



**12<sup>th</sup> CompNet Conference**  
**“Productivity and External Imbalances”**  
**Prague 21-22 April 2016**

**Thursday, 21 April 2016**

**Welcome address**

***Miroslav Singer, Governor, Czech National Bank***

The 12th CompNet conference, jointly organized with the Czech National Bank, was introduced by the Governor of the CNB, Miroslav Singer. He mentioned that central banks around the world find themselves in exceptional situations these days, with substantial changes to their “standard” monetary policy toolkit. The conference was therefore a very welcome opportunity to exchange insights on various topics that are of great importance to enhance the understanding of old and new policy tools, as well as to improve the forecasting instruments of central banks. First, Singer argued that it is important to understand how to analyse the key drivers of firms’ exports, in order to spur domestic growth and help firms to expand their activities into foreign markets. This is even more important when firms’ resilience to shocks needs to be strengthened. Secondly, the conference allows enhancing our understanding of how a more efficient reallocation of resources can help to foster output growth. Third, against the background of increasing interconnections across countries and firms via global value chains, it is crucial to understand the implications for the exchange rate pass-through and the transmission of shocks.

**Introductory remarks**

***Filippo di Mauro, European Central Bank***

Filippo di Mauro, chairman of the Competitiveness Research Network (CompNet), emphasized in his introductory remarks the importance of studying competitiveness-related topics given that progressing trade liberalization – and globalization in general – have substantially increased the international competitive pressure on firms. He briefly recapped the achievements of the network that aims at providing a robust theoretical and empirical link between drivers of competitiveness and macroeconomic performance for research and policy analysis.

In its fourth year, the network comprises about 200 economists from more than 50 institutions that engaged in several projects focusing on productivity, financial constraints, intra- and extra-euro area trade, price and cost competitiveness, investment decisions, corruption and many other related topics. The network members have produced a total of 45 working papers in the series of the ECB; among them several have been published in peer-reviewed journals or are currently under review. The network has also intensified its interaction with other international organization, e.g. the World Bank (ongoing pilot project

using CompNet methodology on World Bank data and major upcoming joint conference planned for mid-October) and the EU Commission.

## Session 1

### Export performance and current account determinants

Chair: Joao Amador, Banco de Portugal

#### **Grin and Bear it: Producer financed exports from and emerging market** ***Beata Javorcik (Oxford University) and Banu Demir (Bilkent University)***

The paper by Beata Javorcik and co-author investigates how one specific factor, the level of competition in exports, is able to influence the way of dealing with international transactions risk. Specifically, the authors study how the abolishment of the Multifiber agreement (MFA) quotas influenced Turkish export financing. During 1993-2003, Turkey and China were the leading exporters of textiles and clothing into the EU market (jointly accounting for 30% of imports to the EU). Chinese exports were subject to MFA quotas which were abolished (with some exceptions) on 1 January 2005. The authors use the end of Chinese export restrictions as an exogenous shock in order to identify the degree of export competition faced by Turkish firms. By using a diff in diff approach, the authors show that a higher degree of export competition leads exporters to bear more risks. Turkish exporters, according to their results, reacted to the abolishment of MFA quotas by increasing the share of exports on OA terms, therefore, taking on additional risks as their bargaining power decreased after the shock.

**Discussion:** *The discussant David Haugh (OECD) stressed the importance of extending the analysis to other countries besides Turkey. Moreover, he questioned the existence of possible survival biases, addressed by the authors using fixed effects, and highlighted the importance of controlling for differences between exporters under the MFA and exports not subject to the MFA.*

#### **Estimating the effect of exchange rate changes on total exports**

***Thierry Mayer (Science Po) and Walter Steingress (Banque de France)***

The paper presented by Walter Steingress, deals with the effect of real exchange rate on exports. It re-visits the theoretical foundations of macro level Real Effective Exchange Rate (REER) regression and assess whether the macro level approach is compatible with the “meso-level” approach. The authors, by calibrating their model, are able to assess and quantify estimation biases arising from applied work and run a number of counterfactual policy experiments (e.g. an appreciation of the Euro, the closing of current account imbalances in the EU area). The authors conclude that the main sources

of aggregation bias are (i) model misspecification, as well as (ii) omitted variables. However, with the proposed unique elasticity of substitution (structural gravity), it is possible to go from the “meso” to the “macro” level with no aggregation bias. The estimation bias raises instead fewer concerns, and seems to arise mainly from the elasticity of demand.

