Fiscal Sustainability and Institutional Change in Nicaragua

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CENTRO DE ESTUDIOS MONETARIOS LATINOAMERICANOS

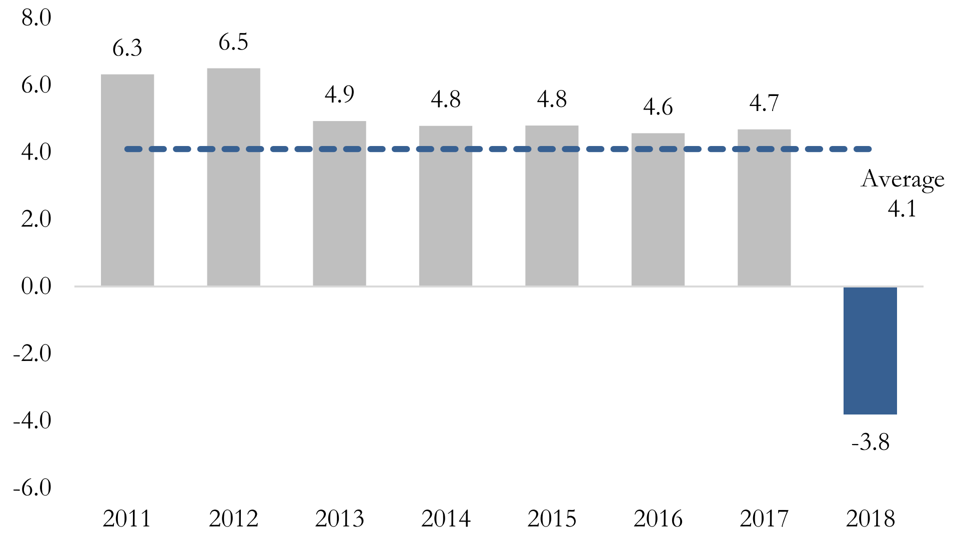
Outline of presentation

1. Introduction
2. Literature review
3. Methodological issues
4. Analysis and discussion
5. Preliminary conclusions

Recent economic performance

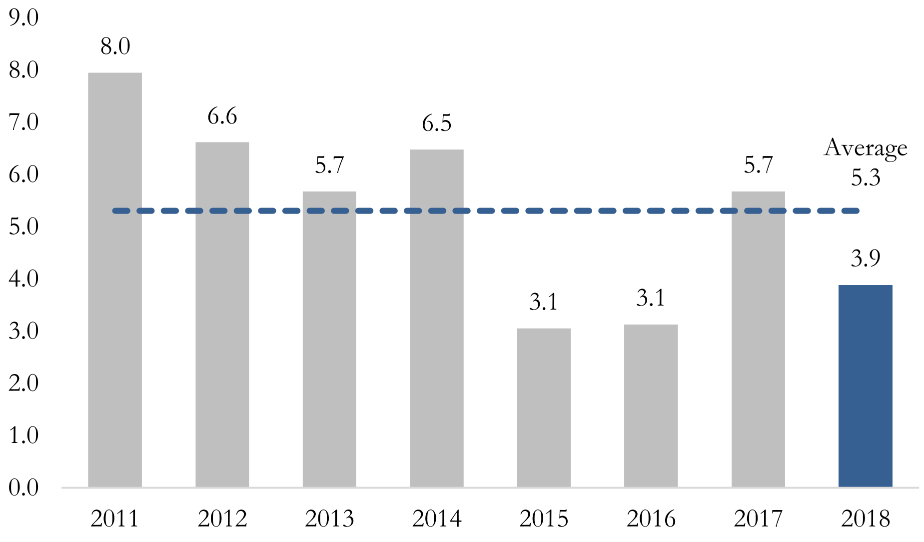
Economic growth

GDP growth (%)



Inflation

Inflation (%)

