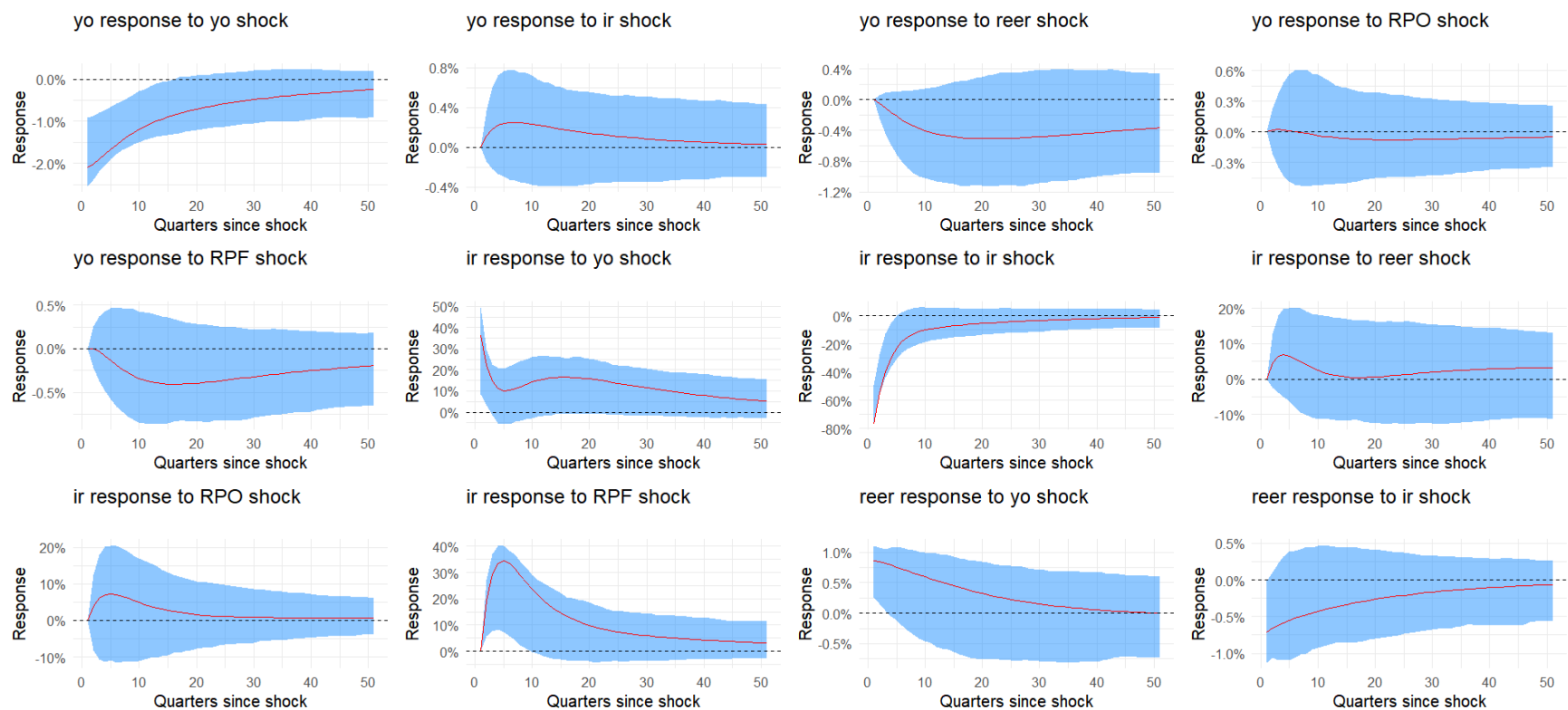


Abstract

This paper investigates the relationship between real interest rates, real exchange rates, and commodity prices, examining how shocks from monetary policy to interest rates and exchange rates influence commodity prices—whether the responses are negative or positive. The analysis utilizes quarterly data spanning from 1996Q1 to 2021Q4.

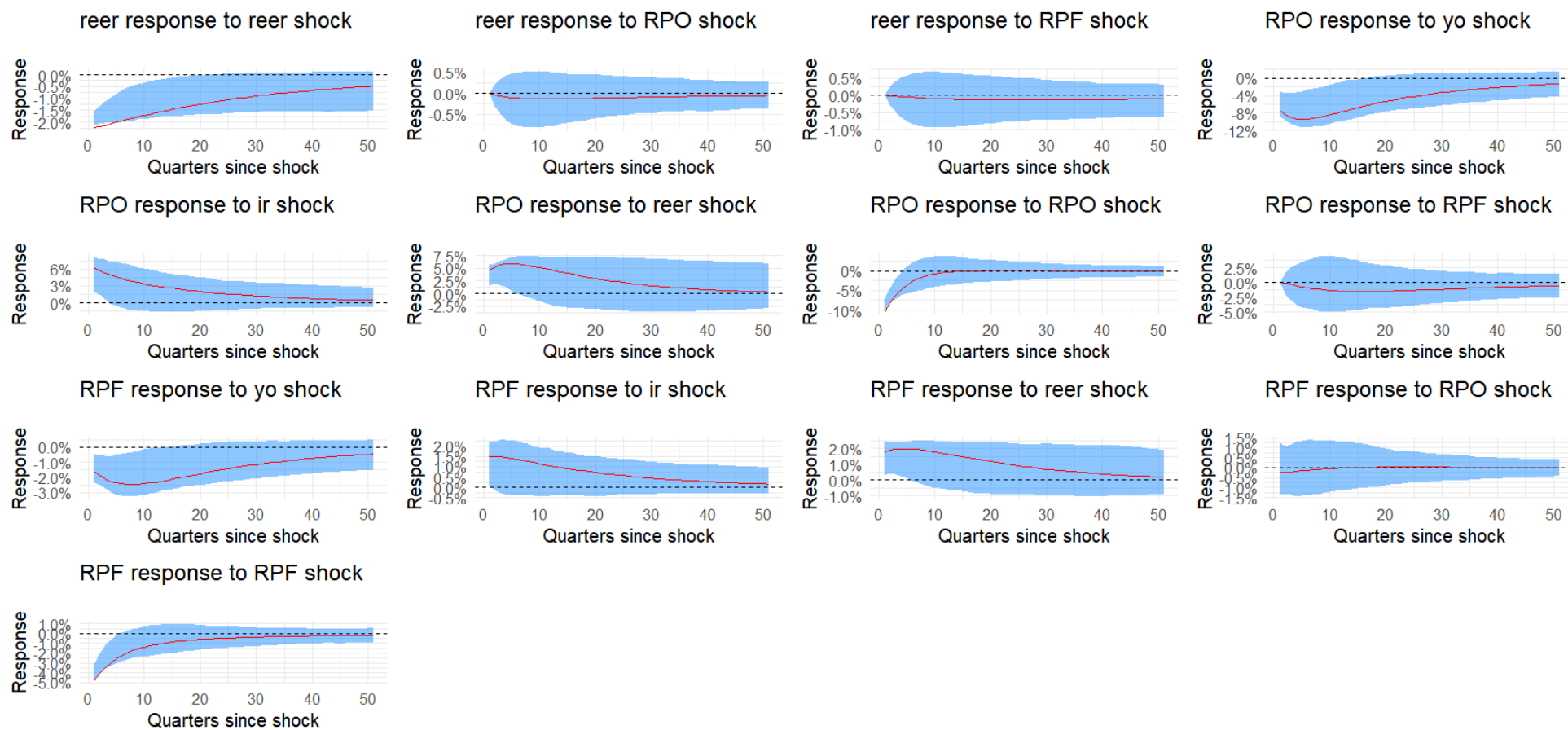
Based on the data and methodology (Proxy-SVAR) employed, the study concludes that while both interest rates and exchange rates contribute to the movement of commodity prices, only the impact of exchange rates is statistically significant at a 95% confidence interval; the real interest rate does not exhibit statistically significant effects.



