

The Cost of Implementing Agricultural Policy

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Introduction

Agricultural policies, like all government policy, incur transaction costs – the cost of designing, implementing and evaluating the measure involved. Making this process more efficient and reducing these costs can help ensure that governments are getting the best value for money in implementing these policies.

Analysts have long considered transaction costs when trying to make social, environmental and development assistance policies more efficient and effective. More recently, the concept has been applied to the transaction costs of agricultural policies – in other words, the costs over and above the price support and budget transfers actually received by farmers.

There are two key issues when looking at the role of policy-related transaction costs in agricultural policy. The first is the need to identify, track and reduce policy-related transaction costs; the second is the impact of these transaction costs on policy choice when governments are looking for the most efficient and cost-effective option to achieve a given objective.

In agricultural policy the debate often revolves around the choice between broad policies such as price support or area payments that benefit all farmers, and more targeted measures that aim for specific results in areas such as biodiversity or landscape. Differences in policy-related transaction costs are only one of a wide range of costs and benefits that need to be taken into account when making that choice. Targeted interventions are often more efficient, because of the savings from targeting. Targeted interventions are only less efficient when the market failure that is being targeted occurs very widely, and/or the policy-related transaction costs are extremely high. If the problem being tackled relates to farmers' income then the costs of delivering support are never so high as to justify an untargeted measure.

This *Policy Brief* examines policy-related transaction costs (PRTCs) and their role in improving the efficiency of agricultural policy. ■

What are policy-related transaction costs?

Policy-related transaction costs are defined as the costs arising from designing, implementing and evaluating agricultural policies at all stages of the policy process, covering actions and interactions between and within government agencies, private organisations and programme participants. It is useful to consider PRTCs according to the stage in the policy process that they occur, who pays the cost, and what type of cost is incurred.

The policy process can be divided into four distinct stages: *policy design*; *policy delivery* when beneficiaries are identified, claims processed and support paid; *monitoring and control* to check that farmers claiming the support have complied with the requirements for receiving a particular payment; and *evaluation* of the outcome to see whether the policy has fulfilled its objectives (see Figure 1). The bulk of the transaction costs of a programme are generated by the second and third stages – implementing the policy, and monitoring the process. A study of the PRTCs incurred by two government agencies involved with the PROCAMPO programme in Mexico, for example, found that delivery (57% of total PRTCs) and monitoring and control (40%), accounted for 97% of total transaction costs, while the design and evaluation stages represented just 2% and 1% of total PRTCs respectively.

At each of the stages, PRTCs can be incurred by a number of different parties. In most cases, the work is primarily undertaken by government agencies operating at the national, regional or local levels. In some cases, part of the process is carried out by private organisations such as consulting companies, banks, insurance companies, co-operatives, farmers' organisations and non-government organisations. For example, in Spain and the United States the network and client files of insurance agencies are used to deliver government-subsidised crop and livestock insurance schemes. Farmers themselves incur transaction costs when claiming financial support offered by governments – the time and effort involved in obtaining and filling in forms, and meeting eligibility and compliance conditions. These costs are sometimes paid by the government, particularly where they are considered so high as to discourage some farmers from taking part in voluntary programmes.

Finally, distinctions can be made between different types of policy-related transaction costs. For example, PRTCs can be separated into labour costs and operational expenditures, such as the purchase of office space, computers, etc. It may also be helpful to distinguish between fixed and variable PRTCs. Fixed costs do not depend on the number of participants or the number of hectares or animals involved, and are not affected by the size of the financial transfer. On the other hand, variable costs increase with the size of the programme. ■

How do PRTCs vary by type of policy measure?

Policy-related transaction costs associated with policy development, such as setting objectives and designing solutions are likely to be common to all measures whatever the final policy decision. Similarly, evaluation should be performed in all cases, and costs should not vary too widely. So the main difference in policy-related transaction costs between policies is due to variations in implementation costs.

