

## **Green Taxes and Environmental Standards of Import, Appropriate Tools of Sustainable Development in Iran's Transition Economy**

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### **Abstract**

Free trade policies make it possible for markets to allocate resources with maximum efficiency, while management and protection of land resources for continuous productivity are the purpose of environmental policies. Contrast occurs when resources are led to increased trade from one side and destruction of the environment from the other side. For optimal allocation, paying attention to these two dimensions is important that trade and environmental policies are in line with sustainable development. Pollution haven hypothesis challenges the opposition between environmental and free trade policies. The current study was conducted to introduce green taxes and environmental standards of imports to protect the environment in order to achieve sustainable development in transition economies of OPEC developing countries and Iran. The environmental Kuznets hypothesis and pollution haven hypothesis were tested using time series data for time period 1980-2007 in Iran by means of OLS method and panel data for time period 1990-2007 in OPEC countries with a quite similar structure to GMM and GLS methods and then the results were compared. The results indicated that environmental Kuznets theory can not be rejected in Iran and OPEC countries, and increased trade along with degree of trade openness increases pollution. Necessity of using green taxes and environmental standards of import are shown through these results.

***JEL classification:*** F40, O13, Q53, K11, K32

***Key words:*** Green Taxes, Environmental Standards of Import, Sustainable Development, Transition Economy of Iran

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**Prioritize of Effective Financial Factors in Development on Agricultural Investments in Kohgiluyeh and BoyerAhmad Province using Analytical Hierarchy Process**

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**Abstract**

Agricultural financial market is very important because of its effective role in investors financing and agricultural development. The aim of this study is prioritize of financial factors which influenced of development on agricultural investments with fill out 50 questionnaires by experts agricultural organization in Kohgiluyeh and BoyerAhmad province in year 2013. For this purpose Analytical Hierarchy Process was utilized. Results showed that profession of fiscal and monetary organizations, liquidity injection Inject liquidity into financial markets for agricultural, to update credit and financial institutions, financial counseling centers, financial institutions and credit given to the private sector and diversify are very important factors. In this thesis rate adjustment equal to 0.04 is estimated that suggest the desirability of consistency in qzavthast rates. Therefore suggested that with expansion and development of financial and stock markets and investment companies, reduced investor's reliance of banks funds.

**JEL classification:** C58, D53, D92, E22, O13, O16.

**Keywords:** Fiscal Markets Development, Investment, Agriculture, Kohgiluyeh and BoyerAhmad Province, Analytical Hierarchy Process.

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## Explaining the Pattern of Risks in the Beekeeping Farms in Iran

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### **Abstract**

The productivity of honeybee production in Iran is lower than that of the world average of this industry. This situation is the consequences of several factors causing production damages in the beekeeping farms. As such, specifying damaging factors and determining the role of these factors in causing damages as well as differentiating management factors from the other ones are very important. Given that, the present study tries to specify factors affecting probability of occurring damages and factors causing diseases in honey producing farms, using a system of recursive logit. The data used in this study is from a sample of 726 farms collected from 8 provinces including, East Azarbayjan, Mazandaran, Esfahan, Tehran, Lorestan, Razavi Khorasan, khozestan and Boshehr. Results indicate that from pest group *Varroa destructor*, Wax moth and *Akarapis Woodi*, from diseases group, American foul brood, and from disaster factors, drought, robbery and extreme negative temperature have positive and significant effect on the probability of occurring damages in the beekeeping farms. Classifying the damaging factors into two management and weather condition factors revealed that 41.97 percent of probability of occurring damages comes from the first group, while 38.64 percent are caused by the second group. Consequently, the role of management factors is very crucial in occurring damages in the honey producing farms in Iran. Given that, one can conclude that there is a good potential for increasing productivity in honey producing farms in Iran by increasing level of knowledge of the present producers, giving production license to producers with approved knowledge, and extending production farms just in the regions most appropriate for beekeeping in Iran.

