MULTIMSPROD – TSI 2022

1st Progress Report

February 15, 2023

Deliverable D1.2

Content

1. Introduction

Content: Brief introduction of TSI project, context and goal of progress report, structure of the report.

Access to cross-country comparable micro-based data entails many challenges due to confidentiality concerns, different requirements for data access and lastly heterogeneity in data structure. MULTIMSPROD aims to provide national authorities of participating productivity boards with the tools to improve their ability to analyze productivity and development and design policy reforms.

This ambitious objective is achieved by providing the beneficiaries with

1. harmonized data (micro-aggregated and cross-country comparable) to conduct policy analysis and produce policy recommendations,
2. the necessary training to ensure that the beneficiaries can fully exploit the potential of the micro-based data infrastructure, and
3. finally with a network to share best practices and common goals.

MULTIMSPROD started in October 2022 for a period of 24 months.

This report is the first of in total eight quarterly progress reports which have the goal of documenting the current project status, highlighting achievements, and pointing out risks and problems.

The report is structured as follows: Section 2 documents the project progress and describes recent activities (section 2.1) and submitted deliverables (section 2.2). Section 3 describes the efforts and progress made in the implementation of technical assistance in each of the six participating countries. Section 4 provides an outlook and the next milestones and planned steps.

2. General Progress Report

2.1 Kick-off Activities

Content: Description of recent activities (i.e., country visits, country meetings, website, e-learning, 1st workshop organization etc.) and their current status.

We organized technical kick-off meetings from mid-October to early November to meet individually with the participating national productivity boards and statistical offices. These meetings served several purposes:

1. Introducing our data products, i.e., the micro-aggregated CompNet dataset, and the micro data infrastructure (MDI);
2. Obtain a first impression of training and data needs.
3. Describes deliverable and responsibilities.
4. Initiate contacts between country's productivity board and statistical office regarding the provision of administrative microdata;

We met with all requesting countries in Wiesbaden (Germany), Paris (France), Lisbon (Portugal), Ljubljana (Slovenia), Bratislava (Slovakia), and Riga (Latvia). The meetings included representation of the EC DG-Reform as the funders of the Technical Support Instrument. Representatives provided the introductory remarks and set a collaborative tone for all the meetings. Meeting summaries were provided to DG-Reform.

The slides that were presented at these meetings can be found in the Appendix. Appendix A includes the general introduction to the CompNet project, Appendix B the introduction to the Technical Assistance Grant. Appendix C and D introduce the CompNet and MDI data and research applications, respectively.

After the meetings, we provided the NPBs with documentation of the CompNet data and self-guided learning modules (cf. D3.2 in section 2.2), as well as documentation of the data required to build the MDI in the respective statistical office. One-on-one conversations with statistical offices were initiated to assess: 1) the types of research projects they would like to undertake with the readily available CompNet data, and 2) the feasibility of setting up access to confidential microdata through each of the requesting countries National Statistics Offices (NSO).

In the new year, following the holiday period, we engaged DG-Reform to help with the set-up of a TSI Steering Committee (TSI-SC) encompassing representation for all requesting countries. The goal of the TSI-SC is to provide a platform, where requesting countries and the TSI service provider (IWH-CompNet) can openly discuss progress, concerns, and next steps. The first meeting of the TSI-SC took place on February 3rd, 2023. We plan to schedule regular quarterly meetings.

During this time, we had multiple one-on-one meetings to engage both with the NPBs and the NSOs. The goal of these meetings was multifold:

1. To assess progress and concerns with the training modules
2. To obtain a list of economists from each of the requesting countries that would become CompNet data experts.
3. To obtain a list of initiatives the NPBs might be interested in. To this end we provided a list of possible topics. This was not meant to be exclusive or exhaustive.
4. To initiate the process to gain access to confidential microdata.

We met with all NPBs. The Results of these meetings were summarized in the presentations that we provided to the TSI-SC. These can be found in Appendix E. NPBs assigned 2 to 3 members to become CompNet data experts to undertake trainings and work closely with the IWH/CompNet team. Five general topics of interest were identified:

1. Competitiveness
2. Energy
3. Trade
4. Allocative Efficiency
5. Small Medium Enterprises

We are now in the process of creating research teams around the ideas identified that include experts from both the NPBs and the TSI Service Provider. The goal of these teams will be to develop more specific research ideas and projects that make use of the CompNet data and for exploring the possibility of setting up the MDI and that are of interest to the NPBs. These groups have been tasked with developing a series of presentations to be delivered at the first workshop (Deliverable D2.5) that is to be held on February 24th in Lisbon. The agenda for the 1st workshop can be found in Appendix I.