PRTCs associated with implementing policies that affect market prices (MPS), depend on the extent to which tariff protection is accompanied by other forms of border measures such as tariff rate quotas or export support, and domestic measures such as production controls, administered prices, intervention purchases to support prices and storage. The implementation cost of these measures can be significant.

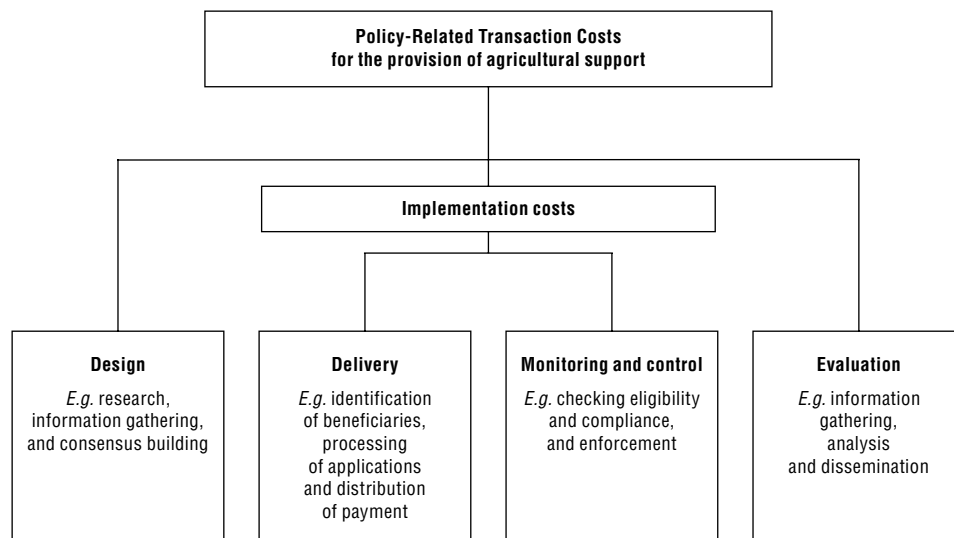
On the other hand, MPS policies do not incur the costs associated with processing applications to establish eligibility that are incurred by payments for growing crops or keeping livestock (e.g. declaration of area planted or animal numbers). Additional PRTCs associated with identifying beneficiaries occur in the case of targeted payments to specific less-favoured areas, for example, or to achieve specific environmental goals or income levels.

Variations between policies in terms of PRTCs during the monitoring and control stage largely depend on the extent to which specific conditions or eligibility criteria accompany the measure. These costs can be considerable in the case of agri-environmental or socio-structural measures which require specific outcomes.

For example, since 1999 all direct payments in Switzerland have required proof of ecological performance. A study of two Swiss cantons, Grisons and Zurich, found that of the total PRTCs of CHF 3 million and CHF 3.9 million estimated for each canton respectively, 63% and 70% were costs incurred by the farmers to control and record production techniques to satisfy the requirements for receiving payment. Nonetheless, the transaction costs to farmers represented only a small proportion of the funds they received, with total PRTCs representing just 1.8% and 2.8% of the value of payments in each canton.

It is clear, however, that policy-related transaction costs increase relative to the total cost of a particular policy as measures become more tightly targeted to a particular outcome. So the PRTC of market price support

Figure 1.
POLICY-RELATED
TRANSACTION COSTS
ACROSS THE POLICY
PROCESS



measures, for example, is far lower as a proportion of support than a targeted payment for planting hedgerows which is paid on the basis of metres of hedge planted (see Figure 2). ■

When might differences in PRTCs determine policy choice?

Having determined that there are large differences in policy-related transaction costs between different agricultural policies, the question is whether these differences are significant enough to affect policy choice? While there is a need to examine all the specific costs and benefits of alternative policy options on a case-by-case basis to answer this question fully, examples focusing on some of the major economic costs, using plausible assumptions, provide important insights for policy development.