Redline is the response and the blue shade is the 95% confidence interval
 Responses are based on four variables: log outputs from OECD, log of real price of oil, log REER, log real price of food, 1-year interest rate and monetary policy shock
 Quarterly data Jan 1996 to Dec 2021
 Sources: IMF, OECD, Federal Reserve
 Retrieved from FRED, Federal Reserve Bank of St. Louis

Figure 10: Impulse Response from Food

Appendix A.2



Redline is the response and the blue shade is the 95% confidence interval
 Responses are based on four variables: log outputs from OECD, log of real price of oil, log REER, log real price of food, 1-year interest rate and monetary policy shock
 Quarterly data Jan 1996 to Dec 2021
 Sources: IMF, OECD, Federal Reserve
 Retrieved from FRED, Federal Reserve Bank of St. Louis

Figure 11 Impulse response from Food

Appendix A.3

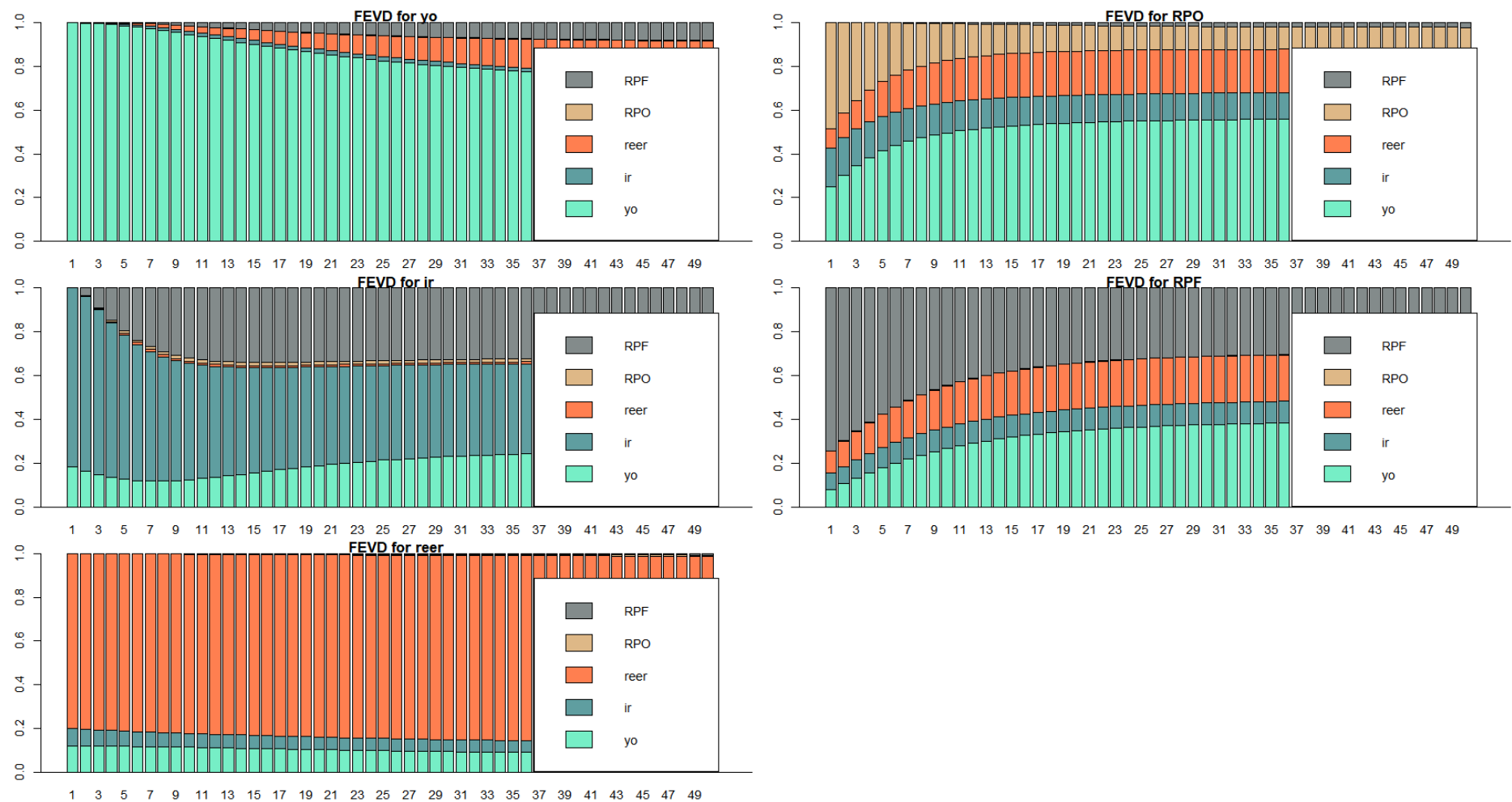
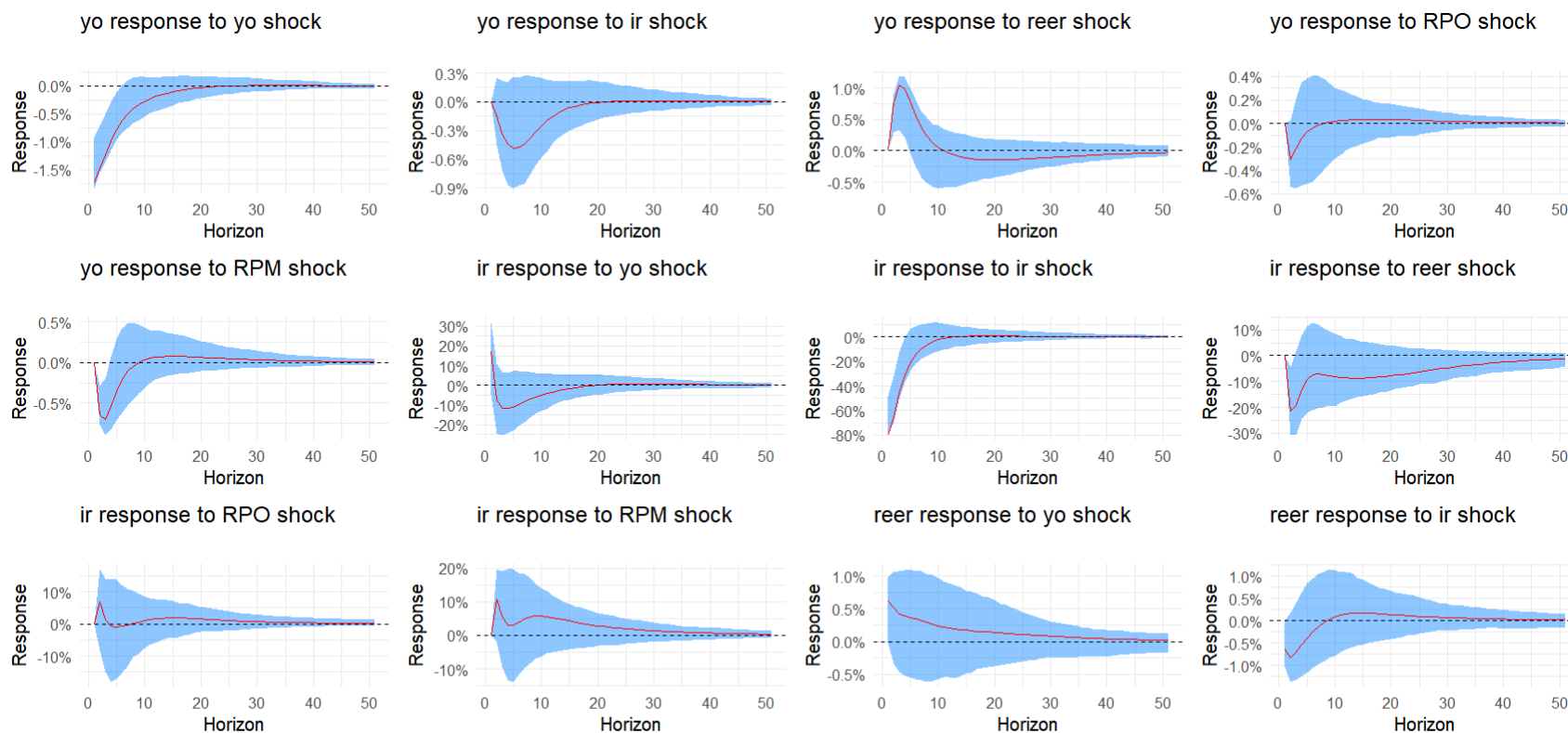


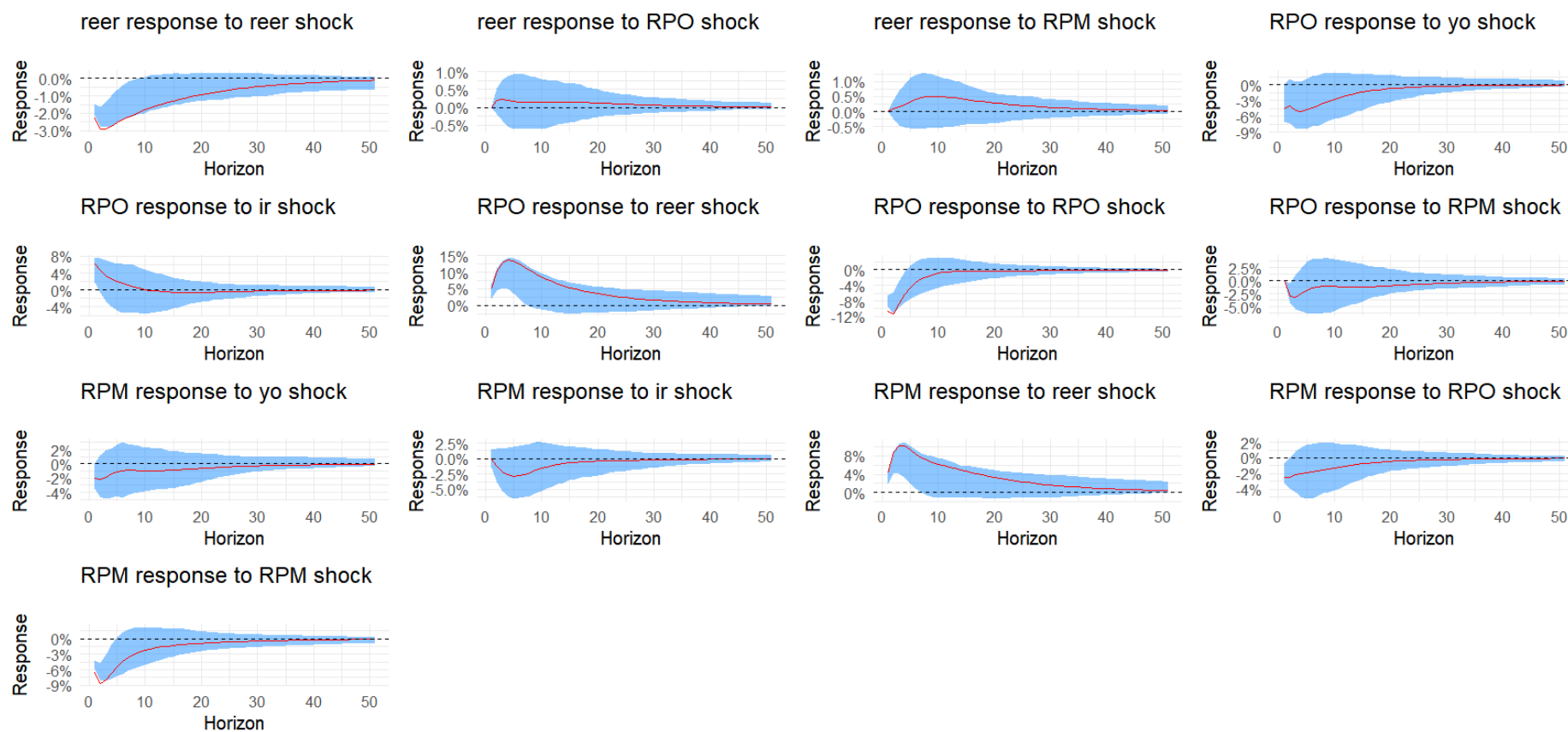
Figure 12. FEVD based on the VAR model of Real Price of Food

