

Use of Income and Employment Statistics for Estimating National Accounts Aggregates

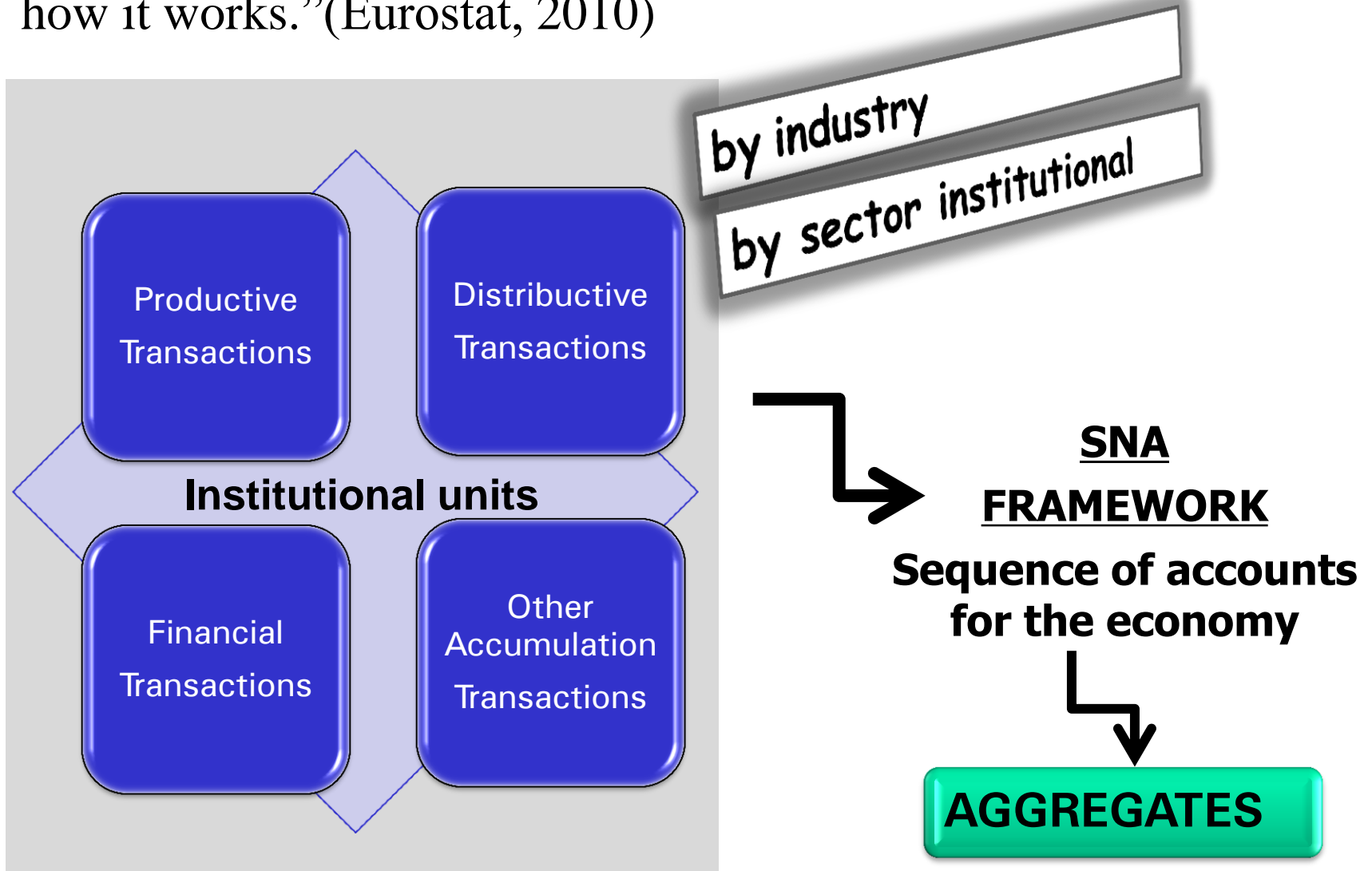
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SUMMARY

- **What's the system of national accounts?**
- **Basic concepts: labor input and income**
- **Income and employment statistics in the Brazilian SNA**

Introduction: What's the system of national accounts?

