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APPLIED MACROECONOMICS 1

Unit 1:

The Statement of Government Financial Operations (GFO)

















Introduction

- o A GFO is a macroeconomic management tool it allows the discussion about issues such as: is it necessary to reduce public spending? What are the future effects of the current situation of public finances? Can we reach the MDGs in a sustainable way? Etc.
- A GFO is not a budget.
- o A budget:
 - Is made for the following year. It is a document through which the people representatives give the executive the right to levy and spend according to specified amounts and purposes.
 - For reporting on the execution, governments have to establish a "appropriation accounts" submitted to the Parliament. Called the "settlement bill' (Loi de Réglement" in Francophone countries), it reports the budget execution based on the outturns (without it, the parliamentary control would be devoid of sense)
 - In general, the budget does not cover all entities (there are appendix, but public entities may be managed outside of the budget)





The GFO includes all resources and uses of the government in financial terms during a given period of time.

- The resources are the monetary sums received by the government during a given period of time
- The uses correspond to the payments made during a given period of time
- Resources and uses are flows (quantities related to a given period of time)
- Stocks or outstanding amounts (an amount calculated at a given date), such as public debt or the outstanding accounts of the government in the banking sector, are not taken into account in the GFO (the information is recorded in other documents)



Example 1: A first simplified GFO

| Uses | | Resources | |
|--------------|-----|-----------------------|-----|
| Expenditures | 230 | Revenue and Grants | 180 |
| | | Loans | 75 |
| Amortization | | | |
| | 25 | | |
| Total | 255 | Total | 255 |



Comments 1

- Logically, the total amount of resources is always equal to the total amount of uses, since the uses represent what has been done with the resources that have been received.
- In example 1, we have total resources = 255 = total uses.
- This does not mean that there is no deficit, or that the government is managing prudently.
- Unfortunately, in practice:
 - It is difficult to obtain the balance (there are mistakes, there are different sources of information)
 - An adjustment item should then be included. This item may be called "adjustment", "cash basis adjustment", "errors and omissions", etc. ("gap" is used only for the future)
 - This is not always the case, however. Take care! It is very unlikely that resources and uses actually balance. The difference may be "hidden" somewhere (in the item "change in arrears" for instance)



- The resources include revenues and loans received (borrowing), and sales of assets
- The expenditures (note that expenditure relates to cash while expense relates to a use of a resource in an accrual accounting system) are not the only uses: there are also repayments of the principal of loans and purchases of assets
- The course reviews later this distinction between revenues and resources, expenditures and uses: it is the issue of financing.
- GFOs are usually not presented with two columns. To make it easier to compare over several years, they are presented in a single column, such as this:



The same GFO in columns

| Revenue and grants | 180 |
|--|-----|
| Expenditures | 230 |
| Balance (deficit or surplus) | -50 |
| Net financing | 50 |
| Loans (borrowing, drawings or withdrawals) | 75 |
| Capital repayment (or amortization) | |



o This example describes a government:

- That spent more than it received as revenues and grants. The difference is the deficit (50 in the example)
- That borrowed to "finance" the difference and to pay amortization (on previously incurred loans)





- o The deficit is included in the GFO. It is not a resource or an use, but an intermediate calculation to expedite the analyse: it is a balance.
- o The indented lines (such as "loans") are part of the higher ranking line above (or less indented line). For instance, loans - capital repayment = net financing.
- The indented lines starting by "of which" are part of the total of the less indented line, given for information but without presenting all the lines.
- In general no negative sign is added for expenditures.
 Of course, they are outflows.
- But there is one for negative financings (such as repayment in capital)





The way to account for the flows included in the GFO is determined in the Government Finance Statistics Manuals (GFSM) of the IMF (IMF, 1986, 2001). They can be downloaded for free at www.imf.org!

The old manual(1986) had a cash basis (resources: what enters the cash, uses: what goes out)

The new manual (2001) offers an accrual basis: the GFO seeks to describe the variation in the net worth of the state (assets – liabilities)

The problem is that the new approach is very ambitious and demanding in terms of information (especially concerning the valuation of non-financial assets, such as infrastructures). Not being able to obtain them, current GFOs often lie "somewhere" in between both manuals.



