Minimum Wage Setting in China: What Factors Matter for Local Governments?

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Extended abstract

The literature on firm effects of minimum wages is about a century old and includes hundreds of studies (yet the debate remains intense and unsettled). The reversal side, namely how firms influence the determination of the minimum wage, so far has been fairly overlooked. Inspired by this, together with distinct features of minimum wage legislation in China and evidence from field survey on relevant regulatory authorities, we conduct this research.

This paper uses geographically-linked firm data from national tax survey between 2007 and 2011 and exploits heterogeneity at city level to reveal the process to set minimum wage and differentiates such analysis for municipal districts and non-municipal regions. National tax survey is popular for its large sample size and high data quality. Compared to other data sets such as the Chinese Industrial Enterprises Database (CIED, or Zhongguo Gongye Qiye Shuju in Chinese) and the Economic Census Database (or Jingji Pucha Shuju in Chinese) that have been widely used in empirical studies, it particularly fits studies on minimum wages since it not only surveys kinds of firms from all industries but also provides annually detailed balance sheets and income statements of firms., which enables us to get a much more complete picture of minimum wage setting. Moreover, the county level minimum wage data is carefully extracted from website announcements on minimum wage adjustment. In order to overcome omitted variable bias as much as possible, a large number of
variables at city level are also controlled for.

It finds that the minimum wages in areas with relatively more labor-intensive enterprises are lower even when many other potential factors are controlled for, and this is particularly evident for municipal districts though they on average have higher minimum wages. Moreover, the socio-economic factors publicly mentioned in official documents, such as unemployment rate, average wages, development stage and living standard seldomly show any influence on minimum wage setting when using specifications of common usage. They, however, exert both statistically and economically significant effects as expected when possible endogeneity problems caused by neighborhood effects (Chinese local governments benchmarking their minimum wages against those in other regions) are carefully addressed with Tobit regressions. Robustness-check analyses confirm that these results hold to a wide range of specifications including alternative measures of labor intensity and many other scenarios. This article implies that more work could be conducted to revisit firm effects of minimum wages when relaxing a priori assumptions that they are exogenously and/or independently determined.

This paper contributes to the literature in the following aspects. First, although not mentioned in the Provisions on Minimum Wages and other publicly released documents (either national guidelines or specific implementation rules at provincial level), our field interviews and empirical analysis both show that labor intensity of local firms or industries is indeed a factor of consideration in the adjustment of the actual minimum wages for Chinese local governments. Second, to our best knowledge, this study is among the first ones to estimate capital stock and labor intensity at firm level for all industries (including the first, secondary and tertiary industries) in the economy based on the method proposed in Brandt et al. (2012). Third, it points to a neighborhood effect among local governments. In other words, local governments would benchmark against their peers together with their followers when adjusting minimum wages so that the levels they set would neither lag too behind nor go too far ahead; the hypothesis that “minimum wages are exogenously given and/or independently and identically distributed” in existing research about the effect of minimum wages on labor market is
highly questionable. Furthermore, since China to some extent employs a combination of three modes widely adopted across the world—“formula based (criteria are made available to the public)”, “expert team recommendation based” and “stakeholder negotiation (voting) based” in the adjustment of its minimum wages, discussions on the internal mechanism of such adjustment in China and identifying its influencing factors can be a reference for relevant research on other countries.