

Appendix to The structural dynamics of US output and inflation: what explains the changes?

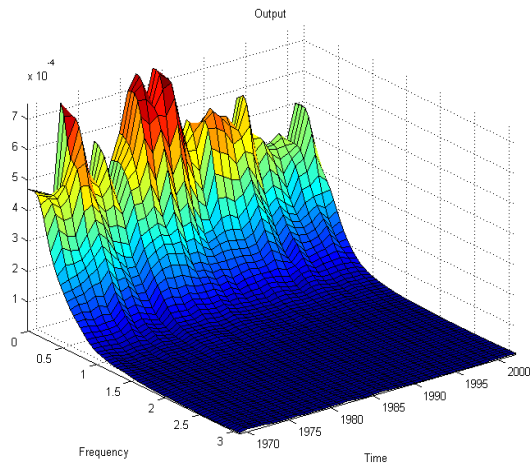
Luca Gambetti, UPF Evi Pappa, LSE and IGIER
Fabio Canova, IGIER, UPF and CEPR *

June 2005

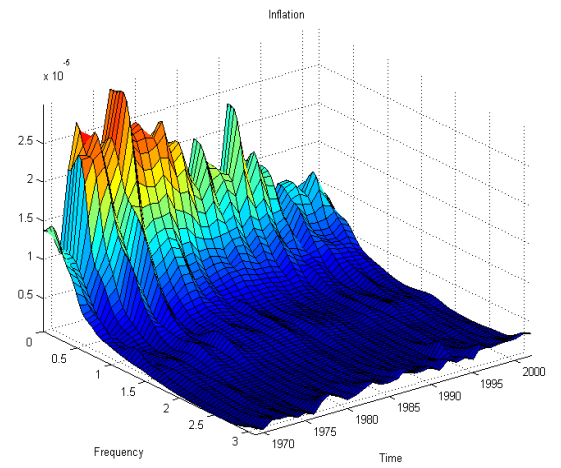
This appendix reports results obtained with:

- A reduced form model.
- A model with Choleski identified shocks.
- Structural analysis where draws which satisfy the restrictions at all horizons are given weight $0.5/n_1$, draws which satisfy the restrictions at two horizons are given weight $0.33/n_2$ draws which satisfy the restrictions at one horizons are given the weight $0.17/n_3$ $n_1 + n_2 + n_3 + n_4 = n$, where n is the total number of draws. (weighting 1)
- Structural analysis where draws satisfying all the restrictions are given weight $0.68/n_1$ and draws which do not satisfy all the restrictions are given weight $0.32/n_2$, $n_1 + n_2 = n$.(weighting 2)
- Structural analysis where shocks to future coefficients are set to zero.
- Non-recursive estimation of the structural variances.