**Discussion:** *The discussant David Haugh (OECD) pointed to the possibility of extending the analysis to the long run effects on welfare and to use the model to estimate the effect of stabilizing EU current accounts.*

### **Corporate Investment and the Real Exchange Rate**

***Mai Dao, Camelia Minoiu and Jonathan D. Ostry (International Monetary Fund)***

The economic literature identifies three main channels through which exchange rate variations can affect medium- term firm outcomes through investment, namely: the competitiveness channel, the balance sheet channel, and the aggregate lending channel. The authors investigate instead an alternative channel through which exchange rate variations can affect short-term firm outcomes through investment, namely the internal financing channel. The channel identified by the authors: highlights how exchange rate variations affect investments via internal financing capacity and cash flows; with its effect going in the opposite direction of external finance for tradable-sector firms and operating both in crisis and in normal times counteracting the balance sheet and lending channel.

**Discussion:** *The discussant David Haugh (OECD) highlighted the importance of using alternative measures of financial development. Moreover, he suggested providing results linked more strongly to policy (for example that smaller firms benefit more from exchange rate depreciations).*

### **Keynote speech**

***Jan de Loecker (Princeton University)***

Jan de Loecker from Princeton University mentioned in his introduction that the topics on firm performance and competition have received a large amount of attention as shown by the rapidly growing literature focussing on these issues. A critical component of the work is to estimate production functions in order to recover measures of productivity. In his speech, De Loecker presented a general empirical framework that allows recovering the underlying components of firm performance and identifying productivity without committing to any particular demand system and a model of competition. De Loecker shows that with sales and expenditure data alone, one cannot, in general, recover the underlying components of firm performance or identify productivity. One would need either to collect more detailed data, in particular for price changes, or making additional assumptions that will allow for a unique identification. The key question is not whether or not one needs assumptions, but which set of assumptions is less restrictive. As an example,

de Loecker presented a very recent paper that examines how prices, markups and marginal costs respond to trade liberalizations in India. The authors develop a framework to estimate markups from production data with multi-product firms. The approach does not require assumptions on the market structure or demand curves faced by firms, nor assumptions on how firms allocate their inputs across products.

## Session 2

### Resource Misallocation

Chair: Eric Bartelsman, VU University Amsterdam

#### Assessing the Labour Reallocation Process in Europe: Productivity-enhancing or not?

**Paloma Lopez-Garcia (European Central Bank), Eric Bartelsman (VU University Amsterdam), Giorgio Presidente (OECD)**

The authors underlined the importance of shifting resources from low productive to high productive firms, in order to have a productivity enhancing allocation of resources. The paper presented addresses two main questions:

1. Is input reallocation productivity enhancing in Europe and why?
2. Does productivity enhancing reallocation vary over the cycle?

In order to answer these questions the authors use the CompNet database and specifically employment growth data for six euro countries, over a twelve years period. They conclude that factor reallocation is an important source of aggregate productivity growth and that indeed factor reallocation is productivity-enhancing although there are differences across countries. Contrary to what predicted by theoretical works, productivity-enhancing reallocation slowed down during the great recession, partly due to the collapse in trade and partly due to the credit crunch.

**Discussion:** *The discussant Antoine Berthou (Banque de France) found the paper to be a very suitable application of the CompNet data that are particularly useful for cross-country studies. He suggested refining the identification strategy of the others in order to improve the credibility and robustness of the results. For example, Antoine mentioned in his discussion that the authors should better use an instrument for the “cycle” variable included as a covariate in the regression in order to avoid endogeneity bias. In a very similar vein, he suggested using more control variables for the “representative firm” characteristics in order to avoid omitted variable bias.*

#### Firm-Level Dispersion in Productivity: Is the Devil in the Details?

**Zoltan Wolf, Lucia Foster, Cheryl Grim (U.S. Census Bureau), John Haltiwanger (University of Maryland)**

Zoltan Wolf, U.S. Census Bureau, mentioned that an important finding of the literature is that productivity differences among establishments are large, even in narrowly defined industries. This conclusion holds for both revenue-based and

quantity-based productivity measures. The high dispersion is robust to alternative estimation methods leading to believing that estimation methods are not critical for this and other core findings. Wolf reports, however, that alternative methods yield conceptually different measures. This is important since one specific measure, the one à la Hsieh-Klenow, has become an important indicator of the degree of misallocation. More specifically, their insight is that dispersion in a specific revenue productivity measure reflects dispersion in distortions – under certain assumptions about production and demand. Wolf and his co-authors show that the conclusions in Hsieh-Klenow (2009) don't necessarily hold under alternative assumptions about returns to scale. The analysis is particularly relevant because evidence suggests often non-constant returns to scale.

