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СРАВНИТЕЛЬНЫЕ ПРЕИМУЩЕСТВА АРМЕНИИ В ДЕЛЕ ПРОИЗВОДСТВА И ЭКСПОРТА СТАНДАРТНЫХ ГРУПП ТОВАРНОЙ НОМЕНКЛАТУРЫ ВНЕШНЕЭКОНОМИЧЕСКОЙ ДЕЯТЕЛЬНОСТИ

Аннотация. **Цель:** выявить стандартные группы экспортируемых армянских продуктов, согласно товарной номенклатуре внешнеэкономической деятельности (ТН ВЭД), для того, чтобы правительство Армении направило свои усилия на содействие экспорту выявленных групп. **Методология:** значения индексов Балассы (Balassa, 1965), выявленных симметричных сравнительных преимуществ (Dalum et al., 1998), аддитивных выявленных сравнительных преимуществ (Hoen и Oosterhaven, 2006), Лафейа (Lafay, 1992), относительных торговых преимуществ, относительных экспортных преимуществ, выявленных конкурентоспособностей (Vollrath, 1991), чистых сравнительных преимуществ (Gnidchenko и Salnikov, 2015) были рассчитаны для определения тех групп продуктов (на двухзначном уровне), в разрезе которых Армения имеет «сравнительные преимущества» в деле производства этих товаров на основе выбранных методов расчета. **Результаты:** В целом широкий перечень товарных групп составляет 17, выявленных в соответствии с требованиями всех методов расчета индексов «сравнительных преимуществ» (рассматриваемых в статье), кроме одного. Выявленные группы следующие: рыба и ракообразные, моллюски и прочие водные беспозвоночные; продукты переработки овощей, фруктов, орехов или прочих частей растений; алкогольные и безалкогольные напитки и уксус; табак и промышленные заменители табака; руды, шлак и зола; жемчуг природный или культивированный, драгоценные или полудрагоценные камни, драгоценные металлы, металлы, плакированные драгоценными металлами, и изделия из них; ювелирные изделия; монеты; черные металлы; медь и изделия из нее; алюминий и изделия из него; прочие недорогие металлы; металлокерамика; изделия из них; часы всех видов и их части; живые животные; живые деревья и другие растения; луковицы, корни и прочие аналогичные части растений; срезанные цветы и декоративная зелень; овощи и некоторые съедобные корнеплоды и клубнеплоды; съедобные фрукты и орехи; кожура и корки цитрусовых или дынь; соль; сера; земли и камень; штукатурные материалы, известняк и цемент; предметы одежды и принадлежности к одежде, кроме трикотажных машинного или ручного вязания. Вышеупомянутые группы выявлены как приоритетные, которые правительству Армении необходимо продвигать. **Выводы:** перечень выявленных групп, в основном представляющих продукцию сельского хозяйства, добычу полезных ископаемых, производство пищевых продуктов, включая напитки и табачные изделия, производство одежды, производство основных металлов и т. д., означает, что сравнительные преимущества Армении в основном зависят от деятельности ограниченного числа отраслей экономики. Что касается усилий по стимулированию экспорта, то наилучшим выбором будет разработка и осуществление таких мер, которые позволят увеличить долю рынка на существующих рынках в среднесрочной перспективе. **Практическая значимость:** выводы статьи могут быть использованы Министерством экономического развития и инвестиций Республики Армения и Фондом развития Армении при разработке стратегий продвижения экспорта для различных отраслей промышленности.

Ключевые слова: сравнительное преимущество, выявленное сравнительное преимущество, экспорт, группы товаров, Армения.

