The Effect of Macroeconomic Variables on Food Inflation in Iran: An Application of Structural Vector Error Correction Model

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ABSTRACT

Food prices are interested by policymakers due to its vital roles for food security. On the other hand, Agriculture and food prices, like other economic sectors, will be affected by macroeconomic policies. Hence, governments usually use fiscal and monetary policies to control food inflation. The purpose of this study is investigating the effect of macroeconomic factors on food prices in Iran. In fact, this article looks for answering this question that which of the macroeconomic variables effects food inflation. Therefore, structural vector error correction model (SVECM) is utilized for period of 1978-2011. The results showed that in short-term, food inflation has significant and positive effect on food inflation and value-added has significantly negative effect. In long-term, agricultural value-added has negative and significant effect on food inflation and money supply has significantly positive effect. In fact, food inflation shock increases food inflation in short-term (0.0206). Also, rising agriculture value-added causes decreasing food inflation in short and long terms as 0.0186 and 0.0149, respectively. Also, money supply increases food inflation in long term as 0.0723.

Keywords: Food Inflation, Macroeconomic Variables, Structural Vector Error Correction Model

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Analysing agricultural products Import Pattern in Iran with the emphasis on unstability of exchange rate (Using VECM and EGARCH methods)

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ABSTRACT

The increasing demand of agricultural commodities as well as weak management of resources has resulted in the country in order to satisfy domestic needs, a large part of the income is spent on the import of these goods. So, in order to better managing the import of agricultural products and identifying the necessary tools to control the indiscriminate importation of these products, in this study, the pattern of imports of agricultural products (wheat, barley, corn, sugar, rice, chicken meat, meat, egg and oilseed) analyzed and evaluated, for the period 1983-2011. The results show that the price policy on imports of egg products, chicken, wheat, due to mainly impact, has the higher importance. So, import tariff on wheat, meat, and barley, as an instrument of trade policy, is very important. The study also shows that the impact of currency fluctuations in the number products is positive (meat) and in some crops (sugar) is negative. Therefore, to efficiently manage on agricultural products imports, supporting local producers and food security through food availability in the country, the appropriate policy instruments to keep pace with current trade policies, should be used.

Keywords: import, agricultural products, Iran

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Measurement and Analysis of Virtual Water Trade Balance in Agriculture Sector of Zanjan Province

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ABSTRACT

The current study used the basic approach to determine the amount of virtual water consumption and related Indexes for the main agricultural products of Zanjan province in 2013. The results showed that export of the studied agricultural crops, leads to the export of 26.53 million cubic meters volume of virtual water accordingly. Also, 95 percent of virtual water export is pertinent to horticultural products and 5 percent is related to agronomic crops. In addition, the intensity of water consumption in agriculture is estimated to be 24 percent of the renewable water resources. It is necessary that the agricultural sector authorities of the province proceed to find comparative advantages in producing different agricultural products which makes the lowest pressure on groundwater resources.

Keywords: virtual water, water consumption rate, water dependence index, water sufficiency index, Zanjan

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The effects of economic growth, energy consumption, trade openness and urbanization on environmental pollution in the MENA region during the period 1995-2012

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ABSTRACT

In the present study, using the Co-integration analysis in panel data, short and long term relationship between carbon dioxide emissions, per capita income, energy consumption, trade openness index and urbanization in the MENA region during the period 1995-2012 were assessed. The results showed N-shape relationship between income and emissions. The effect of energy consumption variable was significance at high level of statistical, So that by 10 percent increasing per capita energy consumption is expected that per capita emissions increased in the long-term and short-term respectively about 6 and 3 percent. Trade openness index with little effect, increases the pollution. The effect of urbanization variable on per capita emissions was not statistically significant.

Keywords: carbon dioxide emissions, per capita income, Panel data, Co-integration analysis

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Investigating the Relationship between Organizational Culture and Knowledge Management Process in the Agricultural Faculties of West Iran

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ABSTRACT

The main purpose of this this descriptive- correlational research was to investigating the relationship between organizational culture and knowledge management process in the agricultural faculties of west Iran. The statistical population of the study consisted of the faculty members of west Iran agricultural colleges (N=157. Census method is used for selecting samples and finally 138 questionnaires were analyzable. A questionnaire was the main tool of study. The validity of the questionnaire was approved by the judgment of a panel of faculty members of the department of Agricultural extension and education, University of Tehran who were assumed here as experts. In order to measure the reliability of the questionnaire, Cronbach Alpha coefficients were calculated for the main scales of the questionnaire which ranged from 0.81 to 0.91. The data were analyzed by SPSS-win18 software. Data analysis was performed using descriptive and inferential statistic such as mean, standard deviation, coefficient of variation, correlation variability and regression analysis. The results of correlation analysis showed the relationship between involvement, consistency, adoptability and mission with knowledge management in faculty members is positive and significant. the results of multiple regression analysis indicates that 49/9 percent of the variance of the dependent variable: knowledge management is explained by three components "Adoptability ", "Mission" and” involvement ".

