**FI\_AINO16: The AINO 2.0 Model of the Bank of Finland**

Kilponen et al. (2016) present the AINO 2.0 model, which is the DSGE model used at the Bank of Finland for forecasting and policy analysis. It is a small open economy model of the Finnish economy within the Euro Area and the rest of the world. The framework includes standard frictions and rigidities as well as a monopolistically competitive banking sector in the spirit of Gerali et al (2010).

* Aggregate Demand: Households maximize their lifetime utility, where the per-period utility function is separable in consumption and labour. They can invest in the domestic capital stock (via capital goods producers), in euro area bonds, rest of the world bonds and domestic bonds. Households supply labour and act as wage setters in monopolistically competitive labour markets.
* Aggregate Supply: Production of domestic intermediate goods is subject to a CES production function with time varying mark-up and Harrod-neutral technological progress under monopolistic competition. Final consumption and investment goods are produced by domestic retailers operating under perfect competition, combining both domestic and imported goods. Export goods are produced by separate exports goods producing firms with a CES production function including domestic intermediate goods and imported goods. Domestic intermediate goods and export goods producers are subject to nominal rigidities in the form of Calvo (1983) – pricing.
* Banking Sector: The economy is populated by entrepreneurs who rent capital to the domestic intermediate good firms at the beginning of the period and sell the undepreciated capital to capital producers (owned by households) at the end of the period. Entrepreneurs finance the difference between expenditures and net worth from banks. Banks have market power and set rates on loans, subject to adjustment costs.
* Shocks: 6 types of technology shocks, 3 types of domestic mark-up shocks, 4 types of domestic demand shocks (including a standard government consumption shock), 7 foreign/external shocks and 4 financial shocks (among them the euro area interest rate shock).
* Calibration/Estimation: The model is estimated using Bayesian methods on 24 observables of Finnish and foreign data, with the sample period being 1995Q2 to 2014Q4.
* Replication: We simulated the impulse response functions to a productivity shock and a euro area interest rate shock, Figure 6 and Figure 8 in the paper.
* Implementation: Monetary policy is exogenous in this framework, as it does not explicitly model the euro area economy and associated monetary policy decisions. Hence, the model is implemented without the option to choose among various monetary policy rules. However, the implementation allows to compare the fiscal policy shock in the model to other models.