

## **ANALYSIS OF TENDENCIES IN THE DEVELOPMENT OF TRANS-REGIONAL INTEGRATION PROCESSES WITH PARTICIPATION OF JORDANIAN BASIN COUNTRIES**

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### **ABSTRACT**

The purpose of the article is to compare the potential of transborder cooperation within Jordanian basin countries. The research covers the tendencies in the development of trans-regional integration processes with participation of Jordanian basin countries. The article takes issue with apparently simple economic logic, drawing attention to the effective model for economic cooperation within regional or sub-regional country groups of developing countries, that can give a visible impulse for accelerated economic growth and be the leading factor in solving economic development problems.

It argues that integration processes within Jordanian basin countries should rely on the solid ground of intra-regional interactions, to be capable to compete with alternative options of trans-regional integrative interactions, such as economic cooperation including bilateral trade relations, joint credit and investment projects and other economic cooperation mechanisms.

The analysis of tendencies in regional and trans-regional integration processes is made using quantitative indicators of the integrative interactions activity: GDP, population, foreign direct investment flows, structure of foreign trade, participation in regional and trans-regional integrative associations.

**Key words:** cooperation, integration processes, investment, Jordanian basin countries, trade relations.

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## 1. Specific features of Jordanian basin countries

A peculiar feature of the Jordanian basin region, determining objective conditions for integration processes therein, is its integrity by several essential parameters. First, territorial integrity and the need for joint effort for effective and fair distribution of basic resources, water in the first place. This vast area covers six countries with most part of the population consisting of ethnically homogenous groups (90% of the inhabitants are Arabs, and 10% are other nationalities).

Apart from similarities in language, history and regional problems of resource distribution, the Jordanian basin countries share economic problems. A powerful factor uniting these countries is religion: 90% of their population (Arabs and non-Arabs) confess Islam, 10% belong to other religions, mostly Christian confessions. Yet, the above factors of similarity are rather relative, because the region features ethnic and demographic, linguistic and confessional diversities, high asymmetries in economic, social and political development of nations inhabiting these territories. The distinctions are characteristic for not only the association of Mashrik countries (Sirya, Jordan, Palestine, Lebanon, and Egypt), but for all the group of Jordanian basin countries.

## 2. Determinants for integration processes in the Jordanian basin countries

Because heterogeneity of the region has strong effects for the ongoing integration processes, stimuli and barriers for international economic integration (IEI) can be outlined (see Table 1).

**Table 1.** Stimulating and barriers for the ongoing integration processes in Jordanian basin countries

<i>IEI stimuli</i>	<i>IEI barriers</i>
<ul style="list-style-type: none"> <li>– high potentials for economic growth and rich mineral resources;</li> <li>– positive example of integration processes in Europe and South East Asia;</li> <li>– encouragement of the regional convergence by EU;</li> <li>– the growing need for expansion of foreign trade;</li> <li>– revision of strategies and improvement of integration institutions in the</li> </ul>	<ul style="list-style-type: none"> <li>– imperfect integration mechanisms;</li> <li>– lack of countries with outward leadership, oriented on deepening of IEI;</li> <li>– consequences of the global economic crisis and worsening of conjuncture at global mineral markets;</li> <li>– political instability and transformations of political systems in some countries of the region, triggered by “Arab spring”;</li> </ul>

<p>framework of already created organizations;</p> <ul style="list-style-type: none"> <li>- similarity of problems related with development of industry focused essentially on regional markets;</li> <li>- the need for adaptation to global standards in trade;</li> <li>- new global challenges</li> </ul>	<ul style="list-style-type: none"> <li>- difficulties in implementing trade liberalization at multilateral level;</li> <li>- defiance of WTO standards by all the countries of the region;</li> <li>- poorly developed mechanisms of sectoral integration in industry, R&amp;D and technology;</li> <li>- weakness of market institutes in selected countries;</li> <li>- contradictory nature of geo-economic impact from developed countries (regarding integration of the Arab world);</li> <li>- military conflicts in the Arab world and persisting mutual claims</li> </ul>
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Source: Own work.

There are internal and external factors raising the need to intensify economic cooperation not only through trans-regional integration, but inside the region as well. A distinctive feature of integration processes in the Jordanian basin countries is rapid development of trans-regional integration and minor attention to the formation of background principles for intra-regional cooperation. As mentioned above, each country of the region has formed a peculiar type of political system, determining the foreign policy lines.