Keywords: Organizational culture, Faculty members, Knowledge management, Agricultural colleges.

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Performance comparison of private agricultural insurance agents and production cooperatives using CSM & Seraqual techniques: the case of Shiraz County

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ABSTRACT

Among different supportive policies of agricultural sector, crop insurance as a useful solution has always been emphasized. Agricultural insurance fund of Iran actually began its work in 1984. From 1996, some parts of its activities have been transferred to production cooperatives (PC) and continuing, some parts of its activities have also been transferred to private agricultural insurance (PAI) agents in 2002. To ensure effective and efficient services of these two agents (PC and PAI), it is necessary to evaluate their performance and to learn about their strengths and weaknesses. Thus, the aim of this study was to compare the performance of PC and PAI. Survey research method was used in this study. CSM and Servqual techniques were used to calculate PC and PAI performances. The results of both techniques indicated that PCs have a better performance in terms of social and economic aspects, while PAIs are better in management, general and "law and procedures" aspects. Also, calculating total performance revealed that PAIs have a better performance and farmers have been more satisfied with them.

Keywords: Agricultural Insurance, private agents, production cooperatives, CSM, Servqual

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Simulating the effects of Climate Change and Policy of Water transfer from Agriculture to Industry on Water Resources and its Impact on Horticultural Products (in Yazd Province)

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ABSTRACT

The aim of this study was to simulate the effects of climate change and Transfer water from agriculture on water resources and its effects on the production of garden in plain of Yazd-Ardekan. This study was used the methodology of system dynamics and time series data (from 1367 to 1392). Data was taken from difference sources such as Regional Water and Agriculture Organization of Yazd which were analyzed by Vensim PLE software. The results showed that climate change will reduce amount of water in garden sector by 17% until 1404 in Yazd-Ardakan plain. Loss of water resources in interaction with other variables involved in horticultural production will lead to a reduction of 51% of production of garden in this plain. The Results indicate that approximately 37 thousand tonnes of horticultural production will be lower until 1404 than 1392. The simulation results showed that horticultural productions decreased by 6.5 thousand tons. The drop in production due to the effects of climate change on water resources garden will be more than 5.5 times water reallocation policy in Yazd-Ardekan Plain.

Keywords: Climate change, Agricultural water Transfer, horticultural productions, Yazd-Ardekan Plain.

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The Effect of Entrepreneurial Orientation on Organizational Performance of the Jihad-e- Agriculture Organization in West Azerbaijan Province

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ABSTRACT

In the recent years, entrepreneurial orientation has been recognized as an important element in improving organizational performance. Therefore, the purpose of this descriptive-correlative research was to study the effect of entrepreneurial orientation on organizational performance of the Jihad-e-Agriculture organization, in West Azerbaijan Province. The statistical population of the study consisted of 1040 experts of the Jihad-e-Agriculture organization in West Azerbaijan Province. According to the Bartlett et al. table, a sample size of 240 was selected using a stratified random sampling method. The standard questionnaires were used to collect the data. The content validity of the questionnaire was confirmed by a panel of experts. The construct validity and the composite reliability of the research instrument were tested by estimating the measurement model and they were satisfied after making necessary corrections. The results show that the hypothesis of the research has verified and the entrepreneurial orientation had a positive and significant effect on the dependent variable. The entrepreneurial orientation explained about 41 percent of the variances of the organizational performance of the Jihad-e-Agriculture organization in West Azerbaijan Province. Based on the findings, it can be concluded that reinforcing the entrepreneurial orientation directly results in improvement of organizational performance of the Jihad-e-Agriculture organization.

Keywords: Organizational performance, Entrepreneurial orientation, Jihad-e-Agriculture Organization.

