

## **Payment Flows in the Global Economy: Tracking Consumer Outlays to Owners of the Embodied Factors of Production in the Same and Other Regions**

Topic:

Author: Faye Duchin

Money payments flow from buyer to seller, that is, in the reverse direction to the flows of purchased goods and services. These money flows originate with the payments made by consumers of final products and continue in the downstream direction, terminating with payments to the owners of the embodied factors of production. This paper describes a method for quantifying the paths of such payments by consumers in one region through the network of global imports and exports of intermediate products to the owners in all regions of the factors that are embodied in the consumer purchases. We disaggregate payments by individual product and by embodied factor, in particular distinguishing scarcity rents from other factor earnings.

Our method applies the absorbing Markov chain (AMC) to either historical data or scenario results. In this paper we provide an illustrative numerical example of scenario results obtained using the World Trade Model with Bilateral Trade (WTMBT). The method is presented in three steps. First we demonstrate the logic of our approach using a simplified model of a multiple-region system that ignores intermediate products. We next incorporate inter-industry flows within and between the regional economies. Finally we explain how our method disaggregates the price paid, by intermediate as well as final consumers, for each unit of purchased product into the portion that is received by the seller of the product and the remaining portion that covers the cost of transporting imports (if any) of the product. This last distinction is important as it reflects the differences in the extent and mix and geographic origins of factors embodied in goods vs. those required directly or indirectly for providing international transportation services.