

Referee's comments on "A Long Run Structural Macroeconometric Model for Germany," by Elena Schneider, Pu Chen and Joachim Frohnz

1. The equations characterising the long-run show no development over those in GLPS. The main contribution of the paper is therefore limited to estimating the same model that GLPS estimated in the context of the German economy.
2. Further to the above point, the derivation of the steady state relationships follows GLPS very closely which raises the question of whether it should be included in this form or merely as a reference to the original work. The same criticism can be made concerning section 2.2.
3. The sample period of 1991Q1-2005Q4 is very short. Presumably the reason for this was the reunification of Germany in 1991 but I doubt whether 56 observations are sufficient to yield good results. Alternatively the authors should consider the longer span of the data and allow for the structural breaks.
4. In estimating the cointegrating VAR model, the Case IV (the model with unrestricted intercepts and restricted trend coefficients) should be a benchmark when the data under consideration are subject to trending. However, the current paper estimates the Case III (the model with unrestricted intercepts and no trend coefficients) without any justification.
5. Weak exogeneity of the oil price should surely be tested?
6. Given that the trace statistic supports up to 7 cointegrating vectors the authors may wish to consider other long-run equations in an attempt to improve their impulse response patterns.
7. Page 10 the authors use critical values reported in GLPS but refer to 25 over identifying restrictions when there are only 18? This is simply incorrect and the appropriate critical values should be obtained via bootstrap simulation.
8. Assuming that the rounded parentheses in equation 21 contain t-values, there is no evidence of a negative response of real money balances to the interest rate in contradiction to the authors' assertion. Also the coefficient on y seems to be too large.

9. The impulse responses often exhibit strange and unsatisfactory patterns from a theoretical viewpoint. Furthermore I suspect that if the authors were to compute confidence intervals they would find many of the responses to be insignificant.
10. The authors need to work on their interpretation of the impulse responses, in particular it is not clear why domestic and foreign output should rise after an oil price shock.

In summary, the scope of the study is too limited - it would need to be substantially extended. Some possible directions for further work may include:

- In the context of Germany, data limitations (due to unification) are likely to be the principal obstacle to successful estimation of the model. The authors need to acknowledge this and consider an alternative approach such as allowing for the structural breaks.
- Consideration of a broader set of long-run relations in an attempt to build on the work of GLPS rather than simply applying it in a different setting.
- The authors need to formally test the stability of the system and report their findings.
- Consideration of the impact of foreign shocks such as the US monetary policy shocks or shocks to world output.
- The simple consideration of impulse responses does not fully utilise the modelling strategy of GLPS. The authors should consider forecasting exercises too. This would also make the paper considerably more interesting from a policy making perspective.