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Eurostat Guidance on accounting rules for EDP[1]

Recording of changes in inventories of Agricultural Market Regulatory Agencies

1. This note provides guidance on the appropriate accounting treatment of the changes in inventories of Market Regulatory Agencies acting on behalf of the European Community, in the light of ESA 1995/SNA 1993 principles and rules and of the further elaboration of the Manual on Government Deficit and Debt (MGDD), with the aim to ensure an appropriate measurement of the government deficit and the equality of treatment across Member States.

I. The issue

2. The Eurostat 2005 decision on the accounting treatment of transfers between the EU budget and Member States specifies that EU transfers should have no impact on government deficit/surplus, as government is considered to act "on behalf" of the EU. The Eurostat decision focused on the recording of some ESA 1995 transactions, such as subsidies or investment grants.

3. Some Member States have asked Eurostat whether the principle of re-arranging EU transactions would also apply to the recording of changes in inventories (P.52) arising from the interventions of agricultural market regulatory agencies in the market. Market regulatory agencies[2] are bodies whose intervention activities are mostly characterised by buying and selling products, often on behalf of the EU, with an aim to stabilize prices and to maintain purchasing prices to farmers at a sufficiently high level: they offer buying agricultural products from domestic producers at a predetermined price (often higher than "market" prices) and reselling them usually at a lower price later on and occasionally arranging for giving them away free of charge. These agencies can be involved in storing agricultural inventories, or in arranging for storage, as well as in distributing subsidies. There is a present trend towards a reduction in the importance of these market regulatory agency interventions and in the size of the subsidies covering differences in buying and selling prices.

4. From a national accounts point of view, general governments are not the economic owner's of these inventories. However, allocating to the EU (S.2 Rest of the world) the changes in inventories would imply recording market regulatory agencies` purchases/disposals as exports/imports with the EU institutions, which seems not a desirable or plausible national

[1] This Guidance note is released under the responsibility of Eurostat. Member States have been consulted within the framework of the Financial Accounts Working Group (FAWG), where this Guidance note received broad support.

[2] In Regulation (EC) No 138/2004 on the economic accounts for agriculture, those are referred to as "market-regulating agencies".

accounting solution. This paper explores these aspects and provides guidance on which accounting solution is appropriate.

II. Accounting references

Impact of EU transactions in government accounts

5. In national accounts, payments from the EU to Member States, such as subsidies and/or investment grants should be recorded as being paid directly by the EU to the final beneficiaries, even though cash flows usually transit via government agencies.

6. The Eurostat decision on the treatment of transfers from the EU budget to the Member States (News Release 22/2005 of 15 February) specifies that EU transfers should have no impact on the government deficit/surplus, regardless of the timing differences between the moment of government pre-financing and the moment of effective reimbursement by the EU. This is because government is considered to act "on behalf" of the EU when advancing payments to a final beneficiary that is not a government unit. This reasoning implies re-arranging (ESA 1995 paragraphs 1.38-1.41) the transactions conducted by institutional units classified inside general government, whenever acting "on behalf of the EU".

7. This reasoning for re-arranging transactions is supported by ESA 1995 paragraph 1.41: "*when a unit carries out a transaction on behalf of other unit, the transaction is recorded exclusively in the accounts of the principal.*"

8. In addition, the Eurostat decision specifies that if the final beneficiary is a government unit, the time of recording of the transfer from the EU to government is the time when the government unit makes the expenditure, therefore with no impact on government deficit.

Agricultural market regulatory agencies

9. The sector classification of market regulatory agencies acting on behalf of the EU is treated in ESA 1995 and is further analysed in the ESA 1995 Manual on Government Deficit and Debt (MGDD). ESA 1995 states that "*by convention, market regulatory agencies whose sole or principal activity is to buy, hold and sell agricultural and other food products are classified under S.11*[3]" (paragraph 2.21 footnote 6) and "*market regulatory agencies which are either exclusively or principally simple distributors of subsidies are classified in S.13, sub-sector central government S.1311*" (paragraph 2.69a footnote 11).

