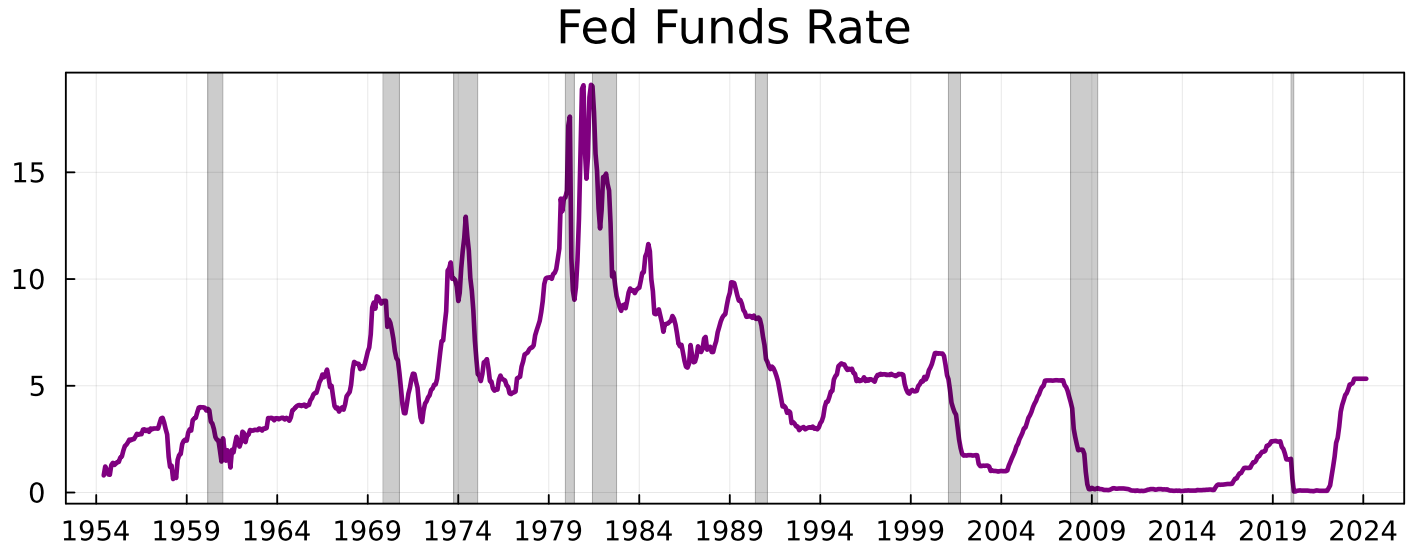
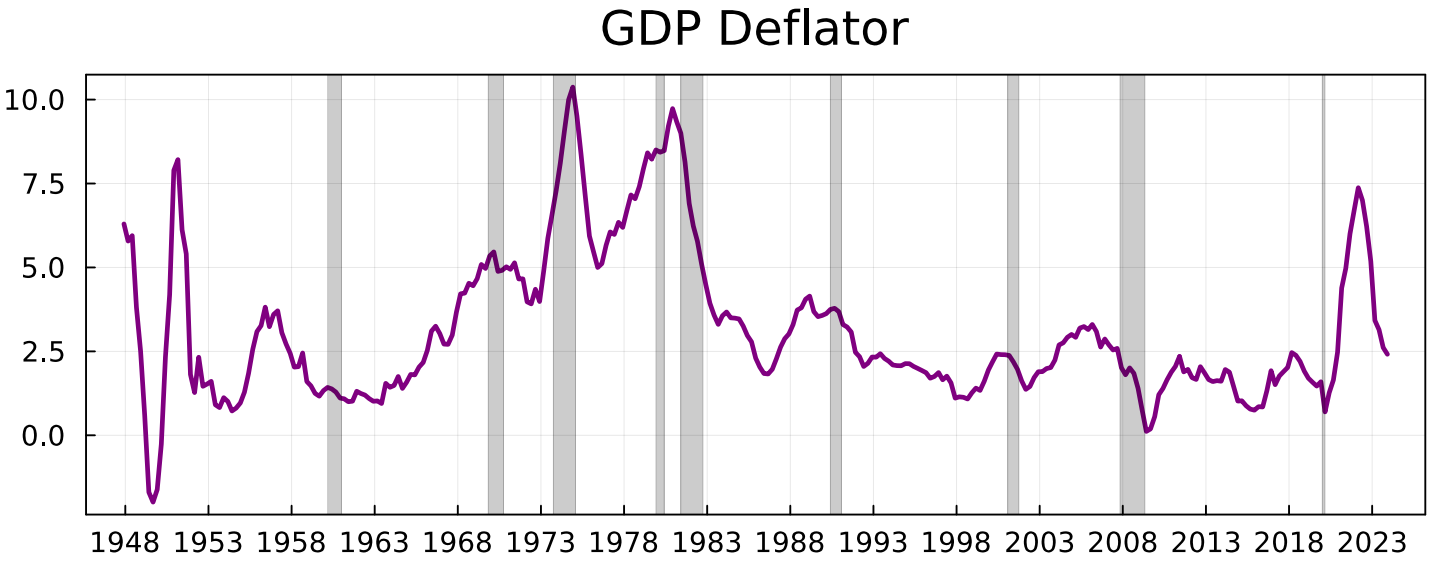
