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РОЛЬ ИМПОРТА КАК ФАКТОРА ОБЕСПЕЧЕНИЯ ЭКОНОМИЧЕСКОГО РОСТА В АРМЕНИИ - ВЫЗОВЫ И ПЕРСПЕКТИВЫ

Аннотация: *Торговля является важным фактором обеспечения экономического роста каждой страны. Таким образом, мы определили роль реального импорта в объяснении статистически значимых изменений реального ВВП, а также роль изменений в реальных расходах домохозяйств на конечное потребление и реальном экспорте товаров и услуг в объяснении статистически значимых изменений в реальном импорте в краткосрочной перспективе, основываясь на методе наименьших квадратов, используя квартальные данные, охватывающие период с первого квартала 2012 года по второй квартал 2023 года, определили соответствующие приоритеты для противостояния внешним потрясениям и указали вызовы на основе разработанных нами сценариев. Соответствующие оценки позволили нам сделать вывод, что реальный импорт начал оказывать статистически значимое влияние на изменение реального ВВП Армении в связи с возросшей ролью импорта в обеспечении роста экспорта в Армении. Возросшая роль импорта обосновывается возросшей ролью экспорта услуг и товаров и расходов домашних хозяйств на конечное потребление в связи с небольшим внутренним рынком Армении и укреплением курса армянского драма по отношению к доллару США и российскому рублю. Мы подчеркиваем роль диверсификации экспорта тех товаров, в производстве которых Армения имеет сравнительные преимущества на экспортных рынках, и увеличения доли добавленной стоимости, создаваемой в Армении по отношению к экспортируемым товарам.*
Ключевые слова: *ВВП, импорт, экспорт, расходы домохозяйств на конечное потребление, экономический рост, гипотеза роста, обусловленного импортом, Армения.*

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THE ROLE OF IMPORTS AS THE FACTOR OF ENSURING ECONOMIC GROWTH IN ARMENIA: CHALLENGES AND PROSPECTS

Abstract: *Trade is an essential factor in ensuring the economic growth of every country. Therefore, we identified the role of real imports in explaining statistically significant changes in the real GDP, and the role of changes in the real household final consumption expenditures and real exports of goods and services in explaining statistically significant changes in the real imports in the short-run, based on the least square estimation technique and using quarterly data covering from the first quarter of 2012 to the second quarter of 2023 to indicate the respective priorities to face external shocks and challenges, based on the scenarios designed by us. The respective estimates allowed us to conclude that the real imports have started to have a statistically significant impact in explaining the changes in the real GDP of Armenia due to the increased role of imports in ensuring export growth in Armenia. The increased role of imports is substantiated by the increased role of exports of services and goods and household final consumption expenditure due to the small size of the domestic market of Armenia and the appreciated Armenian dram against the US dollar and the Russian ruble. We stress the role of export diversification of those goods that Armenia has a comparative advantage in producing thereof by export markets and increase in the share of value-added created in Armenia with respect to the exported goods.*
Keywords: *GDP, import, export, household final consumption expenditure, economic growth, import-led growth hypothesis, Armenia.*

Introduction

Although the increase in imports could cause financial and economic crises, in the case of the Armenian economy (ceteris paribus), the increase in imports might be associated with an increase in the household final consumption expenditures and the exports (especially intermediate goods that are required for producing the final goods and or rendering services), and spendings on the acquisition of capital goods (fixed capital) by the private sector. In turn, the increase in capital expenditure by private companies in the given period is explained by the capital goods expenditures made by companies in previous periods.