Deficit and financing

- A distinction is made between different flows reported in the GFO. It is based on a distinction of their impact on the net worth of the State. In the GFO in columns, non financing flows are "above the line" and financing flows, "below the line".
- The deficit (balance) is the difference between nonfinancial resources and uses (all flows above the line). That is the reason why it is so important to define precisely what we call "financing".
- o The volume of financing is necessarily equal, ex post (but with the opposite sign), to the deficit.
- Careful!: the term financing does not mean as in every day language "to find money somewhere". Not in economics.
- o Problem: they are two IMF Manuals of Public Finance Statistics. The old one, 1986 (cash basis) and the new one (2001), on an accrual basis. The definition of "financing" is different in those two approaches.



Financing 1: the old approach

- In the 1986 manual, we call "financing" all the flows that increase or decrease either financial assets or liabilities (debts).
- In this case, things are quite simple: the deficit corresponds to the increase in debt (net financing).
- Only the status of the variation of arrears is not very clear (is it a debt?)(more to come on this issue)



Financing 2: the new approach

- o In the new approach (2001 Manual), financing is made of transactions that cause no change in the net worth of the government (NWG).
- The net worth of the government is the amount of nonfinancial assets (public infrastructures, etc.) + the net financial worth (financial assets minus debts)
- o Privatisation revenues, for instance, are considered as a revenue in the 1986 approach, but as financing in the 2001 approach, since the government's assets (the value of the public company) decreases while its financial asset increases: the NW of the government remains unchanged.



Domestic financing, foreign financing

- We distinguish between:
 - Domestic financing (by residents, but sometimes in foreign currency)
 - Foreign financing (by non-residents, but sometimes in local currency)
- Let's see these two items more in detail



Domestic financing

o We distinguish between:

- Banking sector financing (including Central Bank):
 variation of the "current account" with the banking
 system, or change in the Net Credit to the
 Government (NCG) = credit (loans, overdraft) to the
 government made by the banking system –
 government deposits in the banking system
- Non-bank financing: Treasury bonds, debt (issuances-amortization) subscribed by the nonbanking sector (transactions on TBs with the banking sector are included in the NCG)
- Loans ("purchases", implying foreign currencies) with the IMF, net of repurchases. In fact, the IMF lends to Central Banks. What appears in the GFO is the retrocession of the IMF loan (to the Central Bank) to the government in local currency



Foreign financing

Net Foreign financing includes:

- New loans (or drawings) net of principal repayments (we also speak of capital repayment or amortization)
- Debt issuances on the international financial market (net of repurchases)

o Careful!:

- The amounts are the quantities effectively paid out (received in the account of the Treasury), not the amounts promised by the external creditors (their commitments)
- The term "amortization" has nothing to do, in this case, with the accounting term used for describing the "wear and tear" and obsolescence of fixed capital (in the 2001 manual, the term used for "wear and tear" is "consumption of fixed capital")



Test questions 1

- Are the following operations financing operations?
 - Ad valorem taxes (like VAT)
 - Sale of a mobile phone licence
 - Payment of the principal of the public debt
 - Sale of a building owned by the government
 - Payment of interests on the public debt
 - Investment expenditures



Test questions 1: correction

- o Are the following operations financing operations?
 - Ad valorem taxes: NO
 - Sale of a mobile phone licence: NO in the 1986 manual (non-fiscal revenue), YES in the 2001 GFSM (sale of an intangible asset)
 - Payment of the principal of the public debt: YES (reduces debt)
 - Sale of a building owned by the government: No in the 1986 manual (non-fiscal revenue, capital revenue) YES in the 2001 GFSM (sale of a fixed asset)
 - Payment of interests on the public debt: NO (does not reduce debt)
 - Investment expenditures: NO in the 1986 manual (expenditure in capital), YES in the 2001 GFSM (accumulation of a tangible asset)





- In practice, in developing countries, we hover in between both approaches.
 - We consider privatisations, for instance, as financing (as a precaution)
 - But there is no serious evaluation of tangible assets of the government
 - Investments are considered as expenditures
 - There is no evaluation of the fixed capital consumption in the GFO (wearing out of infrastructures)



- Let's consider the same GFO that we had previously studied, but this time we have detailed the financing (see next slide)
- o What is the amount of the foreign public debt at the end of the year if it amounted to 1200 at the start of the year?
- o What is the amount of the NCG at the end of the year if it amounted to -30 at the start of the year?



