

Financing of Agricultural Pensions on the European Continent

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SUMMARY

Supporting agriculture in Europe is important for many reasons: on the one hand, to secure food supplies, and on the other, to ensure the sustainability of rural lifestyles. But in recent decades, rural populations have also been affected by population ageing. Different agricultural pension schemes have been set up in European countries, taking into account the specificities of the agricultural sector. Pension funds have tended to be more important where the role of small farms was significant and the pension system was of the fully Bismarckian type. In general, they were not introduced where a ‘kolkhoz system’ existed in East-Central Europe before 1990. In our study we looked at the different forms that have been implemented. We have reviewed the changes that have taken place in recent decades and found that in some countries, states have supplemented contributions to pension payments by up to 75–85%. Our methodology involves document analysis and comparative assessment. We argue that it is worthwhile to encourage farmers to continue production on smaller farms by providing special sectoral support, career funding and pensions in order to meet social and environmental objectives.

KEYWORDS: agriculture, pension system, public finances, sustainable farming

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All of the major countries on the European continent have provided significant public support for agricultural pension funds in recent decades. Therefore, we raised the question of how much public support is needed to finance the payment of agricultural pensions, and what the sectoral, macroeconomic and social implications of this might be. To analyse this question, we present examples from several countries.

In the 1950s and 1960s, European countries were not self-sufficient in even basic foodstuffs. Therefore, the countries that founded the predecessor to the European Union set themselves the goal of ensuring self-sufficiency and improving the efficiency of agricultural production by implementing a common agricultural policy. The 1957 Treaty of Rome therefore included the objective of increasing agricultural productivity. This objective naturally aimed to achieve a fair standard of living for farmers, to maintain stability for market operators and to provide consumers with high quality and affordable foodstuffs. The main incentive for agricultural production involved price subsidies toward high prices. In addition to affordable prices for consumers, high producer prices ensured profitability for farmers, which facilitated modernisation. However, by the 1980s the system had already led to overproduction. The guaranteed purchase price system without quantitative limits led to an oversupply.

From the early 1990s, subsidies were reduced and linked to quantitative limits. From the early 2000s, the system gradually changed to a system based on regional subsidies and subsidies linked to development (Lentner, 2004; Somai, 2014).

The regional subsidies made the support system more predictable; however, this led to an increase in land prices and rents. Administrative burdens for smaller farmers became more expensive on the whole. Under

the regional (area-based) subsidy system, the subsidy is paid to the owner of the land. In many cases, therefore, it is not the actual farmer who receives the subsidies, but the owner who does not farm the land.

A concentration process unfolded in terms of ownership. The number of small farmers to be supported under the initial objectives decreased considerably. In 2016, more than 50 percent of agricultural land in the EU was already part of large estates. The number of small and medium-sized holdings fell by approx. 25 percent between 2005 and 2016 (Eurostat, 2018). The consequence of this structural change was a shift in production methods. On large holdings, typically ‘industrial’ farming is practised. This of course also results in European agricultural production becoming more price-competitive. The downside is that the earlier diversity is disappearing, and the biodiversity of the land is declining. Some areas may potentially remain uncultivated. The protection of farmland is essential to ensure environmental sustainability. (Matolcsy, 2020).

In this study, we look at the specific area of agricultural subsidies for farmers, i.e. the agricultural pension system, using international examples. The pension system can support the continued sustainability of rural livelihoods, thereby helping to maintain diverse and environmentally sustainable agricultural production.

ASPECTS OF THE STUDY AND THE COUNTRIES INCLUDED IN RESEARCH

The publications available on the subject of agricultural pensions can be broadly divided into two groups:

- those that describe the financing and its characteristics,

- those that compare the systems of several countries.

The starting point of our analysis was a comprehensive article by Polish authors *Czyżewski and Matuszczak* (2014), which detailed the level of agricultural pensions in 5 countries, their financing, and the extent of contributions and state support.

As funding methods have been used in the agricultural field for decades, the literature generally accepts their existence and stability, i.e. there are at most only occasional specialist publications on how to change the systems already in place.

In addition to professional publications, the annual reports of pension funds also deserve attention.

With regard to the issue of agricultural pensions, we focus on the financing background. The analysis of pension funding is complemented by a comparison of public support for this purpose with the country's GDP. We do so because a subsidy of 0.5 to 1 percent of GDP can already give a country's producers an advantage that is difficult to 'catch up' with for farmers in another nearby country that do not receive such a subsidy.

Our analysis does not cover all EU countries. We considered it a priority to analyse countries that have had a period in the last 20-25 years where an independent public social security fund was used to finance the elderly care of people retired from agriculture.

Among the old continental EU countries, we do not analyse 4 northern Member States (because they did not have an agricultural pension fund), and only mention Portugal (where the agricultural pension fund was abolished 3 decades ago), Belgium and Luxembourg. Due to the absence of an agricultural pension fund, the Baltic States, the Czechoslovak and Yugoslav successor states, Bulgaria and Hungary are not evaluated among the 'new' Member States.

The population of the EU countries we examine in more detail is 335 million, which is 83% of the EU population.

REASONS FOR THE EXISTENCE OF A SPECIAL AGRICULTURAL PENSION SYSTEM

There are good reasons for operating a different, preferential pension system compared to the general one. Agricultural prices on world markets are depressed and farming is inherently risky. Moreover, preventing rural depopulation is an explicit objective of many governments. In the EU, the announcement of the Green Strategy in 2019 put a strong emphasis on the need for governments to do more to help the population living in rural areas remain in their communities.

Support for agricultural pensions is an indirect way to achieve these goals. This can ensure a decent living in old age for people in agriculture. Public support is necessary because the low profitability of the sector makes it impossible to impose a high contribution burden. Support for agricultural pensions offers a stable career financing strategy for farmers. An important effect of this is that the countryside is not depopulated and there are people to work the land.