If we analyze the growth pattern of the imports upon Armenia's accession to the Eurasian Economic Union (EAEU) and until 2020, it becomes clear that the decline in imports in the period 2015-2016 compared to 2014 mainly reflected the reduction of real expenditure directed to final consumption by the Armenian households (amounting to 7.6% and 2.1% respectively), and the real decline in gross fixed capital formation in the period 2013-2014 as well (by 7.0% and 2.2%, respectively) [17]. In the period 2017-2019, the increase in imports was associated with the increase in the real household final consumption expenditure, exports of goods and services, and fixed capital formation [17]. In 2020, the reported decline concerning the main consumption elements (expenditure components) was substantiated by the pandemic, thus leading to a decline in imports of goods and services by 31.5% (y/y) [17] (in the case of imports of goods, by about 965 million US dollars [19]).

In 2021, along with the economy's recovery caused by the growth of these three expenditure components, the real growth rate of imports of goods and services amounted to 12.9% [17]. In 2022, the increase in real imports of goods and services (owing to the Russian-Ukrainian conflict) reported a growth of 34.5% [17] (imports of goods increased by 3.41 billion US dollars and amounted to 8.78 billion US dollars, which continued during the nine months of 2023 compared to the same period of the previous year, comprising 8.43 billion US dollars and increasing by about 2.84 billion US dollars [19]). Therefore, we could conclude that in the short run, statistically significant changes in the real imports could be caused by changes in the real exports of goods and services and household final consumption expenditure, thus leading to statistically significant changes in the real GDP, in turn.

Therefore, the purpose of the article is to identify the role of real imports in explaining statistically

significant changes in the real GDP, and the role of real exports and services and the household final consumption expenditure in explaining statistically significant changes in the real imports and services in the short run, using the least square estimation technique based on quarterly data spanning from the first quarter of 2012 to the second quarter of 2023 to propose respective measures to address the vulnerability to the external shocks with respect to the scenarios we built.

Expected various scenarios of three periods

When the global pandemic broke out in China in December 2019, the lockdown was spreading across various states of China starting from January 2020, followed by many countries across the globe in the first quarter of 2020. Hence, the Government of Armenia at the beginning of the first quarter of 2020 could expect the following scenarios in the short run:

1. *Full and/or partial lockdown (lasting several weeks) in different countries and Armenia.*

- As a result of the lockdown in various countries, and especially in China, a decline in the imports of intermediate goods, required for the production of exported final goods and rendering services, or "inability to import", could have led to a decline in production of goods intended for the consumption in the domestic market (including necessity goods) and exports even if Armenia had to go into a partial lockdown, thus resulting in a decline in exports since the demand for Armenian products would decline in other countries (leading trade partner of Armenia). Even though there could have been an increase in the demand for food products of Armenian origin, however, the growing demand would have been difficult to meet in the case of declining imports.
- The lockdown in various countries would especially affect the imports of food and necessity goods because, during the lockdown, the demand for these products would have increased in Armenia and different countries, associated with the fact that households would have bought these products in large quantities and the demand for those goods would have increased in the short-run worldwide, and therefore increasing the prices of those goods in particular. Hence, Armenian households could have increased their final consumption expenditures, especially channeled to purchasing imported food and necessity goods.
- Owing to the short lockdown of companies and the deteriorating economic situation, the companies could have reduced or postponed their decision to purchase capital goods, which, in general, would have negatively affected the real GDP of Armenia in the medium term.
- In general, a decrease in exports, household final consumption expenditure, and capital expenditure (especially by the private sector) could have led to an economic downturn that would not have been relatively deep.

2. *Full and longer (lasting several months) lockdown in different countries and Armenia:*

- Difficulty or "inability to import" intermediate goods because of longer lockdowns in other countries, and China, which could have led to a decline in exports of goods of Armenian origin, since demand for Armenian goods would have decreased in other countries. This could have also affected the production of companies meeting the domestic demand, especially in the case of a decline in imports of intermediate goods, thus resulting in a decrease in the industrial production volumes, since they would not have been used while offering various tour packages to tourists, owing to closed borders to be consumed in the territory of Armenia (inability to make expenditure).
- Owing to the lockdown in various countries, increased demand for imports, especially for food items and necessity goods by households, and difficulties while importing, and if imported, at higher prices. A decline in domestic demand could have been reported owing to reduced household final consumption expenditure.
- Owing to the prolonged lockdown and deteriorating economic situation, the companies could have reduced or delayed their decision to purchase capital goods and only do so in the medium term.
- In general, reductions in exports, household final consumption expenditures, and capital expenditures would have led to an economic downturn even deeper than under the first scenario, and a double-digit decline could have been reported.