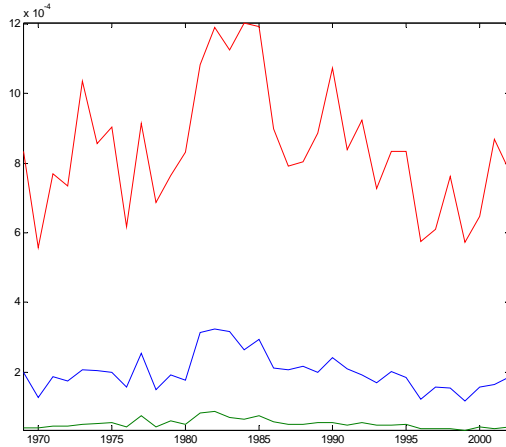
1) Reduced form model



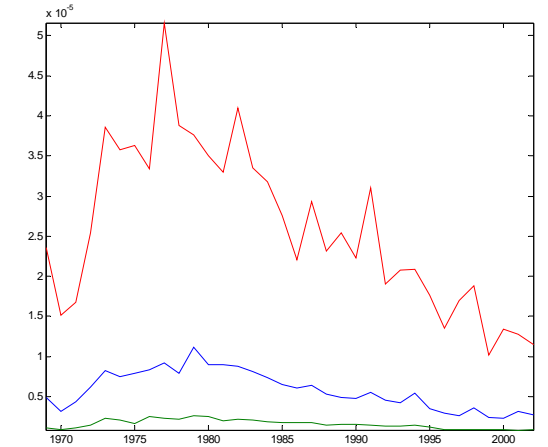
Output spectrum



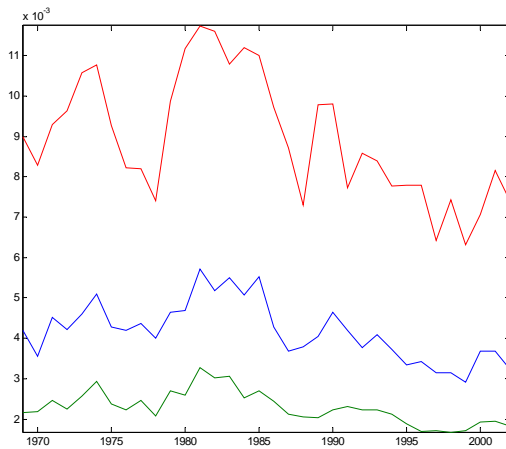
Inflation spectrum



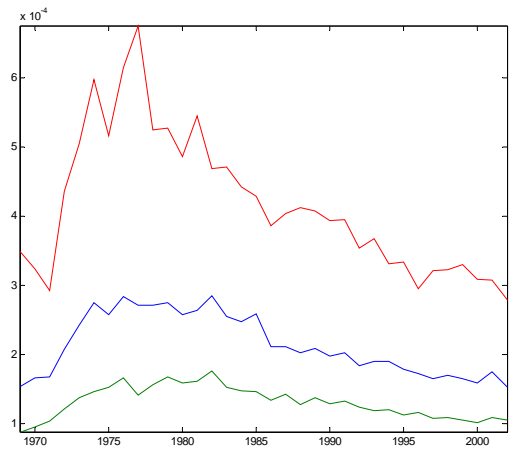
Output persistence



Inflation persistence

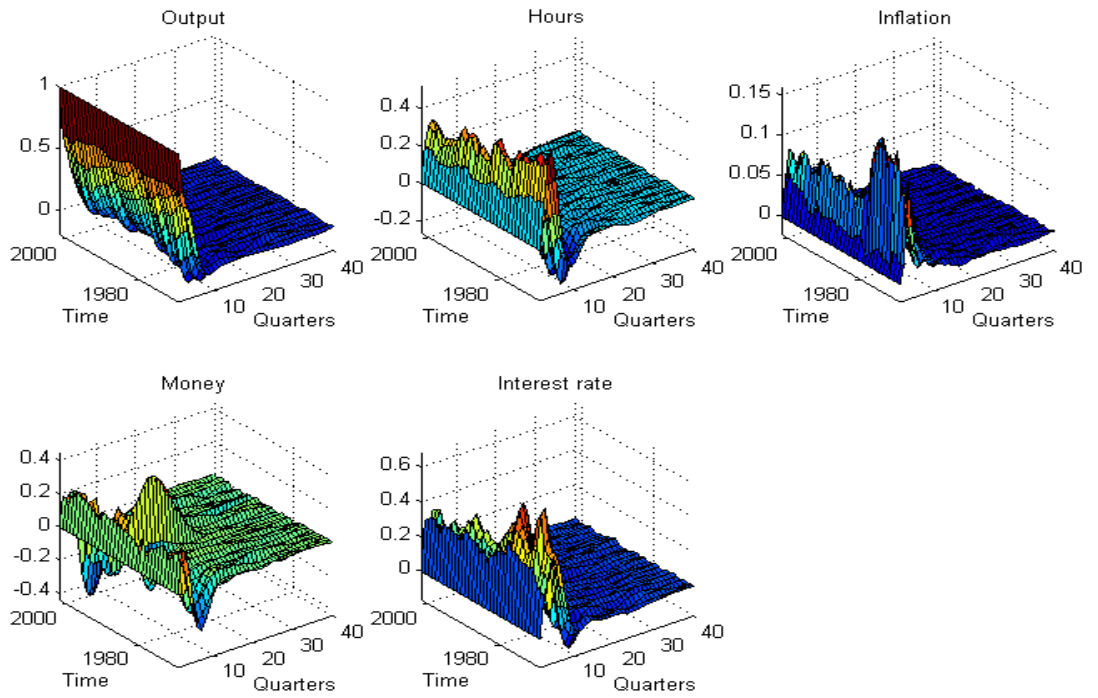


Output volatility

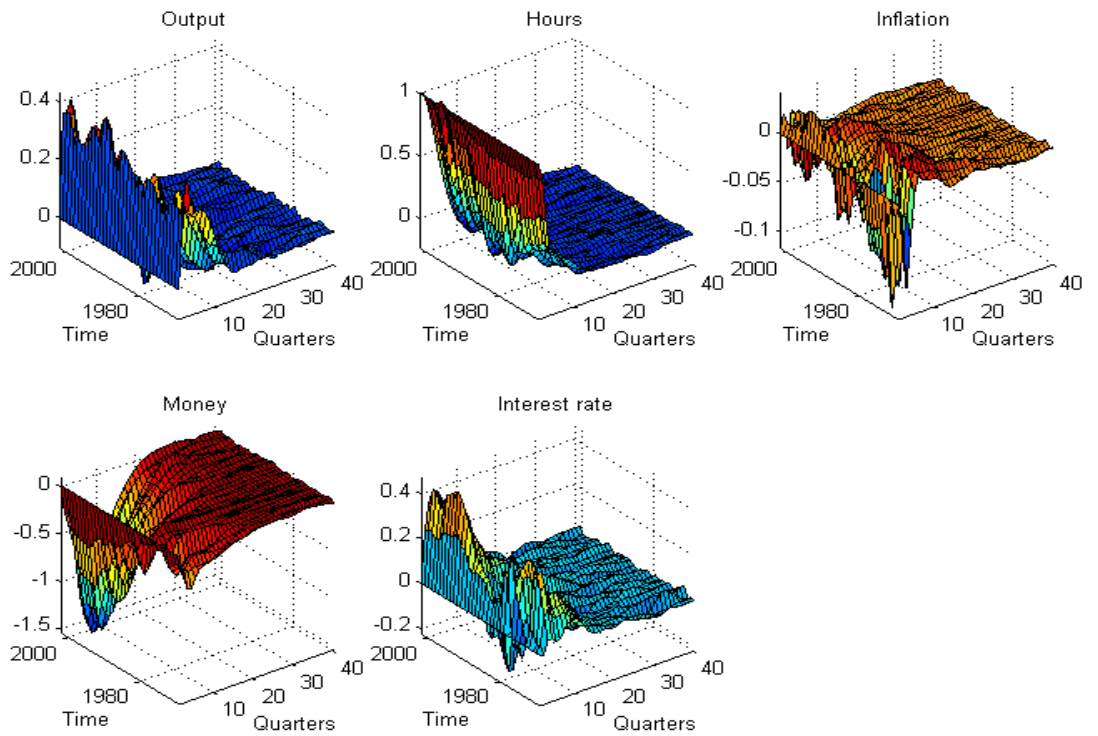


Inflation volatility

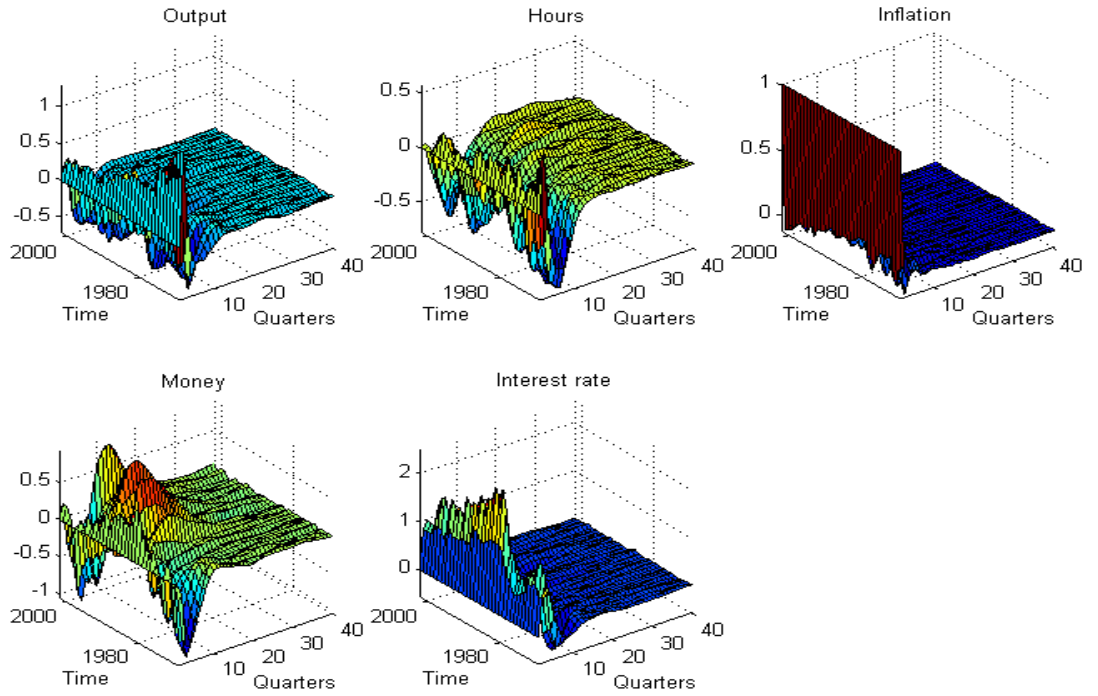
Figure A1: Structural Output and Inflation Dynamics



