
IFC-Banco de Portugal Conference: "Communication on central bank statistics: unlocking the next level"

19-20 September 2022

Innovating statistical communication in Banca d'Italia¹

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¹ This contribution was prepared for the workshop. The views expressed are those of the authors and do not necessarily reflect the views of the Banco de Portugal, the BIS, the IFC or the other central banks and institutions represented at the event.

Joint IFC-BdP Conference

Communication on central bank statistics: unlocking the next level

Innovating statistical communication in Banca d'Italia

Laura BARTILORO

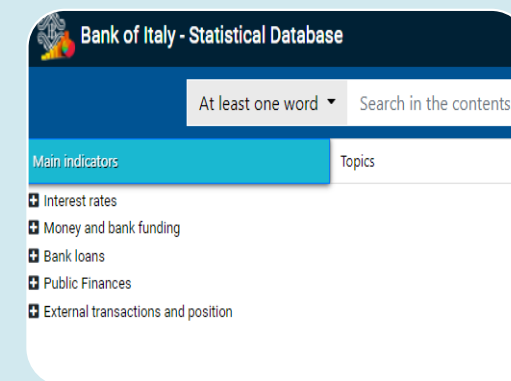
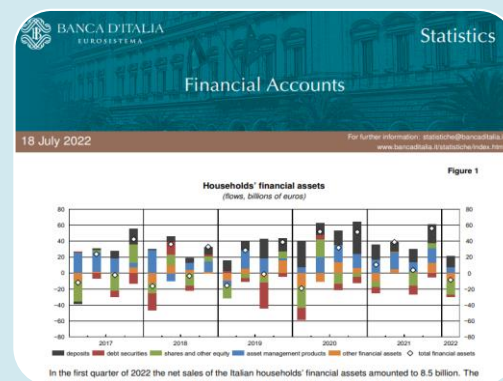
*Research Data Center and Innovation Division
Banca d'Italia | Statistical Analysis Directorate*

20.09.22

Method

1. Analysis of the status quo (Banca d'Italia vs other statistics providers)
2. Definition of user personas
3. Exploring new tools
4. Matching user personas with tools
5. Finding IT solutions starting from current endowment
6. Considering implications for the organisation (structure and work flows)

Status quo



Statistics
series

[link](#)

Economic
publications

[link](#)

Statistical
Data
Warehouse
(Base Dati
Statistica –
BDS)

Statistics series

No interactive visualisation

Pre-defined Excel tables are available, limiting microdata analysis

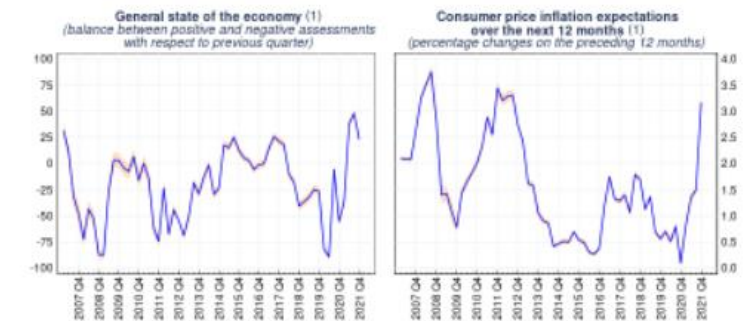


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According to the survey conducted between 23 November and 15 December 2021 among Italian industrial and service firms with 50 or more employees, opinions regarding the general economic situation in the fourth quarter of 2021 and their own operating conditions in the first quarter of the new year are less favourable compared with the previous survey. Demand dynamics are expected to remain robust, but delays in supply chains and the resurgence of the pandemic will likely entail downside risks to the activity or more than one in two firms.

The assessments of investment conditions have become more moderate: the balance between assessments of an improvement and of a worsening remained positive, though it narrowed to less than one third of the levels recorded in the survey conducted between August and September. Investment is expected to expand further in 2022, though at a slower pace than in the previous year. Employment is set to continue to grow in the first quarter of 2022.

Firms revised significantly upwards their selling prices in the last quarter of 2021 and their expectations for consumer price inflation in Italy have risen well above the 2 per cent threshold across all time horizons (12-month expectations have reached 3.2 per cent). The recent increases in energy prices and supply chain difficulties will likely lead to a rise in firms' selling prices over the next twelve months.



(1) The shaded areas represent the 95% confidence intervals. Construction firms are included from 2013 Q1. See tabs. s1 and s4 of the statistical appendix.