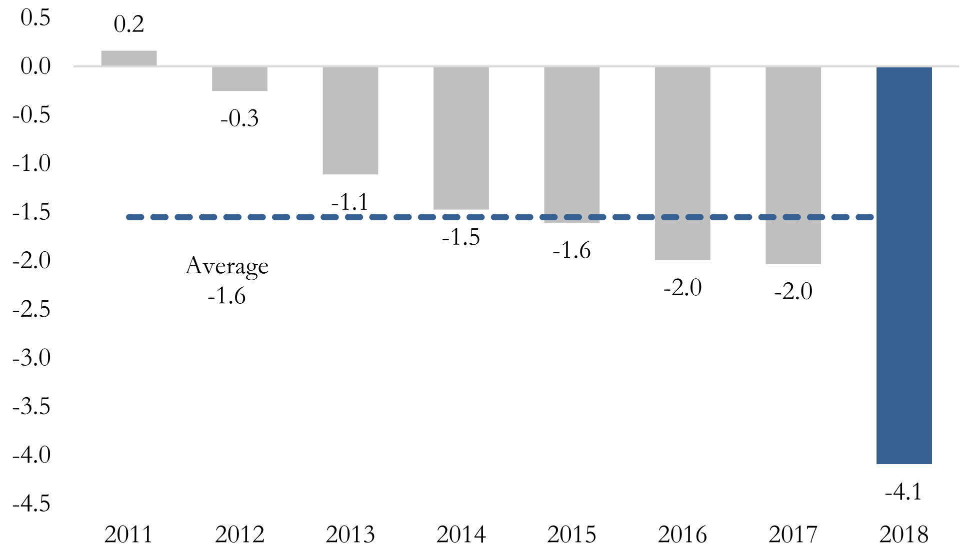


Source: BCN (2018).

Recent economic performance

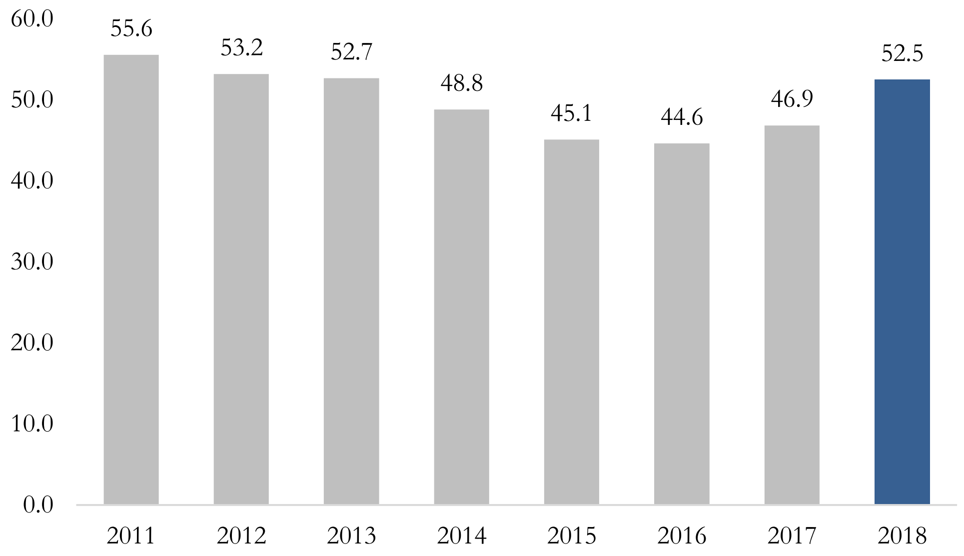
NFPS Deficit

PS deficit (% of GDP)



Public debt

Public debt (% of GDP)



Source: BCN (2018).

Problem statement

- As of 2013 the Nicaraguan Institute for Social Security went into deficit, jeopardizing the viability of the social security system.

  - To counteract this situation, the government of Nicaragua implemented major social reforms passed in April 2018.

  - This triggered widespread social protests, affecting the economy and stability of the country, with implications that still stands to this day.

