WAGE INEQUALITY AND BARRIERS TO ENTRY

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1. Abstract

There has been a remarkable increase in wage inequality in countries like the United States and the United Kingdom in the last twenty years. Conversely, there has been little or no change in most of the countries in continental Europe. Earnings inequality increased by 29 percent in the US but only by 4 percent in Europe between 1980 and 1995. Over the same period, returns to education increased significantly in the United States. According to Eckstein and Nagypal (2004), the college wage premium, i.e. the ratio between the average weekly wage of college graduates and that of workers with at most a high school diploma, increased by 25 percent between 1975 and 1995.

Most of the literature ascribes changes in inequality to technological shocks, in particular to skill-biased technological shocks. However, as documented by Berman, Bound and Machin (1998) and Machin and Van Reenen (1998), developed countries face virtually the same shocks and so differences in inequality have to be attributed to institutional aspects that are specific to each country.

A prominent feature of the data is that in countries where wage inequality is more pronounced, the market plays a larger role in the determination of the economic outcome. In these countries, not only employment protection is more slack and the labor market in general more free, but also the opportunity to realize a business enterprise is greater. In particular, Europe appears to be a much tougher environment for people to exploit the possibility of being entrepreneurs. The average number of days required in Europe

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for a firm to have legal recognition is five times the one required in the United States. The official cost of completing all the procedures is almost 200 times bigger in Europe than in the United States.

In a panel of 18 OECD countries over a period of approximately 20 years, the correlation between a measure of wage inequality such as the ratio between the ninth and the first deciles of the wage distribution and a measure of products market regulation is negative. Countries where wage inequality is high are countries where entry regulation is heavier. Moreover, wage inequality is positively correlated with the labor share: countries where wage inequality is high are countries where the labor share of income is higher. These relationships hold in the sample even after controlling for individual and time effects, for a measure of unionization and employment protection.

I provide a theory of wage inequality and entrepreneurship. In a nutshell, barriers to entry reduce the incentive for skilled workers to become entrepreneurs and lower their outside option.

The model economy is populated by two types of risk-neutral agents. Each type has access to a different spectrum of abilities. While 'unskilled' agents provide raw labor, 'skilled' agents participate in the production process performing different and mutually exclusive activities. In particular, skilled agents can manage existing production processes or start up new ones. Production takes place in firms. Each firm consists of an entrepreneur and a manager together with unskilled labor and physical capital and is characterized by a specific productivity which is drawn when the firm is first started.

At any point in time, skilled workers make an occupational choice. They can either be managers or entrepreneurs. They become entrepreneurs once they get an idea. Each idea has a productivity drawn from a certain distribution. Upon the realization of the idea, the skilled worker decides to open up a firm or not. In case he does decide to become an entrepreneur, he pays a fixed cost and hires a manager who then hires unskilled labor and physical capital. I interpret the fixed cost as measure of the hurdle of doing business. Not only it represents the mere start-up cost but also accounts for those implicit costs imposed by regulations and aspects of the business environment, such as financial development, labor regulation, and protection of intellectual property, that might restrict the set of opportunities and hamper entrepreneurship.

The theory qualitatively replicates the stylized facts. High costs of entry reduce the number of firms, increase their size and decrease the skill premium and the labor share.

The model is calibrated on the size distribution and on the entry and exit rates of firms in the United States to match the observed skill premium assuming the cost of entry is zero. The cost of entry in countries where barriers are higher is backed up by matching the entry rates in these countries, the aim being to measure how much of the observed wage inequality this theory can account for.