting generational change in agriculture. It is worth mentioning that separate insurance systems for agriculture also operate in other countries, and these have influenced the design of the KRUS. Austria, Finland, France, Germany and Poland are European Union Member States with separate agricultural social insurance systems. The insurance institutions of the above-mentioned countries

28. I. Jędrzejczyk, *Europejski Model Społeczny a krajowe i zagraniczne doświadczenia (...)*, op. cit.; W. Sułkowska, *Wybrane aspekty podobieństwa sektorów rolniczych krajów Unii Europejskiej z wyodrębnionym systemem ubezpieczenia społecznego rolników, Część 2, "Ubezpieczenia w Rolnictwie. Materiały i Studia" 2017, nr 61.*

29. J. Kulawik, *Teoria wyboru publicznego jako narzędzie objaśniania (...)*, op. cit.

created the industry's European Network of Agricultural Social Protection Systems (ENASP), declaring mutual close cooperation³⁰.

If we look through the prism of farm functions, it is hard not to notice that agriculture is one of the most important branches of the national economy, which may be the rationale for separate, dedicated insurance systems that would allow them to fully perform their functions. In the modern economy, farms provide public goods that benefit society as a whole. Ensuring food self-sufficiency is one of the strategic goals of agriculture throughout the national economy. Agriculture is also the base for the development of the agri-food industry, and in recent years its role as a supplier of energy and energy resources has become important. The agricultural sector provides employment for a large group of rural residents and shapes the spatial structure of rural areas. It also plays important social and cultural roles. By preserving traditional production methods and land use, it shapes the cultural landscape of the countryside, preserving its natural character and historic buildings. The rural population, especially the agricultural population, preserves traditions and centuries-old cultural values. The family farm also best meets the conditions of sustainable agriculture, as it connects small-scale production with biodiversity. Performing these functions by farms while facing some unique challenges that can cause uncertainty and unpredictability in the conduct of agricultural activities, market instability due to unstable demand patterns and volatile prices leading to large fluctuations in farm income are the basis for public support. One element of such support could be a preferential social insurance system. This is also confirmed by the analyses of Kulawik and Soliwoda, who note that the need for state-subsidised social benefits is to some extent justified, especially in a sector such as agriculture, where there is an unstable level of income and, consequently, limited opportunities for family members to set aside savings for old age, the strong impact of production and price risks on agricultural production, and the disappearance of typical functions of family farms, in which providing care for the elderly is treated as a cultural and religious obligation³¹. They stress that the state's development of a pension insurance system depends on the country's socioeconomic development, the socioeconomic status of the privileged group, and the administrative capacity of state institutions to operate such a scheme.

If we look at the origins of the social insurance scheme in agriculture, the rationale for its introduction into agriculture was explained by the exploitation or ineptitude of

30. "Ubezpieczenia w Rolnictwie – Materiały i Studia" Journal, 2020, nr 74, p. 287; <https://www.svlfg.de/enasp>, access 18.04.2024.

31. J. Kulawik, M. Soliwoda, *Miejsce ubezpieczeń społecznych w finansach* [in:] *Ubezpieczenia społeczne rolników a teorie ekonomii, finansów i wyboru publicznego*, red. nauk. J. Kulawik, Warszawa, IERiGŻ PIB, 2019.

private insurance associations. Łazowski believed that the superiority of social insurance over insurance in private insurance companies lies in the fact that, “The public insurer, as is clear from its nature, does not work for profit, but for the public good. [...] Unit insurers, on the other hand, strive towards profit-making in their business”³². The question of the state’s participation as a kind of guardian is problematic, as it can be hypothetically assumed that the state may not participate in the farmers’ social insurance programme. However, on philosophical (ethical) grounds, society (including policymakers) is not willing to “turn a blind eye” to elderly people living in poverty, even if their standard of living is the product of personal mistakes. The above shows that the tools of public choice theory are applied to national agricultural policy, including agricultural and rural insurance policy, and justify the operation of a separate rural insurance system.

The rationale for a separate insurance system for farmers is explained not only by economic arguments, but also, and perhaps above all, by social ones. The social insurance scheme in Polish agriculture has played an important social role since its inception, especially in the early years of economic transition. The Agricultural Social Insurance Fund – through its funds – undoubtedly pursues a social objective towards the agricultural population. The social function of farms is directed to farmers who meet the conditions for becoming subject to this insurance, and in turn thus reduces risks of a social nature.

Many researchers of social insurance issues stress that this tool, by mitigating the disadvantage of farm families, to some extent reduces the stream of migration from the countryside. This is especially important for those areas that are experiencing depopulation. A report by the Ministry of Agriculture and Rural Development (MRiRW), entitled *Diagnosis of the Socio-Economic Situation of Rural Areas and Fisheries in Poland*, shows that the depopulation process is affecting peripherally located rural areas. The trend of rural depopulation is most visible in eastern Poland. For example, out of 118 Podlaskie municipalities, 78 recorded a decrease in population between 2010 and 2019. Rural areas are being abandoned primarily by young people; moreover, small farms are also disappearing. These areas will have to face a number of consequences of this phenomenon, such as a shrinking tax base, raising problems related to the provision of satisfactory infrastructure, especially in the area of services; a deficit in the labor market or depopulation of peripheral localities, which will create additional problems related to, among other things, the maintenance of cultural

32. J. Łazowski, *Wstęp do nauki ubezpieczeń*, Warszawa 1934.

heritage. As Drygas notes³³, in the absence of a preferential insurance scheme for farmers, depopulation could be even more severe than it currently is.

