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ABSTRACTS

Factors Affecting Agricultural Commodities Export in Iran

Seyed Safdar Hosseini, Mahdieh Homayunpour*

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Abstract:

Foreign trade is an important component of economic development and source of foreign exchange earnings for investment in new technology and increasing the production power of economy. In recent years, despite fluctuations in the market price of oil, has met the country's foreign exchange earnings with many changes and has influenced the economy and this shows the need to diversify export products and trade and to emphasize the importance of non-oil products trade clearly . Focusing on agriculture sector trade according to the goals such as self-sufficiency and food security and the possibility of high exchange revenues of mentioned sector is avoidable. Since the formation of a strong agricultural sector requires adopting appropriate policies and these policies cannot be adopted without identifying important factors, the present study has discussed the factors affecting agricultural commodities exports in Iran. In the face of factors affecting export agricultural products in Iran were studied in the context of time series models using vector error correction model. Results showed that variables relative price index, real exchange rate, commercial exchange relation and added value of trade and commercial agriculture were positive and significant and also the variable GDP of trade partner countries was positive and significant affecting agricultural exports value index. So if the shocks appeared in the system, shock will be adjusted after 2 periods. In other words, sustainable pattern of agricultural exports was clear.

JEL classification: Q17
Keywords: export, agricultural products, time series models, Iran.

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Anticipated Liquidity and Inflation and its Effects on Agriculture Value Added

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Abstract

The purpose of doing this study was forecasting liquidity and inflation for the period 1352-1387. After that surveyed unit root and Wallis-Moore nonparametric and Durbin-Watson parametric tests, we used Harmonic; ARMA and ARCH patterns for forecasting and finally the best models were selected for prediction. Results showed that ARMA (2, 1) and GARCH (1, 1) are more efficient models for prediction inflation rate and liquidity, respectively. One of the Iran's economic problems in the past decades is increases liquidity volume that cause raises the price index and therefore, it will create inflation. In the other, agriculture sector is one of the major sectors of economy that influenced by macro-economic policies. Accordingly the second aim of this study is survey impacts of inflation rate and liquidity on agriculture value added. The results of this part showed that there is a direct relation between liquidity, inflation rate and agriculture value added.

JEL Classification: C53, D46
Keywords: Forecasting, Agriculture value added, Liquidity, Vector Autoregressive model (VAR)

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Investigation the Impact of News on Meat Price Volatility in Iran

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Abstract

Price volatility is affecting consumers and producers welfare. The extent to which food price news contributes to volatility is most important for policymakers. Hence, the goal of this paper is the survey the impact of news on price volatility of chicken, mutton and beef in Iran. For this purpose, the various types of non-linear GARCH models were estimated using monthly meat price data for the period of 1992:1-2011:12. Findings show that EGARCH is the best model to Exploiting Asymmetries in the News Impact Curve. According to results, conditional heteroscedasticity of beef, mutton and chicken price is non-symmetry. In other words, price volatility of these commodities has asymmetric response to good and bad news. Moreover, high-price news increase the price volatility of these products and low-price news stabilizes price just in chicken market. Therefore it is recommended that policymakers design policies with respect to movement of expected prices.

JEL classification: Q11, C22, C51
Keywords: Meat, News Impact, Non-Linear GARCH Models, Price Volatility

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Analysis of Subsidized Goods Consumption Model: Usage of Quadratic Almost Ideal Demand System

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Abstract

In this study, to examine the consumers' behavior and to calculate the price and expenditure elasticity, the Quadratic Almost Ideal Demand System was used and the circumstances of income distribution among different income groups were shown using the deducted indices from this system. To reach the goals of this study, the Iran's statistics center data of household expanses in 1386 was used and the seemingly unrelated regression estimator (sure) was estimated using the Eviews 5 software. The selected goods liable to subsidy are vegetable oil, sugar, bread and rice. The results obtained from the expenditure elasticity shows the rural consumers' higher tendency towards increasing the consumption of the goods than the urban consumers. Considering the low price elasticity of the under study goods it seams that using just the price policies to correct the consumption model is not enough. By studying the results obtained from the applied demand system, it was observed that in urban areas the highest inequality is in the high- income group and in rural areas in the low- income group.

