Dynamic analysis of technical efficiency of water use in Sugarcane (DEA approach)

Afsane Serajoddin, Ahmad Fatahi Ardakani, Masoud Fehresti Sani and Akram Neshat [1]

Abstract

The recent drought along with the increased water demand in various economic sectors has increased the need for attention to improved water use efficiency and improves productivity, especially in agriculture. Planning to efficiency Improvement without determination of the present situation and investigation of the past trend of efficiency may not. So in this study, using data and information of input consumption and output production related to the active sugarcane industry in Khuzestan province, Irrigation water use efficiency (IWUE) and efficiency of all inputs in crop production during the year's 2004 to 2015 using data envelopment analysis approach were calculated and compared. The results showed that Imam Khomeini Company in terms of use of water resources has better performance than other firms. So, average efficiency of water use for the cultivation of sugarcane during the period studied is about 70% and average efficiency of general inputs for production is about 80 percent. This means that now, with better management of water resources consumption, there is acquisition potential of existing production level in active units with less water in the production of sugarcane.

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Relative Assessment of Iran's Food Security Situation in the Mena Region (Consolidated Approach of Analytical Hierarchy Process and Entropy)

Saber kalhori , vahide ansari ,Emran Taheri Reykandeh and Farshad Mohamadian [1]

Abstract

Given continuous increase in population and growth of living standards, requires to food products is increasing with tremendous speed. Importance of providing sufficient food from one hand, and emphasis on Iran's regional position in the country's Vision 1404, from the other hand, has encouraged policy makers and planners to improve food security index. However, before any planning and policy making, recognizing Iran's current situation in terms of the multiple dimensions of food insecurity is very important. So, in the present study, Iran's position in the MENA region over the period 2013- 2000 is assessed, using a Consolidated multi-criteria decision approach and entropy technique. To this end, at the first, the weight of the different criteria was calculated through entropy method, then ranking of the countries was done using the Analytical Hierarchy Process. The results show that Iran is in fourteenth place among 21 countries of the MENA region in terms of food security. Results also indicate the positive correlation between food security and per capita GDP, trade liberalization, and the mechanization of agriculture, but negative correlation between food security and population as well as inequality in income distribution. So, it is suggested that government operate in order to improve food security index by removing trade barrier and eliminating sanctions, promoting mechanization in agricultural sector, and giving more consideration to the living situation of the low income groups.

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The Study of the Small Industries Role in Improving the livelihoods of Rural Households (Case Study: Sirvan and Chardavol Counties- Ilam)

Javad alibeygi and hossein mehdizadeh [1]

Abstract

This research is to investigate the role of small businesses on livelihood assets of employed households in this type of industry in the period before and after employment and also non-employees with the approach of livelihood in the counties of Sirvan and Chardavol approach. Therefore, we investigated 20 villages of the two counties that is placed the number of 51 small industrial units in your range. According to Cochran correlation, a total of 373 employees were selected as the sample of 189 workers to respond to the questionnaire into two periods: before and after employment. As well as a total of 10155 families residing in tow counties, were selected as the sample of 376 non-employed heads of households to respond to the questionnaire related to non-employment. To collect research data used a survey design and completion of questionnaires and interviews with employees. The collected data is analyzed by using t, Mann-Whitney and Wilcoxon tests in spss software. The findings showed that aside from natural capital (pre-employment with an average of 2.32 & post-employment with an average of 2.55); the amount of human, financial, social and physical capitals & total capital of employed families after working in small industries (respectively 3.56, 3.81, 4.34, 3.80 & 3.61) is higher than the pre-employment (respectively 1.71, 1.39, 2.32, 2.28 & 2.05) and also the establishment of small industries in rural counties studied aside from natural capital (employeds with an average of 296.55 & non- employeds with an average of 276.19); has a positive effect on employed household (respectively 410.56, 434.54, 380.74, 359.58 & 374.46) than non-employed household (respectively 218.88, 206.82, 233.87, 244.55 & 237.03).