Integration processes in the Jordanian basin countries have been on in a contradictory way. Countries like Jordan or Egypt closely cooperate with each other and with the rest of the region on line of interrelated agreements on free trade and economic integration. However, by now there have been no attempts to launch a regional integration project, which would enable for elaborating a new interactive environment in the region. In spite of rapid change and revisions of institutional and organizational mechanisms for integration at global level and even in the Middle East, Mashrik countries and Israel have not followed the global tendency towards revision of integrative interactions.

Analysis of tendencies in regional and trans-regional integration processes should be made using quantitative indicators of the integrative interactions activity: GDP, population, foreign direct investment flows, structure of foreign trade, participation in regional and trans-regional integrative associations.

This method for assessment, elaborated by the UN Development Program, is designed to rank countries by international economic integration, computed by. According to the UN Development Program report, countries hosting the activities transferred through international integration can have great advantage from the access to new jobs. Integration of developing countries, to which the Jordanian basin countries belong, and global value chains can expand job opportunities and accelerate restructuring of workforce in favor of women, with positive implications for socio-economic performance of these countries. The highest rank

among the Jordanian basin countries is with Israel (18th position), although its indicators of trade (64.5 percent share of exports and imports in GDP) and money transfers are among the lowest in the region. However, Israel has low migration ratio, high share of migrants in the total population, and high performance of communications. The lowest rank of international integration is with Syria (134th position), given that it has one of the highest positions on international inbound tourism (5,070,000 persons) and the lowest migration ratio (-13.7 per 1,000 population).

The above mentioned methodological tools for assessment are used in the below given analysis of tendencies in integration processes in the Jordanian basin countries.

### 3. Tendencies in integration processes in Jordanian basin countries

According to Human Development Index, most part of the Jordanian basin countries (Mashrik countries) has medium level of human potential development, confirming a high potential for their socio-economic development (see Table 2, Table 3).

**Table 2.** Ranks of the Jordanian basin countries by international economic integration

Country	Rank	Trade	Financial flows				Mobility of population				Communications		
		Exports and imports	Direct foreign investment, net flow	Private capital flows	Net official aid for development	Money transfers, inflow	Net ratio of migration	Immigrants as share of population	International student mobility	International inbound tourism	Internet users	Subscribers to mobil connection	
		(% GDP)	(% GDP)	(% GDP)	(% GNP)	(% GDP)	(per 1,000 persons)	(% of population)	(% of the total higher education system)	(thous.)	(% of population)	(per 100 persons)	(change, %)
Year	2013	2013	2013	2013	2013	2010/2015	2013	2013	2013	2014	2014	2009-2014	
Israel	18	64.5	4.1	0.2	-	0.26	-2	26.5	-2.6	2962	71.5	121.5	-2.1
Egypt	108	42.3	2	-0.2	2.1	7.32	-0.5	0.4	1	9174	31.7	114.3	58.6
Jordan	80	113.8	5.3	-10	4.2	10.82	11.3	40.2	3.7	3945	44	147.8	51.9
Lebanon	67	138.7	6.8	-6.5	1.4	17.73	21.3	17.6	6.9	1274	74.7	88.4	57
Palestine	113	72.4	1.6	-1.2	19.1	18.29	-2	59	-9.8	545	53.7	72.1	56.7
Syria	134	76.5	3.1	-	0.2	2.55	-13.7	6.4	-	5070	28.1	71	48.9

Source: Own work.

Israel is the only country in the region with high level of human development, being ahead of many European countries. It has stable upward tendencies in GDP, population, and per capita GDP that was higher in Israel in 2014 (38987.6 USD) than the EU average (36078 USD). These figures explain the existing asymmetry in the development of Jordan basin countries, and erect an extra barrier for integrative interactions, apart from religious, territorial and other claims.

