Live data – a game changer for official statistics

Elena Bucea, Carlos Figueira Statistics Department Banco de Portugal

ABSTRACT

In a world increasingly filled by big data, data visualization has been an answer to its complex, dynamic, and multidimensional nature. Visual and interactive dashboards are increasingly replacing plain numbers and tables. The notion of "click and see" has broaden horizons, bringing curiosity and deeper understanding on large complex datasets – abundant in official statistics.

The self-service visualization tools have provided statisticians quick and easy-to-understand insights, allowing the identification of patterns, outliers, relationships, trends, and as well new phenomena, which in the past were hidden behind large and flat tables. At Banco de Portugal, these tools have been playing an important role in comprehending timely the most complex statistics and its different perspectives, namely Foreign Direct Investment (FDI).

The era of navigation between spreadsheets, the exploration of different unconnected databases, as well as the long searching for answers, is over. Live data on FDI, with different coordinated visualizations has been a game changer. It led behind the "one-analysis-fits-all", empowering compilers and users with personalized data filtering, clicking and hovering over a graph to zoom in the data. Through this work, we show that self-service data visualization is a paradigm shift for official statistics. Intuitive and friendly, it came to turn official statistics more attractive, deepening the understanding on complex matters and giving answers for questions we did not know we had.

Keywords: data visualization, dashboards, official statistics, foreign direct investment