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# **THE USE OF ADMINISTRATIVE DATA FOR SHORT TERM STATISTICS**

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# Contents

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- ✓ Introduction
- ✓ Reasons
- ✓ Why do we need admin data
- ✓ Country practice



# Introduction

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All national statistical institutes (NSIs) have a duty to produce official statistics with the highest possible quality with reference to:

- ✓ Relevance and completeness
- ✓ Timeliness and punctuality
- ✓ Accuracy
- ✓ Comparability and coherence
- ✓ Accessibility and clarity
- ✓ Cost efficiency
- ✓ Low response burden

# Introduction

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Administrative data are produced on the basis of some administrative processes, and units and variables are defined out of administrative rules and demands. The definitions may differ from the needs of the official statistics, **but the data are usually of good quality for their administrative purposes.**

Administrative data are defined as all data arising from the administration of an activity or program, covering a **full population** or a subset of that population.

It includes individual transactions or aggregations that were originally collected for **non statistical purposes.**

# Introduction

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**Admin data are the data collected for administration purposes, not for statistical purposes.**

Admin data are often collected using different concepts and/or from different population than the statistical program uses.

Different organizations collect, maintain, and control the admin data need their cooperation

**No data collection cost but it requires data processing.**

# Introduction

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Using administrative data sources can bring some opportunities such as a **low marginal cost, a high response rate, a high coverage of the target population (no sampling errors), edited data.**

However, there are potential drawbacks with administrative data. The (frame) population covered by many administrative sources is often not the same as the target population for STS. Due to the primarily administrative purpose of an administrative source the concepts, definitions and units used will often differ from statistical norms and standard.

# Introduction

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The use of admin data for Short Term Statistics (STS) has to cope with the problem that this data might not be complete to comply with the dissemination deadlines. **The reasons for incompleteness may depend on the rules of reporting, implying availability of data for a different periodicity than that required (periodicity issue), or because of the late response** of single units (timeliness issue).

Moreover, attention has been also paid to the issue of **revisions between estimates based on incomplete admin data** (preliminary estimates) and estimates based on complete admin data (final estimates).

# Introduction

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Administrative data, such as the VAT data, bring several advantages to the production of short-term economic statistics.

**They improve production processes and statistical quality, increase cost effectiveness and enhance data coverage while decreasing enterprises' response burden.**

In order to reduce the burden on respondents and the cost of statistics, admin data should be used in Business Statistics.

# Reasons

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Main reasons for using admin data are;

- ✓ reduction of response burden
- ✓ reduction of costs of statistics
- ✓ maintain statistical registers
- ✓ to have total populations
  - more detailed classifications are possible
  - more reliable “totals”

# Why do we need admin data?

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- ✓ Already available and cheap
- ✓ Growing demands for statistical data
- ✓ Growing concern for response burden
- ✓ Budgetary constraints
- ✓ To improve the statistical programs
- ✓ To check the quality of statistical products
- ✓ To maintain statistical registers.

# How do we use admin data?

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Admin data assist surveys and replace some part of the surveys administrative sources can be used for statistical purposes in different ways:

Three types of admin data use

1. Assistance role for surveys

- ✓ To construct the sampling frame
- ✓ Auxiliary information for editing, imputation, and estimation

2. Replacement of surveys

- ✓ Admin data are directly used to produce statistics, replacing the existing programs

3. Combination of 1 and 2

# Administrative data for the development of the turnover index in Turkey

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As turnover is recorded in accounts by all units, information concerning turnover does not need to be collected through a statistical survey and administrative sources can be used.

The main administrative source for turnover is the VAT declarations made by enterprises regarding their sales.

The sectoral and legal form coverage for turnover from the administrative source is good in Turkey.

# Administrative data for the development of the turnover index in Turkey

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VAT declarations are required by (approximately) the 24<sup>th</sup> of M+1. Nearly all legal units declare monthly; a very few enterprises declare quarterly.

Data are accessed by TurkSTAT approximately 12 days after the deadline.

TurkSTAT is calculating turnover from the administrative data by taking total income and subtracting several elements that are not considered to be turnover.

# Administrative data for the development of the turnover index in Turkey

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TurkSTAT aims to use administrative data in the data to be published in 2018, therefore at the same time as the implementation of the 2015 base/reference year.

TurkSTAT is considering whether to mix survey and administrative data, in other words to continue with a survey for part of the population.

# Administrative data for the development of the production index in Turkey

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Monthly PRODCOM level administrative data is not available in Turkey.

Monthly inventory administrative data is not available in Turkey.

Because of that turnover data is used to estimate production index.

Deflated turnover and deflated production value index indices are calculated.

# Administrative data for the development of the production index in Turkey

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For the deflated production value index, in most activities the turnover of units that are not in the sample is being adjusted to approximate production value by using a **ratio of production to turnover** compiled from the units that are in the survey.

# Administrative data for the development of the production index in Turkey

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It was noted that , the development of deflated turnover was close to that for deflated production value for most periods and for most activities. For some activities with a strong seasonal factor, these was not coincide.

However, for many activities, the differences between turnover and production (for example stock changes) was more significant in the more interesting periods of changes in the economic cycle and so it was decided to make the adjustment of turnover data to estimate the production value.

# Administrative data for the development of the production index in Turkey

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In order to calculate a ratio of production to turnover, it is necessary to continue with a sample survey.

For the production process take more than one year products, hours worked data will continue to collect with a sample survey.

For section B and D, it will continue to collect production quantity data with a sample survey to produce the production index.

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Thank You For Your Attention.