# CompNet Annual Conference

19th and 20th October 2023, Charlemagne Building, European Commission

# Thursday, 19 October 2023

**Filippo di Mauro**, Chairman of CompNet, inaugurated the 12<sup>th</sup> CompNet Annual Conference hosted by the European Commission in the Charlemagne building with his opening speech. He thanked the co-hosting institution and the participants, introducing then the Firm Productivity Report, recently published by CompNet. He then updated participants on the status of the MDI, with 7 countries soon available and a pilot testing ongoing in collaboration with colleagues from DG ECFIN and DG GROW from the European Commission. Last remarks focused on the future steps in term of data generation and research output, with particular focus on the importance of Competitiveness and Productivity data in the current policy debate.

#### Keynote by Jan De Loecker

The first Keynote, by Jan De Loecker (KU Leuven, CEPR) focused on the different production and demand approaches in estimating markups.

### Session 1 – Firms Resilience to Shocks

The session, chaired by Javier Miranda (IWH), started with a presentation by Leonardo Indraccolo (EUI) of his paper coauthored with Russell Cooper and Carl-Wolfram Horn "Covid and Productivity in Europe: A Responsiveness Perspective". Estimating a firm dynamics model with adjustment costs for France, Germany, Italy and Spain, the authors investigate different firm responsiveness across Europe and how these differences shape the aggregate response to Covid-19, including policy support to employment, firm exit and productivity. Results show that adjustment costs are not that different across countries and policy support mattered considerably.

**Tibor Lalinsky** (National Bank of Slovakia) then discussed the paper presenting his remarks and comments. The discussant praised the focus of the work on highly topical issues and the original model-based approach. In particular, the work focuses on highly topical issues and presents an original model-based approach. He then suggested some improvements with respect to the ongoing Covid-19 related debate.

Jakob Schneebacher (Competition and Markets Authority) presented the second work of this session, "Managing to Adapt: Structured Management Practices and Firm Resilience", coauthored with Wei Li, Paul Mizen and Rebecca Riley. On the impact of structured management practices on firm adaptation to shock, the work focuses on the Covid-19 pandemic and its effect on working practices. The main findings indicate that structured management practices are indeed associated with better adaptation, leading to smaller declines in turnover, higher adoption of remote working and online sales, with more pronounced effects in industries more exposed to the shock.

**Yannick Bormans** (KU Leuven) then discussed the work pointing out some key strengths of the paper and providing some suggestions on four main aspects. First, the discussant suggests improving the construction of the performance score used in the work exploiting a robustness test with different weights and subcomponents. Then, on outcome variables, he suggests the inclusion of differential value added and profit changes.

### Session 2 – Market Power and Pricing

The session, chaired by **Kaspar Richter** (European Commission), focused on market power and pricing. **Bernardo Mottironi** (London School of Economics) presented the third paper of the day: **"Do Larger Firms Exert More Market Power? Markups and Markdowns along the Size Distribution"**, coauthored with Matthias Mertens. The work focuses on the relationship between firm size and market power, adding to the ongoing debate on increasing concentration and the potential impact on productivity and competition. The empirical findings showed that larger firms have lower markups, in opposition with most theories (e.g. Cournot, Bertrand, linear demand), and significantly higher markdowns. The presenter then discusses the potential mechanism behind the empirical results, presenting possible implications and finally underlining in the conclusions the suggestion of a trade-off between product and labour market power.

**Davide Luparello** (Penn State University) then discussed the paper, suggesting some further research considering the work by Demirer (2020).

**Yannick Bormans** (KU Leuven) presented the last paper of the day **"Price-cost margins, fixed costs and excess profits"**, coauthored with Filip Abraham, Jozef Konings and Werner Roeger. The work builds from the concerns about rising US markups, still highly debated at the conceptual and empirical level. The authors introduce a novel methodology to estimate price-cost margins, building on previous work by Hall (1988) and Roeger (1995). This methodology allows flexible treatment of all input factors (labor, capital and intermediate inputs), distinguishing between variable, fixed or a combination of both. Using Belgian firm-level data, the presenter illustrates how this approach can provide valuable insights into the evolution of markups, market power and profitability.

**Chiara Osbat** (ECB) discussed the paper highlighting the strengths of the novel methodology introduced and pointing out possible future research opportunities. In particular, she proposed to include a factor-augmenting technology, referring to the work by Demirer (2022). Then, she suggested further research on the production function estimation, on the inclusion of product markups, input markdowns and the role of intangible assets.

