SYSTEMATIC POLICY DECISIONS ON DIRECT INCOME PAYMENTS IN AGRICULTURAL POLICIES

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1. Introduction

Direct income payments (DIP) are in the centre of the discussion in the ongoing political debate whether agricultural policy objectives can be pursued in an economically more efficient and, at the same time, less distorting way. However, the review of literature and agricultural policy debates on DIP suggests that the numerous different issues addressed by DIP often reveal that a systematic approach to the topic is still missing. Particularly conflicting policy objectives lead to confusion and can conceal the real merits of DIP.

The most important objectives of agricultural policies as expressed by governments are income support or income stability for farmers, structural adjustment in rural areas, regional assistance and payments for the provision of public goods (such as landscape preservation and wildlife habitat). These objectives reflect two categories of policy targets: (1) the overcoming of market failures and (2) equity or income distribution related interventions. Both can be addressed by DIP.

This paper discusses under which circumstances DIP are an appropriate and efficient measure to address the objectives of agricultural policies. It identifies and examines the characteristics and features that DIP should have in the context of different objectives. The development of an objective-directed decision tree for the design and efficient use of DIP as an instrument in agricultural policies aims at facilitating a sustainable and resource saving economic policy in the field of agriculture. With the intervention decision tree for DIP the paper provides an important tool to structure and improve policy debates and policy decisions on DIP.

2. Policy effects of direct income payments – the decoupling issue

DIP for agriculture cover all payments made directly from public authorities' budgets to individual farmers or farms and have the effect of increasing farmers' current incomes. They are either made to meet particular (agri-) social demands or to remunerate farmers for the provision of non-commodity outputs for which markets do not exist (FELLMANN, 2006). This category of measures excludes budget payments that are intended to increase the income possibilities in the future (e.g. earmarked investment contributions). However, it may include measures that are linked to production to varying degrees, and measures under which farmers are expected to comply with particular conditions, engage in specific activities or provide specific non-agricultural outputs (OECD, 1994; FELLMANN, 2006).

DIP measures are often referred to as "decoupled" policies - in a sense of having no link to production (and consumption) and therefore being neutral to production and trade. CAHILL (1997) defines a policy as fully decoupled if it does not distort decision making by farmers and if markets adjust as if there was no policy in place. In a less restrictive sense, a policy is defined to be effectively decoupled if production decisions by farmers are affected by the policy in a way that does not increase the level of production; i.e. the policy results in a level of production that does not exceed the level that would exist without the policy.

In practice, it is very difficult to completely eliminate the link between a payment (or policy) and the production decision process. There are three main mechanisms through which policies affect production and trade. First, static effects or relative price effects arise when incentive prices are affected, markets work imperfectly or farmers make decisions under binding constraints. Second, risk related effects either result from a policy induced reduction of variability of income (insurance effect) or from the fact that more wealthy farmers take bigger risks (wealth effect). Third, dynamic effects may occur when current investment decisions and/or farmers' expectations on future policies affect production decisions in the following years (HENNESSY, 1998; OECD, 2001a).

Since it seems difficult to imagine any agricultural policy measure for which none of these effects exist and also because it is difficult to evaluate ex-ante whether a policy is indeed decoupled or not, two conclusions can be drawn with regard to decoupling (CAHILL, 1997): (1) Whether a programme is production and trade neutral can only be determined on the basis of an empirical ex post analysis of farmers' response to that programme. (2) In general, decoupling is rather a question of degree than a zero-one characteristic. DIP usually are viewed as being advantageous compared to traditional agricultural policy measures due to their higher level of decoupling. However, also DIP may be linked to mandatory production activities and thus possible production incentives and market impacts have to be reviewed carefully.

3. Intervention decision tree for direct income payments

The intervention decision tree in Figure 1 provides a general framework for the policy design of DIP. This decision tree indicates the design of DIP and its changes with regard to production incentives. Its structure is mainly based on the criterion whether the DIP requires mandatory cultivation/production or not; it therefore distinguishes between *production related*, *production neutral* and *production unrelated* DIP.