Appendix B.1



Redline is the response and the blue shade is the 95% confidence interval
 Responses are based on four variables: log outputs from OECD, log real price of oil, log REER, log real price of Metal, 1-year interest rate and monetary policy shock
 Quarterly data Jan 1996 to Dec 2021
 Sources: IMF, OECD, Federal Reserve
 Retrieved from FRED, Federal Reserve Bank of St. Louis

Appendix B.2



Redline is the response and the blue shade is the 95% confidence interval
 Responses are based on four variables: log outputs from OECD, log real price of oil, log REER, log real price of Metal, 1-year interest rate and monetary policy shock
 Quarterly data Jan 1996 to Dec 2021
 Sources: IMF, OECD, Federal Reserve
 Retrieved from FRED, Federal Reserve Bank of St. Louis

Figure: Impulse response from Real price of Metal

Appendix B.3

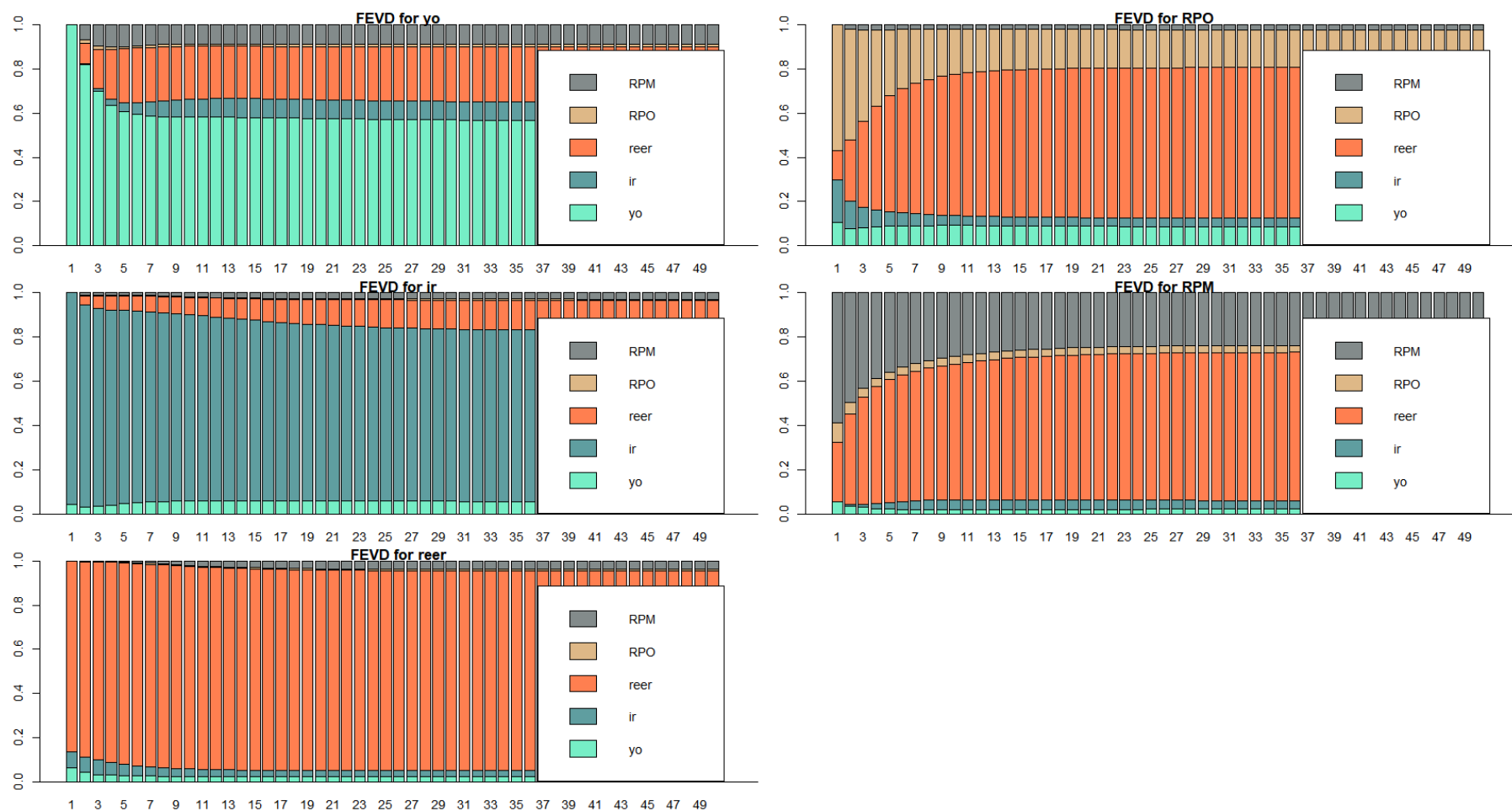
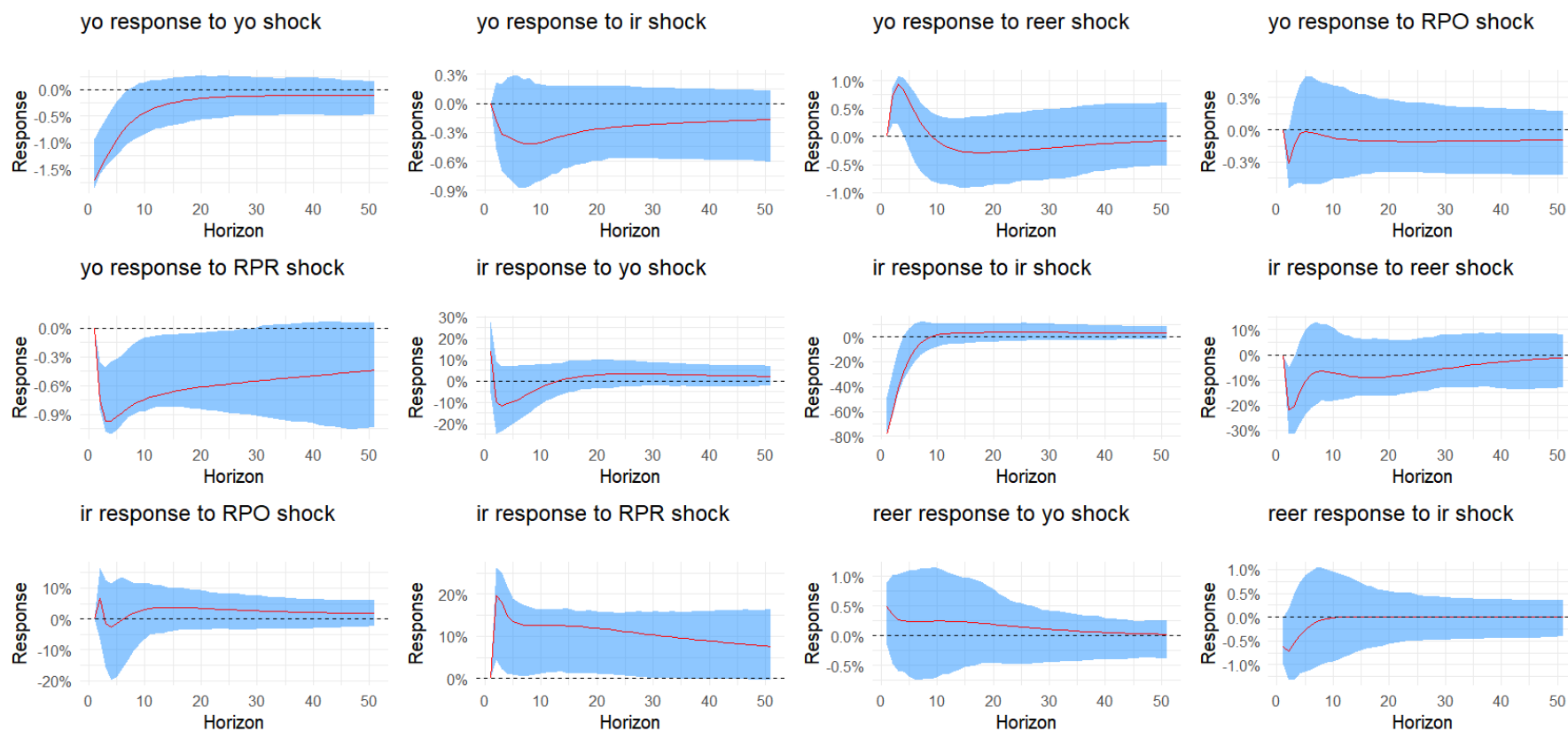


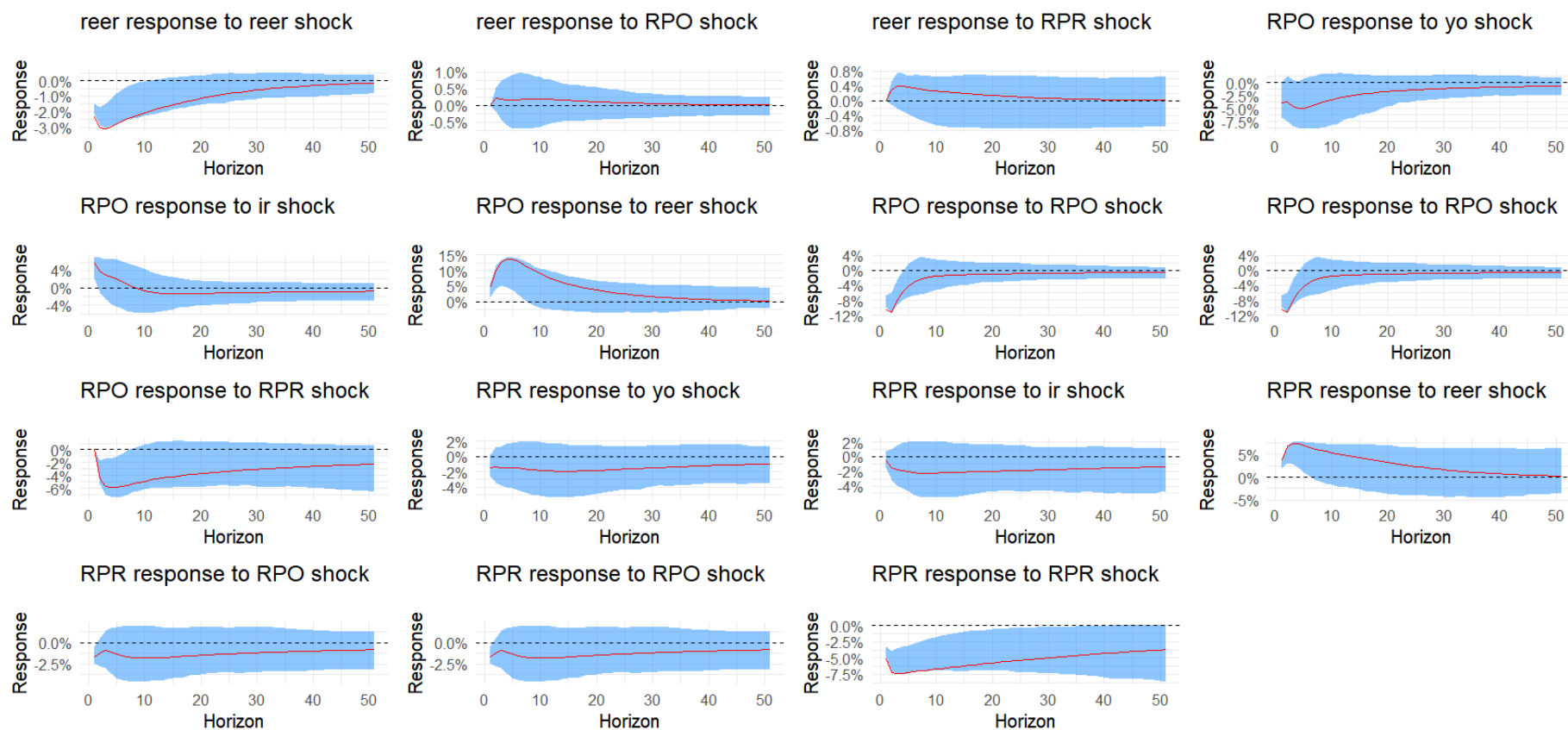
Figure :. FEVD based on the VAR model of Metal

Appendix C.1



Redline is the response and the blue shade is the 95% confidence interval
 Responses are based on four variables: log outputs from OECD, log real price of oil, log REER, log real price of industrial inputs, 1-year interest rate and monetary policy shock
 Quarterly data Jan 1996 to Dec 2021
 Sources: IMF, OECD, Federal Reserve
 Retrieved from FRED, Federal Reserve Bank of St. Louis

Appendix C.2



Redline is the response and the blue shade is the 95% confidence interval
 Responses are based on four variables: log outputs from OECD, log real price of oil, log REER, log real price of industrial inputs, 1-year interest rate and monetary policy shock
 Quarterly data Jan 1996 to Dec 2021
 Sources: IMF, OECD, Federal Reserve
 Retrieved from FRED, Federal Reserve Bank of St. Louis