Detailed GFO

| Revenue and Grants | 180 |
|-------------------------------------|------|
| Expenditures | 230 |
| Deficit | -50 |
| | |
| Net financing | 50 |
| Net domestic financing | 15 |
| Change in the NCG | 15 |
| Net foreign financing | 35 |
| Loans (Drawings) | 60 |
| Capital repayment (or amortization) | - 25 |



Correction of exercise 1

- Amount of the public debt at the end of the year: 1200 + 60 (drawings) - 25 (capital repayment), or 1200 + 35 (net financing)
- Amount of the NCG at the end of the year: -30 (government deposits exceed its liabilities vis-à-vis the banking sector) + 15 = -15 (the government commands 15 in "reserve" in the banking system)



The boundaries of the government

In the GFO, we find the concept of "government". What is the "government" from the point of view of economic statistics?

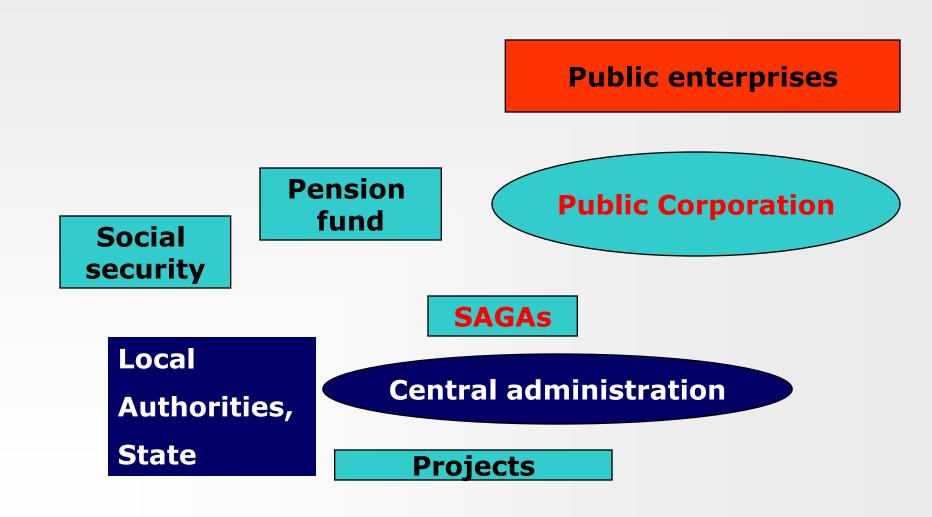
- In national accounts, the government is an economic agent defined by:
 - The legitimacy to make compulsory levies
 - A redistribution function (transfers among agents)
 - The production of nonmarket goods (free or almost free)



- In practice, the government, in economic terms, is composed of multiple entities, as the following slide will show.
- Which entities accounts are reported in the GFO?
 - public enterprises, as they produce market goods (sold at their real value) are never taken into account in the GFO as an entity (on this subject, see infra)
 - If we want to include public enterprises, we need to speak about "public sector", not government.



Perimeter of the government





Entities that should be considered

o The GFO can include:

- Decentralised public entities: States (in Federal States), Regions, Districts, etc.
- SAGAs (Semi Autonomous Government Agencies): these entities receive almost all their resources as public subsidies (e.g. universities, hospitals, autonomous funds charged of reimbursing public debt)
- Public Corporations: these entities obtain a significant part of their resources from the sale of goods and services but rely on the government subsidies for more than 50% for their budget.
- Careful!: these two categories are legal categories that do not necessarily translate into an economic reality.



Entities taken into account 2

- Pension funds. In some countries they are separate entities. Sometimes limited to a single line in the budget.
- Social security Funds and their administration, authorised to make compulsory levies
- Development projects (since the financing comes from grants or loans to the government, they are in principle public expenditures). At this level, there is an important information problem as most projects are managed out of budget.



Boundaries: theory and practice

- In theory, the GFO includes all entities that get the bulk of their resources from the public Treasury or compulsory levies.
- In practice, the IMF includes in the GFO the most important entities in terms of financial risks, at least those for which information is quickly available and reasonably reliable.
- In a given country, before interpreting the GFO, one needs to ascertain which entities are taken into account.

