

The Effect of Political and Economic Components on Environmental Performance: Application of Ordered Logit Model with Panel- Random Effects

Mohammad Ghorbani and Reza Hezareh¹

Received: 29 Nov.2015

Accepted:3 Jan.2016

Abstract

Environmental performance and quality as main factors of preservation of life, has been affected by human activities and performance. Therefore, identifying the factors affecting it can be appropriate tool to policymakers and planners to achieve economic sustainable growth. This study has conducted to investigate the effect of economical and political components on environmental performance using ordered logit model with panel-random effects for 151 countries during 2002-2012. In this research, the countries classified to 10 groups according to environmental performance index and examined the effect of independent variables on the probability of being in the higher score groups. The results showed that economic growth and population have negative effect and foreign investment and efficiency and effectiveness of government, quality of legal, legal sovereignty and political stability have positive effect to improvement of countries position in environmental performance index. In this study, improvement of political condition caused to the promotion of environmental quality. On the other hand, economic growth and population increase are reasons of environmental degradation. Regard to results, to achieve the sustainable economic growth should be used to tax tools and reform and legislation of law to conservation of environment suggested.

JEL Classification : F52,H11, H56,N50, O44,Q00 ,Q58

Keywords: Environmental performance index, Foreign investment, Political stability, Panel data.

¹Respectively: Professor and Ph.D student of Agricultural Economics, Ferdowsi University of Mashhad)

Email: ghorbani@um.ac.ir

Assessment of Competitiveness on the World Market for Medicinal Plants and Prioritize Target Countries for Export

Emran Taheri Rykande, Mohammad Reza Pakravan, Omid Gilanpour, Fateme Abolghasemi¹

Received: 30 Oct.2015

Accepted:13 April.2016

Abstract:

Economists and policy makers always refer to an increase in non-oil export as a way to reduce dependence on non-renewable underground reserves. In order to achieve this goal, due to the axial role of agriculture in economy; the main attention is drawing to this part. Medicinal plants are one of the most important export items in country agriculture sector due to their high unit value. Nowadays, because of some main social and economic differences among various groups of consumers and the extent of global markets, development of non-oil exports in general and increase in agriculture exports specifically requires the use of a systematic and modern method in order to identify and politicize the target export markets. This study conducted with the goal of evaluation of Iran competitiveness in global markets of medicinal plants and priorities target export countries of this group of plants. For this purpose, first competitiveness of Iran in global markets of medicinal plants evaluated with the use of the index of revealed comparative advantage and symmetric revealed comparative advantage, then, screening techniques and multi-criteria decision used in order to priorities target countries for export of medicinal plants. Results show that Iran has comparative advantage in export of medicinal plants during years 2000-2011. Also, United Arab Emirates, Saudi Arabia, United States of America, United Kingdom, Qatar, Botswana, Netherlands, Germany, Denmark and Canada have the highest priority for export of medicinal plants.

JEL: N50, D49, Q17

Keywords: Prioritizing target markets for export, screening technique, multiple Attribute Decision making, VIKOR technique, Entropy technique.

¹Respectively: Master Student & Phd of Policy and Development Agriculture, University of Tehran, Assistant Professor, Chair, Foreign Trade & Marketing Research Department; Agricultural Planning, Economics and Rural Development Research Institute and Master Student of Agriculture Economics Tarbiat Modares University.
Email: etaheri@ut.ac.ir

Analyzing the Effects of Energy Carriers' Price Surging on the Cost of Wheat Production in FARS province: Application of the Almost Ideal Supply System

