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Classification of funded pension schemes and impact on government finance

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Part I

1.3 Classification of funded pension schemes and impact on government finance

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Summary

If a government unit is responsible for the management of a defined-contribution funded scheme for which no government guarantee exists for the risks of defaulting payments covering the majority of the participants, the scheme is not treated in the national accounts as a social security scheme in the government sector. In such schemes, the schemes are not financed by the government nor does the government define the level of pensions to be paid (the members have a say in how much they contribute and how their contributions are invested). Thus, the contributions and payments in respect of such schemes have no impact on the EDP deficit, as they are stripped out of general government revenue and general government expenditure, respectively. Likewise, a mixed scheme with defined-contribution and defined-benefit parts should be split in national accounts and the different parts recorded separately

1.3.1 Background

1.3.1.1. Pension schemes as "social insurance" in national accounts

In national accounts, social insurance[1] means collectively-organised protection (through government units or NPISHs) against a list of "social risks or needs". Among them, pension schemes – that are usually defined as a set of rules governing the flows under a scheme - are designed for "old age" risks by providing replacement revenue after retirement from professional life. In this context, main flows under a social insurance scheme will be referred to as "social contributions" (to the scheme) and "social benefits"(from the scheme).

It is important to note that these risks may be covered, in variable proportions due to various factors, outside the social insurance system, as defined in national accounts. They may be covered by "normal" insurance, based on policies taken on the own initiative of the insured, and by saving instruments, for precaution motives. In this context, the sector financial corporations may play a major role in the coverage of "old age" risk. [2]

National accounts have drawn a line between social insurance and any other personal protection against social risks or needs. Notably, ESA95 par. 4.87 and 4.88) requires at least one out of the following conditions.

In order for an individual policy to be treated as part of a social insurance scheme, the scheme must be compulsory, whatever the level of this obligation (all the population, some categories of workers, branches, some firms, etc.) although the experience shows that this criterion must be interpreted with some flexibility. Notably, there may be cases where there is no strict legal obligation to enter into a

[1] As a reminder, this must not be confused with social assistance by government paying benefits in cash or in kind on the basis of a social policy purpose, for covering similar risks but regardless of the payments of contributions. ESA95 says that these benefits in cash "are similar in nature to social security benefits but which are not made under a social insurance scheme incorporating social contributions and social benefits" whereas social assistance benefits in kind "are not provided in the context of a social insurance scheme". The main difference is that social assistance does not require contributions from beneficiaries that are earmarked for that purpose. In addition, an insurance scheme defines in advance clear rights acquired by participants in the context of the rules set up in the scheme, whereas social assistance is adjusted to situations on the basis of rules that are subject to change by the government.

[2] In this context, some long-term saving instruments may be qualified as private voluntary pension schemes.

given scheme but where it is observed that a very large majority of the population is de facto member of the scheme because of some obvious advantages compared to other possibilities existing on markets. In addition, the expression “encouraged” is also used, which expresses that this criterion of “compulsory” is not too prescriptive.

The scheme must be collectively organised, meaning that the participants are submitted to general rules and cannot enter in specific negotiations about some conditions.

Finally, the employer, at least, must pay a contribution (even if there is no actual payment in the case of “imputed contributions”) on behalf of their employees. In other words, social insurance is therefore part of the total labour cost.

Given these conditions, many pension schemes can be considered as part of social insurance. In practice, based on a large variety of rules, specific accounts, showing receipts, expenditure, assets and liabilities, can be identified for each scheme. In national accounts, it is important to distinguish clearly a pension scheme from the institutional units that are involved in the management of the scheme.

1.3.1.2. Classification of pension schemes in national accounts by unit responsible for the management

The following step is to classify the schemes on the basis of the unit that is responsible for the management of the scheme, acting as “sponsor”, according to a term that is frequently used in this specific area. The expression “responsible for the management” does not mean that some practical, administrative, tasks cannot be carried out by other units that may be in some circumstances more efficient. As a corollary, the fact that a government unit takes in charge some practical tasks is not as such a sufficient criterion for classifying a scheme.