### **Policy Panel**

The Policy Panel, chaired by **Filippo di Mauro** (CompNet), focused on the "Multidimensions of Market Power".

To start, the Chairman introduced the five panel participants: **Isabel Vansteenkiste**, Director General at the DG "European and International Relations" of the European Central Bank; **Mario Nava**, Director General at the DG "Structural Reform Support" (DG REFORM) of the European Commission; **Emily Sinnott**, Head of Policy and Strategy Division of the Economics Department at the European Investment Bank; **Declan Costello**, Director General "Economic and Financial affairs" (DG ECFIN) at the European Commission.

Considering firm concentration and market power as key aspects of the conference, the Chairman started the discussion investigating the position of the panellists' institutions on the topic. The focus was mainly on the expected impacts of firm concentration on market power, considering four main aspects.

First, the chairman introduced the issue of market concentration rising from barriers that smaller, less productive firms may face, wondering how policymakers can address the issue. **Emily Sinnott** highlighted several factors contributing to the growing gap between the most and least productive firms, including limited innovation diffusion, tightening credit, a scarcity of venture capital, and cautious "wait-and-see" behaviors. Notably, innovation spreads more rapidly in the United States compared to the EU. **Filippo di Mauro** shared findings on CompNet data, which suggested that resources were not disproportionately allocated to the least productive firms during pandemic support measures. **Isabel Vansteenkiste** emphasized that as support measures diminish, the challenges faced by struggling firms will become more apparent. Importantly, there is little evidence to suggest that increasing interest rates penalize specific firms. **Declan Costelo** added that while support measures were crucial during times of crisis, it is essential to consider international comparisons, particularly concerning efforts to promote healthy competition. The EU Recovery Plan is a step in the right direction, as it conditions support measures on implementing reforms, fostering a more competitive landscape.

Second, the focus moved to the strengths and limits of EU policy surveillance to target the business environment, with particular emphasis on EU harmonization of national policies. **Mario Nava** emphasized the critical role of well-functioning competition legislation in narrowing the disparities between large and small firms. He identified access to finance, competition laws, and business knowledge as pivotal factors in enhancing competitiveness. Furthermore, he acknowledged that President von der Leyen, in her 2023 State of the Union address, stressed the importance of reducing administrative "burden" to facilitate business operations in Europe, with this burden impacting both firms and public administrations. One notable source of varied challenges for businesses across EU member states lies in discrepancies related to consumer protection laws, public listing frameworks, and fiscal conditions. These differences create heterogeneous frictions within the European market. **Declan Costelo** highlighted that the EU trails behind the United States in terms of innovation and investments. He emphasized the need for the EU to focus on becoming more business-friendly, and strengthening the union of capital is a key component in achieving that goal.

Linked to this, the third topic on the heterogeneity of national regulatory settings was discussed, considering the role of the European Commission in helping member states improving the business environment and regulatory landscape. Specifically, **Mario Nava** noted that multiple EU member states are currently enhancing their capital market regulations in alignment with guidance from the European Commission DGCOMP. These improvements center on areas such as transparency, public listing practices, and the governance of voting rights within publicly listed companies.

When **Davide Luparello** asked about the factors contributing to diverse economic performances among EU countries, especially between Southern and Northern EU nations, **Isabel Vansteenkiste** pointed out that although firms in different EU countries encounter varying financial obstacles, the degree of heterogeneity has been decreasing in recent years, partly due to initiatives like the Next Generation EU. **Niklas Garnadt** encouraged the panel to delve into what it would take to eliminate barriers to doing business in the EU beyond improving and standardizing rules for public listing and addressing financial frictions. **Mario Nava** responded by highlighting how varying legislations have led to segmented bond markets in Europe. **Filippo Biondi** raised the issue of whether firms' location in the United States rather than Europe should be a concern, assuming well-functioning competitive markets. Finally, **Vincent Aussilloux** inquired about the EU's ability to compete in the context of the Green Transition. **Declan Costelo** argued that the EU's means do not allow for Green Transition strategies reliant solely on public support, as seen in the United States. Instead, the EU should emphasize complementarity with the market economy, as the Green Transition is crucial for overall competitiveness.

