

Introduction

- Rice is the main staple in the Philippines
- Rice accounts for a high share in the consumption basket (Table 1)
- Rice prices increases in 2018 pushed inflation above the 4% target, leading the Central Bank to raise interest rates to manage inflation

Table 1: Inflation rates and their shares in 2012 (%)

Overall inflation	100.0
Food and non-alcoholic beverages	38.3
Food	35.5
Rice	9.6
Alcoholic beverages-tobacco	1.6
Clothing-footwear	2.9
Housing-water-electricity-gas-other fuels	22.0
Furnishing-household equipment	3.0
Health	3.9
Transport	8.1
Communication	2.9
Recreation-culture	1.4
Education	3.3
Restaurants-miscellaneous goods and services	12.6

Source: Bangko Sentral ng Pilipinas.

Objectives

This study examines the effects of rice prices, fuel prices and remittances on regional inflation using a panel vector auto-regression framework

Methodological Approach

We analyze this relationship using a panel VAR as follows:

$$X_{it} = A(L) X_{(it-1)} + \mu_i + \varepsilon_{it}$$

X_{it} = four endogenous variables:

- Inflation
- Rice price
- Fuel price
- Remittance

Data

We use a balanced dataset for 17 regions from Jan 2007 to Sept 2019. Inflation, fuel price and the proxy for remittances data are from the Central Bank of the Philippines. Rice retail prices data are from the Philippine Statistics Authority.

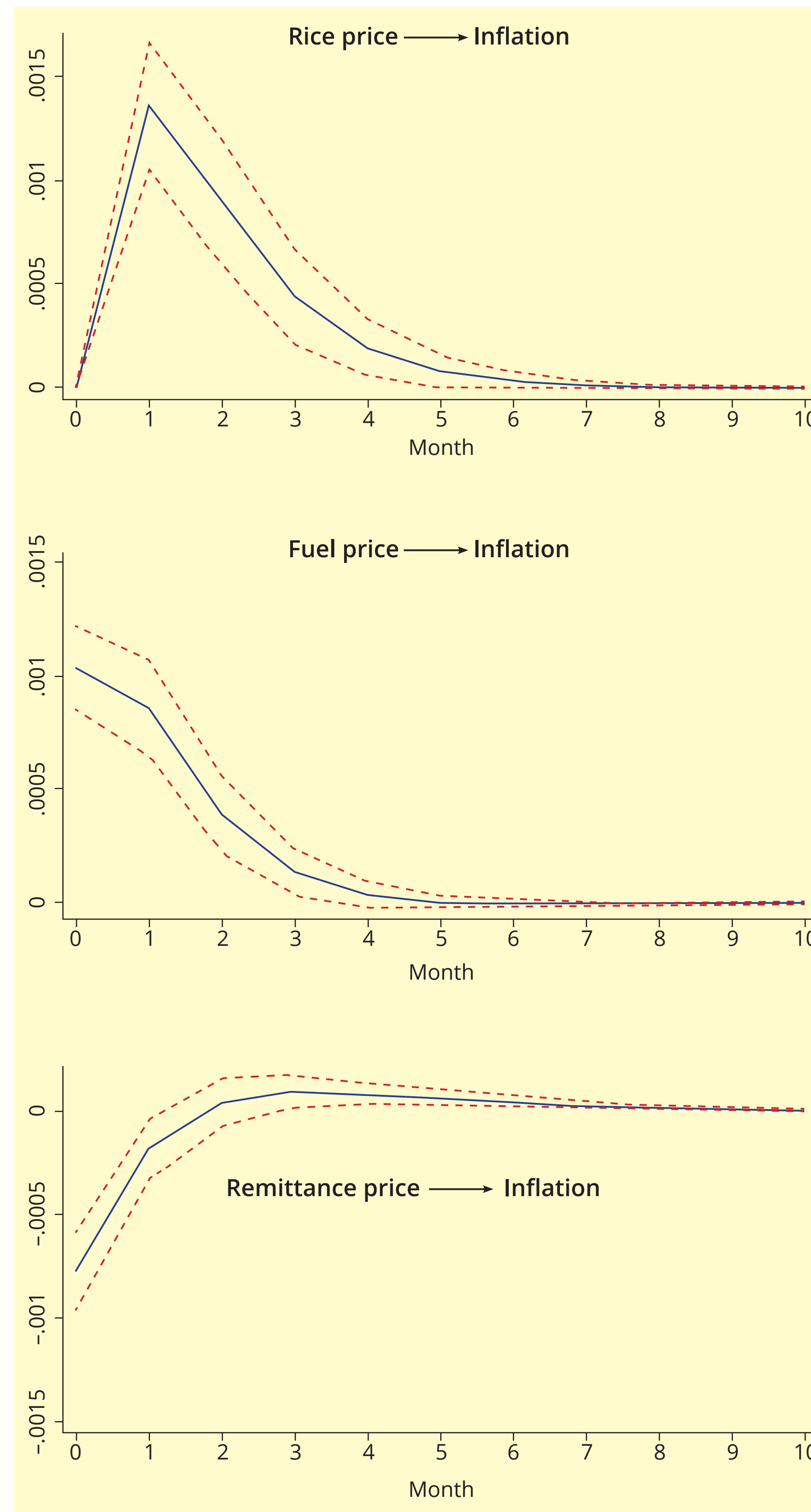


Figure 1. Impulse response functions (IRFs) from estimated panel VAR, 2007M1-2019M9