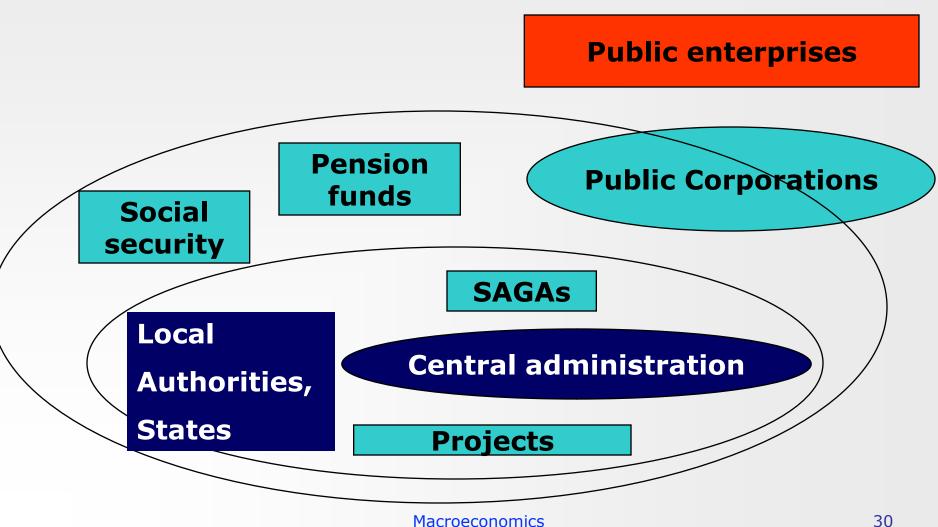


Boundaries: theory and practice 2

- In the next slide, the ellipses represent different possible "boundaries" of the GFO:
 - The smallest is simply the government (ministries), whose accounts appear in the budget
 - The biggest includes virtually all that can be taken into account (attention: some Public Corporations are de facto public enterprises whose resources stem for more than 50% from their industrial or commercial activity, so they should be logically excluded)



Perimeter of the government





To be or not to be... in the GFO

- The resources and the uses that appear in the GFO are those of the entities taken into account, not including the flows between these entities (consolidated statement)
- The GFO records the flows between the entities making part of the GFO and those excluded. Example: let's consider the case of a hospital:
 - In the first column of the next slide, the hospital is included in the GFO. In the second column, it is not.
 - We suppose that the difference between resources and uses of the hospital is financed by a public subsidy (transfer).



Two presentations of the GFO

| | Hospital included in the GFO | Hospital excluded from the GFO |
|----------------------------------|------------------------------|--------------------------------|
| Revenues | 162 | 150 |
| Government except hospital | 150 | 150 |
| Hospital | 12 | |
| Expenditures | 228 | 216 |
| Expenditures: goods and services | 228 | 216 |
| Government except hospital | 210 | 210 |
| Hospital | 18 | |
| Transfers | | 6 |
| Deficit | Macroeconomics - 66 | - <u>6</u> 6 |





- Including or not the hospital in the government in the sense of the GFO does not change the deficit.
- But the amount of public revenues and that of expenditures (or of certain expenditure items) does change. That may be important, especially when IMF programmes' conditionalities relate to these amounts.
- o In the previous example, if the conditionality applies to the revenues, which must exceed 160, the programme is "on track" in the first case, "off track" in the second.



- The resources of the government include:
 - Taxes
 - Exports
 - Public enterprises sales
 - Treasury bonds issuances
 - Civil servants wages



Test questions 2: correction

- o The resources of the government include:
 - Taxes YES
 - Exports NO (the government does not benefit from them)
 - Public enterprises sales NO (public enterprises are not part of the government)
 - Treasury bonds issuances YES
 - Civil servants wages NO (it is a recurrent expenditure of the government, an income for each civil servant)



Exercise 2: Elaboration of a GFO

- You are in charge of elaborating the GFO for your country, Belindia. The following information is available:
- The management of the Treasury indicates that revenues are 140, expenditures in goods and services (except interest payments and transfers) amounts to 135.
- The Central Bank indicates that the NCG was -50 at the start of the year and -60 at the end of the year.
- o The Ministry of Planning indicates that Belindia has received grants for an amount of 30.
- o The Public Debt Management Unit indicates that Belindia has borrowed an amount of 57 on the markets, and has repaid an amount of 40 in principal and 15 in interests.
- o The Postal Services, a public corporation, is not part of the GFO, but its revenues amount to 20, its expenditures to 25. The Treasury paid the difference.



