An analysis of Socio-economic Factors Affecting theAdoption of Modern Conservation Tillage Technologies in Darab Region (An Application of Multinomial Logit Models)

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Abstract

To investigate factors affecting the adoption of conservation tillage systems, the tillage methods utilized by wheat producers in the central Darab county are categorized into conventional, reduced-tillage and no tillage systems. For this purpose, multinomial logit model approach using the stata software was applied to the data set collected by random cluster sampling method. The explanatory variables consisted of farmer's age, farm land size, farmer's level of education, farmer's experience on conservation tillage methods, number of family members, off-farm employment, number of land parcels and farmer 's information on conservation tillage methods.The results indicated that some variables such as farmer 's level of education, farmer's experience on conservation tillage methods, off-farm employment, farm land size and farmer's information on conservation tillage systems have positive and significant effect on the adoption of reduced-tillage systems, while the variable of the number of land parcels has a negative and significant effect. Other variables such as the farmer's age and the number of family members were found insignificants.

Keywords: Technology adoption, Wheat, Conservation tillage, Multinomial logit model

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The Structural Equation Model of Job Satisfaction for Teachers Working in Agricultural Institutes within Mazandaran Province, Iran

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Abstract

Job satisfaction is a positive or pleasant emotional state resulting from a person's appreciation of his/her own job or experience. The study purpose was to model job satisfaction for teachers working in Agricultural institutes within Mazandaran province of Iran. The study used a descriptive-correlative design . The statistical population (including all instructors working for agricultural Institutes within Mazandaran Province of Iran) was es 127 teachers. Using Cochran's formula, the sample size was estimated at 85 teachers. To increase the viability of the study, the planned sample size was determined att 110 teachers from which 108 teachers completed the questionnaires. The study was conducted using questionnaire. The content validity of the questionnaire was assessed by a group of extension specialists. In order to measure the reliability of research questionnaires, 29 teachers who were randomly selected. completed some questionnaires. Cronbach's alpha, ordinal theta and combination reliability were calculated by 0.95, 0.92 and 0.87 respectively. The results indicate that the magnitude of job satisfaction for %85.2 of instructors working in Agricultural institutes within Mazandaran province was moderate and relatively high. Based on the estimated Structural equation model, the highest effect on the job satisfaction was related to the environmental factor with the path coefficient of 0.64. Motivational factor with the path coefficient of 0.26 had a significant effect on job satisfaction. In addition, the environmental factor with the path coefficient of 0.55 had a significant effect on the Motivational factor.

Keywords: Job satisfaction, Instructors, Agriculture institute, Structural equation model

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The Impact of Factors Affecting Environmental Pollution with Emphasis on Trade Openness in Different Countries (Case study CO_2 emission)

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Abstract

Urbanization, population growth and moving from traditional manufacturing industry to accelerate the process of economic development and parallel, significant environmental impacts are left. The purpose of this study is to investigate the effect of different variables such as trade openness, comparative advantage, production levels and other important variables affecting the emission of carbon dioxide gas in various countries of the world. Stata11 software was used to estimate the panel data model of 77 countries over the years 2010-1980. The results indicate that propagation environment, and in particular CO_2, in all four groups of countries are associated with prior emission, with a per capita income direct link but with the square of it correlates inversely and have direct link with the ratio of capital to labor and with the square of it correlates inversely and trade openness in high-income countries and moderate negative effect in low-income and middle-income countries is directly related to the bottom.