Therefore, it was important for the Armenian government to have various estimates at the beginning of 2020 on what role imports played in ensuring economic growth in Armenia, and how the changes thereof could have been affected by the changes in household final consumption expenditure and exports of goods and services especially in the short-run, along with the recovery of the economy, based on the data of the previous period.

At the beginning of 2022, when Russian relations were tense with the West over the Ukraine, the Government of Armenia could have expected the following scenarios:

1. Imposing sanctions (not strict) on Russia, as a result of which Russian imports from these countries could have been reduced, thus leading to an increase in exports of services (mainly tourism) and/or goods to Russia and resulting in an increase in imports to produce final goods and/or to provide services. Exports could have also increased household income and final consumption expenditure in the short run, especially on imported goods and services. An increase in exports could have led to an increase in expenditure on capital goods by companies, thus resulting in an increase in imported goods (real imports) only in the medium term, given the fact that capital expenditure in the given period is affected by the expenditure channeled to acquire and to introduce new technologies and replace old ones with new ones, as well as to report an increase in the production. Rising household expenditure would have also increased domestic demand.
2. Imposing new large-scale sanctions on Russia that might have possibly affected the banking system of Russia, could, in addition to the above-described first scenario, have led to an influx of migrants (to receive wages in foreign currency), and the increase in the expenditure thereof could have caused a growth in household income and expenditure, namely on the imported goods and services.

Therefore, it was important for the Armenian government to have these estimates in early 2022, as in the case of scenarios and expected in early 2020, to gain insight into the impact of changes in real imports of goods and services on the economic growth in Armenia and how the real imports could have been affected by changes in household final consumption expenditure and exports of goods and services. Under the above-mentioned scenarios, the increase in imports of goods and services would have positively contributed to the economic growth in Armenia.

The Government of Armenia could have expected the following scenarios in the short run, in the case of the prolonged Russian-Ukrainian conflict at the beginning of the third quarter of 2023, when the Russian ruble had depreciated [14] against the Armenian dram compared to 2022.

1. A sharp depreciation of the Russian ruble against the Armenian dram would not be reported, or the exchange rate would remain at the same level, an increase in the demand for imported goods and/or services by households might be reported in the case of the household final consumption expenditure remaining unchanged; however, the Armenians manufacturers could have faced the following issues:

- *Mainly sellers of products in the domestic market:* The fall in the prices of imported goods could intensify the competition in the local market, and with the household final consumption expenditure at least remaining at the same level, the sales turnover of the local producers might be reduced. This, in turn, could cause an increase in those imported goods to be consumed by Armenian households, along with a decline in the imports (intermediate goods) to be used in the manufacturing of final goods. This could lead to a decline in capital expenditure by local producers, thus reducing imports of capital goods.
- *Mainly exporters to Russia (including service providers):* In terms of price competitiveness, the prolonged depreciation of the Russian ruble (but not drastic) against the Armenian dram might make products of Armenian origin and/or services less competitive in the Russian market and/or for tourists. However, we do not exclude the fact that exports to Russia from Armenia might mostly remain at the same level in the case of a limited supply of goods and/or services at the Russian market, owing to the limited supply from other countries at least until the end of 2023, or even a slight increase could be reported. Because the exports to Russia accounted for about 30% of the merchandise exports of Armenia to the world in the period 2020-2021 [20], hence, exports of goods of Armenian origin to Russia could at least remain at the same level or even report a slight increase (namely in the case of services), with imports of intermediary goods possibly remaining unchanged (or even slightly increasing). The exports might be affected by weather conditions, making it impossible to transport goods through the Upper Lars checkpoint for a certain period. A reduction in capital expenditure by exporters might be reported, thus causing a decline in the imports of capital goods.