Correction of exercise 2: Belindia's BGFO

| Revenues and Grants | 170 |
|------------------------------------|------|
| Revenues | 140 |
| Grants | 30 |
| Expenditures | 155 |
| Expenditures of goods and services | 135 |
| Interests | 15 |
| Transfers | 5 |
| Deficit | - 15 |
| Adjustment (cash basis) | +8 |
| Net financing | +7 |
| Change in NCG | - 10 |
| Net foreign financing | - 10 |
| Loans | 57 |
| Amortization | - 40 |





- o NOTE: the information given does not allow us to balance the GFO: this is usual! (and one of the reasons why the elaboration of the GFO is not a coveted position in any Ministry of Finance-and there are generally no bonus to compensate!)
- The variation of the NCG is negative, which means that the government put its money in its account(s) in the banking sector.
- The deficit of the Postal Services (25-20) is paid for by the Treasury: it is a subsidy amounting to 5.



Accounting principles

- The GFO does not record revenue and expenditures in the same way (asymmetry).
- The principle of prudence leads to attempt presenting the "least favourable" situation for the government, in an attempt to alert about potential risks.



Accounting principles: expenditures

- Expenditures are recorded at the moment of the (legal) commitment by the government
- CAREFUL!: there are several stages of commitments in public finance management. For GFO, we use the legal one, i.e. the existence of a contract binding the public entity to pay a third party if it delivers according to terms
- o In the GFO the debt service that appears is the service due, according to the agreements in force, including the reprocessed debt, not the debt service that has been paid.



Reminder: the stages of public expenditure

- In the French tradition of budgetary approach, the public expenditure goes through several stages:
- The administrative phase, carried by the line ministries and Ministry of Finance includes:
 - The commitment (engagement): An authorising officer lays an act that will have a financial implication for the government, and evaluates the amount of this implication. The financial controller verifies whether there remains enough credit in the appropriate financial line and blocks the amount.
 - The settlement (liquidation): The authorising officer validates that the prescribed service has been realised, and settles the amount of the expenditure (which may differ from the previous amount, but cannot exceed the commitment made).
 - The issuance of payment order/voucher (ordonnancement). The authorising officer gives to the public accountant the order to pay.
- o 2. The payment phase at the Treasury:
 - The payment. The public accountant verifies the compliance of the procedure and pays to the creditor of the government.



Reminder: the stages of public expenditure

- In the english tradition of budgetary approach, the line ministries and the Ministry of Finance manage the entire cycle
- o The Exchequer or the Accountant General Department is responsible for paying the cash allocations to the line ministries on their accounts and in some countries for large payments and the personal emoluments
- The line ministries' authorising officer and users are responsible for commitment (reserving funds) against the budget line (the vote) and for the legal commitment (purchase order)
- The accountant is responsible for verifying availability of funds and for paying on service has been approved.
- A fundamental difference between the French and English tradition is that in the French system, two sets of financial statements are prepared by two different entity and have to be reconciled to check the accuracy of the public accounts.



- o In practice, some GFOs are not presented in terms of commitments, but after the verification by the financial controller (this is the case of the West African Economic and Monetary Union).
- o Sometimes the GFOs are presented in terms of payments. This reduces the available information, making impossible to get a precise idea of the situation (change in arrears = commitments made and delivery confirmed but that were not be paid).



Accounting principles: revenue

- On the opposite, revenues are recorded when cash is received (as it "enters" the account of the Treasury)
- The issuance of notices according to which taxpayers must pay their taxes, or the documents by which importers commit to pay their customs duties later, are not recorded as revenue until some payment is made (legal commitment stage).



Consequence of this asymmetry: payments' arrears

45

- This asymmetry in the recording method breaks the balance between resources and uses: if an expenditure is recorded, but not the reduction of the amount in the bank account of the government, there is no longer equilibrium between resources and uses
- To re-establish the balance, the difference between commitments and payments is recorded as a "change in arrears"
- The payment does not appear in the GFO
- o CAREFUL!: the definition of arrear for GFO is the IMF one: unpaid bills that have been duly settled and mandated. This is a recording and timing issue.

 Macroeconomics



Payment in arrears: examples

o Example 1:

 We commit 170 in expenditures, but we pay only 160 before the end of the year. The difference, 10, is accounted as a "change in arrears" (it is recorded as a resource)

o Example 2:

 We pay the expenditures committed last year for a value of 20. This appears as a "change in arrears" in uses (negative in the GFO in column)





- o The GFO presents only the change in arrears. It does not provide information about the stock of arrears (amount at the start or the end of the year).
- o The existence of a change in arrears is normal. It is unusual that governments pay before the end of the year the expenses committed in December, for instance.
- o To refine the information, it is possible to broke down the payments in arrears according to stages: commitment, service delivery certification, payment voucher (domestic, foreign, on expenditures on goods and services, on the debt service, and so on).
- An arrear is not exactly a debt, because there is usually no contract between the Governement and the creditor, or the supplier (or the civil servant) who has not been paid. Sometimes it is part of the domestic debt figure, sometimes not. This is why arrears are not included in « financing », but between deficit on a commitment basis and deficit on a cash basis.



