

CompNet The Competitiveness Research Network



CompNet Newsletter No.11 - June 2014

CompNet Research Output

CompNet Research Output has been recently enriched by the four working papers, one policy brief and one VoxEU.

WORKING PAPERS

Euro area external imbalances and the burden of adjustment Authors: Filippo Di Mauro, Francesco Pappadà

Paper available at: <http://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1681.pdf>

► *This paper has the aim to explore the consequences of the correction of Euro area trade imbalances on real exchange rates. This analysis requires one additional dimension with respect to the standard Global Imbalances framework à la Obstfeld and Rogoff (2005), since the adjustment takes place within and outside the Euro area.*

► **Main result:** *Both types of adjustments are analyzed in a three-country general equilibrium model with a tradable and a non-tradable sectors, and heterogeneous firms built upon Pappadà (2011).*

ECB (CompNet) data are used to measure the differences in firm size and productivity dispersion across Euro area countries. With respect to the surplus country (Germany), countries running a trade deficit (Spain, Italy) are characterised by a productivity distribution with a lower mean and a less fat right tail. This increases the relative price movement associated with the external adjustment because of the limited role played by the extensive margin. We show that the real exchange rate movements are underestimated when the cross-country differences in terms of productivity distributions are neglected.

Vertical differentiation in export markets Authors: Francesco Di Comite, Jacques-François Thisse, Hylke Vandenbussche

Paper available at: <http://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1680.pdf>

► *This paper proposes a new model to put consumer preferences more central in trade theory and to relax the typical symmetric demand assumption. It enriches a "love-for-variety" model such that the demand for each firm-product in every export market is unique and characterized by a unique level of horizontal and vertical product differentiation..*

► **Main result:** *Cross-sectional Belgian firm-product level export data shows that within firm-product export prices vary by destination. Data also shows that within firm-product export prices across destinations are strongly correlated. This implies that high versus low priced varieties in one country continue to be high and low priced varieties in another country, with few reversals in price rankings across varieties. This suggests that quality and production costs, two important determinants of prices, are intrinsic to a firm-product variety independent of where a variety is shipped to. Results also show that export quantities of within firm-products are much more volatile and correlate only weakly across destinations.*

Mapping global value chains Authors: Koen De Backer, Sébastien Miroudot

Paper available at: <http://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1677.pdf>

► *The main objective of the paper is to provide for more and better evidence allowing to examine the position of countries within international production networks. The paper develops a number of indicators that give a more accurate picture of the integration and position of countries in GVCs. It also provides a more detailed assessment of global value chains in six broad industries.*

► **Main result:** *Empirical data on trade and output confirm the fragmentation of production and the emergence of global value chains. On average more than half of the value of exports is made up of products traded in the context of global value chains. Successful emerging economies have become more specialised in intermediate inputs and generally increased their “upstreamness”. This can be seen in particular in Asia. However, global value chains are not limited to Asia; all OECD regions show a comparable level of participation in GVCs, differences being between large economies producing a significant share of their intermediates domestically and small open economies relying more on international sourcing. While most studies on GVCs have focused on Asia, Europe shows a comparable if not higher level of participation in GVCs.*

Identifying hubs and spokes in global supply chains using redirected trade in value added Authors: Arjan Lejour, Hugo Rojas-Romagosa, Paul Veenendaal

Paper available at: <http://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1670.pdf>

► *The paper creates indicators that can consistently identify the hubs and spokes in global chains by industry and country. By analysing the value added of trade at the sectoral level the paper links global trade patterns with global supply chains. For that purpose authors define global supply hubs as those industry-country pairs that use a relatively large share of imported value added in producing output for final use abroad.*

► **Main result:** *Paper calculate indicators from global input-output tables derived from the GTAP database for the years 2001, 2004 and 2007, which clearly identify the spokes and hubs in global supply chains. Global production networks are mainly located in the EU27, the NAFTA region (USA, Canada and Mexico) and the Asia-Pacific region (China, East Asia and Southeast Asia). Within these regions, some subregions act like hubs in a regional network. For instance, the region EU12 (the new EU member states) is a hub for EU15 (the old EU member states). While the EU27 and NAFTA are mainly “regional” hubs that are sourced within their trading block, the Asia-Pacific region –and in particular China– are truly “global” hubs that are both sourced by many regions and supply the world markets with final goods.*

POLICY NOTES

Eurozone external adjustment and real exchange rate movements: The role of firm productivity distribution Authors: Filippo Di Mauro, Francesco Pappadà

Article available at: <http://www.voxeu.org/article/exchange-rates-and-trade-adjustment-fat-tails-matter>

► *Trade imbalances in the Eurozone require relative price adjustments. This column argues that the traditional ‘elasticity’ approach is lacking when thinking about the adjustment magnitude. Exports adjust when exporting firms sell more (intensive margin) and new firms start exporting (extensive margin). The extensive-margin reaction depends upon the fatness of firm-level productivity distributions. Surplus-country distributions have fatter tails than deficit countries, suggesting that the price adjustment magnitude may be larger than traditional calculations suggest.*

