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Implicit Social Policy in Agriculture

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The current agricultural policy instrument of direct payments to farmers is also very much a form of social policy. This applies particularly for agricultural systems based on small family farms. Taking Switzerland as an example, the main weaknesses of the present system are outlined. A quantitative analysis reveals massive income differences among Swiss farmers, with the richest receiving more direct payments than the poorest. Potential improvements to the agricultural policy system are suggested by explicitly redefining direct payments as a social policy instrument.

Introduction

Social policy is not always explicitly labelled as such. Distributional motives are often hidden in policy measures of various kinds and blended with other policy objectives, thereby often challenging the Tinbergen (1956) rule that recommends, for efficiency reasons, that at least one instrument should be chosen for each policy objective. Although 'agricultural policy and social policy are rather distant domains in political life', as Granberg (1999: 324) puts it, agricultural policy is an excellent case in point for such implicit social policy. Most comprehensive publications about agricultural policy (Rieger, 1996; Piccinini and Loseby, 2002; Tweeten and Thompson, 2002) somehow mention the social dimension of agricultural policy. However, I claim that the impact of social motivations and social problems for today's agricultural policy instruments, with respect to the Tinbergen rule, is yet to understand.

Some countries with predominantly small farms like Spain, Italy and Germany follow a specific declared social policy for farmers. This policy mostly consists in subsidising social insurance schemes for old age, accidents or illnesses and has been extensively criticised for injustice and inefficiency reasons (Schmitt and von Witzke, 1975; Wiss. Beirat, 1979; Hagedorn, 1981, 1982). However, it is apparent that other policy instruments, not labelled 'social', have a more significant impact on the social situation of farmers, mainly due to the higher budget allotted to these main policy instruments.

The majority of farmers in industrialised countries would not be able to carry on in the current way if no transfers were paid by the state. Even with existing transfers, farming is a very relevant case for the intensely discussed phenomenon (OECD, 1997; Pearson and Scarpetta, 2000; Munger, 2002) of the working poor. The hypothesis, which we want to test, is that the current systems of direct payments in agriculture leave room for changes in accordance to the Tinbergen rule, pursuing distributive objectives by implicit social policy instruments. Both justice and efficiency could be increased considerably, although

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it would be a mistake to abandon the special status of farming and just switch to the general systems of social welfare.

This hypothesis is discussed through the following procedure: The following section gives an overview about agricultural systems in industrialised countries and their social impact, followed in the next section by a qualitative discussion of the implicit social policy instrument of direct payments. In the fourth section, the different social outcomes of a laissez-faire scenario, direct payments and general welfare are shown quantitatively by taking the example of Swiss farms. The next section highlights the shortcomings of the instruments of general welfare for farming. From these results, recommendations for agricultural policy changes with special regard to social policy are made in the final section.

Agricultural systems and social policy

In general, agricultural structures in industrialised countries can crudely be categorised into two groups. In most of North America, Eastern Europe and some Western European countries like Britain, small farms (setting a threshold at about 50 ha) and large farms mix, but large holdings manage most of the farmland, receive most governmental support and more or less characterise the sector. This sort of agricultural system is dominated by what is sometimes labelled 'fordistic production model' (Land, 2000; Land and Willisch, 2002), because large amounts of mass products like wheat and milk are produced in a rational way.

It is obvious that, in these agricultural systems, it is very difficult at best and perhaps even unnecessary to carry out a social policy targeted at the farming sector as a whole. Indeed, some authors (e.g. Allen, 1999) claim that farm programmes, for example in the United States, are of little benefit for low-income people.

In East Asia, the Mediterranean countries, the Alpine countries and some outliers like Poland or Finland, agriculture is characterised by many small family farms. In these countries, various factors have lagged the structural development of the sector, so that the agricultural sector is structured in a very traditional way and has a low-income potential compared with other sectors in these countries. In most countries with such family farm systems, agriculture does not only have low productivity, it is the sector with the largest rate of working poor (e.g. Streuli and Bauer, 2002), in spite of the widespread perception of 'working poor' as an urban phenomenon (Johnson, 2002; Munger, 2002) and in spite of the generally high level of public sympathy that such an organisation as agriculture enjoys.

