Sectoral and Aggregate Structural Change*

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Abstract

We estimate that trends in TFP and employment growth have steadily declined across a majority of U.S. sectors over the post-war period. Most of the secular decline in aggregate TFP and employment growth results from the combination of sector-specific rather than aggregate disturbances. We embed these observations into a dynamic multi-sector framework in which materials and capital used in each sector are produced by other sectors. The presence of capital, in particular, induces quantitatively important sectoral multiplier effects from production linkages on GDP growth. Thus, in some sectors, the effects of changes in TFP or employment growth on GDP growth may be as large as 3 times their share in the economy. Taken together, structural changes across sectors have lowered trend GDP growth by around 2 percentage points since the early 1950s. Sustained contractions in growth specific to Durable and Non-Durable Goods, and most importantly Construction, account for close to 2/3 of this decline. Because of capital accumulation, structural changes have endogenously persistent effects. Consequently, we estimate that trend GDP growth will continue to decline for the next 10 years even if trend TFP and employment growth stabilize.

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