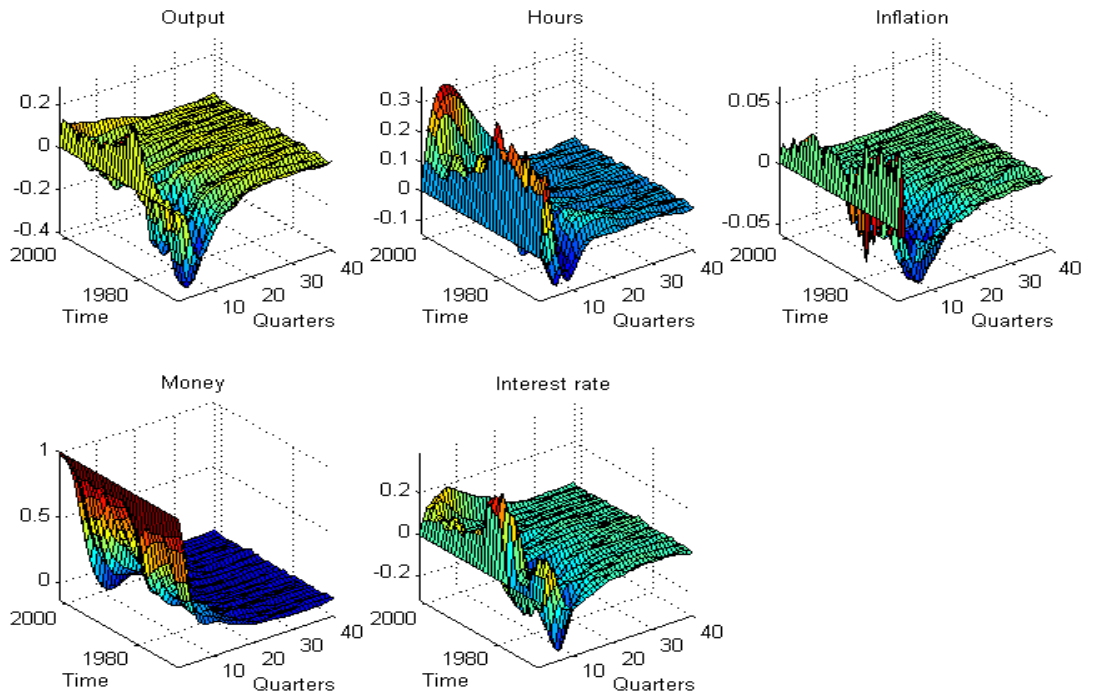
Response to Shock 1



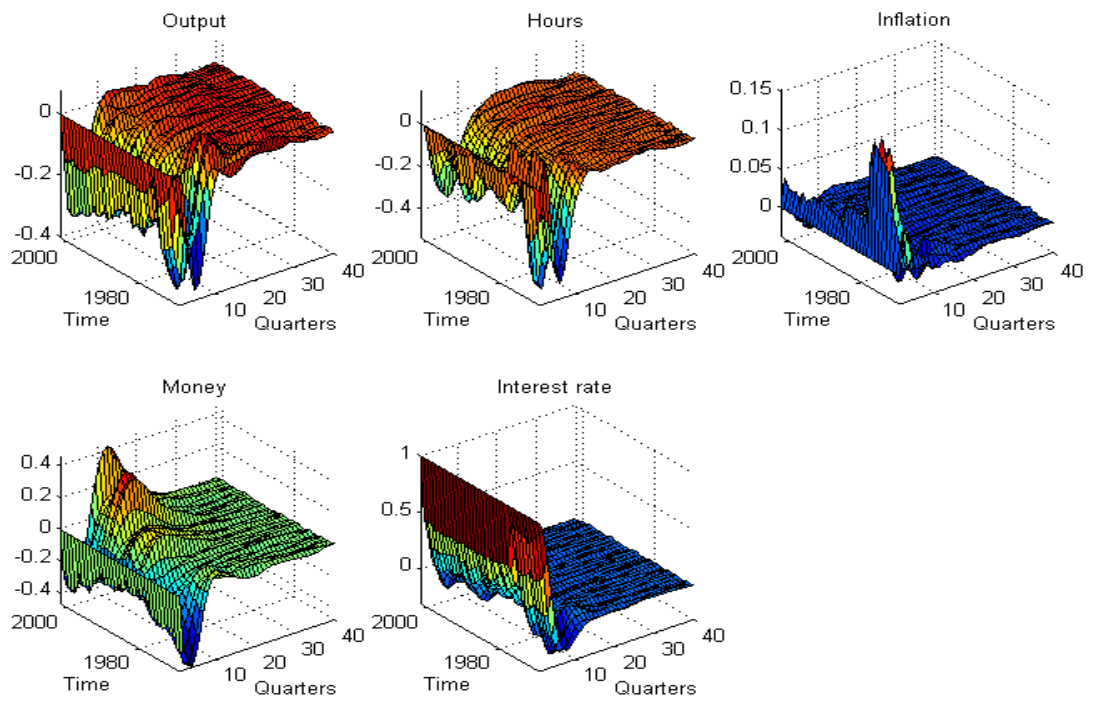
Response to Shock 2



Responses to shock 3



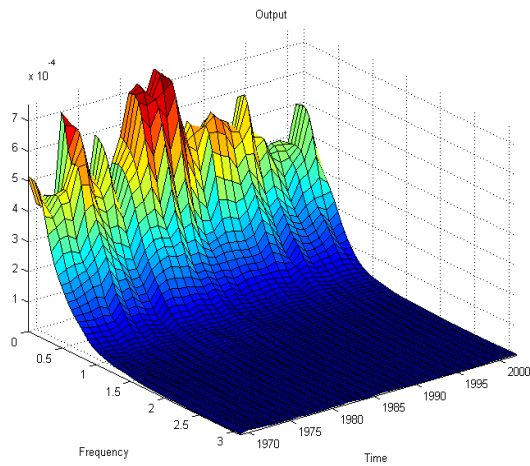
Responses to shock 4



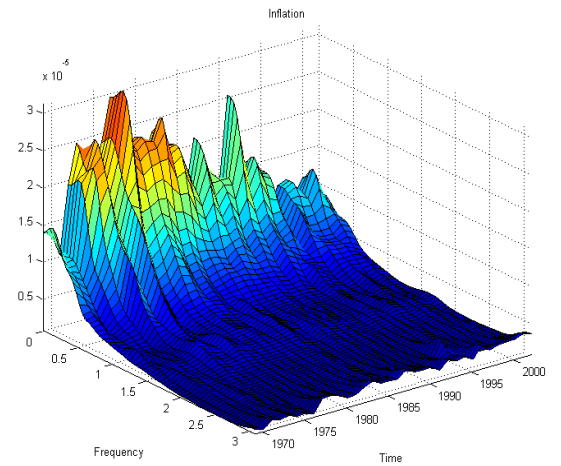
Responses to shock 5

Figure A2: Responses to Reduced form Shocks

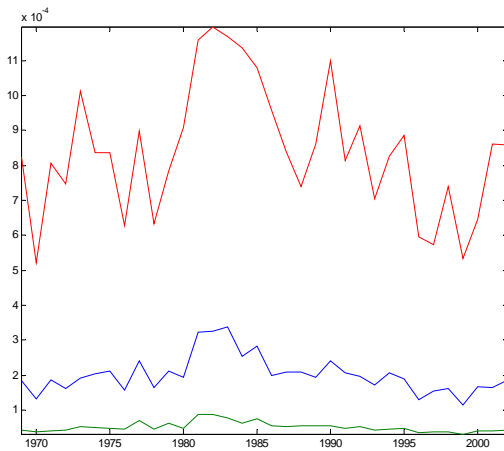
2) Choleski Identified shocks



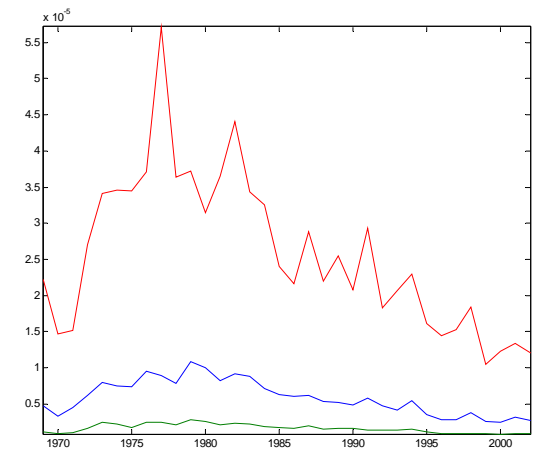
Output spectrum



