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Comment Tokuo Iwaisako

Lee and Song's chapter analyzes the effect of oil shocks on the Korean economy and examines the role of monetary policy in dealing with oil

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shocks. In doing this, they employ two analytical tools out of the standard macroeconomists' toolbox, structural VAR and Dynamic Stochastic General Equilibrium model (DSGE). However, their analytical tools are particularly constrained in this case for two reasons. First, the Asian currency crisis in the late 1990s caused serious turmoil and significant structural changes for the Korean economy. Hence, in addition to dividing the sample around the Asian currency crisis, Lee and Song dropped the observations in 1998 and 1999. This limits the sample size for the post-Asian crisis period to less than forty observations of quarterly data. It is obviously a short sample for an application of time-series techniques.

Second, oil price movements in the 2000s (2000 to 2009) exhibit large swings relative to the post-crisis sample period. Like Japan's asset price bubble episode in the late 1980s, the existence of a large onetime fluctuation in asset prices often spoils sophisticated econometric techniques that rely on asymptotic methods. I am particularly afraid that the nature of estimated VAR system for the post-Asian crisis sample might be dominated by the effect of volatile oil price movements toward the end of the sample period, as documented in figure 8.1.

Even though the small sample size imposes serious constraints, Lee and Song have presented a worthy analysis of the issues addressed in their chapter, using the tools employed. As a conclusion to the first half of the chapter, the authors argue that the persistent increase of the oil price in the 2000s is induced by the increase in demand for oil, in contrast with the oil price fluctuations in the pre-crisis period that are mostly caused by supply-side disturbances. While this conclusion seems reasonable, their VAR analysis obviously suffers because of the limited sample size. For example, in figure 8.5, impulse response functions of most of the variables exhibit rather unusual wave shapes. I suspect that this reflects the effect of wild fluctuations of the oil price in 2008 and 2009. A related minor point is that because the authors included the interest rate variable, which is available only for the period after 1987, in their VAR analysis, their pre-crisis sample does not contain important information about the first and second oil crisis episodes. Therefore, we have to be particularly careful in interpreting the VAR results presented here.

I also have some comments on the DSGE results. First, while the relative size of the price stickiness parameters makes sense, I am not very comfortable with the fact that the estimated wage stickiness parameter (0.539) is lower than any other price stickiness parameters, even lower than oil price stickiness (0.685) in table 8.5. The result is even more surprising with pre-crisis estimates in table 8.7, with the wage stickiness parameter being 0.149 and the oil price stickiness parameter being 0.464. I hope that the authors provide some discussion about this problem.

Second, from the simulation results reported in table 8.6, the authors conclude that the monetary policy rule, which accommodates oil price infla-

tion, generally works well, except for the case of very persistent technology shocks. However, exactly how costly is it for the Bank of Korea to deviate from the optimal policy rule? The numbers reported in table 8.6 seem to suggest that the cost might not be very large. I would like to see the authors discuss the economic significance of the numbers reported in table 8.6, as well as their implications for monetary policy in practice.

Comment Mohamed Rizwan Habeeb Rahuman

Generally, this chapter is timely as it attempts to discern the reasons for the recent rise in oil prices and the macroeconomic impact it has on South Korea. The authors attribute the recent oil price shock (especially since 2003) on demand conditions, which is distinct in character from previous oil price shocks that were mostly supply shocks. On this point, this discussant concurs fully with the authors, and indeed, it is clear that the authors were inspired by James Hamilton's seminal works (Hamilton and Herrera 2004; Hamilton 2008, 2009) that lead to this conclusion as well.

However, I have some comments. The authors mention the inherent "battle" between headline inflation and core inflation in determining the function of oil shocks on the macroeconomy, especially in setting monetary policy. Though the chapter seems to lean toward Hamilton's contention that oil price shocks, due to their increasingly permanent nature, cannot be treated as transitory and headline inflation must be paid close attention by central banks, the authors shied away from making a clear argument. I believe a thorough discussion on this issue, and clearly stating which way the authors believe the direction should be taking, would not only strengthen the argument of demand-shock role of oil prices that this chapter wants to make, but also would serve to influence many central bankers in deciding the role of oil price shocks in setting monetary policy.

The authors inserted a clear "structural break" in the data set, separating the data set for the Korean economy between "pre-crisis" (which is 1970 to 1997) and "post-crisis" (which is 2000 to 2009). The years 1998 and 1999 were omitted, as the authors argued that these two years saw the Korean economy moving to a free-floating exchange rate system, and adopting an inflation-targeting regime. I believe this structural break could have led to a flawed data set, as the years 1998 and 1999, the years of the Asian Financial Crisis, also led to a sharp decline in oil prices (hitting the trough of US$10 per barrel in September 1998) due to negative demand shock from East Asia. Just as the authors intend to investigate the positive demand shock

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