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ARMENIA'S COMPARATIVE ADVANTAGE IN PRODUCING AND EXPORTING THE HARMONIZED SYSTEM STANDARD PRODUCT GROUPS

Abstract. Purpose: to identify those Harmonized System (HS) standard Product Groups of Armenian exported commodities the Government of Armenia would channel its efforts towards promotion of the exports of those groups of interest. **Design/methodological approach:** values of Balassa (Balassa, 1965), Revealed Symmetric Comparative Advantage (Dalum et al., 1998), Additive Revealed Comparative Advantage (Hoen and Oosterhaven, 2006), Lafay (1992), Relative Trade Advantage, Relative Export Advantage, Revealed Competitiveness (Vollrath, 1991), Net Comparative Advantage (Gnidchenko and Šalnikov, 2015) indices have been calculated to identify those product groups (at 2-digit level) that Armenia has a “comparative advantage” in producing thereof based on the selected methods of measurements. **Findings:** Overall, the broad list of identified product groups amounts to seventeen that comply with all measurement method requirements except one method discussed in the article and these groups are Fish and crustaceans, molluscs and other aquatic invertebrates; Preparations of vegetables, fruit, nuts or other parts of plants; Beverages, spirits and vinegar; Tobacco and manufactured tobacco substitutes; Ores, slag and ash; Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin; Iron and steel; Copper and articles thereof; Aluminium and articles thereof; Other base metals; cermets; articles thereof; Clocks and watches and parts thereof; Live animals; Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage; Edible vegetables and certain roots and tubers; Edible fruit and nuts; peel of citrus fruit or melons, Salt; sulphur; earths and stone; plastering materials, lime and cement; Articles of apparel and clothing accessories, not knitted or crocheted. These product groups are revealed as “priority” groups that the exports of thereof Armenia’s Government needs to promote. **Conclusion:** The identified broad list basically represents agriculture; mining and quarrying; manufacture of food products, beverages, and tobacco products; manufacture of wearing apparel; manufacture of basic metals and etc., meaning that Armenia’s comparative advantage is vulnerable to the performance of a limited number of industries. With respect to the exports promotion efforts the best choice would be to design and implement such measures that would increase the market share in existing markets over the medium term. **Practical Implications:** The findings of the article could be used by the Ministry of Economic Development and Investments of the Republic of Armenia, and the Development Foundation of Armenia in designing the export promotion strategies for various industries. **Keywords:** Comparative advantage, revealed comparative advantage, exports, product groups, Armenia.

Introduction. The Government of Armenia by adopting the Strategy of Export-Led Industrial Policy of the Republic of Armenia in December 2011 [1], identified the list of industries to be developed and to promote the exports of the items produced by the industries of the interest. With respect to some of the industries and/or sectors of the economy identified, corresponding sector and/or industry development strategies and action plans have been designed and adopted [2].

From 2012 to 2015, Armenia was reporting somehow a “stable” exports performance with some ups and downs, while in 2016, the commodities exports reported a double-digit growth (21.9 % y./y.) in comparison to 2015 (see table 1). The share of exports of the top 15 product groups in total merchandise exports was ranging from 83.11 % to 89.69 % over the reported period (see table 1). The exports of Ores, slag and ash Product Group were accounting for 20 % and above over the reported period. Overall, the Armenian merchandise export is somehow highly concentrated, highlighting the nation’s dependence on leading 5 product groups the exports of thereof reached about 68 % of the total exports in 2016.

Therefore, the choice of industries and/or product groups that Armenia could report a “comparative advantage” in producing and exporting them to be promoted for exports plays a vital role in the Government’s industrial development and export promotion agenda. Hence, the purpose of this article is to calculate various comparative advantage indices of the HS Standard Product Groups of Armenian exported commodities in order to identify those product groups the Government of Armenia would channel its efforts towards promotion of the exports of those groups of interest.