A new, more complete BGFO

- In the next slide, you will find a more complete GFO.
- o Can you present it in two columns, one for resources and one for uses?



Exercise 3: presentation of the GFO

| Revenues | 150 |
|----------------------|------|
| Expenditures | -170 |
| | |
| Deficit (Commitment) | -20 |
| | |
| Change in Arrears | 10 |
| | |
| Definit (Cash basis) | -10 |
| | |
| Net Financing | 10 |
| Drawings | 23 |
| Amortization | -13 |



Exercise 3: correction

| Uses | | Resources | |
|----------------------|-----|----------------------------------|-----|
| Expenses (committed) | 170 | Revenues | 150 |
| Capital repayment | 13 | Variation in payments in arrears | 10 |
| | | Drawings (loans during the year) | 23 |
| Total | 183 | Total | 183 |



- With the GFO of example 1:
- What is the amount of expenditures paid?
- o By how much has public debt increased?



Test questions 3: correction

- o With the GFO of example 1:
- What is the amount of paid expenditures? 170 (committed) - 10 (variation in arrears) = 160
- o By how much has public debt increased? Strictly speaking, the variation in public debt is the difference between new loans and capital repayment, that is, in this case 23 − 13 = 10 (the amount of net financing). However, the change in arrears is also a kind of debt, even if they do not correspond wholly with the definition (an agreement between creditor and debtor is needed to fix the terms of repayment). In a broader sense (including payments in arrears), debt increased by 23 + 10 − 13 = 20.





- When there are payments in arrears (positive or negative), calculating the deficit (or the surplus) is no longer as easy. We can distinguish between:
 - Deficit on a commitment basis (DCB):revenue and grants minus expenditures in an accrual basis
 - Cash basis deficit (CBD): DCB + the change in arrears (or CBD= revenue + grants - expenditures paid)
- o The deficit on a commitment basis is the deficit the government should have if it had paid everything: it is the "real" deficit from an economic point of view.
- o The cash basis deficit corresponds to what should have been financed in debt terms (narrow definition of debt). It is useful to verify the overall consistency: the DCB must be equal to the net financing if the GFO balances.



GFO Exercise 3 modified:

- Let's suppose that the previous GFO has already been prepared, and we realize that a project has not been taken into account (managed "off budget").
- It involves a road financed by loans: 40 in expenditures of additional investment and 40 in loans.
- How is the GFO now presented, taking into account this new information?



GFO: example 1 (2)

| Revenues | 150 |
|--|------|
| Grants | -210 |
| of which investments on external resources | -40 |
| Deficit (Commitment) | -60 |
| Change in arrears | 10 |
| Deficit (Cash basis) | -50 |
| Net Financing | 50 |
| Drawings | 63 |
| Amùortization | -13 |



- o In this new GFO:
- The amount of resources remains equal to the amount of uses, but the total amount has increased by 40.
- The deficit has increased noticeably.
 Must we consider this a problem?



Comments, cont.

- In fact, the GFO is not enough to answer this question.
 Let's consider two extreme situations:
- o Situation 1: the road built by this project is not very useful. On the contrary, the loan comes with a high interest rate. In this case, the increase in deficit is very detrimental (there is a high risk of default)
- of return is very high) and the loan is concessional (very low interest rate). In this case, the increase in deficit is just an accounting exercise, the prospects for the future are good (the debt should be repaid without difficulties... provided that citizens pay their taxes, if no tolls are charged in the road)



Detailed nomenclature

- To understand the GFO properly, we need to enter now in the domain of the detailed nomenclature of resources and expenditures
- Let's start with expenditures, and then follow on with revenues



Nomenclature: Expenditures and net loans

o Three big categories are distinguished:

- Current expenditures. Expenditures that work as inputs for the production of public goods and services (such as education, security, etc.) or intended to make transfers or to pay the interests of the debt.
- Investment expenditures (or capital expenditures, development expenditures): expenditures that will allow, in the future, to increase the capacity of production of public goods and services (in national accounting, we speak of Gross Fixed Capital Formation, or GFCF)
- Net loans: loans of the government to entities, granted to entities for reasons of public management, minus repayments.



