



Instituto Brasileiro de Geografia e Estatística

***TRANSITION TO AN INTEGRATED
SYSTEM OF BUSINESS SURVEYS
THE BRAZILIAN CASE***

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Brazil in Figures

Area ➤ **8,5 millions km²**

Population in 2005 ➤ **184 millions**

GDP ➤ **600 bi USD**

Per capita income ➤ **3300 USD**

Political organization

➤ **Republican Federation with 27 States**

Composition of GDP (%) - 2003

Agriculture	9,9%
Mining and Manufacturing	28,1%
Construction and Utilities	10,7%
Wholesale and Retail Trade	7,7%
Government	15,8%
Services	27,8%

Informal urban economy:

- **6% of GDP**
- **25% of employed people**

Brazilian Statistical System

- **Centralized statistical system**
Brazilian National Statistical Office - IBGE
- **Tasks: production of official statistics on**
 - **Population**
 - **Economy**
 - **Social conditions and**
 - **Environment conditions**

Brazilian Business Sector

➤ **Scope**

All enterprises registered at the Internal Revenue Service with an unique legal identification number

➤ **2003 Figures**

Total of enterprises: 4,6 millions

Total of employed: 25,0 millions

➤ **% Business Sector in Brazilian GDP**

↳ around 50 %

Brazilian Business Sector

➤ **General characteristic**

Uneven weight of the units in the Business universe

2002	Total enterprises	Total employed
< 5 employed	83,3%	24,4%
5 <= employed < 20	13,6%	20,9%
20 < = employed < 100	2,6%	17,5%
> = 100 employed	0,5%	37,2%

Brazilian Economic Statistics Program

**Up to mid 1990's the organization of
Brazilian Economic Statistics Program was
based in Economic Censuses**

Economic Censuses in Brazil

- **Base years:**
 - 1920, 1940, 1960, 1970,**
 - 1975, 1980, 1985**

- **Coverage:**
 - ↳ **mining and manufacturing**
 - ↳ **wholesale and retail trade**
 - ↳ **part of the services activities (coverage varied in each census operation)**

- **Historical role**
 - ↳ **to provide data on the structure of the economy at a time when no other source of comprehensive data on economic activities existed**

Diversification of the Economic Statistics Program after the 1970's

- **Annual business surveys (intercensus period)**
 - **Mining and Manufacturing (1971)**
 - **Wholesale and Retail Trade (1988)**
 - **Construction (1990)**

- **Monthly Indicators**
 - **Mining and Manufacturing Indicators (1971)**
 - Quantum of production**
 - Employment and salaries**

Problems Faced by the Surveys Program up to 1995

➤ Annual Economic Surveys Program

Not well succeeded in providing updated data in the intercensus period

⊖ lack of an updated Business Register

⊖ lack of standardization in two basic elements:

- the basic statistical unit***

- the industrial classification***

Surveys Program up to 1995

➤ **Short term indicators system for Mining and Manufacturing:**

↳ ***piece de resistance* of the Economic Statistics Program**

↳ **main source for GDP estimates on Mining and Manufacturing**

Economic Environment in the First Quarter of the 1990's

- **Period of intense structural changes:**
 - ↳ **increasing opening of the economy**
 - ↳ **intensification of industrial restructuring process**
 - ↳ **large dissemination of ICT**
 - ↳ **multiple extension of outsourcing practices**

- **Resulting in**
 - ↳ **increasing demand of updated and diversified economic data**

Challenges Faced by IBGE

- **How to answer the increasing demand of updated and diversified economic data (new areas, new variables, national and regional dimension)**

- **Under the conditions of :**
 - ↳ **severe budget restrictions**

 - ↳ **lessening the burden for business in the response of the surveys forms**

 - ↳ **improving national and international harmonization**

Challenges Faced by IBGE

➤ Solution pointed out to the rationalization of the Business Statistical System

↳ wide use of sampling surveys

↳ articulation with administrative files and data.