**Exports of Top 15 Harmonized System [13] Standard Product Groups
of Armenian Exported Commodities from 2012 to 2016 (US dollars)**

	2012	2013	2014	2015	2016
Ores, slag and ash	279,345,153	303,604,933	291,178,484	366,394,024	412,976,555
Natural, cultured pearls; precious, semi-precious stones; precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	172,524,586	187,085,214	227,999,674	205,398,816	343,409,562
Tobacco and manufactured tobacco substitutes	41,861,391	69,079,148	115,881,754	170,623,943	211,565,114
Beverages, spirits and vinegar	186,948,774	212,905,614	188,982,779	110,480,403	175,534,634
Aluminium and articles thereof	88,037,302	85,461,803	93,251,224	86,459,431	82,694,949
Articles of apparel and clothing accessories; not knitted or crocheted	14,978,640	33,277,311	47,012,607	61,395,185	74,769,437
Iron and steel	118,976,947	105,196,921	110,061,975	55,785,453	66,307,848
Copper and articles thereof	110,677,201	95,074,603	75,362,614	71,891,251	65,997,343
Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	107,809,631	88,417,903	90,339,328	92,391,607	61,432,518
Edible fruit and nuts; peel of citrus fruit or melons	24,087,780	24,622,460	17,137,096	11,784,316	27,599,524
Clocks and watches and parts thereof	12,822,175	13,951,631	17,748,380	19,948,239	24,583,508
Edible vegetables and certain roots and tubers	1,640,817	10,136,288	6,542,641	12,760,320	24,349,578
Preparations of vegetables, fruit, nuts or other parts of plants	17,176,649	18,268,605	21,801,682	18,416,444	19,118,513
Articles of apparel and clothing accessories, knitted or crocheted	3,172,825	4,590,885	2,476,630	6,544,363	16,124,810
Pharmaceutical products	6,881,164	7,818,963	9,697,607	11,368,412	14,953,281
Total Exports	1,428,120,691	1,467,799,675	1,490,190,149	1,482,667,348	1,807,789,510
Share of top-15 product groups in total merchandise exports (%)	83.11 %	85.81 %	88.28 %	87.79 %	89.69 %

Source: [12]. Authors' own calculations.

Design/methodological approach

Identification of priority sectors of the economy to be promoted to ensure an export growth is based on some indices and methods. Revealed comparative indices (RCA) have been widely used to measure the relative capacity and/or capability of the nation to produce a given product vis-à-vis other nations and or trading partners [3, p.83]. RCA has been proposed by Balassa (1965) [4, pp.105-107]. This index reflects the degree of export specialization with respect to a given product in comparison to the world average [5, p.5] and is defined as the following:

$$\frac{\frac{X_{i,c,t}}{\sum_i X_{i,c,t}}}{\sum_c X_{i,c,t} / \sum_i \sum_c X_{i,c,t}} \quad (1),$$

where:

$X_{i,c,t}$ is the value of exports of commodity i of a country c in year t [5, p.5]. Gnidchenko and Salnikov (2015) state that the numerator in aforementioned equation was proposed earlier by Liesner (1958) [5, p.5]; [6];

BI is the Balassa index.

If the value of the index exceeds unity (which happens when the share of exports of the given industry, product group or commodity in the total exports of the given nation exceeds the share of exports of the given industry, product group or commodity in the world exports (of all commodities)) it means that the given nation has a revealed comparative advantage with respect to the given sector of the economy and/or in producing the corresponding product group or the commodity [7, pp. 61–62]; [8, pp.268–269].

BI has been criticized and various alternative and/or new indices have been proposed by various scholars and the comparison of thereof is addressed by Sanidas and Shin (2010) [9], Gnidchenko and Salnikov (2015) [5], and etc. In this article we pursue a goal of measuring and presenting various comparative advantage indices constructed and proposed, since if the given product group is revealed as a group that a given nation has a “comparative advantage” in producing the product group of interest based on the nearly all methods of measurement, the given product group could be considered a “priority product group” the Government needs to stress the design and implementation of targeted measures to promote the exports of the identified groups of interest.

Dalum et al. (1998) [10, pp.427-428] proposed Revealed Symmetric Comparative Advantage (RSCA) Index which is defined as the following:

$$RSCA_{i,c} = \frac{BI_{i,c} - 1}{BI_{i,c} + 1} \quad (2) \quad [5, p. 9].$$

The value of the index ranges from -1 to +1, thus avoiding the 0 value problem [10, p.427]. If the value of the index exceeds unity, it means that the given product group and/or commodity has a “comparative advantage” [5, p.9].