To conclude the panel, the discussion moved to the role of market power on inflation and the need to address it in monetary policy. **Isabel Vansteenkiste** emphasized the recent evolution of monetary policy, which has begun incorporating standard monopolistic competition models alongside more comprehensive investigations into market power dynamics. Understanding markups, which significantly influence price dynamics, is now imperative for monetary policy. She also stressed the importance of deeper analysis that interweaves macro and micro-level considerations. **Mario Nava** pointed out that measures related to pandemic relief have increased the number of firms in the markets, subsequently mitigating markups and markdowns. He suggested that research should focus on counterfactual scenarios in a business environment devoid of frictions. **Emily Sinnott** called for a more in-depth analysis of which firms are negatively affected and which benefit from rising markups and markdowns. **Declan Costelo** concluded by underscoring the resurgence of the productivity narrative amid successive crises and escalating geopolitical tensions. The EU faces the challenge of striking the right balance between reforms, incentives, competitiveness, and finding the appropriate equilibrium between national and European-level actions.

## Friday, 20 October 2023

### Session 3 – Reallocation and Productivity

In this session, chaired by Alessandro Turrini, the focus was on reallocation and productivity.

Filippo Biondi (KU Leuven) started presenting his paper "Declining Business Dynamism in Europe: the Role of Shocks, Market Power, and Technology", co-authored with Matthias Mertens, Sergio Inferrera, and Javier Miranda. The paper examines the decline in US business dynamism over the past decade, highlighting factors like demographic shifts, reduced knowledge diffusion, increased market power, and technological changes. Using CompNet data from 19 European countries, the study suggests similar trends in Europe. The paper identifies changing patterns of business dynamism in Europe, with a notable reduction in job reallocation rates, predominantly influenced by within-sector dynamics and larger firms. While firms in Europe, akin to their US counterparts, are becoming less responsive to productivity shocks, Europe distinguishes itself with a decline in the dispersion of these productivity shocks. The authors propose a comprehensive framework that correlates differences in firms' market power and technology with job reallocation and firm responsiveness.

The discussion on the paper was presented by **Anthony Savagar** from the University of Kent. He highlighted that job reallocation has been observed to decline across the 19 European countries. This decline is more evident within specific sectors, size categories, and age groups rather than being a result of compositional changes. Larger and older firms exhibit the most significant decline in job reallocation, while younger firms are witnessing a decrease in sales and employment share. Furthermore, there's a discernible decline in employment responsiveness to productivity shocks in Europe. An essential point raised in the discussion is the paper's omission of measuring firm entry and exit, focusing instead on firms that are expanding or downsizing. This could introduce a potential bias in the results, especially if firm entry is on the decline, which would intensify the observed decline in job reallocation. Savagar underscores two primary channels contributing to the decline in job reallocation: 1) a decrease in the dispersion of firm-level productivity shocks, and 2) a diminished firm

response to these productivity shocks. Interestingly, while Europe and the US both exhibit these trends, they diverge in their manifestations, with the US showing an increase in shock dispersion.

**Flavien Moreau** (IMF) presented the paper "**How Costly Are Cartels?**", co-authored with Ludovic Panon. The paper investigates the economic impact of cartels on welfare and productivity. Moreau and Panon introduce a quantitative framework that extends the traditional oligopolistic competition model to include collusive behavior. Their static model, calibrated using French firm-level data, suggests that cartels' decisions impact the profits of their members. The findings, sensitive to the collusive parameter and elasticities of substitutions, indicate that eliminating cartels could boost aggregate productivity by 1.1% and enhance aggregate welfare by 2.0%.

**Leonardo Indraccolo** discussed the paper, praising its depth and methodology. He highlighted the paper's focus on the economic costs of cartels and pointed out that the paper's quantitative conclusions heavily hinge on three pivotal parameters: the collusive parameter and two distinct elasticities of substitutions. He proposed the idea of bounding the macroeconomic costs based on various combinations of these parameters, offering a more nuanced perspective on the presented figures. Indraccolo also sought further clarity on the transitional welfare costs, possibly related to capital accumulation.

### Session 4 – Market Selection and Misallocation Chair: Román Arjona Gracia

The session, chaired by Román Arjona Gracia, focused on market selection and misallocation.

Anthony Savagar (University of Kent) started the session presenting his paper "**Returns to Scale and Aggregate Productivity**", coauthored with Joel Kariel. The research focuses on the interplay between rising returns to scale (RTS) and the observed stagnation in productivity. The authors posit a theory suggesting that while recent technological advancements can amplify returns to scale, the stagnation in productivity remains a puzzle. The primary results of the paper indicate that an increase in RTS, brought about by reduced marginal costs, should ideally boost Total Factor Productivity (TFP). However, the rise in markups counteracts this effect, offering an explanation for the observed productivity slowdown.