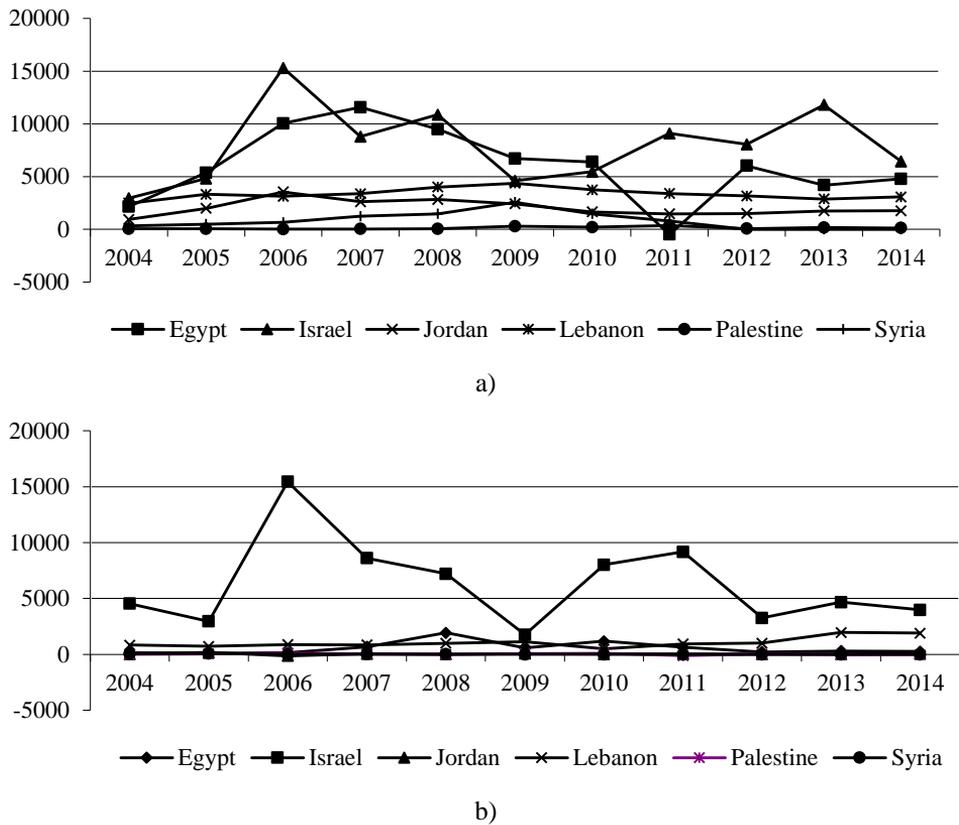
As regards Mashrik countries, the highest GDP among the Jordan basin countries is in Egypt. In 2010–2014 it grew by 31.5%, being in 2014 only 22.6 billion USD lower than in Israel, whereas the difference with Jordan made 269.2 billion USD. The Mashrik population grew rapidly given quite low GDP per capita. While in Lebanon it grew by 0.6 million people in 2010–2014 (14%), per capital GDP increased only by 12.6%, giving evidence of the economy lagging behind the population needs.

**Table 3.** GDP and population in the Jordanian basin countries

Country	GDP, billion USD			Population, million people			GDP per capita, USD		
	2010	2013	2014	2010	2013	2014	2010	2013	2014
Countries with high level of human development									
Israel	231.6	291.5	304.9	7.4	7.7	7.8	31221.6	37703.5	38987.6
Countries with medium level of human development									
Egypt	214.6	255.2	282.3	78.1	82.1	83.3	2748.9	3110	3385.9
Jordan	26.4	33.5	35.7	6.4	7.2	7.5	4736.4	4618.4	4094.1
Lebanon	38.4	47.2	49.5	4.3	4.8	4.9	8850.2	9792.8	9972.5
Palestine	8.9	12.5	13.1	4.01	4.3	4.4	2221.12	2907.6	2971.12
Syria	60.4	35.1	30.6	21.5	21.8	21.9	2808.1	1605.8	1394.3

*Source: Own work.*

Practices of global integration processes show that imports of capital and technologies from industrial countries are critical in expanding economic interactions of developing countries, which allows them to improve positions at international markets. Regarding foreign capital inflow in the Jordanian basin countries, its highest scopes and dynamics were in Israel, with the cumulative 118.2 percent growth over the latest ten years. The inflow fell only in 2009–2012, as a consequence of “Arab spring” events and vigorous military confrontation in the region. However, in 2013 foreign investment grew by 46.5% against 2012, and by 85% compared to the pre-crisis year of 2008 (see Figure 1, Table 4, Table 5).



**Figure 1.** Direct foreign investment in the Jordanian basin countries (a – foreign investment inflow, b – investment from the Jordanian basin countries)

Source: Own work.

According to UNCTAD data, the lowest inflow of foreign investment among Mashrik countries was in Palestine. Although the foreign investment grew more than twice in 2004–2014, it amounted to only 123.9 million USD in 2014, which was 2946.22 million USD less than in Lebanon, and 1636.5 million USD less than in Jordan. Apart from poor socio-economic performance of Palestine, it is related with difficult geopolitical conditions.

The highest activity in capital exports was in Israel and, beginning with 2012, Lebanon. The share of capital exports from the two countries in the total capital exports of the Jordanian basin countries was 95% in 2014. Palestine and Syria were not engaged in the international investment process, with negative or zero measures of capital exports. This peculiar feature of economic development in Mashrik countries confirms their high dependence on external assistance and active cooperation.