Hoen and Oosterhaven-□ (2006) [11, pp.683-684] proposed a new Index called Additive Revealed Comparative Advantage that was defined as the following:

$$ARCA_j^A = \left(\frac{X_j^A}{X^A} \right) - \left(\frac{X_j^{REF}}{X^{REF}} \right) \quad (3) \quad [11, p. 684],$$

where:

$ARCA_j^A$ is the value of Additive Revealed Comparative Advantage Index of sector j of country A,

X_j^A is the value of exports of sector j of country A;

X^A is the value of the total exports of a country A;

X_j^{REF} is the value of the exports of sector j of the reference countries (in our case the reference countries are all the nations, and as the trading partner is the world exports of sector j);

X^{REF} is the value of the total export of the reference countries (in our case the world exports).

If the value of the Index exceeds unity is means that “country A has a “revealed comparative Advantage”” in sector j” [11, p.684] .

Lafay (1992) [15] proposed a new index called Lafay Index (LI) that incorporates 2 additional variables compared to traditional indices such as imports and GDP and is defined as the following:

$$LI_{ij} = \left(1000 * \frac{X_{ij} - M_{ij}}{Y_i} \right) - \left(\frac{X_{ij} + M_{ij}}{\sum_j (X_{ij} + M_{ij})} * \frac{1000 \sum_j (X_{ij} - M_{ij})}{Y_i} \right) \quad (5) \quad [9, p. 15].$$

And in a more condensed form it could be expressed as the following:

$$LI_{ij} = \frac{1000}{Y_i} * \frac{2(X_{ij}M_i - X_iM_{ij})}{X_i + M_i} \quad (6) \quad [9, p.15],$$

where:

LI_{ij} is the value of Lafay Index of product j of country i ;

X_{ij} is the value of exports of product j of country i ;

M_{ij} is the value of imports of product j of country i ;

Y_{ij} is the gross domestic product of country i ;

$$X_i = \sum_j X_{ij}, M_i = \sum_j M_{ij}$$

and

Country is believed to have a comparative advantage in producing product j when the value of Lafay Index exceeds unity [9, p.15].

Vollrath-□ (1991) [8, pp. 275-277] proposed three indices to measure the comparative advantage such as Relative Trade Advantage (RCA^{V1}), Relative Export Advantage (RCA^{V2}), and Revealed Competitiveness (RCA^{V3}) indices that are defined as the followings:

$$RCA_{i,c,t}^{V1} = RXA_{i,c,t} - RMA_{i,c,t} \quad (7) \quad [5, p.11],$$

$$RXA_{i,c,t} = \frac{\frac{X_{i,c,t}}{\sum_i X_{i,c,t} - X_{i,c,t}}}{\frac{\sum_c X_{i,c,t} - X_{i,c,t}}{\sum_i \sum_c X_{i,c,t} - \sum_i X_{i,c,t} - \sum_c X_{i,c,t}}} \quad (8) \quad [5, p.11],$$

$$RMA_{i,c,t} = \frac{\frac{M_{i,c,t}}{\sum_i M_{i,c,t} - M_{i,c,t}}}{\frac{\sum_c M_{i,c,t} - M_{i,c,t}}{\sum_i \sum_c M_{i,c,t} - \sum_i M_{i,c,t} - \sum_c M_{i,c,t}}} \quad (9) \quad [5, p.12],$$

$$RCA_{i,c,t}^{V2} = \ln(RXA_{i,c,t}) \quad (10) \quad [5, p.11],$$

$$RCA_{i,c,t}^{V3} = \ln(RXA_{i,c,t}) - \ln(RMA_{i,c,t}) \quad (11) \quad [5, p.11]$$

where:

i denotes a specific good;

c denotes a country of interest and/or origin;

w denotes the world;

t denotes respective period and/or year

and X and M respectively denote the exports and imports [8, p.9].