**Discussion:** *The discussant Antoine Berthou (Banque de France) praised the work of Wolf as very useful since the HK measure is a frequently used tool in the recent literature. Berthou named a list of other possible determinants - apart from the assumption about constant returns to scale - that could potentially drive dispersion in TFPR, including market structure, adjustment frictions or counter-cyclical dynamics of TFPR dispersion as suggested by recent empirical findings.*

**Trade Liberalisation and Reallocation: the Role of Foreign Ownership**  
***Cagatay Bircan (European Bank for Reconstruction and Development)***

The author investigates the impact of trade liberalisation on cross-border investments, productivity, and innovation. Using the customs union agreement between Turkey and the European Union as a quasi-natural experiment, Bircan provides evidence that greater product market competition due to output tariff reductions leads to technological upgrading across Turkish firms. Drawing from firm-level information included in the manufacturing census, he concludes that unilateral trade liberalisation induces cross-border investments and productivity-enhancing innovations. It also induces more multinationals to provide finances and technologies, possibly due to higher product market competition.

**Discussion:** *The discussant Matteo Bugamelli (Banca d'Italia) defined the paper as an interesting and novel contribution to the literature, unveiling novel mechanisms of productivity enhancing trade liberalization. The discussant suggested replicating the results excluding the years when Turkey was hit by the crisis. Bugamelli points out that during the time-line considered by the author, 1995-2001, Turkey in 2000-2001 was hit by the financial crisis. Bugamelli suggested to better untangling the impact of the crisis by considering the period 1995-1998. Lastly, he suggested to the author to clarify further the channels through which foreign ownership could impact positively the productivity upgrading.*

**Capital and Labour (Mis)allocation in the Euro Area: Stylised Facts and possible Determinants**

**Elisa Gamberoni, Paloma Lopez-Garcia (European Central Bank), Claire Giordan (Banca d'Italia)**

Gamberoni presented recent work that aims at measuring the current degree of capital and labour misallocation across in Europe. The measure employed is the one proposed by Hsieh and Klenow. The HK suggest that in a context where there are no distortions, profit maximization ensures that returns to capital and labour (“marginal revenue product” of the two inputs) are the same across all firms in a sector, i.e. the dispersion is zero. Using CompNet data on five European countries and eight macro-sectors between 2002 and 2012, Gamberoni shows that the dispersion of capital productivity has increased in most euro area countries, remarkably in the service industry. The result can be explained by the rising in demand uncertainty. Moreover, reductions in product market regulation have inhibited these dynamics. Labour misallocation was very stable over the observed time horizon with only a slight increase in the manufacturing sector. This trend is explained by the changes in the degree of product and labour market regulations. Interestingly, while controlling for all other explanatory variables, the crisis had an efficiency-enhancing effect on both capital and labour.

**Discussion:** *The discussant Matteo Bugamelli (Banca d'Italia) praised the work of Gamberoni and co-authors as their framework accounts for the role of demand as a source of growth but also of uncertainty. He noted that the dependent variable used here, i.e. dispersion in marginal productivities, is not necessarily a measure of misallocation as shown for example in Asker et al. (2014). On the contrary, in a model with dynamic inputs and adjustment costs it could even be a measure for efficient (dynamic) allocation.*

## **Recent policy-relevant research by the European Commission**

### **Quality Adjusted Labour Productivity Index in the EU**

**Isabelle Remond-Tiedrez (Eurostat)**

Isabelle Rémond-Tiedrez presented a newly developed standardized methodology for the so-called Quality Adjusted Labour Index (QALI). The index is particularly useful to undertake multi-factor productivity and growth accounting analysis. According to Rémond Tiedrez, the key advantage is that it provides a broader picture of labour inputs into the production process, taking into account the heterogeneity of the workforce (e.g. age and skills). The QALI indicator combines both macro-data from National Accounts and micro-data from the EU statistics of the Labour Force Survey (LFS), the Structural Earnings Survey (SES) as well as the EU-Statistics on Income and Living Conditions (EU-SILC). By keeping track of the workforce composition, the index provides a broader and more complete perspective in assessing productivity performance. Data is available from 2002 to 2014, for each member of the European Union and the European aggregates: euro area and European Union as a whole.