Keywords: Environment, Trade openness, CO_2 emission, Income, Panel data

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Analytical Comparison of Pistachio Production and Trade in Iran and the USA and the Impact of Exchange rate Volatility on its Exports

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Abstract

In the present study, pistachio production and trade and influential factors on its exports in Iran and the USA are compared. The Using the annual data from 1970 to 2011; this study aimed to analyze the effects of pistachio price and the effects of food security. Moreover, the relationship between exchange rate and pistachio export in the Iranian economy was analyzed through examining a non linear relation between the two factors. Therefore, the hypothesis validation upon nonlinearity relationship between exchange rate and pistachio export was analyzed using smooth transition autoregressive model (STAR). The results of smooth transition model (STAR) show that there is a nonlinear Granger causality between exchange rate and pistachio export and vice versa. It is therefore recommended ,in order to determine the threshold level of potential benefits of pistachio exports, the existence of the nonlinear relationship between the dynamic exchange rate and pistachio exports should be considered. Furthermore, in order to maintain market share in the international level, understanding target markets of export and achieving complete information upon the position of the major competitors in the production and trade of Pistachio is essential.

Keywords: Production, Pistachio trade, Exchange rates, Nonlinearity smooth transition model, Granger causality
JEL Classification: C4, F4, F43, M21

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Assessing Distinct Aspects of Karaj Citizens' Intentions to Buy Fruit and Vegetables from Municipal Markets and its Parallel Markets

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Abstract

The main objective of the present study is to assess distinct aspects of citizens' intention to buy fruits and vegetables from municipal markets and its parallel markets within Karaj city. The required data was collected by completing 150 questionnaires from Karaj citizens in 2013. Using the multi-Group discriminant analysis, analysis ofthe study results within the three groups including buyers from municipal markets, local shops and fruit pickups show that possibility for non-cash payment, presenting printed purchase receipts, a higher quality of product, degree of fruit importance in the household basket, seller's behaviour, more openning hours, use the benefit of the more familiar seller, and length of time allocated to buy fruit play the greatest role in making a distinction between two groups of buyers including buyers from local shops and buyers from municipal markets against buyers from fruit pickups. In addition, the results of this study indicate that monthly household expenditures, number of monthly fruit purchase, possibility for customers to select his desired items , a reasonable price comapared to the product's quality, appropriate packing, education, how often a household buy fruits in a month a wide variety of products, trust to the offered prices, distance to the market play the greatest role in making a distinction between two groups of buyers from local shops and buyers from municipal markets, respectively. Ultimately, it is suggested to train sellers how to behave properly withcustomers. In addition, it should be paid more attention to appropriate packing and to make it possible for the citizens to select their desired items themselves.

Keywords: Multi-group discriminant analysis, Municipal market, Local shops, Fruit pickups

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Nonparametric Nonlinear Control of Productivity Shocks in Estimation of Agricultural Production Function of Selected Provinces in Iran: (Case Study: Wheat Production Function)

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Abstract

Productivity shocks are one of the most important factors that influence the firms ' decisions on he optimal consumption of production inputs. Unobservable productivity shocks create selection and simultaneity problems causing biased estimates of production function by ordinary least squares. However, to estimate coefficients associated with production function by Levinsohn and Petrin technique, coefficients associated with intermediate inputs are used as a proxy variable. It is therefore argued that when firms face productivity shocks, intermediate inputs will be moderated by firms. In this approach, because of the nonlinear and nonparametric controlls on productivity shocks, some unbiased estimates could be achieved. To examine this hypothesis, a data set from 11 provinces of Iran during the years between 2000 and 2008 was collected. For the collected data set, a production function of wheat was estimated using the three techniques of OLS, random effects and Levinsohn and Petrin method. Based on the results, ordinary least square had an upwardly biased estimate of water and fertilizer, while the OLS showed downwardly biased estimates of capital. Therefore to control the bias due to simultaneity and selection problems, nonparametric methods should be used to model unobservable productivity shocks. In addition result shows that productivity shocks in wheat farms of the selected provinces, are moderated by adjusting the input demand, and thus, there is a significant correlation between input adjustment and productivity shocks.