2. A sharp depreciation of the Russian ruble against the Armenian dram might be reported owing to the economic decline in Russia, coupled with other factors as well and resulting in a significant increase in the demand for imported goods by households at least the final consumption expenditure thereof remaining at the same level. In the case of this scenario, the changes described under the first scenario would be more drastic, especially in the first half of 2024 and during the third quarter of 2024 (in the negative aspect).

Therefore, it was vital for the Government of Armenia to have these estimates at the beginning of the third quarter of 2023, as in the case of expected scenarios at the beginning of 2020 and 2022. Under these scenarios, even if a slight decrease in the imports had been reported (a substantial increase in imports of final goods (intended for final consumption) could have compensated namely for the decline in the imports of capital and intermediate goods), they would have negatively affected the economic growth in Armenia.

Brief Literature Review

Developing countries can increase their competitiveness and produce goods with high efficacy through intermediate, capital goods, and new technology to reduce unit cost, while advanced and/or industrially developed nations can import raw materials to translate them into technology products, thus contributing to the economic growth [9, p. 2]. Recent endogenous growth models promote economic growth through imports, considering the essential growth elements through new technology from capital-intensive to labor-intensive countries [7, p. 21]. It is emphasized that the imported goods in the industry could also affect export-oriented production [7, p. 21]. Importing capital and intermediate goods stimulates domestic production, while the inflow of overseas advanced technologies and knowledge increases productivity [13, pp. 368-369]. Imports of final and intermediate goods enable domestic producers to innovate, increase productivity, and become more efficient in competing with overseas imports, especially in the medium term and long run [10, p. 1084].

Therefore, the Export-Led Growth Hypothesis (ELG) and Import-Led Growth Hypothesis (ILG) have been addressed by many scholars. The evidence of the ILG has been found in the case of some countries, namely in China [12, p. 11], Japan and South Korea [13, p. 368], India [3, p. 87], Russia [9, p. 10], Belarus, Bulgaria, the Czech Republic, Estonia, Kazakhstan, Latvia, Lithuania, Poland, Slovakia, Slovenia [2, p. 646], the Netherlands, Belgium, Germany, France, Greece, Italy [5, p. 83], Pakistan [7, p. 26], South Africa [6, p. 24], Malaysia, Indonesia, Philippines, and Thailand [4, p. 411], Argentina, Colombia and Peru [1, p. 172], Chile, Costa Rica, Guatemala, Honduras [8, p. 16] and Namibia [11, p. 694].

Methodology and Data Description

We have defined our models as the followings to identify:

- the role of real imports of goods and services in explaining the statistically significant changes in the real GDP;
- and the role of real exports of goods and services, the real household final consumption expenditure in explaining statistically significant changes in the real imports of goods and services:

Real GDP = f (real imports of goods and services) (1),

Real imports of goods and services = f (real exports of goods and services, real household final consumption expenditure) (2).

The Statistical Committee of Armenia switched to the System of National Accounts 2008, therefore, the estimation of the first and second models was carried out based on quarterly data covering the period from the first quarter of 2012 to the second quarter of 2023, (i.e. 46 quarters). 2012 was considered as the base year (2012=100) for respective calculations. Seasonally adjusted quarterly data of the real GDP, household final consumption expenditure, exports, and imports of goods and services were calculated by using chained indices of the GDP real volume and its main expenditure components (%) [16] and their nominal values for 2012 thereof [17].

In the case of the first and second models, the regression equations were estimated for three separate periods (2012q1-2019q4, 2012q1-2021q4, and 2012q1-2023q2) based on the scenarios presented above.

Before estimating the regression equations, we took the natural log of all the variables to be included in the equations, and upon finding the evidence that the given time series were not stationary, we took the first difference thereof to ensure their stationarity.