10. At national level, it is often the case that a market regulatory agency performs mixed activities: market activities by intervening in the market for buying and selling agricultural products, while at the same time also performing government activities by distributing subsidies. If it performs both activities, the MGDD recommends splitting the unit into two separate institutional units: one institutional unit being involved in market intervention activities, classified in the non-financial corporations sector (S.11) and a second institutional unit distributing subsidies, classified in the general government sector (S.13). If this is not possible, the MGDD indicates that the criterion of "principal activity" should be applied on the basis of costs: classifying the institutional units in the sector general government if

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[3] Sector of non-financial corporations.

costs incurred for market regulation activities are less than 80% of total costs, and in the sector non-financial corporations if costs incurred in market regulation are more than 80% of total costs (MGDD I.2.5).

11. Thus, for market regulatory/intervention agencies, the so-called 50% rule is not applicable, and ESA 1995 paragraph 2.21, further supplemented by the MGDD, provides an *ad-hoc* sectorization rule ("*by convention*").

12. If a market regulatory agency cannot be split into two distinct institutional units (subsidy distributor unit and market regulation unit) and the whole agency is classified inside general government, some transactions should however be re-arranged to reflect the transactions between the EU and the final beneficiaries.

13. The analysis below focuses on how changes in inventories should be recorded in national accounts when the market regulatory agency is classified within general government.

Subsidies on products

14. Subsidies on products (ESA 1995 paragraph 4.33) record "*the difference between a specified target price and the market price actually paid by a buyer. A subsidy on product usually becomes payable when the good is produced, sold or imported*". In addition, according to ESA 1995 paragraph 4.35, other subsidies on products (D.319) include "…*(b) losses of government trading organizations whose function is to buy the products of resident producers and then sell them at lower prices to residents or non-residents, when they are incurred as a matter of deliberate government economic or social policy*".

Notional units and quasi-corporations

15. After having defined the criteria for recognizing an entity as an institutional unit (ESA 1995 § 2.12), the system provides flexibility to stay closer to an economic perspective, introducing quasi-corporations and notional units, as well as ancillary corporations. Quasi-corporations and notional units are cases of entities that, whilst not formally meeting the legal aspects of the criteria to qualify as institutional units, are recognized as such, because it is analytically useful to do so from an economic perspective. Conversely, ancillary corporations are cases of entities that, whilst formally meeting the institutional unit criteria, are not recognized as such, because it is analytically superior to do so (see SNA 1993 § 4.40-4.44). The identification and classification of quasi-corporations relates to behavioural, rather than legal, characteristics, similarly to ancillary corporations. The treatment of legally dependent quasi-corporations is to separate them from their parent entity, which is the symmetric situation to the legally independent ancillaries that are merged with their parent entity.

Quasi-corporations

16. ESA 1995 §2.13.f states: "*The following principles apply whenever entities do not clearly possess both the characteristics (decision-making autonomy and a complete set of accounts) of an institutional unit: … f) Quasi-corporations keep a complete set of accounts and have no independent legal status. However, they have an economic and financial behaviour that is different from that of their owners and similar to that of corporations. Therefore they are deemed to have autonomy of decision and are considered as distinct institutional units*."

17. SNA 1993 outlines, in paragraphs 4.49-4.53, the concept of quasi-corporations. SNA 1993 paragraph 4.49: "*A quasi-corporation may be: either an unincorporated enterprise owned by a resident institutional unit that is operated as if it were a separate corporation and whose de facto relationship to its owner is that of a corporation to its shareholders: such an enterprise must, of course, keep a complete set of accounts; or an unincorporated enterprise owned by a non-resident institutional unit that is deemed to be a resident institutional unit because it engages in a significant amount of production in the economic territory over a long or indefinite period of time*."