Gnidchenko and Salnikov (2015) [8, pp.14-16] constructed a new index called Net Comparative Advantage Index that is defined as the following:

$$NCA_{i,c,t} = \frac{X_{i,c,t} - M_{i,c,t}}{X_{i,c,t} + M_{i,c,t}} * \frac{\frac{X_{i,c,t} + M_{i,c,t}}{GDP_{c,t}}}{\frac{\sum_c X_{i,c,t} + \sum_c M_{i,c,t}}{\sum_c GDP_{c,t}}} \quad (12) \quad [5, p.15],$$

where:

i denotes a specific good;

c denotes a country of interest and/or origin;

t denotes respective period of time and/or year;

X and M respectively denote the exports and imports [8, p.9];

and GDP denotes the gross domestic product.

In the case of Armenia, in order to calculate various indices, the data on HS Standard Product Groups of Commodities at 2-digit level (both exports and imports values) were retrieved from the United Nations' Comtrade Database [12], while the values of other variables such as the world and

Armenia's gross domestic products (GDP) were retrieved from the IMF's World Economic Outlook online database [14]. Average values of various indices for the period 2012-2016 were used to identify the product groups of interest: i.e. whether the given product group has a comparative advantage or not.

Findings

Upon calculating the values of the selected indices for each standard product group those groups that met the requirements of the methods of measurement of at least one of them were revealed as the groups that Armenia has a "comparative advantage" in producing and exporting thereof. In the case of Armenia, 23 standard product groups have been identified that complied with at least one of the measurement method requirements to be chosen as a group of interest (see Table 2).

Table 2:

Revealed Product Groups that Armenia has a "comparative advantage" in producing thereof based on the average values of the chosen indices for the period 2012-2016

Code	Product Group	BI	RSCA	ARCA	LI	RCA ^{V1}	RCA ^{V2}	RCA ^{V3}	NCA
1	Live animals.	+	+	+	+	+	+	+	
3	Fish and crustaceans, molluscs and other aquatic invertebrates	+	+	+	+	+	+	+	+
4	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included.	+	+	+			+		
6	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage.	+	+	+	+	+	+	+	
7	Edible vegetables and certain roots and tubers	+	+	+	+	+	+	+	
8	Edible fruit and nuts; peel of citrus fruit or melons.	+	+	+	+	+	+	+	
9	Coffee, tea, maté and spices	+	+	+			+		
20	Preparations of vegetables, fruit, nuts or other parts of plants.	+	+	+	+	+	+	+	+
22	Beverages, spirits and vinegar.	+	+	+	+	+	+	+	+
24	Tobacco and manufactured tobacco substitutes.	+	+	+	+	+	+	+	+
25	Salt; sulphur; earths and stone; plastering materials, lime and cement.	+	+	+	+	+	+	+	
26	Ores, slag and ash.	+	+	+	+	+	+	+	+
43	Furskins and artificial fur; manufactures thereof.				+				
62	Articles of apparel and clothing accessories, not knitted or crocheted	+	+	+	+	+	+	+	
68	Articles of stone, plaster, cement, asbestos, mica or similar materials.	+	+	+			+		
70	Glass and glassware.	+	+	+			+		
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin	+	+	+	+	+	+	+	+
72	Iron and steel.	+	+	+	+	+	+	+	+
74	Copper and articles thereof.	+	+	+	+	+	+	+	+
76	Aluminium and articles thereof.	+	+	+	+	+	+	+	+
81	Other base metals; cermets; articles thereof.	+	+	+	+	+	+	+	+
88	Aircraft, spacecraft, and parts thereof				+	+		+	+
91	Clocks and watches and parts thereof.	+	+	+	+	+	+	+	+

Source: [12]; [14]. Author's own calculations.

Note: “+” sign means that the respective standard product group has complied with the corresponding measurement method requirement to be selected as a group of interest.

Overall, the broad list of identified product groups amounts to seventeen groups that comply with all measurement method requirements except one method.