We found that the correlation coefficients among independent variables included in the equations did not exceed 0.5 (an absolute value) for all periods, which was evidence of no multicollinearity problem. The regression equations were estimated using the least square method for different time periods.

We have estimated the following equations:

$dlgdp_t=\alpha_0+\alpha_1*dlimport_t+\varepsilon_t$ (3)

Where:

$dlgdp_t$ is the first difference of the log of the seasonally adjusted value of the real GDP in period t.

$dlimpor_t$ is the first difference of the log of the seasonally adjusted value of the real imports of goods and services in period t.

α_0, α_1 are model unknown parameters.

ε_t is the error term in period t.

$$dlimport_t=\beta_0 + \beta_1*dlexport_t +\beta_2*dlhhfce_t+\upsilon_t \quad (4)$$

Where:

$dlimport_t$ is the first difference of the log of the seasonally adjusted value of the real imports of goods and services in period t.

$dlexport_t$ is the first difference of the log of the seasonally adjusted value of the real exports of goods and services in period t.

$dlhhfce_t$ is the first difference of the log of the seasonally adjusted value of real household final consumption expenditure in period t.

β_0, β_1, β_2 are model unknown parameters.

υ_t is the error term in period t.

We tested for the evidence of autocorrelation and found the evidence thereof, therefore, we incorporated respective MA order processes in the equations to deal with the problem.

Then, upon incorporating the respective MA order process into equations we tested for the evidence of autocorrelation, heteroskedasticity, and normal distribution of error term, by performing the following tests: Breusch-Godfrey Serial Correlation LM (lags included: 4); Breusch-Pagan-Godfrey; and Jarque–Bera.

Results and Discussion

Exports of goods and services, household final consumption expenditure and imports of goods and services nexus; and the imports of goods and services and the GDP nexus: In general, in the case of the variables included in models of three periods, it was only in the case of the first model that the changes in those variables explained about 40% of the variance in real imports of goods and services, while in the case of the second and third models, the changes in those variables explained about 80% of the variance in the real imports of goods and services (see Table 1, Estimations # 1, 2, 3).

In the first quarter of 2020 (when the pandemic began to spread across the globe), according to the results of the estimation based on the data spanning from the first quarter of 2012 to the fourth quarter of 2019, the Government of Armenia could expect that decline in the exports of goods and services by 1% in period t would lead to a reduction in the real imports of goods and services by 0.33% in the same period (see Table 1, assessment #1), on average. Meanwhile, a decline in the real household final consumption expenditure by 1% could cause a 0.74% decrease in the real imports of goods and services, in general (see Table 1, assessment #1). It was expected that a decline in the real exports and services and household final consumption expenditure [18] from the second to the fourth quarters of 2020 could cause a decrease in real imports of goods and services by around 24.3%, 22.4%, and 31% accordingly, other things being equal.

In 2020, the first scenario was reported, and the real household final consumption expenditure, exports of goods and services, and gross fixed capital formation declined by 13.9% (y/y), 33.5% (y/y), and 1.5% (y/y) respectively, thus resulting in the economic decline of 7.2% (y/y) [17] compared to 2019. Under this scenario, in 2020, an increase in the main imported product lines (at a 4-digit level) was reported with respect to the necessity goods (wheat, sugar, sunflower, cottonseed oil, milk powder), and intermediate goods as well [19]. Regarding the role of real imports of goods and services in explaining the statistically significant changes in the real GDP, according to the data covering the period from the first quarter of 2012 to the fourth quarter of 2019, and based on the estimation results, changes in the real imports of goods and services did not explain the statistically significant changes in the real GDP.