CompNet Policy Brief No.6: Global value chains reshape our policy thinking Authors: Koen De Backer, Sébastien Miroudot

Article available at:

http://www.ecb.europa.eu/home/pdf/research/compnet/Policy_Brief_no_6.pdf?ce46c149d4cb617fafeefe8bc139bb36

► *The international fragmentation of production in global value chains (GVCs) challenges the way we look at the global economy. It is essential to understand how global value chains work, how they affect economic performance, and how policy can help countries to derive benefits from their participation in GVCs. The policy implications are diverse and include trade policy, investment policies, innovation policies, and framework and structural policies that directly affect how, and to what extent economies can benefit from global value chains.*

The **CompNet Research Pipeline**, which contains a list of on-going projects, is available at: http://www.ecb.europa.eu/home/pdf/research/compnet/CompNet_ongoing_research_pipeline.pdf?1db876bd20650adb40d2eb93e63e2034. In case of any additional project to be included or any information to be updated, please e-mail us at compnet@ecb.europa.eu.

CompNet Workshops and Events

► The forthcoming CompNet Events include:

30 June-1 July 2014: CompNet workshop at ECB, Frankfurt am Main

The agenda of the workshop can be found at:

http://www.ecb.europa.eu/home/pdf/research/compnet/20140630/20140630_agenda_CompNet_meeting_Frankfurt.pdf?5ed93cae55a4e244b2127e7982c923ff

18-19 September 2014: CompNet workshop in Lisbon

News from the Workstreams

Workstream 1 (WS1) - Aggregate-macro indicators

- There was significant progress in writing the Compendium paper. The group of volunteers wrote the descriptions of the CompNet novel indicators thus producing a "user guide" for analysts and policy makers. The first draft of descriptions was internally discussed with major users of Compendium – economists from Convergence & Competitiveness division, DGE-DED. The Compendium team already wrote several boxes with stylized facts that provide an example of the use for above-mentioned CompNet novel indicators. The first draft of the Compendium will be finalized by end June and presented in the next CompNet workshop in Frankfurt.
- One paper has been submitted to the ECB Working Paper series: "A consistent set of multilateral productivity approach-based indicators of price competitiveness" by Christoph Fischer and Oliver Hossfeld.
- The selected joint projects currently in the pipeline are:
 - i) A Diagnostic Toolkit for Competitiveness Assessment (Konstantins Benkovskis, Benjamin Bluhm, Elena Bobeica, Chiara Osbat, and Stefan Zeugner)
 - ii) Case study of the European automotive industry (Alexandru Leonte and Lucia Orszaghova);
 - iii) Transmission of shocks in capital flows and competitiveness in selected European economies (Karsten Staehr and Robert Vermeulen).

Workstream 2 (WS2) - Firm-level

- On May 14th, the revamped codes encompassing all the improvements and additions suggested during the last CompNet workshop in Rome were sent to the country teams. At the closing date of this newsletter we had received already data from 8 teams. We are expecting the rest to be sent over the next days.
- Research coordinators will use these new data to show some cross-country basic facts on trade, financial, labour and mark-ups in the next CompNet workshop, to be celebrated in Frankfurt. We expect that each of those presentations will be used as basis for a thematic working paper showing a selection of cross-country stylised facts.
- The ECB team, on the other hand, will update the methodology paper with information on the new database as well as some cross-module preliminary results.

Workstream 3 (WS3) - Global value Chains (GVC)

- Ongoing research in WS3 is focused on three areas: first, the impact of GVCs on spillover effects and imbalances, second, the implications of GVCs on the domestic economy (productivity, employment, distributional aspects), and third, the link between GVC analysis and firm-level data. The first topic covers research on spillover effects of the global recession in 2008/2009, on possible implications of GVCs on trade elasticities, and on the computation of real effective exchange rates using value added instead of gross trade. The second topic includes work on the impact of GVCs on macroeconomic performance, distributional aspects, sectoral developments and implications for the labour market. The third topic tries to create a link between GVC analysis and firm-level data. The main idea for future work is to explore the information on the imports of intermediate products at the firm level to compute a proxy of

foreign value added in exports. Nevertheless, this information is available only for some countries.

- Some GVC indicators are now included in the Compendium.
- Efforts are currently ongoing on the data front to analyse which data could most easily be used by researchers in the future, as the WIOD is not planned to be further updated. Therefore, N. Yaman from the OECD will present at the forthcoming CompNet meeting current developments and future expansions of the TiVA.
- In this vein, three projects are planned to be presented in the WS3 sessions at the June CompNet workshop:
 - i) Global spillover effects due to GVCs – a network analysis (M. Endr  sz and F. Skudelny)
 - ii) The dog that did bark? Changes in global value chains during the great trade collapse (A. Nagengast and R. Stehrer)
 - iii) Getting into the flow – Global Value Chains and Current Account Imbalances (F. Trottner, G. Georgiadis and J. Gr  b)

Further Information

- All relevant information and documents on objectives and output of the network can be found on the **CompNet website** at: http://www.ecb.europa.eu/home/html/researcher_compnet.en.html. For further information or suggestions, please e-mail us at compnet@ecb.europa.eu .