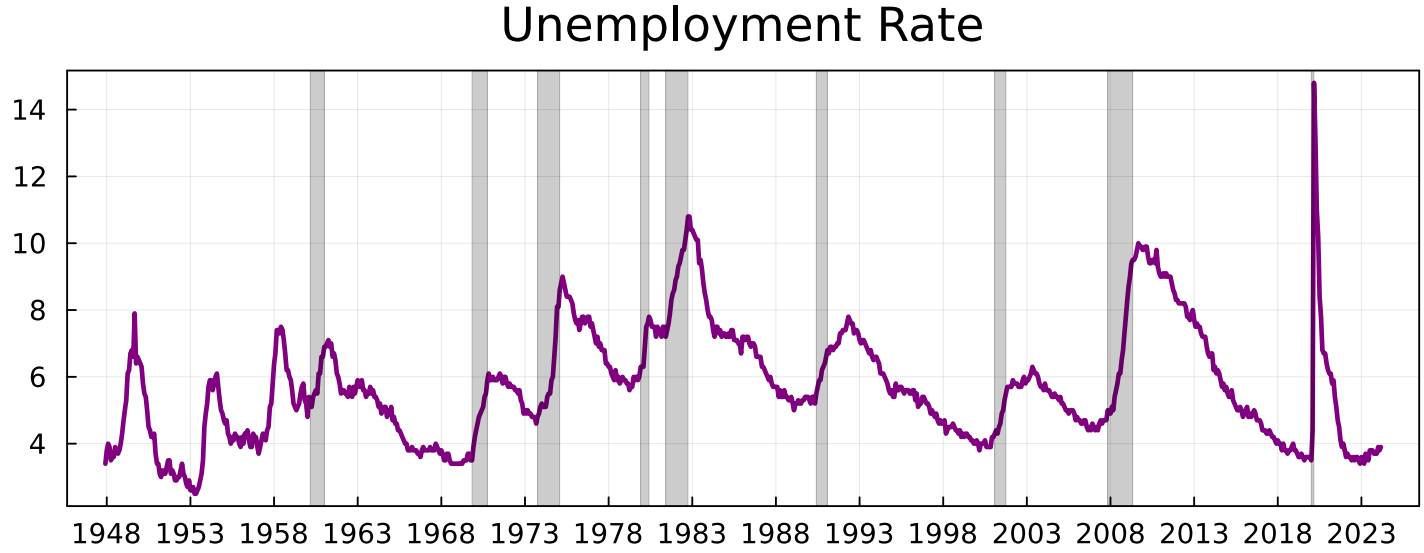
1a


