CompNet The Competitiveness Research Network

1st CompNet Data User Conference

8-9 October 2019 in Paris hosted at France Stratégie jointly organized with CompNet and IWH.

Conference Takeaways

The conference started with the opening statements by Vincent Aussilloux from France Stratégie and CompNet's chairman Filippo di Mauro. They emphasized the importance of micro-based research and they warmly welcomed many colleagues of CompNet exchanging their experiences. The first keynote speaker, Philippe Martin, gave a brief introduction into the main objectives of the CompNet, namely "productivity and competitiveness". He argued that productivity is crucial as a policy goal, while competitiveness being a more relative concept could only be improved at the expense of others. Especially in the context of increasing European integration, national policymakers should, therefore, try to target productivity to reach pareto-efficient improvements.

Session 1: Productivity and Trade

The first session focused on the relationship between productivity and trade. In the first study presented by Jan Teresinkski "Total factor productivity and terms of trade" the effect of positive terms of trade shocks on total factor productivity (TFP) was investigated. From a theoretical point of view, he argued that a positive shock would decrease subsequent knowledge accumulation and TFP growth. The labor demand in tradeable goods production would increase while discouraging labor in research and development. The empirical findings using TFP indicators from the CompNet dataset confirmed this. The subsequent discussion raised the notion that R&D expenditures might also be encouraged, if there is a long-run increase in terms of trade triggering investment in the export sector.

The second presentation by Emanuele Forlani "Revisiting the link between firm productivity and aggregate exports" was scrutinizing the relationship between firm productivity and aggregate exports by estimating the country-sector-year gravity model and explaining country fixed effects with productivity distribution. The researcher extracted exporting country fixed effects at the sector-year level net of destination country fixed effects and dyadic terms. This work can be seen as an essential contribution to explain the gravity equation's country fixed effects by looking at the productivity distribution and may help to understand the main drivers of trade flows. In the discussion, several ways were insinuated to gain more robust results for increasing the explanatory power of the research project.

The third presentation led by Anthoine Berthou "Productivity, (mis)allocation and trade" investigated the effect of trade liberalization on productivity. The goal is to understand better if export and import induce better allocation of resources or whether initial misallocation could hamper these gains from trade. The empirical evidence suggested that both exports and imports increase the labor productivity in the economy. However, more efficient institutions were found to amplify gains from import competition while dampening gains from export expansion. Interestingly, the improvement due to exports seemed to have stemmed from reallocation while import competition only raised average productivity.

Session 2: Labour and Productivity

The second session of the conference was dedicated to the topic of labor and productivity. In the first presentation, Ladislav Wintr "Employment protection and firm-level job reallocation: Adjusting for coverage ", investigated the effect of employment protection legislation (EPL) on allocation of workers with special focus on different coverages of EPL in different sectors and countries. The empirical evidence shows that, after adjusting for different levels of coverage of EPL, it has a significant negative effect on firm growth and induces firms to stay in their size-class. A crucial suggestion for the enhancement of this research project is to look into the "holes" in the firm-size distribution. Some firms might want to grow, but are worried of losing their exemption status and facing the downsides of stricter employment regulations. The results indeed match with the theory, but there might still be room to enhance the research project by utilizing further CompNet indicators available in the CompNet dataset.

In the second presentation, Daniele Aglio "Micro-based dataset for collective bargaining and productivity analysis" provided an insight into his research on collective bargaining and productivity based on merging the CompNet dataset with the Wage dynamic Survey run by the ECB in three different vintages. By compiling and studying this dataset he found signs of decentralization through firm-level negotiation in the CEE countries and multi-level bargaining in the non-CEE countries. Further research needs to be done to evaluate the mechanisms behind these findings. In the subsequent discussion it was also pointed out that in a two-tier system firm level bargaining does not topple the country or union wide bargaining; instead it augments the multi-level bargaining, which should be addressed. Apart from that it was suggested to use the full distribution of variables like TFP, not just the mean in regressions utilizing the full explanatory power of CompNet data.

The presentation by Luke Rehill "Globalisation, productivity and the labour share" concluded the second session while focusing on globalization and the declining labour share. In the discussion it was emphasized that there indeed exists a downward trend in the labour share in the world's four biggest economies. The reasons for such a trend are still unclear and the author was testing whether it might have been caused by the technological change, globalization or market power. The discussant suggested highlighting the importance of studying the labour share movement due to the theory of production inconsistency (this trend is inconsistent with the Cobb-Douglas production function which implies a constant labour share).

Session 3: Trade and Firm-Heterogeneity

The third session dealt with firm heterogeneity and firm-level evidence as well as issues affected by these in the context of trade. Moreover, the presenters explicitly discussed aspects of public policies and the effect of a single currency and its implications on trade. The first presentation by Paloma Lopez-Garcia "Markups and Productivity under Heterogeneous Financial Frictions**"** dealt with the characteristics of firm heterogeneity and trade in EU countries and was also providing patterns and impacts of exporting. Through the empirical analysis utilizing CompNet data, the presenter could support following theoretical trade aspects. Most firms which are engaged in trade are very productive and very large and secondly, in most cases, exporters are also importers and vice versa. Moreover, the crucial point is that international trade is increasing aggregate productivity growth. Finally, the results support the importance of scale and cross-border production aggregate growth, which may be helpful for the design of trade policies.