Let us look first at the value of transfers provided to farmers and the transaction costs associated with a particular policy. While the transaction costs related to targeted policies account for a higher proportion of the transfer than for untargeted policies, it is likely that the total value of transfers to farmers required to achieve the objective(s) is less for targeted policies than for untargeted ones. So the overall cost will be lower for a targeted measure than for an untargeted policy, even if total PRTCs are higher.

Compare the two extreme policy measures shown in Figure 2: MPS (tariff only) and a targeted, decoupled policy such as hedge planting measured by metre. Assuming plausible PRTCs of 0.5% of the value of the transfer to farmers for the MPS and 50% for the targeted policy, a targeted, decoupled policy will be more cost effective than the MPS policy if the value of transfers it provides to farmers is at least 33% lower than those provided by MPS (Figure 3, Section A).

Another important economic cost can be added to this analysis. MPS policies change market conditions, raising the price that consumers pay for the commodity. So although domestic production increases, it results in an overall welfare loss. Including this additional cost of MPS and assuming that the targeted decoupled policy does not produce a welfare loss, the targeted policy becomes more cost-effective if the amount transferred to farmers is just 10% less than for the untargeted MPS policy (Figure 3, Section B).

It is clear from this example that differences in policy-related transaction costs cannot alone determine policy choice: another crucial element in the decision-making process is the potential reduction in the amount of transfers given to farmers as a result of targeting. But what determines the size of the transfers to farmers? The answer largely depends on the nature and scope of the policy objective.

If the objective is to achieve a certain level of farm income, a significantly lower level of transfer is required by decoupled policy measures – those that are not linked to production levels – than by coupled measures. When a policy, such as market price support, is linked to commodity production such as increased wheat growing or more dairy cattle, farmers have to invest in seeds or livestock, or buy or rent land in order to produce the commodity and obtain the price or financial support. As a result,

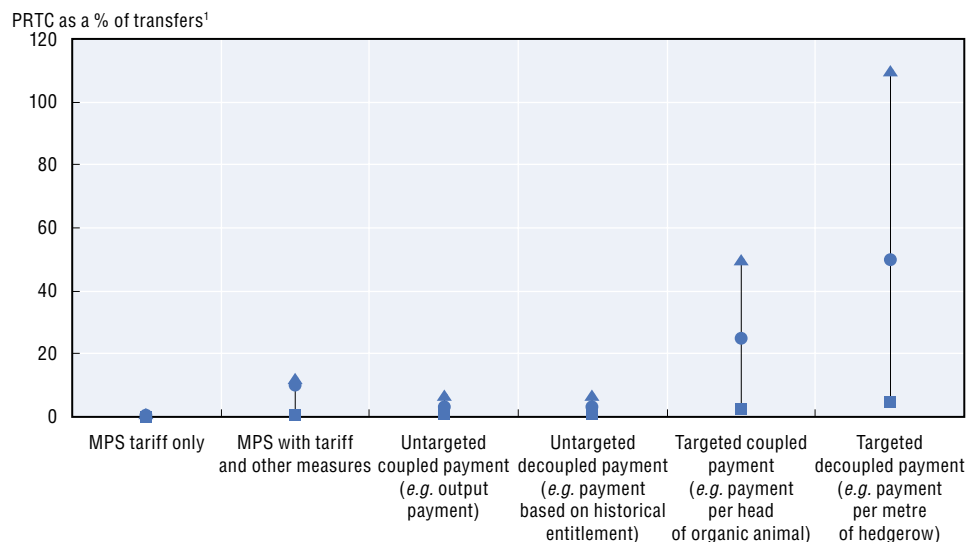
a large share of the transfers is passed on to input suppliers such as seed merchants and non-farming landowners, and does not achieve the policy’s aim of adding to the net income of the farmer. A decoupled policy, which is not linked to production, does not have this disadvantage. Therefore a lower level of transfers to farmers is required to achieve the same net income result. If it is also targeted, such as individual payments to reach a minimum income, support only goes to those who need it, further minimising the transfer required. Consequently, lower transaction costs are very unlikely to change the policy recommendation in favour of decoupled, targeted payments when the objective of the policy is income support.

