

The Secular Decline in Business Dynamism in the U.S.

By

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Abstract

There is accumulating evidence that the pace of business dynamism (measured by indices of firm volatility or the pace of creative destruction) in the U.S. has fallen over recent decades (see Davis et. al. (2007) and Davis et. al (2010)). There is also evidence of an acceleration of this downward trend post-2000 (see Haltiwanger, Jarmin and Miranda (2011b), Reedy and Litan (2011)). The decline in business level volatility is evident in a pronounced declining trend in the pace of gross job creation and gross job destruction. An important component of the declining trend in gross job creation has been a decline in job creation from business startups.

In this paper, we explore these trends further using the Census Bureau's Longitudinal Business Database. We provide evidence that the average annual job creation from business startups has declined from 3.5 percent of employment in the 1980s, to 3 percent in the 1990s to 2.6 percent in the post-2000 period. This represents more than a 25 percent decline in the pace of job creation from business startups over a 30-year period.

The decline in the pace of creative destruction along with the severe recession of 2007 to 2009 have resulted in economy wide job creation rates and the job creation rate from business startups (new firms) being lower in 2009 than any year since at least 1980. Related evidence presented in Davis, Faberman and Haltiwanger (2011) shows that the anemic recovery in the U.S. since 2009 is associated with job destruction rates returning to pre-recession levels while job creation rates have remained close to historical lows.¹ The declining pace of business dynamism has further implications in that the high pace of creative destruction in the U.S. has contributed to its robust pace of productivity growth in the past. There is considerable evidence (see Haltiwanger (2011) and Syverson (2011)

¹ This class of statistics can only be computed economy wide since the late seventies. Also, note that the Davis, Faberman and Haltiwanger (2011) evidence uses an independent source (the BLS Business Employment Dynamics data) and finds similar patterns of declines in the pace of business dynamism.

for recent surveys and summaries of the evidence) that the observed pace of reallocation reflects shifting outputs and inputs away from less productive to more productive businesses. Startups and the up and out dynamics of young firms have been an important component of the productivity enhancing reallocation (Foster, Haltiwanger and Krizan (2006)). Moreover, the dynamism that has contributed to productivity growth has also been associated with recoveries from past deep recessions in the U.S. For example, Davis, Haltiwanger and Schuh (1996) document the rapid recovery from the deep 1982-83 recession was accompanied by a substantial pace of creative destruction.

Within this context, the decline in the pace of creative destruction including the pace of business startups raises several questions. On the one hand, the declining pace of creative destruction may be associated with a dampening of the dynamism, flexibility, experimentation and innovation that has helped contribute to U.S. productivity growth and recovery from past recessions. On the other hand, it may be that there are more benign factors at work. A high pace of creative destruction is not inherently a positive economic outcome and by itself not an economic objective targeted by policymakers. Reallocation and restructuring is costly for firms and workers which invest time, energy and resources into their ventures.² Moreover, the pace and nature of creative destruction may reflect distortions and imperfections in markets.

The answers to these questions depend critically on the factors underlying the decline in business dynamism. The current paper attempts to understand and quantify the contribution of these factors. We first document the decline in business dynamism through 2009. We find evidence that the decline in business dynamism tends to accelerate in the post-2000 period. We then build on the work discussed above as well as related work to examine the role played by the changing structure of the U.S. economy. For example, evidence from Davis et. al. (2007) indicates that the shift toward large, national chains in key sectors like retail trade explains at least part of the decline in firm volatility. Similarly, Davis et. al. (2007) find that a shift in the employment distribution towards older firms plays an important role in the decline across all industries. Does this particular type of structural change imply a less dynamic and flexible U.S. economy?

² Costs include the investments in skill, capital and effort as well as possibly idle time for facilities and individuals.

The answer is not obvious. The evidence shows that a large fraction of productivity growth in U.S. retail trade over the past few decades is associated with the shift to national chains that have take advantage of improvements in information technology for distribution networks. Similarly, consolidation into older more experienced firms could account for the decline in volatility if their experience translates into realizing and taking advantage of opportunities more efficiently. Still even here these changes may reflect a tradeoff between economies of scale and flexibility. That is, it may be that changing technology has increased incentives in at least some sectors in favor of business models that take advantage of economies of scale (i.e., distribution networks) while at the same time decreasing flexibility and the ability of the economy to respond to shocks and to take advantage of new opportunities.

We build on this recent related literature and analyze the extent to which composition changes in U.S. businesses across detailed industries, states, size classes and age classes and firm structure account for the decline in dynamism. We find that such composition effects do not account for the decline in dynamism even when we consider rich interactions across these firm characteristics. This failure of composition effects to account for the aggregate decline reflects offsetting composition effects. For example, the shifting composition to more mature businesses acts to help account for the decline in dynamism (consistent with the evidence in Davis et. al. (2007)) but this is offset by the shifting composition of U.S. businesses towards sectors with a high average pace of dynamism.

Given that the decline in creation and destruction is mostly a within group phenomenon, we next explore the nature of the within group changes. We find that all size classes, all age classes, almost all states and about 90 percent of 4-digit NAICS sectors exhibit a secular decline in creation and destruction.³ While virtually all groups exhibit a decline, the pace of decline varies widely across groups. In this respect, we find evidence of convergence across groups – for example, we find that industries and states with the highest average creation, startup and destruction rates in the 1980s had the largest percentage declines in these rates.

³ The only state that does not experience a decline in job creation is Wyoming. This state's job creation rate practically remains unchanged.

The dispersion across groups in the pace of within group secular change offers the potential for accounting for the patterns of decline with group specific factors that underlie this variation. A potentially promising set of factors are state specific. We investigate a range of covariates that vary by state and year. These fit into a number of broad categories. One broad category is state specific differences in demographic trends. The well-known aging of the U.S. population and workforce exhibits considerable variation across states. The aging of the population can impact firm dynamics through a variety of channels – for example, by impacting the propensity for being an entrepreneur or alternatively impacting worker turnover rates that in turn may influence firm dynamics.⁴ A second broad category is state specific differences in changes in the business climate as captured by differences in personal and corporate tax rates, minimum wage laws, and regulations (e.g., environmental). A third broad category is state specific differences in changes in the structure of banking. While there has been considerable consolidation and deregulation of U.S. banking over the last several decades, the pace of these changes has been uneven across states.

Our objective is to evaluate the extent to which covariates in these broad categories of variables can help account for the observed decline in dynamism. Recognizing the potential identification and interpretation problems here (e.g., multicollinearity, omitted variables), we don't focus on specific estimated coefficients but rather the extent to which the residual year effects after controlling for various factors exhibit less of a decline than without controls. Moreover, we use lagged values of these controls as instruments to mitigate potential problems of reverse causality.

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⁴ Ardagna and Lusardi, (2010) find non-necessity startups have average age of entrepreneur of 40.