ABSTRACT

AGRICULTURAL POLICIES AND TIME SERIES ANALYSES: AN APPLICATION TO COTTON PRICES IN TURKEY

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Cotton is a strategic commodity at regional, national and international scale. Although Turkey was self sufficient in cotton, it has become an significant importer recently because of variations in world prices, increasing input costs, increasing demand from the domestic textile industry, and decreasing comparative advantage. In this study, the interaction between cotton and prices were examined. The relationship between cotton production, cotton prices in commodity exchange, and diesel oil prices were analyzed employing the VAR. The results indicate that the production amount and cotton prices in previous year are main determinants for the decision of current year. The causality test indicates that causality runs from diesel prices to production. This finding can be explained by the fact that increasing diesel prices lead to higher costs of cotton substitutes in textile industry and therefore decreases the demand for these substitutes in the process of manufacturing. The impulse response function indicates that any shock in production leads to higher prices for cotton. According to the findings, the commodity prices in previous years are main determinants fort he production decision. The diesel prices are not the direct factor in production decision but show its effect indirectly through changing demand for substitutes. In addition, the difference between the cotton prices and diesel prices widened recently against the farmers. This situation causes both lower incomes for farmers and endangers the sufficiency of domestically produced raw material. Therefore, it is quite essential that inputs are provided to farmers at world prices and income related supports are redesigned.

Keywords: Cotton, Time Series, VAR