In effect, pension support is recognition of the work performed over the previous 35-40 years. If it is worth staying on the farm, they will not abandon labour-intensive production cultures. If small and medium-sized farms are retained, the monocultural forms of production often seen on large farms will not take hold.

Agricultural regions are generally poorer. Pension support helps to prevent them from becoming too far removed from more developed regions. The incentivising state (Báger, Parragh,

2020) can support sustainability in agriculture from several angles.

THE EMERGENCE AND DIRECTIONS OF CHANGE IN AGRICULTURAL PENSION INSURANCE SCHEMES

The universalisation of social insurance was a strong social policy aspiration in the major Western European countries in the early to mid-1950s. As social insurance was already present in industry, small businesses and agriculture were the two areas where it was possible to involve large numbers of people in pension insurance and public healthcare.

Agricultural policy at the time was seeking to have a say in the design and operation of the social security system for farmers, and to use it as a tool to influence the structural transformation of agriculture. This ambition was stronger in countries where small and medium-sized holdings were dominant. At the time, there was a general perception within the industry that a large proportion of small farms were not sufficiently equipped with new technological equipment and were slow to switch to newer production methods. It was therefore advocated that the economic weight of larger holdings should be increased. The agricultural pension system was able to help with this. After all, if the financing of the pension is (also) conditional on the farmer ceasing production, it is expected that the land would be offered on the land market, which could then be bought by larger and more capital-intensive farms.

In the meantime, however, a question arose: how would contributions be collected in agriculture, especially from individual farmers. The taxation and imposition of contributions on agriculture was not a common practice, and the agricultural community had always been averse to it. It became common to make

it compulsory for farmers to pay into social insurance, but to set low contribution rates and to understate the value of agricultural income compared to declared income. This was done, for example, by means of the cadastral income established by the tax authorities, where the income of a farm was determined according to the size of the land, the quality of the soil and the production method. This meant that a contribution base adjusted to low incomes became the norm, after which a contribution rate of only one-half to two-thirds of the general rate was applied.

As a consequence, the agricultural social security funds could not be self-financing and had to be supported by subsidies. Three different methods of support were used:

- the state supplemented the contribution paid at a certain rate, so that more was paid into the fund (e.g. Germany, Greece),
- certain public revenues (e.g. taxes) were systematically transferred by the state to the agricultural social security fund (France, Romania),
- the annual deficit was financed by the state through subsidies (for a large proportion of the funds; Czyżewski, Matuszczak, 2014).

The golden age of agricultural pension funds in the West was the 1970s and 1980s. The political lobbying capacity of the agrarian population was relatively strong. This was partly due to their relatively large numbers. The farming community had traditionally been conservative, while agricultural workers were in many cases a mass base for left-wing parties. As a consequence, many countries had separate social security funds, or at least pension funds, for agricultural employees (*see Table 1*).

In terms of payments, the agricultural pensions for farmers declined compared to the national average.¹ The system followed for agricultural employees, however, generally

Table 1

YEAR OF INTRODUCTION OF SEPARATE AGRICULTURAL SOCIAL SECURITY BY COUNTRY

Country	Year
France	1952
Germany (FRG)	1957
Italy	1957
Belgium	1957
Luxembourg	1957
Austria	1958
Finland	1971
Spain	1972
Greece	1961
Poland	1990

Source: Poteraj (2008), and Hoskins (1971)

differed little from the normal social security system for wage earners. Their contributions were thus higher on average, and their pensions were closer to the average. Their system had a lower subsidy requirement than that of farmers (Poteraj, 2008).

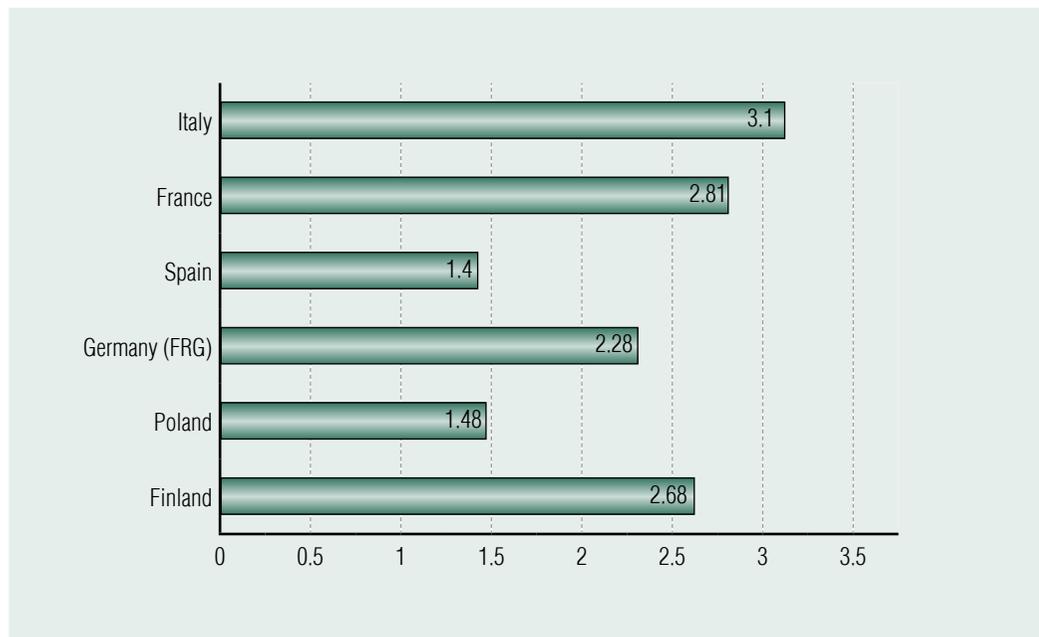
If major changes are made to the pension system as a whole, in many cases this will also affect agricultural pension funds. Cost-effective administration is a recurring argument in favour of merging the agricultural fund into the general system. In recent years, there has been a trend in some countries to either merge the agricultural social security system with another separate pension system or to merge it into the general system. However, these changes do not generally lead to changes in the contribution system itself (income determination, contribution rate), nor do they tend to lead to substantial changes in the pension determination system. Mergers have taken place in Germany and Austria, and funds have been merged into the general

social security system in Spain and Greece (Bundesverfassungsgericht, 2018; SVB, 2020).