Net worth of quasi-corporations

18. The net worth of a quasi-corporation is generally assumed to be zero. ESA 1995 §7.03 indicates: "*In the case of quasi-corporations, net worth is zero, because the value of the owners' equity is assumed to be equal to its assets less its liabilities. Therefore, the net worth of resident direct investment enterprises, which are branches of non-resident enterprises and are therefore treated as quasi-corporations, is zero.*"

19. It is however interesting to observe the variation of language used in the SNA 1993 to describe the issue, from a rather strong principle in paragraph 13.73 to a suggestion that the "net worth is zero in practice" in paragraph 4.52, implying that this may not be conceptually based. SNA 1993 13.73 states: " *….Equity in quasi-corporations* ***should*** *be valued as equal to the value of the quasi-corporations' assets less the value of their liabilities.*" But SNA 1993 13.83 says "*In the case of quasi-corporations, net worth is zero, because the value of the owners' equity is* ***assumed*** *to be equal to its assets less its liabilities…*" and SNA 1993 4.52: "*… It is* ***assumed*** *that the owner's net equity in a quasi-corporation is equal to the difference between the value of its assets and the value of its other liabilities so that the net worth of the quasi-corporation is always zero* ***in practice****. The owner may invest more capital in the enterprise or withdraw capital from it by disposing of some of its assets, and such flows of capital must also be identifiable in the accounts whenever they occur.*" (bold added).

20. In total, it would seem that the net worth zero assumption is more a practical convention, in the absence of better measurement methods, than a strict rule based on concepts. A non-zero net worth could perhaps be reported if pricing the net present value of the activities independently from the assets and liabilities was possible in practice.

Notional units

21. SNA 1993 paragraph 10.41 indicates that "*…if an existing immovable fixed asset such as a building is sold to a non-resident, by convention the latter is treated as purchasing a financial asset that is the equity of a notional resident unit while the notional resident unit is deemed to purchase the asset, so that the sale and purchase of the asset takes place between residents*". In this case, when a building is sold to a non resident, the recording in Balance of Payments (BOP) leads to the recognition of a foreign direct investment, with an equity liability being recorded in the financial accounts of the reporting economy *vis-à-vis* the Rest of the World accounts. It should be noted that buildings also give rise to output in national accounts, with the implication that (cross border) reinvested earnings are to be recorded in both national accounts and the BOP.

22. According to ESA 1995 paragraph 2.25, "*the sector of non-financial corporations includes all notional resident units, which by convention, are treated as if they were quasi-corporations*".

III. The analysis

Economic ownership

23. Given that a market regulatory agency is "acting on behalf of the EU" and does not use these inventories in its own production process, this institutional unit does not seem to be the economic owner of those inventories arising from its interventions on the market. The EU should be considered the economic owner of such inventories.

24. Nonetheless, the recording of exports/imports relationships with the EU does not seem desirable or plausible because this would entail recording export and import flows each time the agency buys or sells, inflating totals with limited analytical value. In addition, market interventions of regulatory agencies, although acting "on behalf" of the EU, are made at national level, i.e. in the national markets.

25. It is important to analyse the economic ownership of the inventories constituted by market regulatory agencies. The SNA 1993 does not explicitly define economic ownership; the term “economic ownership” aims at better reflecting the underlying economic reality of the transaction and where the risks and rewards of ownership lie. It seems that in the case of public interventions in the field of stocks of cereals, the Commission bears all the financial risks including all the losses derived from the intervention in the market, as the aim of the EU common agricultural policy in this field is to avoid any financial impact on the Member State resulting from market interventions. The opposite situation might also occur in the hypothetical scenario where the price goes up, the Member State repaying in full the difference to the Commission (gain on sale). In addition, the Member State is responsible for taking all necessary measures for its good conservation but, at the same time, has no control over these goods: it is obliged to buy goods; and their re-selling is only decided by the EU (Commission). In this context, the EU unquestionably has economic ownership of such inventories.

