Trade Collapses: the Role of Economic and Policy Uncertainty in the Great Recession*

Jeronimo Carballo University of Colorado Kyle Handley University of Michigan

Nuno Limão University of Maryland NBER

December 2015

ABSTRACT:

The recent "Great Recession" and slow recovery renewed concerns about the impact of uncertainty on economic activity. Most frameworks used to study such impacts focus on uncertainty from purely economic shocks but omit uncertainty about future policy. This paper models the interaction of economic and policy uncertainty, estimates their impact on firms' international trade decisions during the Great Recession, and examines whether trade agreements mitigated the effects of uncertainty.

We first document the trade dynamics of U.S. firms during the recent Great Trade Collapse (GTC) and recovery. Among other things, we find that a considerable share of the drop in U.S. export value during the collapse is due to the net exit of firms from trading. We then develop a dynamic model with sunk costs of entry and exit into foreign markets where heterogeneous firms face demand uncertainty in both policy and economic conditions. The model predicts that the impact of economic uncertainty shocks on firm entry and exit is amplified if lower income is associated with higher trade protection, as was the case in the Great Depression and until recently. For example, the possibility of trade wars or rising protectionism were widely discussed at the start of the GTC. Agreements where countries credibly fix their trade barriers may reduce both the direct impact of trade policy uncertainty and dampen the effect of economic uncertainty.

Using model-consistent measures of uncertainty we estimate the impact of economic and policy uncertainty on firms' export entry and exit decisions. We find that uncertainty has a negative impact on the number of firm-product varieties exported by the US and that its effect increased during the GTC compared to the baseline period of 2002-2008. The effect peaks during the first four quarters of the GTC and then decreases. Moreover, the negative impact of economic and policy uncertainty during the GTC is weaker for export to countries where the US has preferential trade agreements (PTAs); this differential effect disappears by 2011. The impact of uncertainty is relatively stronger in industries where the importer has higher potential tariffs; this difference is only present in non-PTA countries, as expected if PTAs have low probability of a trade war. The findings suggest that PTAs reduced uncertainty by providing insurance against protectionism and in doing so also mitigated the effects of economic uncertainty.

^{*}We thank the University of Maryland BSOS for financial support for part of this project. We also acknowledge financial support from the NSF under grants SES-1360738 (Handley) and SES-1360780 (Limão). This research was conducted while the authors were Special Sworn Status researchers at the Census HQ and Michigan Research Data Centers. Any opinions and conclusions expressed herein are those of the authors and do not necessarily represent the views of the U.S. Census Bureau. All results have been reviewed to ensure that no confidential information is disclosed. We thank Clint Carter for assistance and timely disclosure review of all results. Yue Fang (Michigan) and Marisol Rodriguez Chatruc (Maryland) provided excellent research assistance.