In spite of this observation, it has to be asked why farmers, if poor, should not simply be deferred to the general social security systems. The answer is that most social policy instruments in industrialized countries having originally been designed to fight urban poverty. It becomes increasingly clear that special instruments are appropriate to target rural poverty too (Shobe and Boyde, 2003).

Another argument to employ specific social policy instruments for family farm systems (but not necessarily for fordistic farm systems) is the impact of the system for the rural community. Public support for agriculture has generally been intended to maintain not only individual farmers, but whole communities, and support for threatened communities is a valid social policy goal. Some empirical studies (MacConnel and White, 1980; Mann, 2004) have found, however, that the economic and social interdependencies

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between family farm systems and rural communities are far stronger than between fordistic farm systems and rural communities. If rural regions face problems of depopulation and decline, there is a case for supporting a family farm structure.

Direct payments as implicit social policy

We define, as an implicit social policy instrument, interventions by the state, which are not labelled social but the main effects of which are income transfers for overwhelmingly poor citizens. So-called direct payments are the most significant example of implicit social policy packages. In Europe and the United States of the 1990s, public support for farmers switched from market-based subsidies to such support systems, which were based mainly on direct transfers from the state to farmers. Farmers ceased to receive far higher prices for their products than under market equilibrium. Instead, they received grants that were usually linked to inputs, such as hectares of farmland or the number of animals they kept.

Agricultural economists have generally hailed that development, because it got rid of inappropriate production incentives (Fuchs and Trunk, 1995; Hovland and Bennett, 1995; Popp, 1996). However, if direct payments are merely an income transfer to farmers, it has to be asked what distinguishes them from welfare payments to non-farmers and what is the justification for the existing distinctions.

The dilemma of direct payments in agricultural policy has, in general, been around for much longer than direct payments have existed. As mentioned above, the Dutch economist Jan Tinbergen (1956) showed by formal analysis that at least one instrument had to be created for each goal if policy is to be able to achieve the goals efficiently and flexibly. It will become obvious that direct payments for farmers are a good example of a policy that is a breach of the so-called Tinbergen rule, thereby permanently accepting efficiency losses.

Direct payments serve very different goals. The first is social policy. Uniquely in agriculture, the term social policy is very rarely used among agricultural policy makers. Instead, the crude term 'income policy' is preferred. The Economic Research Service of the US Department of Agriculture formulates it thus (2002): 'Enhancing and stabilizing farm income is a fundamental feature of US agricultural policy.' One can cynically explain that goal by strong rent-seeking activities by farmers and vote-maximizing strategies on the part of politicians (Hagedorn, 1989; Tullock and Hillman, 1991). If, however, this 'income policy' has any normative justification, we can only interpret it as a euphemism for social policy. The justification would be that farmers, in general, earn little enough to make them eligible for public transfers. We will come back to this issue below.

Another objective of agricultural policy is to keep the land under the plough in a sustainable way. On the one hand, the transfers are meant to prevent agricultural land from merely being abandoned, which supposedly has negative effects on biodiversity and landscape diversity and also on the rural infrastructure. On the other hand, an increasing share of transfers is tied to environmental restrictions designed to prevent water and air pollution, species extinction, erosion and other negative effects that may be connected with intensive farming. The following two examples are presented to show what kind of inefficiencies arise if only these two goals are linked within one policy instrument, let alone other existing objectives of direct payments like rural development or self-sufficiency with food.

