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EESE  
Enabling Environment for  
Sustainable Enterprises

# ► EESE assessment of MSME trends and policies in Armenia



REPUBLICAN  
UNION OF  
EMPLOYERS  
OF ARMENIA



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First published 2021

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*ESESE Assessment of MSME trends and policies in Armenia*

International Labour Office – Geneva: ILO, 2021

ISBN: 978-9-220-36517-5 (print)

978-9-220-36518-2 (web PDF)

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## ► Foreword

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Republican Union of Employers of Armenia (RUEA), in line with its mandate to contribute to the development of a conducive environment for enterprises in Armenia, has called upon the ILO to assist the organization to assess the follow up analyses of the business environment in the country focusing on two specific topics – taxation system in Armenia and Export, FDI and FDI-SME linkages.

The ILO commissioned a follow-up study in 2021, based on the findings of the 2016 ILO EESE assessment report, delving further into some of the priority areas identified in this first report. In particular, the follow-up study examined more in-depth major bottlenecks and possible solutions in selected policy areas (taxation and FDI and export) which were jointly agreed by the RUEA and ILO. At the same time, it was equally proposed that the follow-up study takes into account that, due to the COVID-19 pandemic, today's economic context is very different from that of 2016. As such, it was proposed that the first part of the follow-up study offer an overview of the impact of the COVID-19 pandemic on Armenian enterprises, based on existing data and surveys, as this preliminary analysis might also point to priority areas for intervention that did not come up in the previous assessment. Also, report introduce part on Digitalization and connection of digital transformation with business environment in Armenia.

As in previous report, this report was developed in line with ILO methodology on the Enabling

Environment for Sustainable Enterprises (EESE). For RUEA, the analysis of two specific area of enabling environment provides starting point for further development of strategic documents and structured and evidence-based advocacy efforts.

This report provides an overview of the research findings of the EESE assessment. It identifies the relative strengths and weaknesses of the enabling environment for sustainable enterprises focusing on taxation system and FDI and export in Armenia as well as digitalization trends in the country. The purpose of the assessment is to stimulate debate and to provide an evidence base for policy reforms, leading to an environment that is more conducive to the promotion of sustainable enterprises.

The report reflects information gathered through a review of secondary data and through a national interviews process with more than 15 national stakeholders. This report has been written by external consultants Ricardo Arroja (taxation), Roberta Rabellotti (Export, FDI and FDI-SME linkages) and Arman Sargsyan, national expert (Impact of COVID 19 on SMEs and Digitalization) under the coordination of ILO Moscow's Senior Employers' Specialist Vladimir Curovic, Technical Officer on Enterprise Development Mirza Muleskovic, Team Leader, Enabling Environ. for Sustainable Enterprises HQ ILO Severine Deboos and Technical Specialist, SME Enabling Environment, Enterprises Department - Technical Officer Ratsima Rasendra, Soary.

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## ► Executive summary

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The present report has been prepared by the ILO Enabling Environment for Sustainable Enterprise (ESEE) Programme on request of Republican Union of Employers of Armenia (RUEA), as a follow-up to the 2016 ILO ESEE Assessment report of Armenia. The 2016 assessment was conducted by the ILO upon request of the Republican Union of Employers of Armenia (RUEA) and involved an enterprise survey of 300 companies and 4 focus groups in four different sectors of the Armenian economy.

This report takes a more focused approach, looking closely into three policy areas which RUEA flagged as priority: enterprise taxation; fdi and export, and digitalization as one of the important factors for development of business environment. In addition, given the current context of the COVID-19 pandemic, the report includes an initial chapter that presents information on the impact of the pandemic on the performance of Armenian enterprises, especially MSMEs.

The methodology underlying this report has included desk research, covering both statistical and policy information; a policy questionnaire submitted to RUEA to receive factual information on Armenian's main policies in the areas covered by the study; and online meetings between the ILO, on the one hand, and Armenian stakeholders and other international organizations supporting business development in Armenia, on the other.

### **Main findings of the report**

The rest of this introduction presents the main findings of the report, with more details available in the thematic chapters.

### **The impact of the COVID-19 pandemic on Armenian enterprises**

The chapter analyses the multidimensional impact of COVID-19 to the Armenian business

environment. Chapter present information on the structure and performance (productivity, innovation, export, access to finance) of the MSME sector in Armenia before the COVID-19 crisis, the impact of this crisis on Armenian enterprises, and the extent to which Armenian enterprises have been able to access COVID-related government support. An overview of the structure and performance of Armenian enterprises and of the potential impact of the COVID-19 pandemic on this performance. Comparisons of Armenia with other EU Eastern Partnership countries (Azerbaijan, Belarus, Georgia, Moldova and Ukraine) have been introduced to better assess the strengths and weaknesses of the domestic enterprise sector.

The focus of the chapter is on the following dimensions: 1. COVID-19 and macroeconomic outlook; 2. The structure of Armenia's business sector; 3. The performance of MSMEs in Armenia and 4. The impact of COVID-19 crisis on Armenian MSMEs.

The research found significant negative correlation between COVID-19 cases and GDP growth among European countries, showing the high inclusion of COVID-19 impact in the region. Another finding is that the correlation become significant only when COVID-19 total cumulated cases per 100,000 population are above 7,000. The latter shows that there is a constant threshold of COVID-19 when the negative impact on economy is starting to be tangible. Armenia is above of the threshold with around 8,300 cumulative total cases.

In general, Armenian enterprises are not recovered to the pre COVID-19 level yet. Armenian enterprises have had tangible restructuring as a result of COVID-19 negative factors and lockdown of specific spheres, infrastructures, gathering restrictions, mainly during March-May, 2020. Later on, after the lockdown quantity of active enterprises and sectoral structuring is on the positive trend, but not still at the recovery threshold. Due to the pandemic, productivity declined in Armenia with 3.7% in 2020 and remains stable with a slight increase during 2021. Due to the sectoral differences and economy of scale larger enterprises are often more productive also in Armenia, and

productivity in MSME's may be progressive from the level of ICT usage, and innovations. Larger firms are on average more productive than smaller ones, as well, in Armenia, particularly in mining, manufacturing, ITC sectors. COVID-19 impact at enterprises in Armenia is not modest among other observing countries. From the other side, with the government support to enterprises Armenia is at leading positions. COVID-19 Government support programs in general are well designed and the main issue is the small size of financing.

Armenia is placed at medium or low-medium position with labour productivity, innovation and other indicators among observed countries. Access to finance is at a positive level in Armenia, but Armenian Government needs to develop alternate start-up and enterprise financing solutions.

The chapter ends with the policy recommendations for the better eliminating of pandemic influences to entrepreneurship environment and for follow-up strengthening of the shield for better response and development of the national business enabling environment.

## Taxation system in Armenia

Business taxation in Armenia is undermined by the policy and administrative complexities of the tax code. Although the main tax rates are broadly in line with median rates in the EU Eastern Partnership region, the intricacies of each tax make it challenging for businesses, especially smaller ones, to fully comply with their tax liabilities. Fair business competition is also undermined by the existence of numerous deductions and exemptions, which have paved the way for unstable policy and arbitrage opportunities. Furthermore, rather than simplifying the general tax code, policymakers have opted instead for extending tax exemptions to larger segments of the business sector under preferential regimes. As a result, the tax burden, which ranks the highest in the region, rests on a narrow base of business taxpayers, and (as regards direct taxation) mostly on personal income taxpayers, leading to an inefficient, uncompetitive, and unequitable tax policy. Unsurprisingly, corporate income taxation and value-added tax have become poor proxies of economic activity in recent years. The tax policy is therefore neither helpful of businesses, providing

plentiful opportunities for competition distortion, nor for economic activity, by imposing an excessive burden on the economy overall.