Appendix C.3

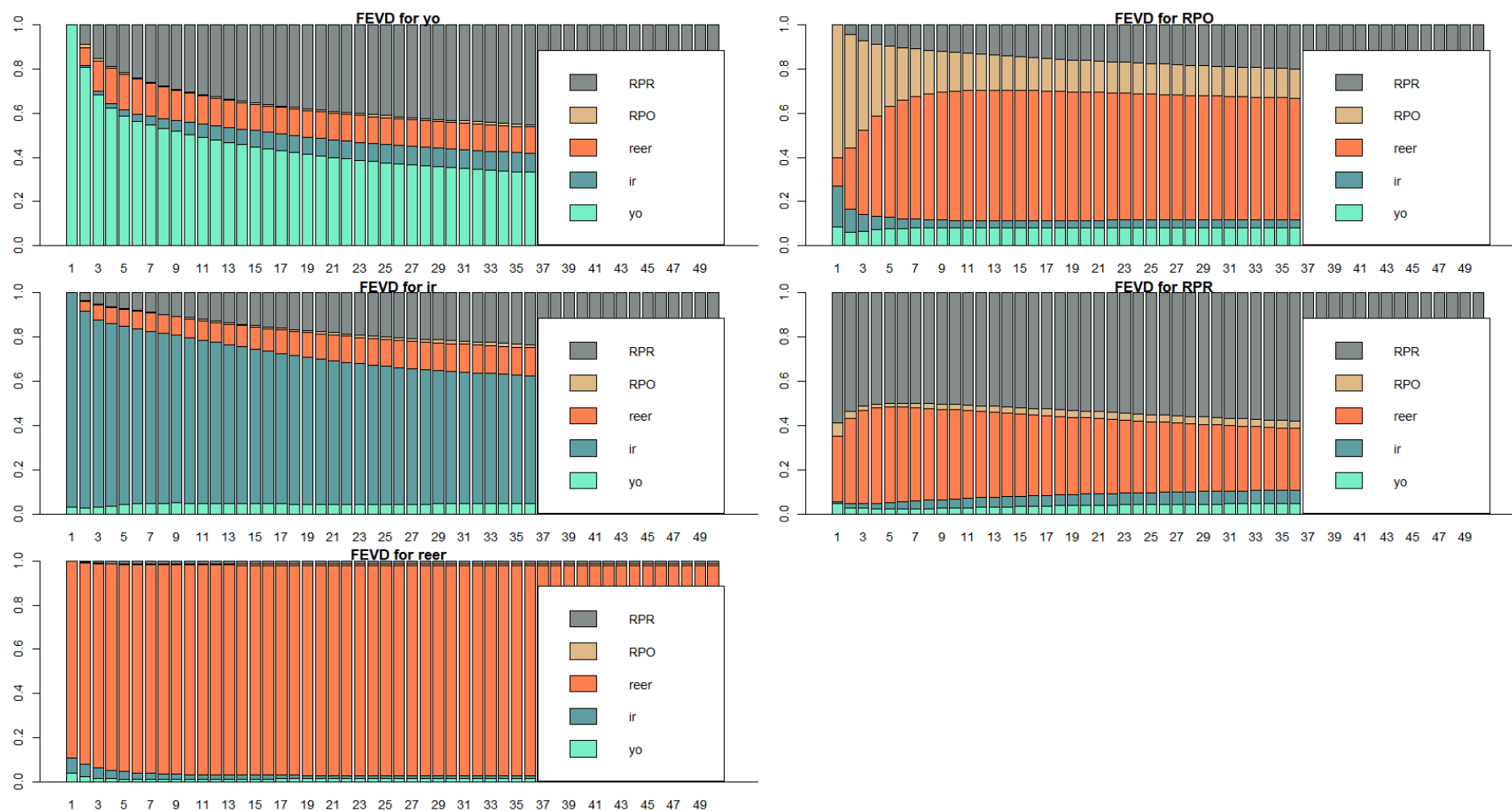
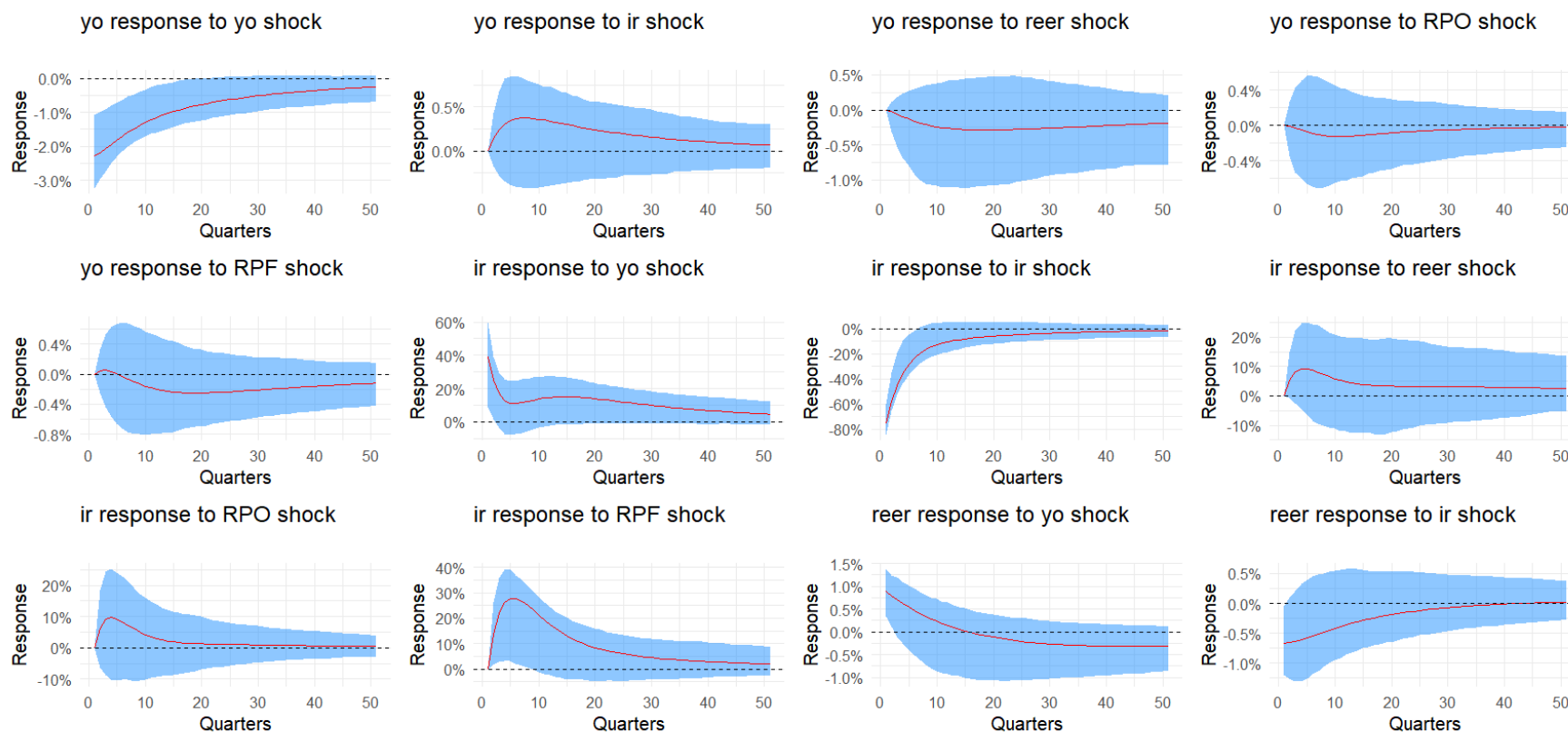


Figure : FEVD based on the VAR model of Real Price of raw material (industrial inputs)

