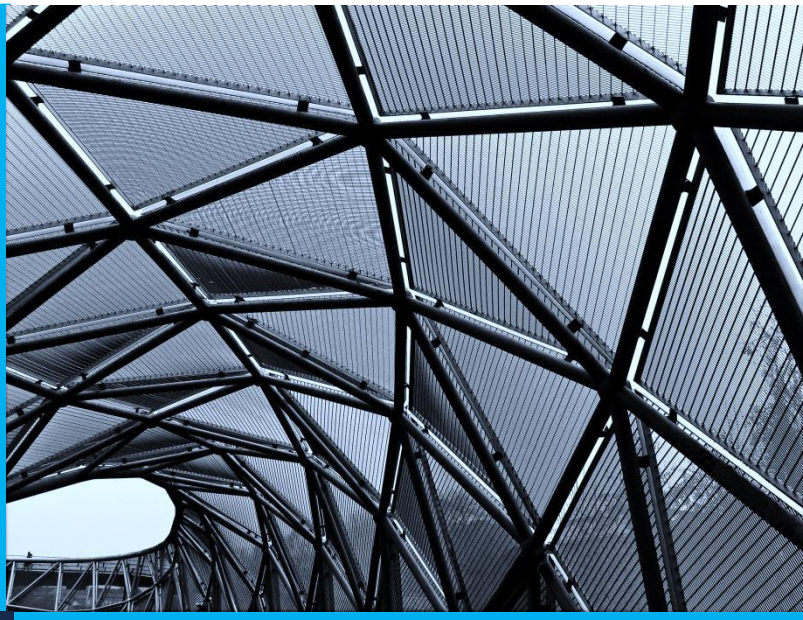
The economic impact of Trans-Pacific partnership:

What have we learned from CGE simulation?



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WORKING PAPER

The economic impact of Trans-Pacific partnership:

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Abstract

The Trans-Pacific-Partnership (TPP) trade agreement, if successfully implemented, will liberalize trade between the US, Japan and ten other Asia-Pacific economies, making it one of the largest regional agreements ever seen. The prospect of a comprehensive trade agreement spanning the Pacific raises a number of important quantitative questions. One of the most widely used techniques for evaluating the economic impact of regional trading agreements is numerical simulation with computable general equilibrium, or CGE, models. There have now been a large number of papers written that use CGE methods to analyze the potential economic impact of the TPP agreement under varying theoretical and policy assumptions. In this paper we provide a synthesis of the key results that have emerged from the literature, and discuss some new simulation results of our own.

Keywords: Asia-Pacific, Regional Trade, TPP, CGE

JEL Classifications: F15, F17, C68

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1. Introduction

Although its ultimate passage still remains uncertain (the recent success of fast-track legislation in the United States (US) and finalization of the agreement articles notwithstanding), the Trans-Pacific- Partnership (TPP) trade agreement, if successfully implemented, will be among the largest and most comprehensive free trade agreements ever seen. Together the 12 TPP member economies (Australia, New Zealand, Japan, Brunei, Malaysia, Singapore, Vietnam, USA, Canada, Mexico, Chile and Peru) generate nearly 40 percent of the value of global production, and over a quarter of world trade, making the grouping substantially larger in economic terms than even the European Union. The proposed agreement would not only liberalize trade barriers on goods and services and free up investment flows between the member economies, but would also introduce measures aimed at trade facilitation through enhanced regulatory coherence, measures to encourage the development of production and supply chains, intellectual property provisions, and, most controversially, provisions for investor-state arbitration.

The prospect of such a far-reaching trade and investment agreement spanning the Pacific raises a number of important quantitative questions. What is the likely magnitude of the economic gains? How dependent are those gains on the details of the agreement? How do the gains compare to other proposed agreements? Are they evenly distributed across member economies and across societies within the members? How will the agreement affect non-members, especially the least developed economies? What are the consequences of expanding the agreement to bring in new member economies? What types of changes might we observe in the pattern of economic activity in the member economies? This list is certainly not exhaustive.

One of the most widely used techniques for evaluating the potential economic implications of large scale changes in trade policy, such as free trade agreements, and thereby providing some insights into the answers to the questions posed above and others like them, is numerical simulation with computable general equilibrium, or CGE, models. While this approach, like any, has its strengths and weaknesses (and certainly its detractors, see, for example, Kehoe, 2003), CGE has proven a useful if imperfect tool for the *ex-ante* analysis of trade policy. CGE models are multi-sectoral, and often multi-regional, are flexible, and logically consistent. Because at their core they are designed to track linkages across an entire economic system, they are particularly well-suited to examining the economy-wide

implications of large changes in the economic environment, and/or changes that affect multiple parts of the economic system at the same time, as is certainly the case with regional trade agreements like the TPP. Applications of CGE models to trade policy are numerous. See, for example, Scollay and Gilbert (2000) for a survey of models applied to APEC, Gilbert and Wahl (2002) for the case of Chinese trade reform, Bekkers and Rojas- Romagosa (2016) for the TTIP, and Robinson and Thierfelder (2002) and Lloyd and MacLaren (2004), for more general overviews of CGE simulation of regional trade agreements. Also see the meta-analysis approach of Hess and von Cramon-Taubadel (2008).

There have now been a large number of papers written that use CGE methods to analyze the TPP (over 35 of which we are aware). Hence, a survey of the results that have been obtained is in order. The studies come from a wide variety of sources, and include academic pieces, working papers from policy- oriented think tanks, and publicly released works commissioned by the governments of various economies. The primary objective of this paper is to provide an overview of the scope of the existing studies, and a synthesis of the key results that have emerged from the literature, with an eye to providing information useful to both policymakers looking to evaluate key themes and contextualize results emerging from what is now a substantial body of literature, and to researchers in the area looking both to compare their results to existing work and to identify gaps that new research may gainfully address.

In the process of surveying the existing studies, we also incorporate some new simulation results of our own. In particular, we examine the TPP in comparison to two other major trade agreements: the Regional Comprehensive Economic Partnership (RCEP) and the Free Trade Area of the Asia-Pacific (FTAAP). The former aims to consolidate and deepen trade liberalization among the economies of ASEAN and those economies with which ASEAN already has a plurilateral trade agreement (i.e., Australia, New Zealand, Japan, South Korea, China and India), while the latter is conceived as a free trade agreement among all