Hassan Azarm, Mohammad Bakhshoodeh¹

Received:14 Dec.2015

Accepted:27 Feb,2016

Abstract

In this research, wheat inputs demands were estimated for 201 producers in Fars applying the Almost Ideal Supply System on cross sectional data of 2014-15 to analyze the effects of energy carriers' price rising on the cost of wheat in the Fasa region in Fars province. The results indicated that own-price elasticities of compensated demand are negative for all inputs. Based on the absolute values of the own-price elasticities, demands for chemical pesticides and other inputs are realized to be inelastic. The cross elasticities coefficients revealed complementary relationships between labor and machinery and gas oil and machinery, and the substitutionary relationship between labor and fertilizers and machinery and fertilizers. Based on the calculated cost elasticities, use of irrigation water and fertilizers are deeply dependent to the level of spending on wheat production. Applying Shepherd's lemma on various scenarios of targeted subsidies plan, showed that production costs particularly for the vulnerable farmers increase by surging the prices of electricity and gas oils. Therefore, it is suggested that price increase should be gradual in order to keep farmers not to reduce production of wheat in the region.

JEL Classification: D04, D22, D24

Keywords: Input demand, Almost Ideal Supply System, application Shepherd's lemma, wheat, Fars provinc

¹Respectively: Msc students and Professor Department of Agricultural economics of Shiraz University.

Email: Hassan_azarm@yahoo.com

**Defining Sustainability Indicators and Improving Productivity of
Resources Production in Plain Mahidasht Cropping Pattern of
Kermanshah Province
(Fractional Programming Approach)**

Saeed yazdani, Farshad mohammadian, Emran taheri reykandeh, Saber kalhori¹

Received: 21 Nov. 2015

Accepted: 18 Jan. 2016

Abstract

Today, to prevent the degradation of soil and water resources and reducing the economic and social losses, Agricultural sustainability and providing sustainable cropping patterns has become one of the main priorities for policy makers in the agricultural sector. Therefore, this study in the field of Introduce Suitable cropping pattern for Equalization consumption of chemical fertilizers and pesticides, balance between available resources and the climate, as well as optimal utilization of them in Mahidasht plain is located in Kermanshah province. For this purpose, 263 questionnaires were complete by two-stage cluster sampling in 2014, and using multi-objective and fuzzy multi-objective fractional programming models, sustainable cropping patterns in the framework technical constraints of production and self-sufficiency in providing forage and nutritional needs of livestock and poultry of this Plain presented in six different scenarios. According to the results, it can be stated that the proposed cropping patterns are more sustainable than the current cropping patterns of region. Therefore suggested that the policy makers with regard to overall and regional goals, prioritize the Implementation of each of the proposed cropping patterns. This requires the Codification of legal requirements, incentive and punitive policies and use of agricultural extension agents in order to move to the cropping pattern that proposed.

JEL Classification: C33, Q01, Q25, R32, C61

Keywords: cropping pattern, multi-objective fractional programming, fuzzy multi-objective fractional programming, Mahidasht plain

¹Respectively: Professor, Phd student, and Master students of Agricultural economics of Tehran University.

Email: syazdani@ut.ac.ir

Investigate the Effects of subsidies targeted, exchange rates rise and currency restrictions of boycott on field of wheat, flour and bread

Zahra nematollahi, Nasershahnoushi Froshani, Masoud Hosseinzadeh, Leili Abolhassani¹

Received:8 April. 2015

Accepted: 17 Jan.2016

Abstract

After employing the policy of subsidies targeted of energy carriers and essential commodities (wheat and flour), the exchange rate rose and also more financial constraints imposed on Iran. Given the importance of the field of wheat, flour and bread to feed the population, this study is done to investigate the effects of subsidies targeted of energy carriers and essential commodities, exchange rates rise and currency restrictions of boycott on wheat, flour and bread. Considering the advantages of computable general equilibrium model, a CGE model is used based on the ORANI_G pattern and economic structure is adjusted for Iran. Comparing the results of dual scenarios indicates that, exchange rate will improve the results of subsidies on wheat, flour and bread in the long run. Therefore, improving the infrastructure and providing the necessary conditions to enter private sectors in wheat, flour and bread field have been proposed.

Key words: subsidies targeted, exchange rate, wheat, flour and bread, Economic sanctions.