The economic crisis had noticeable impact on the foreign investment inflow in the Jordanian basin countries that had become attractive for foreign investment beginning with 2000s (their share in the capital inflow grew from 0.8% in 2000 to 3.9% in 2009) [159]. 2006–2007 were years with record high inflow of direct foreign investment in these countries, their main recipients being Egypt and Israel. The major part of investment was allocated in energy and construction sectors.

European technologies and investment combined with capital inflow from Persian Gulf countries in these years: the economy of South Mediterranean area was boosting, as its markets were quite competitive and effective, production costs low and economy specializing in industries like tourism, agriculture and extracting of hydrocarbons, i. e. ones with minimal risks for foreign direct investment in times of crisis. However, the interest of partners to this investment pattern fell due to stagnation in EU and “Arab spring”.

**Table 4.** Direct foreign investment flows in Jordanian basin countries, 2000–2014, billion USD

Country	Direct foreign investment inflow									Direct foreign investment outflow									
	2000	2002	2005	2007	2008	2011	2012	2013	2014	2000	2002	2005	2007	2008	2011	2012	2013	2014	
Egypt	1,24	0,65	5,38	11,58	9,49	-0,48	6,03	4,26	4,61	0,05	0,03	0,09	0,66	1,92	0,63	0,21	0,30	0,25	
Israel	6,96	1,58	4,82	8,80	10,27	8,73	8,47	12,45	6,74	3,34	0,98	2,95	8,60	7,21	9,17	3,26	5,50	3,67	
Jordan	0,91	0,24	1,98	2,62	2,83	1,49	1,51	1,80	2,01	0,01	0,01	0,16	0,05	0,01	0,03	0,01	0,02	0,08	
Lebanon	0,99	1,34	3,32	3,38	4,00	3,18	3,16	2,70	2,91	0,14	-	0,72	0,85	0,99	0,96	1,01	1,97	1,21	
Palestine	0,06	0,01	0,05	0,03	0,05	0,35	0,06	0,18	0,16	0,22	0,35	0,04	0,04	-	-0,13	0,03	-0,05	0,19	
Syria	0,27	0,12	0,58	1,24	1,47	0,80	-	-	-	-	-	-	-	-	-	-	-	-	

Source: Own work.

**Table 5.** Payment balance in Jordanian basin countries, billion euro

Country	Credit										Debit									
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Egypt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Israel	64,5	68,1	68,7	61,1	75,2	81,6	86,5	88,6	91,5	26,2	58,7	63,8	66,6	55,3	69,1	76,8	85,2	81,2	82,3	22,9
Jordan	9,6	-	-	-	-	-	-	-	-	-	11,2	-	-	-	-	-	-	-	-	-
Lebanon	17,8	18,5	21,5	21,7	22,3	24,0	23,7	23,5	23,5	27,9	18,8	19,6	24,3	26,8	27,6	27,9	31,1	32,1	32,3	35,3
Palestine	2,0	2,9	3,5	2,9	3,3	3,1	4,0	3,9	4,4	5,8	3,0	3,2	3,2	3,7	4,3	4,6	5,4	5,7	6,0	7,3
Syria	11,3	12,6	-	-	-	-	-	-	-	-	10,6	12,2	-	-	-	-	-	-	-	-

Source: Own work.

As regards payment balance, its debit rapidly declined in Israel as of the beginning of 2016 (from 82.3 billion euro in 2014 to 22.9 billion euro), which signaled negative trends in the domestic economy: the reducing imports of goods and services, the reducing scopes of non-resident services, acquisition of assets from outside, the increasing claims to non-residents and the decreasing obligations to non-residents. Yet, payment balance of Israel increased on the credit side, being an evidence of the increasing exports and extra transfers from non-residents. Basically, the above figures showed a positive change in the domestic economy, which was not true for other countries of the region like Lebanon and Palestine, where debit of payment balance was continually growing along with insignificant growth in credit.

#### **4. Analysis of trade relations between the Jordanian basin countries as an indicator of their potentials for trans-regional cooperation**

Apart from free movement of capital and the level of human development, an essential aspect of integrative interactions is trade relations. Extra-regional integration processes have boosted in the Jordanian basin countries in the latest decade and acquired the strategic geo-political significance. Traditionally, they had been promoted through participating in Pan-Arabian organizations of the universal nature, regional associations, and signing agreements with EU and other developed countries and associations. The institutional mechanism for integrative interactions is built by several Pan-Arabic and regional organizations responsible for economic and political relations. As the Jordanian basin countries are oriented on various export markets, they participate in various integrative groups. The export-oriented economic model, with prevalence of primary commodities in exports, resulting from low diversification and low productivity of the national economy cause the dependence of the national income on the market conjuncture.