Classifying the inventories in the corporate sector: a notional unit or a quasi corporation?

26. In national accounts, a possible solution (to avoid recording exports and imports upon each addition to or removal from inventories) would be to allocate the recording of such agricultural inventories (P.52) to the non-financial corporation sector (S.11). This would be consistent with the reasoning that general government is not the economic owner of the inventories resulting from market interventions. This approach would follow to some extent the convention stated in ESA 1995 (footnote of paragraph 2.21) that market regulatory agencies whose sole or principal activity is to buy, hold and sell agricultural and other food products are classified in S.11. The market regulatory agency's activity at national level – buying and selling agricultural products – reflects a market activity that should be carried out by a corporation (and not by general government).

27. The above view would imply that an artificial unit would be created to capture transactions in inventories within S.11, in those cases where the market regulatory agencies are classified inside central government (S.1311).

28. One possibility would be to recognize a notional resident unit owned by the EU. The creation of a notional resident unit seems broadly in line with the ESA 1995 paragraph 2.15, which explains that notional resident units, even if they keep only partial accounts and may not always enjoy autonomy of decision, are treated as institutional units, by convention. Such

a notional resident unit would hold inventories and it would be regarded as transacting in those. This implies the EU being the owner of the entity in national accounts.

29. Another possibility would be to recognize a quasi-corporation in national accounts, having the same purpose as a notional resident unit mentioned above (i.e. to capture transactions in inventories in case that a market regulatory agency is classified inside central government). In some cases, this option might be seen *prima facie* to deviate from ESA 1995 paragraph 2.13f when no complete set of accounts is formally available. However, to the extent that the EU makes up for the losses arising from the holdings of inventories, relevant and comprehensive sets of accounts must be available. This implies government being the owner of the entity in national accounts.

30. Both these treatments would avoid recording changes in acquisitions and disposals of inventories as exports/imports to the EU.

31. Summarizing, two options seem to be possible, according to who is viewed as the owner of the entity that is holding the inventories, to be classified in S.11:

Option 1) recognizing a quasi-corporation, implying that the owner of the entity remains government; or

Option 2) recognizing a notional unit, implying that the owner of the entity is the rest of the world (ROW).

Net worth of general government

32. Given it is argued that the ownership of the inventories lays with the EU, it is important to determine whether the changes in own funds of the entity owing to gains and losses on inventories at market value (which might be large from one period to the next) would impact either general government net worth, or the rest of the world net worth, or none of them.[4]

33. It is important to determine whether the quasi-corporation option or the notional unit option would yield different, or very different, results from the point of view of the net worth of general government. It could be assumed as a preliminary conclusion that the result would be different as far as the net worth of the EU is concerned. This is because the latter would be impacted by gains and losses on inventories in the case of the notional unit option, but not in the case of the quasi-corporation option.

34. If the agency is an entity established by government, it is likely that some equity link will exist and will appear as an asset of general government when the agency is classified outside general government. However, changes in the price of inventories should not be reflected in the equity value of the entity (i.e. should not be reflected in the price of the asset of government) because by definition those gains and losses do not accrue to government but will eventually be returned to the EU or compensated by EU subsidies. Thus, in concept, the gains and losses should, at first sight, give rise to the appearance of a kind of payable/receivable with the EU, which would keep the own funds of the agency unchanged.

[4] In ESA 1995, *Own funds* is defined as net assets of units, excluding equity liabilities, while *Net worth* is defined as net assets of units, including equity liabilities. Thus, *Own funds* minus equity liabilities of units (i.e. equity issued) equals *Net worth*. See ESA 1995 paragraphs 7.01 and 7.05. The ESA 1995 net worth should thus not be confused with the business accounting notion of shareholders' equity or net worth. This business accounting notion of net worth is, in fact, closer to the ESA 1995 notion of own funds.

However, in concept, the time of the appearance of the payable/receivable also results from the time of recording of the subsidy, which accounting is specifically regulated in ESA 1995 (see annex).