“National accounts represent a broad and comprehensive statistical system aimed at describing a national economy and how it works.”(Eurostat, 2010)



- by industry because it represents the production process and the flows experienced by goods and services produced in the economy. In this case, units are defined according to their technical-productive profile, so they are units of production in the strict sense of the term.

Establishments that have the same principal activity are grouped into industries according to the:

International Standard Industrial Classification of All Economic Activities Revision 4 (ISIC, Rev.4)

Classificação Nacional de Atividade Econômica (CNAE 2.0)



● by institutional sector where the units are defined according to their economic behaviour, economic function and economic objectives. This classification highlights how income is obtained and distributed in an economy, how share capital is generated and how this is financed.

- The non-financial corporations sector
- The financial corporations sector
- The general government sector
- The non-profit institutions serving households sector
- The households sector



Given the complexity of an entire economy, it is necessary that the SNA uses data from multiple systems:

Establishment surveys:

- **Pesquisa Industrial Anual (PIA)**
- **Pesquisa Anual de Serviços (PAS)**
- **Pesquisa Anual de Comércio (PAC)**
- **Pesquisa Anual da Indústria da Construção (PAIC)**

Households surveys:

- **Pesquisa Nacional por Amostra de Domicílios (PNAD)**
- **Pesquisa de Orçamento Familiares (POF)**

Administrative Registers:

- **Government finance data**
- **Annual Report from Ministry of Labor and Employment (RAIS/MTE)**
- **Corporate Economic-Fiscal Information Declarations (IRPJ)**

Balance of payments data



AGGREGATES are values that measure one aspect of the activity of the entire economy.

Some aggregates can be obtained directly as totals of particular transactions in the SNA, such as total production, final consumption, gross fixed capital formation, etc.

Others result from aggregating balancing items of institutional sectors accounts: value added, balance of primary incomes, disposable income and savings.

GDP (INCOME APPROACH)

GDP (INCOME APPROACH) =

compensation of employees

+ gross mixed income

+ gross operating surplus

**+ taxes net of subsidies on productions and
imports**

Gross Mixed Income: contains an element of remuneration for work done by the owner, or other members of the household, that cannot be separately identified from the return to any capital used in the unincorporated enterprise.

Compensation of employees: represents the income accruing to individual in return for their labor input into production processes.

Consists of the following components:

- Wages and salaries payable in cash
- Wages and salaries payable in kind
- Employers' social contributions

Compensation of employees:

- Wages and salaries payable in cash: includes social contributors, income tax, and other payments payable by the employee, including those withheld by the employer and paid directly to social insurance schemes on behalf of the employee;
- Wages and salaries payable in kind: goods and services, provided free of charge or at reduced prices by employers (transportation to and from work, child care);
- Employers' social contributions: payable by employers to social security schemes or other employment-related social insurance schemes to secure social benefits for their employees.

Labor input can be provided by the number of actual hours worked, jobs or persons employed.

Jobs: defined as contracts (formal or informal) between an individual and an institutional unit, whereby the person works in return for a remuneration in cash or in kind.

Employment: covers all persons engaged in productive activity that falls within the production boundary of the national accounts.

Persons holding more than one job: are classified as employees or self-employed according to their main job.

As **Brazilian SNA** compiles data from different sources it uses the concept of jobs.

The Brazilian SNA considers the following occupational categories:

- registered employees
- non registered employees
- employers
- own account
- and unpaid family workers.

1. Registered employment

- employees under a formal contract with a corporation,
- civil servants,
- owners of corporations in which they work

Data sources:

Jobs and compensation provided by:

1. establishments surveys (PAS, PAC, PIA, PAIC)
2. administrative registers (RAIS/MTE, finance government data and Corporate Economic-Fiscal Information Declarations IRPJ)
3. PNAD is used for jobs in the activities public administration, education and health and paid domestic service;

2. Non Registered employment

Employees without a formal contract with a corporation or a household unincorporate enterprise in which they work.

Data sources:

Jobs and compensation provided by the National Household Sample Survey (PNAD)

Compensation of non registered employees is comprising only wages.