Report text

- Survey on Inflation and Growth Expectations - 2021 Q4 pdf 3.5 MB
13 January 2022
- Questionnaire of the 2021 Survey - 4th quarter pdf 132.0 KB
13 January 2022
- Tables zip 327.8 KB
13 January 2022

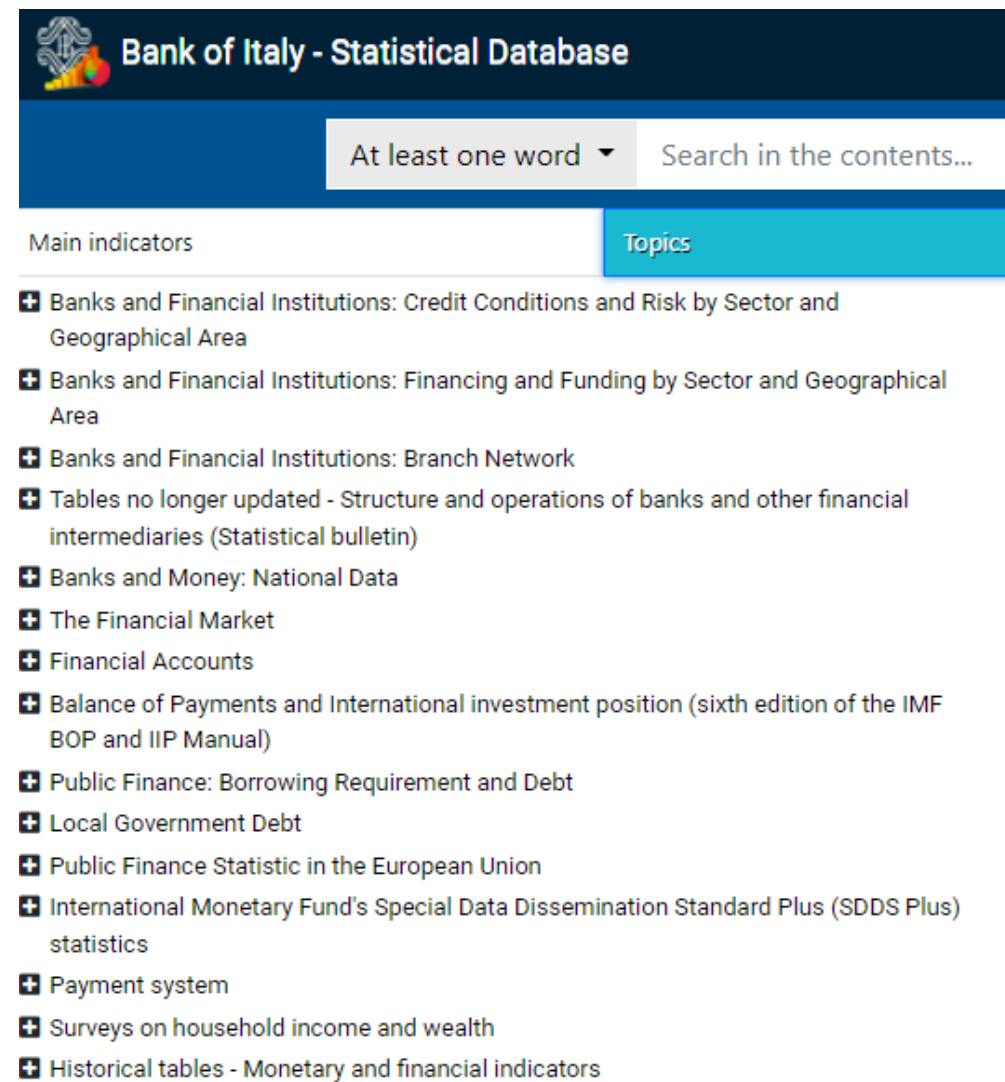
Statistical Data Warehouse (Base dati statistica - BDS)

Follows the Statistics
series structure

Requires some
economic/statistics
skills

BDS is not perfectly fit
for microdata (yet
including some
aggregates from survey
data)

Specialistic language



The screenshot shows the 'Bank of Italy - Statistical Database' interface. At the top, there is a search bar with the text 'At least one word' and a dropdown arrow, followed by 'Search in the contents...'. Below the search bar, there are two tabs: 'Main indicators' (selected) and 'Topics'. Under the 'Main indicators' tab, a list of statistical indicators is displayed, each preceded by a plus sign in a square icon. The indicators include: 'Banks and Financial Institutions: Credit Conditions and Risk by Sector and Geographical Area', 'Banks and Financial Institutions: Financing and Funding by Sector and Geographical Area', 'Banks and Financial Institutions: Branch Network', 'Tables no longer updated - Structure and operations of banks and other financial intermediaries (Statistical bulletin)', 'Banks and Money: National Data', 'The Financial Market', 'Financial Accounts', 'Balance of Payments and International investment position (sixth edition of the IMF BOP and IIP Manual)', 'Public Finance: Borrowing Requirement and Debt', 'Local Government Debt', 'Public Finance Statistic in the European Union', 'International Monetary Fund's Special Data Dissemination Standard Plus (SDDS Plus) statistics', 'Payment system', 'Surveys on household income and wealth', and 'Historical tables - Monetary and financial indicators'.

