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1st Comment on “The Austrian Quarterly Model of the OeNB, WIFO-Macromod and Macroeconometric Model LIMA (IHS)”

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1. Forecasts with Macro-econometric Models

Models can only be evaluated if you do know the questions they are supposed to answer. These questions determine the theoretical foundation, size, disaggregation, data, specification, strategy for tests. The forecasting quality of the three models of OeNB, WIFO and (IHS) cannot be evaluated here, because the necessary statistics about the forecasting errors of the models are not available.

2. Characteristics of the Three Models

All three models are national structural macro-econometric models.

- *AQM* is a quarterly model with a neoclassical long-term solution. It estimates error correction models (ECM) and is used for forecasts and economic policy simulations. It is part of the ESCB-model.
- *WIFO-Macromod* is an annual model. The demand side is important. It follows the ECM framework and is used for forecasts and economic policy simulations.
- *LIMA* is an annual model, in which the demand side is important. Using the ECM methodology, its main purpose are forecasts. It is part of the LINK-project.

3. Simulation Results

- Common characteristics of the three models: High elasticities of public expenditures and external demand and low negative elasticities of interest

rate changes. On the other hand a very strong impact of wages and prices, but a very low impact of international competitiveness on exports.

- Differences: AQM-model does not have induced productivity effects in the medium term and there are no differences in the elasticity of public expenditures and exports on growth.
- Special features of all three models are very high price and wage effects, but a very low impact of changes in international competitiveness.

4. Expected Wage and Price Effects in a Monetary Union

Preconditions: A common short-term interest rate in the European Monetary Union (EMU) and no nominal exchange rate changes in the EMU anymore. The economy of Austria is small and open with low wage and price increases.

Expected simulation result of higher public expenditures (1% of GDP):

- Induced growth impact should be smaller or equal to unity
- Wages should increase only slightly
- Prices in Austria are mainly determined by external factors and should not change a lot
- Induced employment effect should be much smaller than unity because of expected changes in productivity
- Exports should decline (relative to baseline) because of the impact of a lower international competitiveness

5. Macroeconomic Effects (after 5 Years) of Higher Public Expenditures (1% of GDP)

- OeNB-AQM:
- GDP: +1,6%, Wages: +1,9%, Prices: +2%, Employment: +1,6%, Exports: -0,3%
- WIFO-Macromod:
- GDP: +1,1%, Wages: +1,5%, Prices: +0,6%, Employment: +0,4%, Exports: -0%
- IHS-LIMA:
- GDP: +1,4%, Wages: +2,7%, Prices: +1,8%, Employment: +0,8%, Exports: -0%

6. Summary

Induced medium term growth effects of higher public expenditures seem to be very high in the models of OeNB and IHS. In both models wages and prices increase a lot after public expenditures have been lifted. The prices increase by around 2% and the wages between 2% and 3%. In the OeNB model the employment reaction is as large as the GDP reaction. There are no medium term productivity effects in this case. All models do not show a considerable impact of changes in competitiveness on exports. This is surprising because Austria is a small and open economy. Strong price effects do reduce the real interest rates and do have a positive growth impact on the one side. But on the other side the impact of a reduced international competitiveness should reduce economic growth.