Progress with the microdata infrastructure (MDI) setup has progressed significantly. We have engaged with both the NPB and respective NSIs to discuss the legal framework, data availability, and access options to establish the MDI in the respective country. The country situation varies. Latvia and Slovakia NSOs are facing significant resource constraints to provide data and have declined collaborating with this project at this time. Data access contracts are almost ready to be signed in Slovenia. Progress with Portugal and Germany is strong.

There have been general efforts to span the network beyond the participating countries. Additional participants have been invited to the workshop in Lisbon, i.e., Austria, Finland, and the Netherlands.

2.2 Deliverables

Content: listing and description of the completed deliverables so far:

D1.1 Project Website has been submitted. The project website can be accessed via the CompNet website and includes an overview of the project content, information on the project team, data products and training. The news section will provide updates on recent developments. The website can be found here: CompNet (comp-net.org). All deliverables associated with the TSI can be accessed through this website. The website has now been reviewed by DG-Reform and updated based on recommendations. See Appendix F.

D2.2 Data access toolkit has been partly submitted. Data visualizations in the form of a point-and-click tool featuring seven core variables of the CompNet dataset are available on the CompNet website. Expansion of the visualizations are planned in accordance with user needs. See Appendix G. In addition, an easy-to-use dataset is now available called the CompNet reduced dataset. This dataset provides quick access to key CompNet variables (including productivity and employment) in an easy-to-use manner. It is meant as an easy introduction to the more complex CompNet data.

D3.1 General training on data handling has been submitted. It entails self-guided training programs on various levels (beginners, intermediate, soon: advanced) including presentations, data, code, and exercises on the 8th vintage CompNet data and is available on the CompNet website. In addition, in-person training on a more advanced level will be designed to match the requirements of the NPBs and their research project once applicable. See Appendix H.

As a future deliverable readily usable code for specific research applications will be provided (part of deliverable D2.2 Data access toolkit and D2.4 Replication Packages). Progress on Country data reports is ongoing. These reports will be part of deliverable D2.1.

3. Country specific progress

Content: Description of the specific situation of the TSI program in each country. Country section cover the following aspects:

- *Description of the cooperation between NPBs, NSIs, CompNet Team and others (e.g., which of the former we work together, how is cooperation between them etc.)*
- *Summary of all the meetings held*
- *Status of the current MDI set-up/data access*
- *Progress on research ideas projects*
- *Other country-specific circumstances.*

3.1 France

Cooperation with France has its root in the Microprod project, where we started setting up the MDI for France, through the CASD infrastructure. In the context of the TSI program, we initiated interaction through the technical kick-off meeting in early November, which took place at France Strategie (French PB). In the meeting relevant counterparts also from INSEE and Banque de France were present. In that occasion we presented the most recent progress in the construction of the MDI in France and started a conversation with INSEE to refine and shape up the databases included. Moreover, we were able to present the CompNet dataset to the members of the French institutions that were still not familiar with it. Finally, we discussed research and policy work priorities for the French PB, to start laying down an agenda for the upcoming months.

Relevant counterparts for follow up work:

- France Strategie
- INSEE

As a follow up, we provided the PB with CompNet training modules and assistance on interacting with CompNet data, although progress had to wait since the PB had to hire staff that could be specifically dedicated to the project. Relevant counterparts for the MDI and CompNet, respectively, were established by the PB in January 2023. In the meantime, the data and the training were advertised to the whole institution.

On the MDI front, we included more data on product level transactions and on energy use by companies, working with INSEE on an effort to further strengthen the sources we had already included in our remote access environment, as well as how to harmonize them with those of other countries.

As of February 2023, training is at its intermediate module (the 2nd out of 3 modules) were made available, and we are working as intermediaries on an MDI based project between France and Germany to start exploring the energy survey data available in the two countries. The goal is to produce stylized facts and general patterns that characterize the two countries, to draw conclusions for the energy transition, carbon tax and exposure to energy price shocks. The French PB has formulated a research proposal which will be assessed by the German PB, to converge to a shared project.