The second paper was presented by Raphael Lee with the title: "How effective are public policies in a context of rising heterogeneity?" This project emphasized the vital relation of exogenous shocks, either from monetary or fiscal policy, on dependent variables at firm level like the output or investment. A refinement of the empirical analysis is needed because in CompNet different countries have different production functions, which cannot be compared directly. This needs to be addressed and means that TFP estimates cannot be pooled together and it also entails that heterogeneity can only be addressed within each country. Furthermore, it was suggested to additionally look at other instruments of monetary policy instead of only interest rates.

The recent paper by Tibor Lalinský "The effect of the single currency on exports: comparative firm-level evidence**"** tested the heterogeneity of the euro effect on the two relatively new EU members Slovakia and Estonia. There exists a reduction of trade prices due to lower transaction costs or increased competition; possibly trade of some new goods. As the countries of interest are relatively small given the EU average, they have little influence on the equilibrium prices in the euro area. The results are that the introduction of the euro in Slovakia has raised the exports due to the transaction cost channel and while no effect was observed for Estonia. Lastly, more productive firms benefit more from the introduction of euro currency.

Session 4: Allocation of Capital and Financial Markets

The fourth session started with a keynote speech of Gilbert Cette, Banque de France, focusing on the allocation of capital and financial markets. Throughout this session it was highlighted how crucial data at the firm level is. Important characteristics of the firm, such as capital allocation or the ability to access credit, display a high degree of heterogeneity along the whole distribution. Cette highlighted the existence of an inverted-U relationship between financial constraints and productivity – especially in those sectors more exposed to credit needs - due to two mechanisms going in opposite directions: a positive one working through the productivity growth and a negative one working through the exit rates of incumbent firms. However, it was pointed out that political economy played a crucial role in shaping the size of the cleansing effect as firms with low financial constraints tend to survive more after the crises. This brings the need of a period differentiation in the analysis.

With the next presentation by Behzod Alimov, "Private debt, public debt, and capital misallocation", the focus shifted on how private – both corporate and household – and public debt influence capital misallocation. Through a detailed analysis, the author attempts to show how the rise in private debt tends to exacerbate capital misallocation especially in sectors with high financial dependence. Surprisingly, public debt did not play any role in shaping the allocation of capital, whereas corporate debt has a three times more significant effect on the cap misallocation than the household debt. This implies that private debt accumulation amplifies the negative impact of financial frictions and market imperfections on productivity. However, the channels through which private debt influences capital allocation are still not entirely clear, especially regarding the difference in magnitude between household and corporate debt. A more punctual analysis should be carried out in order to check whether private debt has an impact on financial stability.

The previous presentation by Alimov raises a legitimate question, i.e. whether the current credit allocation is efficient and how to measure this efficiency? Fadi Hassan investigated this in his presentation on "Financial markets and the allocation of capital: The role of productivity". The novelty presented in this study concerns the use of the productivity level to measure efficiency in the allocation of capital rather than real value added, reaching different conclusions with respect to the traditional approach. The authors acknowledged that the role of productivity in shaping the allocation of capital is heterogeneous along firms' dimension; therefore, they split the analysis by dimension to account for this heterogeneity. Other suggestions were made, especially regarding the splitting of the time sample due to the variation in credit supply and constraints on the side of financial intermediaries.

The last presentation of this session was given by Laszlo Tetenyi and focussed on "Financial heterogeneity and trade liberalization in Europe". The author shed light on how capital markets and financial heterogeneity affect the gains from trade. From the analysis presented, it was pointed out that financial heterogeneity might have a detrimental effect on the gains of trade. The theory proposed was that zombie firms that are doomed to exit the market could get an extra investment stimulus through trade liberalization, which would in turn divert this investment from other more productive potential exporters. Hence the effect of trade liberalization hinges on the financial market development. However, it was pointed out that other measures of collateral constraints could have been employed as a robustness check. In the discussion it was pointed out that R&D expenditure, which would also be stimulated through export prospects, could be worthwhile to the analysis. In addition to this, it was noted that idiosyncratic labour market institutions should have been taken into account into the analysis as they differ substantially across countries. Lastly, a general assessment from a social welfare and policy perspective was suggested to the speaker.

Session 5: Labour+ Extra Session on Split Data Sets

In the fifth session, Richard Bräuer introduced a new methodology for estimation procedures in his presentation on "Embarrassingly parallel GMM over split data sets. Mr. Bräuer argued that the linear GMM estimator can be decomposed into the ratio of two cross-product matrices. This matrix product can be computed within each data set and then be aggregated. The critical result is thatthe estimates which are obtained are the same than the ones obtained using pooled data (which are not available in CompNet). The drawback is that no inference would be available using the proposed methodology to test the goodness of fit. One application presented was the estimation of production functions across countries with a common estimation basis. However, it was also noted that this implies common technologies in all countries, which is rarely the case and might therefore result in biased results. In such cases, there would be a trade-off between cross-country comparable TFP measures and unbiased estimation

In the last presentation, Tina Zumer introduced her co-authored work "What drives wages in the CEE EU countries? A comparative Philips curve approach from a macro and micro perspective". The authors investigate the reasons why wages grow in the Eastern Europe, but not in the Euro area. Starting from a comprehensive analysis of the Phillips curve in both regions, the speaker pointed out how substantial differences in the two curves are present, with the PC of the Euro Area being flatter and thus inducing a lower response there. While doing the analysis, the authors were able to utilize the CompNet data to better understand the micro-dynamics of these macro developments. Other possible reasons of this phenomenon might lie in differences in institutional frameworks (e.g. minimum wages) and in the difference in the dispersion of wages.