Discussion of “Business Volatility, Job Destruction and Unemployment”

Recent Trends in Economic Volatility: Sources and Implications, November 3, 2007

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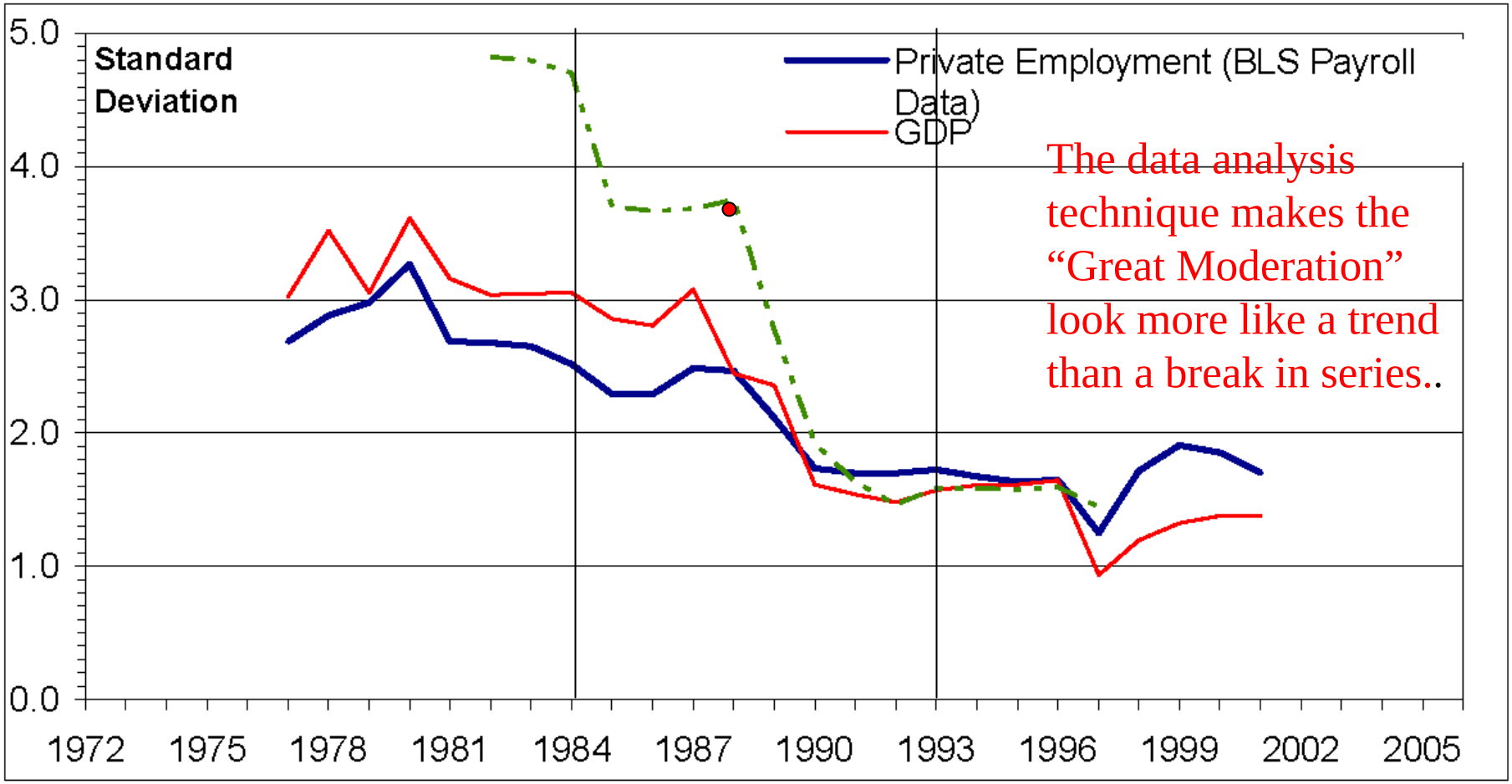
Outline

- Great moderation?
- What's the main finding?
- What's the debate?
- Is the Davis et al. evidence credible?
- Can the authors further advance the debate?

