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Trade linkages, balance sheets, and spillovers: The Germany-Central European Supply Chain☆

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Abstract

Germany and the Czech Republic, Hungary, Poland, and Slovakia (the CE4) have been in a process of deepening economic integration which has lead to the development of a dynamic supply chain within Europe—the Germany-Central European Supply Chain (GCESC). Model-based simulations suggest two key policy implications: first, as a reflection of strengthening trade linkages, German fiscal spillovers (stemming from higher public consumption) to the CE4 and more broadly to the rest of the euro area, have increased over time, but are still relatively small. This is explained by the supply chain nature of trade integration: final demand in Germany is not necessarily the main determinant of CE4 exports to Germany. Second, increased trade openness in both Germany and the CE4 implies a greater exposure of the GCESC to global shocks. However, owing to its strong fundamentals—including sound balance sheets and its safe haven status—Germany plays the role of a regional anchor of stability by

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better absorbing shocks from other trading partners instead of amplifying their transmission across the GCESC.

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1. Introduction

The pace of the global recovery has disappointed again recently. In particular, global trade growth slowed markedly in the first half of 2014 compared with global activity.[3] Some of the slowdown in trade could reflect a more modest pace in the fragmentation of global production processes—that is, supply chains—after years of rapid change. Given the weak and uneven recovery in Europe, these developments are especially relevant for Germany and the Czech Republic, Hungary, Poland, and Slovakia (hereafter, the CE4) who have established a dynamic supply chain with each other and will henceforth be referred to as the German-Central European Supply Chain (GCESC). As discussed by the International Monetary Fund (IMF, 2013), geographic proximity, cultural similarities, and labor cost differentials are factors which have led many German firms to shift large parts of their production to the CE4, thereby deepening economic integration within the region.

Motivated by these developments, this paper comprises two parts, focusing on two broad questions. The first part concentrates on the implications of greater economic interconnectedness owing to the establishment of the supply chain. How has deeper supply chain integration affected the nature of spillovers over time stemming from various global and regional shocks? Amid weak growth prospects in a highly integrated region, how can German strengthen its role as Europe's engine of growth? In particular, would a greater German public spending help the recovery in Europe? The second part of the paper highlights how German fundamentals can affect spillovers to the supply chain. Along with its central position in the supply chain—in part owing to its safe haven status and robust balance sheets—does Germany act as an anchor of stability by helping the region better cope with external shocks?

This paper provides quantitative answers to these questions using model-based simulations. In particular, policy implications are gleaned from counterfactual simulations generated using the IMF's Global Integrated Monetary and Fiscal model (GIMF). A six-region version of GIMF is utilized, including Germany, the euro area excluding Germany, the CE4, and remaining countries.

The model-based simulations yield several policy implications, and can be summarized as follows. First, and one of the main policy implications of this paper, German fiscal stimulus—in the form of higher public consumption—is likely to have a relatively small impact on the CE4, and more broadly, to the rest of the euro area. As a reflection of strengthening trade linkages, German spillovers to the CE4—including those related to fiscal policy—have increased over time, but remain relatively limited. This is explained by the supply chain nature of trade integration:

[3] See, for example, the IMF's October 2014 *World Economic Outlook*.