Fed Funds Rate
15
10
5
0
1954 1959 1964 1969 1974 1979 1984 1989 1994 1999 2004 2009 2014 2019 2024

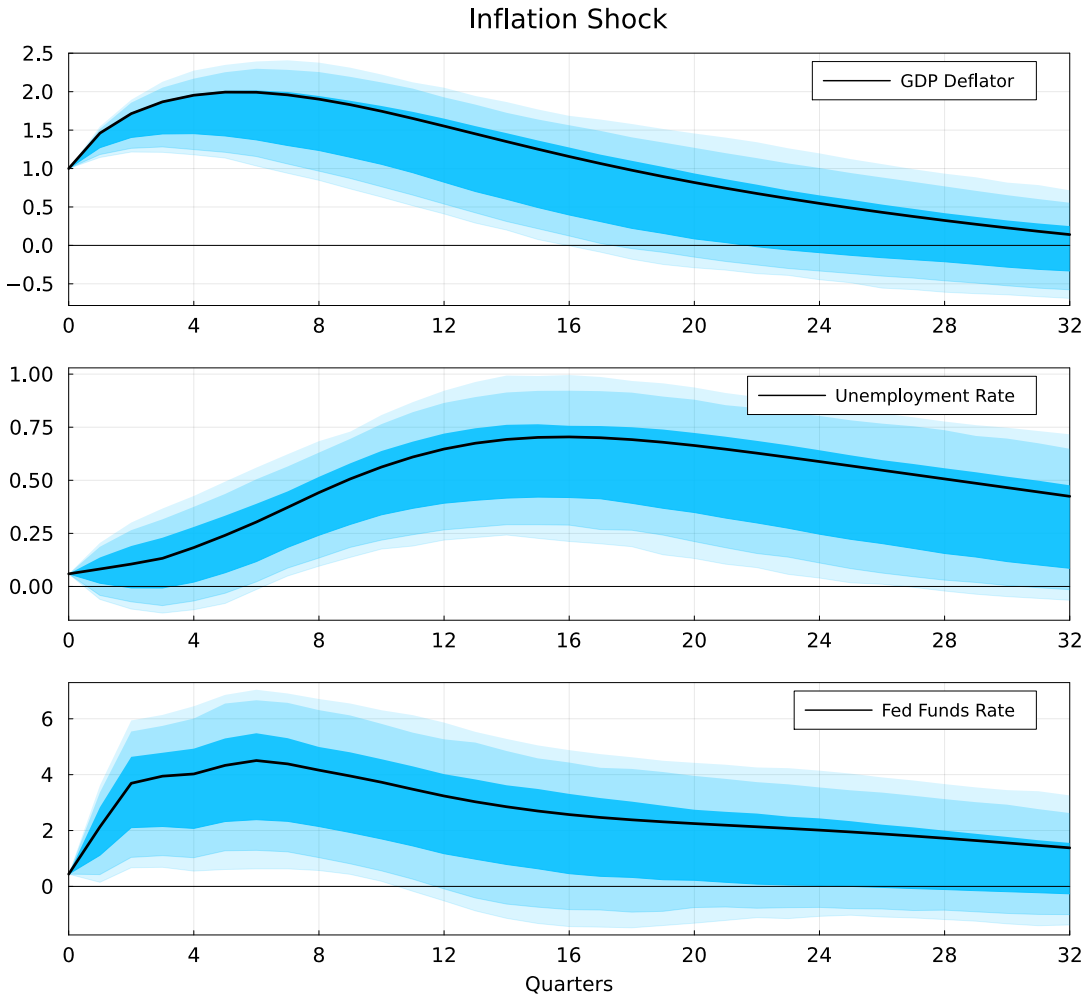

GDP Deflator
10.0
7.5
5.0
2.5
0.0
1948 1953 1958 1963 1968 1973 1978 1983 1988 1993 1998 2003 2008 2013 2018 2023

