

It often takes many years before the analysis done by economists enters into public policy debates. Economists proposed public school vouchers as a way to improve K-12 education decades before cities started to experiment with them. Economists called for abolishing the military draft many years before the issue became a serious policy debate. It seems that today's political discussion of the minimum wage does not incorporate the advances in economics that occurred in the 90's. Unfortunately, I am referring to 1890s.

Before the 1890s, economists believed that there was a fixed ratio of machines to workers for each item that was produced. For instance, in a dress factory, each worker may have 2 tools, perhaps a sewing machine and a tape measure. If this factory wants to make more dresses, it would have to purchase two tools to accompany each additional worker that it hires.

What these early economists did not realize was that firms do not hire workers and machines in fixed proportions. If the cost of hiring workers increases, the firm may hire fewer workers and buy more tools. In this case, every worker in the dress factory may have four tools. Alternatively, if the cost of a tool goes up, the firm may purchase fewer tools and hire more workers, leaving each worker with one tool. Machines and workers are substitutes in the production process. Firms will hire each type of input as long as it adds more revenue to the firm than the additional input costs.

By increasing the minimum wage, we are increasing the cost of hiring unskilled workers, making it less attractive to use these workers in the production process. Firms will substitute away from workers toward other inputs such as machines. The good intentions of the minimum wage advocates to help the poor may leave unskilled people without a job.

When the minimum wage law prevents poor people from finding low paying entry level jobs, the law is also depriving these people of the chance to gain skills that will allow them to make higher salaries in the future. For instance, Bill, a friend of mine, used to work on construction sites. On his first day of work, he picked up garbage and swept because the construction company did not trust him to do anything else. As time went on, other workers showed him how to do different tasks. Before long, he was using a drill, and eventually he was allowed to operate a backhoe. When Bill started working in construction and he only knew how to pick up garbage, he was not very valuable to the company, so he did not get paid much. It would have been tragic if a minimum wage law had prevented Bill from getting the construction job that set him on a path for picking up skills. Now that he knows how to operate a backhoe, plenty of construction companies would love to hire him. He is so productive that a company will pay him significantly more than the minimum wage. If one construction company refuses to pay him a high wage, he can just go work for another company, which would be glad to pay a high salary to obtain such a productive employee.

In the current presidential race, several candidates, both democratic and republican, have called for an increase in the minimum wage. Democrats Bernie Sanders and Martin O'Malley want to raise the federal minimum wage to \$15 an hour. If they are successful in raising the minimum wage, some people, who are in the same situation that Bill was, may not have the opportunity to find a job that builds their skills and allows them to earn a much higher salary later in life.

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