JEL Clasification: H23, E20, D58

¹Respectively: Ph.D student of agriculturaleconomics of Sari university of agricultural sciences & natural resources, Professor of agricultural economics of Ferdowsi university of Masshhad, Ph.D student of agricultural economics of university of Zabol, Assistant Professor of agricultural economics of Ferdowsi university of Masshhad
Email:Znematollahi2002@gmail.coml

**Modeling the Seasonal Behavior of Iran's GDP with Emphasis on
Agriculture Sector: Composition by Sectors***Mohammad Ghahremanzadeh, Esmaeil Pishbahar, Khadijeh Alefi¹*

Received: 21 June. 2015

Accepted: 5 Dec. 2015

Abstract

This study tries to model the seasonal behavior of GDP in different economic sectors (agriculture, services, oil) using periodic autoregressive (PAR) and seasonal integration (SI) models during 1998:3-2010:6. According to the results, the GDP of agricultural sector has a regular and periodic behavior, therefore employing the periodic autoregressive model for GDP behavior of this sector can be very effective. Results of the Hylleberg et al (1990) seasonal unit root test showed seasonal behavior in service sector, so the data became stationary using appropriate filters and then the appropriate seasonal integration model was estimated. The oil sector showed no seasonal behavior, and autoregressive integrated moving average (ARIMA) model is applied to model the GDP of this sector. Finally, the fitted models utilized to forecast the next two years production in economic sectors. So, due to the different nature of the various economic sectors, studying the sectors independently is recommended

JEL Classification: C52, C51, C40*Keywords:* Gross Domestic Production, Iran, periodic autoregressive model, periodic unit root, seasonal integration model, seasonal unit root.

¹Respectively: Associate Professor and Ph.D candidate of Agricultural Economics, Department of Agricultural Economics, Faculty of Agriculture, University of Tabriz, Iran. E-mail: Ghahremanzadeh@tabrizu.ac.ir

Study the Food Poverty Line Urban Households in Iran

Esmail Pishbahar, Zohre Alimohammadi, Javad Hosseinzad¹

Received: 16 Aug. 2015

Accepted: 28 Sep. 2015

Abstract

Poverty issue especially, food poverty is one of the important problems in society. The awareness of amount and depth of nutrition poverty is important for solving this problem. Therefore, in this study food subsistence (food poverty line) for Iranian urban households in the period 1988-2012 was investigated with utilization of MAIDADS system. The results showed that the nutritional poverty line (monthly) has increasing trend in the aforesaid period. So that, it increased from 74851 Rail in year 1988 to 6882346 Rail in 2012, but its growth rate was not monotonic. The food inflation is the most important reason for increasing of food poverty line in this period consequently they must restrain the inflation.

JEL Classification: D11 ,D12 ,I32, ,I31.

Keywords: Inflation, subsistence minimum, Poverty Food Line, MAIDADS System, Urban Households.

¹Respectively: Associate Professor, Master. Student and Associate Professor of Agricultural Economics, University of Tabriz, Iran.
Email: : pishbahar@yahoo.com

**Testing aggregation of protein food products in urban areas of Iran:
A comparison of different Generalized Composite Commodity tests**
Maryam Shokouhi, Habib Allah Salami, Seyyed Safdar Hosseini, Amir Hossein Chizari¹

