How Persistent are Establishment Wage Differentials?

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A large empirical literature has documented the existence of establishment wage differentials. The standard Abowd, Kramarz, and Margolis (1999) approach identifies worker and establishment differentials via turnover, which means that it is not possible to know how persistent they are over time. Other researchers have performed annual decompositions of wage variation, and compare a time series of point-in-time estimates. However, it is useful for policymakers to know how stable this distribution is over time. That is, do high wage establishments persistently pay high wages, or is there is a lot of churning in the distribution of establishment wage differentials?

To examine this question, we use a largely untapped dataset, the BLS's Occupational Employment Statistics survey (OES), to examine the nature of establishment wage differentials. The OES is an establishment survey that collects payroll information (i.e., the employment and wages for each occupation) for a relatively large number (about 400,000 per year) of establishments across the United States. This information allows us to identify and estimate occupation-by-establishment wage differentials, expressed as the percent difference between the prevailing wage in the market for an occupation and the wage paid by the establishment. We then aggregate these differentials to calculate establishment-specific wage differentials. With these establishment-specific differentials in hand, we can examine their properties and determine the extent to which they persist over time.

We start by examining the properties of our measures and show that our approach yields sensible results. We show that the wage differentials vary as expected by establishments' observable characteristics, such as industry, size, skill intensity. Our measure of skill intensity varies as expected across industries. We also find that the evolution of the distribution of skill intensity over our sample period is consistent with increased outsourcing of low-skill occupations. Within establishments, we find that high skill occupations have lower differentials, which implies that establishments' pay setting policies tend to reduce overall inequality. This is consistent with existing research has shown that there is a positive correlation between the wages of certain high-wage and low-wage pairs of occupations. Our methodology is more general, and allows us to use standard inequality measures to examine the within establishment distribution of these differentials, and relate them to observable characteristics. We also replicate some of the results of recent papers that decompose the variance in wages into within- and between-establishment components.

Having established that our approach is valid, we turn to the persistence of establishment wage differentials. We develop a measure of persistence and examine the persistence of establishment wage differentials for a sample of large “certainty” units that are in the OES sample in multiple years. We find that the differentials are persistent for a sizable fraction of establishments. But about 10 percent of establishments see a large increase in their EWD and another 10 percent experience a large decline in their EWD. There is some evidence of regression to the mean.