Growth and Trade with Frictions: A Structural Estimation Framework James E. Anderson, Mario Larch, and Yoto V. Yotov NBER Working Paper No. 21377 July 2015 JEL No. F10,F43,O40

ABSTRACT

We build and estimate a structural dynamic general equilibrium model of growth and trade. Trade affects growth through changes in consumer and producer prices that in turn stimulate or impede physical capital accumulation. At the same time, growth affects trade, directly through changes in country size and indirectly through altering the incidence of trade costs. The model combines structural gravity with a capital accumulation specification of the transition between steady states. Theory translates into an intuitive econometric system that identifies the causal impact of trade on income and growth, and also delivers estimates of the key structural parameters in our model. Counterfactual experiments based on the estimated model give evidence for strong dynamic relationships between growth and trade, resulting in doubling of the static gains from trade liberalization.

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A data appendix is available at: http://www.nber.org/data-appendix/w21377