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Unresolved issues: SEEA transfers related to the environment

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Revision of SEEA 2003:

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1. Introduction

Since 2005, as the work on revising the SEEA 2003 took form there has been a series of discussions on environmental related transactions within the London Group. The discussions on environmental taxes ended in 2008 and will be brought to the UNCEEA for final approval. The discussions on emission trading permits and the classification on natural resource management expenditure are still ongoing but are close to being resolved. The field of environmentally related transfers (subsidies, investment grants and social transfers in kind) is also still being debated.

This paper has the purpose to provide the London Group with an update on actions in the field of environmentally motivated transfers and remind the group of what are still outstanding issues.

The idea is to suggest a SEEA definition for environmentally related transfers that will both be aligned with the SNA and still cover the environmental economic aspects that are of interest for the SEEA.

2. State of the art

Since March 2007 up until May 2009, the London Group has actively debated definitions, scope and statistical methodology on environmentally motivated subsidies and potentially environmental damaging subsidies. During 2008 and 2009, Eurostat also held a reflection group lead by Statistics Sweden discussing more in-depth the issues at hand.

The reflection group consisted of representatives from national statistical offices (Austria, Italy, Norway, Denmark, the Netherlands, Spain, Germany and the UK), the EEA and the OECD. The purpose of the group was to further assist the London Group discussions by discussing definitions, scope and data sources in much more detail. The results of the discussions were (Cederlund 2009):

- Follow the guidelines of the SNA and build a SEEA-subsidy package consisting of: Subsidies, investment grants and social transfers in kind to ensure the inclusion of households. as suggested by the London Group.
- Focus firstly on easily identifiable transfers; those that can be identified through state budgets, so called on-budget subsidies. as suggested by the London Group.
- The group felt that the area of off-budget subsidies (e.g. preferential tax treatments) will need more time to be resolved. as suggested by the London Group.
- The group proposed that testing different approaches for selection criterias with regards to environmentally motivated subsidies should be done in order to establish the best available method.
- The area is in need of a classification that can be used to link other statistics to the field.
- The group though it is important to have access to information on all types of environmentally related transfers, i.e. both environmentally beneficial and harmful.
- The group recommended Eurostat to create a Task Force in order to resolve these issues in a more definite way.

Eurostat has taken the recommendations by the reflection group and are now planning for a Task Force on subsidies. The first meeting is scheduled to take place in Luxembourg in late February 2010. Several countries have already volunteered to enter the TF that will be back-to-back with another TF on natural resource management expenditure. These are: Italy, Sweden, France, the Netherlands, Austria, Norway, Greece, Slovenia, Germany, UK, Portugal and Spain. Besides these national statistical offices the OECD, the EEA and other interested organisations will be invited.

3. Issues that remains debated

3.1 SEEA transfers

The starting point is to add on more items from the SNA to form the SEEA transfers. By adding several variables of the SNA that are related to the environment a better overview is given to government activities.

The transactions that are visible in the accounting framework and in government budgets are termed “on-budget”. In the discussion below, we outline the accounting identities still in need to be further discussed.

A. Environmentally related transfers need a classification to follow.

Discussion: For all types of statistics, the presentation of the area in a clear robust fashion is of utmost importance. Within the field of environment only a handful of international classifications are available. The Classification of Environmental Protection Activities (CEPA 2000), the European Waste Classification for Statistics (EWC-Stat version 3), the Corine Land Cover Classification (CORINE 1985) and Classification for Land Use Statistics: Eurostat Remote Sensing Programme (CLUSTERS 1993). There are also a few classifications in the field of energy available (IEA/Eurostat/UNSD Energy balances, United Nations framework classification for fossil energy and mineral reserves and resources 2009) and the traditional economic sphere contains certain information of environmental relevance; the Classification of Functions of Government (COFOG), the Harmonized Commodity Description and Coding System (HS) and the Central Product Classification (CPC).

Neither of these established classifications satisfies the user need for environmentally related subsidies. At the moment, Italy is working on developing a new classification that deals with natural resource management activities, but that is also not expected to cover all areas of interest.

It is proposed that the new Eurostat Task Force discuss and develop an outline of a new classification specifically aimed at environmentally related transfers. It is important that any new initiatives can communicate with existing classifications to enable deeper analysis.

B. The on-budget SEEA transfers are formed by adding the SNA-subsidies, the transfers to public authorities and to households, and to also include the capital transfers. Both on-budget and off-budget items are of interest to cover.
Discussion: In order to capture the more general scope of subsidies that users are discussing, like e.g. the OECD definition ‘any measure that keeps prices for consumers below market level’, the transfers to public authorities and households must also be considered. The off-budget items are specifically mentioned in the WTO definition: ‘A financial contribution also exists where government revenue that is otherwise due is forgone or not collected’.