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Evaluation and Zoning of Agricultural Development in Counties of Kohgiloyeh and Boyer-Ahmad Province, Iran

Aiatollah Karami, Morteza Nouri and Seyed Nematollah Moosavi [1]

Abstract

Agriculture is one of the most important economic sectors in Iran and it is the main source of rural income. Agricultural development is a result of planned and coordinated efforts in order to broaden the contexts, experiences can broaden the scope and increase the performance in a comprehensive program of rural development. Identifying and exploring the possibilities and capabilities and then determining the level of agricultural developmet is the first step in the process of planning and agricultural development. Therefore, this study aimed to evaluate and zoning of agricultural development of Kohgiloyeh and Boyer-Ahmad counties, Iran. In this study, based on agricultural statistical yearbook 1392, a list of 84 indicators in five major groups of agricultural development (agricultural exploitation; performance; agricultural mechanization; livestock, pultry and fish; and agricultural associations) using the taxonomy model was evaluated. The results showed that the Gachsaran county has the highest degree of agricultural development (Fi = 0.723) and based on two criteria, "agricultural mechanization" and "livestock, poultry and fish" was in the first place. In contrast, the Dena township has the lowest agricultural development (Fi=0.927). Thus, the range in levels of agricultural development townships 0.204 estimated. Moreover, according to development levels, in total, none of the townships have not developed and only two townships Gachsaran and Boyer-Ahmad considered relatively developed. Therefore, it is recommended that planners and authorities in line with policies of justice and eradication of deprivation, more consider to these regions.

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Comparison of Linear and Non-Linear Models in Assessing the Global Food Price Pass-Through into Domestic Food Price in Iran

Ebrahim Javdan, Esmail Pishbahar, Jafar Haghighat, Rassul Mohammadrezaei [1]

Abstract

The global food price crisis and its pass-through to domestic food prices has attracted especial attention from researchers and policymakers over the past decade in developing countries. In this study, by using quarterly data from 1990:Q2 to 2013:Q1, we have estimated the Vector Auto-Regressive (VAR) and Markov Switching Vector Auto-Regressive (MS-VAR) models and then the impulse response functions were used to measure the extent of world food prices pass-through into domestic food prices, in Iran. According to the diagnostic statistics, MSIAH(2)-VAR(1) specification has a better fit to data than the linear VAR model. The results showed that the magnitude of the world food prices pass-through to domestic food price index in first and second regimes is respectively 0.15 and 0.40 after four quarters. Therefore, the extent of the pass-through from world food prices to domestic food price index resulting from recent world food price crisis has been higher than before. These results suggested that much more attention should be given to the magnitude of global food prices pass-through in policy designing. The policymakers can reduce the global food prices pass-through into domestic prices by adopting inflation targeting policies and appreciation of the domestic currency.

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Study the Theory of Export-Led Growth in the Agriculture Sector in Iran: Evidence from Structural VAR Model (SVAR) and Directed Acyclic Graphs (DAG)

Samaneh Khalili and Mohammad Ghahremanzadeh [1]

Abstract
Despite the relationship between exports and economic growth, there is not a clear causality relationship between these variables. This relationship is different depending on the country's economic structure. In this context, this study seeks to the causal link between the export of agriculture sector and agricultural growth in Iran using new causal approach. Directed Acyclic Graphs (DAG) method is applied to identify the structural shocks in a structural VAR model. DAG method allows the examination of both contemporaneous and dynamic causal structure of the exports-productivity nexus. The results showed that the causal relationship between the exports of agriculture and agricultural growth is unilateral and direction is from the agricultural growth to the agricultural export. This confirmed the hypothesis of growth–led export in the agriculture sector. Also investment in the agriculture sector plays an important role in explaining the agricultural growth and exports; therefore creating incentives for investment in agriculture is suggested by policy makers.

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The impact of product market competition on earnings quality in Agriculture and food industry companies Tehran Stock Exchange

Mahdi Salehi, Farzaneh Nasserzadeh and Mahdi Vakilian Oghouei [1]

Abstract

The purpose of this article is the effect of product market competition on earnings quality in Agriculture and food industries in Tehran Stock Exchange. For this purpose, the Adjusted Lerner Index is used as a benchmark for competition in product market. For calcualtion of the quality of earnings three aspects were considered, the quality of accruals, the ratio of operating cash flow to operating profit and changes in accruals. The population of this research was 36 agricultural and food companies in Tehran Stock Exchange. For testing of hypotheses, the data was gathered for the years of 2007 to 2016 and Multivariate linear regression analysis was used. The results of hypothesis test shows that with increasing product market competition reduced discretionary accruals and increae the earnings quality. Also result show that there is no significant relationship between product market competition and ratio of operating cash to operating profit. The other results show that there is no relation between product market competition and changes in accruals. Based on obtained results it is recommended to investors and creditors that they must consider the relation between competition in the product market and earnings quality.

JEL Classification: C58, D22 , M41.