[link](#)

Some single initiatives

Survey of Industrial and Service Firms

Statistics



Share    

Since 16 January 2017 the Bank of Italy's statistical data have been published in the 'Statistics' series with a new layout and renewed content. For further details consult the page [Statistics series](#).

Each year the survey gathers information on investments, gross sales, workforce and other economic variables relating to Italian industrial and service firms with 20 or more employees.

Further details are available in the [Methodological notes](#).



Latest reports

- [Survey of Industrial and Service Firms in 2021](#)
Statistics
1 July 2022

[Link](#)
[OECD](#)

Status quo: summing up

- Data are disseminated in different sections of the website (except BDS).
- Graphs are not interactive (except BDS)
- BDS is not on the home page and requires some skills for navigation.
- Too many steps (clicks) are necessary in order to visualise data.
- Information is presented by source, not by economic phenomenon.
- Personalisation and download of data visualisations are not always possible.
- Language is for economists.

Goals

- 1. Widening the audience of statistical information, in particular unskilled public**

NEW TARGET

- 2. Offering current users easier ways to access data and more opportunities for analysing and sharing information**

EASIER AND LARGER USE

- 3. Taking advantage of the technological progress in order to improve effectiveness and efficiency of data dissemination**

- 4. Promote Banca d'Italia's statistical portfolio** NEW CONTENT

- 5. Enhance/keep high Banca d'Italia reputation**

- 6. Keep up with national and international stakeholders**

4 user personas

Mario Rossi Mechanic

Bio

Quit high school, basically skilled with computer and tablet

Needs and goals

Wants to buy a house, and needs information for a mortgage

Martina Neri Student

Bio

She's writing the final dissertation on the economic impact of the energy crisis

Needs and goals

She has to go deeper into some issues studied and prepare the material to include in her final dissertation.

Angela Giallo Small entrepreneur

Bio

She's an accountant, carefully managing her small firm, but she is not IT skilled

Needs and goals

Needs updated information on Italian economy, to correctly steer her activity and take decisions for the family

Paolo Verdi Economic journalist

Bio

Travels a lot for writing his articles

Needs and goals

Would like to easy and fast download tables and graphs, using the tablet

Tools

- ✓ **New Statistics Portal** NEW TARGET + NEW CONTENT
- ✓ **Digital publications (with explainers and no economic interpretation)** NEW TARGET [link](#)
- ✓ **Interactive graphs (easy to understand, personalise, download and share)** NEW TARGET + EASIER AND LARGER USE
- ✓ **Dashboards** NEW CONTENT [link](#)
- ✓ **Diversified language** EASIER USE + NEW TARGET

3 access levels

1. Entry level: Statistics Portal [all user personas]

COMMON TERMS AND CONCEPTS

- ✓ Easy accessible e comprehensible for unskilled users [UP 1]
- ✓ Clearly shows the main indicators [UP 1]

2. Thematic pages

ECONOMIC AND STATISTICAL DEFINITIONS

- ✓ Digital publications [UP 2]
- ✓ Main indicators + explainers [UP 3]
- ✓ Links to more sophisticated tools [UP 4]

3. Dashboards [UP 3 and 4]

SPECIALISED JARGON + METHODOLOGICAL DETAILS

- ✓ Richer data representation
- ✓ Updated to current situation

IT solutions

- ✓ The Statistics Portal will be an ancillary mini website.
- ✓ Heavy re-use of BDS (in-house) technology (requires a doubling of application servers).
- ✓ Data Warehouse(s) unaltered.
- ✓ New design and features of BDS home page.
- ✓ Open source software (libraries, e.g. Apache ECharts), integrated with pre-existing software.
- ✓ Automatic and instant update of all data.

Implications for the organisation

Structures and roles stay basically unaltered.

New software for tables, graphs and dashboards will be managed directly by statisticians and/or economists (no centralised unit).

New Editorial Board, with statisticians, economists and communication experts in order to decide new content and graphical representation.

The Research Data Center (RDC) will coordinate the design and content of all new contents on the Statistics Portal.

At first, dedicated working group for the realisation of all new content (home page, thematic pages, digital publications, dashboards).

How will we know (if) we succeeded?

- ❖ More accesses and downloads from the website.
- ❖ Less queries asking for help for understanding and finding data.
- ❖ More harmonised look and feel.
- ❖ More graphs/tables/dashboards published in articles, papers, tweets, etc.



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