National accounts classification foresees three cases as regards the type of unit responsible for these pension schemes:

1) *A government unit* is responsible for the scheme, meaning that the participation is imposed by law or specific regulation while the unit controls the level of the main flows by setting (or approving in last resort) the rules, as mentioned above. In addition, ESA95 (4.88.a) states that government “finances” the scheme. It is also specified that the management of a scheme is clearly different from any government role as supervisory body that may concern any kind of schemes and, more generally, any financial intermediation activity.

As a result, these schemes are qualified as *“social security schemes” (ESA 95, par. 4.88.a).* It is also specified that a government unit managing such schemes, where clearly identifiable, must be classified within the sub-sector “Social security funds”. Therefore, there is full consistency between the classification of schemes and the classification of the unit where a government unit is responsible.

2) *Employers* (including government units for civil servants) organise schemes exclusively for their own staff (or part of them in some cases) and manage directly (are fully responsible for) all the underlying flows that are related to the rules that have been fixed, in the framework of some specific legislation and regulation that aims to protect the pension rights of the employees.

These schemes are qualified as *“non-autonomous employer pension schemes” (ESA 95, par.4.88, b2).* In this case, there is no issue on the classification of the corresponding units, as the employer acts directly as a sponsor for the scheme such that the flows, and possibly assets and liabilities, are allocated to the sector (sub-sector) in which this employer is classified. In other words, all institutional sectors, except households, may be concerned.

3) *Financial institutions* are responsible for the management of schemes that may be organised on different bases, including those that the employers (including government units for civil servants) organise exclusively for their own staff (or part of them in some cases). The manager, as a unit different in any case from the employer of the participants, receives the social contributions paid by the employers and is fully in charge of the management of the flows and, more generally, accumulated assets, under one or several kinds of control (specific regulatory bodies, firms and possibly the participants themselves).

These schemes are defined as *"autonomous private funds"* (ESA 95, par. 4.88, b1). The flows of contributions and benefits, and the corresponding assets and liabilities, are allocated into the sector "financial institutions".

1.3.1.3. "Unfunded" versus "funded" pension schemes

In parallel to the above-mentioned criteria, the analysis of pension schemes may focus on the financing conditions of the pension benefits, which is also clearly explicit in national accounts.

In this respect, there is a basic distinction between "unfunded" or "funded" schemes.[3]

1) *"Unfunded schemes"*, frequently referred as to "Pay as you go systems", are schemes where one unit is "responsible" for the unconditional payment of the pensions and, therefore, takes the financial risk of payment of the benefits. The origin of the resources used for the payment does not matter. The unit may use other types of resources but may also modify the rules that fix the contributions and the benefits. Similarly the large diversity in arrangements that may be observed, for instance in the way the participants' rights are measured (such as percentage of earnings, points, monetary accounts, etc.) and the amounts of benefits determined (such as "flat pension", percentage of earnings on a given period, period of contributions, age of retirement, etc) and adjusted during the retirement period, is quite secondary in this regard.

The accumulation of some reserves may also be observed, but there is in this case no intention to use invested assets as a major source of resources for payment of the future pensions. It is in addition a discretionary decision from the unit managing (running) the scheme that is also in a position to decide at any time on the (re-)allocation of these reserves. ESA95 Annex III.4 specifies that these funds they remain the property of government and not of the beneficiaries.

If a government unit is responsible for the management of an unfunded scheme, the scheme is undoubtedly a social security scheme.

2) *Funded schemes* are arrangements where there is an accumulation of assets, mainly financial assets, from contributions, with the explicit objective of ensuring all or a major part of payment of the future benefits from these assets (resale with possible capital gains, property income).[4] In this case the financial risk comes mainly from uncertainty over asset performance.

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[3] Note that the terms "first, second, third" pillars, on which there does not seem to be an agreement, are not at all used in the ESA95 framework.

