

# 17<sup>th</sup> Global Economy Lecture: John Van Reenen Trade-Induced Technical Change? The Impact of Chinese Imports on Innovation, IT and Productivity

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On October 22, 2012, John Van Reenen, Professor of Economics at the Department of Economics and Director of the Centre for Economic Performance at The London School of Economics and Political Science, gave the 2012 Global Economy Lecture<sup>1</sup> at the OeNB. In his inspiring presentation, Van Reenen analyzed the impact of rising imports from China on advanced – in particular European – countries. This seminal trend in world trade has two positive implications for importing countries: First, not only is innovation spurred in firms which are heavily exposed to competition from Chinese imports, but also IT intensity and total factor productivity are raised. Second, import pressure from China leads to creative destruction in the sense that low-tech firms have to shed labor, but jobs are reallocated to more high-tech firms. In terms of magnitude, however, it seems that the job losses in low-tech tasks outnumber the gains in the high-tech segment, a point which was also raised in the discussion.

From a theoretical perspective, lower import barriers should boost technological change due to the reallocation of activity between firms (uncompetitive firms are forced to exit the market) as well as within firms (with their product mix shifting toward higher-end products). In addition to these composition effects, increased import competition also induces real innovation in the form of newly created products. This reaction is traceable to “trapped factors” within firms, i.e. firms cannot dispose of their present factors of production due to adjustment costs and sunk investment. While these factors are no longer profitable in producing goods that are in direct competition with Chinese products, the shadow cost of innovating in order to use these production factors in a more high-tech setting is lowered by Chinese competition.

In his lecture, Professor Van Reenen presented an empirical underpinning of these theoretical predictions based on an extremely rich, newly constructed panel dataset, which combines firm-level data on IT intensity, patents, balance sheets and data on international trade. To establish causality between rising import competition from China and firms’ reactions, he focused on import data on textiles and clothing as the episode of quota abolition under the WTO’s Agreement on Textiles and Clothing (1995–2005) represented a natural experiment to test his hypotheses.

The discussion zeroed in on two main issues: First, the positive effect on innovation was considered, by some participants, to be insufficient compared with the negative effects on low-skill employment. John Van Reenen agreed that reallocation costs are substantial and that they have to be dealt with adequately, as they pose a major policy challenge. However, he also pointed out that import competi-

<sup>1</sup> *The Global Economy Lecture is an annual event jointly organized by the Oesterreichische Nationalbank (OeNB) and The Vienna Institute for International Economic Studies (wiiw).*

tion from China merely sped up an inevitable restructuring process in the most advanced economies. Second, it was pointed out that imports from China are not necessarily low-cost and hence low-tech imports, but they may well have been produced by high-tech multinationals located in China, which implies that competition actually comes from advanced countries' firms. This is yet another demonstration of the fact that China's integration into the global economy is accelerating a process of global reallocation and skill-upgrading.