By the 1980s, a new challenge emerged. The number of farmers decreased significantly due to land consolidation, ageing and migration from rural to urban areas. As a result, the number of people paying into social security funds has fallen substantially. At the same time, the number of people aged 60-65 who retired from agriculture will remain relatively high for another one or two decades (since 10-30 years ago one-and-a half to three times as many people worked in agriculture). If the number of contributors falls to a third, then the income covers only a third of expenditure, even in an otherwise self-financing system. Ageing had already created a significant deficit in the public pay-as-you-go agricultural pension funds. A new, higher than before subsidy was needed. The advantage of being managed as a fund was that the agricultural ministries provided a protective umbrella and generated the source of higher subsidies.

Figure 1

**RATIO OF AGRICULTURAL PENSIONERS TO AGRICULTURAL CONTRIBUTORS
(PENSIONER/CONTRIBUTOR)**



Source: own calculation, values obtained by dividing the number of persons indicated in the description of each country

Figure 1 shows the ratio of the number of agricultural pensioners to the number of contributors in certain EU countries. We can see that, with the exception of Poland and Spain, the number of contributors is only one-third to half of the number of pensioners. In Western Europe, only in Spain is the number of pensioners per social security contributor below 2 in agriculture. This is due to their labour-intensive production structure.

In several countries, special schemes were implemented to encourage the sale of land by offering early retirement pensions before retirement age.² This has always been fully financed by public subsidies (Väre, 2004).

Such a scheme was successful in the Federal Republic of Germany, for example. Over a period of seven years, the number of farmers under 45 years of age increased from 300,000

to 410,000 between 1964 and 1970, while the number of farmers over 45 years of age decreased from 719,000 to 465,000 (Hoskins 1971). In France, however, it has subsequently been shown that the land of the farmers in early retirement, who gave up farming, was often bought by members of the family.

After 2007, there were ten years when direct EU CAP-funded resources supported such schemes (Coopmans 2021). This was mainly designed for the southern EU countries. The idea was that those who do not modernise should give up production. In practice, only a limited number of people applied for such a pension. The reason for this was that the market price for the land was not attractive to the parties concerned. Meanwhile, attitudes have changed. Today, diversification is an important principle, and increasing the

size of holdings at any price is no longer an objective.

In the EU Member States of Central and Eastern Europe, the security of employment in agriculture was influenced by the way in which land tenure developed. Where there was no forced co-operative formation, the agricultural social security system of the 1980s generally remained in place after 1990, with farmers having to pay social security contributions. In Poland, the farmers campaigned effectively for the creation of a separate pension fund as early as the early 1990s. In some of the former Yugoslav successor states there were separate agricultural social security funds, which were eventually merged into the general social security system. In fact, (to this day) the introduction of separate agricultural pensions in Hungary, the two successor states of Czechoslovakia and the three Baltic countries has not even been considered. (Czyżewski, Matuszczak, 2014).

From 2012, the financing of the pension of agricultural workers became integrated in the general social security scheme.

We have prepared an estimate for 2017. We did this because the number of contributing agricultural workers did not decrease after 2007. In addition, given the stability of the number of agricultural workers over 3 decades, we could assume that there would be no significant change in the number of workers receiving a pension. We estimated that the total number of contributors decreased by 1 percent over 11 years (to 960,000 persons), and the total number of pensioners decreased by 8 percent over 11 years³ (to 1,331,000 persons). As a result, the share of subsidies in total pensions was 84 percent in 2017, with 72 contributors per 100 pensioners. This represented a subsidy of EUR 7,824 million at current prices for agricultural social security expenditure in 2017. This was then 0.67 percent of GDP.

AGRICULTURAL PENSION SYSTEMS PER COUNTRY

Spain

The separate agricultural social security fund was established in 1972. 2006 was the last year in which both categories of agricultural pensioners were financed by the separate agricultural social security fund. At that time, in terms of agricultural workers, the number of contributors was 740,000, while the number of pensioners was 657,000. The number of farmers contributing to the social security scheme was only one-third of the number of retired farmers (259,000 and 798,000, respectively; Ministerio De Empleo, 2014).

From 2007 onwards, the financing of farmers' pensions was merged into the social security fund for private entrepreneurs.

Italy

A separate fund was created in 1957 to finance agricultural pensions. Even today, people working in agriculture are still included in this separate social security scheme. The scheme is known as CDCM. The most striking tension in the scheme is that the number of pension recipients is more than 3 times the number of contributors. While 20-25 years ago the number of contributors was over 1 million, this has fallen to 451,000 in 2018. In contrast, 1,399,000 persons were receiving pension.

This is also reflected in the funding. Only one-fifth of the benefits paid are covered by contributions. The social security contributions for agriculture are reduced, especially in less favoured areas (mountainous regions, etc.). In 2018, CDCM expenditure amounted to EUR 3,700 million, while the deficit was EUR

2,518 million, compared to a contribution of EUR 1,308 million. In addition, the benefits of those who retired earlier (before 1989) are managed separately, financed by a special public subsidy at 100%, with a total of EUR 1,150 million (2018) - the name of the public entity that finances this is GIAS. Together, the two items amounted to EUR 3,800 million in public support (The Italian pension system, 2020). This was 0.21 percent of GDP at the time.

Poland

In 1990 a law was passed to establish KRUS in 1991, which would take over the social security of agricultural workers from the state social security fund (RUS).