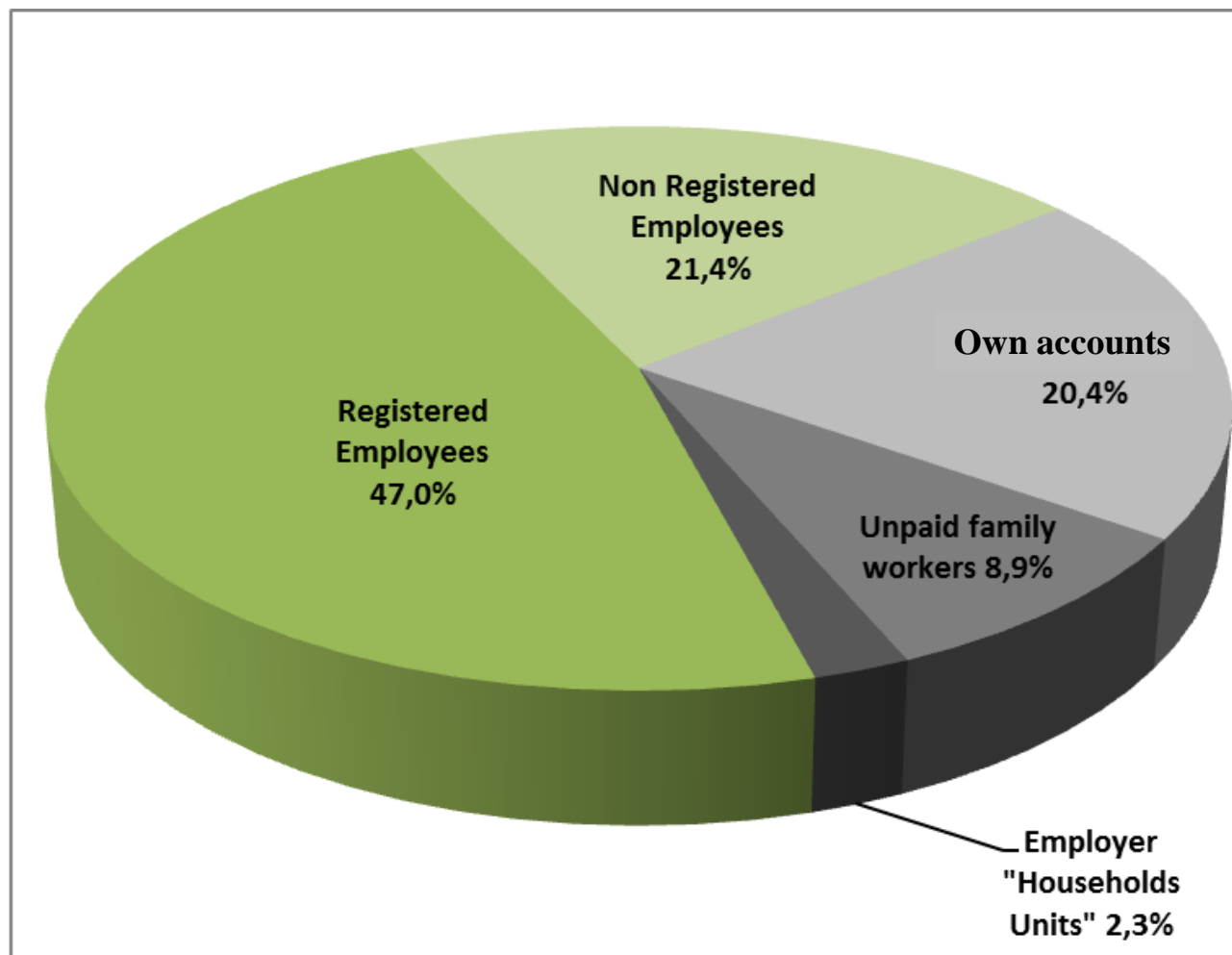
3. Self Employment (“autônomos”):

- Own-account jobs;
- Employers
- unpaid family workers;

Data sources: National Household Sample Survey (PNAD): jobs and remuneration.