[4] Note that of course during a given period the benefits may not be financed exclusively from the assets. A funded scheme is a scheme where the assets are assumed to be sufficient to ensure in the long term and predominantly the payment of all the

The participants do not own directly the assets that are collectively managed (similarly to mutual funds) but they hold an individual claim on the reserves that are accumulated that is recorded in ESA95 as AF.612 "net equity of households in pension funds reserves”. This claim is generally not tradable, in the sense that no market exists, and its transferability (notably in case of some change in the professional position or early death) may be submitted to specific conditions.

However, it is important to clearly distinguish between two categories of funded schemes.

a) A first category is *“defined-benefit funded schemes”* where, although there is an accumulation of assets as mentioned above, the unit responsible for management of the scheme bears the financial risk, taking the commitment to pay a promised level of benefits irrespective of the value of the accumulated assets. The sponsor can of course use some financial techniques in order to reduce this risk.

In the case of such schemes, the liability of the fund (AF.612) must be valued at the "present value of the promised benefits" (§ 7.59) on the basis of some hypotheses. In addition, the sponsor has the power to “adjust the rules” if necessary, similarly to the case of an unfunded scheme.

As a result, such schemes may show a positive (”over-funded”) or negative (“under-funded”) net worth if the market value of the assets is higher (or lower) than the present value mentioned above. Such scheme may be under-funded as a result of a fall in the market value from the assets . Generally, the unit responsible for the scheme (the sponsor) should have to inject money under certain conditions in order to better match the assets and obligations, but it may also take the form of government support, recorded according to ESA95 as a capital transfer. It means that even if the value of the assets is lower than 50% of the future obligations (which, obviously, could not be considered as a “predominant part”) a scheme could be treated as funded if it is obvious that the sponsor shows the intention to “re-balance” the scheme.

A government unit may theoretically manage such defined benefit funded schemes. Provided that other criteria, as mentioned in ESA95 4.88a (large coverage of population, compulsory participation, control of contributions and benefits) are fulfilled, these schemes must be classified as “social security schemes”.

It means that in the current ESA95, the liability vis-à-vis households for defined benefit funded schemes is not recorded as such in government balance sheet. This may be seen as an inconsistency in the system (compared to a “private” defined-benefit pension fund) but, from an economic point of view, this situation is very similar to a social security fund as the main point is the government commitment to pay pensions according *to rules where the market value of the accumulated assets has no influence.*

b) A second type of funded pension scheme is usually called “defined contributions funded schemes". ESA95 uses the term “money purchase pension schemes” (see §7.59) but the description that is given fully covers this category of funded scheme.

benefits. As a result, some temporary distortions may be observed. However, this "adequacy" must be considered in a dynamic way, notably for schemes that have been created recently.

In this case, the individual pension benefits depend on the accumulated assets but the level of the future pensions is uncertain as individual households bear the whole financial risk attached to the invested assets of the accumulated reserves. Generally (but this is not a required condition), the participants in the scheme may have some individual choice in the orientation of the investment of their funds in one or more market segments ("risk profile", financial manager).

As a result, the same amount of contributions accumulated during the same period may give rise to different amounts of pensions. The accumulation of the assets is in fact very similar to individual saving efforts. Normally, of course participants in the scheme cannot dispose of their holdings before retirement. However, it is generally observed (but this is not a required condition as regards the issue of classification) in the case of early death, that all or part of the value of the claim may be transmitted to persons designated by the former holder.

The participants' claim (AF.612) is valued at the market price of the assets invested. As a result, by definition in ESA95, the net worth of such defined contributions funds is zero and the notion of under-funded or over-funded is not relevant in this context. As there are no promised benefits, no comparison is appropriate.[5]

1.3.1.4. A need for clarification of the classification of funded scheme

In recent years, some countries have set up defined-contributions funded pension schemes (or identifiable as such – see below) where a government imposes or encourages participation, collects contributions from employers and pays pension benefits to households, fixes the level of contributions and maybe change the rules, but where it is explicitly stated that pension benefits will predominantly depend on accumulated assets. Under these conditions, it seems that all ESA95 criteria for classifying such schemes as social security schemes are not fulfilled, as government is not fixing the level of the pension benefit and it is difficult to consider that it is "financing" the scheme.