Current expenditures

- o We distinguish between:
 - Wage bill (salaries paid)
 - Operation and Maintenance (goods and services)
 - Transfers (subsidies, grants)
 - Interests on public debt (domestic and foreign)
- The first two categories are considered as production costs of public goods and services. They form the "public administration production" (or "Public consumption") in the National accounts.
- If you are not sure of understanding why the interests are considered as recurrent expenditures, but not the capital repayment, click here (sends to the three last slides)



Investment expenditures

- In practice, it is difficult to know whether expenditures will increase the capacity of production of public goods and services.
- There are some rules, more or less arbitrary.
 - For instance, a threshold value to distinguish between maintenance and new investment.
 - If there is no information, the expenditures made by the projects funded by donors are often included under this section. This avoids unbalancing the equilibrium resources-uses (the same amount is included under resources (grants) and uses (investment). This is a dangerous practice, as it leads to overvalue the amount of public investment (and investment in general).





In practice, the item "net lending" are the loans from the government to public enterprises, minus repayments.

The very existence of this item is advised by prudence (normally, it should be included under financing): we fear these loans to public enterprises are, in fact, hidden subsidies (this happens, even in Europe!)

If the repayments exceed the loans, we can get a negative expenditure item!



Revenues and Grants

o On the revenue side, we find:

- Tax revenues: the result of a compulsory levy.
- Non tax revenues: these are not the result of a compulsory levy. They can come from fines, incomes from the property of the government (e.g. sale of wood from a state forest, gas, petroleum) or dividends paid to the government by public enterprises.
- Grants: received by the government (not to be repaid as opposed to loans, in principle...)





- o Three kinds of tax revenues are distinguished:
 - Taxes on external trade. They are taxes applied only on goods that have been internationally traded ("customs duties")
 - Indirect taxes: Indirect taxes are applied on all goods, whatever their origin (VAT or excise taxes of fixed amount non proportional to the value of the good)
 - Direct taxes: taxes levied on the income of individuals (wages) or businesses (profits)
- In practice, the first category often includes all levies made by the Customs Department, which is not correct. For instance, customs officers also levy VAT at the border. This should be considered as an indirect tax. However, for management and accounting reasons, it is useful to know what it is attributable to the administration directly responsible.



Grants

- Current: intended to fund current, or non specified, expenditures, like budget support (but budget support may also finance capital expenditure).
- In capital: intended to fund investments (this is the case, in principle, of projects)
- In practice, grants are sometimes included under financing (such as in Benin, for instance), especially in the case of debt reductions.



- o When revenues and expenditures have been calculated, we can obtain different balances, apart from the commitment and cash basis balances (see supra):
 - Balances "excluding grants": same definitions as detailed in slide XX (click here to return to definition), taking into account only the government revenues
 - Base balance= revenues expenditures on the national budget
 - Example: let's obtain the balances "without grants" and the base balance in the following example:



Exercise 4: calculating balances

| Revenue and Grants | 170 |
|------------------------------|-----|
| Revenues | 150 |
| Grants | 20 |
| of which Projects (grants) | 15 |
| Expenditures | 262 |
| current | 210 |
| capital | 52 |
| funded by national resources | 20 |
| funded by grants | 15 |
| funded by loans | 17 |



- Commitment basis balance: 170 -262 = -92
- CBB excluding grants: 150 262 = 112
- Base Balance: 150 (210 + 20) = -80

- Which is the right one? They all present a different view on public finances.
- Public savings may also be relevant (Revenue – current expenditure), in order to assess the capacity of the Governement to pay for investment.



 If we consider that grants are not perennial, it is better to consider the CBB excluding grants (this is what the IMF often does in its programmes). However, there are expenditures financed by grants: if grants disappear (but not loans), the deficit would reach 97 (112 – 15). If all the external funding stopped, the result would be the Base Balance



Exercise 5: GFO summing-up

- The Budget department says that equipment expenditures committed during the year amounted to 45. An amount of 38 has been paid to suppliers by the Treasury.
- The External Resources Department (which takes care of the accounting for donors loans and grants) says that external partners' disbursments amounted to 25 related to grants for projects (but managed off budget). The EU had committed 15 for budget support (of which 7 under a variable tranche), but these amounts have not been paid out yet, in the absence of agreement with the IMF. Moreover, the External Resources Department says that a financing agreement has been signed with the EDF for an amount of 12, that will be paid out next year.
- The Customs Department says that revenues of the year paid to the Treasury amount to 102, of which 25 correspond to the VAT.
- The Debt Management Unit (in charge of external debt) says that debt service payments amounted to 65, of which 35 correspond to interests, and the rest to repayment of the principal.
- The IRS says that revenues amounted to 48, of which 38 corresponded to the VAT, and the rest came from withholding taxes from civil servants wages.
- According to a report recently delivered to the Minister of Finance, the (actuarial) value of the pensions to be paid to civil servants currently working amounts to 235.