There were around 1.12 million agricultural pensioners in 2019 (of which 190,000 were disabled pensioners). In 2019, they received an average of PLN 1,387 per month. This is 60 percent of the national average pension. The total expenditure of the KRUS pension fund in 2019 was PLN 20,393 million. Of this, PLN 17,369 million was financed by budget support (i.e. 85 percent of their agricultural social security scheme is subsidised). This public support translated into EUR 4,030 million in 2019 (Czyżewski- Matuszczak 2020). The PLN 18,520 million spent on pensions and disability benefits represented 91 percent of total expenditure (2019).

In 2019, 1,194,000 insured individuals belonged to KRUS, of which 757,000 were individual farmers and the rest were their wives and other family members. The ratio was 1.4 pensioners per contributing farmer, but when compared to the 1,182,000 insured, the ratio is 1.07. KRUS has an extensive network with 6,000 employees, a large number of medical specialists, 250 offices and 5 rehabilitation centres (KRUS, 2019).

In principle, contributions to social security must be paid from a farm size of 1 hectare. The majority of individual farmers pay PLN 70 (i.e. EUR 16) per month. However, if your farm is larger than 50 hectares, you have to pay between 2 to 5 times as much.

In a recent survey in central and eastern Poland, 79 percent of the 27,500 Polish farmers surveyed felt that the attractive agricultural social security system helped them continue farming (Hornowski et al., 2020).⁴

Germany

In Germany, a scheme to provide old-age benefits for farmers was established in 1957. The service provided was more of a subsidy. The scheme was changed in 1995. In 2013 another change was implemented, with the former private service providers and their umbrella organisation merged into one institution (SVLFG) (Wirth 2007).

Compulsory pension insurance applies to farmers who farm on a statutorily defined area of land (ALG) or who have more livestock than the fixed limit. The pension insurance scheme also covers co-farming spouses and other assisting family members. In addition to old-age pensions, SVLFG also finances disability pensions and widows' and orphans' benefits, taking into account the policyholder base.

The German state contributes significantly to the provision of old-age pensions for farmers. This, in turn, is also intended to bring about a generational change in agriculture, since old-age pensions are paid after actual retirement. This generational change has resulted in a concentration of production (Bundesverfassungsgericht, 2018).

Public support accounted for 81.45 percent of SVLFG's total revenue (EUR 2,896 million)

in 2019. In that year, 579,035 persons received an annuity benefit. The total number of policyholders in 2019 was 180,582, of which 129,817 were farmers (SVLFG, 2020).

Austria

Pension benefits in the agricultural sector were introduced in 1958, which already covered old-age, handicapped and disability pensions. The merger of several sectoral insurance funds led to the establishment of Sozialversicherungsanstalt der Bauern (SVB) in 1974. It provided social security for Austrian farmers and their families until 2020. Sozialversicherungsanstalt der Selbständigen (SVS) was established at the beginning of January 2020 after another merger. This organisation took over the social security services for farmers and their families, including pension insurance (SVS, 2021).

Social security covers private entrepreneurs in agriculture and forestry and their assisting family members. Under the compulsory insurance scheme, the farmer becomes a policyholder and, under certain conditions, so do his wife and children, and parents who transfer the farm. Agricultural entrepreneurs whose activity value reaches a certain level of standard production value (as defined by the relevant statistical methodology) become policyholders under the law (BSV). The compulsory contribution is paid according to a calculated contribution base. The contribution base is basically a fixed percentage of the standard production value. This percentage is specified for each year.

The number of farmers receiving old-age pension in 2019 was 123,000. The old-age pensions paid to farmers amounted to EUR 1,836 million. Budget support accounted for 83.9 percent of the payments (Dachverband der Sozialversicherungsträger, 2020).

Romania

Pension statistics in Romania treat agricultural and public pension payments separately. The former is similar in content to the former Hungarian co-operative pension, while the latter corresponds to the standard state social security scheme.

Agricultural pensioners include those who retired before 1992 (practically the former co-operative members). Their number is decreasing significantly. From 1990 onwards, pension contributions were no longer compulsory for agricultural workers and were made optional.⁵ A special tax of 2 to 4 percent on food industrial production and on the margins of the food trade (de Menil, 2002) was imposed to cover part of the state's expenditure on agricultural pensions.⁶ Since 2006 the budget has been the entire source of the older agricultural pensions. The state provided a total of EUR 386 million in 2019 to finance agricultural pensioners (Roman National Institute of Statistics, 2020).

Greece

Although an agricultural pension fund had been in operation since 1957, it provided only minimal benefits. From 2006, compulsory contributions were introduced, with 2 units of budget support to each unit of compulsory contributions. At the same time, the available pensions were increased significantly. The entire pension system used to be a major burden on the state before 2010. Within this, a significant item was the 75 percent public support to the agricultural pension fund, the OGA (Poteraj, 2008),⁷ which by 2008 had already accounted for EUR 7.8 billion in expenditure (3.3 percent of GDP). From 2010, one of the targets of the cuts promising to restore financial equilibrium was the Greek

pension system (there have been 12 restrictive measures affecting this area). On the one hand, an overall reduction was achieved by abolishing the 13th and 14th month pensions, while high pensions were also sharply reduced. Taking this into account, the position of small pensioners, including those receiving agricultural pensions, has even improved somewhat in relative terms (Symeonidis, 2016), as the reduction in earnings in the non-public sector was 33 percent.

There was an even bigger change in contributions. The previously reduced contribution rate for farmers (7 percent) was raised from 2016 (to 13.3 percent, together with an increase in their income tax). A 15-year transition period was announced for determining the pension amounts for farmers.⁸ The agricultural pension fund was merged into the general scheme in 2015.