The answer is less clear in the case of policies that aim to correct market failures, such as the provision of landscape or biodiversity. There is a wide range of scenarios under which targeted payments, whether decoupled or not, are the most cost effective option, in particular when savings from targeting are high. However, this may not hold in the presence of a widespread market failure, which limits the possibility of targeting; where there are very large PRTCs; nor in the case of a decoupled measure where there are high costs of separating the production of commodities from that of “non-commodities”. ■

What other factors determine PRTCs?

In addition to the type of policy, PRTCs depend on the administrative structure and the regulatory environment in which the policy is implemented. For example, a higher degree of decentralisation allows for a better definition of objectives and increased trust at the local level, which could reduce PRTCs. However, the accumulation of administrative layers can increase implementation costs and sometimes lead to a duplication of effort.

Figure 2.
PLAUSIBLE RANGE OF PRTCs BY TYPE OF MEASURE



1. Transfers to farmers from consumers and taxpayers, i.e. price support, government expenditures and foregone revenue. The “spikes” measure the range of estimates found in the literature and the case studies with the dots being the most plausible assumptions for comparative purposes.

PRTCs are influenced by the use of information and co-ordination systems. When implementing area payments for example, geographic information system (GIS) mapping can assist with field identification, reducing error rates and the number of administrative staff required. Remote sensing devices can reduce the need for inspections. And the Internet can be used as a tool to distribute information, maps, forms, etc. between agencies and farmers, reducing processing requirements.

Structural factors such as the number, size and diversity of farms also have an impact. An increase in the number of farms involved in a programme will result in a higher total PRTC for the policy by increasing the number of transactions, but at the same time may reduce PRTCs as a share of transfers or per farm by allowing fixed costs to be spread over a greater number of farms. In general, small farms incur higher PRTCs for a given result and as a percentage of payments. Homogenous structures will facilitate the provision of a standardised outcome using standardised transactions and therefore reduce PRTCs.

Finally, it is important to acknowledge that PRTCs can vary over the time frame in which a policy operates. Initial set-up costs for implementing a programme, such as information systems, technical assistance and co-ordination costs can be large but may reduce implementation and evaluation costs in the long term. These can be viewed as an investment as they help agencies and farmers improve management, and should be spread over the period of the policy when making comparison between policies.

For example, a study of the Conservation Reserve Program (CRP) found that both USDA agencies involved, the Natural Resources Conservation Service (NRCS) which provides education and technical assistance and the Farm Service Agency (FSA) which administers the financial assistance, had substantial start-up costs in the first year CRP operated (1986): a cost equivalent to 87% of payments for the NRCS and 23% for the FSA. Over time, FSA expenditure settled down to a steady 3-4% of payments, while NRCS technical assistance costs were far more variable, ranging from 0.4 to 4% of payments. This reflects the steady nature of administrative support provided by FSA for contracts, and the episodic nature of the technical assistance effort required to plan for and establish a vegetation cover for land entering CRP at different times.

It has also been observed that some costs reduce over time as a result of experience. For example, administrative experience allows for fine-tuning of implementation and improvements in efficiency. Farmers also gain experience over time, making it easier to manage the eligibility criteria and conditions of a programme, and to re-apply when required by the programme. ■

What can be done to reduce PRTCs?

PRTCs are a necessary part of the policy process and are not wasteful *per se*. Nevertheless, for a given result it will always be beneficial to try to reduce PRTCs associated with agricultural policies in order to make better use of public funds and to minimise one of the cost components of a given programme. Approaches to help reduce PRTCs include:

- Make PRTCs transparent and carefully monitor them, sharing experience between different policy measures.