The definitions that constitute what part of ordinary transactions that are related to environment can be constructed in several ways. Two main points of departure are to understand what is done in order to promote environmental activities (the active decisions to use subsidies as environmental policy instruments) and what is being done to promote other goals but that has non-wanted environmentally damaging consequences (like subsidising mining of coal or purchases of fossil fuels). A third category will be the transfers that are neither environmentally motivated, nor given to environmentally intensive activities.

This means finding reference values for what activities are regarded as better, worse or neutral (or at least less easy to distinguish along these lines).

Transfers can be categorised in several ways. In relation to environment-economic assessments there are environmentally related transfers and general transfers.

We will divide the transfers into two categories; on-budget and off-budget (See Table 1), where on-budget, environmentally motivated are those that are of main concern in this paper. For the transfers recorded on-budget there is further subdivision in current transfers and capital transfers (investments). These are assumed to be part of the SEEA standard. For the off-budget transfers there are two categories; the preferential tax treatments and an external cost reference value estimate. These are assumed to be part of Volume two of the SEEA.

The external costs are not suggested to be part of official statistics or thought to be included in the standard. However, for the sake of clarity, we maintain this category in the discussion here. It will make it possible to discuss what type of official data that the users can obtain to make such estimates. A step-wise approach is recommended whereby countries interested in these types of assessment test the modules suggested here.

Table 1. Main on-budget categories of environmentally related SEEA transfers.

<table>
<thead>
<tr>
<th>On-budget transfers</th>
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<tbody>
<tr>
<td>Current transfers to industry, public authority and households</td>
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<tr>
<td>Environmentally motivated (EM)</td>
</tr>
<tr>
<td>Potentially environmentally damaging (PED)</td>
</tr>
<tr>
<td>Capital transfers to industry, public authority and households</td>
</tr>
<tr>
<td>Environmentally motivated (EM)</td>
</tr>
<tr>
<td>Potentially environmentally damaging (PED)</td>
</tr>
</tbody>
</table>

The environmentally related transfers are divided into environmentally motivated (EM) transfers and potentially environmentally damaging (PED) transfers. Here we consider the direct "on-budget" transfers which are environmentally motivated. They are called on-budget, as they are recorded in the national accounts and in the state budget.

It is proposed that the environmentally related transfers are divided into two groups: The environmentally motivated transfers and the potentially environmentally damaging transfers.
3.2 Potentially environmentally damaging SEEA-transfers

There is a demand for a follow up of the amount of potentially damaging transfers. These economic instruments are designed for other motives, but as an indirect effect they change the incitement for environmentally intensive activities. The criteria for potentially environmentally damaging SEEA transfers need to be set. We will propose criteria for assessing this in an objective way. The method is similar to what was tested in a study of the environmentally related transfers from the Swedish state budget.

In the study, the transfers in the budget were divided according to which industries were receiving them. Then, the emission intensity (CO2/value added) for the industries in question was compared to the mean intensity for Sweden\(^2\). For those industries that had emission intensities above the mean, the transfers were analysed in more detail. The industries in question were e.g. agriculture and transport (Figure 1). If the transfers were directed to activities that could be seen to increase the activity in the industry (and thus the emissions), it was labelled potentially environmentally damaging.

Figure 1. Emission intensive industries above the Swedish mean. MIR2008:1

In countries where price controls of certain products are used, it is suggested that the transfers to the authority or organisation that pay the resulting difference should also be regarded as a potentially environmentally damaging transfers, particularly if the product is a fuel. It is suggested that the same list that defines the tax bases for environmental taxes is used and be included on-budget. Here, the first analysis would thus be to find the yearly lump sum paid out to control the price for a fuel. Further analysis of SEEA data could make it possible to assess how that transfer is distributed over the industry, public authorities and households.

\(^2\) Denmark suggests that emission/production value could be a better choice. This could be tested in Task Force work. For the result of the study, this would not change the types of transfers included.
Table 2. Tax bases included in the environmental tax statistics framework (Eurostat 2001)

Measured or estimated emissions to air
- Measured or estimated NO\textsubscript{2} emissions
- SO\textsubscript{2} content of fossil fuels
- Other measured or estimated emissions to air
Ozone depleting substances (e.g. CFC or halon)

Measured or estimated effluents to water
- Measured or estimated effluents of oxydizeable matters (BOD, COD)
- Other measured or estimated effluents to water
- Effluent collection and treatment, fixed annual taxes

