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Data sharing at Deutsche Bundesbank: The House of Microdata

Topic 1 – Bringing in information from where we can get it

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Introduction

The Deutsche Bundesbank collects a wide range of economic data and therefrom generates monetary, financial and external statistics as well as comprehensive sets of indicators and seasonally adjusted business statistics. This data provides the basis for monetary policy decisions as well as macroeconomic and macroprudential analyses.

After the financial crisis microdata are becoming increasingly important. The reason is that aggregated data solely are not sufficient for a proper analysis of the effects of political measures.

Microdata however allow to analyse a system at a granular level and include the heterogeneity of the system. For this reason, Deutsche Bundesbank has launched a large-scale initiative to make better use of existing microdata both, for policy analysis as well as for internal and external research projects.

This initiative is called IMIDIAS – Integrated MicroData based Information and Analysis System.

Methods / Problem statement

To date, the microdata at Deutsche Bundesbank are broadly distributed and stored independently in the operative systems of each department.

Therefore, access from other departments is limited and the harmonization of the data is not taken into account. Thus, the potential of linked data sets cannot be used. The basis for linking and analysing data from different sources is a sound data integration, i. e. common reference data and a common data model are needed.

For a better reuse and sharing of the data a common metadata model within the corresponding framework is necessary. With such interoperable metadata internal and external users will be enabled to push the analysis potential.

Such purpose cannot be achieved only by technical implementation but also needs communication, cooperation of all involved departments and a common governance.

Results / Proposed solution

To overcome those limitations the IMIDIAS initiative has been established and the House of Microdata has been created as its infrastructural part. The House of Microdata is a statistical data warehouse based on the existing statistical infrastructure already being used for aggregated data.

The desired standardisation and harmonisation is achieved through the conceptual part of the integrated data management for micro and metadata by using the international standard SDMX which provides a powerful information model for data-driven systems.

This multidimensional approach offers an ideal means of linking, comparing and consolidating data from different sources. In order to manage (data) competence within the IMIDIAS framework and support researcher's access to the microdata the Research Data and Service Center has been established.

Among others, it ensures the fulfilment of legal requirements and data protection requirements in terms of governance.

Conclusions

To conclude, Deutsche Bundesbank has established the IMIDIAS initiative. With the House of Microdata it provides a centralized means to use the potential of existing microdata. The harmonization of the data through SDMX allows linking, comparing and consolidating data from different sources. Therewith, it fosters research and data analysis of microdata in order to gain new insights and support policy making processes.