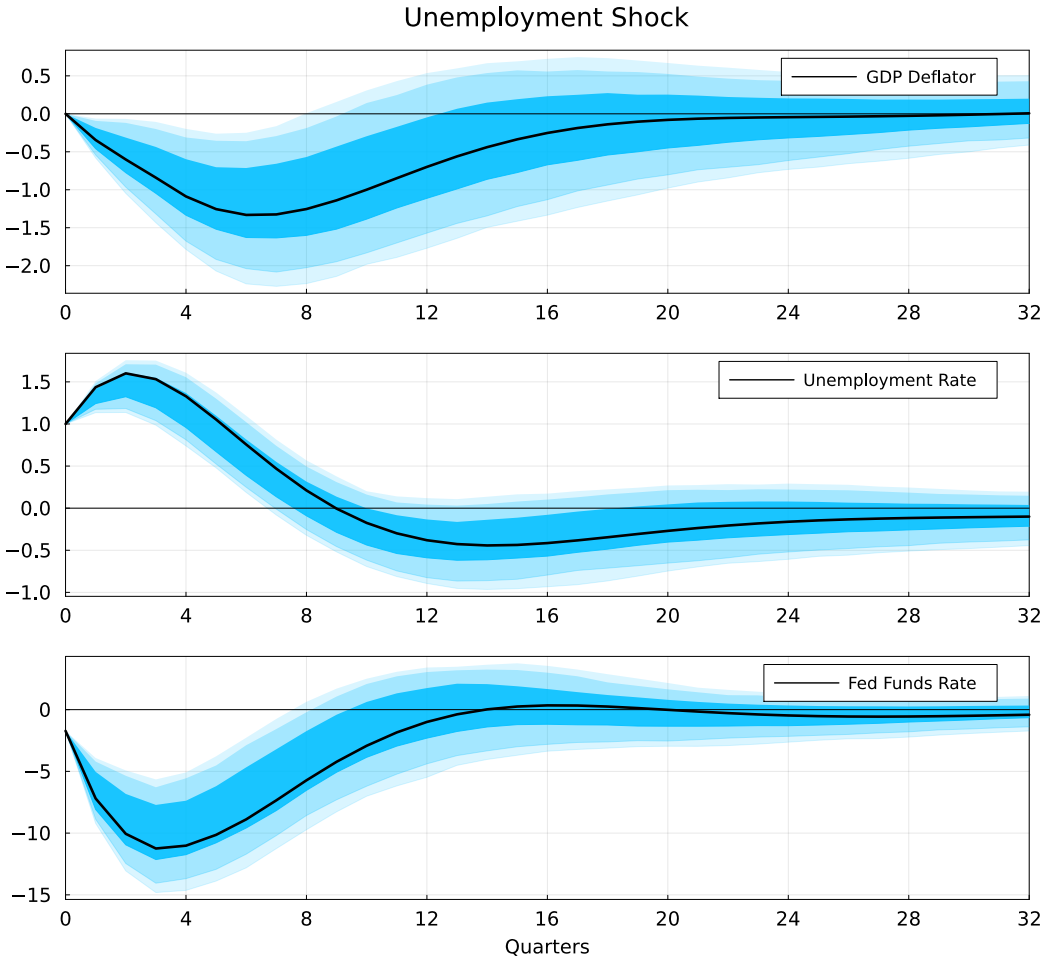

Unemployment Rate
14
12
10
8
6
4
1948 1953 1958 1963 1968 1973 1978 1983 1988 1993 1998 2003 2008 2013 2018 2023