Certain non-point sources of water pollution
- Pesticides (Based on e.g. chemical content, price or volume)
- Artificial fertilisers (Based e.g. on phosphorus or nitrogen content or price)
- Manure

Waste management
- Waste management in general (e.g. collection or treatment costs)
- Waste management, individual products (e.g. packaging, beverage containers)

Noise (e.g. aircraft take-off and landings)

Energy products
- Energy products used for transport purposes
  - Unleaded petrol
  - Leaded petrol
  - Diesel
- Other energy products for transport purposes (e.g. LPG or natural gas)
- Energy products used for stationary purposes
  - Light fuel oil
  - Heavy fuel oil
  - Natural gas
  - Coal
  - Coke
  - Biofuels
- Other fuels for stationary use
  - Electricity consumption
  - Electricity production
  - District heat consumption
  - District heat production

Transport
- Motor vehicles, one-off import or sales taxes
- Registration or use of motor vehicles, recurrent (e.g. yearly) taxes

Resources
- Water abstraction
- Extraction of raw materials (except oil and gas)
- Other resources (e.g. forests)

C. Selection criteria for Potentially Environmentally Damaging SEEA-transfers is suggested to be the list on tax bases from the environmental tax area, combined with an intensity criteria for different industry support.

Discussion: The selection criteria need to be established for selecting appropriate items of transfers. It is necessary to identify criteria for what is to be considered as potentially environmentally damaging. In order to make international reporting possible the criteria need to be based on a limited amount of data.

It is proposed that the emission intensity of an industry, as compared to the country mean, or to a region mean, is used to single out what transfers should be regarded as PED. When the state supports products through the transfers to another authority, the same list that defines what is regarded as an environmental tax is suggested to be used.
D. Preferential tax treatments are calculated and reported separately as off-budget SEEA transfers. To be tested in coming Task Force.

Discussion: Preferential tax treatments are an important off-budget support to economic activities. The SEEA has possibilities to combine the information on taxes with the information on resource use and emissions, and thus to create information about these economic instruments in a harmonised way. This item need to be tested in international studies, and so is suggested to be part of Volume 2 of the SEEA.

It is proposed that the Eurostat Task Force discuss this issue and propose a way forward. It may be to develop a methodology to calculate preferential tax treatments or to lead the way in other directions as it sees fit.

4. Discussion

The major shortcoming today is the lack of internationally comparable and available data on the transfers that are driving forces for the environmental problems. The issue on subsidies is a topic that is discussed in many international organisations. The lack of common definitions and information hampers negotiations and analyses in the field. This is an area where the SEEA is particularly well suited to bring forward some reliable definitions and comparable data.

As environmental pressure can be expressed in many ways, we are faced with the dilemma to find criteria that can be used in many countries and so will not be very data-demanding, but that will allow coverage of the sectors that are of most concern. A step-wise approach is recommended. If CO2 can be the first criteria used, then gradually other criteria such as land use or use of chemicals could be included as the data become available.

In the preparation of this paper, the wish to set the definitions on the grounds of a full impact analysis has been raised. However, such analysis will need valuations that are likely to be difficult for statistical bureaus to use as parts of official statistics. Instead, the suggestions here will be based on more pragmatic solutions, using the data at hand in the SEEA as well as the written material from the budget process.

Subsidies/transfers are common economic instruments, and to discuss them only in terms of being damaging in general is probably not going to help the collection of data. By presenting different transfers in some groups helps the non-specialists to get a grasp of the situation and makes international comparison easier. The motivation itself is not an assessment of the impact, but a statement of the reported intention of the state. A transfer can be labelled both as environmentally motivated and as a potentially environmentally damaging subsidy. The categories are not mutually exclusive. Thus, it is possible for the users to argue for more optimal subsidy schemes or other more suiting economic instruments, based on separate assessments.
The users can take the resulting transfers and make the impact analysis with environmental pressure data from the SEEA or from other statistics, e.g. social statistics. Based on their valuations and assumptions there will then be possibilities to assess the usefulness of the transfers at hand.

We have also learned from the previous discussions that the users need to have a transparency in the reporting of the transfers. Thus, the table suggested at the end of this paper is aimed at summarising the outcome and boundaries of the SEEA transfers. For the users, it will be important to be able to have underlying information on what items used in the preparation of the tables.

Another strong recommendation from the user community is to be clear in the communication that the on-budget transfers are not the total amount of transfers in a country, but that the off-budget part is often at the same size or larger.

As discussed, the SNA covers many of the mechanisms that are of interest. With the extra data available in the SEEA, some of the indirect transfers can also be assessed. As a new and possible interesting feature in the environmentally related subsidy discussion, the separation between current transfers and capital transfers can also be made.