France

In 2020, the total expenditure of the MSA, the French agricultural social security fund was EUR 32 billion, of which pensions accounted for 45%. The share of revenue from social security contributions was 24.7 percent (this does not include CSG⁹ revenue, which combined together accounted for 30.6 percent). As a result of the foregoing, the share of public support was 75.3 percent, amounting to EUR 24.1 billion.

Of the total EUR 26,900 million in benefits from the fund (2020), 55 percent went to farmers and 45 percent went to agricultural workers. EUR 13.7 billion was allocated to pensions and EUR 12.1 billion to healthcare expenditures. 3.3 million persons received agricultural pensions in 2020. There were 2.8 dependants per contributor in 2019. Of the 1,174,000 contributors, 469,000 were farmers

and 704,000 were agricultural workers. The contribution paid by farmers was EUR 2.4 billion, to which the CSG contributed an additional EUR 0.6 billion. The contribution paid by agricultural workers was EUR 5.5 billion, to which CSG contributed EUR 1.4 billion (MSA, 2020).

Care should be taken when comparing the data with payments in other countries. For other countries, most of the expenditure per beneficiary is pension-related, but for the French fund, the MSA, the share of healthcare allowance is 45 percent, while the family-type allowance is 4 percent.

Of the public funds received, two item types stand out. One is the demographic compensation. Since 1974, this has been allocated to the agricultural social security fund due to the ageing of the sector. The other is that some state tax revenues are earmarked for the agricultural social security fund (all of the spirit tax, the company car tax, and part of the tax on tobacco products) (Poteraj, 2008).

The compulsory payment of agricultural social security contributions by farmers is linked to a minimum area of land or work. The latter is 1,200 hours/year in agriculture, and the former is an area of approx. 0.25 hectares (the size of this may vary from region to region). It is worth mentioning that up to a certain land area limit, agricultural pensioners are allowed to farm for themselves. The French agricultural social security fund has established a wide network. It has 35 offices, 1,800 employees and direct contact with farmers through 27,000 representatives.

It should be noted that if one wants to calculate pension per capita, the data from these figures can be misleading. In fact, many of those who receive a pension have worked in agriculture for only 5–15 years and also receive some form of state pension for their work in other sectors.

Finland

In Finland, a separate law (MYEL) regulates the pensions of farmers. All farmers have to pay a social security contribution if their income reaches the EUR 4,000 per year threshold under the MYEL law. The contribution is 10 percent for lower incomes and twice as much for higher incomes.

In 2018, the amount of benefits provided by the agricultural pension fund (MYLA) was EUR 827 million. On the other hand, the contributions paid amounted to EUR 175 million, i.e. around 80 percent of the payments were financed from public support. In 2015, around 68,000 farmers paid social security contributions. In contrast, 182,000 farmers received pensions that year (Finnish Centre for Pensions, 2021). Thus, there were 2.68 dependants per contributor in 2015.

Five other continental EU countries

In Portugal, there used to be an agricultural social security fund (RESSAA), but from 1986 no new pensions were established, after which new claimants could only receive pensions under the general social security scheme. The name of the fund was changed in 1987 to Transitional Rural Scheme (RRT). The number of beneficiaries funded by the RRT is gradually decreasing, with payments expected to be made until 2025, according to expert estimates (Poteraaj, 2008).

In Belgium, a separate social security fund for agricultural workers was set up in 1957. As publications evaluating pension systems suggest that the country has a uniform public pension funding system, the agricultural fund was probably merged into the general public social security scheme for the self-employed after a few years of operation. The situation

is similar in Luxembourg (there too it was founded in 1957).

In Croatia, the previously separate scheme for agricultural workers was later merged into the single social security scheme (2002). In Slovenia, employers' social security contributions for agricultural workers are paid by the state instead of the employer.¹⁰

COMPARATIVE ANALYSIS

Figure 2 illustrates how much the agricultural sector has been subsidised by state contributions to social security as a share of GDP. It shows that three countries have high values, above 0.6 percent. In contrast, Germany's figure is particularly low, bringing the average down.

Figure 3 shows the amount of agricultural pensions as a percentage of GDP. The bulk of the data comes from the single approach studies (The Ageing Report, 2021). For most countries, values are given as a percentage of GDP. Where no data is provided, we have provided a value using our own calculations.¹¹

Figure 4 shows the proportion of the pensions paid out funded by public (budget) support. The typical values are around 75-85 percent.

CORRELATIONS WITH OTHER FACTORS

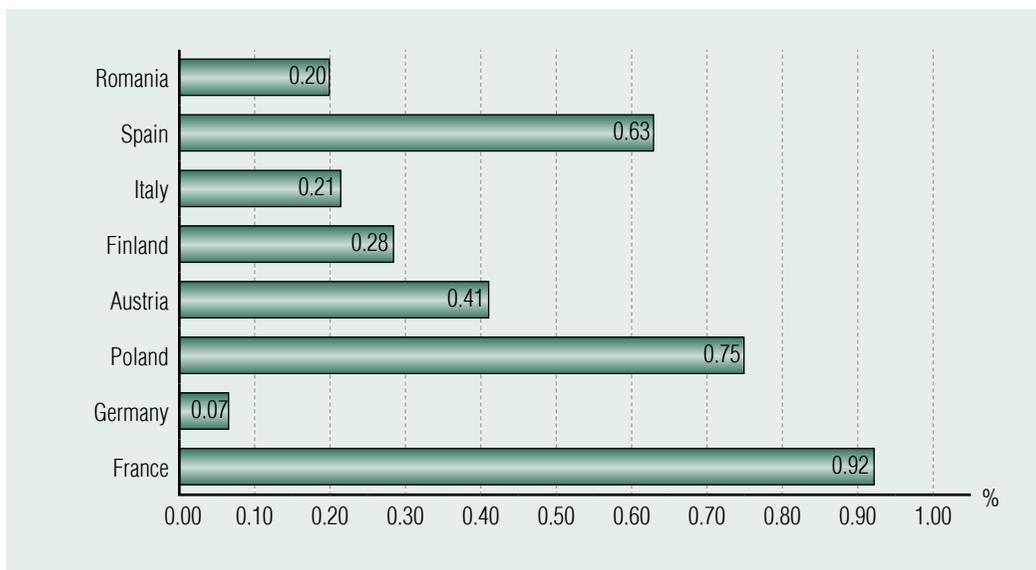
'Old' Member States

There are two questions to distinguish with almost complete accuracy between countries where there is (was) an agricultural pension scheme and countries where there is (was) no such scheme:

- is the pension system fully Bismarckian?
- how important is the role of small farms in agriculture?