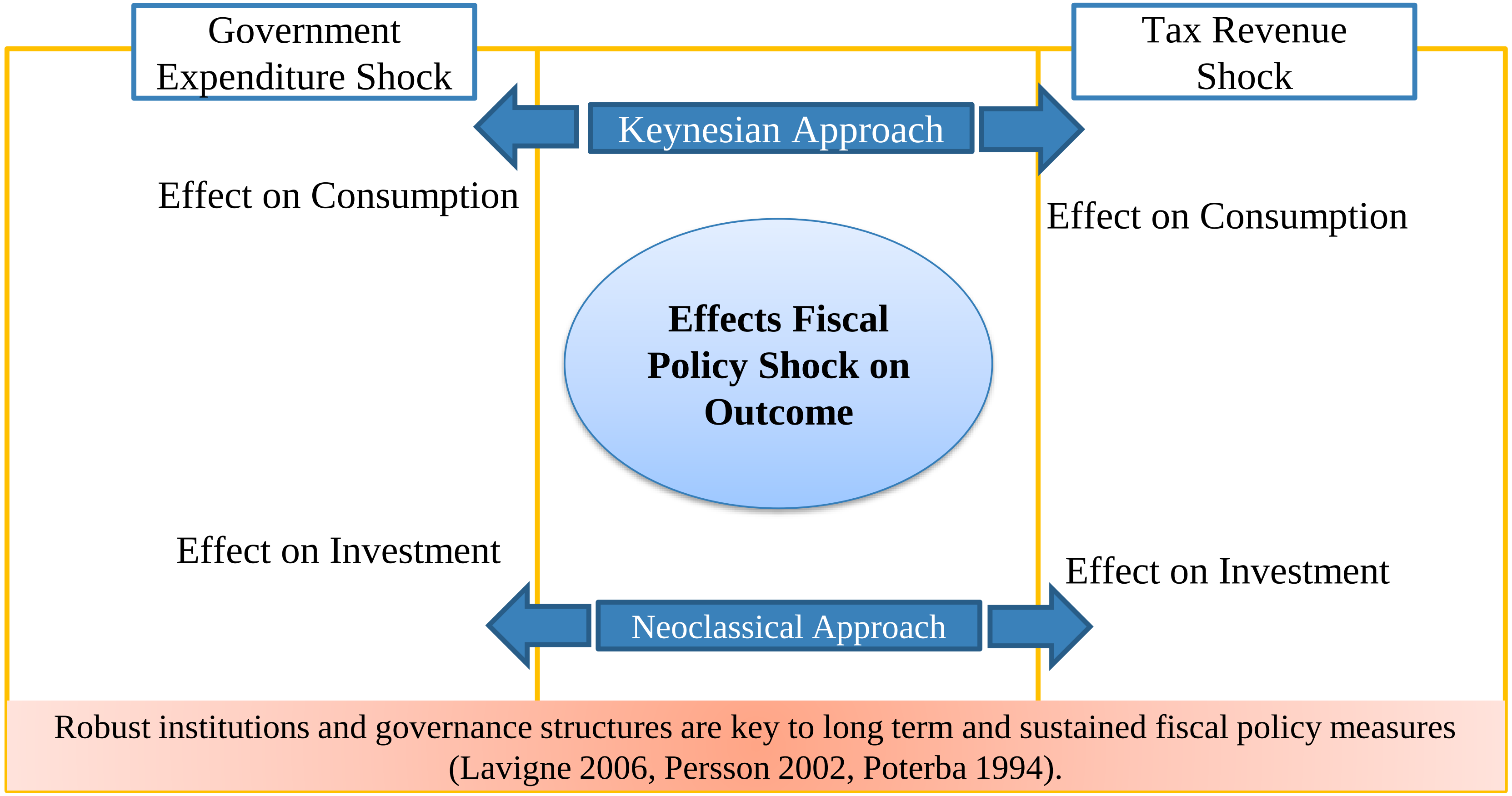
Problem statement

- As a result, GDP fell to minus 3.8 percent, consumption fell by 4.5 percent, and investment fell by 23.6 percent (BCN 2018a, p. 7).
  - This caused a shortfall in tax revenues, affecting the General Budget of the Republic (GBR) in about USD367.7 Million (cf. BCN 2018b, p. 157).
  - Consequently, the government has taken major Fiscal Policy actions, reviewing and adjusting GBR 2018 and 2019, passing a tax reform, and new measures of social security.

Research question

To what extend are the new institutions able to revert the current trends of economic downturn and improve the fiscal position of the government of Nicaragua?

Theoretical Foundations



Source: Based on Blanchard & Perotti (2002), Lavigne (2006).

Theoretical proposition

In contexts where social conflicts and political instability persist, it will be wise to adopt austerity measures while working on the reconstruction of the institutional environment as a pre-condition to undertake successful Fiscal Policy measures.

Methodological issues

General model

$$Y_t = \phi(L,q)Y_{t-1} + U_t$$

Where:

$$Y_t = [T_t, G_t, X_t]$$

$$U_t = [t_t, g_t, x_t]$$

Variables:

- Public spending.
- Tax revenues.
- Real GDP.

Model identification

$$t_t = a_1 x_t + a_2 e_t^g + e_t^t$$

$$g_t = b_1 x_t + b_2 e_t^t + e_t^g$$

$$x_t = c_1 t_t + c_2 g_t + e_t^x$$

Time period: 2006:01 - 2018:04.
Approach: Blanchard & Perotti (2002)