While it is difficult to envisage a lower tax burden in the medium term in Armenia, a shift from direct to indirect taxation is desirable. Armenia exhibits the highest share of tax revenues on personal and business incomes as a percentage of total tax revenues amongst EU Eastern Partnership countries (in addition to having the highest overall tax burden in the region). Personal income tax revenues account for almost 75% of income taxation, whilst businesses account for little more than 25%. Yet the bulk of businesses in Armenia are not corporate income taxpayers, making the corporate income tax, already engulfed by its complexity, reliant on a small base of taxpayers. Most Armenian businesses benefit from preferential taxation, either under the turnover tax, the micro entrepreneurship regime, or other targeted tax benefits. And only a small fraction of businesses are VAT taxpayers, due to an exceptionally high VAT registration threshold. VAT is not contributing adequately to Armenian tax revenues, and neither to the country's tax culture. Bringing VAT policy into line with regional benchmarks, as well as simplifying its administration, would likely allow for a rebalancing of tax revenues away from income taxes while at the same time allowing for a more ample base of business taxpayers.

## Export, FDI and FDI-SME linkages in Armenia

Armenia needs to strengthen its position in the international market, rebalancing its growth from being domestic demand oriented towards exportable/tradable goods and services and foreign investments. Its performance in terms of exports, FDI and GVC involvement has not been very satisfactorily during the last few years. Exports are still concentrated in very few products and markets, FDI performance has been mediocre and GVC involvement is insignificant. Nonetheless, there are some notable positive signals such as the ICT boom, which has attracted to Armenia many leading multinationals, generating a domestic, very lively startup scene and leading to a significant increase in exports of ICT services. Besides, Armenia has started several reforms and it is a

very open country with few restrictions to foreign direct investments and with tangible improvements in areas such as e-regulations and corruption fight. In order to address the constraints and challenges identified in this chapter as well as to fully take advantage of the existing opportunities, a multi-pronged approach combining actions in different areas is needed. Key actions that would contribute addressing challenges and fully grasp opportunities are a reinforcement of the education system; a greater and more systematic leverage of the diaspora for trade, investment and knowledge networks; an improvement of logistics and physical and digital infrastructures; an international recognition of the country' accreditation system; the implementation of E-government solutions; the strengthening of trade and FDI promotion agencies and the reinforcement of the stability and predictability of the investment ecosystem.

## Digitalisation of the business enabling environment

The chapter analyses the digitalization state in Armenia and its business enabling environment. More specifically, the section provides an overview of Armenia's enabling environment from a digital perspective, explaining where there has been progress and where there is still room for improvement. The focus is on the following topics: 1. Information and communications technology; 2. Legal and regulatory environment; 3. Trade system; 4. Getting Credit and 5. Training and lifelong learning. When presenting international indicators, the chapter compare Armenia to the other 5 countries of the EU Eastern Partnership (Azerbaijan, Belarus, Georgia, Moldova and Ukraine). The paper analyses the extent to which digital transformations occur in the business

environment, which is something that has become even more important after the COVID-19 pandemic struck the entire world. The chapter also includes policy recommendations to strengthen the digital dimension of Armenia's enabling environment. At the end of each section overall conclusions related to the chapter topic are shown.

The paper found out that Armenian ICT sector has a boosting growth and development trends during last decade, with a leading growth of IT sector. ICT access, ICT use, ICT regulatory, network readiness, economic freedom scores have positive trends in Armenia. From the other side Armenia and other EU Eastern Partnership countries, except Ukraine have declines of global innovation index during last 8 years. Armenia has relatively positive position with e-government, e-participation and online services indexes among EPC's.

The digitalization of public services and e-governance have a tangible space for development. Still tangible part of public services is not provided online. Some of available solutions need to be modernized and capture the whole business processes. There are barriers in legislation for e-commerce development and digital integration and identification.

Workforce trainings in Armenian enterprises are mainly available in productive economic sectors. SME's are not very active in workforce training solutions. Absence of training materials in Armenian is a serious obstacle for training platforms development.

The chapter ends with the policy recommendations for the strengthening the digital dimension of the national enabling environment. Several government solutions, as well as NGO sector involvement are proposed.



## ► 1. The impact of the COVID-19 pandemic on Armenian enterprises

---

### 1.1 The impact of the COVID-19 pandemic on Armenian enterprises

Armenia, located in the South Caucasus region, is an upper middle income black landlocked country with real gross national income (GNI) per capita of 4,680 USD in 2019. The country which shares border with Georgia, Azerbaijan, Turkey and the Islamic Republic of Iran is gifted by rich mineral resources particularly gold. Armenia is linked with regional and global markets through bilateral free trade agreements including with Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Tajikistan, Turkmenistan and Ukraine and regional cooperation arrangement. The country is member of the Commonwealth of Independent States (CIS) and since January 2015, the Eurasian Economic Union (EAEU) which includes as members Belarus, Kazakhstan, Kyrgyzstan and the Russian Federation. It is also a GSP+ member and is a signatory of a comprehensive and enhanced partnership agreement with the EU.

A few years of strong economic performance has projected the Armenian economy into a relatively good path and growth stood at 7.6% in 2019, driven by an exceptionally strong performance of the manufacturing sector.

Despite the impressive economic growth trajectory of Armenia since its independence, the economy was still unable to generate enough jobs for its growing labor force. Unemployment stood at around 18% in 2019 so that working abroad continued to constitute an integral part of Armenian labor market dynamics. A million workers were seeking job opportunities abroad particularly in the Russian Federation owing to the lack of job

opportunities in domestic markets. While the remittances of the workers have been on a declining trend of the past few years, at 11% of GDP in 2019, they remain an important contributor to income generation ranking Armenia among the top 20 remittance receiving countries worldwide.<sup>1</sup>

A low level of investment is one of the distinguishing features of the Armenian economy. The economy was indeed unable to generate enough savings for financing investments. The share of savings in GDP was on a declining trend, reaching 11% in 2019, down from 16.3% in 2017, and the share of investment in GDP decreased from 22.4% in 2018 to 17.4% in 2019 (UNECE, 2021).

FDI is directed towards the booming construction sector, increase through the 2000 at 8.8% of GDP just prior to the financial crisis but since has fallen to its former level and now stands at 2% of GDP.

Concerning the trade, Armenia's position is greatly constrained by unresolved geopolitical conflicts with neighboring states. The borders with Turkey and Azerbaijan are effectively closed and trade with Iran was complicated by sanctions from international communities. The border complications forced almost all goods to travel through neighboring Georgia to the north. Armenia's trade largest partner, the Russian Federation, requires transporting products through the Georgian Russian border which is notorious for long delays and is often closed for long periods in the winter. To worsen the matter, it is worth mentioning the military situation that affected Nagorno Karabagh and Azerbaijan in September-November 2020. Despite its numerous geopolitical challenges, Armenia has been successful at increasing its trade over time.

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1 Armenia Inclusive Growth Diagnostic, USAID, 2019.

Hence, despite its impressive growth record, the Armenian economy was too vulnerable to withstand the economic effects of the pandemic.