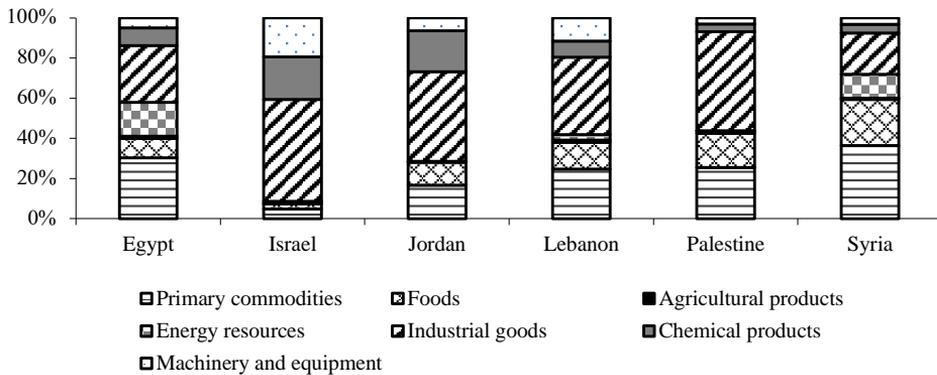
It should be noted that in laying the background for integrative interactions the Jordanian basin countries need to take consideration for not only economic intervention policy through direct and indirect methods of regulation, but for indirect financial stimulation as well. A comparative advantage from trade potentials of these countries is oil and gas industry with the related services sector (finances and trade) based on circulation of export incomes.

Figure 2 a) shows the export structure of the Jordanian basin countries. It cannot be overlooked that although the main export position is energy resources, a large share of exports is machinery, equipment and raw materials. Energy resources account for nearly 50% of Syrian exports.

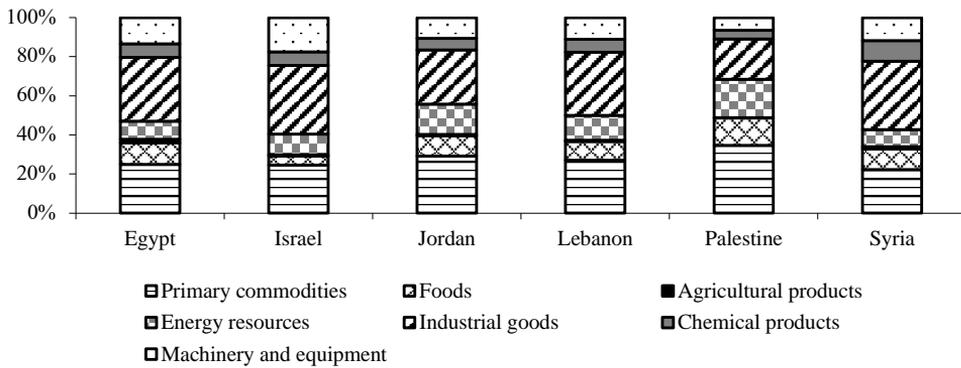
Strategic objectives of these countries are to diversify exports and gain access to advanced technologies, to enhance competitiveness of the economy, attract investment to not only oil and gas sector, but to industry and agriculture.

The commodity group “Foods and beverages” also has a large share in the total exports from the Jordanian basin countries; the highest share of these commodity group in the total exports is in Palestine (18.4%) and Syria (19.6%).

The largest import positions of the Jordanian basin countries remain to be machinery and equipment, energy resources and foods (see Figure pic. 2b). The commodity group “Foods and beverages” has a significant share in the total imports of counties like Palestine (21.7%) and Syria (18.3%). Machinery and equipment account for the largest share in the total imports of the Jordanian basin countries, except for Syria and Palestine (20.6% and 13.7%, respectively).



a) Structure of exports in the Jordanian basin countries



b) Structure of imports in the Jordanian basin countries

**Figure 2.** Structure of foreign trade in the Jordanian basin countries, 2014

Source: Own work.

Palestine is the only country of the South East Mediterranean, fully dependent on supply of energy resources. 22% of its total imports are energy resources from

Israel. In the recent years Palestinian government has taken efforts to reduce imports of energy resources through exploiting domestic deposits of energy resources. Apart from the release from energy dependence on Israel, it would lay the basis for macroeconomic development.

