

BE-FAST - Data Infrastructure and Indicators for Fast Monitoring of Social and Labour Market Developments in Belgium

Summary of the Final Report.

Context & Objectives

The BE-FAST project investigates Belgium's capacity to respond effectively to future crises, drawing lessons from the COVID-19 pandemic. The pandemic revealed significant weaknesses in data infrastructure, which restricted the government's capacity to monitor the social and economic impacts in real time and evaluate the effectiveness of policy responses. Initiatives such as the Working Group Social Impact COVID-19 and Taskforce Vulnerable Groups were hailed as good practices: the groups managed to disclose a wealth of administrative data at short notice. Yet, their success was constrained by data fragmentation, delays and gaps, particularly with regard to micro-level linked administrative data and tracking household-level conditions and vulnerable groups not entitled to social protection.

The BE-FAST project was launched to address these shortcomings. The project aimed to assess and improve the country's socio-economic monitoring capacity by reviewing (administrative) data sources, evaluating existing tools, and identifying critical blind spots. The project was guided by several core objectives, ranging from mapping current data resources, investigating the nowcasting method adopted during the crisis, to proposing pathways for improved data collection, especially for at-risk groups.

Methodology

Mapping administrative socio-economic data infrastructure:

To assess the socio-economic data in Belgium, information was gathered through desk research and unstructured (online) interviews conducted between January 2023 and February 2025 with Belgian public institutions of social security. Each institution provided insight into the data they collect or receive, its quality, structure, and the timeliness of their data (including stability and further distribution). We focused on data relevant for crisis response, such as labour market transitions and income replacement, but also policy responses such as temporary unemployment and bridging right.

Assessment of the nowcasting tool during COVID-19:

Next, an assessment of various nowcasting approaches employed during the COVID-19 pandemic was made. More specifically, the following research activities were performed:

- Review and comparison of nowcasting models used during COVID-19 to estimate income loss, poverty and inequality trends.
 - Comparison of the projections to post-hoc survey data (EU-SILC) and administrative sources.
 - Assessment of the accuracy, assumptions, and limitations of different modelling approaches.
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Identification of data gaps, blind spots and alternative sources:

Blind spots and data gaps within the current data infrastructure, as well as alternative data sources were identified and explored in multiple ways:

- Analyses of the information gathered through the interviews with public institutions for social security.
- Consultation group meetings with stakeholder organisations, coordinated by the Combat Poverty Service. Within this exercise, special focus lied on the experiences of people at risk of poverty. The meetings explored how vulnerable populations were affected, identifying blind spots and potential ways of better monitoring across seven critical life domains. Next, the stakeholder consultations (Combat Poverty Service) suggested new indicators.
- Exploration of the potential of underused data holders (e.g., National Bank of Belgium, Prometis Lab, The Social Study). Based on those interviews, recommendations are made on the potential of alternative data sources, to complement traditional administrative data for rapid policy monitoring.

Main findings & conclusions

Key findings on data quality & timeliness:

The project found that some crucial socio-economic data in Belgium is available in the short term (e.g. unemployment, wage-, and working time data within 1–4 months). In contrast, some data, particularly data on the incomes of the self-employed, suffers from substantial delays of up to three years. Critical information relating to social protection, such as that on social assistance and disability recognition, is available (and relatively stable) within 3–4 months. However, pension data takes more than a year to consolidate due to complexity and dispersion across sources. Information on support measures (e.g. temporary unemployment and bridging rights for self-employed), was available relatively quickly.

Delays often stem from the timing and frequency of data transfer, lengthy validation processes, and a fragmented administrative data infrastructure. Aligning different data sources can be complex and time-consuming, especially when they are updated on different schedules. These harmonisation efforts often cause delays, which can hinder timely policy responses.

Finally, data quality is generally high when it is legally mandated or essential for operations. Various institutions acknowledged that data quality is lower for optional fields or decentralised/local data.

Nowcasting accuracy and limitations:

The BE-FAST assessment of the nowcasting models concluded that the method provided valuable, largely accurate and consistent estimates of inequality and poverty trends. Besides, the models indicated that Belgium's welfare interventions successfully cushioned income shocks. Most notably, the projected outcomes aligned well with later observed data from EU-SILC and administrative sources.

However, the nowcasting exercises also revealed some important limitations. Firstly, the available data lacked sufficient detail to adequately capture the full effect on vulnerable groups, such as the self-employed. Furthermore, the inability of the available nowcasting models to model household-level

effects could potentially lead to significant underestimation of income shock clustering within households. Finally, only major policy measures were considered, meaning certain benefits, such as disability allowances and parental leave, were excluded.

Identified data gaps & blind spots:

Several critical gaps were highlighted, among which:

- Major blind spots exist in monitoring self-employed workers, mostly due to long delays.
- Administrative data lacks coverage of informal workers, savings, debts, local support schemes (e.g. food aid or energy support), and subjective indicators (e.g. wellbeing, subjective poverty)
- The impact on individuals using precarious or informal work arrangements remains underexplored. Also transitions on the labour market within a quarter remain a blind spot.

Recommendations

1. Exploration of alternative data: Leverage transactional bank data (e.g., from BNP Paribas Fortis via Prometis Lab) to obtain high-frequency insights into consumption, savings, and debts—particularly useful in crisis contexts.
2. Incorporate subjective and local support indicators: Complement administrative data with subjective wellbeing surveys. Further motivate public social welfare centres to participate in the surveys regarding local level support.
3. Support structural and financial investments that enable a restructuring of the current administrative data delivery chain. For instance, by delivering preliminary files to the Datawarehouse (before full validation), and/or make data delivery more recurrent. This would evidently require financial and operational support.
4. Develop a centralized metadata repository: build further upon the BE-FAST database (preferably in a wiki-style format) listing available datasets, their content, update frequency, and quality indicators. This resource can greatly enhance transparency and usability for policy monitoring.
5. Expand the use of the BELMOD project: improve the precision of nowcasting models during times of crises, in particular for vulnerable subgroups and households.

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