MOTIVATION

- The *continuous process of fiscal consolidation* over the recent years leads to the necessity to evaluate the effectiveness of fiscal policy (FP) and to propose in accordance to that, the appropriate monetary policies that would ensure a stable path toward sustainable economic growth in the country.

- Several studies published in the field of fiscal policy for the Albanian case. [Mançellari (2011), Shijaku and Gjokuta (2012), Shijaku (2012), Abazaj (2013), Gazidede (2013), Shijaku (2014)]

- The *novelties* of this paper versus the other ones are the following:

  - Calculation of output elasticity through the disaggregated approach as suggested by OECD.

  - Investigation of fiscal policy effects w.r.t. private consumption and private investment.

  - Estimation of IRFs through a recently introduced methodology in the fiscal area, the LPM.

  - Comparison of fiscal effects during high and low economic growth periods.

Aim: To characterize the dynamics of the behaviour of fiscal indicators in Albania and analysing their effects on the economic output.

Research questions:

- What is the overall impact of fiscal indicators on economic output?
- How effective are revenue versus spending instruments?
- Does current or capital spending have a larger impact?
- Which of GDP components is affected more by fiscal policy shocks?
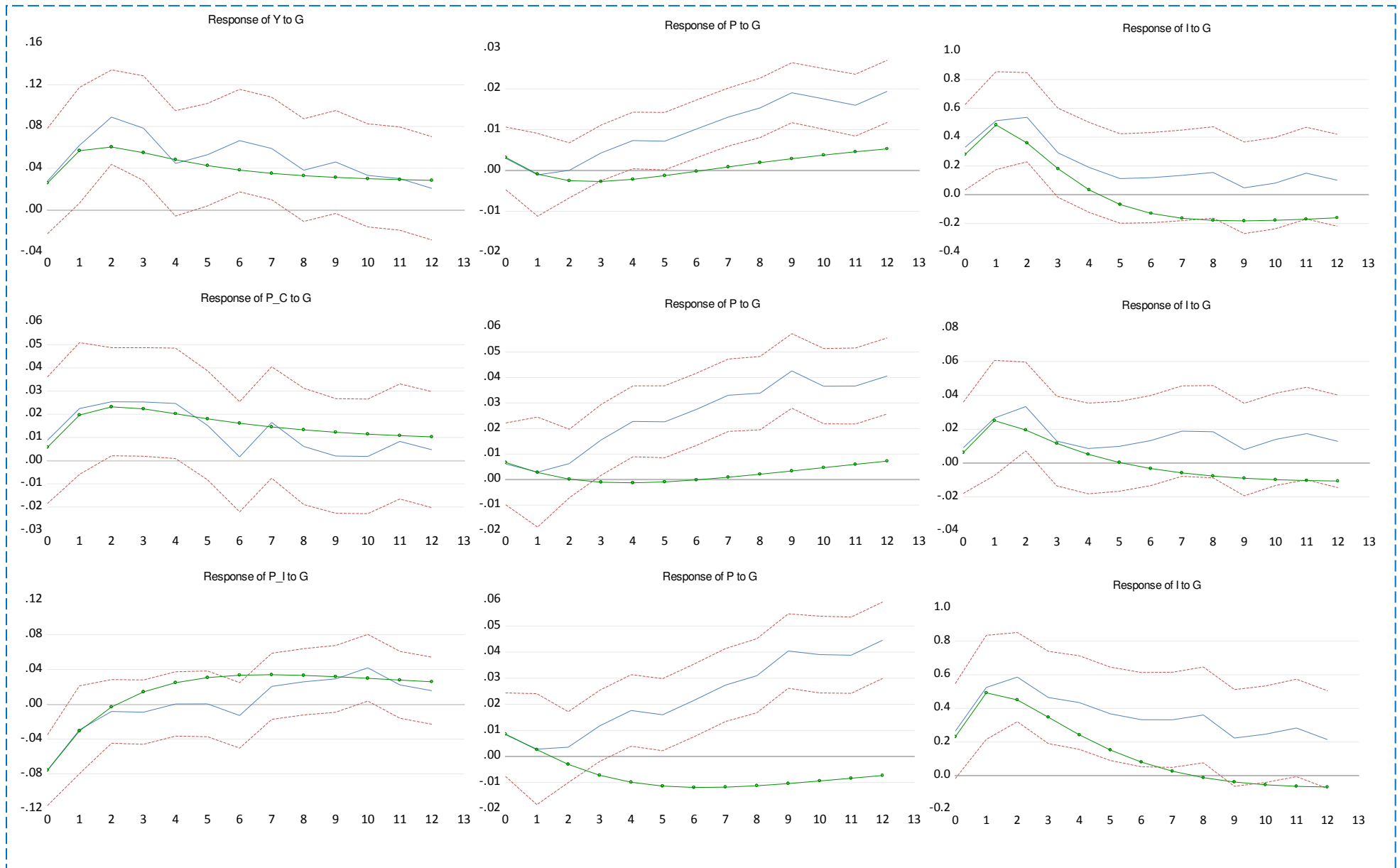- How do fiscal effects vary between periods with high and low economic growth?