**JEL classification:** C31 ,C50 ,O13 ,Q10 ,Q18.

**Key words:** Honeybee, damage factors, recursive logit, pests and diseases.

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## **The Threshold Cointegration and Asymmetric price Transmission: Application for Beef Market in East Azerbaijan Province**

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### **Abstract**

Asymmetric price transmission has influence on the welfare of producers and consumers with increasing market margin and it reduces the marketing efficiency. APT is of considerable importance because it could have important, policy and economic implications. This study considered the price transmission mechanism between farm and retail levels of beef market in East Azerbaijan with weekly prices over Farvardin 1377 to Esfand 1390. In this context, threshold cointegration approach is used. The results of Sup-F and Lo and Sup-LR indicated that there is non-linear cointegration relationship between two levels of prices. The model specification for univariate and TVAR models was carried out by the Sup-F' and the Sup-LR' test, respectively. The result showed that the two regimes model was proper. The result of two- regime TAR and M-TAR indicated that the adjustments have threshold behavior and the retail prices response to the positive shocks more quickly than the negative. The results of TVAR model also demonstrated that the price transmission mechanism has threshold behavior and indicated that farm prices are influenced by changes in retail prices. With the comprehensive review of the relationship between the farm and retail prices, the advantage of using the multivariate models confirmed. Since it seems that non-competitive market structures is as cause for asymmetry in this market its suggested that the bargaining power be increased with supportive policy. Also make agricultural marketing cooperatives which consists the farmers could be the right solution for this problem.

**JEL Classification:** C32 .C52 .Q13

**Keywords:** Asymmetric price transmission, Beef, Threshold cointegration, TVAR model

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## Investigating of Unknown Multiple Structural Breakdates in Agricultural Prices (Case Study Animal Production)

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### Abstract

Detection of structural changes and shocks in time series is a topic that has been discussed for many decades. Ignoring these change points in time series can lead to serious problems with economic models of time series. The purpose of this paper is investigation of multiple structural breakdate in prices of milk, egg, hen meat, sheep meat and beef for the period from January 1380 to December 1391 by means of QLR statistics. The results showed that there are one breakdate in price of milk, 2 breakdate in egg and 2, 0 and 2 breakdate in hen meat, sheep meat and beef, respectively. Some of macroeconomic policies such as unified exchange rate policies, targeted subsidies have been the effective factors on the occurrence of structural breaks in the series of prices.

**JEL classification:** C12, C32, C53, Q11

**Keyword:** breakdate, structural change, QLR statistic, agricultural prices, animal production.

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**The Effect of Exchange Rate Uncertainty on Agricultural Trade Balance (An Application of GARCH, EGARCH and TGARCH Model)**

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**Abstract**

Exchange rate Fluctuations and consequently relative price fluctuations, through making economic conditions unstable and increasing inflation, increase uncertainty in the field of foreign trade that it causes such consequences as reducing volume of trade, foreign direct investment and economic growth. In this study to investigate the effect of exchange rate uncertainty on Iran's agricultural trade balance, first through ARMA model, Behavioral equation of exchange rate was explained and then by doing test and making sure of asymmetric shock effect, the index of exchange rates Uncertainty was obtained through TGARCH pattern. Then long run equilibrium relationship was estimated through Johansen-Juselius and for the period of 1983-2011. The results show the index of Exchange Rate Uncertainty, according to TGARCH Model, is significantly negative in long run so higher the exchange rate uncertainty, worse the agricultural trade balances. In addition an increase in the GDP of business partners and real exchange rate improves the trade balance, while an increase in Iran GDP worsens it in the long run. Also the results of Error Correction Model show that the fluctuations of the exchange rate in the short run have a significant negative effect on the agricultural trade balance while the effect of the other variables is the same with long run. Furthermore the coefficient of ECM is - 0.39, so in each period 39 percent of the shocks in the short run are adjusted to long run.

**JEL classification:** Q<sub>10</sub>, Q<sub>17</sub>

**Keywords:** Agricultural Trade balance, exchange rate uncertainty, asymmetric shocks, VECM model.

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## Pattern of Competitiveness of Pistachios World Premier Exporters in Iran's Importers Market

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### **Abstract**

This study investigates Iran's competitiveness and their export competitors in importer countries of Iran's Pistachio using indicators of competitive advantage (export advantage, trade advantage and competitiveness) and indicators of market structure (concentration ratios and the Herfindahl - Hirschman) for the period 1997-2011. Based on results, Iran in world market despite the more trade and export advantage in comparison with other rivals has faced negative growth. America also is the main rival of Iran's exports in target markets. Because of ten examined indicators in this study, eight indicators indicated increasing competition for America with Iran in importer markets of Iran's pistachio. Also, according to the negative correlation between America and Hong Kong's export advantage with Iran, whenever Iran lose their market share with whatever reason, export pistachio in these two countries is substituted. Analysis of the competitive behavior of top exporters in pistachios import markets shows that market activity of Iran's competitors is less than Iran around the Persian Gulf that according to the minimal geographical distances of Iran with theirs is an appropriate opportunity for Market development of this product in these countries. Based on the results, it is suggested, in order to retrieve its trade power in pistachio market, Rival countries trade policies that have had negative correlation with Iran pistachio export advantage (particularly America) always be investigated in target markets. Also with identification of taste and health standards in the European market and improvement of economic relations with this region and abolition of trade sanctions increases your export share in the world market.

**JEL Classification:** Q1, Q17, D49, N50

**Keywords:** Relative Export Advantage, Trade Advantage, Revealed Competitiveness, Market Structure of Imports and Exports, Importers of Iranian Pistachio

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## Identify Comparative Advantage and Business Potential of Iran with Developing and Developed Countries

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### Abstract

This research aims to identify the best agricultural products of Iran against the products of twelve developing and developed countries. Also this paper analyzes potential export capacity of Iran to each country. We used RCA and cosine index for measuring business potential. The results show Iran's export to developing countries in seven products and to developed countries in the five-products has comparative advantages. The Cosine criteria indicates among developing countries, Iran can increase exports to UAE and Saudi. An important part of results revealed Germany, Britain and Canada have the highest number of imported agricultural products from Iran.

**JEL Classification:** M21, Q17

**Keywords:** comparative advantage, cosine index, business potential, agricultural products

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## The Examination Of Forecasting Power Of Econometrics And ANN Models Of Inflation In Iran

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### Abstract

Inflation is one of the most fundamental economic problems in each country, so inflation's trend forecasting for arranging economical policies is very important. This necessity has caused serious attention to the application of different models for forecasting inflation's rate, thus different forecasting models have developed in competition with one another. Hence this study aimed to forecast the monthly inflation rate in Iran in 1390, has performed using monthly time series data from Iran's consumer price index of goods and services in the years 1383 to 1389. Information about consumer price index of goods and services for desired years has been obtained from Central Bank of Iran. Hence this study has used two models, Auto Regressive Integrated Moving Average (ARIMA) and Artificial Neural Network (ANN), and has compared the forecasting power of neural network models and econometric models by taking a mean absolute percentage error. Forecast results using these two models showed, although both ARIMA and ANN according to percentage of absolute prediction error within the sample, respectively, 0.86 and 0.94, have a high forecasting power, but ARIMA's model, in comparison with ANN's model, has higher forecasting power. Therefore in this study predicted value of consumer price index of goods and services in Iran is determined based on ARIMA time series model. Forecasts show, due to the growing trend in the consumer price index of goods and services in Iran in 1390, choosing monetary policies and liquidity management through appropriate fiscal and monetary policies by policy makers, play an important rate in controlling inflation.

**JEL classification:** E2, E3, E4, E5.

**Keywords:** Iran's consumer price index of goods and services, Auto Regressive Integrated Moving Average (ARIMA), Artificial Neural Network (ANN).

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