Figure 2

AGRICULTURAL SOCIAL SECURITY SUBSIDY AS A SHARE OF GDP (AGRICULTURAL SUBSIDY/GDP)

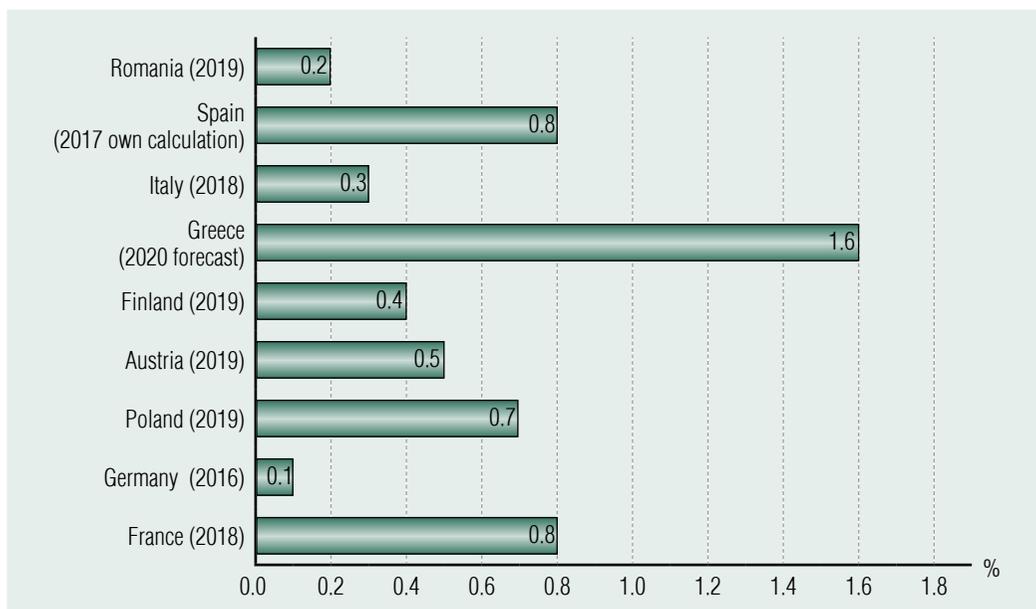


Note: the French data also include healthcare allowance

Source: own calculation (see for each country)

Figure 3

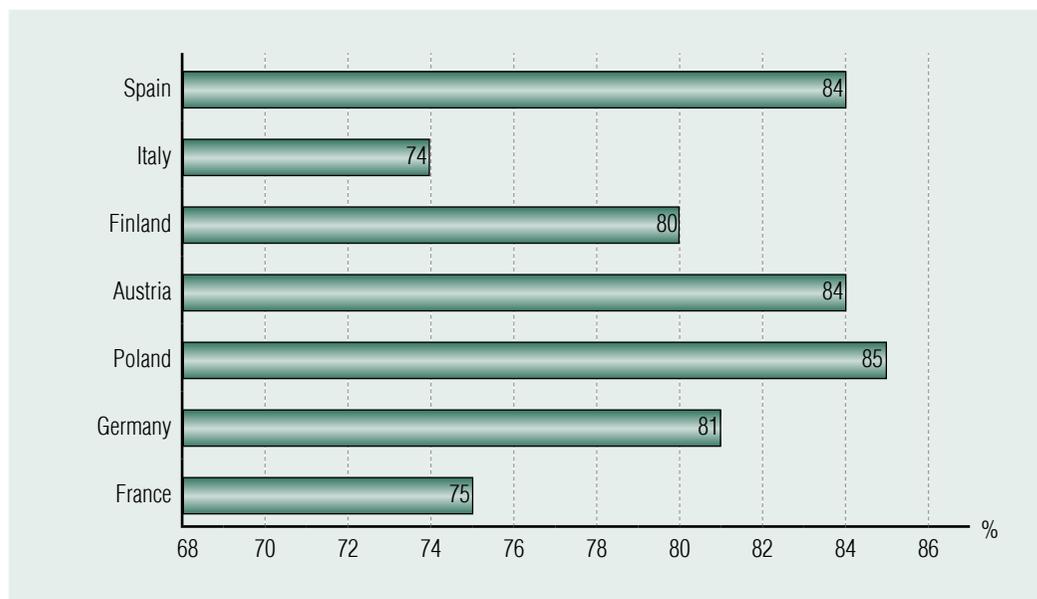
AGRICULTURAL PENSION AS A PERCENTAGE OF GDP (AGRICULTURAL PENSION/GDP)



Source: The 2021 Ageing Report, own calculation

Figure 4

**PUBLIC SUPPORT IN AGRICULTURAL PENSION PAYMENTS
(SUPPORT/PENSION PAYMENTS)**



Note: the French data also include pension fund and health fund support

Source: own calculation (see for each country), and The 2021 Ageing Report.

Where the pension system is not a fully Bismarckian public system, but where occupational pension funds play a significant role in financing pensions, there are no agricultural pension funds. However, where small farms have a significant role, there is (was) separate agricultural pension funding. In contrast, where large farms dominate, there is (was) no agricultural pension system.