Methodology:

➢ *Structural VAR* by Blanchard and Perotti (2002) for the identification of FP shocks [Perotti (2002), Mançellari (2011), Mitra and Poghosyan (2015), Hjelm and Stockhammar (2016)]

➢ Local Projection Method (LPM) for the computation of (IRFs) proposed by Jorda (2005) [Arizala et al. (2017), Jordà and Taylor (2016), Ramey and Zubairy (2014, 2016), Hjelm and Stockhammar (2016), Auerbach and Gorodnichenko (2012, 2013)]

- Variables:

    - Government net primary expenditures (G_t) = Government purchases of goods and services + Government spending for wages + Capital Expenditure - Government transfers - Interest payments

    - Net tax revenues (R_t) = Fiscal Revenues – Transfers = VAT revenues + Direct taxes on individuals + Direct taxes on corporation + Excise Taxes + Customs duties + Social security taxes - Government transfers, where the later represent transfers to households and subsidies to firms

    - Real Gross Domestic Product (Y_t), (2010=100)
    - Price level measured by the Consumer Price Index (P_t), (2015=100)
    - Interest rates, represented by the 12-month Treasury Bills' rate (I_t)

- Quarterly data for the period 1998Q1-2018Q2 (82 periods)

- Sources of information:

    - *Ministry of Finance and Economy*: fiscal indicators
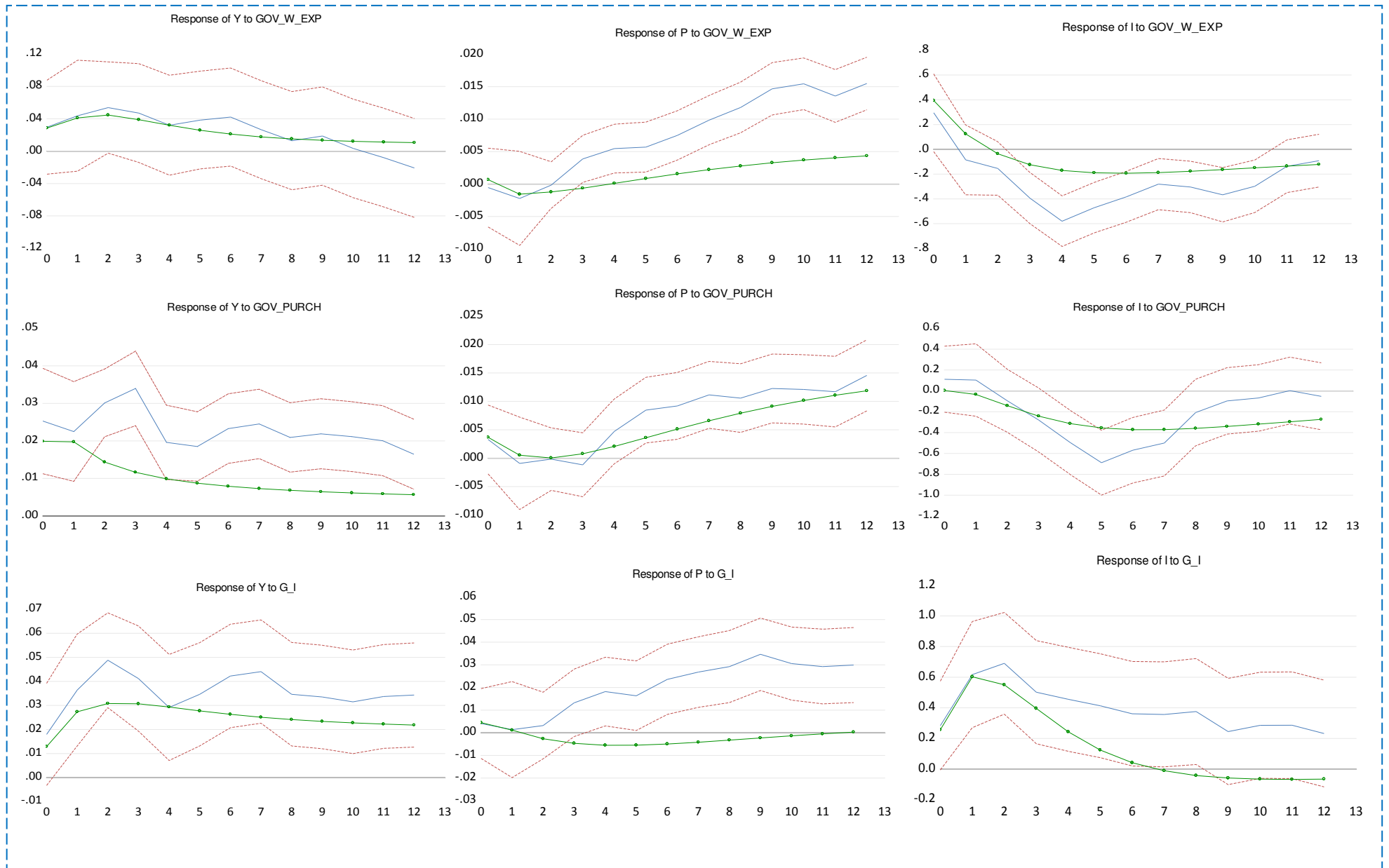   - *INSTAT*: CPI; GDP
    - *Bank of Albania*: 12-M TB

Figure 1. Effects of a 1% structural spending shock on several economic indicators.