1.3.2 Treatment in national accounts[6]

1.3.2.1 Government is managing a "defined contributions funded pension scheme"

If a government unit is responsible for the management of a defined contributions funded scheme, as described above (i.e., essentially, the level of pension is uncertain because it depends on asset performance) and for instance developed as additional social insurance[7], <u>the scheme must not be considered as a social security scheme.</u>

As a consequence, the unit that may be identifiable as "manager" ("sponsor") of the scheme must be considered as a separate institutional unit not classified within the government sector but must be considered as a public financial corporation (classified within the sub-sector S.125 "Insurance corporations and pension funds").

[5] However, at any time, it is possible to estimate the pension that would be received on the basis of the assets accumulated such that, possibly, the sponsor (or even government as supervisory body) would take some measures if the level is judged too low. But, as such, this has no influence on the classification of a funded scheme.
[6] See News release 23/2004 2 March 2004.
[7] This may occur in a context where the "return" under an unfunded scheme (in the form of percentage of "replacement revenue") would be made less advantageous through various measures.

Therefore, the flows of contributions and benefits under this defined-contribution funded scheme are not recorded as government revenue or expenditure and do not have an impact on government deficit or surplus.[8]

1.3.2.2 Government is managing a "mixed scheme"

The expression "mixed schemes" (or "hybrid schemes") does not exist in current national accounts standards as their creation occurred after their publication. It aims covering cases where a government unit is involved simultaneously in the management of two kinds of schemes (imposed on all the population or only a part, for instance, based on age criteria[9]), although in appearance there are on one hand a single flow of contributions (a total rate is paid) and on the other hand a single flow of pension benefits (each household receives only one regular payment for a given period).

> One scheme is unfunded, organised according to the "normal" features of a "pay-as-you go" system where the benefits (fixed according to some factors) are directly financed by the contributions collected and, if necessary, by other government resources.
>
> The other scheme is a funded one that has all the features of a defined-contributions funded pension scheme: part of the contributions received from the employers is invested on markets (directly by the government unit but more frequently through specialised market units) and the individual pension benefits, for that part, will predominantly depend on the invested assets.

What matters here is that both corresponding flows, "in" and "out" and relating to two different sets of rules, are fully identifiable. Similarly the involvement of government in each kind of scheme is very different.

> Under the unfunded scheme, government has taken the commitment to pay a promised level of benefits by reference to rights, determined by given rules on their calculation.
>
> Under the funded scheme, the amount of the pension depends normally on the accumulated assets and government has no general obligations towards all the participants.

As each scheme is run by clearly a different set of rules and more precisely, as the pension benefits are not financed in the same way, the total flows must be allocated to each corresponding scheme, and these should be treated differently in national accounts.

As a result, in such situations, two different institutional units must be distinguished in national accounts, each of them referring to one identifiable scheme.

In this respect, the unit that is identified (resulting from the "split" for statistical purposes of the one apparent government unit) as responsible for the management of the defined-contributions funded scheme must be classified outside the general government sector.

Therefore, the flows of contributions made to the unit managing the defined-contributions funded scheme and the flows of benefits paid from this unit are in no way part of government revenue or expenditure and therefore cannot have an impact on government deficit or surplus.

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[8] However, redistribution may play an important role in such schemes. Contribution payments may be fixed as a share of income, whereas entitlements do not fully reflect the differences between contributions paid by different persons in a single period. In such cases, the redistribution of contributions has to be recorded within the government sector (without any effect on general government deficit or surplus), whereas the pension scheme remains a public financial corporation.

[9] The reason is that older workers would not have accumulated sufficient contributions in order to obtain a non-negligible amount of pension from the assets.

1.3.2.3 Government has granted a guarantee to a funded scheme[10]

As already mentioned, even where government is not responsible for the management of a scheme that is not classified as social security scheme it may have a "strong interest" in the sustainability of the scheme, as part of its fundamental mission as regards social protection.

It means that it is acting as a supervisory body and that it closely follows the situation of any non-government pension scheme, assessing that it is designed and managed in an adequate way. Notably, it has to ensure that nobody within the population would be left without any resources, notably because of age. This kind of commitment is part of the Treaty obligations of all the EU Member States.