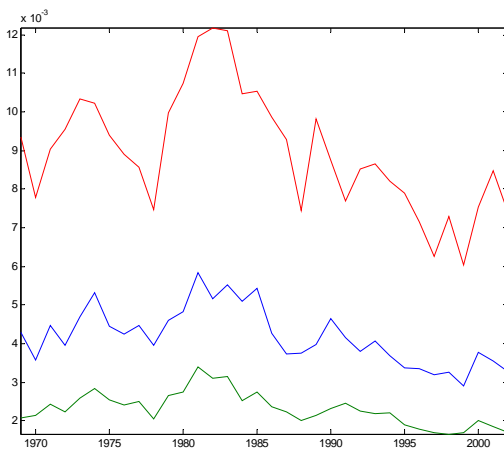
Inflation spectrum



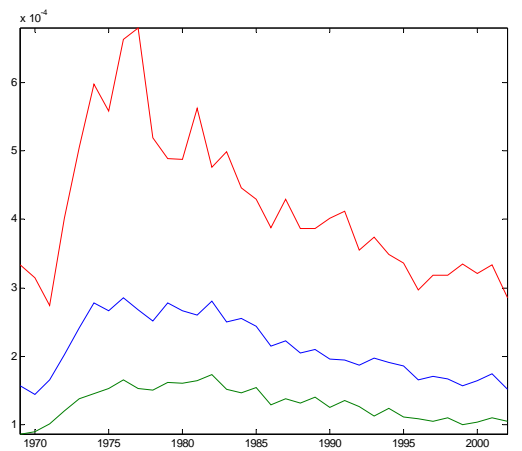
Output persistence



Inflation persistence



Output volatility



Inflation volatility

Figure A3: Structural Output and Inflation Dynamics

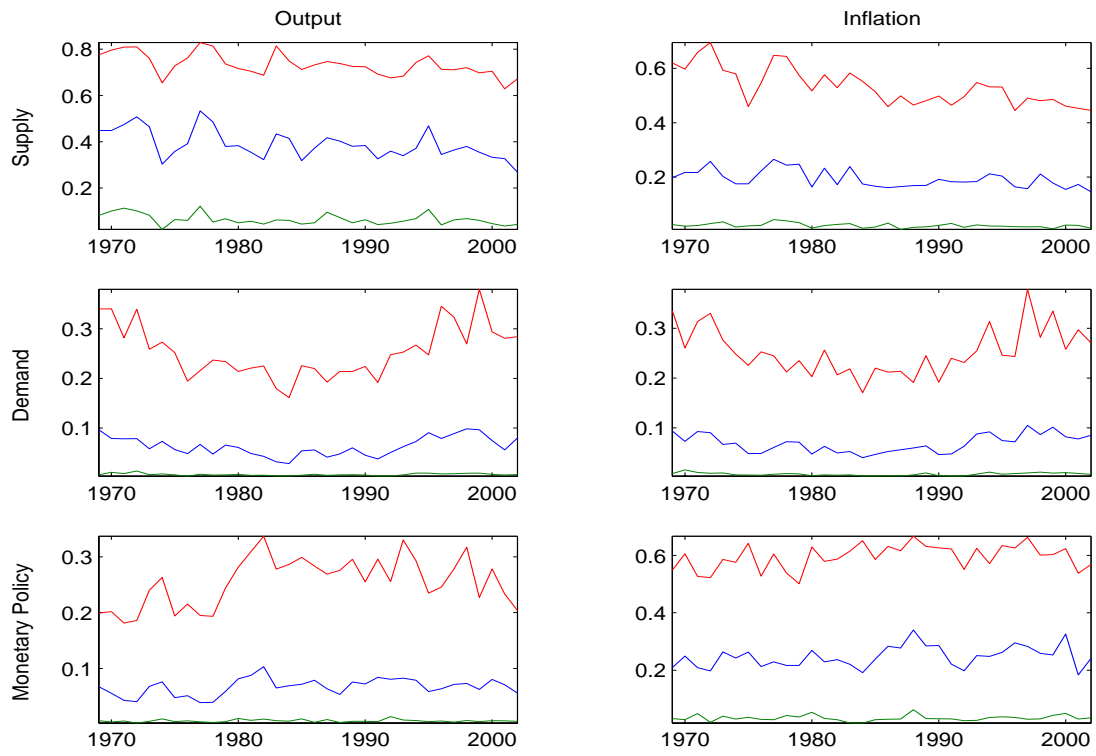


Figure A4: Persistence Shares

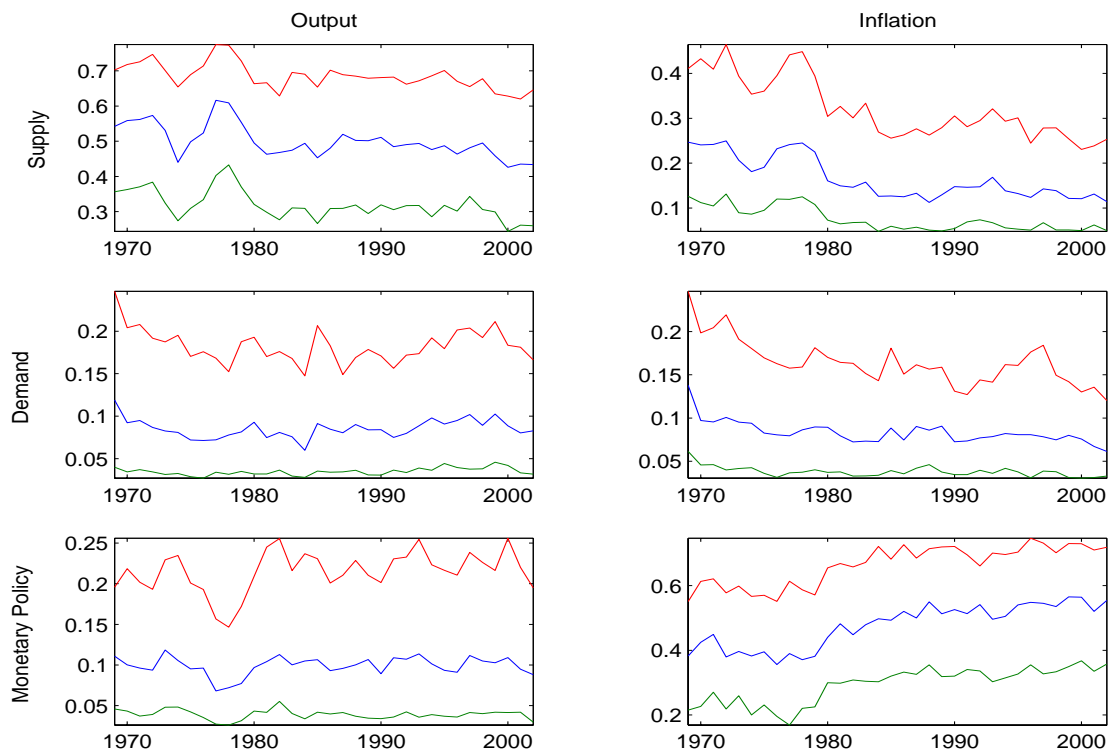
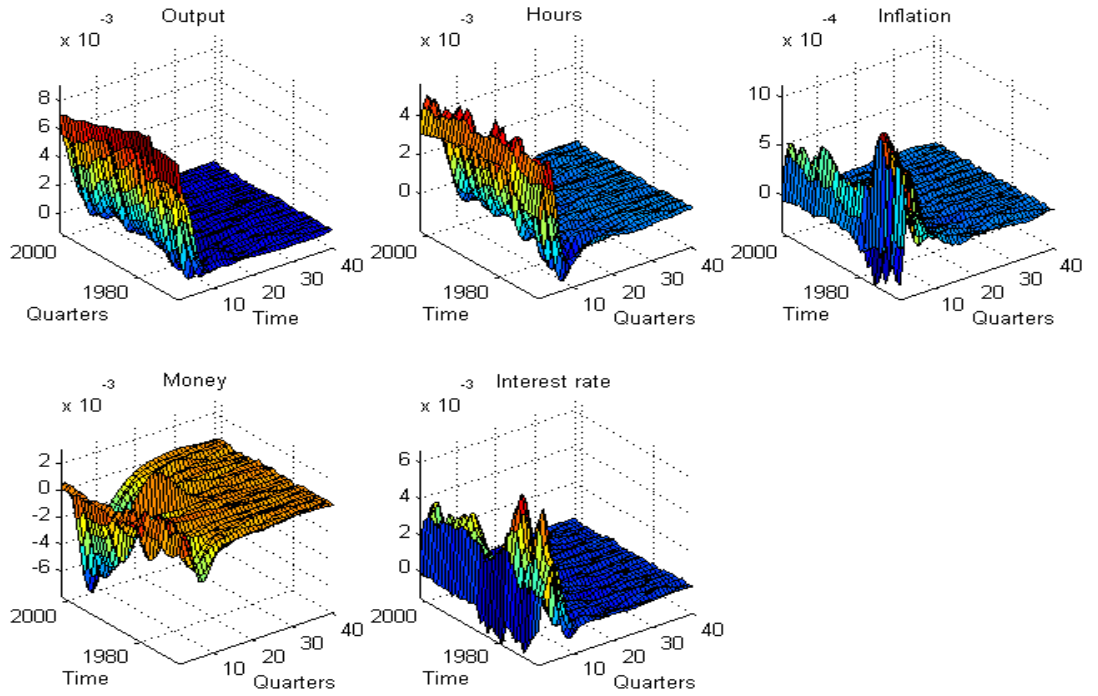
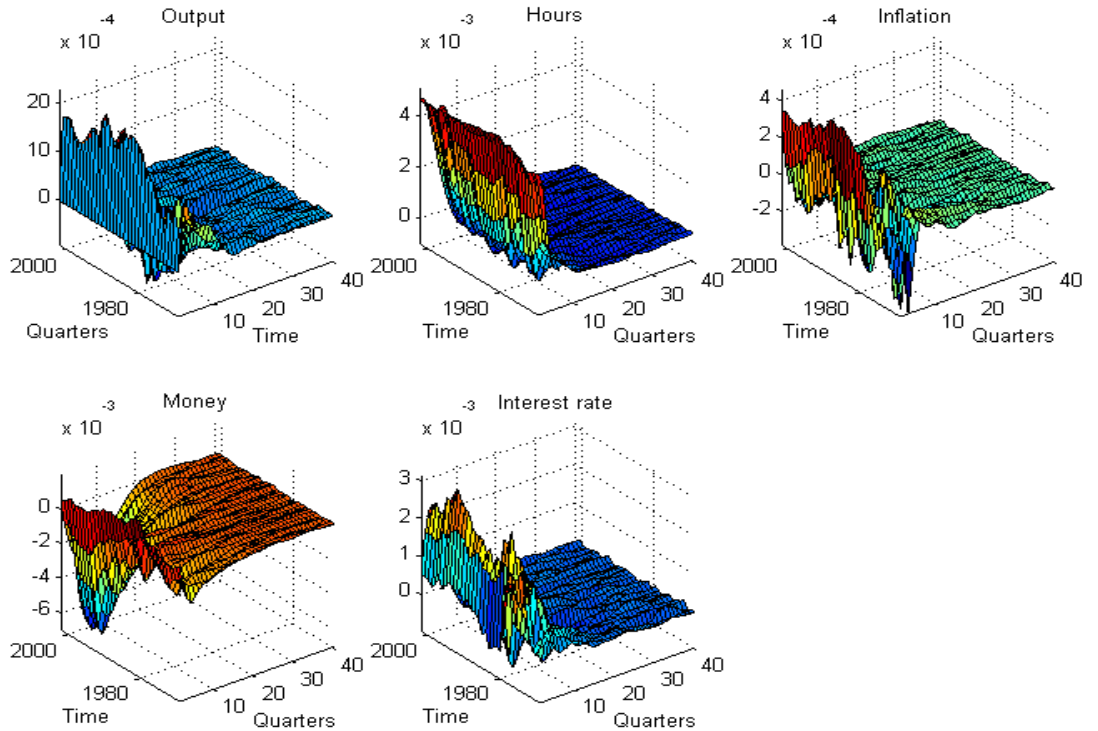