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Estimating economic value of inputs in Sericulture in Mazandaran Province

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ABSTRACT

Sericulture is one of lateral agriculture productions. Some of its features such as short period of Rearing, low investment and appropriate incomes for rural people especially at their leisure times turns it into a more special job. This study aims at determining proper functional form of sericulture and economic valuation of inputs. The study has been performed at Mazandaran Province. Statistical population of the study was 1150 sericulturist that sample volume was 240 sericulturist using Cochran formula. Sampling was performed as multi stage cluster and samples were selected accidentally from each cluster. For determining proper functional form at first 5 functional form (Cobb-Douglas, Transcendental, Translog, Quadratic and Generalized Leontief) were estimated that the Cobb-Douglas form was determined as the optimal model. The results obtained from Cobb-Douglas functional form estimation showed that inputs usage amounts were optimal and silkworm rearing at Mazandaran is located at second region of production range. Also, economic value of silkworm egg 3868339, berry leaf 3313 and labor 229506 Rials were calculated.

Keywords: Economical valuation, production function, silkworm, Mazandaran

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Analysing the Issues and Problems of Tobacco Cultivation in Mazandaran Province

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ABSTRACT

Tobacco farming system as a specialized commodity production is common in the Mazandaran province and has the gains to employment, income and livelihood for rural communities. Statistical evidences of tobacco cultivation in recent years illuminate that this farming system is faced with serious challenges in Mazandaran province. This research aimed to identify and analysis the issues and problems of tobacco cultivation and provide appropriate solution to develop the tobacco cultivation in Mazandaran province. This qualitative Research carried out by Grounded Theory method. Data was collected by semi-structured interviews. Statistical population of this research consisted of tobacco growers in the Mazandaran province and experts of Tobacco Research Institute of Tirtash, affiliated to Iranian Tobacco Company. Using purposeful sampling technique, a representative sample was selected (n=42). Data was analyzed through multi-stage coding, including open coding, axial coding and selective coding. According to research findings, restraining factors affecting development of tobacco framing summarized in the six thematic categories, including economic, social – communication, technological - infrastructural, organizational - institutional, natural – agronomic and inappropriate supporting. Also, constructing factors categorized in four principal components, including supplying support services, appropriate policy making and organization, facilitated access to crop inputs, and social considerations. Through conceptualization of retraining and constricting factors, two representative conceptual model of development of tobacco framing system in the Mazandaran province was drawn.

Keywords: agricultural exploitation, grounded theory, specialized commodity production, tobacco cultivation

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Adaptive Capacity of Wheat Farmers towards Dust  
(Case Study: Dehloran Township)

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ABSTRACT

The purpose of this study was to assess the adaptive capacity of farmers towards dust. The population in this study comprised of wheat farmers (N = 2105) in which 330 wheat farmers from Markazi and Moosian townships were selected using stratified proportionate cluster sampling techniques. First, to assess farmers' adaptive capacity towards dust was used as indicators of adaptive capacity. Using AHP techniques, 15 experts weighted the indicators through 2*2 matrices and Expert Choice Software was utilized as tool for further analysis. Composite indicators were then developed for further assessments. Fuzzy logic and MATLAB Software was used to determine the adaptive capacity of wheat farmers. Result revealed that wheat farmers of Dasht Abas Rural district with the adaptive capacity rate of 0.605 had the highest adaptive capacity and Nahr anbar rural district with rate of 0.508 and Anaran Rural district with rate of 0.563 were placed in the second and third places. The implication of this study aids policy-makers in Dehloran Township to allocated resources based on farmers’ vulnerability level. Furthermore, the result of this study helps policy-makers to plan for enhancement of farmers' adaptive capacities and thus lowering their vulnerability towards dust.

Keyword: dust, Adaptive capacity, Ahp, fuzzy logic

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Analyzing the role of increase in energy prices on the renewable energy adoption by Broiler Breeders, Garmsar County

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ABSTRACT

With regard to the implementation of targeted subsidies law in the country and rising energy prices as one of the most important inputs of Broiler farms, replacing current fuel sources with renewable sources is necessary in order to reduce production costs. For this purpose, in this we study to identify factors affecting the adoption of new energy resource by Broiler breeders in Garmsar County. This research is applicable and casual – relative. The population of this study was Garmsar County Broiler breeders. Based on the results there was a significant relationship between perceived benefits of new technologies, perceived threat from the current situation of energy supply, provides the conditions for the use of renewable resources and willingness of breeders to use it and adoption renewable energy. Purposed model can explained 81.2% of the variance of dependent variable. Also results of path analysis showed that factor willingness with direct impact factor 0.493 was the most effective factor on the adoption of using renewable energy. The perceived advantages of modern energy technologies with impact factor of 0.324 the second, prepared of conditions with total impact factor 0.322 third and perceived threats of the current situation of energy supply and a significant factor with impact factor 0.241 are the fourth affecting factors on adoption process.