Methodological issues

Spending shock identification

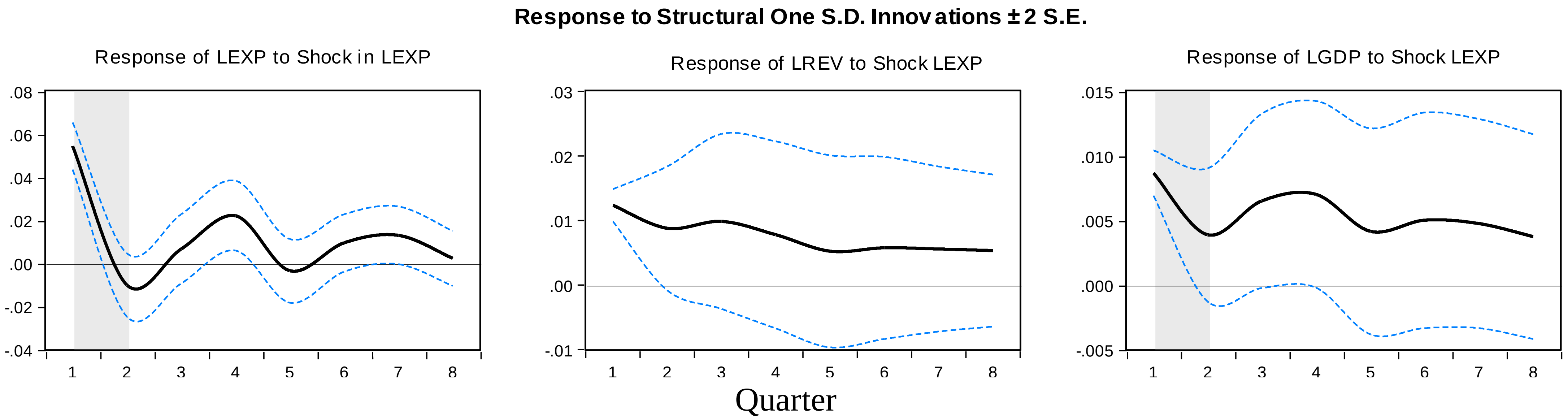
$$C = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & -a_1 \\ -c_2 & -c_1 & 1 \end{bmatrix}, D = \begin{bmatrix} * & 0 & 0 \\ a_2 & * & 0 \\ 0 & 0 & * \end{bmatrix}$$

Tax shock identification

$$A = \begin{bmatrix} 1 & 0 & -a_1 \\ 0 & 1 & 0 \\ -c_1 & -c_2 & 1 \end{bmatrix}, B = \begin{bmatrix} * & 0 & 0 \\ b_2 & * & 0 \\ 0 & 0 & * \end{bmatrix}$$

Preliminary results

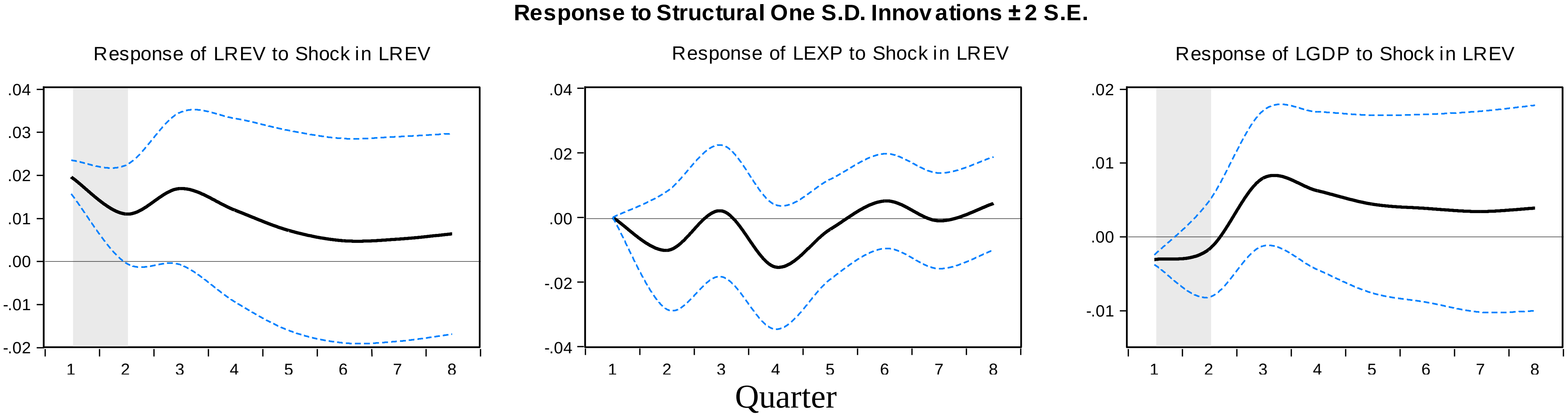
Figure 1. Structural Spending Shock



Source: this study

Preliminary results

Figure 2. Structural Tax Revenue Shock



Source: this study

Preliminary conclusions

- A positive government spending shock, have a positive effect on output, which last in average eight quarters, afterwards goes down.

- An increase in tax burden, have a negative effect on output, this last in average three quarter, then output return to its initial position as found in Ravnic & Žilić (2010), De Castro & Hernández (2006).

- Findings also led to support the notion that robust institutions are key to long term and sustained fiscal policy measures, as found in Lavigne (2006), Persson (2002), Poterba (1994) .

Thank you for your attention!

I also wish to acknowledge
and thank the following entities