### **European Wheel of Competitiveness**

***Letizia Montinari (European Commission)***

Letizia Montinari from the Joint Research Center (JRC) of Eurostat introduced the EU Wheel of Competitiveness (EWoC). It is a statistical reference framework for the analysis of the competitiveness stance of the EU28. Apart from the conceptual framework, it comprises a set of 35 variables, including five main dimensions (macro and micro), globalisation, and environmental as well as socio-institutional indicators. The main objective of the project is to provide all Eurostat users with a comprehensive and easy to-access framework that compares and harmonizes high quality statistical information for the analysis of competitiveness in the EU 28. The indicators that are part of the EWoC will be made available in September 2016 via the website of Eurostat.

### **Cost Competitiveness and Euro Area rebalancing**

***Gaetano D'Adamo and Josefina Monteagudo (European Commission)***

Gaetano D'Adamo has reported on recent evidence on the trade balances and labour costs adjustments in Europe. According to his work, some rebalancing has already materialized and some it is still ongoing. He emphasized that cost-competitiveness is key for intra-EA export performance and of vital importance for the rebalancing processes across countries. D'Adamo noted that, before the crisis, the observed export slowdown in many countries was driven by a worsening cost-competitiveness. Interestingly, quality is one of the elements defining non-cost competitiveness: while reducing labour costs can help in the short run, increasing quality is crucial for the long run competitiveness.

## **Friday, 22 April 2016**

### **Keynote speech**

***Andrew B. Bernard (Tuck School of Business at Dartmouth)***

The second day was opened by the keynote speech of Andrew Bernard. He explained that the emergence of GVCs raises many new questions to be addressed by researchers and policy-makers. A great deal of the focus is indeed on cross-border flows. We understand, however, only little about the firm-to-firm connections in GVCs and even less about structures and firm behaviours in domestic networks. Questions to be answered include for example, which firms connect, how geographic distances between firms are relevant, and how networks evolve over time. Bernard presented a paper that uses transactions among Belgian firms subject to the VAT, over 2002 and 2012, to identify a number of stylized facts. First, firms differ substantially in the number of connections they have to other firms with manufacturing enterprises having most of the connections. Second connected firms buy from and sell to all types of firms while less connected firms buy from and sell to big/connected firms only. In terms of geographic distance between connected firms,



Bernard showed that most connections are local only suggesting that distance plays a strong role in buyer-seller connections even in a small country like Belgium. Interestingly, firms that perform better in terms of turnover and TFP, source from multiple locations. Third, by drawing from the dataset on Belgian firms, he also showed that most exporting firms sell the majority of their output domestically, which raises the question of how important domestic networks are for international trade and in general the general country's export performance.

## Session 3

### Global Value Chains 1/2

Chair: Matteo Bugamelli (Banca d'Italia)

#### Overcoming The Middle-Income Trap: The Role of Global Value Chain Integration for Climbing up the Income Ladder

***Daria Taglioni, Deborah Winkler (World Bank), Victor Kummritz (Institut de hautes études internationales et du développement), Mauro Boffa (Université de Genève), Gianluca Santoni (Centre d'études prospectives et d'informations internationales).***

The study addresses whether the integration in global value chains (GVCs) helps countries avoiding the “middle-income trap”. The role of GVC integration in supporting countries climbing up higher income level is also analysed by Taglioni and co-authors. The main finding is that expanding and strengthening a country's participation in GVC increases the probability of transitioning to a higher income class. The results in more pronounced for low income countries. Similarly, growth in output per capita is higher for low income countries. According to the authors, the lack of impact on income growth in high-income countries may be due to unobserved heterogeneity. Once controlled for macro-economic conditions and time-invariant heterogeneity, integration into global production networks is positively correlated with GVC integration. In addition, both within-industry and cross-industry (buyer and seller) GVC linkages have positive and significant effect on per capita income, with the effect being larger for intra-industry linkage.