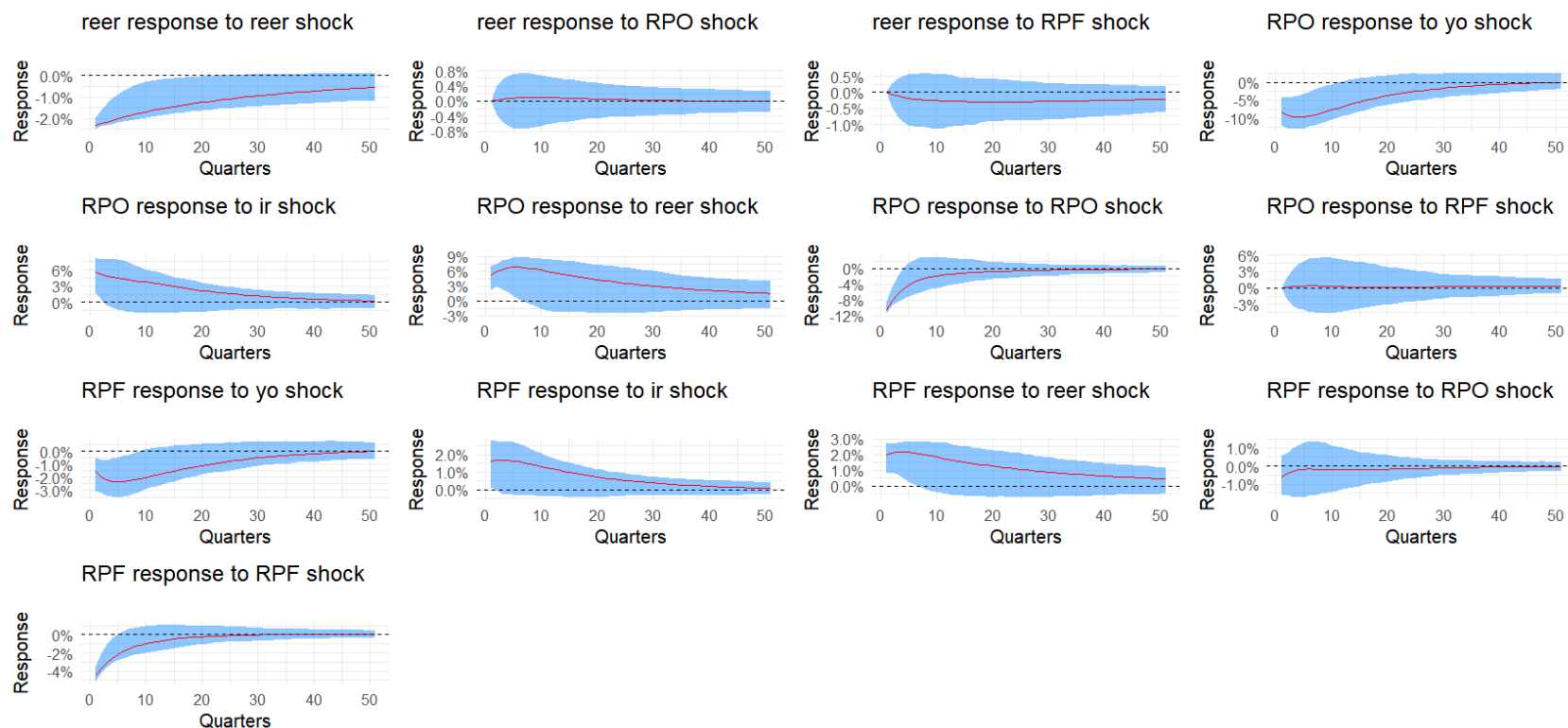
Appendix D.1



Redline is the response and the blue shade is the 95% confidence interval
 Responses are based on four variables: log outputs from OECD, log of real price of oil, log REER, log real price of food, 1-year interest rate without monetary policy shock
 Quarterly data Jan 1996 to Dec 2021
 Sources: IMF, OECD, Federal Reserve
 Retrieved from FRED, Federal Reserve Bank of St. Louis

Impulse Response from Real price of Food without monetary policy shock

Appendix D.2



Redline is the response and the blue shade is the 95% confidence interval
 Responses are based on four variables: log outputs from OECD, log REER, log real price of oil, log real price of food, 1-year interest rate without monetary policy shock
 Quarterly data Jan 1996 to Dec 2021
 Sources: IMF, OECD, Federal Reserve
 Retrieved from FRED, Federal Reserve Bank of St. Louis

Appendix D.3

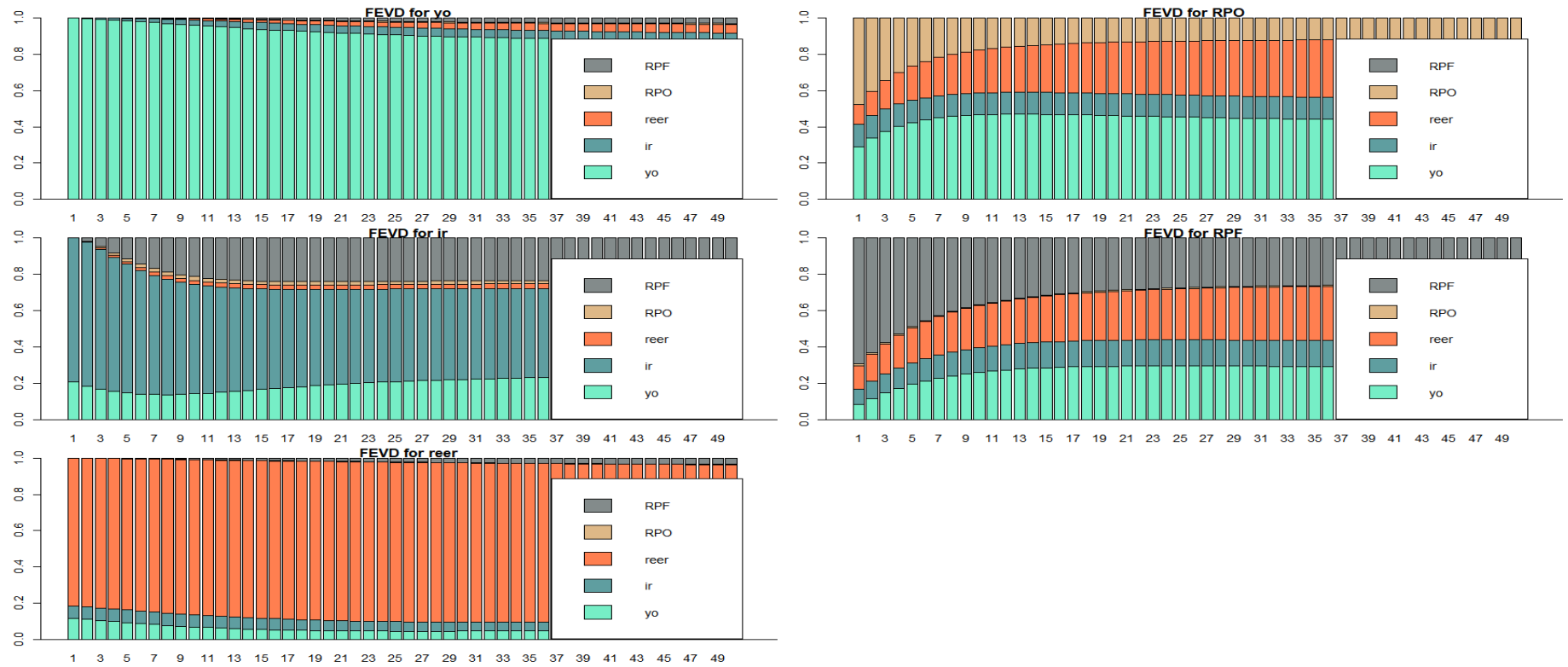


Figure FEVD of the real price of Food without monetary shock to the real interest rate