

“Economic Reform and Openness in North Korea: A General Equilibrium Model,” (joint with Scott Bradford & Dong-jin Kim) targeting *North Korean Review*, in progress.

This paper examines the impact of hypothetical economic reforms in North Korea based on market mechanisms. A dynamic general equilibrium model is built and used to simulate several possible reform scenarios. The economic data used to calibrate the model are carefully chosen and are the best available.

We first construct a baseline model which mimicks the current command economy. In this scenario the government allocates goods in an inefficient way and economic growth is negative. We next model a semi-market transition that allows producers to make optimal decisions regarding the distribution of the available capital. Total capital is still chosen via government as in the baseline case. We also consider two scenarios with full market reform. The first assumes all market mechanisms, including consumer utility maximization, firm profit maximization, and market clearing prices. However, we keep government investment in public infrastructure unchanged from the first two scenarios. In the second, the government significantly increases the rate of infrastructure investment. In none of our scenarios in this paper do we consider reforms that allow for international trade, international investment or reductions in the size of the military.

The simulations show little hope for the North Korean economy without significant market reforms. Although all of the reforms raise the level of output and consumption per capita, only with significant increases in infrastructure investment does growth change from negative to positive.