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The Determinants of Market Share: A Case Study of Iranian Food and Beverage Industries, (A Panal Data Approach)

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Abstract

This paper investigates the effects of advertising, profitability, degree of concentration on the market and Research & Development costs on the Market Share in the Iranian large food and beverage industries during the period of 2000-2011. For this purpose, the study used the statistics associated with large firms-with more than 50 employees. The panel data technique was used to estimate the model. The main results of this paper reveal that, the elasticity for market share with respect to profitability is greater than those for other explanatory variables such as advertising cost and R&D cost. Moreover the results indicate that concentration on the market has a positive and significant effect on the Market Share within the large industries. Thus, the main policy recommendations of this study is that Firms and business managers and executives as well as economic authorities can contribute to improve market share through providing the essential conditions to increase the research and development costs, advertising costs, and increase in profitability in the Iranian large   beverage industries.

Keywords: Market Share, Profitiability, Advertising, Research & Development, Degree of Concentration
JEL Classification: C23: L10

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Measurement of Conjectural Variations Elasticity in an Oligopoly Structure (Using Iwata Approach for Iranians Food and Beverage Industry)

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Abstract

In this paper, we investigate Conjectural Variations elasticity in Iranians Food and Beverage industry using Iwata approach, The conjectural variation function is extracted from demand and supply information also optimization process on producers' behavior. The experimental estimates of conjectural variation elasticities were obtained based on price elasticity of demand, cost elasticity and marginal cost elasticity for the selected industries. In this research demand function AIDS was used to obtain the price elasticity. The AIDS function was estimated using SUR and the demand price elasticity is calculated by calfent. The results show that "Vegetable oils and animal" industry with 19.37 have the most conjectural variation elasticity among the selected industries (The more divergent the conjectural variation elasticity is from zero the more likely the monopoly exists). In addition, dairy, sugar and malt industries have the most conjectural variation elasticity with 18.01, 17.18, and 10.51 respectively.

Keywords: Conjectural Variation elasticity, Oligopoly, Market Power, Industry
JEL: l0001

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The Effect of Macroeconomic Variables on Value-Added Agriculture: Approach of Vector Autoregresive Bayesian Model (BVAR)

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Abstract

There are different ideas and opinions about the effects of macroeconomic variables on real and nominal variables. To answer the question of whether changes in macroeconomic variables as a political tool is useful over a business cycle, understanding the effect of macroeconomic variables on economic growth is important. In the present study, the Bayesian Vector autoregresive model and seasonality data for the years between 1991 and 2013 was used to determine the impact of monetary policy on value-added agriculture. Predicts of Vector autoregresive model are usually divertaed due to a lot of parameters in the model. Bayesian vector autoregresive model estimates more reliable predictions due to reducing the number of included parametrs and considering the former models. Compared to the Vector Autoregressive model, the coefficients are estimated more accurately. Based on the results of RMSE in this study, previous function Nrmal-Vyshart was identified as a suitable previous distribution. According to the results of the impulse response function, the sudden effects of shocks in macroeconomic variables on the value added in agriculture and domestic venture capital are stable. The effects on the exchange rates, tax revenues and monetary will bemoderated after 7, 5 and 4periods. Monetary policy shocks ,in the first half of the year, increased the value added of agriculture, while in the second half of the year had a depressing effect on the value added.

Keywords: Value-Added Agriculture, Bayesian Vector Autoregressive (BVAR), Monetary Policy Shock

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Investigating Welfare Effect of Climate Change on the Wheat Products in Iran

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Abstract

Agricultural sector will be most affected by climate change due to its extensive interaction with the environment. and as a result of changing production conditions, community welfare is changed. This study attempted at understanding the welfare effects of changes in climate parameters on the wheat product. Therefore, the yield functions were initially estimated. Supply, demand and import functions were secondly estimated by Simultaneous equations system. Finally, to study the welfare effects resulting from changes in temperature and precipitation, a price-endogenous mathematical programming model in three different scenarios of climate was used. The results showed that in the case of reducing precipitation with increasing temperature, consumer surplus, producer surplus and therefore society surplus will be reduced . Loss of welfare for consumers are higher than what is for producers.

Keywords: Climate change, Climatic zoning, Wheat, Panel data, Price-endogenous model

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