Eleven product groups such as Fish and crustaceans, molluscs and other aquatic invertebrates; Preparations of vegetables, fruit, nuts or other parts of plants; Beverages, spirits and vinegar; Tobacco and manufactured tobacco substitutes; Ores, slag and ash; Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin; Iron and steel; Copper and articles thereof; Aluminium and articles thereof; Other base metals; cermets; articles thereof; Clocks and watches and parts thereof are revealed based on all the methods of measurements discussed (see Table 2).

Armenia has a comparative advantage in producing the following 6 product groups as well, namely: Live animals; Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage; Edible vegetables and certain roots and tubers; Edible fruit and nuts; peel of citrus fruit or melons, Salt; sulphur; earths and stone; plastering materials, lime and cement; Articles of apparel and clothing accessories, not knitted or crocheted (see Table 2) based on all the disused measurements except the method of measuring the Net Comparative Advantage, due to 2 facts: first, with respect to these 5 groups Armenia could be, in general, considered a “net importer” (see table 3) [12] for the major part of the period 2012-2016; and second, during a single period of time the trade balance was high enough, thus affecting the average value of the index of the respective product group over the reported period 2012-2016.

These identified 17 groups are revealed as “priority” product groups that the exports of thereof Armenia’s Government needs to promote

Table 3

**The Trade Balance of the Selected HS Standard Product Groups
from 2012 to 2016 in Armenia (US dollars)**

Code	Product Group	2012	2013	2014	2015	2016
1	Live animals.	534,686	-2,301,900	-2,512,072	-449,116	-2,220,243
6	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage.	-2,678,674	-886,417	-1,298,428	685,052	2,827,859
7	Edible vegetables and certain roots and tubers	-12,486,763	-1,194,148	-8,574,983	1,688,696	15,113,204
8	Edible fruit and nuts; peel of citrus fruit or melons.	-14,903,175	-10,655,098	-23,180,747	-15,421,724	-1,912,240
25	Salt; sulphur; earths and stone; plastering materials, lime and cement.	1,446,537	2,559,935	-6,109,134	-10,209,510	-10,475,575
62	Articles of apparel and clothing accessories, not knitted or crocheted	-28,277,216	-10,216,550	2,574,383	16,573,266	15,550,582

Source: [12]. Author’s own calculations.

If we compare the product groups revealed as Armenia’s “comparative advantage” in producing those items (see table 2) with the leading 15 export groups (see table 1), not all of the above-identified 17 groups are among the top performers (namely: Live animals; Fish and crustaceans, molluscs and other aquatic invertebrates; Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage;). This could be explained by the following: the exports of the respective groups have started declining and/or increasing, however, the export volumes and/or values were not high enough to qualify them as a “top export performer”, but Armenia was still maintaining and/or gaining its specialization to some extent (see Table 4).

Table 4.

The Exports of the Selected HS Standard Product Groups from 2012 to 2016 in Armenia (US dollars)

Code	Product Group	2012	2013	2014	2015	2016
1	Live animals.	4,601,422	4,951,158	3,300,101	4,555,538	2,308,805
3	Fish and crustaceans, molluscs and other aquatic invertebrates	21,340,678	32,434,557	30,516,949	13,464,031	10,713,456
6	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage.	1,221,852	2,068,699	2,816,414	4,105,030	6,120,326

Source: [12].

In its turn, not all of the top export performers are among the product groups that are identified as Armenia's comparative advantage and among them are Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes; Articles of apparel and clothing accessories, knitted or crocheted; and Pharmaceutical products. In the case of Product Group 27 (Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes) this could be explained by the followings: although Armenia is exporting electrical energy [12] however, it is heavily dependent on the Russian imports (see Table 5); the global exports of this group is highly concentrated, an only limited number of countries are the leading suppliers (in 2016, the exports of top 19 suppliers amounted to about 74 % of the world exports, with Russia remaining the major player in this market, accounting for about 10 % of the total supplies [12, author's own calculations]); and the world export of the corresponding product group could comprise a relatively higher share in the world export of all commodities [12] in comparison to Armenia's share in the total export of domestically produced commodities. In the case of Product Group 30 (Pharmaceutical products), although the exports are increasing Armenia is still a "net importer" with respect to this products (see Table 5). Despite the fact that this product group hasn't been revealed as a group that Armenia has a "comparative advantage" in producing and exporting these goods, Armenia's Government prioritized the role of the pharmaceutical industry in ensuring export growth and the Action Plan of the Pharmaceuticals and Biotechnologies was approved in 2013 by the Industrial Council adjunct to the Prime Minister of Armenia [16]. And in the case of Group 61 (Articles of apparel and clothing accessories, knitted or crocheted), the exports have started increasing thus resulting in decline in the trade balance (see Table 5), however this was not enough to qualify the latter one as a group of interest, and the imports reported an increase in 2016.