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In Switzerland, farmers who want to receive the generous direct payments are obliged to fulfil certain minimum standards for environmental quality, a link that is known as cross-compliance among agricultural policy-makers. While that may appear reasonable at first glance, it is not. The minimum level for respecting the environment and reducing emissions ought to be set by law. In fact, Switzerland's restrictions regarding animal welfare and fertilizer and pesticide use are among the strictest in the world. It is totally acceptable if farmers are rewarded for the environmental quality they deliver in addition to legal requirements, but what happens, in effect, is that Swiss farmers who do not deliver extra public goods are excluded from direct payments and therefore from the sectoral social security system. It may be justified in the case of farmers who break the law. The decision to protect the environment only to the degree prescribed by law, however, should be no reason to stigmatise the farmer and exclude him from social welfare.

In the European Union, the system is currently changing from per-hectare and per-animal premiums to per-hectare premiums only. The link between factor endowment and its entitlement to transfers remains unchanged. That is rational from a viewpoint of keeping land in tillage. From a Social Policy perspective, however, it is precarious and counterproductive. It is well known that the income of small farms is in general well below the income of large farms (Dodson, 1994). But, due to the current system, large farms are entitled to much more public money than small farms. Thus, agricultural policy creates exactly the paradox of social policy that has been well known and broadly discussed since Murray (1982; p.16): 'The large proportion of the social welfare budget spent on people above the poverty level.'

Hence, by explicitly distinguishing between agricultural policy instruments designed to protect the farmer and instruments designed to protect the environment, the efficiency and justice of agricultural policy could be increased considerably, as will be shown quantitatively in the next section.

The social situation of Swiss farmers

Having outlined that different farming systems exist in the industrialised world, Switzerland can serve as an extreme example of small-structured family farming. Average farm size is about 16 hectares, compared with 67 hectares in Britain and 200 hectares in East Germany. Family holdings are almost the only existent legal form of agricultural enterprises. Thus, Switzerland may serve as a case for the social problems that small-structured family farm systems entail. In the context of direct payments, Switzerland is also a particularly interesting example, because of the uniquely high level of support by the national government that agriculture enjoys.

In Switzerland and elsewhere household income is treated as an average in most publications about agricultural income. This, however, conceals the large income differences between farms. For our purpose, the Central Farm Accountancy Data Network of Switzerland was analysed in a different way. The total incomes of farm households as an average of the years 1999–2002 were divided into ten deciles, the principal criteria of which are displayed in Table 1.

It shows that income differentials within farms are enormous. The top 10 per cent of households earn almost seven times as much as the bottom 10 per cent. Around 70 per cent of farm households earn less than the median income of all Swiss households (87,600 Fr./a), while some 20 per cent are below the poverty line of half the median

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Table 1 Deciles of total income among swiss farm households (reference farms of the farm accountancy data network)

Decile		1	2	3	4	5	6	7	8	9	10
Farm area	ha	14.22	14.83	15.98	16.26	17.41	18.55	19.75	21.29	23.39	27.53
Animals	LU	18.7	18.9	21.5	21.9	22.6	24.0	24.4	26.5	29.6	33.2
Persons in household below 16 years	No.	0.67	0.92	1.06	1.22	1.28	1.35	1.40	1.48	1.56	1.58
Persons in household 16 years and older	No.	2.56	2.86	2.99	3.03	3.03	3.05	3.06	3.05	2.98	3.18
General direct payments	Fr.	29,943	31,157	31,535	31,286	31,816	33,347	34,195	35,471	37,400	39,752
Ecological direct payments	Fr.	3,954	4,040	4,604	4,889	5,341	5,988	6,765	7,122	8,371	10,872
Agricultural income	Fr.	14,747	28,190	35,642	40,996	46,676	54,601	60,222	69,795	83,238	122,059
Off-farm income	Fr.	7,816	12,747	14,872	17,352	18,844	18,946	22,007	22,867	24,989	27,241
Total income	Fr.	22,562	40,937	50,515	58,348	65,520	73,546	82,229	92,661	108,273	149,300

income. The average number of farm household members differs only slightly between rich and poor farms and certainly cannot outweigh income differences.