Keywords: Fossil energy, renewable energy, behavior change, Broiler breeders

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Agricultural Education Pathology in Payam-e-Noor University (PNU) of Shahreza Branch

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ABSTRACT

The main purpose of the present study was to agricultural education pathology in Payam-e-Noor University (PNU) of Shahreza Branch. Research method was qualitative and the population included four groups i.e. planning personnel, university instructors, university students and graduates in 2012-2013 academic years. The samples were 58 people including 39 students, 7 instructors, 6 planning personnel and 7 graduates. The data was gathered by semi-structured interviews. To determine the credibility and trustworthy of the questions and to achieve impartial and transferable results (transferability of data), the methods of continuous contacts of researcher to environment and the subject, the adequacy of the references, and triangulation were used. The data were analyzed based on a content analysis qualitative method. The results of the study showed that the most important difficulties and obstacles in agricultural education in PNU, Shahreza Branch were the irrelevance of teaching material to agriculture discipline and students’ need, the over-content books in comparison to other universities, ignoring practical teaching and executing methods compatible with agriculture, low level of learning, lack of laboratory and related facilities, incompatibility of test with the content of the course, ignoring frequent and continuous tests, some tests are not comprehensive. Cases such as use appropriate faculty major of Study with course and with higher levels of education and teaching experience, reform and revision of textbooks be free of mistakes content and print, correcting and revision questions and answers before holding the test and the allocations part of scores to operational tests and activities of student were some solutions to solve the mentioned difficulties and improve teaching agriculture.

Keywords: Agricultural education, Educational System, PNU, Qualitative Analysis

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Investigating the Functional Implications of Nano-Technological Innovation System in the Agricultural Sector of Iran

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ABSTRACT

The purpose of this study was to investigate the functional implications of nano-technological innovation in the agricultural sector of Iran. This research paradigm was mixed method with qualitative to quantitative data connection approach. The statistical society of the qualitative section consists key members of the nanotechnology committee of agriculture-jihad Ministry which 12 person were interviewed using purposive sampling technique and quantitative section of research consists of researchers in the nanotechnology knowledge-based agricultural companies (85 person) and researchers in national research centers/institutes (290 person) which according to the Krejcie and Morgan table, 235 person of them were selected as sample through stratified random sampling method. To achieve the reliability and validity of qualitative section of research three-dimensional vision technique were used and at the quantitative section, cronbach's alpha test and opinions of subject experts were used. Based on qualitative and quantitative research results by using Atlas.ti5.2 software and SPSS, functions of counteracting resistance to change, mobilization of resources and guidance of the search were in the first to third priorities of the functional implications of nano-technological innovation system in the agricultural sector respectively. Eventually confirmatory factor analysis was used in order to fit the implications of nano-technological innovation system in the agricultural sector of Iran.

Keywords: development, system, technology, agriculture

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Extending the Model of Planned Behavior to Predict the Intention of Producing Organic Products among Isfahan Cucumber Greenhouse Owners by Moral Norm Variable

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ABSTRACT

The present study investigates behavioral intention of greenhouse owners regarding organic cucumber production in Isfahan and sought to identify the factors that stimulate producers to produce organic products. Data were gathered in 2015 through field surveys from 114 greenhouse owners, by designing and filling a researcher made questionnaire using a stratified sampling method. Causal relationship between variables was investigated through structural equation modeling and theory of planned behavior (TPB). Findings revealed that attitude in the TPB model can predict 37% of variances in intention of producing organic products by greenhouse owner and while in the extended Theory of Planned Behavior (ETPB) the Attitudes and Moral norms can predict 58% of variances in intention of producing organic products. Also according to the results of both models, perceived behavioral control (control beliefs) and Subjective norms had no significant effects on predicting intention of greenhouse owner. In conclusion, results indicate that both models are suitable for investigating greenhouse owner’s intention regarding production of organic products, while adding moral norms to the TPB as an additional predictor, significantly increased the predictive power of the original model. Therefore, designing of interventional programs based on improving Attitudes and Moral norms of greenhouse owner in order to encourage them to produce organic products is recommended.

Keywords: Organic, Greenhouse, Structural equation modeling, Theory of planned behavior, Isfahan

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