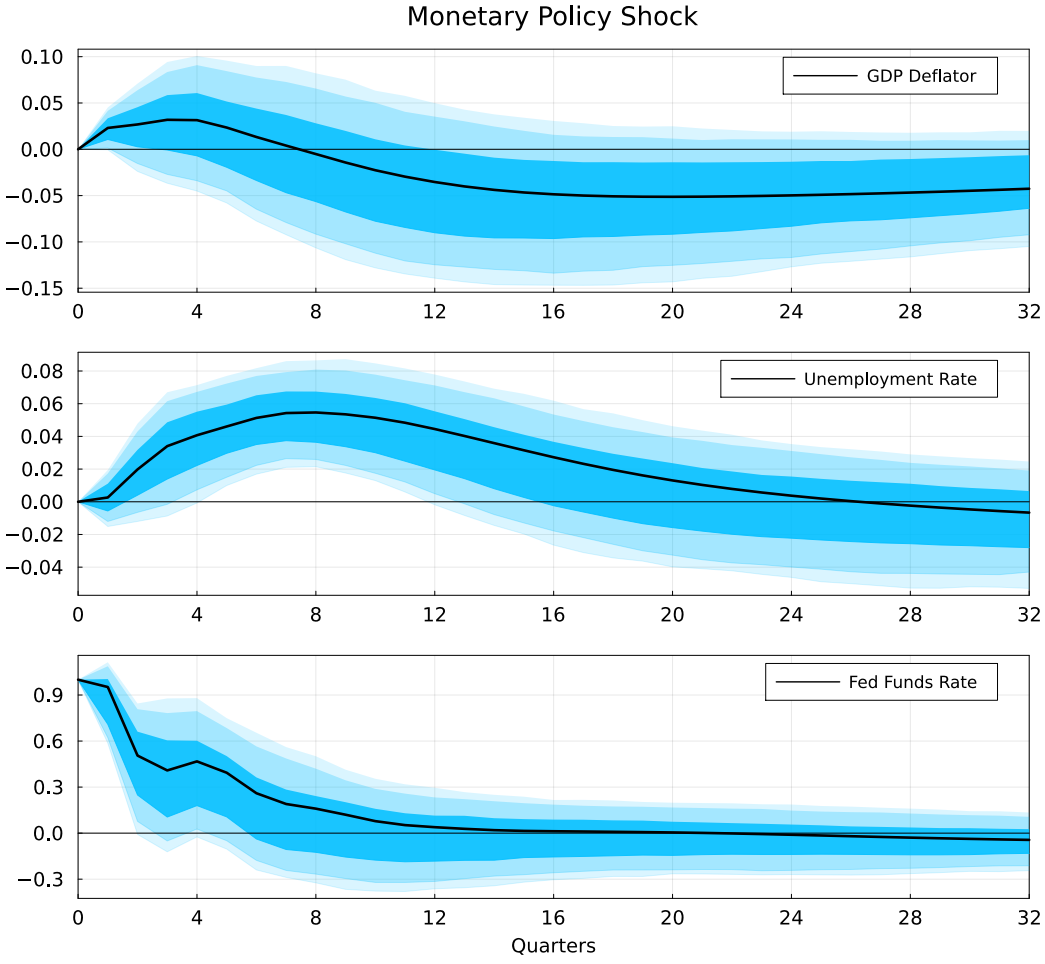
1b in the code

1c
We cut before of the financial crisis because it was an extreme outlier which could produce different IRF compared at the one we get. The stationarity is not a problem, it is more about the sensibility of the IRF (average response) to an extreme event

1d the confidence interval are constructed using wild bootstrap to control for heteroskedasticity. The shadow areas are 95, 90, 64 confidence interval. The order is the same as requested.