The discussion on the paper was presented by **Riccardo Silvestrini** from the European Commission. Silvestrini commended the paper for its innovative approach, which combines known facts to present a fresh narrative on the combined role of RTS, overhead costs, and markups in influencing the trajectory of TFP. He emphasized the paper's non-US-centric approach, highlighting that the magnitude and implications of the discussed issues might vary across countries.

**Davide Luparello** (Pennsylvania State University) then presented his paper titled "**Productivity, Inputs Misallocation and the Financial Crisis**" on the 2008 credit crunch and its impact on input misallocation across EU countries. The study, using the EU Horizon 2020 MICROPROD dataset, focused on manufacturing firms in the EU. It revealed that the Financial Crisis's effects were not uniform, leading to varied financial frictions and influencing firms' input allocation decisions. Luparello introduced a dynamic approach to measure misallocation, contrasting the traditional static method. He emphasized the role of productivity shocks and adjustment costs in the misallocation process. The paper's conclusions highlighted the Financial Crisis's primary impact through productivity shocks and input allocation. It also suggested a need for a more adaptable approach to productivity distributions in future research.

**Benedicta Marzinotto** (Johns Hopkins University SAIS Europe) provided a discussion on Luparello's paper. Marzinotto recognized the paper's unique approach to understanding the differential impact of the Financial Crisis on input misallocation across EU regions. The discussion emphasized the paper's departure from traditional literature, focusing on dynamic misallocation with inherent frictions. Marzinotto also highlighted the paper's exploration of the transition from Total Factor Productivity growth to Marginal Revenue Product, underscoring the significance of productivity heterogeneity and shocks.

#### Keynote by Jan Eeckhout

The second Keynote, by **Jan Eeckhout** (UPF Barcelona, CEPR) focused on the role of monopoly and monopsony in driving wage stagnation.

### Session 5 – Firms Performance, Energy and Green Transition Chair Filippo di Mauro

The 9th paper of the day, titled "Rising Energy Prices and Productivity: Short-Run Pain Long-Term Gain?", was presented by Guido Franco (OECD). The authors, Christophe André, Hélia Costa, Lilas Demmou, Guido Franco, from the OECD Economics Department, investigated the potential impact of energy price shocks on firm productivity. They conducted an empirical analysis on a panel of firms from 21 countries, spanning the period 1995-2020. The study focused on heterogeneity across countries, sectors, and firm characteristics, distinguishing between short- and medium-term impacts and aimed to understand the channels behind these impacts. The paper's findings suggest that sharp energy price increases have a negative effect on productivity in the short term. However, the role of financial and macroeconomic conditions is crucial. Firms with larger cash buffers can better cushion energy price shocks, and those in external finance-dependent sectors are more exposed. The economic momentum also plays a role, with the effects tending to vanish when output is above potential.

The discussion by **Wouter Simons** (DG ECFIN) highlighted the importance of understanding the relationship between energy prices and productivity, especially in the context of the current energy transition. He also emphasized the need for further research to explore the channels through which energy prices impact firm-level productivity.

**Clara Kögel** (OECD) presented the last paper of the day, **"The impact of air pollution on labour productivity in France"**. The author discussed the impact of air pollution on labour productivity in France, considering the growing evidence of air pollution's subtle effects on cognitive abilities. Introducing a country-wide applicable estimation method for both manufacturing and service firms, the author relied on two interesting measures for air pollution (wind speed and Planetary Boundary layer Height (PBLH)). Results show that a 10% increase in PM 2.5 pollution led to a 1.5% decrease in labor productivity, mainly affecting service-intensive firms and sectors with a high share of skilled workers. This impact aligns with expectations of air pollution affecting cognitive skills, concentration, headaches, and fatigue in non-routine cognitive tasks.

**Flavien Moreau** (IMF) discussed the paper, complimenting the author for the topic choice, the great data (pollution and firm level data) and the relevant policy findings and implications. He then

suggested some possible improvements. In particular, he suggested further possibilities on the data side: including more detailed labor data and the demand channel could improve significantly the work. As conclusive remarks, the discussant added some comments on the PBLH definition, the need for further details on pollution's impact on cognitive skills and the role of specific pollution sources (e.g., polluting plants, diesel cars).

**Filippo di Mauro** closed the 12<sup>th</sup> CompNet Annual Conference thanking all participants and manifesting great satisfaction on the presentations and overall discussions. He concluded remarking the importance of such events and reminding participants of the next Annual Conference.