Obviously, farm size is one of the key issues in explaining income differences. The richest farms own almost double the land and the animals (measured by Livestock Units) of the poorest farms. Also, off-farm income possibilities contribute a little to the difference, as they seem to be brighter for the owners of large farms. What is more striking, however, is the confirmation of the discussed phenomenon that distribution of public transfers is certainly not according to needs. It can be understood that the ecological payments, which are made according to added ecological value provided by farmers (such as planting hedges or extensifying grassland), are higher for large (and richer) farms than for small ones. Large farms' potential for supplying public goods exceeds the small farms' possibilities. But it remains difficult to accept that the general payments by the government, which are only loosely bound to environmental quality, are also higher for rich households than for poor households.

It has to be remarked that the data are drawn only from the 3,000 farms, which share their bookkeeping data with the respective government agency, not from the total of 70,000 farms. It can be assumed that there is some bias in the sample, because the poorest and least skilled will be less able to fulfil the requirements for a proper bookkeeping system, which enables them to be included in the Farm Accountancy Data Network. Therefore, it can only be estimated whether the lowest decile described in Table 1 really represents 10 or rather 20 to 30 per cent of all Swiss farms. A smaller random sample of farmers drawn from a general household panel suggests the latter (Streuli and Bauer, 2002).

In Switzerland, as in most industrialized countries, general welfare is provided both for persons without income and for the working poor, defining a minimum income to which everybody is entitled. Although they are also entitled without having to sell their land, farm households hardly ever apply for general welfare. In fact, during this study a lot of effort had to be made to find out about farm eligibility for general welfare, because most local offices have never encountered this case.

However, from the nationally recommended level of social welfare[1] and from the data on the family size of the income deciles, it was estimated what the level of general welfare would be for the farming households if the existing direct payments were substituted by the general welfare system. Figure 1 shows the results, depicting income levels of the deciles under three different scenarios. The dotted line shows what farmers would receive if instead of receiving general direct payments they were to receive general welfare payments. The other two lines show the status quo, with and without general direct payments.

The results show that the poorest farms would be better off after such a system change. Currently, they live well below the standard provided by social welfare. On the other hand, the richest quarter of farmers would not be eligible for social welfare, not even without receiving direct payments from agricultural policy. The income of the richest decile would still be double the income of the poorer half of farmers, if welfare were substituted for general direct payments. The government would save considerably by such a system change, for the additional sum they would be handing out to poor farmers would be far exceeded by the savings on transfers to rich farmers as can be seen by comparing the hatched fields.

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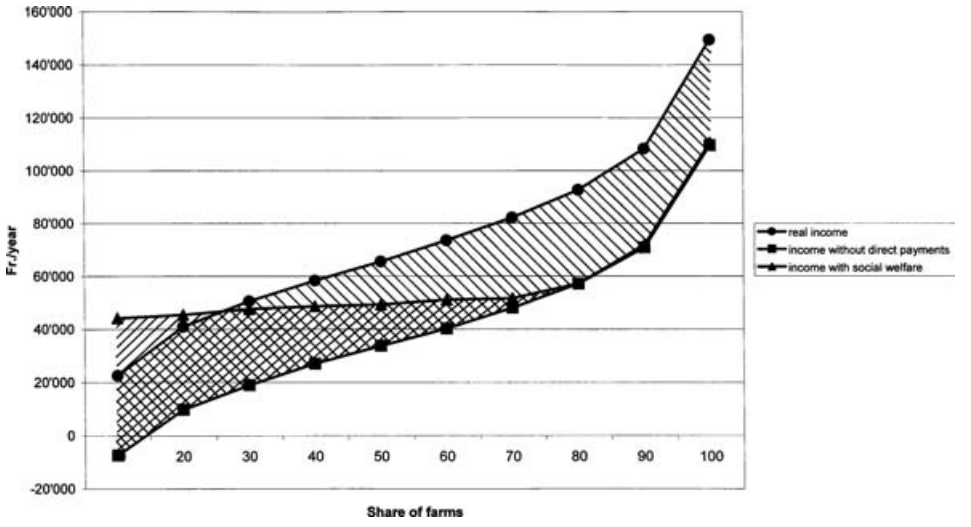


Figure 1. Income situation among Swiss farm households.