**Discussion:** *The discussant Jan Babecky (Czech National Bank) invited the authors to test further the robustness of their results. He suggested considering a shorter time-line, like 2008-2011, to see whether the results would change substantially. In addition he invited the authors to extend the analysis to new data e.g. the WIOD 2000-2014. Among other comments, he suggested to consider non-stationarity in their 2SLS specification and to test their hypothesis on country groups.*

#### Local or Global Outsourcing and Firm's Performance: Empirical Evidence from the Belgian Production Network

***Emmanuel Dhyne, Cédric Duprez (National Bank of Belgium)***



The paper combines an original dataset on Belgian firm-level exports and imports with WIOD data for the period 2002-2011, the authors are therefore able to characterise the length of production chains in which Belgian firms are involved. The relevant role performed in the chain by these firms is also analysed by Dhyne and co-author. The results proposed support the idea that larger TFP growth is associated with firms' participation in production chains. The position of the firm in the chain affects its contribution to the value added embodied in the final good, and in addition, affects its survival. A theoretical model of organization of production chains is also proposed by the paper.

**Discussion:** *The discussant Jan Babecky (Czech National Bank) pointed that additional robustness checks considering different time frameworks would be optimal. He invited the authors to verify their results considering two different time periods, e.g. 2000-2008 and 2009-2011. As for the previous paper, he suggested to use the recently updated WIOD. He also suggested showing some stylized facts in order to provide a more comprehensive view.*

### **Peak Trade? An Anatomy of the recent Global Trade Slowdown**

**Marcel P. Timmer, Bart Los, Gaaitzen J. de Vries (University of Groningen), Robert Stehrer (The Vienna Institute for International Economic Studies)**

As a matter of fact, global trade is shrinking compared to world GDP. The literature links this shift in world trade to the structure of demand and production. The authors analyse the slowdown in global trade by focusing on the changes in international trade, and including in the analysis the structure of final demand and the effects of changes in production fragmentation. They use the updated WIOD, for the period 2000-2014, to account for changes in global trade elasticity. They decompose this change into change in global production structure and change in global demand, in order to distinguish their impact. Results show that after the crisis the slow-down in trade growth was not due to changes in supply chain, which had actually a positive impact, but changes in the demand structure.

**Discussion:** *The discussant Jan Babecky (Czech National Bank) explained that it would be useful for the paper to perform the analysis on the basis of constant price series and with annual data. He invited the authors perform regression analysis to account for the dynamics and concludes suggesting to consider the decomposition at country level.*

## **Session 4**

### **Global Value Chains 2/2**

Chair: Lubos Komarek, Czech National Bank

### **Global value chains and effective exchange rates at the country-sector level**



**Nikhil Patel (Bank for International Settlements), Zhi Wang (United States International Trade Commission) and Shang-Jin Wei (Asian Development Bank, Columbia University, NBER, CEPR, and CIER)**

The paper proposes a new model of Real Effective Exchange Rate (REER) that better captures movements in competitiveness, while creating a database of country and sector level REERs using data from World Input Output Database (WIOD). The conventional model ignores intermediate inputs and heterogeneity across sectors and within countries, and has stringent assumptions on the elasticity of substitution in production and preferences. The new model uses sector and country level REER weights and incorporates sector level price indices and different elasticities of substitution. The measure derived is an improved measure of REER along four dimensions:

1. Trade in intermediates and distinction between gross and value added flows
2. REER indices at the country-sector level
3. CES production functions and preferences with elasticities estimated from the data
4. Use of sector level prices instead of aggregate country level prices

**Discussion:** *The discussant, Beata Javorcik (Oxford University) advised on using this tool to study competitiveness asymmetries within the Eurozone.*

#### **Global value chain participation and current account imbalances**

**Johannes Brumm (University of Zurich), Georgios Georgiadis (European Central Bank), Johannes Gräßl (European Central Bank) and Fabian Trottner (Princeton University)**

The authors link the rise of global value chains (GVC) participation to the emergence of current account (CA) imbalances, with GVC participation raising CA by improving competitiveness and by temporarily boosting exports. The paper proposes a theoretical framework that models this relationship, and estimates a CA regression built on the IMF External Balance Assessment (EBA) framework. Overall, the authors find that the GVC participation accounts for an economically significant part of unexplained CA imbalances.

**Discussion:** *The discussant, Beata Javorcik (Oxford University) questioned the focus of the authors on transitory shocks and whether these shocks can be regarded indeed as transitory, and highlighted a number of other sources influencing the relevant relationship.*

## **Session 5**

### **GVC research going forward**

Chair: Filippo di Mauro, ECB

#### **Introductory remarks**

***Bart Los (University of Groningen)***

Bart Los presented an update on the WIOD database. At the moment, the database covers the period 2000-2014, about 60 industries as well as additional countries. The WIOD is also available at regional level, covering 240 regions and most EU countries. The period covered is the 2000-2010, with more than 50 products and 10 industries for which the data is available. Bart Los presented a number of applications and concluded that it is important to integrate further micro and macro data. He also added that there is a fundamental need of improving the data that are currently used to compile the input-outputs tables (e.g. in terms of consistency between National Accounts statistics and bilateral trade data).