Table 5

The Imports of the Selected HS Standard Product Groups from 2012 to 2016 in Armenia (US dollars)

Code	Product Group	2012	2013	2014	2015	2016
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	902,923,323	938,218,899	814,033,513	673,716,410	567,308,482
	<i>Imports from Russia</i>	524,055,176	602,169,560	605,809,307	517,078,507	428,359,406
30	Pharmaceutical products	111,006,911	127,781,116	119,911,250	111,749,601	110,727,375
61	Articles of apparel and clothing accessories, knitted or crocheted	27,698,699	30,304,637	30,792,609	30,800,825	42,078,794

Overall, the identified 17 product groups basically represent the following industries (according to NACE 2 Rev. of the Statistical classification of economic activities [17]) of the Armenian economy: agriculture; mining and quarrying; Manufacture of food products, beverages, and tobacco products; manufacture of wearing apparel; manufacture of basic metals and etc., which means that Armenia's comparative advantage is vulnerable to the performance of limited number of industries thus stressing the need for more diversified export performance. With this limited number of industries, the ex-

port promotion efforts would be either to help local producers to at least maintain market position and increase its share and/or penetrate new markets. However, the best choice would be to increase market share in existing markets, since exporting to EU and/or other developed countries' markets requires strict compliance to the various directives and/or international standards (especially in the case of the products of the food processing industry and agricultural goods).

Conclusion. In the case of Armenia, 23 standard product groups have been identified that complied with at least one of the measurement method requirements to be chosen as a group of interest. 11 groups that are revealed based on all the methods of measurements discussed and 6 groups that are identified based on all the disused measurements except the method of measuring the Net Comparative Advantage are revealed as "priority" product groups that the exports of thereof Armenia's Government needs to promote. Hence, the broad list of identified product groups amounts to seventeen that are Preparations of vegetables, fruit, nuts or other parts of plants; Beverages, spirits and vinegar; Tobacco and manufactured tobacco substitutes; Ores, slag and ash; Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin; Iron and steel; Copper and articles thereof; Aluminium and articles thereof; Other base metals; cermets; articles thereof; Clocks and watches and parts thereof; Live animals; Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage; Edible vegetables and certain roots and tubers; Edible fruit and nuts; peel of citrus fruit or melons, Salt; sulphur; earths and stone; plastering materials, lime and cement; Articles of apparel and clothing accessories, not knitted or crocheted.

The identified broad list basically represents the agriculture; mining and quarrying; manufacture of food products, beverages, and tobacco products; manufacture of wearing apparel; manufacture of basic metals and etc., meaning that Armenia's comparative advantage is vulnerable to the performance of limited number of industries, thus stressing the need for more diversified export performance. Hence, in order to increase the exports, the export promotion efforts would be either to help local producers at least to maintain market position and increase its share and/or penetrate new markets. However, with these product groups, the best choice would be to increase the market share in existing markets over the medium term due to strict compliance with the rigorous standards mainly in developed countries (especially in the case of the products of the food processing industry and agricultural goods).

Practical Implications. The findings of the article could be used by the Ministry of Economic Development and Investments of the Republic of Armenia, and the Development Foundation of Armenia in designing the export promotion strategies for various industries of the economy and by those institutions that are engaged in the process of elaboration and carrying out the economic policy.

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