Unemployment Shock
GDP Deflator
Unemployment Rate
Fed Funds Rate
Quarters

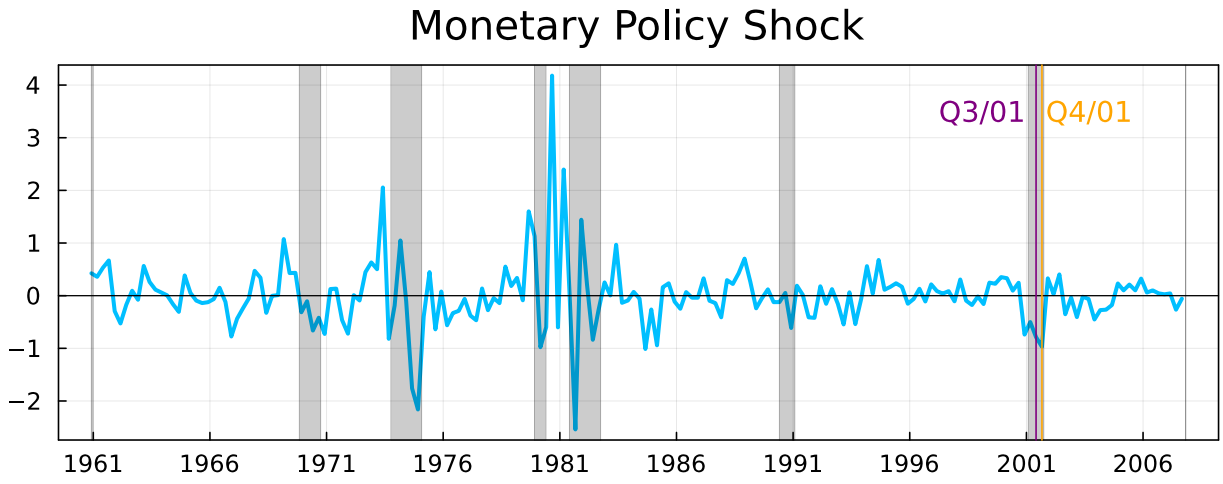

Monetary Policy Shock
GDP Deflator
Unemployment Rate
Fed Funds Rate
Quarters

Monetary policy shock: we observe the price puzzle with an initial increase in inflation, after that inflation decrease and unemployment increase, which is in line with the idea of a contractionary monetary policy.

Shocks to Inflation: If inflation increases then interest rates increase and unemployment increases. This may catch the policy function of the fed that raise interest rate whenever it observe an increase in inflation due to exogenous shock.

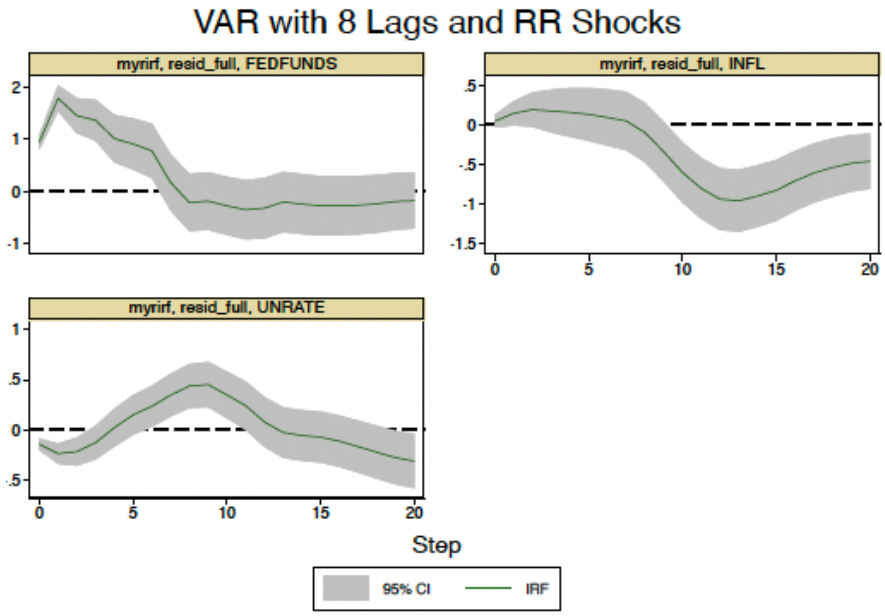
Shocks to Unemployment Rate: If unemployment increases then the fed responds by decreasing interest rates to timuluate the economy. Inflation goes down as well but then it goes back to the steady state level.