In these respects, Belgium (which does not currently operate a separate agricultural social security scheme) is the only country that does not fully follow the general trend. On the one hand, there is no meaningful role for occupational pension funds in the pension system, which could ‘justify’ the existence of a separate agricultural pension fund. On the other hand, large farms dominate, which

would argue in favour of not having a separate agricultural pension system.

The situation in Germany is unique, because the pension system was introduced in the former FRG, where the current weight of larger farms is around the threshold (67 percent), while in the former GDR it is 95 percent. In terms of relative weight (e.g. as a share of GDP), it is the German system that is the least significant. *Table 2* shows what characterises each of the continental older EU countries according to the aspects analysed.¹²

‘New’ Member States

For the new Member States, there is a third aspect which helps to assess whether they

Table 2

**THE SHARE OF LARGE FARMS AND THE NATURE OF THE PENSION SYSTEM.
OLD CONTINENTAL EU MEMBER STATES**

Country	Share of large farms*	Bismarckian public pension system	Is there (was there) an agricultural pension fund?
Germany	high	yes	yes
France	average	yes	yes
Italy	low	yes	yes
Spain	low	yes	yes
Greece	low	yes	yes
Finland	low	yes	yes
Portugal	low	yes	remnants exist
Belgium	high	yes	no
Netherlands	high	only in part	no
Denmark	high	only in part	no
Sweden	high	only in part	no

Notes: The share of large farms is considered high if the share of farms with a production value (SO) of more than EUR 250,000 in 2016 reaches 65 percent and low if it does not exceed 50 percent.

Source: self-edited, based on Eurostat data for the share of large farms

have established separate agricultural pension funding. This aspect is whether farmers were integrated into farmers’ co-operatives under the previous (socialist) system. Where the co-operative sector dominated, agricultural pension funding was typically not established after 1990.

There was no collectivisation in Poland and Yugoslavia; a separate agricultural pension system was set up in 1990 in Poland, and a separate farmers’ social security scheme was established in Croatia. There was a division of common land in co-operatives in Romania and Bulgaria, but no new fund to finance the farmers’ social security scheme was set up.

There is no agricultural social security fund in the 6 other new Member States. Of these, small farms dominate in the 2 southernmost Baltic states, while large farms (successors to

former co-operatives) account for the bulk of production in the Czech and Slovak successor states. Hungary and Estonia are situated ‘halfway’ between these two extremes.

SUMMARY ASSESSMENT

Based on the examples of the countries presented in our study, it can be said that the pension systems related to agriculture have varied considerably from country to country and have undergone significant changes over the last twenty to thirty years. This was not only the case in countries undergoing a regime change, but also in countries with unchanged regimes. The reasons for these changes include changes in the structure of agricultural holdings and in the system of

agricultural subsidies. Changes in the product structure and productivity growth have led to a reduction in the number of people employed in agriculture. Agriculture has also been affected by the demographic trend in Europe which has become more widespread in recent decades, i.e. population ageing. The number of active farmers, including young farmers, is declining dramatically. However, the number of retired farmers is still high. The problems facing the European pension systems are even more striking for those involved in agriculture. There is a growing gap between the contributions paid by agricultural workers and the payments made to their pensions.

Agricultural activity is characterised by low profitability and dependence on support schemes. If a farmer with an average technological level of farming can only achieve a low income, he generally has two main alternatives. One is to switch to intensive production methods, and the other is to stop farming. Problems may arise in both cases. The countryside can become depopulated,

environmentally undesirable monoculture production can develop, and untended areas can appear. It is therefore more appropriate to encourage farmers to continue production by means of support and career financing (e.g. pensions). The pension system for those involved in agriculture should be designed in a predictable way, taking into account the specific characteristics of agriculture and the indirect effects of the various forms of agricultural production.

Hungary does not have a solution for farmers to receive a decent income in their old age. Today there are around 250,000 farmers (primary producers), but in 2018 only 42,000 farmers paid pension contributions, usually after the minimum wage level,¹³ so even in their case, a low pension can be expected in their old age. It would therefore be advisable to introduce an agricultural pension insurance scheme for the farming community in our country, which (as in the countries analysed) should finance a significant share of pensions directly from public support. ■

NOTES

¹ Today it is the highest in Poland, at 60 percent.

² Generally, pensions were given for 10–15 years

³ We estimated a reduction (26 percent) in the number of contributing farmers, by which the AWU of paid work had decreased. We assumed a similar decrease in the number of retired farmers (13 percent) as in the previous 10 years (INE Spanish Stat. Yearbook, 2020. pp. 239–249).

⁴ Only EU agricultural subsidies were rated higher, at 95 percent.

⁵ Despite this, few have taken up the commitment

to pay, for example, in 1999, 5 percent of farmers paid pension contributions (Poteraĵ, 2008).

⁶ In 1997, this source covered 48 percent of the expenditure of the agricultural pension fund, 52 percent came from public support and 2 percent came from paid contributions.

⁷ The high expenditure was due to the 2 million pensioners. Beside farmers and agricultural workers, other professionals in smaller rural areas also received their pensions from this fund.

⁸ The pension is determined according to both the old calculation method and the new calculation

method, and then the proportion of each is determined by the years elapsed since introduction.

⁹ A public treasury funded by taxes.

¹⁰ It is worth mentioning that in the former Yugoslavia there were individual farms before 1990 which were obliged to pay social security contributions.

¹¹ For Spain, Italy and Austria, the pension expenditure figure given in the discussion of each country has been divided by the GDP value.

¹² The analysis was conducted on data from 9 countries (Figures 1–4). Table 1 includes more countries as it includes those that have long since abolished their agricultural social security fund. Table 2 analyses the situation from a different perspective, on the one hand including continental EU countries that have never had an agricultural social security fund and on the other hand excluding Poland, which is not an old Member State.