## 1.2 COVID-19 and macroeconomic outlook

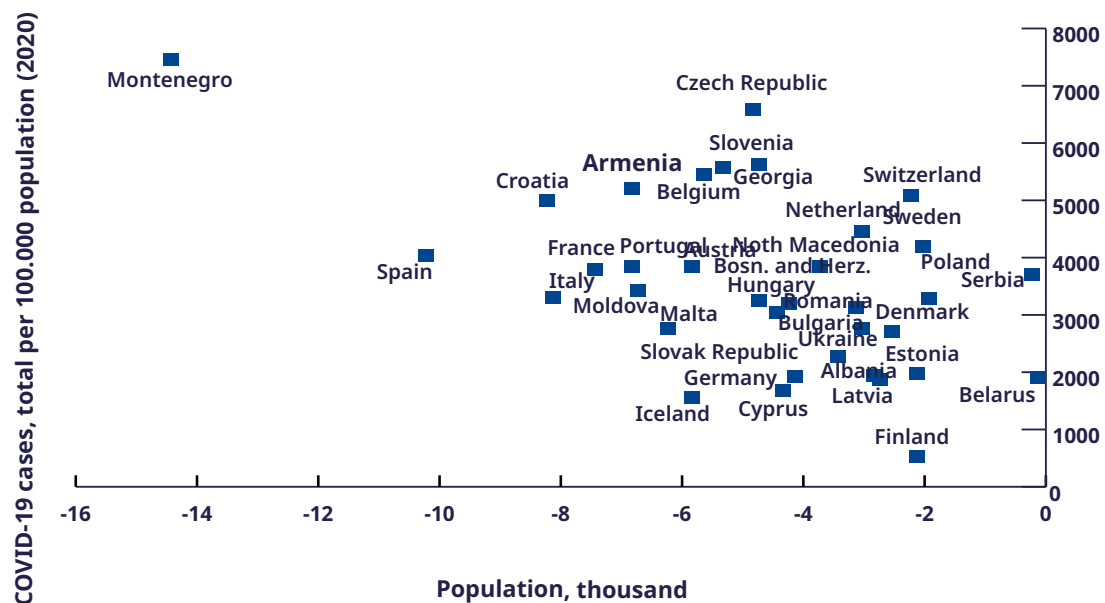
While the global economy is trended to somehow recover in 2021, the GDP at the end of 2021 in advanced and developing economies is tended to remain below the pre COVID-19 baseline. Analysis done in the framework of this report using IMF World Economic Outlook database, 124 countries, as well as total European area will remain below the baseline<sup>2</sup>.

Cumulative COVID-19 cases per 100,000 population from World Health Organization databases and GDP growth among European countries for 2020 show that there is a significant negative correlation ( $r = 0.512$ ,  $p = 0.016$ ).

Calculation using the same variables for 160 countries from all continents shows that there is no significant correlation (from March 2020 to Sept 2021). Segmentation of variables of 160 countries shows that correlation become significant only when COVID-19 total cumulated cases per 100,000 population are above 7,000. The latter shows that there is a constant threshold of COVID-19 when the negative impact on economy is starting to be tangible, and Armenia is above this threshold with around 8,300 cumulative total cases, as provided later in this report.

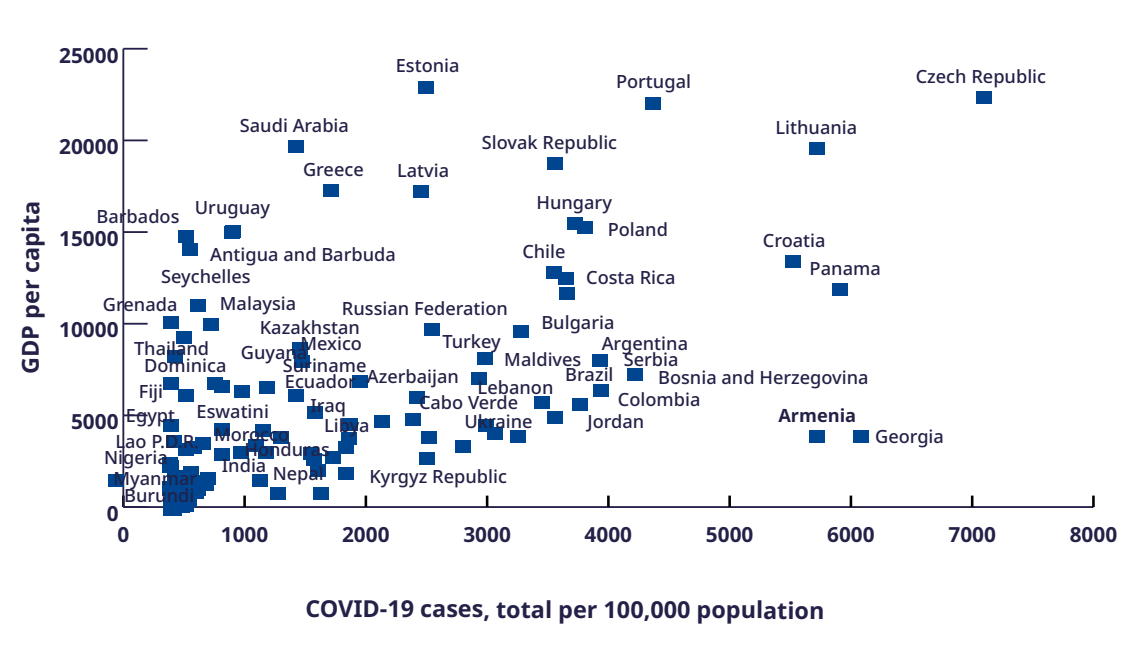
Another finding is that econometric calculations show that countries with higher GDP per capita are more likely to have higher spread of COVID-19 ( $r = 0.41$ ,  $p = 0.000002$ ). Looking at below scatter, it is also obvious that particularly Armenia and Georgia are at the first two places in the world with a low GDP per capita and a high COVID-19 rate share. This shows that Armenia and Georgia are noticeably polarized from the main trend.

► Graph 1: COVID-19 and GDP growth in European countries in 2020



Source: Data extracted from the WHO database - [WHO Coronavirus \(COVID-19\) Dashboard](#) | [WHO Coronavirus \(COVID-19\) Dashboard with Vaccination Data](#).

▶ Graph 2: COVID-19 and GDP per capita in 2020



Source: Data extracted from the WHO database - [WHO Coronavirus \(COVID-19\) Dashboard](#) | [WHO Coronavirus \(COVID-19\) Dashboard with Vaccination Data](#).

From 1 March 2020 up to early September 2021, cumulative cases in Armenia are around 245,000, and cumulative total cases per 100,000 population are about 8,300. With the latter figure Armenia stands at the 186<sup>th</sup> place (from low to high) in 237 countries worldwide, which can be described as high from average rank.

COVID-19 economic shock is exogenous, and the recovery may be highly correlated with the timing and deepness of COVID-19 influences. It is now very much likely that Armenian economy will go to “U” and not “V” shaped recovery after COVID-19 shock. With 7.6% economy decline in 2020, IMF 2021<sup>3</sup> forecast is 1% and World Bank’s forecast<sup>4</sup> in June 2021 is already 3.4%. In most European countries the recovery is not very fast, as well.

**Table 1** shows that comparing to 2019 the most optimistic positioning of growth is in Moldova and Ukraine.

**Table 2** shows that taking into account World Bank’s 2021 growth forecast of 3.4%, Armenia will do its recovery with -4.2 net balance comparing to pre-COVID-19 situation. Ukraine has the fastest recovery rate among observing countries. As for COVID-19 total cases per 100,000 population, Armenia is at better condition than Georgia.

It is also worth to mention that the relatively sharper economic shock in Armenia may be also linked with the military situation in Nagorno Karabagh and Azerbaijan in September-November 2020.

Countries across the globe are suffering setbacks that are akin to complex humanitarian

3 [Armenia’s economy set to start recovering in 2021 – IMF](#)  
 4 [Global Economic Prospects, June 2021 \(worldbank.org\)](#)

► **Table 1: GDP growth in the selected countries for the period of 2019-2026, %**

Country	2019	2020	2021	2022	2023	2024	2025	2026
Armenia	7,631	-7,353	6,461	4,543	4,4	4,1	4	4
Azerbaijan	2,48	-4,29	2,959	2,349	1,715	1,726	1,738	1,75
Belarus	1,446	-0,949	2,071	0,512	1,033	1,18	1,281	1,319
Georgia	4,982	-6,16	7,69	5,764	5,494	5,249	5,201	5,201
Moldova	3,7	-6,969	4,5	5,172	5,501	5,783	5,39	5,006
Ukraine	3,199	-4,042	3,45	3,636	3,396	3,795	3,997	3,999

Source: Data extracted from the World Economic Outlook 2021 database - <https://www.imf.org/en/Publications/WEO/weo-database/2021/October/select-country-group>

► **Table 2: COVID-19 total cases from per 100,000 population, from 1 March 2020 to 7 September 2021**

Country	Cases - cumulative total per 100 000 population	2020	2021	2021/2020 recovery
Armenia	8293,81	-7,6	3,4	-4,2
Azerbaijan	4391,66	-4,3	2,3	-2
Belarus	5210,95	-0,9	-0,4	-1,3
Georgia	14236,58	-6,1	3,5	-2,6
Moldova	6710,15	-6,96	4,5	-2,46
Ukraine	5260,25	-4,2	4	-0,2
Georgia	14236,58	-6,1	3,5	-2,6

Source: Data extracted from the World Health Organization COVID-19 database, Sept. 2021 - [WHO COVID-19 Explorer \(shinyapps.io\)](https://shinyapps.io/WHO-COVID-19-Explorer/)

emergencies associated with the COVID-19. The coping strategies of businesses and state agencies are being depleted by the unfolding economic crisis, vulnerabilities are aggravated and the impact on productive capacities and business confidence is severe.