Received: 28 April. 2015

Accepted: 1 Sept. 2015

Abstracts

Although prices of all commodities play a role in consumers' decision-making process, the large number of individual commodities and prices creates problems in analyzing consumers' choice. As a result, to the study consumer behavior, data aggregation is used quite often. To this end, different theories are proposed that justify consistent aggregation of commodities. The Generalized Composite Commodity Theorem (GCCT) and the testing procedure proposed by Lewbel is the original one that considers a necessary condition for consistent aggregation. Davis proposed aggregation testing approaches by resorting to the Bonferroni, Simes, Holm and Hochburg statistical methods for testing Generalized Composite Commodity Theorem in which the necessary and sufficient conditions are considered. This study is aiming to examine the possibility of aggregating meats, meat products, dairy products and eggs in a group named "Animal Proteins" and aggregating all grains in a "Vegetable Proteins" group, and to compare the aggregation results using Lewbel's procedure and the approaches proposed by Davis using data over 1990-2012 period. Results show that based on the Lewbel's method, all animal products except dough, curd and egg can consistently be aggregated in the Animal Protein group, and all grains including split peas, beans and lentils can be aggregated in the Vegetable Protein group. While based on Davis methods, all animal commodities without any exception can be placed in Animal Protein group and all grains are consistently aggregated in the Vegetable Protein group. These results indicate that the latter approach lets a wider range of commodities to be aggregated in a group. This implies that selecting an inappropriate aggregation method can lead to a bias in evaluating consumer behavior.

Keywords: Commodity aggregation, Generalized Composite Commodity Theorem, Lewbel, Bonferroni, Simes, Holm, Hochburg

¹Respectively:Phd Candidate in Agricultural Economics, Professors & Assistant Professor of Agricultural Economics, Department of Agricultural Economics, Faculty of Agronomy Sciences, University of Tehran Faculty of Agronomy Sciences, University of Tehran
Email:hsalami@ut.ac.ir

Measurement of Market Power and Cost Efficiency of Iran's Milk Industry

Habib Shahbazi , Hamid Balali and Milad Hakempoor¹

Received: 7 Junu. 2016

Accepted: 10 April. 2016

Abstract

Measurement of market power and market structure determination of different products, always of basic and has been very important issues in the economy crushed because existence any kind of differently structural, including competitive and non-competitive on the amount production and prices of different products can have a significant influence. In this study, the structure of the domestic milk markets by using approach new empirical industrial organization was investigated. Data of the study was related to the period 2001-2014 and from the Herfindal index as a variable in the equation is the margin of the market. The results showed that during the period under study, the effect of market power and cost efficiency in milk production in the country, respectively, is equal 0.77 and 0.33. In fact, manufacturers have market power and can affect the prices and manufacturing firms were cost-effective and were establishing have benefit. In other words, the net effect that the sum of the effects of market power and cost efficiency achieved was equal to 0.44 that reflects an increase in milk product prices because of the market power top of the product.

JEL Classification: D43, G14, L13, L16.

Keywords: Milk, Market Power, Cost Efficiency

¹Respectively:Assistant professor, Department of agricultural economics, Sayyed Jamaledin Asadabadi university (SJAU), Hamedan, Iran, Assistant professor, Department of rural development & Former MS.c student of agricultural economics, Bu-Ali-Sina university, Hamedan, Iran.
Email: habib_susa@yahoo.com

The Instability Impact of Petroleum Revenues on the Value-added of Agricultural Sector

*Reza Heidari Kamalabadi ,Seyed Mojtaba Mojaverian ,Mojtaba Nabizadeh
Zolpirani¹*

Received: 12 nov. 2015

Accepted: 14 march. 2016

Abstract:

Any change in the petroleum market indicators such as price or income, almost all petroleum-exporting countries affected. Since the major part of the government's budget obtain from petroleum exports, instability survey of petroleum revenue on various sectors of the Iran's economy such as agriculture is very important. Therefore in this study, the instability impact of petroleum revenues on the value-added of Iran's agricultural Sector was evaluated using the ARDL model in the period of 1971-2007. The results of this study showed that the impact of capital stock and labor on value-added of agricultural sector is positive and significant in short-term and long-term, while the instability variable of petroleum revenues have negative effect on the value-added of agricultural sector in short-term and do not influence it in long-term. The estimated error correction coefficient has the expected sign and it showed that changes in value-added of agricultural sector %45 corrected in each period. Also, the results of stability test showed that estimated parameters are stable. Finally, strengthening agricultural export and applying measures and policies can reduce the effect intensity of petroleum revenues.

JEL: B22, C50, Q19.

Keywords: The Value-added of Agricultural Sector, The Instability of Petroleum Revenues, GARCH and ARDL Approaches, Iran.