The largest scopes of trade are reported by Israel, with the highest shares of industrial and capital goods. It needs to be noted that Israeli trade shrank on nearly all the commodity groups in 2015, except for “Animal and vegetable oils” (0.87 percent growth compared with 2014) and “Machinery and transport equipment” (11.5 percent growth against 2014).

The lowest figures of trade are with Palestine and Syria, i. e. countries which territories have been locations of the bitterest geo-political conflicts. Scopes of foreign trade in Palestine featured volatile growth: in spite of the rapidly growing total trade (more than twice in 2015 against 2000), annual decline by 1 to 2% was recorded for commodity groups like “Machinery and transport equipment”, “Industrial goods” and “Commodities and operation” in 2013 and the following years. As regards the structure of Syrian foreign trade, although the most significant groups are “Industrial goods” (40% of the total trade) and “Foods and live animals” (34.6% of the total trade), it needs to be noted that trade in these commodity groups reduced by more than twice in 2015. The similar downward tendency in trade was recorded for the other commodity groups, except for “Beverages and tobacco”, grown by 45% in 2015 compared with 2014.

Unfortunately, the Syrian trade has been down since 2011, which is an evidence of the acute necessity to cease the military conflict on the Syrian territory and recover political, social and economic relations.

The same downward tendency in trade was recorded in Lebanon in 2011 and the following years. Its trade significantly increased only 2015, on commodity groups such as “Mineral fuels, lubricants and related materials (98.7 percent growth relative to 2014), and “Commodities and operations” (14.0 percent growth against 2014).

The main commodity groups in Jordan are “Industrial goods” (69.6% of the total), “Chemicals and related products” (31.3% of the total), and “Other manufactured goods” (22.2% of the total). Like the other Jordanian basin countries, Jordan followed the overall downward tendency in the total foreign trade on nearly all the categories of goods, except for minerals (growth by 0.21% in 2015 against 2014), machinery and transport equipment (growth by 11.6% in 2015 against 2014), and other industrial goods (growth by 0.24% in 2015 against 2014).

Egypt is the most active participant in foreign trade among the Jordanian basin countries after Israel. The smallest commodity groups of Egypt were “Beverages and tobacco” (0.47% of the total) and “Animal and vegetable oils” (0.01% of the

total). The growing trade was recorded for commodity group “Other industrial goods”: growth by 0.59% in 2015 compared with 2014.

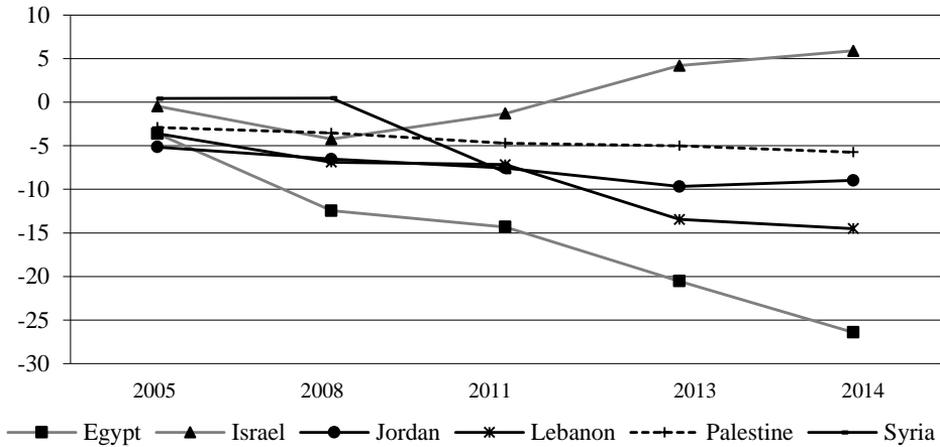
Given the varying economic performance and weak regional interactions, the economies of the Jordanian basin countries are highly integrated in the global trade system. Exports and imports of Mashrik countries and Israel grew considerably in 2005–2014 (see Table 6). The highest rates of growth in exports were demonstrated by Israel (by 73.2% in 2014 compared with 2005), Jordan (by 132.9%). Rapid growth (more than twofold) in exports was also recorded in Palestine and Lebanon. As regards imports of goods and services, the leader among Jordanian basin countries was Israel demonstrating the highest rates of growth (by 61.6% in 2014 compared with 2005), Palestine (more than twofold), and Lebanon.