Lesson drawn from past experiences shows that disasters aggravate deep seated weakness. The focus on SMEs is consistent with their important

role in driving the economy. According to the latest official statistics<sup>5</sup>, SMEs accounted for 99% of active enterprises in 2020, with micro enterprises representing the largest segment, 94 percent of total. Moreover, MSMEs accounted for 66% of total employment, 62% of total turnover and 60% of total value added generated by the enterprises sector. Such focus is also dictated by the SMEs limited resources, which renders them inherently vulnerable to negative shocks and changes.

5 [MSME Country Indicators - Historical Data | World Bank Group Finances](#); [Ukraine | Financing SMEs and Entrepreneurs 2020: An OECD Scoreboard | OECD iLibrary \(oecd-ilibrary.org\)](#)



Government of Armenia limited trade restriction to the minimum, implemented expansionary monetary and fiscal policies, and launched sweeping relief measures, such as credit schemes and tax deferrals, to curb unemployment and support the hardest hit sectors.

Moreover, measures as follows were insured: online publication of Health Protection measures and applicable trade related rules and customs procedures, border control continued within the context of an integrated border management system, customs and tax payments continued to be made online through the government’s online payment platform, transit traffic continued to be facilitated by cooperation arrangement anchored in regional agreement.

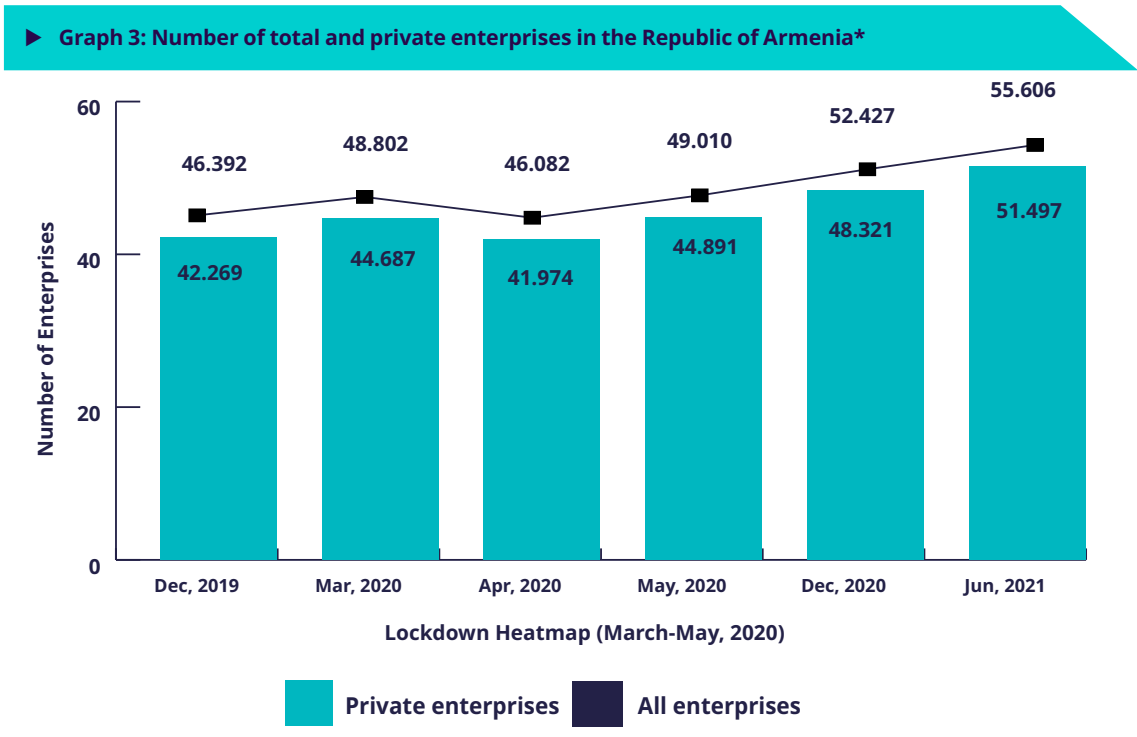
These measures mitigated the economic impact of the pandemic. However, the Government’s ability to unleash the full efficiency potential of support measures was undermined by capacity shortfalls, i.e., limited access to international transport routes and an underdeveloped transport system. These channels disrupted supply chain operations.

The economic impact of the pandemic would have been much worse had it not been for the government sweeping relief measures. Direct support in the form of subsidized loans for covering their wage bills and part of businesses operational costs including the procurement of raw materials as well as cash injections in form of grants and one-time payments were triggered.

### 1.3 The structure of Armenia’s business sector

Comparing to pre-COVID-19 situation, Armenia has a quite stable and almost positive trend with the number of enterprises (total and private). The only decline of the number of functioning enterprises is in March-April 2020.

Due to the COVID-19, the Government of the Republic of Armenia adopted lockdown decision and the measure covered mainly retail trade and services (i.e. hair salons, clothing stores, etc.), gyms, cultural and educational institutions,



Source: Data extracted from the report on Socio-Economic Situation of RA, Armstat 2020 and 2021.  
 \*According to Armstat methodology only enterprises with 1 or more employees are shown in the statistics.

► **Table 3: Private enterprises in the Republic of Armenia by firm size**

Enterprises by size, number*	Dec, 2019	Mar, 2020	Apr, 2020	May, 2020	Dec, 2020	Jun, 2021
Private enterprises (total)	42.269	44.687	41.974	44.891	48.321	51.497
From 1 to 9	36.175	38.947	36.973	39.393	42.516	45.278
From 10 to 49	5.010	4.703	4.068	4.485	4.743	5.089
From 50 to 249	902	855	767	835	873	944
250 and over	182	182	166	178	189	186
Enterprises by size, % of total*	Dec, 2019	Mar, 2020	Apr, 2020	May, 2020	Dec, 2020	Jun, 2021
Private enterprises (total)	42.269	44.687	41.974	44.891	48.321	51.497
From 1 to 9	85,6%	87,2%	88,1%	87,8%	88,0%	87,9%
From 10 to 49	11,9%	10,5%	9,7%	10,0%	9,8%	9,9%
From 50 to 249	2,1%	1,9%	1,8%	1,9%	1,8%	1,8%
250 and over	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%

\* - EU definition (micro, 1-9; small, 10-49; medium, 50-249; large, 250+) - Commission recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (2003) 1422).

Source: Data extracted from the report on Socio-Economic Situation of RA, Armstat 2020 and 2021.

shopping malls and restaurants, public transport. The lockdown worked from 16 March, with gradual mitigation up to 18 May<sup>6</sup>. In **Graph 3** the negative trend of enterprises is just during the same period as the broader lockdown accrued.

In Armenia, as in most of the countries, the vast majority of firms are micro, small and medium-sized enterprises (MSMEs). As of June 2021, it accounts for 99.8% of all functioning enterprises with one or more employees. MSME's represent 69% of the total business employment and 65% of total produced products and provided services. MSME's have 65% share of the value added in the private sector.

