

Desagregation level and Productivity
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Summary

1. Desagregation
2. The role of productivity

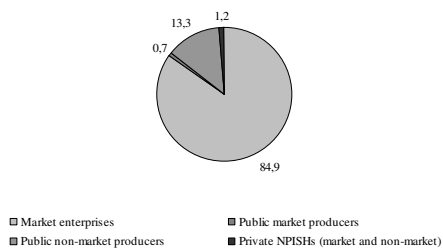
1 - Desegregation

- NA estimates are based on very detailed information and sometimes involve compiling individual data
- The classification used for grossing up the results consists of:
 - 101 branch of activity (NACE Rev.1.1);
 - 6 types of operators
 - 8 size class

1 - Desegregation

- 6 types of operators
 - market enterprises;
 - producer for own final use;
 - public market producer;
 - public non market producer;
 - private market NPIs;
 - private non market NPIs.

1 - Desegregation - value added by type of producer (2000)

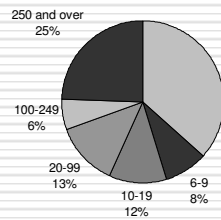


1 - Desegregation

- 8 size class in terms of number of workers: 1-5; 6-9; 10-19; 20-99; 100-249; 250 and over.
- The choice of classes is based on:
 - EU definition of small and medium sized firms (<250);
 - Major features of ISTAT surveys (<100);
 - Different numbers in the various size class.

1 - Desegregation

Value added in the market firms by size class (2000)



2- The role of productivity

$$Y = \sum_{b=1}^m \sum_{c=1}^z X'_{bc} \cdot U_{bc}$$

Drawbacks due to non observed economy

•Missing Information

•solution:

Exhaustive estimate of FTE unit

•Biased information

•solution:

correction for reporting of the per capita value (productivity)



2- The role of productivity

The hidden economic aggregate produced by regular worker is equal

$$\Delta RI = \sum_{b=1}^m \sum_{c=1}^z (X'_{bc} - X_{bc}) \cdot U_{reg_{bc}}$$

The hidden economic aggregate produced by non regular worker is equal

$$\Delta NOR = \sum_{b=1}^m \sum_{c=1}^z X'_{bc} \cdot U_{irr_{bc}}$$



2- The role of productivity

Hypothesis: Same productivity (X') for irregular and regular workers working in the same:
sector of economic activity (3 digit ATECO);
dimensional class (up to 500.000; 500.000-5.000.000; over 5.000.000).

Related to the FTE unit (U)



2- The role of productivity

Industrial processing: characteristic relationships - 2000