35. This time of recording issue of subsidies would most likely lead to an impact on the own funds of the agency. However, conceptually, this should not impact the equity value of the agency. If the agency itself were to be sold, its valuation would be independent of the value of its inventories owing to the obligation of the EU to cover losses when incurred, or of the obligation of the agency to return gains to the EU.

36. Accordingly, gains and losses on inventories must be neutral from the perspective of general government net worth in all cases (notional unit or quasi-corporation), even if they are also neutral from the perspective of the EU net worth (quasi-corporation). Thus, holding gains and losses on market regulatory agencies inventories do impact only the nonfinancial corporations' (S.11) net worth, pending the recognition of the subsidy associated to the receivable/payable.

37. However, this will require that the valuation of the equity in the quasi-corporation will have to correspond to the financing provided to date, rather than being equal to its own funds: thus the unit net worth would be either positive or negative, although only for short periods of time, owing to the gains and losses on inventories not yet realized or recognized, and thus not yet compensated or returned to the EU. Such deviations could nevertheless be seen as a reasonable approximation of the convention that the net worth of the quasi-corporation should be zero (ESA 1995 paragraph 7.03).

Valuation of transactions in inventories

38. In national accounts, the transactions related to interventions in the market should be recorded in application of ESA 1995 paragraphs 4.33 and 4.35, in the context of notional or quasi-corporation units. These ESA 1995 paragraphs would still be applicable for the cases of notional or quasi-corporation units.

39. The transaction value on resale must include the EU subsidy. Thus, changes in inventories will tend to compensate over time. The reimbursements made by the EU correspond to the difference between purchase and resale prices, which is shown in national accounts as subsidies paid by the EU.

Accounting treatment in the financial accounts

40. The following discusses how to record in the financial accounts the links between the notional or quasi-corporation unit and the EU and/or government.

41. Under the **notional unit option** recording, some parallel might be found with SNA 1993 paragraph 10.41, and a similar reasoning could be applied in the case of market regulatory agencies: an acquisition of equity (F.5) by the EU is to be recorded, matched by an EU borrowing (F.4) from the entity financing the market regulatory agencies (often government itself). This would imply changing the present recording in the Rest of the World financial accounts.

42. Under the **quasi-corporation option**, no entries are recorded in the Rest of the World financial accounts, as the transactions in equity on the liability side of the quasi-corporation have a counterpart entry in the accounts of government.

43. Thus, in both cases the net change in inventories that is *de facto* financed by the entity sectorized inside government (by way of borrowing from third parties or of drawing down on its liquidities) is recorded in the financial accounts of general government, instead of in the non-financial accounts as would otherwise be the case (under changes in inventories – P.52): either as transaction in equity (F.5 – quasi-corporation option) or as loans to the EU (F.4 – notional unit option).

44. A theoretical advantage of the notional unit option, over the quasi-corporation option, is that it reflects the genuine economic ownership of the EU.

45. However, a main disadvantage of the notional unit option is that this requires entries in the ROW financial accounts that do not even exist when the regulatory agency unit is classified outside general government in the first place: thus the notional resident unit option seems to introduce an apparent asymmetric treatment between those market regulatory agencies that are classified inside general government and those market regulatory agencies that are classified outside general government. This would seem to go against a homogeneous treatment across Member States.

46. In addition, the impact of the movement in the market value of inventories not yet covered by subsidies is likely to be small and temporary, and on average zero over time. In this context, the merit of imputing government lending to the EU and, simultaneously, EU financing of the inventories may be doubtful.

47. Finally, it should be reminded that strictly following a recording that portrays the change in the economic ownership would have implied recording imports and exports, which is deemed not to be particularly useful for analytical purposes (balance of payment).

48. It may be noted, however, that both options leave the same impact on the government deficit and debt.

"Shell" treatment

49. When the notional unit or the quasi-corporation is seen as a "shell", for simplicity purposes, it would be conceived in national accounts as only holding inventories and undertaking transactions in those, with counterpart entries in the financial accounts: equity liability. The "shell" option would also mean that no reinvested earnings would be recorded.