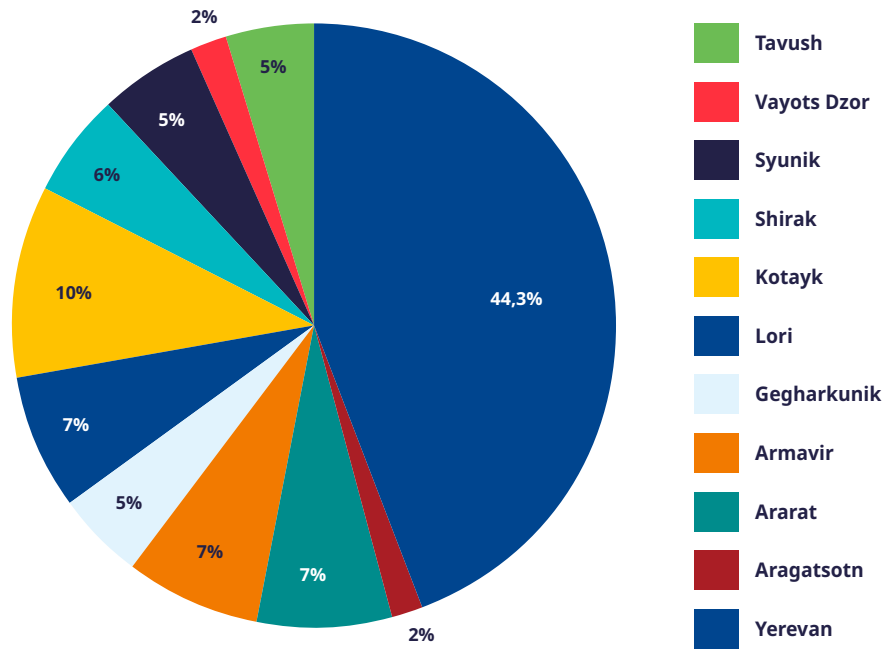
Another picture is in the backdown by firm size (**table 3**). The most temporary suspensions are occurred in small (10-49 employees) and medium

(50-249) enterprises. The negative trends are better shown in percentage distribution below.

Almost 44% of enterprises with 1 and more employees are functioning in Yerevan and the rest – in 10 regions (**Graph 4**). Most inclusive is Yerevan, with 1 enterprise to each 41 people, and after comes Kotayk, with 1 enterprise to 42 people. At the last place is Aragatsotn and Gegharkunik (near lake Sevan) with correspondingly 130 and 79 people for each enterprise.

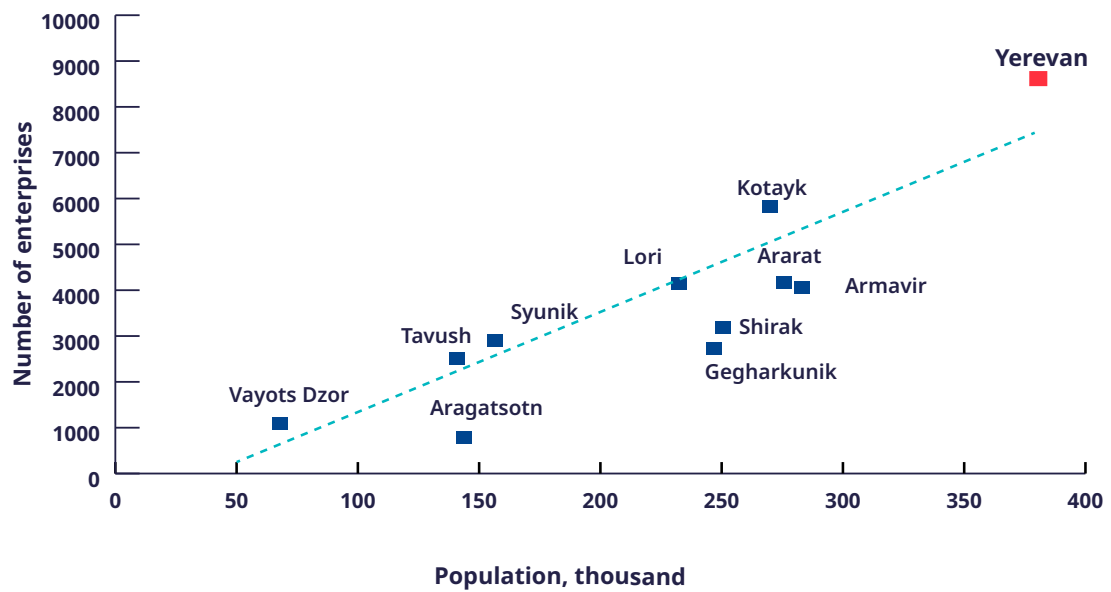
Correlation between number of population and enterprises by regions is obvious. As mentioned above, **Graph 3** shows that Yerevan, Kotayk, Lori are most concentrated with the number of enterprises and Gegharkunik and Aragatsotn have relatively low quantity.

► Graph 4: Enterprises in the Republic of Armenia, by regions, 2020



Source: Data extracted from the report on Socio-Economic Situation of RA, Armstat 2021.

► Graph 5: Enterprises and population in the Republic of Armenia, by regions\*



\* - Figures of Yerevan are decreased 3 times for the appropriate scaling.

Source: Data extracted from the report on Socio-Economic Situation of RA, Armstat 2021 and Demographic situation of RA, Armstat, 2020.

► **Table 4: MSME's in regions, by production and services, 2020**

Region	Production and services, mln AMD	Percentage, in total	Population, thousand	Production and services per capita, mln. AMD
<b>Yerevan</b>	5,236,466	75.6%	1,084	4.8
<b>Aragatsotn</b>	44,607	0.6%	125	0.4
<b>Ararat</b>	326,576	4.7%	257	1.3
<b>Armavir</b>	172,558	2.5%	264	0.7
<b>Gegharkunik</b>	52,563	0.8%	228	0.2
<b>Lori</b>	136,791	2.0%	213	0.6
<b>Kotayk</b>	353,915	5.1%	251	1.4
<b>Shirak</b>	95,079	1.4%	231	0.4
<b>Syunik</b>	418,135	6.0%	137	3.0
<b>Vayots Dzor</b>	32,511	0.5%	49	0.7
<b>Tavush</b>	54,955	0.8%	122	0.5
<b>Total/average</b>	6,924,156	100.0%	2959.7	1.3 (average)

Source: Data extracted from the report on [SME's in the Republic of Armenia, 2020 \(armstat.am\)](http://armstat.am)

By the production volumes and provided services, in the leading place is Yerevan with almost 76% in total. The smallest share comes to Vayots Dzor region where the population has the smallest number. By the production and services per capita in the region Yerevan is leading with 4.8 mln AMD per capita and the smallest number (0.2 mln. AMD) has been calculated in Gegharkunik region, after which comes Aragatsotn region.

**Table 5** shows that among defined countries, Armenia and Moldova have slightly lower polarization in micro level and is slightly better distributed among small and medium enterprises with the highest share of small (11.9%) and medium (2.1%) enterprises. All countries have almost the same level of MSME's share in total.

Almost 63% of Armenian enterprises are functioning in trade sector, from which 97% are micro enterprises with up to 9 employees. Construction enterprises are 2.4%, ITC – 3.4%, with correspondingly 75% and 84% micro enterprises. Industry enterprises form almost 11%, accounting for almost 33% of total production by enterprises and 32% of

employment. Finally, ITC sector represents 3.4% of total enterprises generating almost 5% of value added and 7% of employment.