Further work will be placed in working with the French PB also on CompNet data, as interaction proceed with the person in charge of writing the productivity report (Alexandre Bourgeois).

3.2 Germany

The **technical kick-off meeting** took place in person on the 18th of October 2022 and included participants from the national productivity board (GCEE) and the National Statistical Office (Destatis), and the European Commission (TBD). The meeting started with the descriptions of both parties: CompNet and SVR. The CompNet team explained the structure and utilization of the two datasets: 8th vintage CompNet and MDI. The GCEE expressed interest in using firm-level microdata, especially for topics related to labor economics, environmental economics, and productivity. They look forward to working with the CompNet dataset and the MDI. Destatis assured its support for the project and is hiring two statisticians to set up the MDI within the research data centers.

The first meeting was followed by an email where the CompNet members provided access to data as well as a training package to help the Germany PB familiarize with the data.

The **follow-up meeting** took place online on the 16th of December 2022 with the CompNet team and German PB members. The main goals of the meeting were:

- introduce the junior consultant as the main contact person to communicate directly with in case of questions on the data or research
- discuss issues with data / data access
- discuss future research projects of interest to the GCEE

The German PB members communicated their interest in pursuing a research project on energy use which will require the utilization of the MDI dataset. Currently, the German PB discusses the possibility to carry out the project in cooperation with the French PB (see above).

The relevant counterparts for follow-up work are:

- GCEE
- Destatis RDC

A third online meeting will take place to show further MDI utilizations.

3.3 Latvia

The **technical kick-off meeting** took place October 27th , 2022, in Riga at the Latvian University and included participants from the national productivity board (LV PEAK), the Central Statistical Bureau, Bank of Latvia, the ministry of economics and finance, the European Commission and IWH/CompNet. The aim of the meeting was to get an overview of the NPB's research interests and agenda, experience in working with microdata and data access options.

The PBs' projects and research agenda include the annual productivity report, recovery perspectives following COVID-19, the Economic Barometer, and research on economic impact of climate goals. The limitations for conducting research were also discussed, namely data limitations for including other factors that could impact firm-level productivity or extending analysis to an international scope to understand Latvia's situation compared to other countries. At the moment, Latvia's Productivity Board rely on commercial micro-data, however the data is relatively limited, which is why they are interested in collaborating with CompNet. The NPBs' expectations for the TSI program are access to broader and more detailed firm-level data; fully exploiting dataset of 20+ European countries for cross-country analysis; benefiting from CompNet's technical experience, their support and network. The newly announced task for Latvia's Productivity Board was to focus on competitiveness and catching up with neighboring countries, to which this program can be highly beneficial due to the large cross-country dataset.

The Bank of Latvia has access to administrative data sources (collected by different governmental bodies, including Statistics Latvia, State Revenue Service, Ministry of Finance and the Bank of Latvia) via a remote server hosted by Statistics Latvia.

In the discussion, the NSI raised concerns regarding lack of resources for harmonizing the data and providing data access to the NPB. The Ministry of Economics indicates support for this project and believes the project is of value. Currently, they are exploring options with the participants.

As a follow up, we provided the PB with CompNet training modules and assistance with interacting with CompNet data. Relevant counterparts for CompNet were established by the PB in January. The relevant counterparts are:

- LV PEAK

3.4 Portugal

The **technical kick-off meeting** took place October 20th, 2022, in Lisbon at the premises of Statistics Portugal and included participants from the National Productivity Board, the national statistical office (Statistics Portugal), the European Commission (DG Reform) and IWH/CompNet. On behalf of the National Productivity Board, ------- were present, while, on behalf of the National Productivity Board, ------- were present. The aim of the meeting was to get an overview of the NPB and statistical office's research interests and agenda, experience in working with microdata and data access options.

They have been building a statistical business database of which most of the data are derived from Eurostat regulation, but which also has some characteristics that are unique to the Portuguese statistical system. They combine surveys and administrative data and harmonize concepts and definitions. They have standard surveys, as well as new Portuguese surveys, while the core of the database infrastructure is the business register. They believe they have one of the most advanced statistical business databases and therefore want to collaborate with the academia to explore it in depth. They also have a research unit which oversees the merging in case of the acquisition of new data. Finally, and most importantly, foreign institutions are not allowed by the law to directly access the most sensitive data.

