

attention to the role of inventories in the amplification of the downturn.

Before presenting our model of offshoring, we examine a benchmark model of supply chains without offshoring, where the only “friction” is that production takes time. Even so, fluctuations in credit conditions have large impact on output and productivity. Our model of offshoring builds on the benchmark model of supply chains by holding fixed the technology, but allowing the length of the supply chain to be the choice variable. The rationale is that the degree of “roundaboutness” of production (in the terminology of Böhm-Bawerk (1884)) cannot easily be varied in the short run, and the firm must adjust its supply chain by varying the extent of offshoring. We show that the optimal choice of supply chain length depends critically on financial conditions, yielding a credit demand function of firms for the purpose of financing the supply chain. Finally, we close the model by deriving a credit supply function, and conduct comparative statics exercises with respect to financial shocks. We find that tighter financial conditions will result in higher loan risk premiums and a contraction in the degree of offshoring undertaken by the firms.

2 Benchmark “Austrian” Model

We begin with an elementary model of supply chains without offshoring. Our model is deliberately stark in order to isolate the time dimension of production and the only substantial decision is the ex ante choice of the length of the production chain. There are no product or labor market distortions. The only friction is that production takes time. In this sense, our benchmark model has an Austrian theme that echoes the capital theory of Böhm-Bawerk (1884).

There is a population of L workers and L firms each owned by a penniless entrepreneur. Each firm is matched with one worker. Production takes place through chains of length n , so that there are L/n production chains in the