50. Alternatively, these units can be conceived to be more complete entities, showing a more complete sequence of national accounts, such as generating a margin and incurring costs.

IV. Guidance

51. In those circumstances where a market regulatory agency acting on behalf of the EU is classified inside general government, the creation of a unit in S.11 is recommended in order to capture the changes in agricultural inventories, and to avoid that such changes in inventories are recorded in national government accounts (as changes in government

inventories, with an impact on the government deficit/surplus) or in the rest of the world accounts (as exports and imports).

52. This recording would be mainly based on the view that the EU has economic ownership of those inventories, and not the national government, and that the market regulatory agencies are in fact acting on behalf of the EU: the EU exercising control and assuming risks and rewards associated to these inventories. Such a treatment is also in line with the convention of sector classification of market regulatory agencies (in S.11) stated in ESA 1995.

53. The unit to be created to capture these changes in inventories is a quasi-corporation, rather than a notional unit, in order to ensure an equality of treatment with cases where market regulatory agencies are sectorized outside government. This is also appropriate because any temporary difference in value arising from changes in market value of these inventories not yet covered by subsidies is likely to be small and on average zero.

Annex

Time of recording of the subsidy

ESA 1995 paragraph 4.39a) indicates that the time of recording of "*subsidies which take the form of the difference between the purchase price and the selling price charged by a government*" is "*at the time the goods are bought by the agency*". But how should this be interpreted?

When a product is bought for 120 by the agency in period T, and resold for 100 in the following period T+1, a subsidy on product is recorded in T. In T, the output of farmers (S14/S11) is then 120, the GDP 100, changes in inventories +100. In T+1, the output of farmers is 0, GDP is 0, final consumption is 100, and changes in inventories are -100.

However 4.39a) specifically indicates: "*if the selling price is known at that time*", which needs to be interpreted. The resale price is *a priori* generally not known in advance. But an expected price is probably known: suppose it was 106 in the example above. Then 6 (=20-14) only is the non-expected element.

The reference in ESA 1995 above presumably intends to avoid that holding gains/losses enter the production account. Only the part that the scheme is expected to finance should contribute to output. But at the same time, in the case of agricultural market regulatory agencies, no holding gains and loss will ever be born by farmers or by the agency: all the changes in price will be eventually assumed by the EU.

Finally, the selling price of the goods might have fallen to 102 by end of year T. This would be the value of inventories recorded on the balance sheet at the end of period T.

If ESA 1995 paragraph 4.39a) also covers cases when the selling price will be "known" only in the next period, then the amount to record as subsidy in T (and parallel acquisition of a receivable) by the agency is either:
Option (1) the actual amount observed in T+1 (20); or
Option (2) the expected amount observed in T (14); or
Option (3) an amount reflecting the market price observed as of end of the year (18).

In option (1), the recordings are straightforward but imply a revision in the data, when the information is gradually available (notably for quarterly data). In option (2) and (3), one issue is how to record in T+1 the difference of 6 (=20-14) or 2 (=20-18). One approach is to enter those flows in the revaluation accounts of the financial accounts (thus recording subsidies on an expected basis), which seems difficult. Another approach is to record a subsidy on production in T+1 for the remainder (that could be either positive or negative) matched by an entry in change in inventories (although this might appear artificial). In doing so an entry in the revaluation account in the nonfinancial assets occurs (of +4=6-(20-18) = (20-14)-(20-18) =18-14)) in T+1 in option (2) compensating the holding loss arising in T (of -4=14-18). No revaluation occurs in option (3) neither in T+1 nor in T.

It should be noted that in option (3), the net worth of the quasi-corporation are always zero (see section above). In option (1) or (2), the net worth deviates from zero, for either positive or negative amounts, but for limited time spans.