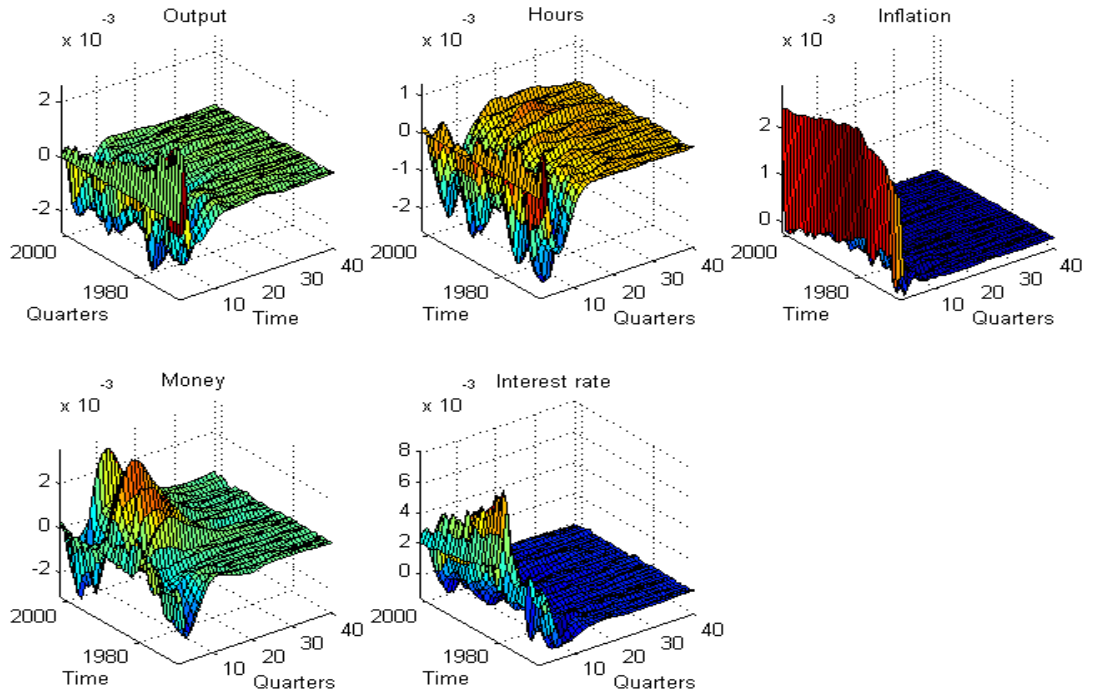
Figure A5: Volatility Shares



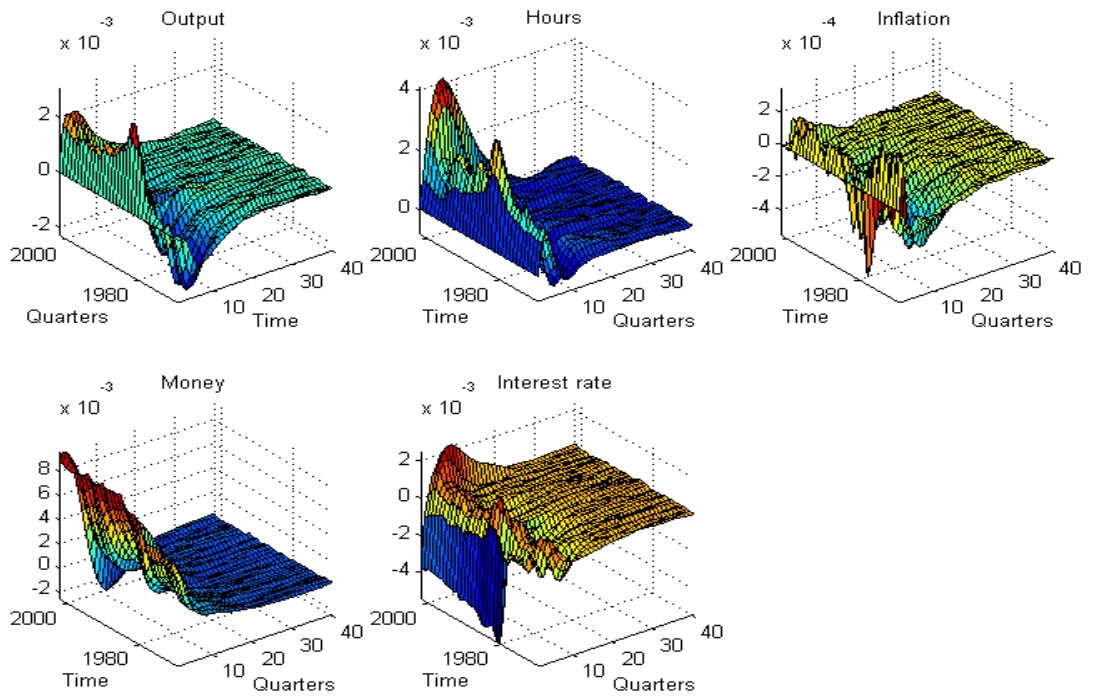
Response to Shock 1



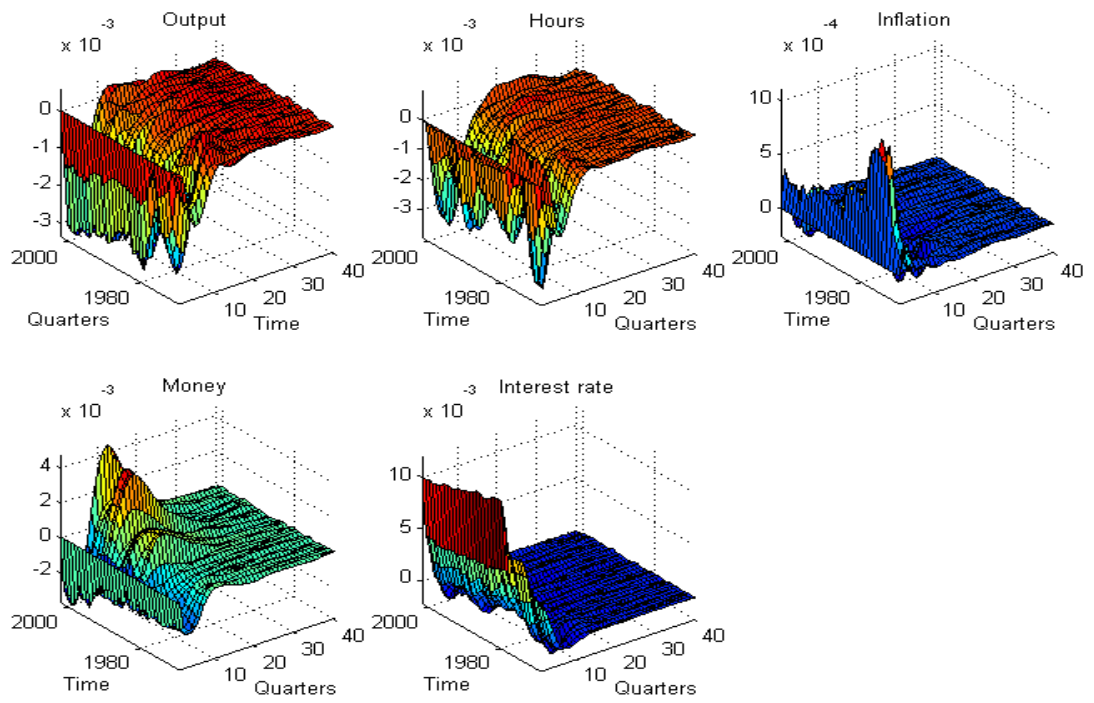
Response to Shock 2



Responses to shock 3



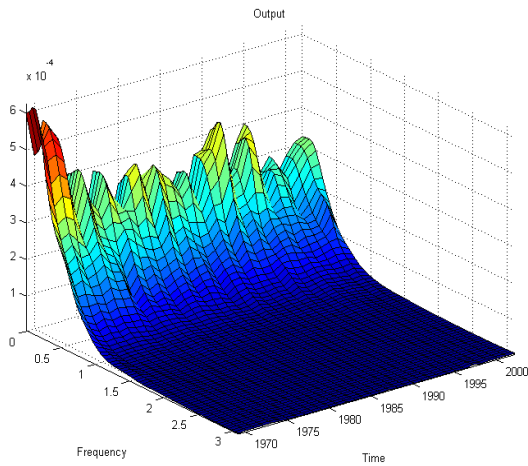
Responses to shock 4



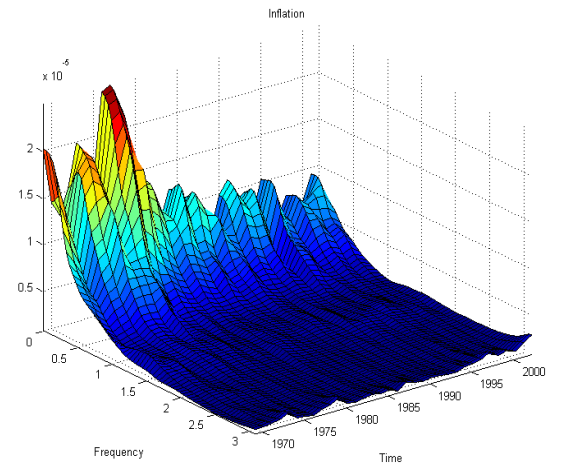
Responses to shock 5

Figure A6: Responses to Shocks

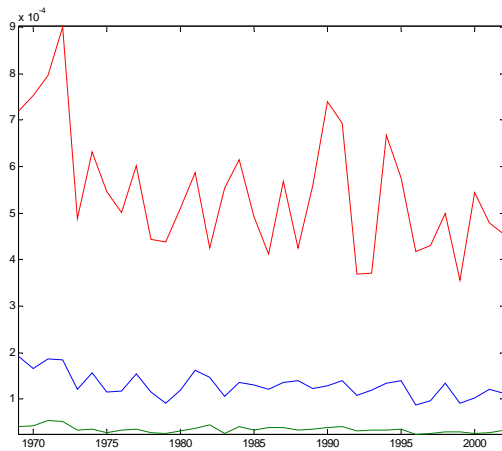
3) Weighting 1



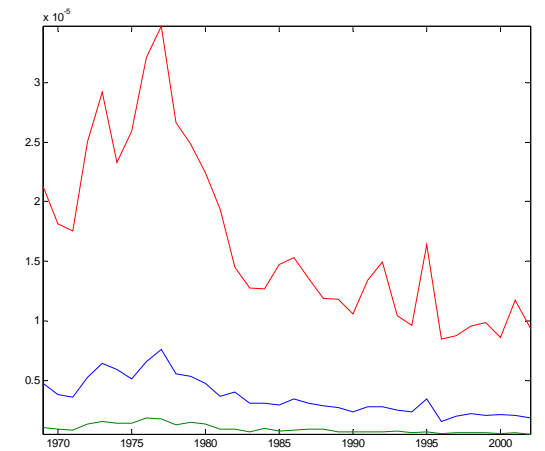
