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Opinions

The Impact of China's Rise on the Korean Labor Market and Its Implications

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China's economy has grown at an amazing pace since the 1990s. This rise of China has been one of the most pronounced economic phenomena in the world over the last three decades, often referred to as the "China shock." Due to its fast improvement in manufacturing productivity, in particular, China's exports have increased so rapidly that they accounted for about 13% of all exports in the world in 2018.[1]

A number of recent studies highlight the adverse effects of the growth in Chinese manufacturing exports on other countries' labor markets. For instance, some advanced economies such as the U.S., Norway, Denmark, and Spain were found to have gone through a substantial reduction in their manufacturing employment due to the China shock since the 1990s.[2] Furthermore, the decrease in manufacturing employment in those countries also turned out to have a negative effect on the service sectors' employment. For example, U.S. manufacturing jobs decreased by 1.4 million because of the Chinese imports penetration from 1991 thr-

[1] http://stat.kita.net/stat/world/trade/CtrImpExpList.screen (accessed on April 1, 2019)
[2] See Autor et al. (2013), Balsvik et al. (2015), Donoso et al. (2015), and Ashournia et al. (2014).

ough 2011, which also entails the additional reduction of 0.8 million jobs in the service sector over the same time.[3]

The South Korean economy also has been greatly affected by the rise of China, but in a somewhat different manner. Like other advanced economies, Korea's imports from China grew substantially, roughly by thirty times from 1992 through 2018, with China accounting for the largest share of the total imports of Korea in 2018 (20%). A notable difference between Korea's case and other advanced economies, however, is that the upsurge in its exports to China surpassed even that of its imports from China over the same period. From 1992 through 2018, for instance, Korea's exports to China increased roughly by sixty times and China accounted for the largest share of total Korean exports in 2018 (27%).[4]

With the unusual experience regarding the China shock, the Korean labor market went through more complicated structural changes compared to other advanced countries; the rise of China caused considerable job creations as well as job destructions for Korean manufacturing industries over the last decades. In particular, from 1992 to 2015, 1.20 million manufacturing jobs in Korea were reduced because of the increase in Chinese imports attributable to the China shock. But over the same period, in turn, 1.09 million manufacturing jobs were newly created by an increase in Korea's exports to China due to the China shock as well.[5]

Interestingly, such big changes in Korean employment due to the China shock were mainly driven through Korea's domestic industrial linkages. For example, although some industries were relatively less exposed to Chinese imports, employment in these industries decreased substantially because their downstream industries (buyer industries) were intensively exposed to the Chinese imports. Similarly, some industries did not experience a large increase in their direct exports to China, but hired more workers due to their downstream industries substantially expanding their exports to China. These indirect channels played a central role in the process of the China shock transmitting to Korean manufacturing employment.[6]

All in all, more than one million jobs, or about one third of all manufacturing jobs in Korea, currently seem to be supported by the Chinese economy directly or indirectly. This large amount of additional jobs created as a result of the China shock partly explains the rebounding trend in Korea's manufacturing employment starting from the 2000s, which contrasts with

[3] See Acemoglu et al. (2016).
[4] http://stat.kita.net/stat/kts/ctr/CtrTotalImpExpList.screen (accessed on April 1, 2019)
[5] The analysis includes data from firms with 5 employees or more. See Koo and Whang (2018) for the details.
[6] See Koo and Whang (2018).

other advanced economies' continuously decreasing trend in their manufacturing employment over the same period.[7] Further considering that the increase in manufacturing jobs should be also linked to a great number of jobs in the service sector through the industrial linkages, we realize how enormously China's rise has affected the Korean labor market over the last decades.

The above findings entail several implications regarding Korea's employment policies. First of all, a closer examination is required in order to verify how each Korean manufacturing job is related to China at a more detailed industry-occupation level. This is hardly a straightforward task because, as discussed before, a large portion of Korean manufacturing jobs appear to be indirectly affected by China through domestic industrial linkages, not through their direct trade with China. Hence, we need to carefully look at all the specific direct/indirect channels through which new manufacturing jobs have been formed with China's rise over the last decades, so as to more precisely understand the impacts of further potential China shocks on the Korean labor market.

The immediate further China shocks would include the current trade conflicts that China is facing with the U.S. under the Trump administration. As is well known, the U.S. has imposed various trade measures on China to reduce its trade deficits against China. We need to understand the impacts of those measures on the Chinese economy and how exactly those impacts would translate to our economy and jobs in near future. From a long-term perspective, in turn, we also need to recognize that the current rebounding trend in Korea's manufacturing employment is an unusual phenomenon which is hard to find in other advanced economies. In other words, this is likely to be a temporary situation quite dependent on China. Given that the Chinese economy keeps changing fast, it is hard to be sure how longer our current manufacturing jobs will continue to survive. In that sense, we should systematically determine the relevance that Korean manufacturing jobs hold to the Chinese economy and evaluate their quality and prospects in consideration of where the Chinese economy will go. This will provide essential information needed for better shaping our government's employment policies from a long-term perspective.

We should also pay attention to the fact that more than one million jobs have disappeared in Korea's manufacturing industries over the last two decades because of the China shock. If a worker displaced from his or her job due to the China shock could find a new high-quality job in a short period of time, such job reductions would not matter. However, a number of exist-

[7] https://www.imf.org/en/Publications/WEO/Issues/2018/03/20/world-economic-outlook-april-2018 (accessed on April 1, 2019)

ing studies have shown that displaced workers are likely to suffer from permanent income loss for the rest of his or her life.[8] Thus, the Korean government should review cases of workers who lost their jobs due to the China shock and track what happened to them after they lost their jobs. Based on the investigation, we should figure out a better way to mitigate workers' income loss caused by an external shock and promote successful job relocations. This process is needed not only to take care of people who already were worse off due to the China shock, but to prevent people from being severely scarred by potential trade shocks that might come in the future.

During the rise of China over the last decades, a large share of Korean jobs have become closely intertwined with the Chinese economy. To pursue successful Korean labor market policies, it should be the first step to thoroughly learn how the Korean labor market has adjusted to the rise of China. KIEP

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[8] For example, see Couch and Placzek (2010).

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