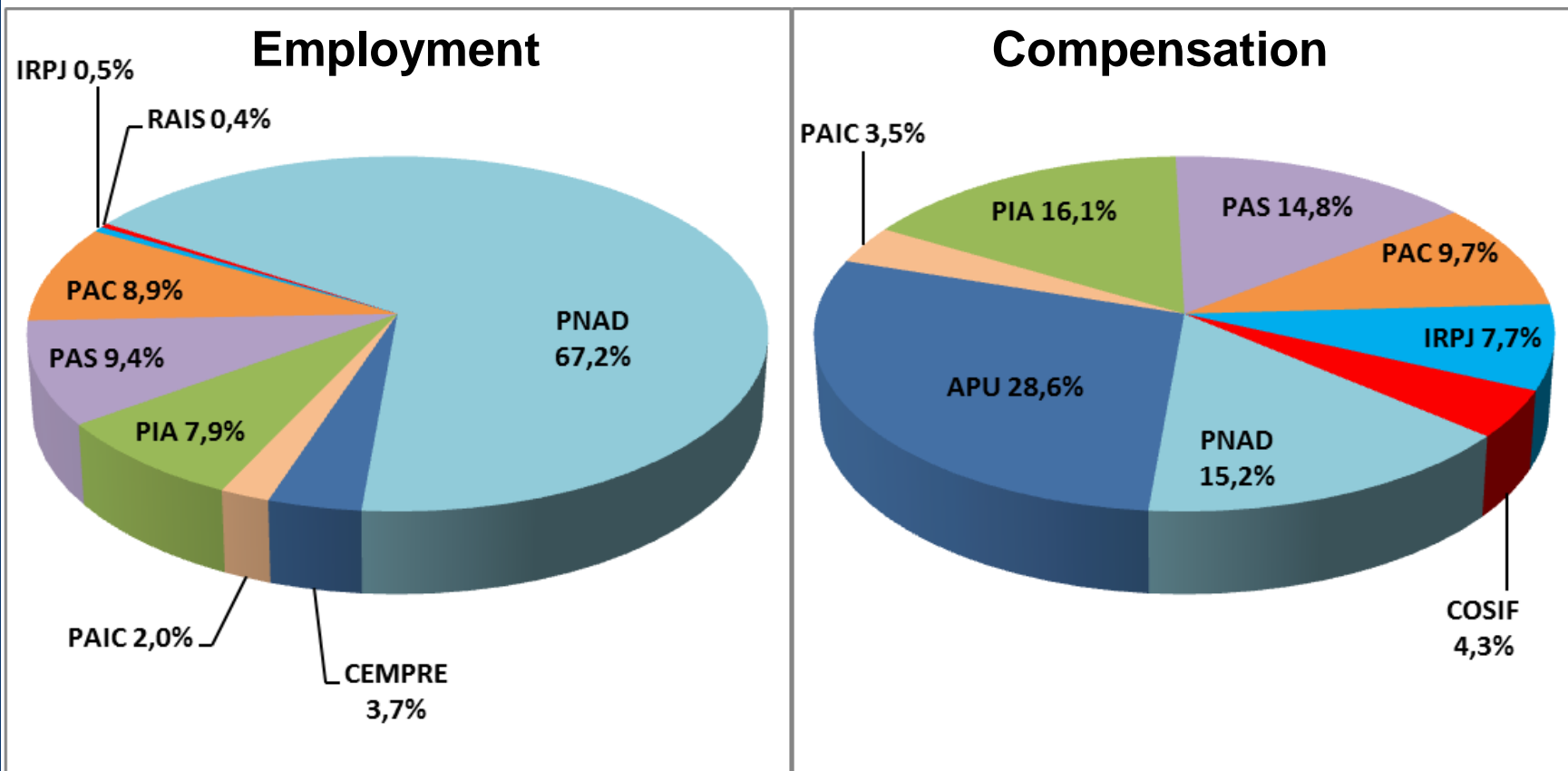
- Self employed remuneration is a key component to estimate the output of household productive units.