Output spectrum



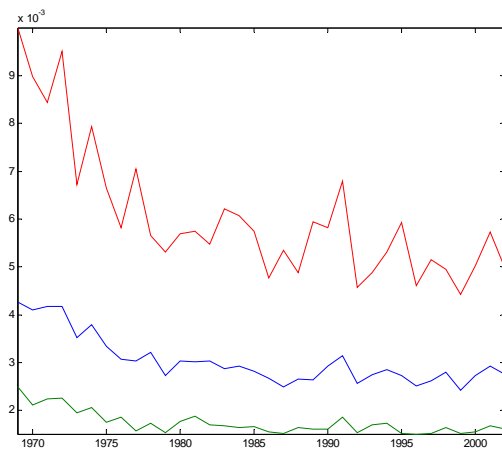
Inflation spectrum



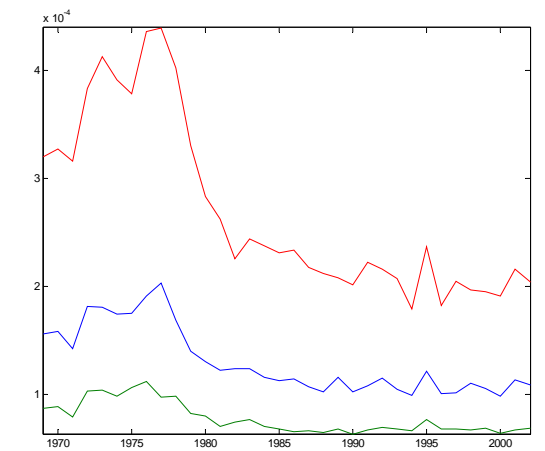
Output persistence



Inflation persistence



Output volatility



Inflation volatility

Figure A7: Structural Output and Inflation Dynamics

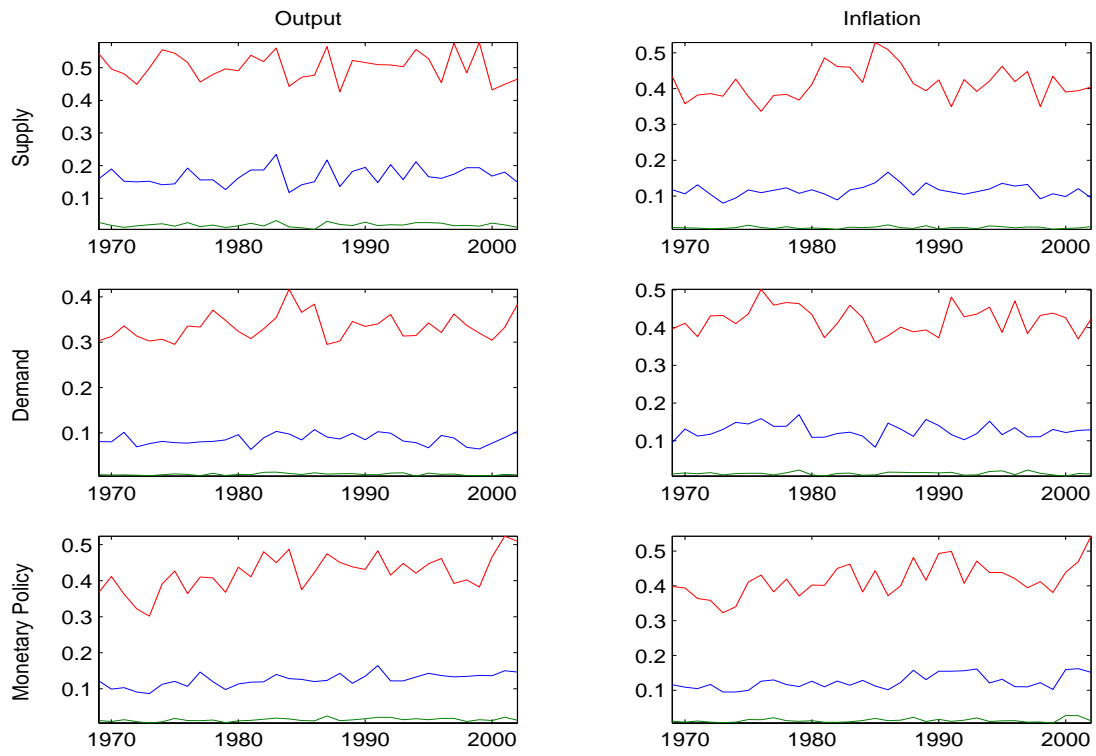


Figure A8: Persistence Shares

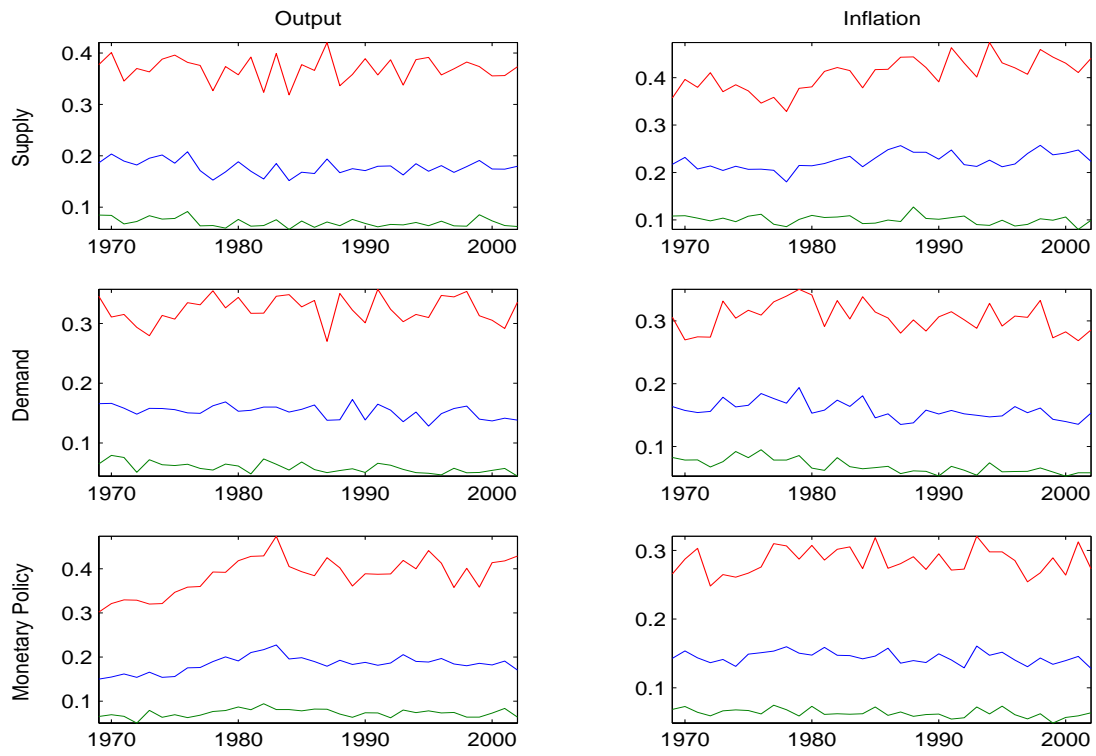
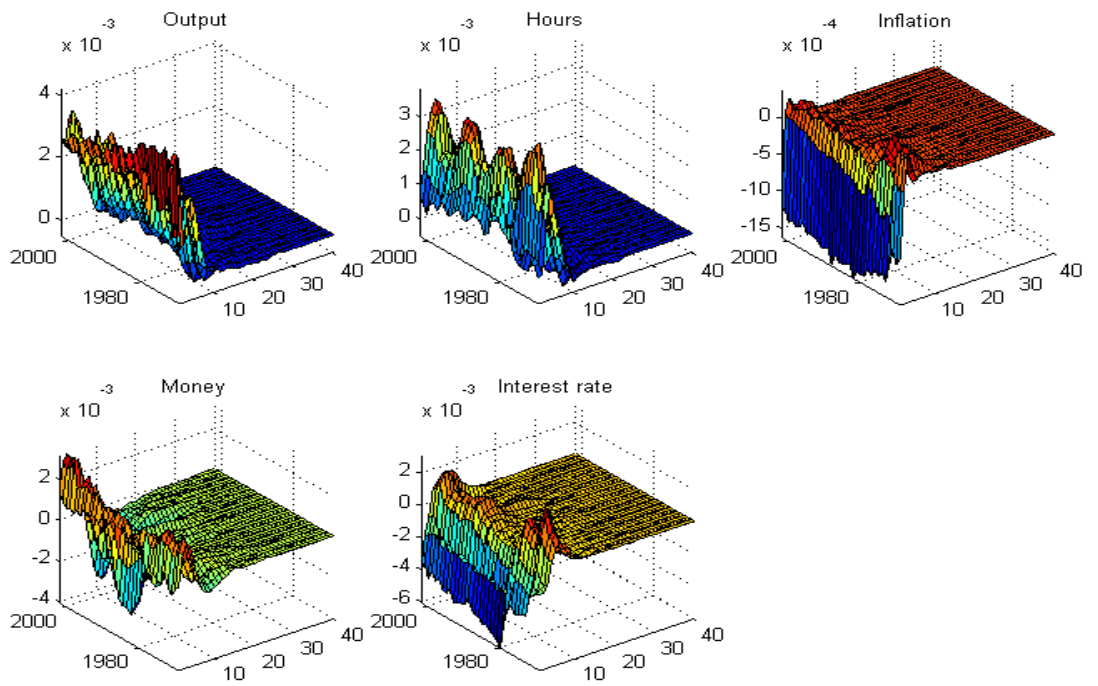
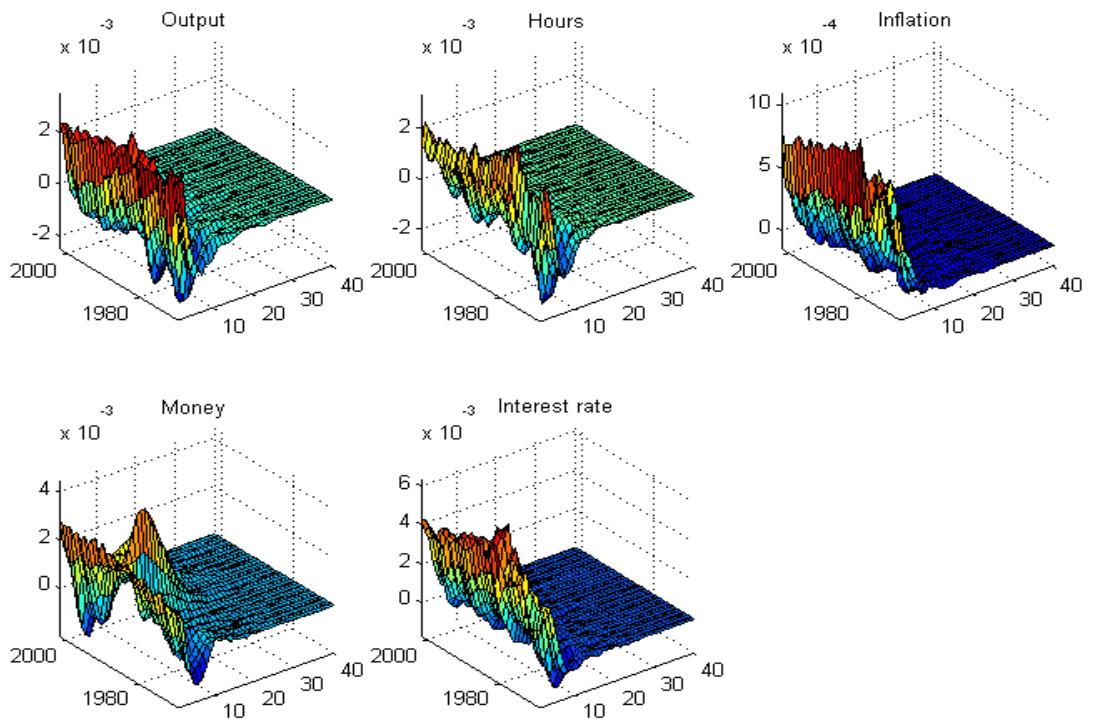