In this context, where government considers that the degree of uncertainty for participants in a non-government pension scheme is not acceptable or is an obstacle to its development, government may grant an explicit guarantee for the risk of defaulting payments covering all the participants, due to various factors (operational risks, insufficient level of accumulated reserves, market collapse). Government will act as payer of last resort and in this way will ensure that benefits reach a level considered as satisfactory.

Depending of the nature of the pension fund, this would have the effect of offsetting all or a very large part of the financial risks borne by all the participants in the scheme (defined-contributions) or only by the non-government institutional unit "responsible" for the scheme (defined benefits).

The existence of a government guarantee, in conditions mentioned above, to a funded scheme that is not classified as a social security scheme, does not as such imply that the beneficiary scheme should be reclassified as a social security scheme.

The government guarantee must be considered as a contingent liability, not recorded in national accounts as a government liability according to the general ESA95 principles. In this respect the risk borne by government is only a potential one as it depends on the occurrence of certain specific events.

As a result, neither government expenditure nor government revenue are concerned as long as the guarantee is not used. It is only under very restrictive conditions that a private pension fund that has been granted a government guarantee could be reclassified as a social security scheme.

> Government may support a scheme obviously for exceptional and temporary reasons, for instance a short-term shock on financial markets (such as the 1987 shock on shares or the 1994 shock on bonds) such that the government intervention is limited in time and amount. This does not imply reclassifying the scheme as social security scheme, except if government decided to fully take control of the scheme and directly adjust the levels of contributions and benefits, which would be very hypothetical in this context. This means that, in a first stage, any government support, although affecting government surplus or deficit, would not have the automatic effect of reclassifying the scheme.
>
> But if the intervention is observed frequently, national accountants should closely examine the position of the scheme. If actuarial expectations give strong evidence, based on a large consensus of experts, of noticeable default in sustainability (a "fundamental imbalance"), such that government's support to the scheme is not implemented for exceptional and temporary reasons but is assumed to be permanent, national accountants should closely examine the position of the scheme.

[10] Note that the following rule is also applicable to the case of a non-government unfunded scheme.

In the case of a defined benefit funded scheme where government would ensure the payment of more than 50% of the actuarial value of the pensions to be paid in the context of the non government scheme from its own resources, the private scheme could be reclassified as a social security scheme if the government would change the main features of the scheme such that the ESA 95 conditions for classifying it as a social security scheme would be fulfilled (see notably ESA 95 § 2.74 and 4.88.)

In the case of a defined-contributions funded scheme, this reclassification as social security scheme should be implemented only in the case, rather hypothetical, where the government is effectively ensuring the payment of benefits in the context of the scheme for an amount higher from than the one paid from the assets accumulated in the fund. (for instance because it ensures a minimum return). In this case, it becomes de facto a defined benefit funded scheme under the responsibility of government.

In "mixed schemes", as mentioned above, it may happen that government grants a specific guarantee for the defined contributions funded scheme that is not classified as a social security scheme. In this case, the reclassification of the defined contributions funded scheme would depend only on the involvement of government as regards the payment of benefits from the assets accumulated under this scheme (for instance by adding a specific allowance that could double the amount of benefits for a majority of participants). This reclassification wouldn't depend on any support resulting from its responsibility for the defined benefits scheme that is by definition classified as social security scheme.

In more exceptional cases, such reclassification may also occur even before any effective call if there is strong evidence that, in the next few years, the guarantee would be called. In these cases, the payment of benefits would come mainly from government financing, under the conditions mentioned above as regards the nature of the scheme. But this could only occur under the assessment of sustainability by independent experts and where any prudential provision such that specific guarantee funds) is expected to be inactive or insufficient.

1.3.3 Rationale of the treatment

1.3.3.1 Classification of defined-contributions funded schemes managed by government

The main reasons for the classification of a government unit responsible for a defined contributions funded scheme into the sub-sector S125 "insurance corporations and pensions funds" have been already mentioned in the previous section:

-The level of pensions, as mentioned above, is obviously predominantly depending on accumulated assets invested on market. Therefore, government is not controlling the level of the individual pension benefits because it has no direct influence on the market performance of the assets.