Figure 1   Intervention decision tree for direct income payments
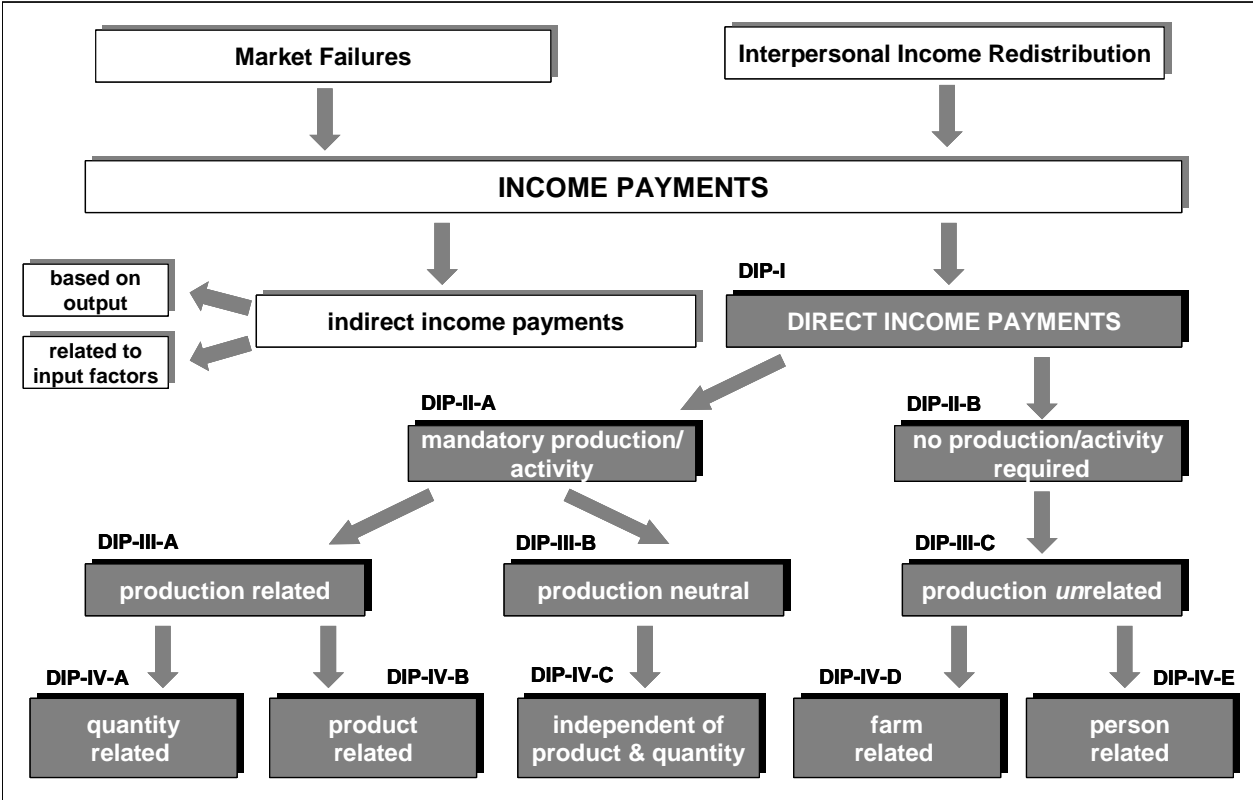
Source: FELLMANN, 2006

The first step of a DIP policy design is to determine whether the policy objective requires production activities. While this is usually not the case when the objective targets income distribution, particularly market failure related DIP may to some extent be linked to physical units of production or production activities. If a policy is *production unrelated* (DIP-III-C in Figure 1) the decision tree indicates that such DIP can be disbursed on the basis of the farm or the individual (DIP-IV-D and DIP-IV-E). If a production link is necessary or desired (DIP-II-A) the policy design may be based on *production related* or *production neutral* DIP (DIP-III-A and DIP-III-B). *Production neutral* DIP are disbursed independently from the production of

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agricultural products and their quantity (DIP-IV-C). *Production related* DIP depend on the production of a specific product and/or its quantity (DIP-IV-A and DIP-IV-B).

It is the objective of a policy that is decisive for the design of the DIP and thus for its production effects. If a policy objective requires production links, the policy design will come out less decoupled and the more production incentives result. In Figure 1 the degree of decoupling in the most disaggregated level of DIP (DIP-IV) increases from the left (quantity related DIP) to the right (person related DIP). To avoid unnecessary market distortions, a DIP of the category DIP-III-C requiring no production activity should be chosen whenever the rationale of a DIP is purely directed to interpersonal income redistribution. DIP aiming at the provision of a public good or service might require some kind of production or activity. In this case, a production neutral DIP (DIP-III-B) is preferable compared to a less decoupled production related DIP (DIP-III-A).

The desired characteristics and features of DIP in the context of these two policy objectives, income distribution related interventions and the overcoming of market failures, will be exemplified in the following. As an example for DIP in the context of objectives concerned with distributional issues the case of adjustment assistance will be discussed. In the context of objectives related to the correction of market failure, direct payments for the provision of environmental goods and services will be analysed.

4. Direct income payments for adjustment assistance (compensation payments)

Past agricultural assistance has attracted more resources into agriculture than would have been the case without agricultural policies. Also production techniques and farm size are affected. It can be argued, that farmers made their economic decisions relying upon policy continuity, i.e. in line with the expectation of further policy assistance. DIP may be used as a measure of income redistribution to help these farmers to adjust to policy changes that could not be foreseen but affect their incomes negatively.

DIP which are introduced to compensate policy changes do not require production activities (DIP-II-B in Figure 1); thus they should not be conditional on any other requirement, but a fixed historical basis to be used for calculating the DIP to be paid to farmers. Any further condition requiring recipients to continue farming or to keep resources in farming in order to

preserve their eligibility, would hinder smooth adjustment. Provided that the compensation payment is not linked to agricultural production or activities, this results in a high degree of decoupling (DIP-III-C in Figure 1).