Deepest COVID-19 sectoral impact in Armenia has been fixed in April-May 2020. As a result, industry volume in April 2020, comparing to April 2019 is 91.4%, and for May the same index is 96.1% with the highest decline in processing industry (90.6%). As for the trade, the index is one of the worst, forming 66.9% in April and 81.6% in May 2020. The retail trade same index is lower in April 2020 at 59.4%. After cancelling the lockdown restrictions and COVID-19 cases decline in February 2021, comparing to the February 2020, trade comparative index is still negative, forming 92.2% (retail trade – 88.6%). For the same period, industry volume?? is negative as well, forming 94.9%. As for the construction, the share of February 2021, comparing to the February 2020 is positive and is 101.1%.

Comparing with the selected countries, Armenia has a highest share in trade sector (62.5%) and the next is Ukraine with 53.1%. Industry share in Armenia is 10.7% and is higher from 3 countries

► Table 5: MSME's in selected countries, by size

Economy	Size Breakdown, % of all enterprises				
	Micro (1-9 employees)	Small (10-49)	Medium (50-249)	Large (250 and over)	MSMEs in total
Armenia	85.6%	11.9%	2.1%	0.4%	99.6%
Azerbaijan*	-	-	-	-	-
Belarus**	-	-	-	-	99.5%
Georgia***	98.34%	1.36%	0.3%	99.7%	
Moldova	85.1%	11.3%	2.3%	1.3%	98.7%
Ukraine	96.2%	2.9%	0.9%	0.02%	99.9%

Sources and notes: Data extracted from the following links:

Ukraine | *Financing SMEs and Entrepreneurs 2020: An OECD Scoreboard* | OECD iLibrary ([oecd-ilibrary.org](https://oecd-ilibrary.org))

\*Azerbaijan uses different MSME definition with only small and medium enterprises diversification. Small enterprises (up to 25 employees) represented 97.5% of all business entities and medium enterprises (from 26 to 125 employees) represented 2.5%. Leyla Mahmudova, *Overview of small and medium entrepreneurship in Azerbaijan*, Network Intelligence Studies, Hungary, 2019. ([seaopenresearch.eu](https://seaopenresearch.eu))

A new definition of SMEs was introduced in December 2018 (1-10 employees, 50, 250), but no data available on enterprise diversification by size.

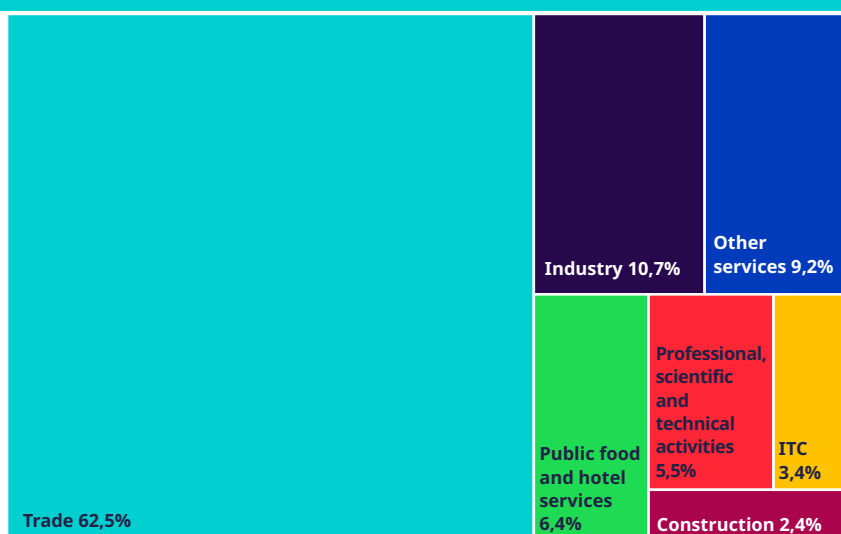
\*\* Belarus uses different MSME definition since 2010. Individual enterprises in Belarus (1-4 employees) represented 68.1% of all business entities; microenterprises (5-15 employees) 27.5%; small enterprises (16-100 employees) 3.3%; medium enterprises (101-250 employees) 0.6% and large enterprises 0.5%. All size categories of business entities, including large ones, displayed a decrease of registered companies. Belarus, *SME Policy Index: Eastern Partner Countries 2020 Assessing the Implementation of the Small Business Act for Europe* | OECD iLibrary ([oecd-ilibrary.org](https://oecd-ilibrary.org))

\*\*\* In Georgia there is no universally accepted definition of SMEs, so the data is taken from OECD scoreboard where micro and small enterprises are shown in one figure. Georgia | *Financing SMEs and Entrepreneurs 2020: An OECD Scoreboard* | OECD iLibrary ([oecd-ilibrary.org](https://oecd-ilibrary.org))

Moldova, *SME Policy Index: Eastern Partner Countries 2020: Assessing the Implementation of the Small Business Act for Europe* | OECD iLibrary ([oecd-ilibrary.org](https://oecd-ilibrary.org))

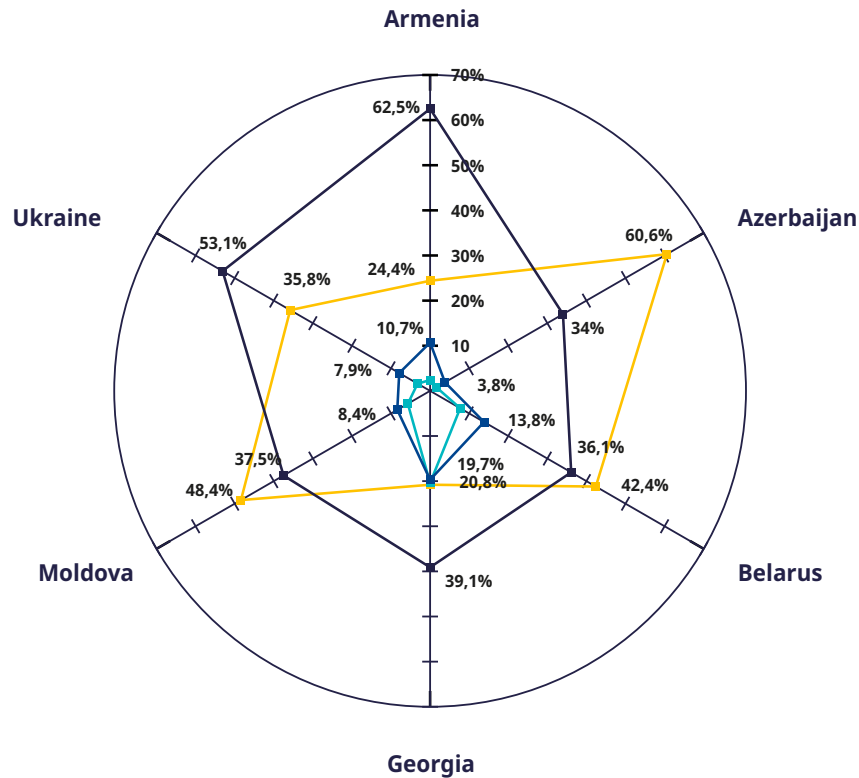
MSME Country Indicators - Historical Data | World Bank Group Finances

► Graph 6: Enterprises in the Republic of Armenia, by macro sectors, 2020



Source: Data extracted from the Socio-Economic Situation of RA report, January-April 2020, Armstat.

► Graph 6: Enterprises in selected countries, by macro sectors, 2020 (or recent available)



Source: Data extracted from:

Azerbaijan, SME Policy Index: Eastern Partner Countries 2020 : Assessing the Implementation of the Small Business Act for Europe | OECD iLibrary (oecd-ilibrary.org)

Georgia, SME Policy Index: Eastern Partner Countries 2020 : Assessing the Implementation of the Small Business Act for Europe | OECD iLibrary (oecd-ilibrary.org)

Compendium of Enterprise Statistics in Ukraine 2018 (oecd.org)

Belarus: SME Policy Index: 2020 | OECD iLibrary (oecd-ilibrary.org)

above. Armenia has one of the lowest share in construction (2.4%). In Georgia, the share of construction is the biggest and forms 20.4%. One of the COVID-19 resistance factors for Armenia and Georgia is that comparing to above countries the share of services is lowest, where COVID-19 economic impact is practically one of the strongest. In Armenian the share of services is 24.4%, in Georgia it forms 2.8%. It is important to mention that lower figures above do not necessarily mean that the sector is small, but the situation is that enterprises are bigger.