Table 1

Estimation Results-1 (Method: Least Square)

Dependent variable $dlimport_t$	**Estimation** #1: Sample: 2012q1-2019q4 Adjusted sample: 2012q2-2019q4	**Estimation** #2: Sample: 2012q1-2021q4 Adjusted sample: 2012q2-2021q4	**Estimation** #3: Sample: 2012q1-2023q2 Adjusted sample: 2012q2-2023q2
Constant	-0.001 (-0.129)	-0.007 (-1.013)	-0.003 (-0.546)
$dlexport_t$	0.333 (2.192)**	0.521 (6.762)***	0.516 (7.703)***
$dlhhfce_t$	0.739 (3.794)***	0.828 (6.239)***	0.889 (7.119)***
R-squared	0.395	0.796	0.792
Adjusted R-squared	0.352	0.785	0.782
Included Quarters	31	39	45

*Notes: t statistic values in parentheses. ** denotes significant at 5% significance level, *** significant at 1% significance level.*

Table 2

Estimation Results-2 (Method: Least Square)

Dependent variable $dlgdp_t$	Estimation #4: Sample: 2012q1-2021q4 Adjusted choice: 2012q2-2021q4	Estimation #5: Sample: 2012q1-2023q2 Adjusted choice: 2012q2-2023q2
Constant	0.007 (3.660)***	0.007 (4.082)***
$dlimport_t$	0.229 (7.169)***	0.223 (7.955)***
MA (1)	-0.364 (-2.324)**	-0.398 (-2.806)***
R-squared	0.564	0.536
Adjusted R-squared	0.539	0.514
Included Quarters	39	45

*Notes: t statistic values in parentheses. ** denotes significant at 5% significance level, *** significant at 1% significance level.*

At the beginning of the first quarter of 2022 (when the Russian-Ukrainian conflict had not yet started), based on the estimation results using data spanning from the first quarter of 2012 to the fourth quarter of 2021, the Government of Armenia could have expected, that the increase in the real exports of goods and services by 1% in period t could cause a 0.521% increase in the real imports of goods and services in the same period, while a 1% decline in the real household final consumption expenditure could lead to a 0.828% decrease in the real imports of goods and services (see Table 1, Estimation #2).

In 2022, the second scenario was reported, and under this scenario, the increase in the real imports of goods and services was accompanied by an increase in the real exports of goods and services in 2022, and the deficit of goods and services account declined compared to 2021, however, the goods account deficit worsened [11]. Meanwhile, to meet the growing external and domestic demands, both the whole manufacturing and the manufacture of food products industry reported an increase of 13.5% (y/y) and 7.1% (y/y), respectively in 2022 [21].

Regarding the role of the real imports in explaining the statistically significant changes in the real GDP, in the second period, based on the estimation results using quarterly data spanning from the first quarter of 2012 to the fourth quarter of 2021, the Government of Armenia could expect that changes in the real imports of goods and services would explain statistically significant changes in the real GDP (see Table 2, Estimation #4). Therefore, on average, a 1% increase in the real imports of goods and services in period t could cause a 0.229% increase in the real GDP in that same period (see Table 2, Estimation #4).

At the beginning of the third quarter of 2023 (when the Russian-Ukrainian conflict was continuing), based on the estimation results covering quarterly data from the first quarter of 2012 to the second quarter of 2023, the Government of Armenia could expect that, on average, if the exports of goods and services increased by 1% in period t (quarter), it could cause a 0.516% increase in the real imports in the same period, while a 1% decline in the real household final consumption expenditure could lead to a 0.889% decline in the real imports of goods and services (see Table 1, Estimation #3).

According to the data of the first three quarters of 2023, the first scenario was reported and likely to be observed till the end of 2023. The increase in imports in nine months of 2023 was accompanied by an increase in exports [19], due to re-exports as well, compared to the same period of 2022, and the whole manufacturing, namely the manufacture of food products industry reported a decline by 0.4% and 4.9%, respectively [22].