-all pensions funds where the participants bear the financial risk should be treated in the same way, whatever the nature - public or private - of the unit managing the scheme, or even the obligatory or voluntary nature of the scheme. Thus, there is no rational ground to treat differently what is really saving accumulated by households. Managing assets on behalf of other units is in national accounts a "financial intermediation" activity that is not normally one function of government. Where managing such schemes, government is not acting for public policy purposes but is acting in a similar way to a financial institution.

In addition, attention must be given to the impact on government debt.

Through the consolidation process, any debt instrument issued by a government unit and held by another government unit is not accounted for in government debt in the context of EDP ("Maastricht debt" concept – see Addendum at the end of this Manual). In case of considering the pension scheme as a social security scheme, for the part of the assets that are invested in government securities, the government liability vis-à-vis households is not taken into account, which gives a wrong picture of the amount that government would be legally obliged to repay. Classified as defined contributions funded scheme into the sub-sector S125 "insurance corporations and pensions funds" the liability relating to the future pensions is not recorded as government liability but the government securities held securities held as assets of the pension fund are rightly measured with counterpart the government debt. Under these conditions, the structure of the portfolio of the pension fund has no influence on the recording of its liabilities.

1.3.3.2 Classification of "mixed schemes" managed by government

Similar arguments, as mentioned above, are of course relevant as regards the classification of defined-contribution pension funds that are managed by government.

However, an important aspect is the centralisation of all flows through one government unit.

This does not mean that all criteria for classifying a scheme as social security scheme are fulfilled, and this should rather be considered as a "technical" aspect that can be justified in terms of efficiency. As such this does not provide any argument for the classification of each scheme. In fact, what matters here is that an observed "single" flow of payments in each direction (contributions/benefits) covers transactions related to different sets of rules that require corresponding treatment in national accounts.

In addition, an important issue to be considered is the degree of "independence" of each scheme.

This means that the calculation of benefits must be completely separated and depend on a quite different set of rules, with a direct and predominant link between assets invested on markets and level of pension for the funded scheme. Under these conditions, the treatment should not apply in the case where calculation of the pension would be clearly global.

In this respect, it would mean that the "market scheme" is "subordinated" to the "non-market scheme" in the sense that the maximum level of the pension would be fixed according to rules where the market value of the assets has no influence. On the contrary, government could be entitled to dip into the accumulated reserves for ensuring the payments required under the "non-market scheme" if the amount of contributions is not sufficient to finance the payment of the promised benefits due under the unfunded scheme. It is only under these restrictive conditions that both schemes could be considered as not independent.

1.3.4 Numerical examples

The classification of social contributions and social benefits as government revenue and expenditure (in the ESA95 category D6) does not raise any specific issue. This is the same also for temporary support by government to a funded scheme that must recorded as a capital transfer D99 (see § 4.165.i).

In the case of a defined-contributions funded scheme that has no impact on government revenue or expenditure, the current accounting system on ESA95 needs to record an adjustment D8 “for the change in net equity of households pension funded reserves” (see § 4.141 to 4.144). This adjustment has the effect of neutralising on households' saving the difference between contributions and benefits under funded schemes, such that the final effect is only acquisition or liquidation of financial instruments. This adjustment is a resource of households but, as a counterpart a use of financial corporations.

ESA95 provides an example in the Annex IV (see page 324 for financial corporations and page 342 for households).

1.3.5 Key-words and references.

Social security funds	ESA95 2.74
Social insurance	ESA95 4.83 / 4.87 and Annex III (2 / 1)
Social security schemes	ESA95 4.88
Employer pension schemes	ESA95 4.88
Social assistance	ESA954.103 / 4.105
Net equity of households in pension funds reserves	ESA95 5.110/5.113
Defined-benefit pension schemes	ESA95 7.59
Money purchase pension schemes	ESA95 7.59
Social security schemes of government	ESA95 Annex III (4)
Private funded social insurance schemes	ESA95 Annex III (5)