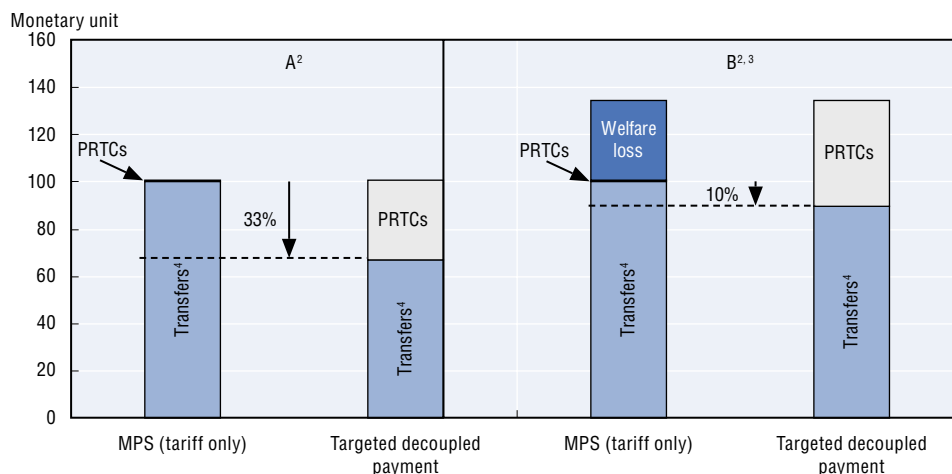
- Establish clear, well-defined, measurable objectives.
- Select programme participants through auctions – those with the lowest compliance costs, including PRTCs, will apply to the programme.
- Limit the number of conditions placed on farmers and do not change them too frequently.
- Reduce control costs without changing compliance with a lower frequency of monitoring but with significant penalties for non-compliance.
- Design programmes to provide the information needed for monitoring.
- Increase some PRTCs to reduce others. For example, activities to promote the scheme can reduce implementation and control costs because they increase participation (economies of scale) and compliance.
- Build on existing institutions to implement policies rather than create new systems (e.g. deliver income support via tax or social security systems).
- Reduce the number of agencies involved in implementation, perhaps even using a single agency/desk for all policies.
- Contract out routine administrative activities through competitive tendering.
- Use information technologies such as computer databases, online information and forms, GIS, cartographic (mapping) software, etc. to reduce costs.
- Increase the duration of programmes if proved effective. ■

For further information

For more information about the OECD's work on agricultural policy-related transaction costs, please contact:

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Figure 3.
REDUCTION IN TRANSFERS TO FARMERS REQUIRED FOR A TARGETED DECOUPLED POLICY TO BE AS COST EFFECTIVE AS MPS¹



1. Assumes that both policy measures achieve the policy objective.
2. Assumes a ratio of PRTCs to transfers of 0.5% for MPS and 50% for the targeted decoupled payment.
3. Assumes a welfare loss of 34% of transfers for MPS and 0% for the targeted decoupled payment.
4. Transfers to farmers from consumers and taxpayers, i.e. price support, government expenditures and revenue foregone.



For further reading

OECD (2007), *The Implementation Costs of Agricultural Policies*, ISBN 978-92-64-03091-6, € 45, 196 pages.

OECD (2007), *Effective Targeting of Agricultural Policies: Best Practices for Policy Design and Implementation*, ISBN 978-92-64-03827-1, € 24, 79 pages.

OECD (2003), *Multifunctionality: The Policy Implications*, ISBN 92-64-10451-8, 106 pages, available at: www.oecd.org/agr.

OECD (2003), *Farm Household Income: Issues and Policy Responses*, ISBN 92-64-09965-4, € 25, 83 pages.

OECD (2002), *Agricultural Policies in OECD Countries: A Positive Reform Agenda*, ISBN 92-64-19967-5, 40 pages, available at: www.oecd.org/agr.

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