

average peak-to-trough decline in inventories is nearly 70% of the peak-to-trough decline in GDP. Schwartzman (2010) shows that the pattern for emerging economies is even more procyclical. Since output is the sum of sales and the change in inventories, the procyclicality of inventory investment sits uncomfortably with the textbook treatment of inventories as a buffer stock used to smooth sales. Blinder (1986) and Blinder and Maccini (1991) note that far from inventories serving to smooth sales to keep pace with production, production is *more volatile* than sales.

The rapid growth of trade in intermediate goods and offshoring provides the perfect setting for the study of the time dimension of production. Grossman and Rossi-Hansberg (2006, 2008) argue that offshoring is now so prevalent that the classical theory of trade in finished goods should be augmented by the theory of the trade in *tasks*. In the same spirit, recent advances in our understanding of offshoring have focused on their technological and informational determinants, such as the specialization between routine and complex tasks (Antras, Garicano and Rossi-Hansberg (2006)), robustness to quality variability (Costinot, Vogel and Wang (2011)) or the complementarity of production processes (Baldwin and Venables (2010)).

In this paper, we take a different tack and explore the time dimension of offshoring and its consequences for the management of working capital. The time accounting discussion for inventories given above apply with even greater force when applied to offshoring and trade.

Although the production process is largely determined by technological realities, the firm nevertheless has considerable scope to choose its production time profile. Offshoring provides a good illustration of the discretion that firms have in this regard. Figure 2 illustrates the effect of offshoring for a firm with a three-stage production process, with each stage taking one unit of time. The left panel depicts the firm without offshoring, while the right panel shows the time profile when the second production stage is located offshore, entailing a lengthening of the production process due to time taken