Armenian enterprises have had tangible restructuring as a result of COVID-19 negative factors and lockdown of specific spheres, infrastructures, gathering restrictions, mainly during March-May, 2020. Later on, after the lockdown quantity of

active enterprises and sectoral structuring are on the positive trend, but still not at the recovery threshold.

## 2.4 The performance of MSMEs in Armenia

### Impact of COVID-19 on productivity

Enterprise level labour productivity in Armenia, as well, is a dependent of multiple factors, including also endogenous factors, such as sector of activity, firm size, skills and capacities of the management and team, level of innovation. Due to the sectoral differences and economy of scale, larger enterprises are often more productive also in Armenia,

**► Table 6: Annual labour productivity in Armenian MSME's, by size (estimated), USD**

Sector of economy	2018 (as of 01.01.2019)				2019 (as of 01.01.2020)			
	Total	Micro and small (1-49)	Medium (50-249)	Large (250 and over)	Total	Micro and small (1-49)	Medium (50-249)	Large (250 and over)
Mining	33,041	19,892	23,044	36,089	30,157	4,656	17,577	36,048
Manufacturing	15,412	10,624	14,363	21,278	15,582	10,417	19,140	19,002
Electricity, gas	22,232	22,646	68,663	20,407	21,797	26,689	192,153	17,563
Water supply	9,273	6,015	-	9,768	9,599	4,664	4,682	10,560
Construction	21,541	23,250	23,778	10,073	18,904	19,586	20,288	9,675
Trade	11,234	9,073	14,486	20,203	11,194	12,100	10,185	7,740
Transportation	16,238	17,025	27,065	13,462	18,778	18,942	22,275	17,938
Accommodation and public food	7,579	6,354	11,573	5,293	7,110	5,399	10,559	10,373
ITC	17,347	13,535	17,286	21,688	17,124	12,973	13,292	24,144
Real estate	14,072	14,067	14,098	-	19,457	23,043	9,009	-
Scientific, professional and technical activities	8,917	9,373	7,804	2,831	8,249	7,959	10,313	2,862
Administrative services	7,806	10,282	5,563	5,271	7,480	10,405	4,288	5,228
Repair of computers and technical equipment	7,338	5,106	19,601	-	10,209	9,950	11,061	-
<b>Total</b>	<b>14,264</b>	<b>10,799</b>	<b>15,697</b>	<b>19,786</b>	<b>14,049</b>	<b>11,830</b>	<b>15,283</b>	<b>17,501</b>

Source: Data for the calculation of labour productivity by sectors extracted from SME's in the Republic of Armenia, 2020 ([armstat.am](http://armstat.am)); SME's in the Republic of Armenia, 2019 ([armstat.am](http://armstat.am))

and productivity in MSME's may be progressive from the level of ICT usage, and innovations.

There is no available official statistics on labour productivity in Armenia. For the calculation, the enterprises value added and number of persons employed by firm size and type of economic activity, has been taken. For the better fit to total employment, the number of employees for micro-enterprises is adjusted to include the number of non-employer individual enterprises. Finally, the

figures are shown in USD and annual average exchange rate of AMD/USD has been taken (**table 6**).

Firstly, the estimated total labour productivity had a slight decline by 1.5% in 2019, comparing with 2018 and it is worth to mention that the decline was more from the increase of the number of employees (13% increase) than from the increase of value added of the enterprises (10% increase).

Most productive sector of Armenian MSME's is Mining with 30,157 USD annual labour productivity in 2019. At the third place in 2019 is construction and ITC is at 6<sup>th</sup> place with 17,124 USD.

Larger firms are on average more productive than smaller ones as well in Armenia, particularly in mining, manufacturing, and ITC sectors. This typically reflects increasing returns to scale through capital-intensive production. In some cases, smaller firms can outperform larger firms, particularly in the business services sector, reflecting competitive advantages in niche, high brand or high intellectual property content activities as well as the intensive use of affordable information and communications technologies. So, the vice versa situation is when larger enterprises are less productive i.e., in scientific, professional and technical activities, transportation and administrative services sectors.

For understanding COVID-19 impact to the labour productivity in Armenia, 2021 first quarter, 2021 forecasted and 2020 figures are compared with 2019. As for the 2020 and 2021, productivity calculation value added and number of employed are not available in statistical publications, GDP and employed population figures are taken. The results are not solely connected to MSME labour productivity, but will let to do comparison to pre-COVID-19 situation. For 2021 forecast, the quarterly based dynamics of 2020 GDP and employment has been taken for the extrapolation (table 7).

Table 7 shows that the decline of productivity with AMD in 2020, comparing to 2019 is 3.7% and comparing forecasted productivity for 2021 with 2020

there is an increase by 1.6%. The result is that as in GDP growth, labour productivity also still remains below the pre COVID-19 baseline at the end of 2021. As for the figures of productivity in USD forecasted 2021 figure (12,509 USD) is even below from 2020, which is the result of exchange rate boost during the first quarter of 2021, which in any case have a tangible recovery during the second and third quarters of 2021.

For the international comparison, ILO STAT and "OECD Compendium of Productivity Indicators" sources are taken. As mentioned by ILO STAT, ILO labour productivity estimations are not based on national data, and are subject to high uncertainty. However, productivity figures for Armenia, estimated using national statistical data, are quite close to the estimations done by ILO STAT (table 7 and 8).

Based on ILO STAT figures, Armenia is at the first place with labour productivity in selected countries. Comparing with the GDP per capita, Ukraine is at the last place in above countries and Azerbaijan comes after. The low share of GDP per capita in annual labour productivity in Armenia and Azerbaijan (30.7% and 34.8%) shows that this can be as a result of comparatively higher informal economy, high unemployment, and high share of "non-enterprise backed" GDP.

Despite this high share of informal workers, most of the Government's relief measures address households whose working-age members have or have had recently a labour force status in the formal economy. The measures refer to enterprises in the formal economy with a defined history of good creditworthiness. The measures in consequence

► Table 7: Labour productivity in Armenian 2019-2021 (estimated)

	Employed population	GDP, mln AMD	Labour productivity, AMD	Labour productivity, USD
2019	1,010,425	6,551,850	6,484,251 (annual)	13,502 (annual)
2020	990,975	6,183,742	6,240,059 (annual)	12,753 (annual)
2021 first quarter)	943,800	1,284,690	1,361,189	2,595
2021 (forecasted)	988,148	6,266,821	6,341,986 (annual)	12,509 (annual)

Source: Data for the calculations extracted from Table 6 of the current report and Socio-Economic Situation of RA report, January-August 2021, Armstat



► **Table 8: Labour productivity in selected countries, annual, USD, 2019**

Country	Output per worker (GDP constant 2010 US \$) ILO modelled estimates	GDP per capita	Share of GDP per capita in labour productivity, %
Armenia	13,898	4,267	30.7
Azerbaijan	12,107	4,214	34.8
Belarus	13,209	6,411	48.5
Georgia	10,316	4,278	41.5
Moldova	7,372	4,551	61.7
Ukraine	7,371	3,726	50.5

Sources: Data extracted from [Labour productivity, ILOSTAT, 2020 database, last update on 12 Sep, 2021.](#)  
[GDP per capita \(current US\\$\) | Database \(worldbank.org\)](#)

► **Table 9: Labour productivity growth in selected countries, annual, %**

	Annual labour productivity growth (%)			
	2016	2017	2018	2019
Armenia	1,3	8,1	11,4	7,8
Azerbaijan	-4,9	-1,3	0,1	1,8
Belarus	-2,5	2,4	2,2	2,1
Georgia	4,9	4,7	7,8	5,4
Moldova	8,3	5,9	14,6	-2,4
Ukraine	3,5	3,5	3,7	3,7

Source: Data extracted from [Labour productivity database, ILOSTAT, 2020, last update on 12 Sep, 2021.](#)

are largely not directed at all to the 40% of the labour force who are in the informal economy, which are in majority in agriculture among the self-employed and sole proprietors.<sup>7</sup> There are of course operational / administrative challenges in assisting informal economy workers and enterprises, the scarcity of official records being one of them, the risk of “leakages” being another. These are daunting but not insurmountable challenges. As state in ILO studies, one approach might be to “reverse” the more common conditionality:

instead of insisting upon formal registration as a prior condition to benefit receipt, benefit receipt in the short term could precede a commitment to formalization at a future date.