**Table 6.** Foreign trade of Jordanian basin countries, 2005–2014, million USD

Country	Exports					Imports				
	2005	2008	2011	2013	2014	2005	2008	2011	2013	2014
Egypt	30,7	54,76	47,05	44,79	47,1	34,32	67,22	61,38	65,32	73,52
Israel	57,24	80,04	91,67	95,69	99,14	57,71	84,28	92,97	91,51	93,26
Jordan	6,7	12,69	13,74	14,26	15,61	11,85	19,22	21,3	23,95	24,58
Lebanon	13,22	22,1	25,1	19,23	17,06	16,84	28,98	32,26	32,69	31,57
Palestine	0,71	1,16	1,8	2,3	2,56	3,6	4,7	6,5	7,3	8,3
Syria	11,51	19,74	13,04	-	-	11,1	19,27	21,07	-	-

*Source: Own work.*

Analysis of foreign trade indicators for the Jordanian basin countries shows negative trade balance in nearly all of them. Israel could stabilize the trade balance, and in 2013 it has featured positive tendency towards the sustained growth. This could be achieved through reducing the deficit of public budget and national debt by vigorous cuts of public spending and increase of tax revenues.



**Figure 3.** Trade balance of the Jordanian basin countries

*Source: Own work.*

Israel could become “magnet” for foreign investment, which resulted in positive tendencies in the domestic economy. As regards the other countries of the region, Egypt, Lebanon and Palestine were continuously increasing the import dependence of the domestic economies, which signal was the growing negative balance of foreign trade. Jordan, Lebanon and Palestine could decrease the negative balance of foreign trade in 2014 by 0.72 billion USD and by 1.4 billion USD, respectively, compared with 2013, on account of the growing exports of metal goods and foods.

## 5. The composite rank of Jordanian basin countries: a reflection of spatially uneven economic performance

As the problem related with spatial unevenness of economic development in Jordanian basin countries, both at regional and intraregional level, is still urgent, it requires elaboration of new methods for cross-territorial measurement and comparisons or revision of the existing ones. Sound and informative description of the territory’s performance can be made by use of a set of economic indicators, which raises the need for constructing the integral performance indicator, or the composite rank. The larger number of socio-economic indicators is used to construct the composite rank, the lower is its dependence on the number of used indicators [166]. Socio-economic indicators used in constructing the composite rank are translated into standardized dimensionless quantities, component ranks.

Component ranks are computed by the formula:

$$\lambda_i^r = \frac{x_i^r - x_i^{\min}}{x_i^{\max} - x_i^{\min}}, \quad (1)$$

where  $\lambda_i^r \in [0;1]$ ,  $x_i^r$  is the value of indicator  $i$  in country  $r$ ,  $x_i^{\max}$  is the maximal value of indicator  $i$  in the set of indicators;  $x_i^{\min}$  is the minimal value of indicator  $i$  in the set of indicators.

The derived component rank  $\lambda_i^r$  is a measure of distance of the actual value of indicator  $i$  for country  $r$  from its minimal and maximal values: the closer is  $\lambda_i^r$  to 1, the closer is its actual value to the maximal (best) one, and the closer it to 0, the closer is its actual value to the minimal (worst) one for the set of countries in a given period.

The composite rank is computed by the formula:

$$\bar{\lambda}^r = \sqrt{\frac{\sum_{i=1}^n (\lambda_i^r)^2}{n}}, \quad \bar{\lambda}^r \in [0;1], \quad (2)$$

It is an indicator of the relative performance of a country or its relative position. The closer it to 0, the less is the distance between the vector of actual values of the indicators for a given country and the vector of minimal (worst) values for a given set of countries, the lower is the performance of this country compared with the set of countries. The closer is  $\bar{\lambda}^r$  value to 1, the closer is the vector of actual values for a given country to the vector of maximal (best) values for a given set of countries, the higher is its relative performance.

The composite rank derived by this method, apart from ranking of countries, allows for quantitative assessment of the distance of the vector of their actual values from the vector of the best and worst values, and for grouping the countries that are close by performance, because the proximity of  $\bar{\lambda}^r$  values of countries gives evidence of the proximity of their performance (although the countries may differ by various indicators).