**Global Value Chains, Inflation Co-movement, and the Globalisation of Inflation**

***Raphael Auer (Bank for International Settlements and Swiss National Bank)***

The author links the rise of spillovers of global shocks into national PPI to the extensive participation of firms in global value chains. Due to the linkages arising by the purchase of inputs on a global scale, the co-movements of PPI inflation across countries are sizable and more than doubled in recent times. The author argued that there is a need to extend the research in several directions, including (i) tackling the transmission mechanism from PPI to CPI, (ii) analysing the transmission of small vs drastic shock, as well as (iii) better quantify “openness” and its impact when production processes are internationally contestable.

After the presentations, a couple of short interventions were made by participants from the stage and the floor. Daria Taglioni (World Bank) emphasized that it is crucial to evaluate and harmonize different methodologies, also benefitting from synergies of different datasets. Dalia Marin (University of Munich) presented a recent example from her research asking whether GVCs increase exports. Data from EFIGE confirms the theoretical predictions, which suggest that offshoring and reorganization of firms spurs productivity and exports. Marcel Timmer (University of Groningen) made clear that different databases with different focusses are necessary to address the variety of questions that are currently debated in GVCs research. He added that the increasing interconnections through GVCs across countries and firms leads to blurred country borders. Beata Javorcik (University of Oxford) observed that this implies that firms are increasingly competing on a global level and not on local/country-level anymore.

Concluding the discussion which unfolded after the presentations, the Chair urged CompNet members, particularly the ones mostly involved in the CompNet “labour module”, to examine whether data available already at the national level related to operations of GVCs could not be included in the next vintage of the CompNet data base.



## **Policy Panel**

Chair: Lubomir Lizal (Czech National Bank)

In his introductory speech, Lizal discussed some open issues in the trade literature (e.g. the impact of the Great Recession on export performance and resource misallocation and the impact of GVC on transmission of shocks). More research is needed to provide a complete understanding of these issues. From a macro-perspective, the implications in terms of inflation of these events are crucial.

### ***William Maloney (Chief Economist, Equitable Growth, Finance and Institutions, World Bank)***

Maloney started his presentation by explaining how the same good can have radically different implications for development. He proposed as an example the copper production that had a positive impact in Chile, in 1870-1970, while in the rest of the world the production of this material had been detrimental. The key feature to explain this fact is the ability to adopt or produce new technologies that in Chile facilitated copper production. He stressed also that a minimum human capital, or innovative capacity, is required to reach higher level of production. He stressed the importance of a comprehensive view, from the firm and institutional perspectives, the so-called greater national innovation system (NIS), to fully understand the dynamics of the innovation system.

### ***Dalia Marin (Ludwig-Maximilians University Munich)***

Prof. Marin addressed the question: which firm organization performs better? Data on offshoring and decentralized management (the extent to which managers can take autonomous decisions) can be nowadays retrieved from EFIGE database, Amadeus Data and UN Comtrade data. On average, for countries like UK, offshoring helps firms to have better performance. Similarly, decentralizing the management has positive effects. She claimed that this result is even stronger when firms decide to do both.

### ***Margareta Drzeniek (Global Competitiveness and Risks, World Economic Forum)***

Ms. Drzeniek emphasized the political economy aspect in the discussion about GVC measures. She named several aspects that the index and the discussions in general should account for. First, it is of vital importance to analyse the role of digitalisation and firms business models in more detail. Related to this aspect, she also pointed out to assess the speed by which GVCs emerge, also to properly draw proper conclusions for policy making and regulatory issues. Lastly, it is crucial also to take note of the environmental dimension of GVCs.

### ***Natacha Valla (European Investment Bank)***



In her presentation, Ms. Valla analysed how the European Investment Bank can help to increase European Competitiveness. She claimed that in the EU single market, there is an untapped potential for improving performance, which would result in +12% of the EU GDP. In this sense, the EIB focuses its investments on key drivers of growth: infrastructures, innovation and small and medium sized enterprises. She concluded saying that the EIB lending is rising sharply since its foundation.