

Analyzing income distribution effect on agricultural sector growth: A nonlinear Panel ARDL Approach

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ABSTRACT

According to new literature, improving income distribution leads to economic growth. Considering this issue and the importance of agriculture sector in the economy, in this study, the impact of rural income distribution on agricultural sector's growth has been analyzed dynamically and nonlinearly in Iran's provinces during the period of 2007-2016. For this, after confirming the existence of a long-run asymmetric equilibrium relationship, auto regression model with non-linear distributional lags was used to analyze the asymmetric effects. The result showed that the positive shocks of rural income inequality have a positive effect on agricultural growth in the long and short run. Also The negative shocks of rural income inequality have a negative effect in the short run and a positive effect on agricultural sector's growth in the long run. According to the results, the effect of positive shocks is more than the negative shocks, which indicates the positive effect of income inequality on agricultural growth and the results are consistent with the old literature. In addition, the results showed that in the short and long run, the effect of consumer price index and government spending on agricultural growth was negative and positive, respectively. Also, the effect of tax on agricultural growth is positive in the short run and negative in the long run.

Keywords: Income Inequality Shocks, Agricultural Sector Growth, Asymmetric effects

JEL: O15· O40·C22

EXTENDED ABSTRACT

Some of the researches show that the total society income distribution improves if the agriculture sector develops comparing to other sectors. So according to the new literature if rural income distribution improvement has positive effect on agricultural sector growth, it is expected with rural income gap decrease the agricultural sector develops and the income gap in all the society reduces. So the emphasize on rural income inequality decrease through different ways like protective policies of low-income rural people and increasing infrastructures cause agricultural sector growth, rural income distribution improvement and reduce poverty across the country. Therefore in this study the effect of rural income distribution on Iran agricultural sector growth is emphasized.

The background research study shows that most of the studies done for rural income distribution and agriculture sector growth were analyzed for the entire economy, while province analysis indicates that agricultural sector growth and rural income distribution among provinces is not homogenous.

In this study, rural income distribution effect on agricultural sector growth analyzed by provinces during 2007 - 2016. As income distribution inequality on growth does not limit to a period and positive and negative inequality shocks in different economic conditions has various effects on agricultural sector development. As a result inequality effects on growth in most cases will be accompanied by asymmetry. So in this study the analysis of rural income distribution effect on agricultural sector growth is emphasized dynamically and nonlinear. For this, after confirming the existence of a long-run asymmetric equilibrium relationship, between income distribution and

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agricultural sector growth auto regression model with non-linear distributional lags was used to analyze the asymmetric effects.

The result showed that the positive shocks of rural income inequality have positive effect on agricultural growth in the long and short run. Also the negative shocks of rural income inequality have negative effect in the short run and positive effect on agricultural sector's growth in the long run. According to the results, the effect of positive shocks is more than the negative shocks, which indicates the positive effect of income inequality on agricultural growth and the results are consistent with the old literature. In addition, the results showed that in the short and long run, the effect of consumer price index and government expenditure on agricultural growth was negative and positive, respectively. Also, the effect of tax on agricultural growth is positive in the short run and negative in the long run.

Due to the results above; the increase of income inequality among the rural cause agricultural sector growth. This result beside the results of other studies like Permeh and Dabagh(2003)•Mehregan et al.(2008)•Abounoori and Farahati(2016) ,which show that as the share of the agricultural sector increases, the society's income distribution improves, indicates that the improvement of rural income distribution is not aligned with the improvement of the income distribution of the whole society. Therefore, the mere emphasis on improving income distribution of the whole society may cause the neglect of planners and policymakers to pay attention to the rural income distribution and lead to the spread of poverty in the rural society.