The component ranks of economic development were computed for all the Jordanian basin countries except for Israel, due to the high GDP, which was ten times higher than the analogous figures of the other countries (Table 7): it is well known by experts that objects with extreme measures of an indicator are to be excluded from a sample, to make it homogenous. The exclusion of Israel did not

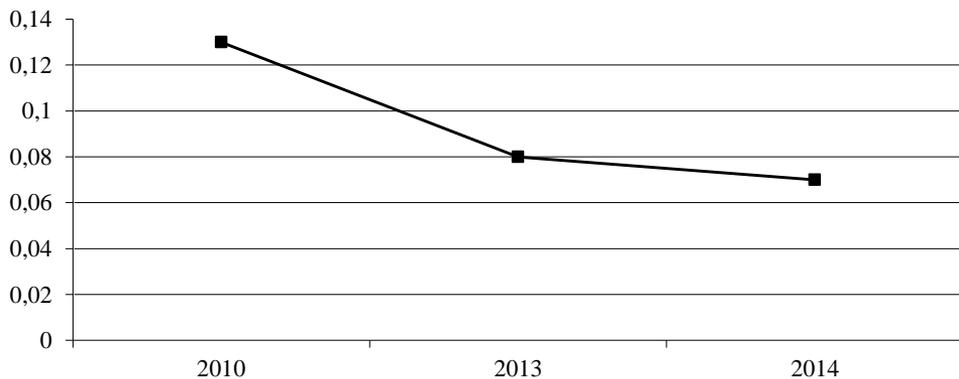
have a significant effect for the distribution of Jordan basic countries by composite rank, nor did it change its dynamics.

**Table 7.** Component ranks of performance for Jordanian basin countries

Country	Rank in 2010	Rank in 2013	Rank in 2014
Egypt	1	1	1
Jordan	0,08	0,08	0,08
Lebanon	0,14	0,14	0,13
Palestine	0	0	0
Syria	0,25	0,09	0,06

Source: Own work.

The average composite rank did not exceed 0.1 over that whole period under study (see Figure 4), and decreased in 2013–2014 compared with 2010. The composite rank for more than half of the countries was lower than the average, confirming high heterogeneity of the countries by the assessed indicators. However, the maximal rank of 1 is with Egypt, confirming its high component ranks by all the indicators. Therefore, high composite ranks of leader countries are not caused by the pseudo-substitution effect.



**Figure 4.** Dynamics of the average composite rank of performance

Source: Own work.

Country grouping by composite indicator (groups and subgroups of countries) is shown in Table 8.

**Table 8.** Criteria for country grouping by composite rank of performance

Groups of countries		Rank
Countries with low relative performance	Outsider countries ( <i>Palestine, Jordan</i> )	$0 < \bar{\lambda}^r < 0,09$
Countries with medium relative performance	Countries with lower rank than the average ( <i>Lebanon, Syria</i> )	$0,09 < \bar{\lambda}^r < 0,25$
Countries with high relative performance	Countries with high rank ( <i>Egypt</i> )	$0,25 < \bar{\lambda}^r < 1$

Source: Own work.

The group of countries with relatively low performance is quite stable (Palestine, Jordan), and this performance is stagnating. These are essentially the regions with low performance indicators: their component ranks by performance are not higher than 0.08. The analysis of component ranks variation ratios allows for clarifying the resulting classification. While the low composite ranks in Palestine and Jordan combine with the low variation of component ranks, the variation in Syria is higher than the average given the low composite rank. It confirms that the situation in these countries is even harder, because relatively low values of some (but not many) component ranks combine with too low (lower than 0.1) values of other component ranks. It is a signal of the critical lag by a number of indicators, disguised by the value of composite rank. In Syria only one rank is higher than 0.2, with the other ranks being lower (not higher than 0.08); it means that with the low composite rank compatible with the other countries, Syria nevertheless has relatively good economic performance from the selected indicators perspective, and its real lag is less critical.

## 6. Summary and conclusion

The Jordanian basin countries are rather heterogeneous by economic performance, and this heterogeneity is increasing. On the one hand, there's small number of leader countries where the ranks are high, increasing more rapidly and stably. Also, the composite ranks of these countries increased in parallel with the decreased pseudo-substitution effect, i.e. a more rapid growth in the lagging indicators. On the other hand, the lag between the countries with composite ranks

lower than the average or low and the leader countries was increasing; the pseudo-substitution effect for their composite rank grew, confirming the critical lag by a number of indicators given the low composite rank. Another negative feature is that the group of countries with the low rank is notably stable, meaning that their lag behind the others is stagnating. However, the situation in these countries improved in 2014: their composite ranks began to grow, the growth resulting from the increasing component ranks.

Therefore, integration processes within Jordaina basin countries should rely on the solid ground of intra-regional interactions, to be capable to compete with alternative options of trans-regional integrative interactions, such as economic cooperation including bilateral trade relations, joint credit and investment projects and other economic cooperation mechanisms. Creation of the effective model for economic cooperation within regional or sub-regional country groups of developing countries can give a visible impulse for accelerated economic growth and be the leading factor in solving economic development problems.

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