Figure 2. Volatility of Annual Real GDP and Employment Growth Rates



Notes: The figure depicts movements in aggregate volatility measured as the standard deviation of the time-series between periods $t-4$ and $t+5$. It illustrates the volatility of GDP and private payroll employment growth measured annually. It also includes the volatility of private employment growth measured from the LBD, which unlike the payroll survey, comes from administrative data whose most notable difference is its complete accounting for establishment entry and exit.

Main Findings

- Secular decline in the job destruction rate
  - Visible in most industries, but largest in durable goods manufacturing, construction.
  - Matters somewhat whether quarterly or annual data are used
- Strong statistical relation between the job destruction rate and both the flow into unemployment and the exit rate from unemployment
- Secular decline in job destruction rate is responsible for about one-half of the decline in unemployment incidence (i.e., this is the smoking gun)

What's the Beef?

- Davis et al: "Our results indicate that in turn the trends in business volatility and job destruction are important for cyclical unemployment volatility since they account for much of that secular decline."
- Hall: "New data compel a new view of events in the labor market during a recession. Unemployment rises almost entirely because jobs become harder to find. Recessions involve little increase in the flow of workers out of jobs."

Evidence That Adjustment Might Come From Hiring (Abowd, Corbel, Kramarz 1999)

- annual job creation can be characterized as hiring three persons and separating two for each job created in a given year
- annual job destruction can be characterized as hiring one person and separating two for each job destroyed in a given year
- when an establishment is changing employment, the adjustment is made primarily by reducing accessions and not by changing the separation rates
- for the highest skill groups, ten percent of months with firm-initiated separations also have new hiring in the same skill group and, for the lowest skill groups, 25% of the months with firm-initiated separations also have new hiring in that skill group
- two-thirds of all hiring is on short term contracts and more than half of all separations are due to the end of these short term contracts
- controlling for between-establishment heterogeneity and common trends, accessions and separations of workers are both countercyclical

Is the Davis et al. evidence credible?

- Table 3 Unemployment inflows and job destruction
  - BED coeff: .278 (.053)
  - LBD coeff: .126 (.022)
- Table 4 Unemployment escape and job destruction
  - BED -1.355 (.385)
  - LBD -.507 (.170)
- These are really not micro-data estimates but they probably do summarize the relationships

Can We Do Better?

- Integrated household and business data (no surprise here: ".. micro data sources that integrate household and individual data with business data would be extremely valuable …")
- Why hasn't anyone looked at the Quarterly Workforce Indicator?
  - Public use data (http://lehd.did.census.gov/led/datatools/qwiapp.html)
  - Job creations, job destructions, separations, accessions (hires and recalls), earnings (30 measures overall)
  - County, MSA, WIA x NAICS (or SIC) sectors, subsectors, industry groups
  - Overall, age and sex specific
  - Coverage of 90% of U.S. labor market

Basic Analysis with QWIs

- Match state x industry unemployment inflows and escape rates to the state x industry creation, destruction, accession and separation rates
- Perform the Table 3 and Table 4 analyses
- …and any of the ones that Bob is going to suggest in his analysis

Using Integrated Micro Data

- Link to both the LBD and BED frames exists in the LEHD Infrastructure File System (accessible via the Census Research Data Center network)
- For each establishment, you know the workers and their characteristics at each quarterly observation
- For those who were respondents to the CPS, the March interview questions are available

Basic Analysis with Integrated Micro Data

- Use the Davis-Haltiwanger measures to characterize the firm-side demand shock
- Estimate the separation and accession equations separately for positive, neutral and negative demand shock establishments
- Characterize the adjustments in terms of employment adjustments via separations and accessions in response to the demand shocks
- This would provide directly evidence on the firm-level adjustment

Can the Integrated CPS Data Help

- Categorize the firms as in the previous slide
- For each separation with a CPS link: measure some characteristics of the post-separation labor market outcomes
- Do the same for each accession with a CPS link
- Could provide direct evidence on whether the demand shock is more strongly related to the inflow to unemployment or the escape rate