


Implications of Rising Income Inequality for the Korean Economy



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The recent literature has found that rising income inequality in many countries is harmful for their sustainable growth (Dabla-Norris and others (2015), Easterly (2007), Ostry, Berg, and Tsangarides (2014). In Han, Kim, and Lee (2016), we narrow down the scope and quantitatively study the effect of rising income inequality in China, Japan, Korea, and the U.S. on the Korean economy. To do that, we first relate the empirical proxies corresponding to income inequality to data on consumption, investment, and employment. The proxies are income shares held by the highest 10 percent, the highest 5 percent, the highest 1 percent, the highest 0.1 percent, and the inverted Pareto-Lorenz coefficient from the World Wealth and Income Database (WID).

Our regression results show that there might be opposing forces at work in the effect of rising income inequality on consumption, investment, and employment. An increase in either income held by top 10 percent or 0.1 percent tends to have negative effects on consumption, investment, and employment. On the contrary, the income share held by top 1 percent tends to have positive effects. As a result, our predicted effect of an increase in top income shares, arising from rising inequality, on consump-

tion, investment, and employment depends on the combination of the predicted path of top income shares weighted by the estimated coefficients. In addition, the inverted Pareto-Lorenz coefficient, which represents a country's degree of income inequality, does not have any significant effect.

Over the last decades, all top income shares tend to increase in China, Japan, Korea, and the U.S. For example, the average, annual growth rates from 1995 to 2012 in Korea are 0.92, 0.31, and 0.14 percent respectively. Treating the historical average changes as the predicted changes in top income shares and assuming a linear relationship between the inequality proxies and the aggregate variables, we predict the future change in consumption, investment, and employment arising from rising inequality. According to our results, consumption and employment are predicted to decrease, while investment is predicted to increase. The increase in investment reflects that the positive effect through an increase in top 1 percent income is greater than the negative effect through increases in both top 0.1 percent and top 10 percent income shares.

To quantify the effect of rising inequality on the Korean economy, we plug the predicted path of three aggregate variables arising from rising inequality into the Global Model Workstation by Oxford Economics. Despite the opposing forces at work between the negative effect on consumption and employment and the positive effect on investment, the negative effect of rising inequality outweighs its positive effect. Therefore, the overall effect of rising inequality on Korea's GDP is negative. In particular, the model predicts that in both cases for rising inequality in Korea only and in all four countries, GDP tends to decline by 0.6% and 1% respectively in 2020.

To further our understanding of the mechanism through which rising inequality affects GDP, we decompose the change in GDP into the changes in private domestic demand, export, and import. At least two implications stand out from the decomposition. First, the main driver of the negative effect of rising inequality on Korea's GDP is through private domestic demand. As rising inequality has negative effect on Korea's GDP, private domestic demand also tends to decline.

On the other hand, the contribution by export is positive and partly offsets the negative effects of rising inequality. In particular, we normalize the change in GDP to -1. Then the contribution by private domestic demand changes from -1.929 in 2016 up to -6.970 in 2018 and finally down to -1.949 in 2020. Over the same period of time, net export changes from 0.929

in 2016 up to 5.963 in 2018, and finally down to 1.027 in 2020. We conjecture that bigger increase in investment might cause growth to pick up through an increase in export because an increase in top 1 percent income shares tends to increase investment.

In conclusion, we believe that a single index for income inequality is limited in fully representing all changes in inequality, and that the aggregate effect of rising inequality is better captured by tracking down changes in the entire income distribution instead. In particular, our results show that the population within the top 1 percent income group tends to have positive consequences on employment and investment. In the absence of detailed data, however, we cannot pinpoint which section of the population would benefit domestic demand. Instead of targeting a single index for inequality, therefore, policy tools to address rising inequality should be grounded by more sophisticated analysis. [KIEP](#)

References

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