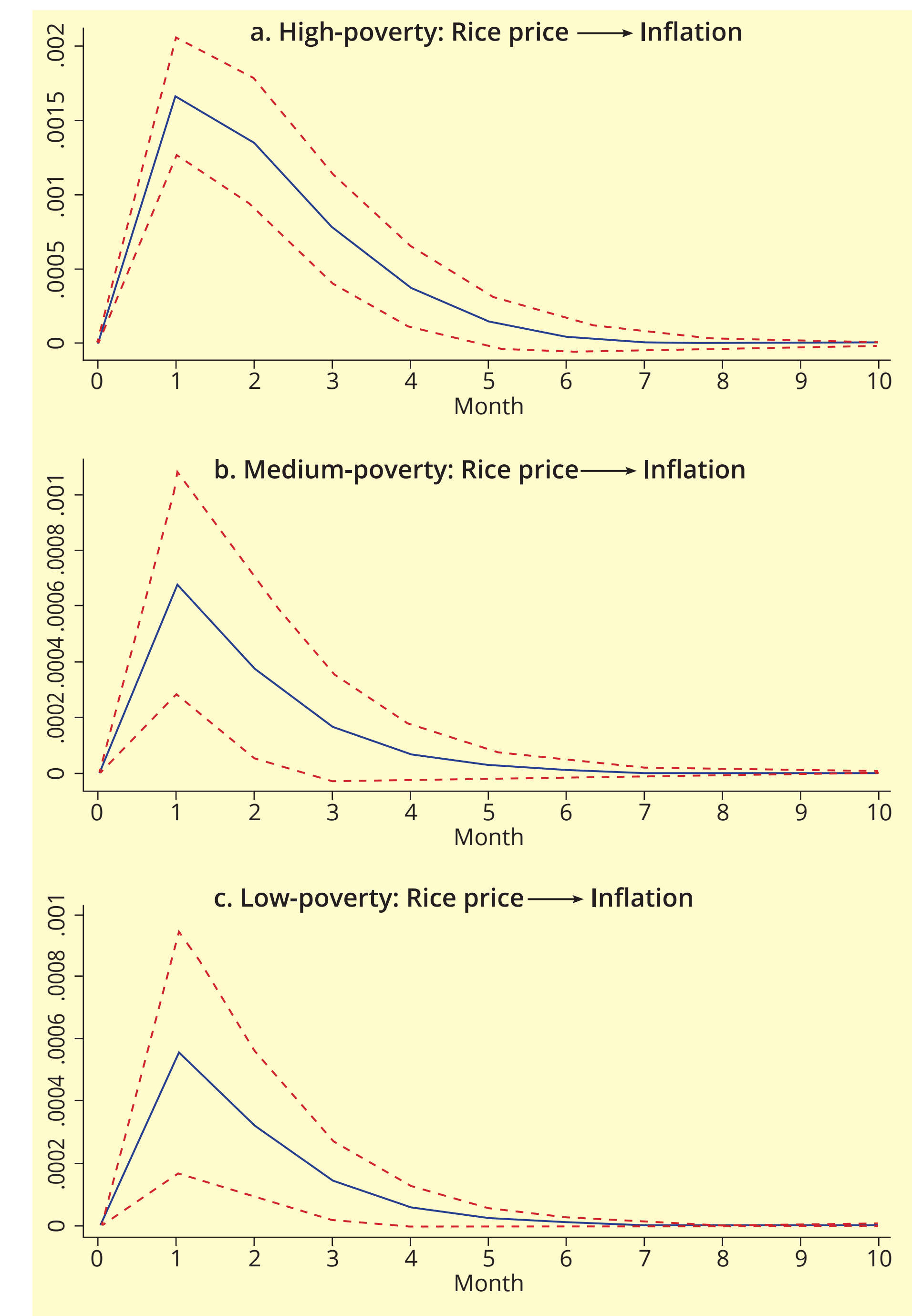


Figure 2. IRFs from estimated panel VAR across different poverty categories of regions

Discussion and Conclusion

- Rice prices have larger inflationary effect than fuel prices (Figure 1)
- The inflation response to rice price changes is consistent across different poverty categories of regions
- The magnitude and persistence of this effect varies by the level of poverty incidence in each region (Figure 2)