Response to the referee's reports:

Response to report I

To general comments:

- Following the comments of the report we have shortened our paper to an empirical note by leaving out all the theoretical part of the paper and referring to the paper by Garratt at al (2003b).
- The asymmetric behaviour of response of the German output and the rest of OECD output to the oil price shock is due to that their residuals have opposite signs in their covariance with the residuals of the oil price.
- We implement bootstrap procedure to test the over-identification restrictions on the beta matrix.

To additional comments:

- p. 3 row 30: the typo is removed.
- 6; 24: typo is removed.
- 7: In Garratt et al. (2000) trend is allowed in the cointegration space. However, the trend appears at the end only in the high-power money equation. We have run LR test of the presence of trend in the cointegration space. The LR-test statistic is 8.0. Hence the null of no trend cannot be rejected.
- 10. This formulation is given in the paper of Garratt et al. (2003b). There are only normalizations and no binding restrictions. After these normalization further binding restrictions can be easily counted.
- 10 Since the constant terms are projected from the unconstrained intercepts, we did not calculate the standard errors. For the two estimated parameters the standard errors are available.
- 19 One SD oil price shock is 0.12 that is roughly 12% increase of the oil price.

## Response to report II

The main comment of the report is the choice of the time span. Since the official data for united Germany started from 1991 we used all of them. Sensitivity is always an issue in empirical modelling exercise. We conduct some studies to assess the sensitivity of the model by doing analysis with subset of data and by doing bootstrap exercise.

As future research project we are going to expand our estimation time span by joint the data before and after the German reunification. This would surely lead not only to the conceptual issue of how to reconstruct the date before the reunification but also to new models with structural breaks in VECMX.

## Response to report III

- 1. We total agree with the referee.
- 2. We reorganize the paper and leave out all the theoretical part of the paper.
- 3. VECMX with structural breaks may be a suitable model for German data. This will be our future research project. Nevertheless, viewing the present analysis as an analysis of a subset of the future large data set will surely help to understand the model with possible structural breaks.
- 4. The Case IV is chosen since Garratt at al. (2000) used the Case IV in modelling UK data. As said in the response to report I, we use now the Case III for the specification of the deterministic term.
- 5. The test of weak exogeneity is done, as suggested by the referee.
- 6. The comment is very valuable. It is especially valuable when we want to provide a gut model for the data. However, our target is not to find the long run model for German data, but to see whether the method by Garratt et al. can provide a useful model for the German data. As always the case in empirical research our estimated model is only one possible model under many possible models.
- 7. 25 refer to free parameters. We can use 5 normalization conditions and the number of true free parameters is 20. The theoretical long run relations have only 2 free parameters. The long run relations put 18 binding restrictions on the beta matrix. As correctly pointed out by the referee, we conducted bootstrap test for the overidentification restrictions.
- 8. The numbers in the parentheses are standard errors.
- 9. As correctly pointed out by the referee the impulse response functions with confidence intervals will be much useful for presenting the IR function. In fact as, pointed out by the referee all the IRF are statistically insignificant. We generate new IRF with bootstrap confidence intervals.
- 10. The anormal patters of the IRF may lie on the insufficient numbers of observations for this analysis. This point can be checked when extend the data set.

All the 5 suggestions for further studies are listed in the agenda of our future project.