Insurance is also a tool to support various forms of multi-professionalism in the agricultural population, as a pathway to cross-sectoral mobility of labour resources related to farms and agricultural production. This is especially important for farmers who operate small-area and inefficient farms, for whom exclusive agricultural work is insufficient to earn a satisfactory income. It is a tool that can thus help stem the exit of the labour force from agriculture, as it provides social insurance while developing non-agricultural activities. Such solutions justify the need for social insurance, especially during the period of making deeper structural changes in agriculture. Unpublished FADN (European Farm Accountancy Data Network) data show that in 2021, the average small-scale farmer's non-farm income in total income accounted for 46.6%, while including social and welfare benefits it was 12.6%. This means that on small farms, social benefits are an important support that, on the one hand, alleviate poverty and protect partly from social exclusion, and on the other hand, can provide a buffer of social insurance for those considering exiting agriculture.

Moreover, as reported by Czyżewski and Matuszczak³⁴, the social security policy of farmers under the KRUS created and supported a number of activities carried out under the RDP (Rural Development Programme), especially activities for the diversification of activities in rural areas, the establishment of micro-enterprises and job creation, as well as support for local development, which indicated the complementarity of the KRUS system in Poland with the 2014–2020 RDP and further justified – in a social and economic sense – the functioning of the KRUS as a separate system. Also, in the new Strategic Plan for Common Agricultural Policy for 2023–2027, there is a strong link between the KRUS and ongoing measures (e.g., Young Farmer), conditioning the possibility of investments. This justifies the need for separate social insurance systems that promote the development of farms.

33. M. Drygas, *Uzasadnienie funkcjonowania odrębnych systemów emerytalnych dla rolników w Polsce i innych krajach UE*, Ekspertyza dla MRiRW, Warszawa 2014.

34. A. Czyżewski, A. Matuszczak, *Uzasadnienie funkcjonowania odrębnych systemów emerytalnych dla rolników w Polsce i w innych krajach UE*, Ekspertyza wykonana na zlecenie MRiRW, Poznań 2014.

Summary

A review of mainstream economic theory and behavioural and public choice theories indicates that they provide a basis for creating state economic policy, especially in the areas of designing social transfers, better anticipating and addressing social needs and shaping social policy, including pension schemes and savings programmes.

Knowledge of the motives underlying saving, including people's desire to secure a better future for themselves, refraining from current consumption in favour of deferred consumption, awareness of risk and types of attitude toward it, preference for self-control, stabilisation (smoothing) of consumption over time, or the tendency to take anticipative action (voluntary enslavement) provide the rationale for constructing social insurance schemes. The rationale for state intervention in the area of introducing insurance schemes is also based on the imperfection of private insurance markets, which involves, among other things, asymmetry of information or adverse selection. It should be noted, however, that insufficiently low levels of private savings by citizens can also occur with an increased likelihood of financial support from the state, but this can be partially mitigated by public insurance schemes. Also among the arguments that justify the need to construct public insurance schemes are: the higher expected utility of income when having insurance than otherwise, the decreasing marginal utility of consumption with increasing risk aversion, as well as altruistic motivations.

Insurance, on the one hand, mitigates a number of negative consequences of not having it, while on the other hand, the acquisition of an insurance policy is a cash depletion for a highly risk-averse person, which explains the presence of compulsory social insurance. Strong arguments for the introduction of compulsory social insurance include intentional lack of insurance, which boils down to problems of negative external effects (external costs), declining marginal willingness to pay contributions for another person (the problem of altruistic motivations), the emergence of the "free-rider effect" or lack of foresightedness. These problems can be neutralised by regulation in the form of compulsory insurance.

The explanation for the operation of separate preferential insurance systems in agriculture is (1) the theory of public choice, which provides a strong basis for their development, as well as (2) features of the agricultural sector such as the high uncertainty and unpredictability of the conduct of agricultural activities, (3) caused by numerous risks not only of a social nature, but also of a productive and price nature, the instability of the market due to unstable demand patterns and volatile prices, and thus large fluctuations in income. It is also important to emphasise the strategic place

of the agricultural sector in the national economy, which can provide an important rationale for the construction of dedicated insurance schemes.

How important a role pension schemes can play in social policies is also indicated by economic practice. Indeed, the insurance market reacts very quickly to crises caused by various events. Recent events – the COVID-19 pandemic, the war in Ukraine, and the subsequent restrictions imposed by governments – have hit agriculture, among other sectors, very hard, which plays a key role in food security, as well as having ties to the overall economy and providing many public goods. The consequences of the crises, which resulted in increased demand for support, were broken food supply chains, problems with the sale of production due to reduced exports of agri-food products, limited availability of workers in agriculture, and rising energy prices, among other things. One of the institutions implementing farm support was the Agricultural Social Insurance Fund.

The possible complementarity of the social insurance scheme for farmers with the strategic plan was also noted. This further justifies the KRUS in Poland as a separate system. Indeed, there are numerous areas in the field of agricultural policy and rural development in Poland that a policy of separate social insurance for farmers could possibly support.

Strong arguments for the operation of separate insurance schemes in agriculture are: reducing the stream of migration from the countryside – important for areas experiencing depopulation; supporting various forms of multi-professionalism in the agricultural population, which can help with the eventual definitive exit of the labor force from agriculture, especially in small area and inefficient farms.

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