Trends in the Volatility of Business Growth Rates

Publicly Traded Versus Privately Held Firms

Research by
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Contrary to popular opinion, recent research finds that U.S. businesses have become significantly more stable in the past 25 years.

In “Volatility and Dispersion in Business Growth Rates: Publicly Traded Versus Privately Held Firms,” University of Chicago Graduate School of Business professor Steven J. Davis, along with coauthors John Haltiwanger of the University of Maryland and Ron Jarmin and Javier Miranda of the Bureau of the Census, studies the volatility of business growth rates in the U.S. economy from 1976 to 2001.

Previous research, as well as media attention, in the United States has focused on publicly traded firms because data for these firms are readily available through quarterly and annual reports to stockholders. However, publicly traded firms only account for about one-third of all employment in the U.S. private business sector. Most workers at U.S. businesses are employed by privately held firms, ranging from family businesses to large, closely held corporations.

It’s important to know what’s going on in the other two-thirds of the economy, and whether that two-thirds is behaving differently, says Davis.

Davis, Haltiwanger, Jarmin, and Miranda find opposing trends in the volatility of employment growth rates for publicly traded and privately held firms. While the results show increased volatility for publicly traded firms, employment growth rates for privately held firms have become much more stable since the late 1970s. The rise in volatility among publicly traded firms is significant, but not large enough to offset the decline in volatility among privately held firms.

To measure business-level volatility, the authors first computed the standard deviation of growth rates during rolling ten-year windows for each U.S. business. They then averaged this measure over firms in each year to obtain a time series on the overall volatility of business growth rates. The results indicate that the average volatility of employment growth rates in the private sector has declined by more than 40 percent since 1982.

While privately held firms have become more stable, the opposite is true for publicly traded firms, which in the same time period have experienced increased volatility of employment and sales growth rates.

The U.S. media constantly tells us that the environment for workers has become increasingly uncertain and that jobs are less stable than ever, says Davis. That view is accurate for certain occupations and for publicly traded firms, but not for the economy as a whole. The media have formed their views about what’s happening in the entire economy from what happens in only a subset of the private sector. As a result, they impart a distorted impression of actual trends in the U.S. economy.

Comprehensive Data
To carry out their study, the authors used the recently developed Longitudinal Business Database, which contains annual observations on employment and payroll for all businesses in the U.S. private sector. The database sources are periodic business surveys conducted by the Census Bureau and federal government administrative records. The database allowed the authors to compute growth rate measures for all U.S. businesses, a major advantage compared to other businesslevel databases.

To supplement the Longitudinal Business Database, the authors relied on data from COMPUSTAT, which tracks firmlevel activity for publicly traded, listed firms from 1950 to 2004. Using COMPUSTAT, the authors identified the firms in the
A significant factor in the overall decline in business volatility is the decreasing rate of business entry and exit. In part, lower entry and exit rates reflect major structural changes in certain industries. For example, the retail sector underwent a pronounced shift away from relatively small firms toward national chains with larger establishments. National chains are less volatile than independent retailers and experience fewer openings and closings per year. In line with this transformation of the retail sector is a trend toward greater employer stability in retail trade than manufacturing.

Opposing Trends
Why do volatility trends in employment differ so much between publicly traded and privately held firms? The authors identified two factors that provide much of the answer. First, among privately held firms, there has been a sizable shift of employment toward older and larger businesses that tend to be more stable than younger and smaller ones. Second, the mix of publicly traded firms has shifted over time toward riskier, more volatile businesses.

The number of newly listed firms, mostly initial public offerings (IPOs), jumped from 156 per year in the 1973 to 1979 period to 549 per year from 1980 to 2001. These newly public firms were increasingly risky relative to seasoned public firms as measured by profitability, stock returns, employer volatility, and business age at IPO. For example, in the 1960s, the average newly public firm was 40 years old at its IPO date. By the late 1990s, the age of a firm at IPO had dramatically decreased to only 5 years old.

In addition, many firms that in the past were considered too risky and volatile to be taken public went public in the 1980s and 1990s.

This was especially true during the technology boom in the late 1990s. In the past, the riskiest firms were screened out of the publicly traded sector; due to their inability to attract funds from investors, these firms remained private.

There were risky firms that, before the 1980s, would have spent their entire lifetimes in the privately held sector, says Davis. Now, many of those firms are able to go public because the market has changed and, as a result, they bring their risky characteristics into the publicly traded sector.

In addition to changes in the composition of publicly traded firms, creative destruction is another driving force behind business volatility and economic growth. Large changes in employment levels at individual businesses reflect the restructuring, experimentation, and adjustment processes at the heart of market economies.

According to theories of creative destruction, the process of economic growth intrinsically involves the displacement of less efficient businesses by more efficient ones. One example of creative destruction is the transformation of the U.S. retail sector in recent decades—the displacement of small, independent retailers by national chain stores such as Wal-Mart, Target, Borders, and Best Buy.

The stability or instability of individual firms, when measured by a variety of economic indicators, reflects the creative destruction process, says Davis. Part of what our study measures is the pace at which the creative destruction process goes on throughout the economy. What is surprising is that the process seems to have slowed over the past 25 years, at least as measured by employer volatility.

Davis suggests that perhaps much of the creative destruction process today now occurs within large firms covering many retail segments as opposed to individual specialty stores. In any event, the creative destruction process in the retail sector has greatly raised productivity and brought large benefits to consumers in the form of lower prices and greater product selection, says Davis.

The Big Picture
According to Davis, it is essential to recognize the changes that have occurred in the economic process that governs what firms, and what types of firms, become publicly traded.

Since younger, riskier firms went public in the 1980s and 1990s than in earlier decades, the publicly traded sector as a whole looks more volatile. However, the entire economy is not composed of publicly traded firms.

In fact, Davis remarks, overall business volatility has declined significantly in the last 25 years.

One key reason for interest in the business-level volatility of employment growth rates is the connection to unemployment. The aggregate unemployment rate in the economy is typically considered to be a macroeconomic indicator. However, the fortunes at individual businesses often determine how many workers get laid off and hence how many workers flow into the unemployment pool.

The authors report that the number of workers who enter the unemployment pool from month to month is down by about one-third since the early 1980s; the rate of unemployment declined by roughly 50 percent over the same period.

It is easier to understand why the unemployment rate has declined so much once you recognize the significant decline in the volatility of employment growth rates at individual firms, says Davis. Individual firms are becoming more stable and fewer workers are losing their jobs.