



INSTITUTO NACIONAL DE ESTATÍSTICA  
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# Unlocking Private Data for Official Statistics in Portugal

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## INTRODUCTION

The increasing availability of privately held data (from financial transactions, e-commerce, telecommunications, etc.) presents new **opportunities** for official statistics.

Private-sector data is usually collected continuously and in real time, enabling the production of **faster** and more **timely** indicators. It allows to reduce the time lag associated with traditional surveys and administrative records.

It can supplement or replace expensive and time-consuming surveys and therefore reduce **costs** for statistical agencies.



## INTRODUCTION

Private-sector data allows to minimize the **response burden** on businesses and individuals by using already available data.

It enables greater **coverage** by capturing hard-to-reach populations or economic activities that may not be well covered by traditional surveys.

It also provides greater **granularity** and detailed insights at a higher temporal and spatial resolution.

It fosters **innovation** in analytical methods, by encouraging the use of new methodological approaches such as big data analytics, machine learning, and AI in official statistics.



## PAYMENTS DATA



Partner  
in Payments

The Portuguese ATMs and point of sale (POS) network (also known as the MULTIBANCO network) is run by SIBS Forward Payment Solutions, which is the main payment cards processor in Portugal.

SIBS is responsible for managing the MULTIBANCO Network across its various channels, from ATMs and POS terminals to online platforms and mobile devices.

Electronic payments transaction data has attracted a lot of interest in recent years. In particular, it has proved to be quite valuable to track and study private consumption behavior in several countries (See, for example, [Duarte, Rodrigues and Rua \(2017\)](#) and [Cabral and Rua \(2024\)](#) in the case of Portugal and references therein for other countries).





## PAYMENTS DATA

SIBS discloses monthly information to Statistics Portugal including:

- Withdrawals in ATMs (No. and €) by:
  - Municipality (Municipality where the ATM is located)
  - Geographical origin of the bank card (Domestic or foreign)
- Service payments in ATMs (No. and €) by:
  - Municipality (Municipality where the ATM is located)
- Purchases using POS (No. and €) by:
  - Municipality (Municipality where the POS is located)
  - Economic activity (of the establishment where the POS is located)
  - Geographical origin of the bank card (Domestic or foreign)
  - Form of purchase (in-person or online)



## PAYMENTS DATA

Such payments data is used for the estimation of private consumption in quarterly national accounts.

It also used to assess the composition of the expenditures by non-residents.

Statistics Portugal releases the monthly data up to 20 days after the reference month.

The Multibanco network statistics are available at the Statistics Portugal website for the period running from 2001 onwards.



ACAP is Automobile Association of Portugal and provides monthly information on vehicle registrations, broken down by brand and model.

Such data is used for quarterly national accounts to estimate household private consumption on motor vehicles and gross fixed capital formation in transport equipment.

It is used in the annual selection of the Consumer Price Index automobile sample and its corresponding weighting structure.

It provides information about imported vehicles.



## EXTERNAL TRADE

Data provided by large firms (and private associations) allows to validate external trade data from Intrastat and Extrastat.







## CONSTRUCTION



## ENERGY





## TRANSPORTATION

Data provided by large operators regarding the transportation of passengers and freight.



**fertagus**



Aeroportos  
de Portugal

**MEDWAY**

Transporte & Logística



Major banks providing mortgage loans in Portugal disclose to Statistics Portugal data regarding:

- i. bank appraisal values of housing conducted within the scope of credit granting, detailed by dwelling (appraisal value, nature and type of dwelling, area, region).
- ii. credit granted for housing acquisition, detailed by contract (purpose of financing, contract signing date, contracted term, contracted amount, interest rate type, outstanding debt, monthly installment, repaid capital, interest paid during the month).

It allows the monthly publication of median bank appraisal values of housing per m<sup>2</sup>, detailed by municipalities and broken down by apartments and houses; and the monthly publication of implicit interest rates on housing loans, average outstanding capital, and average installment.



## Micro data on health personnel

- Order of Physicians
- Order of Dentists
- Order of Nurses
- Order of Pharmacists





Altice Portugal S.A. is the largest telecommunications service provider in Portugal.

Microdata on service points with ADSL capability for the calculation of the indicator potential territorial coverage in broadband (ADSL) of the Synthetic Regional Development Index.



The National Communications Authority (ANACOM) is responsible for regulating the communications sector

Statistics Portugal has been provided with data regarding indicators on mobile access in Roaming IN, with geographic disaggregation by municipality.

The data includes monthly disaggregation and breakdown by operator for the following indicators: number of mobile Internet accesses in Roaming IN; volume of traffic from mobile internet accesses in Roaming IN; number of mobile accesses in Roaming IN.



DNS.PT is a non-profit organisation responsible for administration, operation and maintenance of domain registrations in the .pt top-level domain.

The data provided by DNS.PT refers to data on the registration and maintenance of internet domains. A domain corresponds to a name that allows identifying the location of sites on the internet. These domain names have an associated suffix and separated by a dot ("."), and in the case of DNS.PT domains, they only assume the ".pt" suffix.

Allows to assess firms that have an online presence and link it to surveys on information and technology usage enhancing Information and Knowledge Society Statistics.



## CONCLUDING REMARKS

Data **access** may be troublesome as private companies may be unwilling to share it due to commercial interests, intellectual property concerns, or competitive risks.

Ensuring public **trust** is essential to avoid skepticism about the use of private data. It involves establishing transparent agreements between private data providers and national statistical offices with clear governance and legal safeguards.

Private-sector data is not collected for **statistical** purposes, leading to challenges in representativeness and comparability across different sources and over time. It requires developing methodologies for data validation and integration.





# Thank You!



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