1 e
This is the reconstructed monetary policy

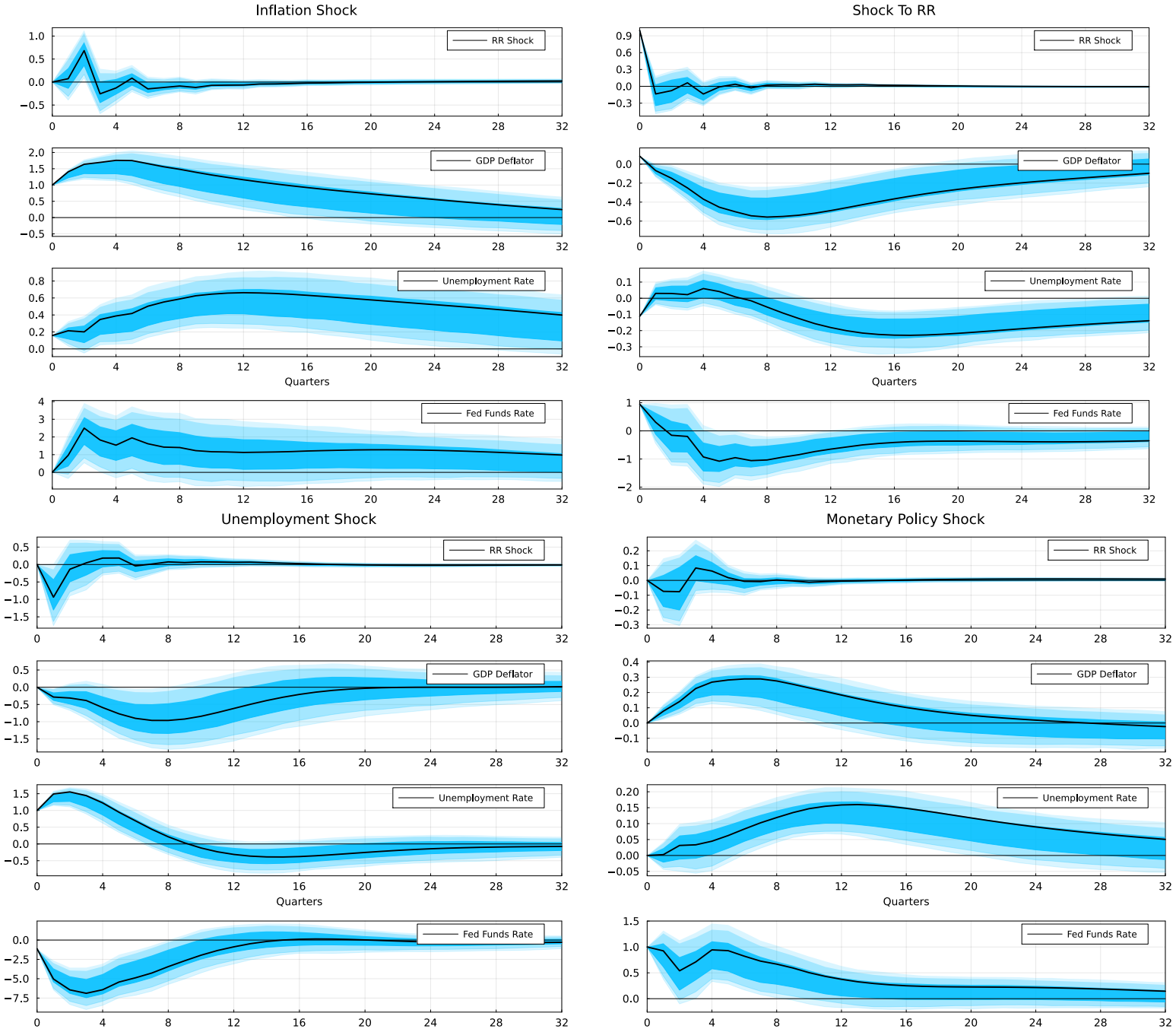


1 f The 9/11 should be interpret as a sign of misspecification of the model. Clearly during those days we did not observe a monetary policy shock but something completely different, than the "exogenous shock" here seems contaminated by some events.

2 b Romer and romer shock (I used stata for that)



2 c



2d As we can see influding the Romer and Romer Shock in the SVAR create a mess The IRFs to an exogenous shock to the FFR essentially increase inflation, while before we only had a small puzzle, also, how should we interpret the shock to the Romer and Romer shock? What is the interpretation of this?

Of course, the Romer and Romer shock must be ordered first, otherwise it would have a contemporaneous response to the other variables and it will not be exogenous, but including the shock in the SVAR in that way is puzzling me. The right use would be to estimate a proxy-SVAR using the R&R as external instrument for the unobserved monetary policy shock.

2e They are different because numerically, different variables in the model implies different residual, different variance covariance matrix and then different choleski decomposition. In general, it seems to have a narrower confidence interval by including the romer and romer shock in the var.

2 f

When using Romer-Romer shocks, the feflationary response is stronger. Also, the Romer-Romer shocks effectively control for the bias from the forward-looking behavior of the FED. Regarding the unemployment rate, there is an initial decrease, unlike the path in the first row and third column of Figure

2g
Romer-Romer identified monetary shocks in 2001Q3 and 2001Q4 are -0.129 and -0.383, respectively. The magnitude of the shock is smaller compared to that of the SVAR identified monetary shocks. The magnitude is smaller since Romer-Romer shocks measure unexpected changes in policy and control for the bias from the forward-looking behavior of the FED.