JEL classification: B12, D1, D12
Keywords: consumer's behavior, goods liable to subsidy, urban & rural areas of Iran

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Estimating Subjective Value of Decreasing Environmental Pollution in Ajichai River, Tabriz Citizens Sight

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Abstract

Today, environmental pollution is one of the most important problems that human is involved with it, because of technological advances and uncontrolled interventions. Despite this because of the difficulty of estimating the environmental impact and its valuation, still, in many large regional, national and international projects, pollution cost is not calculated or be noted transient. In this study, pollution reduction value of Ajichai River in Tabriz and in watercourse within the urban of Mehran River assessed from the perspective of Tabriz citizens. Therefore, 100 households by using random sampling elected and their preferences by Logit model analyzed. The results show that per household in Tabriz pays average monthly amount of 4500 Rials in this watercourse and it is different for citizens with different social and economic characteristics. Also shown that factors as age, sex, income level, family size and education have significant effect on individual Willingness to pay (WTP). According to monthly average WTP for per household and number of 423660 households in province, value of reducing pollution for Ajichai river in this watercourse equal to 22877.64 Millions Rials annually.

JEL classification: C350, Q510
Keywords: Contingent valuation, Willingness to pay, Logit model, Environmental pollution, Ajichai river.

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Estimation of Zayanderood Water Share in Isfahan Province Economy

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Abstract

In this study, the relationship among different economic sectors of Isfahan province has been investigated. Then the economic value of Zayanderood water has been estimated from an aggregated input-output and linear programming model with fuzzy parameters. The goals of the 4th developmental plan and maximized value added of the province have been integrated into the model. Given the model results, the real value of a cubic meter of water in Isfahan is at least 10400 Rials (in constant 2001 prices). On this basis, the share of Zayanderood water is equal to about 13.55 percent of Isfahan province value added. Moreover, if necessary continuing the goals of the 4th developmental plan (which are in the same direction with the goals of the 5th development plan), this will require at least 7.86 percent annual growth in investment. Under the present economic structure of Isfahan province, water resource management and increasing investment are the two most important factors for decreasing the risk of infeasibility of the development plan goals.

JEL Classification: D57, C67, O25
Keywords: Input-output model, linear programming with fuzzy parameters, Zayanderood, Isfahan province

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The effects of sprinkler irrigation system on copping with drought in Fars province

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Abstract

Sprinkler irrigation system is one of the most important rural development investment strategies that can have both direct and indirect impact on coping with drought. This study examines the effects of sprinkler irrigation system on coping with drought in Fars province. It points out the analysis of sprinkler system as a coping strategy that adopted by farmers in mitigating drought. A sample of 234 farmers was selected for interview and collected needed farm level data in 2011 by using a multistage random sampling method. To obtain the results multinomial logit was used. Based on the viewpoints of 30.8%, 46.2% and 16.2% of sampled farmers, the effectiveness of sprinkler system under drought condition are very large, large and medium respectively. The results showed that 29.9 percent of sampled farmers chose sprinkler irrigation system as a strategy to cope with drought. As well, multinomial logit regression demonstrated that income, loan and depth of well have positive and significant effect on the choosing of sprinkler irrigation system as farmer's strategy to cope with drought. Finally the results revealed that sprinkler irrigation systems can considerably increase water productivity.

JEL Classification : Q15 ،Q25 ،Q54
Keywords: Sprinkler irrigation system, Drought, Multinomial logit regressions, Water productivity.

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Estimating the economic value of water using positive mathematical programming in Quchan city

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Abstract

In recent decades most countries because of water crisis tend to manage water resources and water allocation well. Water, the crucial element, is the most important factor limiting of economic development and input in Iranian agriculture. This study estimates the economic value of water with applying positive mathematical programming between farmers in Quchan. The data, used of simple random sampling method, in this study completed by questionnaires between 118 of the farmers in Quchan. Then farmers were divided in 2 groups (farmers with less than 5 acres and more than 5 acres) with using analysis of variance that each group of farmers affected by the reaction of the three scenarios (decrease 30%, 40% &70% water resources for farmers group1 and decrease 10%, 25% & 75% water resources for farmers group2 also increase 70%, 80% & 100% in water price for farmers group1 and 75%, 80% &100% for farmers group2) were examined. The results showed that the economic value of water under scenarios of decrease water for farmers group 1 respectively equal 1100, 1340 & 3120 Rials and for farmers group 2 respectively equal 10, 1260 and 4730 Rials. Also the cultivation of products such as wheat, barley, potatoes and tomatoes has been less change than the existing scenarios.

JEL classification: C61 ،Q12 ،R32 ،Q25.

Kew Words: Water, crop pattern, positive mathematical programming, economic value, Quchan

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