



# **International Workshop on Government output and productivity measurement: lessons from the international experience**

**Session on  
*Administrative information sources for direct output  
measurement and performance management  
systems***

***Rome, April 23 – 24, 2009***



**The use of output indicators in  
Performance management  
and in the  
System of National accounts:  
Is there a link between the two?**

## Outline

- Why using direct output measurements
- Crucial points of direct output measurements
  - Critical issues to consider: **data availability** and **interpretation**
- Role of the data analysts
  - Consistency among data sources
  - What data sources are used for
- Capability of managing changes and providing interpretation
- Performance management system for macroeconomic analysis

## Basic vocabulary

- **Input**
- **Output**
- **Productivity**
- **Outcomes**
- **Efficiency**
- **Effectiveness**
- **Direct output measurements**
- **Performance management systems**
- **Administrative information sources**
- **Statistical data sources**

## Why output and not input anymore?

- Budget constraints and limited public resources
- Link between **resources** (**public funds** for producing goods and services, redistributing income and for capital formation (accumulation)) and **results**
- More transparency in order to allow tax-payers and other stakeholders to know what is done with resources that could be otherwise used
- **Accountability**
- Efficiency and effectiveness of public spending
- Quality of public finance

## **International Guidelines**

- **Hill (1975)**
- **SNA93**
- **ESA95**
- **Eurostat handbook (2001)**
- **Atkinson review: final report (2005)**
- **OCSE handbook (2008)**
- **Do these main references provide any help in separating output measures for National accounts and output measures for performance management system?**

## Still on output measures

- Why using direct output measurement: to separate inputs and outputs to get a productivity measure
- Actually if you don't use a direct output measure
- You are not in the position of calculating any productivity measure
- Simply because
- $\text{Productivity} = \text{output} / \text{input}$

## Still on output measures

- If you don't have a quantity (an output unit)
- to measure the production in two different points in time
- you cannot compare
- the outputs
- and
- the inputs (no productivity calculation)
- There must be
- a change
- between the measurement at current prices (the sum of input used for the production)
- and
- the measurement in volume terms

## To which expenditure items output indicators might be applied?

- When considering public expenditure different phases can be acknowledged
- NA describes the institutional sectors accounts related to:
  - Production
  - Distribution and redistribution of income
  - Accumulation
- Output indicators are more suitable for the Production accounts and partially for the accumulation accounts
- These two accounts collect nearly 40 % and 10 % of public expenditure in 2007, in Italy
- 27 % out of total expenditure is related to individual consumption expenditure



## Output measures: simply quantities?

In case of measurability of public production, individual services:

What is output? How do we define it?

Simply

Quantities

or

Quantities of a certain type?

For instance, Education output can be defined as

Amount of education provided

or

Amount of “fair” education provided



## **Critical issues to consider: data availability (1/4)**

**Sources of information, possible cases:**

- **Statistical sources**
- **Administrative sources (such as DRG treatments)**
- **Mix of the two sets: a basic statistical data base, integrated with information from an administrative register**

## **Critical issues to consider: cost of data (2/4)**

### **Sources of information, costs:**

- **Statistical sources**
- **Administrative sources**
- **Mix of the two sets: the cost is related to the capability of the data manager to get a cheap result when merging the two data sources in order to have a “statistical” derived data base**

## **Critical issues to consider: efficiency and effectiveness (3/4)**

**Sources of information, efficiency and effectiveness:**

**Using already existing data sources, such as administrative ones, is cheaper and it makes the user of such data appearing as more efficient**

**Using existing administrative data, integrated as if they were statistical data sources, in a timely manner, helps improving the effectiveness of this data source.**

## **Critical issues to consider: consistency (4/4)**

- **Time series data availability**
- **Comparability**
- **Consistency over time and space**
- **Capability of managing data sources in case of institutional changes**

## Meaning of output in NA and in PMS

- **NA:** output indicators (when applicable) allow the measurement of production in volume terms
- Deriving the price indices of Government production as an implicit deflator =  $\text{Current production} / \text{production in volume}$
- **PMS:** output indicators (when applicable) allow the measurement of the “amount of target achieved”; this means that they allow to measure the lag/distance between the actual value and the target value
- Target: efficiency
- Target: effectiveness



- **THANKS FOR YOUR ATTENTION!**
- **ANY QUESTION OR REMARK?**