¹³ <https://nyugdijmaskeppen.hu/ostermeloi-nyugdijbiztositas/>

REFERENCES

- BÁGER, G., PARRAGH, B. (2020). The Coronavirus Crisis, Sustainable Development and the Incentive State Model *Public Finance Quarterly (Pénzügyi Szemle)*, 65 (special edition 2), pp. 86–113, https://doi.org/10.35551/PSZ_2020_k_2_4
- COOPMANS, I. et al. (2021). Understanding farm generational renewal and its influencing factors in Europe. *Journal of Rural Studies*, 86, pp. 398–409, <https://doi.org/10.1016/j.jrurstud.2021.06.023>
- CZYŻEWSKI, A., MATUSZCZAK, A. (2014). ASIF in Poland in the light of national budget expenditures since 1991. Justification functioning system separateness among the EU countries. *Management*, 18(2), <https://doi.org/10.2478/manment-2014-0052>
- CZYŻEWSKI, A., MATUSZCZAK, A. (2020). Changes in the structure of budget expenditure on the agricultural sector in Poland. *Annals of the Polish Association of Agricultural and Agribusiness Economists*, <https://doi.org/10.5604/01.3001.0014.5626>
- DE MENIL, G., SHESHINSKI, E. (2002). *Romania's Pension System: From Crisis to Reform, 2002*. In: Feldstein, M., Siebert, H. (editors): *Social Security Pension Reform in Europe*. University of Chicago Press
- HORNOWSKI, A. et al (2020). Factors Determining the Development of Small Farms in Central and Eastern Poland. *Sustainability*, 12(12), <https://doi.org/10.3390/su12125095>
- HOSKINS, D. D. (1971). Special Retirement Programs for Farmers: New Japanese Law. *Social Security Bulletin*
- LENTNER, Cs. (2004). Characteristics of Hungarian agricultural financing on the threshold of EU accession. *Farming (Gazdálkodás)*, 48(1), pp. 69–78 and p. 10
- MATOLCSY, Gy. (2020). Competitiveness as a Decisive Criterion for Sustainability. *Public Finance Quarterly (Pénzügyi Szemle)*, 65 (special edition 2), pp. 7–24, https://doi.org/10.35551/PSZ_2020_k_2_1
- POTERAJ, J. (2008). Pension systems in 27 EU countries. MPRA, München, p. 561, <https://mpra.>

ub.uni-muenchen.de/31053/1/MPRA_paper_31053.pdf, Download: 08. 09. 2021

SOMAI, M (2014). *Agricultural support in the European Union*. In: Katona, Klára; Schlett, András (ed.) *Development strategies, financing alternatives*. Pázmány Press, 22. pp. 225–246 and p. 271

SYMEONIDIS, G. (2016). The Greek Pension Reform Strategy 2010–2016. Discussion paper, Worldbank Group

VÄRE, M., HESHMATI, A. (2004). Perspectives on the Early, Retirement Decisions of Farming Couples. IZA Discussion Papers, 1342, Institute for the Study of Labor (IZA), <https://www.econstor.eu/bitstream/10419/20612/1/dp1342.pdf>, Download: 31. 12. 2021

WIRTH, CH. (2007). 50 Jahre Alterssicherung der Landwirte. In: Soziale Sicherheit in der Landwirtschaft (SDL), 2(96)

Bundesverfassungsgericht (2018). Vorschriften über die Pflicht zur Abgabe landwirtschaftlicher Höfe als Voraussetzung eines Rentenanspruchs verfassungswidrig. *Pressemitteilung*, 68(9)

Dachverband der Sozialversicherungsträger (2020). Jahresbericht der österreichischen Sozialversicherung 2020. November, Sozialversicherungsanstalt der Selbständige – SVB (2021)

Eurostat (2018). Farms and farmland in the European Union – statistics. Nov. 2018

Finnish Centre for Pensions: Farmers and Grant Recipients, <https://www.etk.fi/en/finnish-pension-system/pension-security/pension-coverage-and-insurance/farmers-and-grant-recipients/>, Download: 14. 08. 2021

Gesetz über die Alterssicherung der Landwirte (ALG). <https://www.gesetze-im-internet.de/alg/BjNR189100994.htm>, Download: 16. 05. 2021

INE Anuario Estadístico de España 2018 and 2020. (Statistical Yearbook of Spain)

KRUS (2020). Basic information. Agricultural social insurance fund. Warsaw

Ministerio De Empleo Y Seguridad Social (2014). Anexo al Informe Económico-Financiero a los Presupuestos de la Seg. Social de 2014. Madrid p. 33, 71, 94, 169

MSA Direction des statistiques (2020). Les chiffres utiles de la MSA. Édition nationale 2020

Romanian Statistical Yearbook 2020, Romanian National Institute of Statistics (2020). Bucuresti, https://insse.ro/cms/sites/default/files/field/publicatii/anuarul_statistic_al_romaniei_carte_1.pdf

SVB (2021). Geschichte. <https://web.archive.org/web/20160306070705/https://www.svb.at/portal27/portal/svbportal/content/contentWindow?contentid=10007.718258&action=2>, Download: 20. 04. 2021

SVLFG (2020). Auf einen Blick – Daten und Zahlen 2019.

Statistik Austria: Ausgleichszulagen und Kinderzuschüsse in der gesetzlichen Pensionsversicherung. http://www.statistik.at/web_de/statistiken/menschen_und_gesellschaft/soziales/sozialeleistungen_auf_bundesebene/pensionen_und_renten/020127.htm, Download: 22. 05. 2021

The 2021 Ageing Report: Economic and Budgetary Projections for the EU Member States (2019–2070) Institutional Paper 148. May, 2021

The Italian pension system, Research and Study Centre of Itinerari Previdenziali (2020), Report n.7, 2020, <http://dx.doi.org/10.13140/RG.2.2.19129.93282>