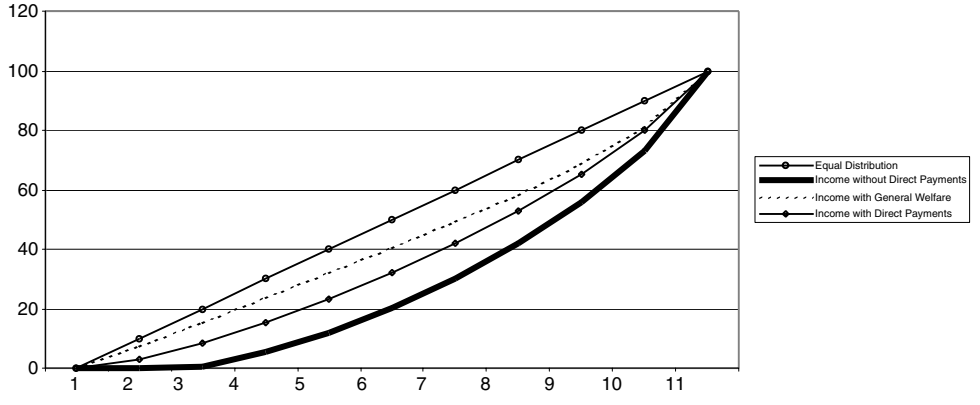


Figure 2. Lorenz-Curve of Swiss Agriculture.

The impression of a more even income distribution by replacing general direct payments by social welfare is confirmed by drawing the Lorenz curve in Figure 2 and calculating Gini coefficients in Table 2. Under laissez-faire conditions, an extremely unequal income distribution would be the result. Given that the Swiss overall Gini coefficient is 0.33 (CIA, 2002) and is at a higher level than in all its neighbouring states (Jackson, 2000), an intrasectoral Gini coefficient as high as 0.43 is probably not sustainable, though we would theoretically observe it under laissez-faire conditions. The current level of 0.26 shows that direct payments contribute to reducing the intrasectoral income differences. The most even income distribution with a Gini coefficient of 0.15, however, would be achieved by replacing direct payments with general welfare payments.

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Table 2 Gini coefficients for the scenarios

Scenario	Gini coefficient
Income without direct payments	0.43
Income with general welfare	0.15
Income with direct payments	0.26

Having carried out this positive analysis, it seems appropriate to switch to the normative part. If we know the outcomes of different social policy instruments, it should be possible to choose between them.

Proposals for greater social justice in agricultural policy

In general, the high level of 'working poor' farmers in Switzerland coincides with a level of subsidies that is the highest in the world (Anton and Jones, 2002). That seems to confirm the notions that high income support for farmers does not, in the long run, raise farming incomes (Schmitt and Tangermann, 1983) and, more generally, that rising welfare spending keeps poverty at a high level (Murray, 1984). However, there is a broad consensus that the 'working poor' problem should not be left to itself. Even scientists who question welfare payments as an unconditional gift to the poor emphasize that the working poor are 'playing by the rules' but 'losing the game' (Ellwood, 1988) and should therefore be the first to be lifted out of poverty. The current direct payment system for farmers obviously does not accomplish this.

Sticking to the Swiss example outlined above, it can be claimed that the current system of direct payments treats neither the poorest nor the richest farmers fairly. If one separately pays farmers for the ecological quality they deliver (which is mostly accomplished through ecological direct payments not included in the figures above), there is no reason to pay them an extra income transfer of 40,000 francs if their income is well above the national median, as is the case for the richest 10 per cent of farm households in Table 1. However, the 30,000 francs paid to the poorest 10 per cent does not help them out of poverty.