Employment by types of job links - 2009



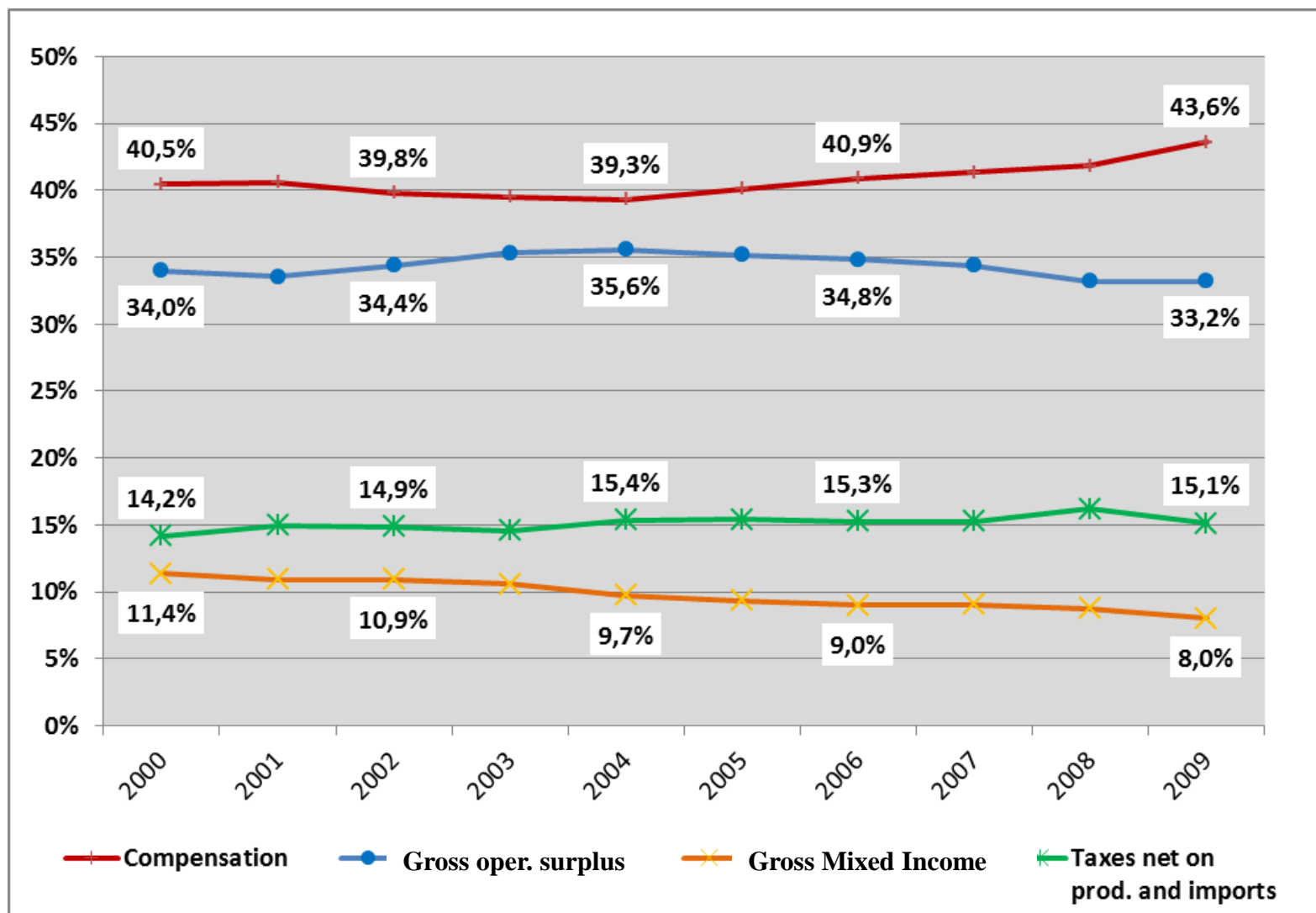
Source: IBGE, System of National Accounts, 2009

Data sources of the Brazilian SNA - 2009



Source: IBGE, System of National Accounts, 2009

GDP by income approach – Brazil 2000/09



Available Data:

Tabelas de Recursos e Usos - TRU



http://www.ibge.gov.br/home/estatistica/economia/contas_nacionais/2009/defaulttabzip.shtm

Contas Econômicas Integradas - CEI



Tabelas Sinóticas 4, 13, 14 e 15

http://www.ibge.gov.br/home/estatistica/economia/contas_nacionais/2009/defaulttab.shtm

OBRIGADA!

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