Figure 2. Effects of a 1% shock on different government spending categories

Figure 3. Effects of a 1% tax revenue shock
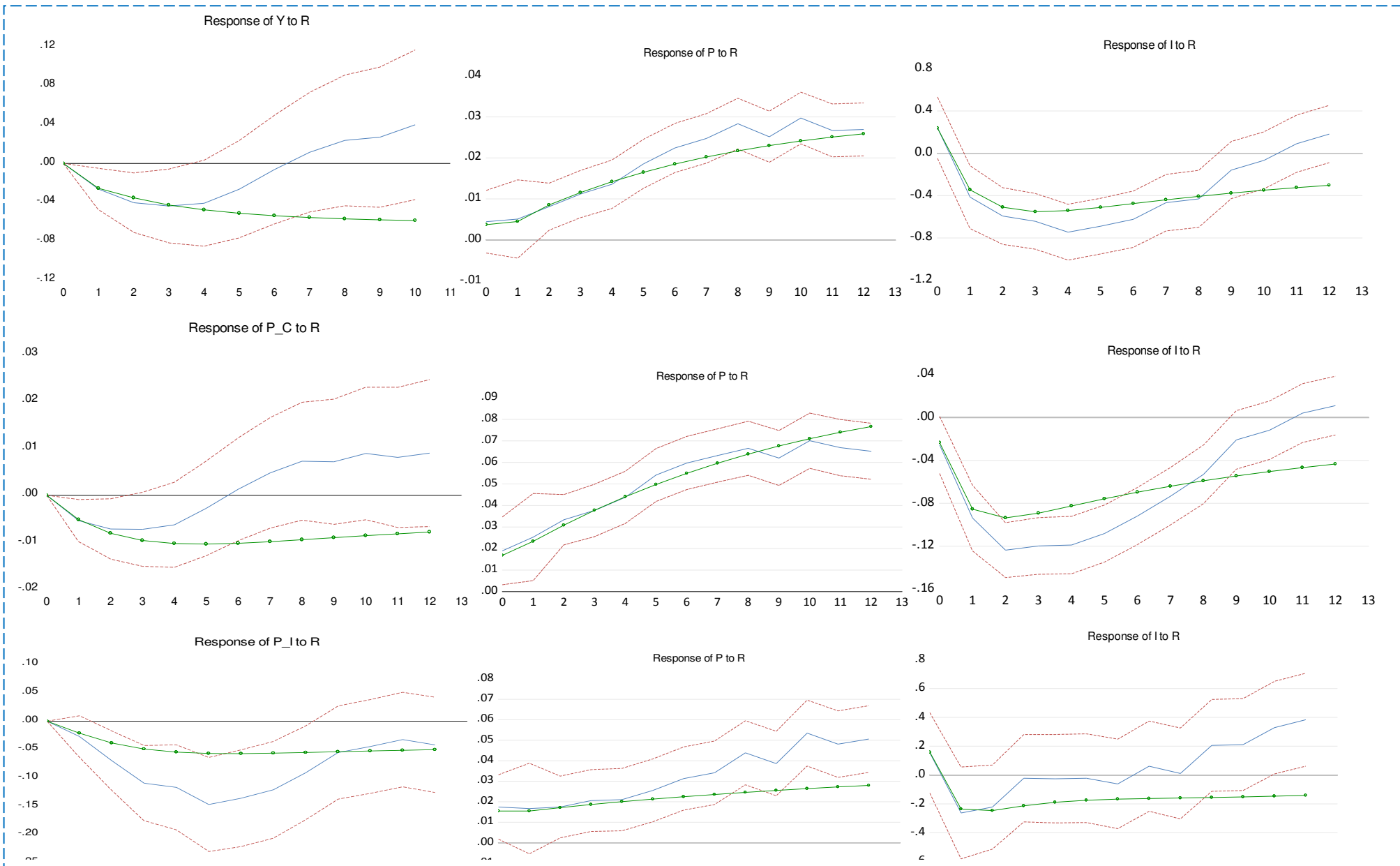