The **follow-up meeting** took place on the 3rd of February 2023, with representatives of Statistics Portugal and the National Productivity Board. Many questions were answered and directions for future work were given. In particular, clarifications about the differences and relative advantages and disadvantages of the MDI and the CompNet dataset were given. Moreover, technical questions about the data and the software to be used were answered. They expressed interest in a platform for connecting with other countries' offices, to facilitate the solution of issues, and in working on research projects that allow for cross-countries comparison.

The relevant counterparts for Portugal are:

1. From the NSO
2. from NPB

3.5 Slovakia

The technical kick-off meeting took place in person on the 25th of October 2022 and it included members of the European Commission, Slovakia Productivity Board, National Bank, and National Statistical Office. During the meeting, after the CompNet team introduction and presentation, it was the turn of the Slovakia Productivity Board that presents its structure and their goal of improving policy evaluation with better data. They expressed their interest in analyzing the skill upgrading of their economy's workforce and how to build resilience to shocks. The National Bank expressed interest in researching topics of State aid and firm-level productivity, Market power trends in Slovakia, Innovation and digitalization, and determinants of inflation. The Slovakia Statistical office explained the modality of data access. List of participants:

The follow-up meeting was with a representative of the PB and one of the Statistical Office.

for the NPB side: -----

as the representative of the Statistical Office: -----

During the meeting, the technicality of data access to the Slovakia dataset for MDI was discussed. At the moment, the Slovakia NSO has declined participation in the project due to lack of resources. Finally, ----- will be the Compnet data expert.

3.6 Slovenia

The **technical kick-off meeting** took place October 20th, 2022, in Ljubljana at the premises of IMAD and included participants from the national productivity board (IMAD), the national statistical office (SURS), the European Commission (DG Reform) and IWH/CompNet. The aim of the meeting was to get an overview of the NPB's research interests and agenda, experience in working with microdata and data access options.

The NPB's research interests are broad and range from intangibles and institutional capital to productivity and competitiveness to finance, and include specific topics such as digitalization, HR, and skills for the green transition. Members of the NPB have ample experience with AJPES data (balance sheet data), which is not supplied by their NSI, but easily accessible and largely used in Slovenia. These data are also used to construct the Slovenian source data for CompNet. In addition, the NPB provides data to OECD Multiprod and contributes to Dynemp. The NPB's goals and expectations are to access microdata at the international level for comparison, sharing knowledge (e.g., regarding TFP estimation and analysis) and understanding productivity differentials. They are especially interested in the comparison with countries of comparable levels of development.

The Slovenian NSI has ample experience in providing microdata to researchers (>15years; > 60 projects and > 100 researchers working with the data). Access to microdata is provided to academic researchers and researchers in policy. They have a wide selection of mandatory company-level datasets (75 individual surveys) available to researchers and all are linked via unique firm identifiers.

On November 22nd, 2022, we had a follow-up meeting regarding the setup of the **Micro Data Infrastructure** involving participants of the NSI and NPB. The NSI presented available data sources, data access options, and described the process of applying for the data. After the meeting, we – in conjunction with the NSI and NPB – identified the data sources needed and initiated the data application process. We assigned two junior consultants to assist in the data preparation.

In a follow-up meeting on January 25th, 2023, we discussed possible research projects and use of the **CompNet dataset**, which they plan to use to address the causes underlying our productivity gap with respect to the top EU economies and peer countries. The relevant counterparts are:

- IMAD
- SURS

4. Outlook

Content: Outlook on the next milestones and steps ahead (particular on the horizon until the next progress report) -> workshops, e-learning etc.

The first workshop is scheduled for February 24th, 2023, and will take in Lisbon at the premises of the Portuguese statistical office. The goal of the workshop is to discuss the possibility of cross-country collaboration regarding specific research topics and to distill research projects to be carried out on the CompNet data.

The MDI setup is under way in most of the participating countries. Once the data access is established, the IWH/CompNet team will harmonize the data in close collaboration with the respective productivity boards and statistical offices.

An advanced self-contained learning course is close to being completed. The training courses, so far based on the 8th data vintage, will be updated to the 9th data vintage as soon as it is available. An in-person training on a more advanced level will be designed matching the requirements of the NPBs and their research project once applicable.