In general, DIP measures should be clearly linked to a specific policy objective and not be mixed up with others. Compensation payments which aim at tiding over the adjustment pressures resulting from a policy change and the non-fulfilment of past policy promises, should be designed according to a clearly-defined transitional period; i.e. such DIP cannot be made permanent since their distortion potential would increase and lead to a slow down of structural change. If, in addition, payments of unspecified duration are linked to farm area (DIP-IV-C in Figure 1) or to the agricultural holding (DIP-IV-D) rather than to persons (DIP-IV-E), there is a risk that they become capitalised into farm asset prices. This leads to a reduction of the economic value of DIP for the farm and may also constrain structural change in agriculture.

Also, a decline of payments over time seems desirable as a feature of the policy design of compensation payments. Declining DIP are justified, if farmers adjust their farming practices over time, thereby reducing the need for further payments. This presumption is valid for both, unprofitable farms and farms with growth potential. SWINBANK and TANGERMANN (2004) furthermore propose that legally binding commitments for future payments should be made in the form of a certificate issued to each recipient, stating the future stream of annual payments. Such certificates should be tradable like government bonds. This would create more flexibility for the individual recipient leading to a smoother adjustment to the new policy environment.

5. Direct income payments for the provision of environmental goods and services

Agricultural activities often create additional joint or spill-over – multifunctional - benefits, such as open space, wildlife habitat, biodiversity, cultural heritage, flood prevention, an assured supply of food and viable rural communities. To promote such multifunctional benefits DIP are used as a supportive measure when market forces alone do not result in an economically optimal structure of production and consumption. In these cases, a market-determined output level may be inefficient because of unpaid external costs or uncompensated external benefits (OECD, 2001b).

While adjustment payments as outlined above should not be conditional on any current production or activity requirement, DIP in the context of objectives related to the correction of market failure often require some kind of agricultural production or activity and thus their degree of decoupling is lower (DIP-II-A in Figure 1). All DIP for the provision of environmental goods and services might therefore have an effect on production and trade and create economic distortions. If possible a DIP policy in this field should be designed *production neutral* and thus independent of product and quantity (DIP-IV-C in Figure 1). An example would be the landscape preservation if cultivation is the only requirement. The same objective could be targeted by a more restrictive and thus more distorting policy when the DIP require a certain type of production (e.g. pastures) or are even dependent on the amount of the produce (e.g. number of suckler cows). In both cases this would lead to *production related* DIP (DIP-IV-A and DIP-V-B in Figure 1) with a high potential to distort market outcomes. To keep such distortions as low as possible and to ensure that DIP for the provision of environmental goods do not become a disguised form of agricultural production support, policy makers should consider the following recommendations with regard to DIP policy design (OECD, 1994; WICKE, 1993; BUCKWELL at al., 1997; HAMPICKE, 1991; OECD, 2001b; RANDALL, 2002):

1. DIP for the provision of environmental goods and services should remunerate farmers for clearly defined environmental goods or services for which markets do not exist.
2. DIP should not be in conflict with the polluter-pays-principle, i.e. polluters have to bear the full costs of their pollution. Through legally defined environmental standards farmers can be obliged to avoid environmental damage without receiving any payment or compensation for income losses. Thus, DIP would normally not be used as an incentive to reduce or eliminate negative externalities.
3. DIP should not be linked to the production of an agricultural commodity or the use of inputs, so that they do not encourage a higher output.
4. The size of the payment should relate to the full cost of producing the targeted environmental good; e.g. the costs of cultivating and safe-guarding the birds breeding habitat. Another approach would be to calculate the opportunity costs incurred to provide the environmental good.
5. DIP should be made on a recurrent contractual basis.

6. Discussion and conclusion

If governments want to meet their policy objectives (particularly those relating to non-commodity outputs or multifunctionality) by the use of DIP in an efficient way, a precise definition of the objective is crucial. An optimal policy design achieves a specific objective while keeping the impact on economic distortions low and ensuring efficiency in the allocation of resources. The decision tree for DIP facilitates the policy design for a sustainable and resource saving economic policy in the field of agriculture. In doing so, the intervention decision tree for DIP provides a helpful and important tool for researchers and politicians to structure the policy debate and policy decisions on DIP.

Economic theory provides two rationales for government intervention: correction of market failures and income redistribution. While government intervention in the case of market failures is generally done for reasons of economic efficiency, intervention in order to redistribute incomes between groups in the society is basically done for reasons of equity.

DIP can be used to address both types of objectives, but have to be adapted carefully depending on the specific targets. If used as a measure to compensate income losses due to policy changes, DIP provided as declining compensation payments over a clearly defined period could not only help farmers to adjust to policy changes, but also release budget funds when efficiency increases. Such gains could then be used in and tied to areas that are known to be crucial but currently lack resources due to budget restrictions – e.g. the provision of environmental goods and services. It must be stressed, though, that in order to reduce resource inefficiencies it is generally important to limit overall expenditures to the minimum required to achieve the well-defined agricultural policy objectives.

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