Economic Surveys Modernization Program

Involving transition from

⇒ the traditional system based in economic censuses

To

⇒ an integrated system of sampled business surveys based in a Business Register articulated to administrative records

IBGE's Business Register

↳ key element in the architecture of the Business Surveys System

Crucial question

↳ how to develop and maintain an updated statistical Business Register covering the enterprises' universe to serve as central frame for sample design

IBGE's Business Register

Pre requirements to the construction and management of the IBGE's Business Register

- ⇒ Institutional arrangements to receive systematically updated administrative individual data on the universe of the enterprises**
- ⇒ Use of the industrial standard national classification**
- ⇒ Feedback from IBGE's business surveys**

Preliminary Stage of the Economic Surveys Modernization Program

⌘ Definition and implementation of a Standard National Industrial Classification – 1993/94

Classificação Nacional de Atividades Econômicas – CNAE, the Standard National Industrial Classification, derived of ISIC Rev.3, first adopted in 1995

CNAE's Implementation

- ↳ Brazilian Statistical System**
 - Statistics and surveys requiring industrial classification**
- ↳ Public Administration registers and files**

Economic Surveys Modernization Program Stage I

***IBGE's Business Register development and
management:***

Institutional agreement with the Labor Ministry to receive annual and monthly employment files, with individual updated information of the universe of enterprises

The first year that IBGE's Business Register is referred to CNAE is 1995, base year of adoption of the National Industrial Classification in Labor Ministry records.

Economic Surveys Modernization Program Stage I

Business Register Survey 1995/96 (Censo Cadastro)

Considering that quality of self coded CNAE in administrative files is usually low, a special and extensive Business Register Survey (size: 430 000 local units) was conducted in 1995/6 with the specific aim to improve the quality of the economic identification (activity code) in IBGE's Business Register

Current IBGE's Business Survey Structure

General description

Administrative Register



**Business Register – central reference
Frame to sample design of business surveys**



Subsystems of business statistics
Mining and Manufacturing enterprises
Construction enterprises
Wholesale and Retail Trade enterprises
Non Financial Services enterprises

Current IBGE's Business Survey Structure

General description

Business Surveys Subsystem composition:

Annual survey:

- ⊞ **source of data replacing Economic Censuses**
- ⊞ **core integration element of each subsystem**
- ⊞ **Main focus: data on the industrial productive structure of the Brazilian economy and its evolution over time, specially to support National Accounts GDP estimates.**

Monthly surveys and indicators:

- ⊞ **Main focus: data on short term performance of economic activities**

Satellite surveys:

- ⊞ **Main focus: to deepen specific themes on the structure and behavior of the business sector**

Annual Surveys Functions

- ↳ providing information to characterize the economic organization of the business sector - their structural characteristics and changes along the time**
- ↳ constituting the nucleus of information around which all other surveys data should be articulated.**

Common Methodological Characteristics of the Annual Surveys

- ⇒ Annual periodicity
- ⇒ Statistical unit: enterprise, with local units reference in Mining and Manufacturing surveys
- ⇒ Pattern of sampling design
 - certainty *stratum*; all enterprises ≥ 20 or 30 employed
 - sampled *stratum*: enterprises < 20 or 30 employed
- ⊢ Common framework for concepts and definitions, referred to SNA
- ⊢ Production of national and sub-national data (State Federation level)

Economic Surveys Modernization Program

Stage II

Implementation of Annual Business Surveys

▷ Activity approach

Mining and Manufacturing	1996
Wholesale and Retail Trade	1996
Non financial Services	1998
Construction	2002

▷ Product approach

introduced in annual surveys, using a detailed and comprehensive list of product linked to CNAE's classes

Economic Surveys Modernization Program

Stage III

**Short term statistics and indicators
revision of previous surveys and definition of new ones**

Mining and Manufacturing

- Quantum production – 2002 (previous revision 1985 base)***
- Employment and salaries – 2001 (previous revision 1980 base)***

Retail trade

- Sales - 2000***

Economic Surveys Modernization Program

Stage IV

Satellite surveys

Technological Innovation Survey – Manufacturing

Reference years: 2000 and 2003

Near Future Challenges to IBGE in the Field of Economic Statistics

- ↳ the development and implementation of Producer Price Index**
- ↳ the construction of short term indicators for services activities**
- ↳ the synchronized implementation of CNAE's revision, after ISIC's 2007 revision**
- ↳ the organization of ICT's surveys**