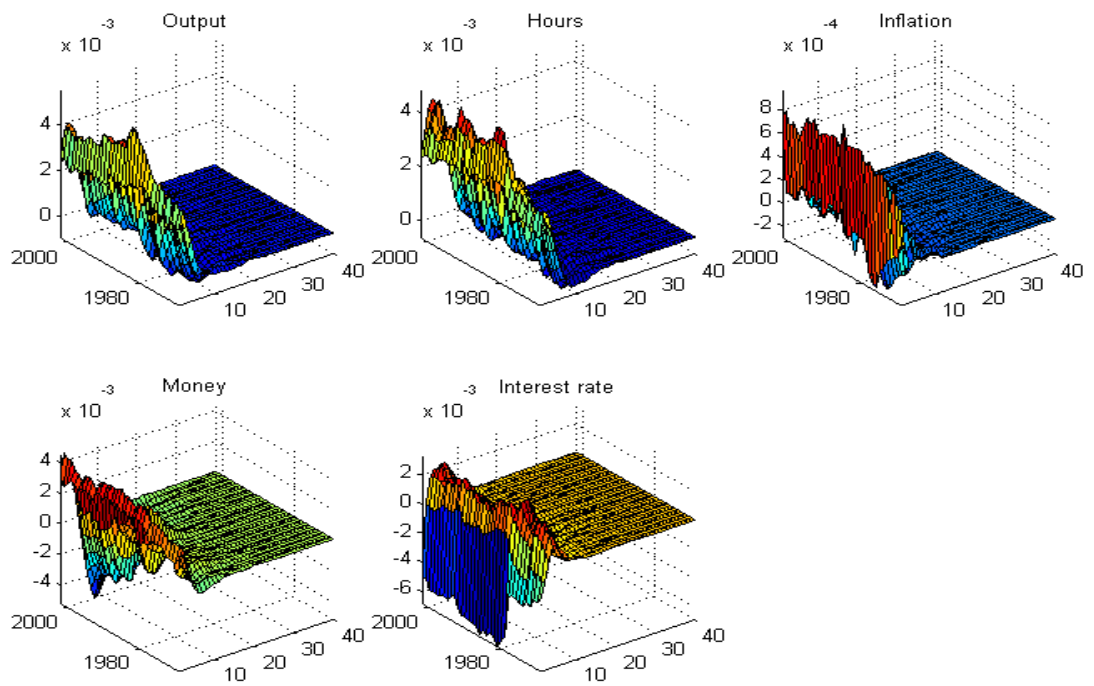
Figure A9: Volatility Shares



Response to Supply Shocks



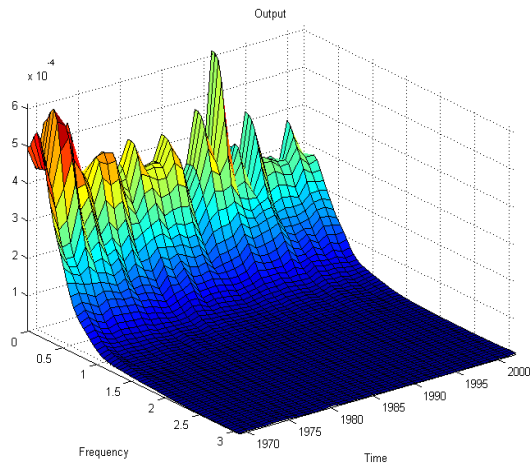
Response to Demand shocks



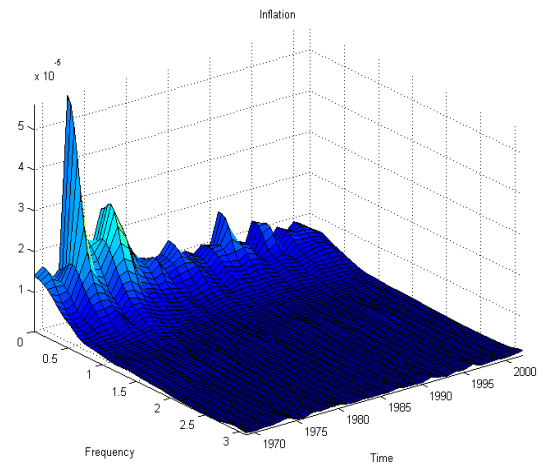
Responses to Monetary Policy shocks

Figure A10: Responses to Shocks

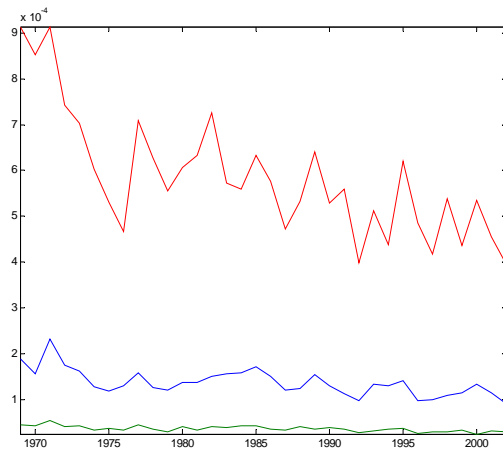
4) Weighting 2



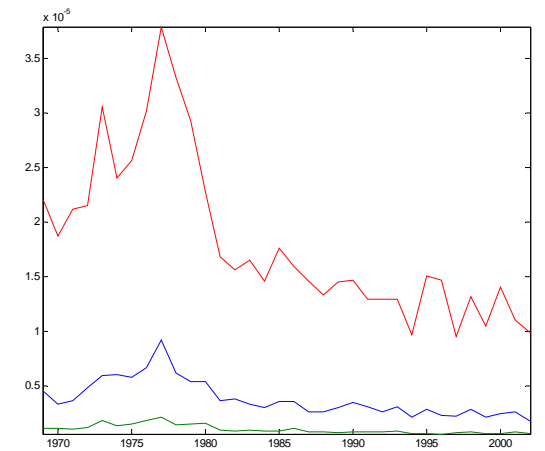
Output spectrum



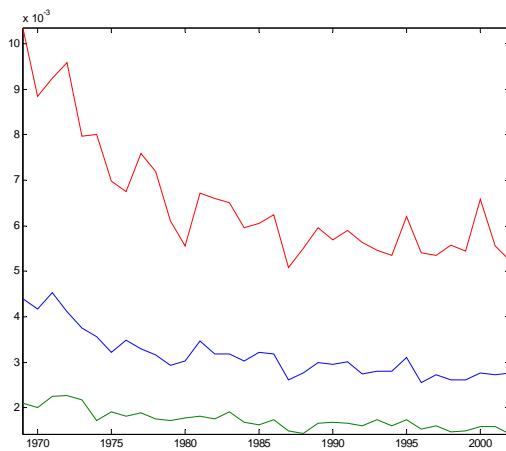
Inflation spectrum



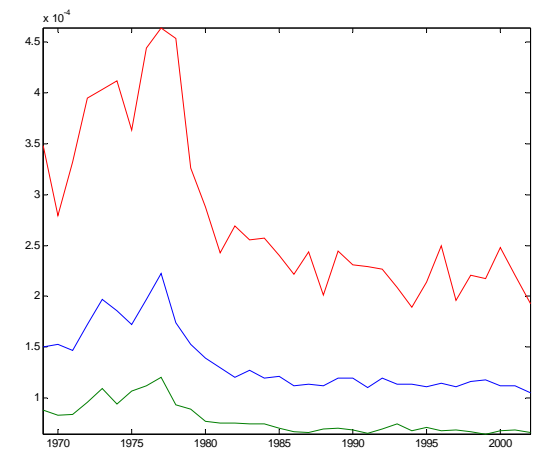
Output persistence



Inflation persistence

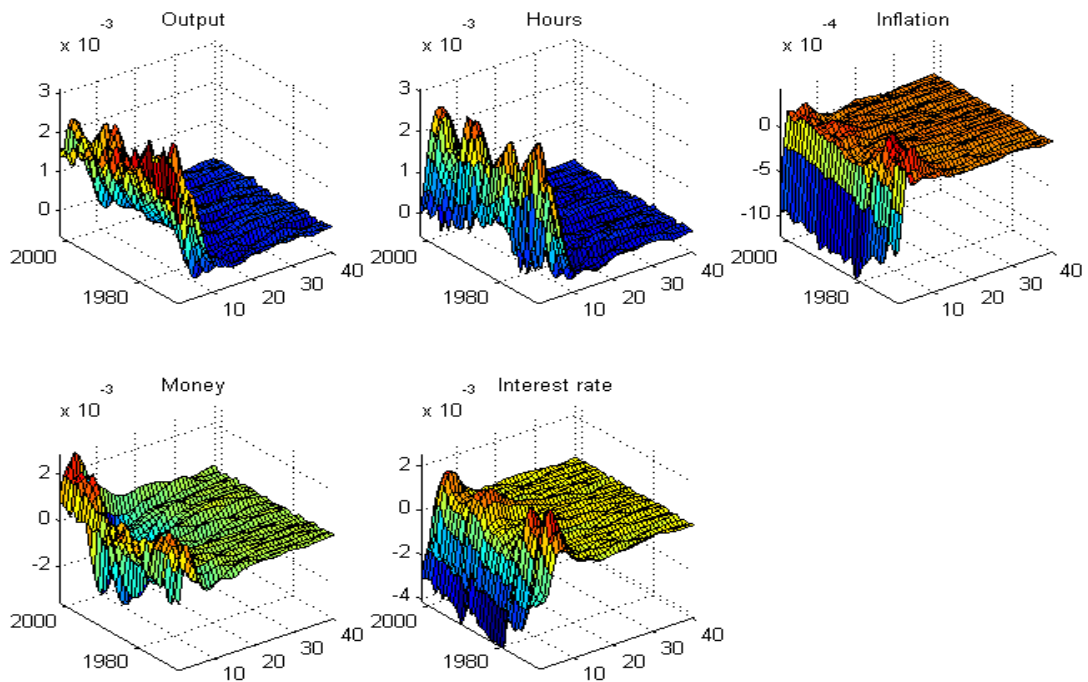