Figure 4. Effects of a 1% structural spending shock on several economic indicators
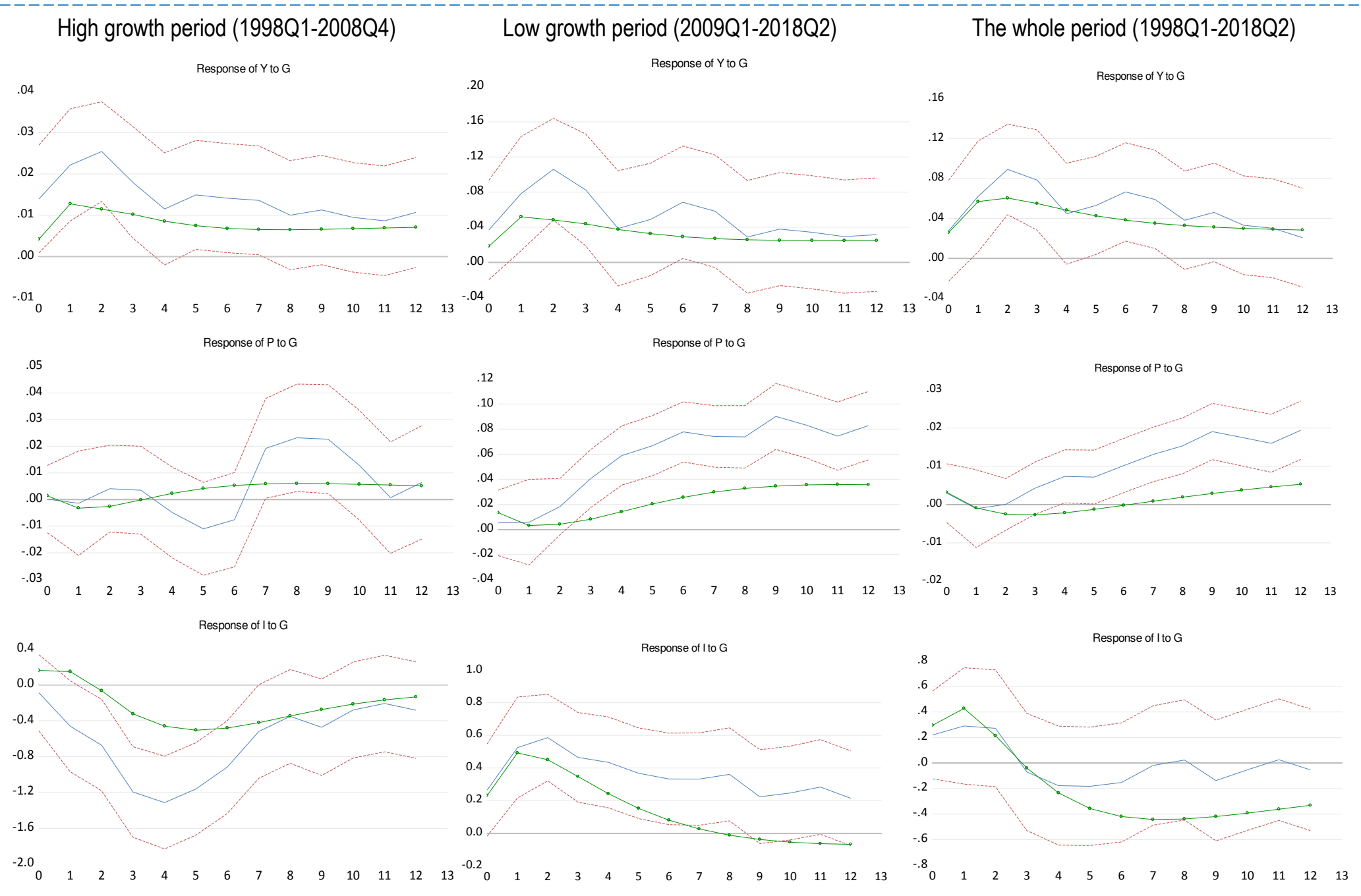
Figure 5. Effects of a 1% structural tax revenue shock on several economic indicators