Regarding the role of real imports of goods and imports in explaining the statistically significant changes in the real GDP in the third period, according to the estimation results using quarterly data from the first quarter of 2012 to the second quarter of 2023, the changes in the real imports explained statistically significant changes in the real GDP (see Table 2, Estimation #5). Hence, the Government of Armenia could expect that, on average, a 1% increase in the real imports of goods and services in period t (quarter) could cause a 0.223% change in the real GDP in the same period (see Table 2, Estimation #5).

If we compare the estimation results of three periods (in particular, the estimated coefficients of the two main GDP expenditure components (see Table 1, Estimations #1-3) with the estimated import coefficients (see Table 2, Estimation # 4, and 5), with the growth pattern of imports and exports of goods and services in the period 2012-2023 (up to the second half of the year) [15], then we could conclude the following:

1. The relatively small domestic market of Armenia that cannot provide Armenian households with a wide range of goods and services, and the appreciation of the Armenian dram against the US dollar and the Russian ruble starting from 2022 [14] as well, enabled the Armenian households to start purchasing imported services and items similar to those produced in Armenia much cheaper, made the purchase of services and/or goods not produced and/or rendered in Armenia more affordable, and as a result, if households in Armenia increase final consumption expenditure, then the largest part of that increase would be channeled to the purchase of imported goods and services. If, in the first period, an increase in the household final consumption expenditure by 10% could cause a 7.4% increase in the imports of goods and services, then in the second and third periods, the expected increase in imports varied from 8.3% to 8.9%. This trend also indicates that in the medium term, if the Armenian dram continues to appreciate against the US dollar and the Russian ruble, then in the short run and medium term, a possible prolonged decline in the manufacturing and especially the manufacture of food products could be expected, along with an increase in the real imports, thus negatively affecting the economic growth in Armenia.

2. Based on the composition of exports by goods and countries, the exchange rates of the Armenian dram to the US dollar and the Russian ruble in the period 2012-2019, the trend pattern of exports and imports of goods and services (according to the balance of payments) [20]; [15]; [14]; [19] (the difference between imports and exports), it could be concluded that the value added created in Armenia in the case of exported goods and services in the first period, and namely goods was higher than the estimation results of the second and third periods indicated. A 10% increase in the real exports could cause a 3.33% increase in the real imports, on average according to the estimated coefficient of the first period, while based on the same coefficient of the second and third periods the expected change could reach about 5.2%, on average. Therefore, we could assume that the value added generated in Armenia in the case of exported goods and services has decreased, in general, explained by the vulnerability to a single market, and the appreciation of the Armenian dram against the Russian ruble [14]. This means that Armenian companies might have reported lower profitability while exporting. This indicates that the role of export diversification of commodities that Armenia has a comparative advantage in producing thereof by trading partners (export markets) needs to be prioritized by Armenia in the medium term.

3. It could be assumed that the decrease in the value added generated in Armenia with respect to the exported goods and services in the second and third periods compared to the first period resulted in an increased role of imports in ensuring export growth and started causing statistically significant changes

in the real GDP since a 10% increase in the real imports of goods and services could cause a 2.3% increase in the real GDP.

Conclusion

In the short-run, statistically significant changes in the real imports of goods and services could be caused by the changes in the real exports of goods and services and real household final consumption expenditure, and changes in the real imports, in turn, could lead to the statistically significant changes in the real GDP. Thus, imports started to have a statistically significant impact in explaining the statistically significant changes in the real GDP of Armenia, because of the increased role of imports of goods and services in driving the growth of the real exports of goods and services, and the increase in household final consumption expenditure as well, explained by the small size of the domestic market of Armenia and appreciated Armenian dram against Russian ruble and US dollar [14], thus leading to increase in imports.

This highlights several challenges that Armenia needs to address. One of the priorities is to develop appropriate measures to prevent the decline of the manufacturing industry, namely the manufacture of food products, and an integral part of those measures could be the diversification of goods that Armenia has a comparative advantage in producing thereof by market, as well as increasing the share of value added created in Armenia with respect to the exported goods.

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