70



Exercise 5: cont.

- In the country there is a Social Security Agency. Its revenues amounted to 25, and the payments made amounted to 30. The difference is covered by a subsidy. The Social Security Agency is entirely public, but is not considered part of the government in the GFO.
- The Central Bank says that the NCG went from -45 at the start of the year to +31 at the end of the year. The interests yielded on the account of the Treasury amounted to 6.
- The Accountant General Department says that the wages committed and paid during the year amount to 110.
- The support given by the Treasury to the Cotton Company to compensate for the fall in international prices amounted to 10.
- Schools' and Universities' scholarships paid amounted to 3.
- On a trial basis, an amount of 38 in Treasury bills has been issued in March, targeted toward the non-financial domestic sector in national currency. These bonds had a three-month maturity, but the issuance was not a great success: Only 5 were subscribed. Interests paid amounted to 1.



Exercise 5: end

- The International Development Association (IDA) says that it paid 30 concerning its projects, which are loans managed off budget. The IDA promised 25 for a credit to fight against poverty in the form of budgetary aid, but it was not paid, in the absence of agreement with the IMF.
- o The Ministry of Planning paid 3 for investment expenditures.
- An audit estimated the net worth of the electricity company to be 35. It is projected to sell it for an amount of 20 (best bid), but it has not been done during the year.
- The debt service has not been entirely paid. Some creditors have been fully repaid (particularly the IDA), but others have been only partially, if at all. Only 25 has been paid, out of the 35 of interests owed on the external debt. Regarding principal repayment, 5 has not been paid out of the 30 outstanding.



Exercise 5: correction

| Revenue and Grants | 175 |
|---------------------------------|-----|
| | |
| Revenues (taxes) | 150 |
| Revenues on external trade | 77 |
| Indirect taxes | 63 |
| Direct taxes | 10 |
| Grants | 25 |
| Grants for projects | 25 |
| Grants for budgetary aid | 0 |
| | |
| Current expenditures | 215 |
| Wages | 110 |
| Goods and services | 45 |
| Transfers | 18 |
| Interests | 42 |
| on domestic debt | 7 |
| on external debt | 35 |
| Expenditures on capital | 58 |
| financed by the national budget | 3 |
| financed externally | 55 |
| by grants | 25 |
| by loans | 30 |

| Accrual basis deficit | -98 |
|-----------------------------------|-----|
| Variation in arrears | 17 |
| of which External | 10 |
| of which Domestic | 7 |
| Cash basis deficit | -81 |
| | |
| Net financing | 81 |
| | |
| Domestic (variation NPG) | 76 |
| Variation NPG | 76 |
| IMF | 0 |
| Non banking sector | 0 |
| External (Net Ioans) | 5 |
| Drawings for projects | 30 |
| Drawings for budgetary aid | 0 |
| Repayment | -30 |
| Variation in arrears on repayment | 5 |



Debt and debt service

- The interests are current expenditures (they represent the "rent", the right to keep the capital borrowed)
- The reimbursements of the principal reduce the debt: they are financing operations
- Example: table of reimbursement of a loan of 1000 in year 0, with 5% interest rate and two years of grace period (or deferred repayment)



Elaborating the repayment table

- During the grace period, only interests are paid (not the principal): the debt is not reduced.
- During years 3 and 4, we need to repay the 1000 principal. Let's suppose that we repay 500 at the end of each year (this is not systematic, as creditor and debtors may agree on other amounts, if the total equals 1000 in all cases)
- The interests are calculated over the amount of the debt remaining at the start of the year (at the end of the previous year).
- o Thus, we get:



Example: loan of 1000 at 5 %, grace period of two years

Hypothesis: repayment of the principal at the end of the year

| | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 |
|--|--------|--------|--------|--------|--------|
| Capital | | | | 500 | 500 |
| Interest | | 50 | 50 | 50 | 25 |
| Capital outstanding at the end of the year | 1000 | 1000 | 1000 | 500 | 0 |
| Service | | 50 | 50 | 550 | 525 |