High growth period (1998Q1-2008Q4)

Low growth period (2009Q1-2018Q2)

The whole period (1998Q1-2018Q2)

Response of Y to R

Response of P to R

Response of I to R
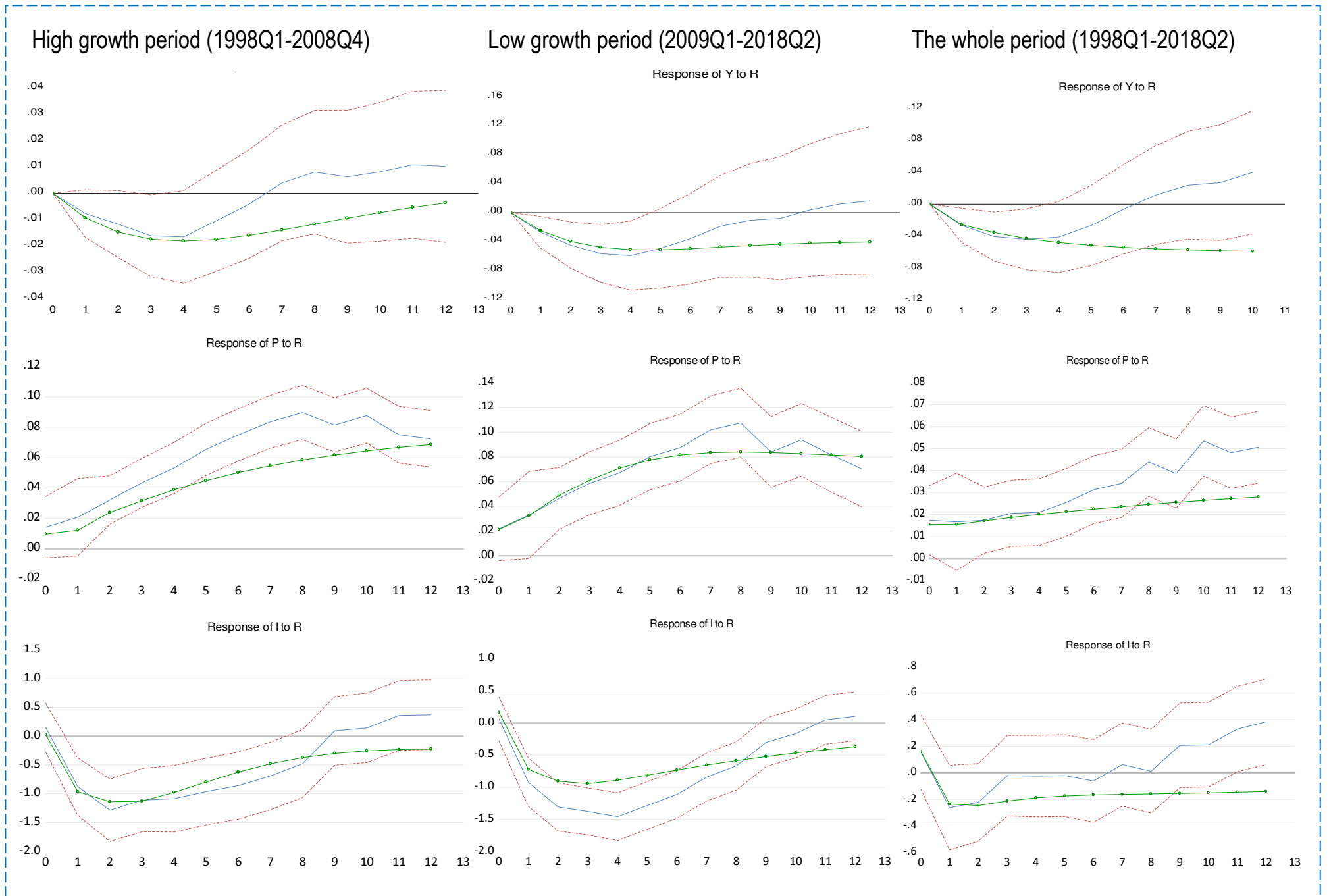
- The magnitude and the sign of the effect of a fiscal indicator is country-, time-, methodology- and economic conditions-dependent [Caldara and Kamps (2008) and Chahrour et al. (2012)].

- Output and private consumption reacts positively to a government spending shock, while investment reaction to spending shock is insignificant.

- Economic output and its components are affected negatively by an increase of tax revenue, but only in the short run.

- The effects of government spending shocks are transmitted to prices after 1 year, while those of tax shocks are transmitted much faster.

- In the medium-term, the revenue effects become insignificant (with a wide confidence interval), while the spending multiplier strengthens.

- Capital spending and government purchases have a similar effect on GDP, but the capital spending effects remain significant for longer.

- The effects of fiscal indicators on the output are higher during low growth periods compared to high growth periods.

POLICY IMPLICATIONS

- A fiscal adjustment strategy based on a combination of expenditure and tax measures may have a lower short-run cost compared with purely expenditure-based consolidation.

- Medium-term policies could minimize the adverse consequences of consolidation on growth by offsetting some current spending cuts with increased capital spending.

- Given the challenges facing the Albanian economy, it is important that policymakers apply these results in conjunction with broader considerations such as public debt sustainability, investor confidence, credibility of government policies, and public spending efficiency.

FUTURE RESEARCH:

- Including additional explanatory variables to capture country characteristics, such as: openness to trade, public debt, money supply, the quality of government (International Country Risk Guide)

- Investigate the effects of different taxes (direct and indirect)

- Application of a sign restriction approach Mountford and Uhlig (2004) that handles the problem of anticipated fiscal policy

- Study these relations only for the period of fiscal consolidation.