

Abstract

## **An Analysis of the Spillover Effects of Labor Market Institutions in Industry**

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The need for policies that address growing inequality and polarization through job creation and human capital accumulation is increasingly clear in the post-financial crisis era of jobless growth and scant trickle-down effects from the large firms. In response to social demands the current administration has promulgated income-led growth as its main economic paradigm, designed to stimulate aggregate demand by promoting stable income growth of workers. Policies implemented under this framework include an increase in the minimum wage, the conversion of non-regular workers to regular status, and the 52-hour workweek.

It is important to analyze the effects of a minimum wage on the labor market, but analyzing only the impact of the minimum wage on the labor market is to limit consideration of its impact to the supply side. Firms use workers to produce goods and pay them wages, so the minimum wage has both direct and indirect impacts on the firms. It is thus necessary to measure the impact of the minimum wage on industrial performance and productivity. With this aim in mind this study analyzes the effects of industrial and economic spillover effects of the minimum wage, measuring changes in productivity and yields using microdata and also through the Computable General Equilibrium Model (CGE).

When we analyzed of the impact of minimum wage on labor productivity and output, we failed to find statistical evidence that the

change in minimum wage had a significant impact on labor productivity and output. We speculate that this may owe to the firms having adjusted production factors to accommodate increased labor costs brought on by the minimum wage hike. To test our reasoning, we analyzed how the change in the minimum wage affected hourly wages and working hours for workers who previously had worked under the minimum wage. Our analysis revealed that the minimum wage hike led to an increase in hourly wages for workers who had previously received less than the minimum wage but a decrease in working hours. The above results exhibited sectoral variation however, with more severe fluctuations in hourly wages and working hours observed in the service sector than in the manufacturing sector.

We conducted a number of analyses of the minimum wage on gross domestic product, gross output and consumption using different scenarios on when the minimum wage would come to 10,000 KRW established by 2030. The minimum wage positively impacts the GDP, gross output and consumption but the size of the effect differs by scenario. We found that, depending on the scenario, the number of workers receiving the minimum wage increased (compared to 2015) and the number of workers making less the minimum wage declined. We speculate that increasing the minimum wage made hiring workers that would receive less than the minimum wage more expensive.

Our research carries a number of policy implications, which are described below. First, one of the stated goals of the minimum wage system is to protect low-wage workers and increase their incomes. But due to industrial and economic spillover effects caused by the increase in the minimum wage, it is possible that workers in select industries may actually see their incomes fall. It is therefore necessary to devise measures to mitigate the side effects of a

minimum wage. Second, additional research is needed to determine what kind minimum wage system is optimal in Korea. The results of this kind of research would help policymakers decide whether to differentiate the minimum wage by business size, industry or region, or maintain the current system. Third, it is important to consider in detail how to create a formula that might help determine an optimal minimum wage. Fourth, reforms to the standard wage system are necessary, and we must also debate the merits and demerits of the decision-making apparatus for minimum wage differentiation. Finally, we should consider allowing those who major in industry and productivity to sit on minimum wage committees to discuss minimum wage issues.