Keywords: competition in the product market, earnings quality, Adjusted lerner index

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Feasibility of Designing Coastal Market in Types of Bony Fish in Mazandaran Province

Hamed Rafiee and Said Yazdani [1]

Abstract

Traditional markets of bony fishes, the low proportion of fishermen from fishing and against, unfavorable market conditions and the high price in fish markets are major problem in Mazandaran Province's fish market. In this market, consumer dissatisfaction and fishermen simultaneously, has created major problem for policymakers. According to consumer interests and the elimination of waste intermediate will be one of the most important factors to improve performance and market share, producer (fisherman). Designing coastal markets and selling fish caught, In addition to providing fresh fish and healthier for the consumer, will create more satisfactory to the attractiveness of these coastal markets. On this basis, this study explores the feasibility of the coastal market in types of bony fish in the province in 2012. For this purpose, 684 questionnaires to a two-stage cluster sampling between coastal and non-coastal provinces were collected. The results of the Logit model analysis indicated that in the coastal market of white fish, mullet and carp, At best; consumers are willing to pay the 16.418, 16.657 and 13.197% more than average prices. Also at worst; they are willing to pay the 7.634, 6.280 and 5.243% more than average prices. In non-coastal markets also showed that in best, consumers are willing to pay for the coastal market, 14.302, 12.590 and 11.185% and at worse they are willing to pay 5.243, 6.02 and 3.995% more than average prices. Therefore designing the coastal market according to reduce transaction cost to wholesale and retail market will be useful for increasing fisherman's market share.

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Modeling of Cheese Product Diversity Impact on the Brands Share Available in Mashhad Market

Amir Dadrasmoghadam, Mohammad Ghorbani , Alireza Karbasi and Mohammad Reza Kohansal [1]

Abstract

Brand diversity is one of effective factors on cheese product share of various brands in the grocery stores. In this study, using Genetic Function Approximation, modelling has been performed on chees product share of Kalleh, Pegah ,Sabah brands and other rivals. The sample consisted of Noshad and Pegah Milk Industry project data in 2014 including 435 grocery stores in Mashhad. The results showe that the minimum price of Kalleh brand is one of effective factors on chees product share of this brand . of the other important factors on chees product share is diversity of this brand so that the more is diversity of the brand, the more is the products of Kalleh brand in the market. Also, variabilty cofffecients of Sabah, Pegah and rival brands have becaome negative. One of the efective factors on Pegah brand share is the maximum price of this brand which put a negative effect. Diversity coffeient of Sabah، Pegah and rival brands have become negative showing that other brands diversity resulted in reducing chees product share of Pegah brand in the market of Mashhad. Regarding Pegah brand share, diversity cofficents of Kalleh ,Pegah and other rival brands have become negative showing that increasing in other brands variety results in decreasing in Sabah brand share in the market.This study showed that variety of Kalleh, Pegah and Sabah brands reduce cheese product shares of the rival brands in the market. Diversity coefficients of the rival brands have become positive. Brands diversity is one of the effective factors on stores profit. Also, the minimum price of sabah brand has a positive relationship with stores profit and has a negative relationship with the maximum price of Sabah and also the price of Sabah brand has an inverse relationship with the store profit. According to the findings, it is suggested that selected brands, for increasing their share in the market, should pay special attention to the diversity of cheese products.

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Factors Affecting choice of Marketing Strategies in Introduction and Growth Stages of Food Industries: a case study in Mashhad

Hosein Mohammadi , *Ali Reza Sani Heydari* [1]

Abstract
Due to high competition in production and consumption, successful companies put most of their resources and efforts for earn more profit by choosing the appropriate marketing strategies. Therefore, selection of appropriate strategy is necessary for increasing sales and profit. The goal of this study is assessing effective factors on selection of marketing strategies in Mashhad food industries in introduction and growth stages of the product life cycle. Data is provided from 88 active companies in Mashhad food industry in 2015. Multinomial Logit Model was used to achieve the aim of this research. Estimated likelihood and Wald tests results showed that combining marketing strategies groups is impossible and according to Hausman test, the three groups of dependent variable are independent. The results of multinomial logit model indicated that variables of: age, manager experience, education, product type, and product brand in introduction and growth stages are significant in terms of effectiveness on choice of strategy. According to positive effectiveness of brand on the choice of marketing strategy type, it is recommended that active companies in food industry work for establishing and strengthen prestigious brands in national and international context.

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ABSTRACTS

Contents: