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### An analytical study of economic openness and its impact on agricultural development in Libya

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### Abstract:

The policy of economic openness is not a new philosophy, but rather a method for managing the national economy on the basis of achieving the correct interaction between the local economy and the global economy, in order to achieve the optimal exploitation of resources within the framework of a comprehensive long-term national plan. The research aimed to identify the development of the most important agricultural economic variables related to foreign trade. The results showed that The ratio of imports to agricultural GDP reached approximately 239.5% in 2015 due to the increase in the value of government spending due to the rise in the financial surplus. This led to an increase in the quantity of imports of agricultural and food commodities.

**Keywords:** economic openness, agricultural economic variables, agricultural GDP

### Introduction:

External openness is one of the most important economic policies aimed at enhancing trade and economic exchange between countries. The term external openness refers to the opening of countries to investments, goods, and services by expanding trade and investment with other countries. External openness significantly impacts agricultural GDP and contributes to increasing employment opportunities for agricultural workers. It also enhances the exchange of technology and knowledge between countries, This leads to improved quality of agricultural and food products, which increases the agricultural sector's ability to compete in global markets. On the other hand, external openness may have a negative impact on some agricultural commodities and food products. When local markets are opened to foreign competition, These agricultural commodities and food products may become uncompetitive. It can be argued that the policy of external openness enhances opportunities for agricultural production development, but it must be implemented cautiously and in a balanced manner to ensure the protection of sensitive domestic agricultural commodities and promote equitable economic integration.

### Research Problem:

External openness presents opportunities for increased trade and enhanced agricultural technology transfer. However, it can also lead to negative consequences, such as reduced competitiveness of the agricultural sector and increased dependence on global markets. Therefore, the problem lies in how to develop appropriate agricultural policies to rationalize imports within agricultural development plans through the following question: Has the increase in trade openness led to a reduction in dependence on the outside in terms of agriculture and food?

### Research objectives:

The research aims to:

1- Identify the development of the most important agricultural economic variables related to foreign trade.

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2- Measure the extent of trade openness and the Libyan economy's dependence on foreign agricultural and food imports.

### **Research Hypotheses:**

To answer the research problem, the following two hypotheses are formulated:

Hypothesis 1: Rationalizing agricultural imports leads to a reduction in the trade deficit.

Hypothesis 2: Increasing economic openness leads to increased dependence on foreign agricultural and food supplies.

### Research Methodology:

The study relied on descriptive and quantitative statistical analysis to determine the effects of economic openness and economic dependence on agricultural commodities on agricultural performance in general and agricultural commodity prices in particular, to arrive at results that achieve the study's objectives.

### **Data Sources:**

The study relied on published annual secondary data issued by official Libyan local authorities in the form of a time series covering the period from 2005 to 2015. These data included economic reports and bulletins issued by the Central Bank of Libya, the National Authority for Information and Documentation, and international bodies, in addition to some academic references related to the field of this study.

#### **Research Limitations:**

Temporal Limits: This research covers the period between 2005 and 2015.

Spatial Limits: The agricultural sector in Libya.

### **Economic Openness Policy**

The concept of economic openness, as a political rather than an economic trend, was associated in the years in which it emerged with what is known as economic globalization, one of its outcomes. It is usually applied to any economic policy in which a government or state adopts a specific policy to stimulate its economy, and to the productive policy implemented by the state, Represented by openness to the outside world in its economic relations to pursue development at the fastest possible rate, as this policy is in line with the logic of the era characterized by the development of international economic relations and the establishment of economic blocs between the countries of the world and common markets. The policy of economic openness encompasses the various forms that this policy can take in both the commercial and financial aspects, Any policy based on removing all restrictions on the movement of trade exchange and encouraging foreign capital to contribute to economic projects within the country in order to achieve a marriage between foreign capital and technology in an attempt to increase production and replace imports, export the surplus, employ the workforce, and eliminate the deficit in the balance of payments.

The policy of economic openness is not a new philosophy, but rather a method for managing the national economy based on achieving the correct interaction between the local economy and the global economy, in order to achieve the optimal exploitation of resources within the framework of a comprehensive long-term national plan (Salama, 2003).

### **Objectives of the Economic Openness Policy:**

The economic openness policy aims to improve the terms of trade exchange, enabling countries to benefit from trade and financial flows between themselves and the outside world. It also aims to improve a country's bargaining power and ability to negotiate the

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purchase and sale of domestic and foreign goods, on terms that serve its interests. This strengthens its position in the international market and ensures its survival and stability. These objectives can be summarized as follows:

- 1. Specialization and international division of labor, which leads to the expansion of world markets, based on differences in relative costs, and the natural and historical conditions of the goods suitable for production.
- 2. Increasing the volume of national exports and reducing the volume of imports, through the role played by exports in providing foreign currency resources, and working to achieve balance in the balance of payments.
- 3.The economic openness policy aims to protect the national economy from the risk of dumping, i.e. combating the actions of some foreign institutions that follow a policy of selling goods in foreign markets at less than their production costs or less than they can be sold in their local market, and then compensate for the loss with a high price in the local market.
- 4. Working to reduce the prices of goods and services, as economic isolation and the practice of protectionist measures have always caused commodity prices to rise due to the behavior of monopolistic institutions that are immune to foreign competition. Opening the economy to the flow of foreign goods will inevitably have an impact on reducing the prices of local goods.

It can be said that the objectives of the economic openness process in trade exchange remain dependent on the reality of economies and their differences, as well as the extent of these countries' readiness to open their doors to trade and financial flows, and the nature and pattern of this economic openness.

Economic openness for the agricultural sector:

The agricultural sector is the most marginalized sector in the economies of developing countries, despite its importance and role in driving economic development. The state seeks to capitalize on the benefits of economic openness by achieving the following objectives:

- 1. Increasing and increasing the productivity of agricultural lands, and utilizing the latest technology in the agricultural field, by opening doors to specialized foreign expertise, allowing the transfer of agricultural technology, and benefiting from successful international experiences in this field.
- 2.Increasing agricultural production in general, improving its properties and classification, and introducing modern scientific methods in its various aspects, with the aim of achieving self-sufficiency and food security for humanity.
- 3.Achieving self-sufficiency for some products whose consumption needs are currently met through imports, or reducing the quantity imported as much as possible (Abdos, 2010).

### Efficiency indicators for agricultural foreign trade:

International trade indicators can be used to assess a country's degree of openness to the global economy. They represent some of the commonly used criteria to describe a country's economic situation in its dealings with the outside world.

### **Agricultural Trade Openness Index:**

This index measures the degree of connection between the local market and global markets. A country is considered open to the outside world if this index reaches 40% or more. It can be calculated using the following formula:

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100 x (exports + imports) / (GDP) = the degree of global exposure to the outside world. The rate of openness in Libya reached about (32.5)% in 2013, which is its lowest level. This is due to the huge budget allocated in that year, which exceeded 74 billion Libyan dinars, and then rose to about (777.9)% in 2016.

This is the highest rate the Libyan economy has seen during this period, which coincided with the civil wars in Libya. This high rate for 2016 demonstrates the extent to which the Libyan economy has been affected by changes in global factors related to foreign and domestic trade, the civil wars, and the small quantities of oil exported as a result of repeated closures.

Agricultural dependence on foreign sources:

This indicator measures the extent to which a society relies on imports to meet its agricultural and food needs. It is the ratio of the total value of agricultural imports to the gross agricultural domestic product (GDP). The higher this ratio, the greater the degree of dependence.

100 x (Agricultural imports) / (Agricultural domestic product) = Agricultural dependence on foreign sources.

Ratio of Agricultural imports to agricultural GDP

This ratio is calculated by measuring the value of exports and imports as a percentage of a country's GDP. A higher ratio reflects a country's degree of economic openness.

It is noted from Table (1) that the percentage of imports to the agricultural GDP reached approximately 162.0% in 2005, then rose to its maximum level of approximately 250.1% in 2007, then gradually decreased to reach 130.7% in 2009, then rose to reach 145.1% in 2010.

But this rise did not continue, as it quickly declined to reach its lowest level of about (73.9, 71.0) in 2011, 2012, respectively, due to the events that the country witnessed. It then rose again to reach 239.5% in 2015 due to the increase in the value of government spending due to the rise in the financial surplus, which led to an increase in the quantity of imports of agricultural and food commodities.

Marginal Propensity to Import (MPI)

This indicator indicates the change in the value of imports relative to the change in the value of agricultural GDP. A negative sign indicates a decrease in imports compared to the previous year. This ratio ranges from zero to 100. The higher the ratio, the higher the country's propensity to import, The increase in import payments relative to the agricultural GDP and the decline in the economic efficiency of foreign trade. It is noted from Table No. (1) that the ratios show the marginal propensity for agricultural imports, which reached approximately 529.1% in 2010 and decreased in 2011 to reach approximately 4.8%.

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Table (1): Indicators measuring openness and agricultural economic dependence during the period (2005-2015).

(Values in millions of dinars)

Year	Agri. GDP	Agri. Exports	Agri. imports	Foreign agri	Degree of external	Marginal propensity of	Ratio of imports to
		(in dinars)	(in dinars)	trade	exposure	Agri. import	agri. output
2005	1437.4	9.45	2329.4	2338.8	162.7	_	162.0
2006	1643.1	9.17	2156.0	2165.1	131.7	18.8-	131.2
2007	1655.2	8.74	4139.8	4148.5	250.6	13.7	250.1
2008	1691.3	8.96	2616.6	2625.5	155.2	1.8-	154.7
2009	1870.3	9.92	2445.2	2455.1	131.2	54.2	130.7
2010	1915.5	8.96	2780.0	2788.9	145.5	529.1	145.1
2011	1935.4	5.53	1430.7	1436.2	74.2	4.8-	73.9
2012	1944.8	4.17	1381.8	1385.9	71.2	650.0	71.0
2013	2028.6	8.96	2616.6	2625.5	129.4	2.0	128.9
2014	2031.7	121.96	5271.7	5393.6	263.9	89.3	259.4
2015	2032.5	191.54	4867.9	5059.4	248.9	28.6	239.5
Average	1835.0	35.21	2912.3	2947.5			

Source: Arab League, Arab Organization for Agricultural Development, Annual Statistics Book, Khartoum, Sudan, various issues.

### **Results and Recommendations:**

#### Results

- 1-The foreign trade policy pursued is static and unpromising in response to changes in the agricultural products market.
- 2-The ratio of imports to agricultural GDP reached approximately 239.5% in 2015 due to the increase in the value of government spending due to the rise in the financial surplus. This led to an increase in the quantity of imports of agricultural and food commodities.
- 3-From the analysis, we find that there is an increase in the country's propensity to import, an increase in import payments relative to the agricultural GDP, and a decrease in the economic efficiency of foreign trade.

### Recommendations

- 1.The need to adopt an agricultural lending policy to secure agricultural production requirements, thereby gradually reducing reliance on foreign imports of agricultural goods and food products.
- 2.Reducing dependence on foreign countries, which is reflected in increased imports of agricultural and food commodities, and moving towards local agricultural production and diversifying its base by increasing public and private spending on the agricultural sector.
- 3. Working to raise the efficiency of the agricultural sector to achieve growth rates in production and increase investment spending on agricultural projects, and supporting the agricultural sector by introducing advanced control technology to increase agricultural production and limit the rise in agricultural commodity prices.

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## دراسة تحليلية للانفتاح الاقتصادي وأثره على التنمية الزراعية في ليبيا فادية علي بن عمار 1، سعاد خليل البنداقو 2 فادية علي بن عمار 1، سعاد خليل البنداقو 2 أنسم الاقتصاد الزراعي، كلية الزراعة، جامعة طرابلس، طرابلس، ليبيا

### الملخص:

إن سياسة الانفتاح الاقتصادي ليست فلسفة جديدة، بل هي أسلوب لإدارة الاقتصاد الوطني على أساس تحقيق النفاعل الصحيح بين الاقتصاد المحلي والاقتصاد العالمي، من أجل تحقيق الاستغلال الأمثل للموارد في إطار خطة وطنية شاملة طويلة الأمد. هدف البحث إلى التعرف على تطور أهم المتغيرات الاقتصادية الزراعية المرتبطة بالتجارة الخارجية، وقد أظهرت النتائج أن نسبة الواردات إلى الناتج المحلي الإجمالي الزراعي بلغت حوالي 239.5% عام 2015، نتيجةً لارتفاع قيمة الإنفاق الحكومي نتيجةً لارتفاع الفوائض المالية، مما أدى إلى زيادة كمية الواردات من السلع الزراعية والغذائية.

الكلمات المفتاحية: الانفتاح الاقتصادي، المتغيرات الاقتصادية الزراعية، الناتج المحلى الإجمالي الزراعي