¹Respectively: Ph.D. Student, Associate Prof & MSc. Student of Agricultural Economics, Sari University of Agricultural Sciences and Natural Resources
Email: nabizadeh.mojtaba@gmail.com

ABSTRACTS

Contents:

The Instability Impact of Petroleum Revenues on the Value-added of Agricultural Sector

R. H. Kamalabadi ,S. M. Mojaverian ,M. N. Zolpirani

Measurement of Market Power and Cost Efficiency of Iran's Milk Industry

H. Shahbazi , H. Balali and M. Hakempoor

Testing aggregation of protein food products in urban areas of Iran:

A comparison of different Generalized Composite Commodity tests

M. Shokouhi, H. Salami, S.S. Hosseini, A. Chizari

Study the Food Poverty Line Urban Households in Iran

E. Pishbahar, Z. Alimohammadi, J. Hosseinzad.

Modeling the Seasonal Behavior of Iran's GDP with Emphasis on Agriculture Sector:

Composition by Sectors

M. Ghahremanzadeh, E. Pishbahar, Khadijeh Alefi

Investigate the Effects of subsidies targeted, exchange rates rise and currency restrictions of boycott on field of wheat, flour and bread

Z. nematollahi, N. shahnoushi Froshani, M. Hosseinzadeh, L. Abolhassani

Defining Sustainability Indicators and Improving Productivity of Resources Production in Plain Mahidasht Cropping Pattern of Kermanshah Province

(Fractional Programming Approach)

S. yazdani, F. mohammadian, E. taheri reykandeh, S. kalhori

Analyzing the Effects of Energy Carriers' Price Surging on the Cost of Wheat Production in FARS province: Application of the Almost Ideal Supply System

H. Azarm, M. Bakhshoodeh

Assessment of Competitiveness on the World Market for Medicinal Plants and Prioritize Target Countries for Export

E. Taheri Rykande, M. Pakravan, O. Gilanpour, F. Abolghasemi

The Effect of Political and Economic Components on Environmental Performance:

Application of Ordered Logit Model with Panel- Random Effects

M. Ghorbani , R. Hezareh



Agricultural Economics
Journal of Iranian Agricultural Economics Society

Vol.10/No.1/2016

Publisher: Iranian Agricultural Economics Society
Managing Director: Saeed Yazdani, PhD, University of Tehran
Editor-in-Chief: Seyed Safdar Hosseini, PhD, University of Tehran
Editorial Manager: Hamed Rafiee, PhD, University of Tehran
Executive Manager: Sara Zargarazad, M.Sc

Editorial Board:

<i>M. Bakhshoodeh, PhD</i>	<i>Shiraz University</i>
<i>S. Hoseini, PhD</i>	<i>Tehran University</i>
<i>S. Dehghanian, PhD</i>	<i>Ferdowsi University of Mashhad</i>
<i>H. Salami, PhD</i>	<i>Tehran University</i>
<i>G.R. Soltani, PhD</i>	<i>Shiraz University</i>
<i>G. Sharzei, PhD</i>	<i>Tehran University</i>
<i>D. Salehi- Isfahani, PhD</i>	<i>Virginia Polytechnic Institute and State University</i>
<i>M. Koopahi, PhD</i>	<i>Tehran University</i>
<i>R. Mohammad Rezaei, PhD</i>	<i>Tabriz University</i>
<i>H. Mehrabi Boshrabadi, PhD</i>	<i>Kerman University</i>
<i>B. Najafi, PhD</i>	<i>Shiraz University</i>
<i>S. Yazdani, PhD</i>	<i>Tehran University</i>

Address: Journal of Agricultural Economics, Collage of Agricultural Economics and Development, Agriculture & Natural Resource Paradise of Tehran University, Karaj, Iran.
Tel: (+98) 26-32222767
Fax: (+98) 26-32247783
Email: iaes.journal@gmail.com
www.iranianjae.ir