Output volatility

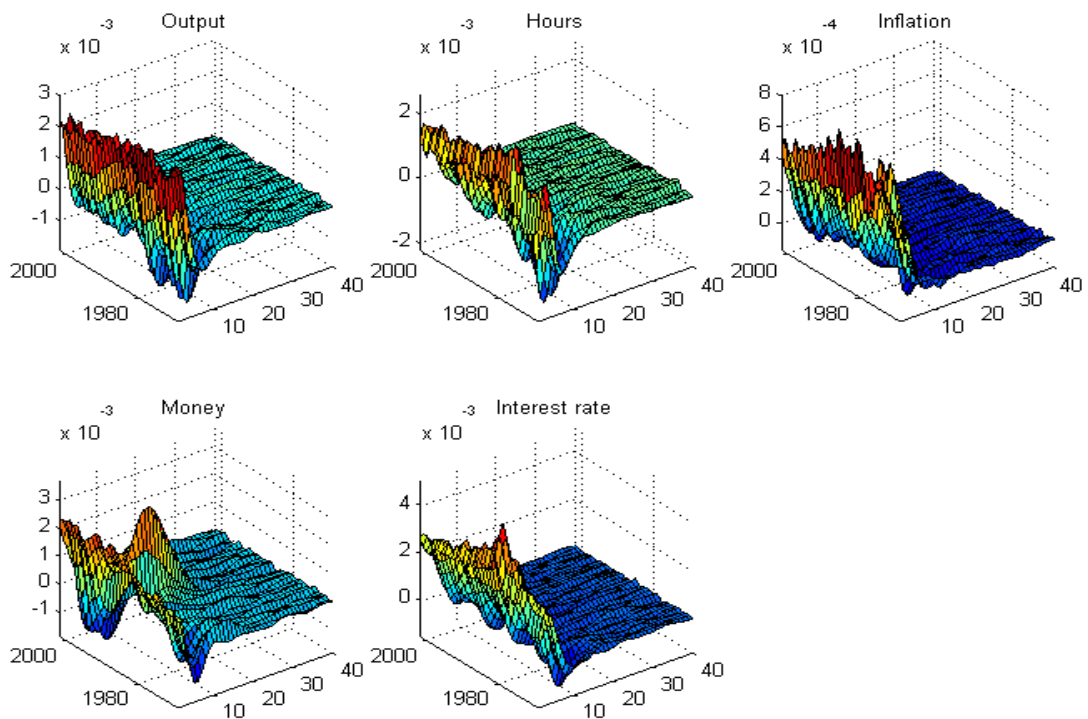


Inflation volatility

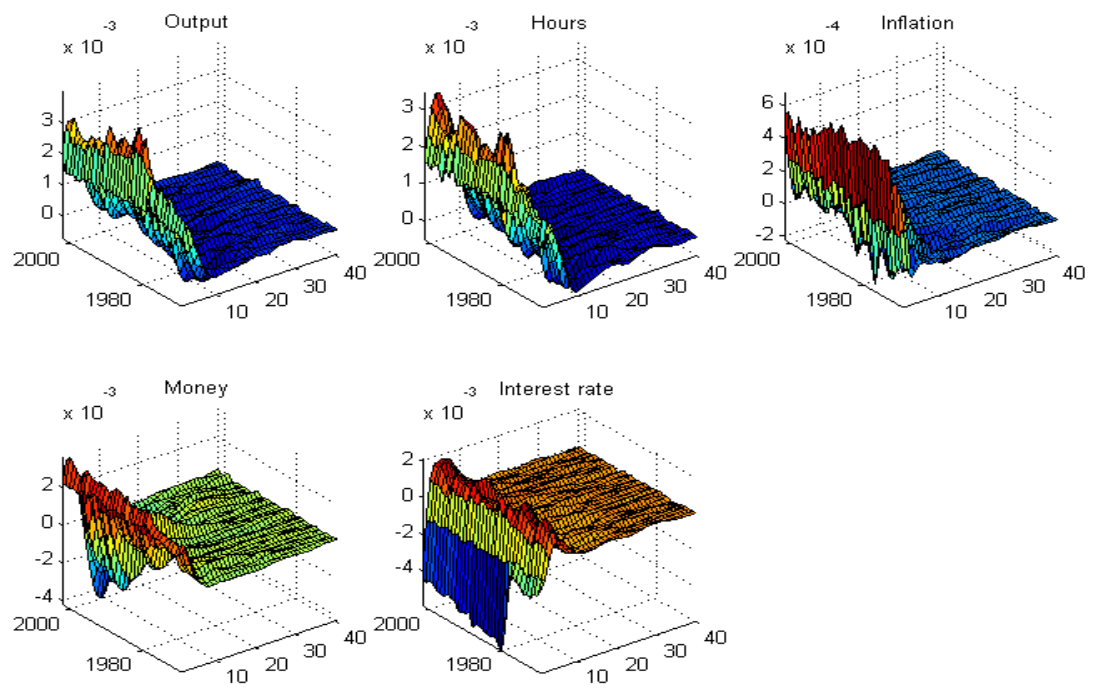
Figure A11: Structural Output and Inflation Dynamics



Response to Supply Shocks



Response to Demand shocks



Responses to Monetary Policy shocks

Figure A12: Responses to Shocks

5) Future coefficient shocks set to zero

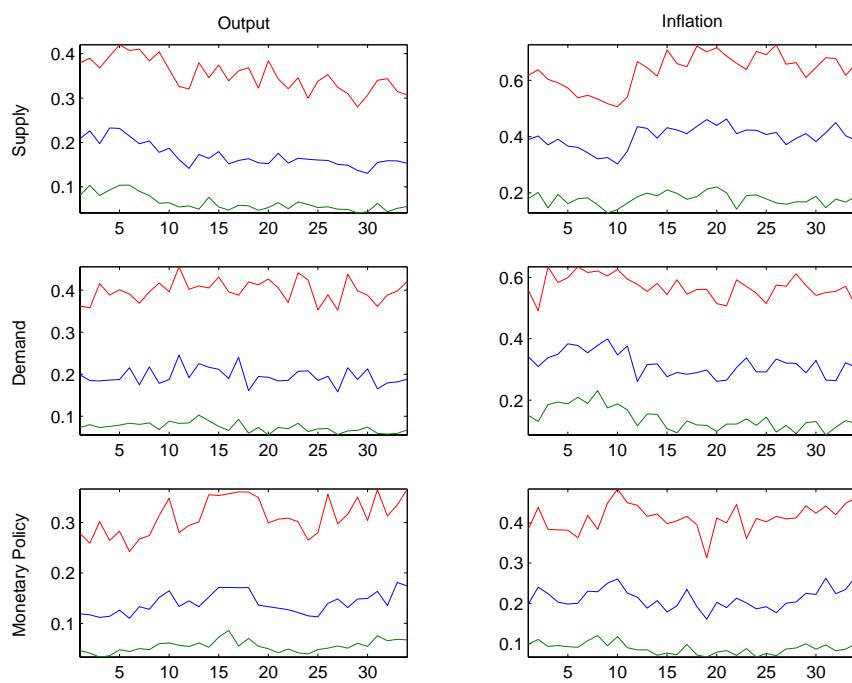


Figure A13: Persistence Shares

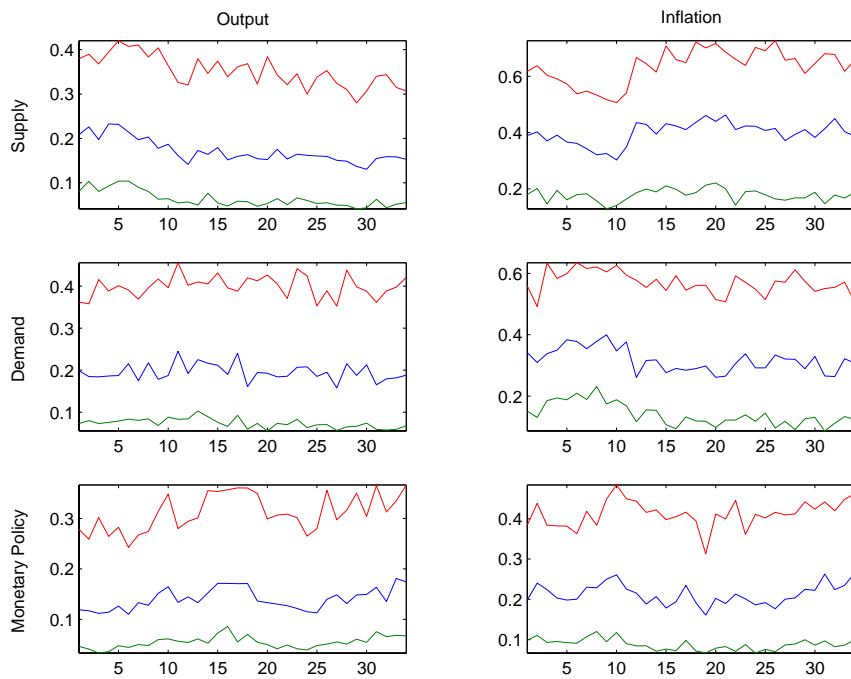


Figure A14: Variance Shares

6) Non recursive estimation

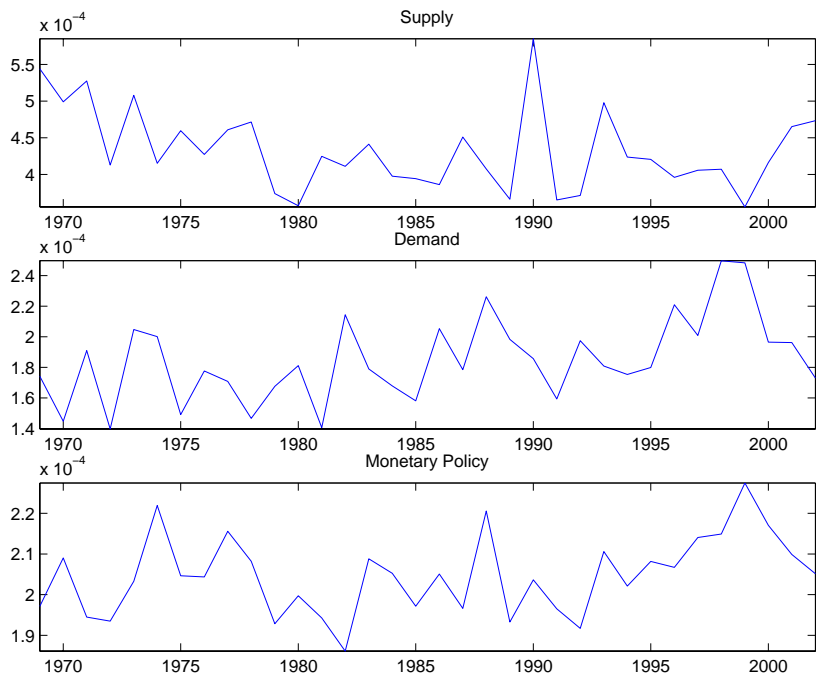


Figure A15: Structural Variances