Is there, thus, a case, for exchanging direct payments for social welfare, for paying every farmer who makes less money than provided by general welfare the difference between his or her income and the general social welfare level? Indeed there is, and switching from current direct payments to such a system would even save the state a considerable amount of money. But, having said that, one should also bear in mind that nowadays farmers below this threshold are eligible for general welfare, but hardly ever apply for it. Even now, it would be a rational solution for many farmers to exchange filling out forms for the Office of Agriculture to apply for general direct payments in favour of filling out forms at the Office of Social Welfare to apply for even greater financial assistance. But, almost all farmers would be unwilling to do so. Hence, institutional solutions have to be found that make applying for welfare funds less embarrassing for the 'working poor' farmers. While the Swiss example was chosen, this is a fairly general notion.

Pearson and Scarpetta (2000), Boughtwood *et al*. (2000) and Bartik (2001) emphasize the success of negative taxes in fighting poverty in working households. Refundable tax credits, preferably paid on a monthly basis rather than as a 'lump sum' at the end of the

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tax year, seem to be an appropriate measure for farmers as well. Farmers have to fill out their tax returns anyway. An automatic tax refund for farmers if their income lies below the social welfare threshold, instead of paying per-hectare and per-animal grants, could mean progress in two respects. It could contribute to more justice in agricultural policy and could provide the nucleus for a tax system that benefits 'working poor' households in other sectors as well.

If one confines the social aspect of agricultural policy to transfers up to the poverty threshold, certainly many farmers in the 80 per cent who would be worse off after such a change would cry 'foul'. And indeed, a difficult ethical question arises about the justification for the foreseeable protest. As for Switzerland, which has pampered its farmers with loads of subsidies for almost 100 years, does the government have a moral obligation to meet the expectations thus built up by farmers? Would a substantial reduction in direct payments be a betrayal of confidence to those who 20 years ago decided to take over their parents' farm because of the high-income potential of this decision?

While there is probably no 'right' or 'wrong' answer to this question, I would like to show directions for those who tend to answer Yes and who would prefer a more buffered agricultural policy change and for those who worry about the political expediency of merely exchanging direct payments for social welfare. We may have a moral obligation towards current farmers, who have invested a lot of human, capital and other resources in their job, leaving only little opportunity costs for other sectors. But certainly, there is no moral obligation towards future generations of potential farmers regarding the income potential of their occupational choice. Hence, there may be a good argument for differentiating between current farmers and future farmers. There may be a good argument for paying an income transfer to current farmers that farmers who take over a farm after a certain cut-off date would not be entitled to.

But, even if one applies such a principle, which may be called 'dynamic differentiation', the basis of the payments to current farmers should be thoroughly reformed. As argued before, there can be no justification for handing out social transfers proportionally to factor endowments. Family size would be a far better basis, as we know from most social welfare systems. The level of payments would make up for the difference between average farming income and average income in other sectors with a comparable educational profile.

A transitional period of about 30 years would be the result of applied 'dynamic differentiation'. Within this period, the farming structure would probably undergo rather rapid development, as every potential farm successor would only take over the farm if he or she could expect to earn a sufficient (monetary and non-monetary) income, just by the production of market goods (such as wheat) and the provision of public goods (such as extra environmental quality). But agricultural policy has significant potential for becoming more just and more efficient than it currently is. And an explicit redefinition of direct payments as social policy would contribute considerably to exploiting this potential.

It is unfortunate that social policy analysts often restrict their activities to policy fields labelled explicitly as social policy. A more critical self-awareness might in the future lead to a broadened critical perception of social issues, even if hidden in other policy fields.

Note

1 In fact, the cantons in Switzerland are free to choose different general social welfare levels.

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