Labour productivity growth shows that Armenia has the highest growth rates on average. From the other side, Armenia, Belarus, Georgia and Moldova have had tangible decrease during 2018-2019.

7 Rapid assessment of the employment impact and policy responses of the COVID-19 pandemic on Armenia, ILO, 2021.

► **Table 10: Labour productivity in selected countries, by firm size, annual, USD**

Country*	Labour productivity, annual USD		
	Micro and small (1-49 workers)	Medium (50-249 workers)	Large (250 or more workers)
Armenia	11,830	15,283	17,501
Slovenia	55,734	69,742	82,650
Latvia	31,843	48,890	57,681
Slovak Republic	38,255	56,910	75,546
Estonia	49,580	66,177	61,048

Source: Data extracted from OECD Compendium of Productivity Indicators – Productivity in SMEs and large firms ([oecd-ilibrary.org](https://oecd-ilibrary.org)). Data for Armenia is calculated and are taken from table 6 of the current report.

\* - for the countries taken into consideration in this report the data on labour productivity by firm size is missing.

For the comparison of labour productivity by firm size with other countries, OECD figures are taken into account and as several countries are absent from OECD publications, figures of Armenia are taken from the estimation results above.

**Table 10:** Labour productivity in selected countries, by firm size, annual, USD

Comparing micro and small enterprises productivity to the same figure in large ones, Armenia has a low middle position. If Armenian large enterprises have at 50% higher productivity, in Estonia the same figure is 23% and in Latvia is 81%.

#### Support to innovation

Armenia has a number of solutions to support innovation, which nevertheless is mostly targeted to the IT sector. The Enterprise Incubator Foundation is the main actor behind most of Armenia's innovation infrastructure: it has established techno parks in the country's three largest cities (with the support of the World Bank), provides business incubation services and training, and supports SMEs in developing and marketing technical innovations. More recently, two initiatives expected to increase activity in high-value manufacturing and applied sciences have been announced: 1) the "Engineering City", a 20 million USD investment to build a physical environment with research and prototyping laboratories for companies in the automotive, semiconductor, electronics and material science sectors; and 2) the "EU-TUMO Convergence Centre for Engineering and Applied

Science", 17 a EUR 25 million EU-sponsored project providing industry-led project-based STEM education along with research facilities for applied sciences and services for start-ups and small technology companies. Direct financial instruments for innovative SMEs are available, though they are predominantly donor-driven and somewhat limited in scale. In particular, the EU-funded "Innovation Matching Grant" and the "Science and Technology Entrepreneurship Program" provide SMEs with grants of up to 50,000 EUR with the objective of stimulating the rate of technology absorption, the commercialization of research ideas, and collaboration between science and the private sector.

There is no specific statistics on innovation in Armenia. The following table shows start-up companies in Armenia during 2019. Comparing to 2018 (10,790), the total number of start-up companies in 2019 are higher in 8%. Tangible part, 93% of the start-up enterprises in Armenia are starting their activities without or with up to 4 employees (**table 11**).

Source: Data extracted from SME's in the Republic of Armenia, 2020 ([armstat.am](http://armstat.am)) and SME's in the Republic of Armenia, 2019 ([armstat.am](http://armstat.am))

Armenian IT sector turnover in GDP had a decline in 2019 from 7.4% to 4.7% and in COVID-19 year the sector turnover had a growth in IT up to 5.1%.

World bank survey database figures (table 12) shows that in 2019-2020 Armenia is competitive with innovation by enterprises and has mostly

► Table 11: Number of start-up enterprises in Armenia, 2019

	Total	Without employed persons	1-4 employees	5-9 employees	10-19 employees	20 and over employees
Mining	12	1	9	1	1	-
Manufacturing	1 027	288	619	72	29	19
Electricity, gas	21	1	20	-	-	-
Water supply	21	7	11	3	-	-
Construction	314	46	212	37	15	4
Trade	6 939	4 055	2 634	172	62	16
Transportation	435	170	242	18	3	2
Accommodation and public food	1 120	355	564	130	47	24
ITC	552	136	342	49	20	5
Real estate	98	19	74	4	1	-
Scientific, professional and technical activities	698	286	376	19	11	6
Administrative services	384	120	239	16	6	3
Repair of computers and technical equipment	35	16	18	1	-	-
<b>Total</b>	<b>11 656</b>	<b>5 500</b>	<b>5 360</b>	<b>522</b>	<b>195</b>	<b>79</b>

Source: Data extracted from [SME's in the Republic of Armenia, 2020 \(armstat.am\)](https://armstat.am) and [SME's in the Republic of Armenia, 2019 \(armstat.am\)](https://armstat.am)

leading or medium places within selected countries in 4 directions from the total 6: licensed technology usage in manufacturing sector, new products and services provision in local market, firms with their own website, and enterprise R&D spending frequency.

According to Global Innovation Index 2021, with the GII global rank (input-output), Armenia is at the 4<sup>th</sup> place among selected 5 countries and with 31.4 score is at the 69<sup>st</sup> place in the world. From the other side Innovation output index is more

descriptive for understanding produced innovation only, where enterprises' role is crucial. Table 13 shows that Armenia is at 2<sup>nd</sup> place among selected countries after Ukraine only.

With international property rights index, published by the Property Rights Alliance Armenia is at level of 5.032 score in 2020, up from 4.8 score previous year, and this is a change forming 4.57%. Among observing countries (Belarus is not available in ranking) Armenia is at 3<sup>rd</sup> place, keeping after, Moldova and Ukraine<sup>8</sup>.

8 [International Property Rights Index 2020, Property Rights Alliance](https://www.propertyrightsalliance.org/)

► **Table 12: Survey on enterprise innovation in selected countries, 2019-2020**

Country	Percent of firms using technology licensed from foreign companies	Percent of firms having their own Web site	Percent of firms that introduced a new product/service
Armenia	33,7	57,5	35,5
Azerbaijan	41,7	66,2	22,9
Belarus	9,1	73,5	39,9
Georgia	11,3	51,2	43,2
Moldova	11,3	48,1	36,8
Ukraine	12,5	63,9	33,4

Country	Percent of firms whose new product/service is also new to the main market	Percent of firms that introduced a process innovation	Percent of firms that spend on R&D
Armenia	74,8	12,6	11,2
Azerbaijan	90,7	8,7	11,1
Belarus	63,5	26,6	11,4
Georgia	73,9	17	10,6
Moldova	57,7	14,8	10,4
Ukraine	61,1	13,7	9,9

Source: Data extracted from [Enterprise Surveys database, 2019-2020 - World Bank Group](#)

► **Table 13: Global Innovation Index 2021, innovation output sub-index**

Country*	Global Innovation Index		Innovation Output Sub-index	
	Ranking	Score	Ranking	Score
Armenia	69	31.4	56	26.0
Azerbaijan	80	28.4	91	17.0
Belarus	62	32.6	62	23.7
Georgia	63	32.4	74	19.9
Ukraine	49	35.6	37	31.6

Source: Data extracted from [Global Innovation Index 2021 database | Tracking Innovation through the COVID-19 Crisis](#)  
\* - Moldova is not available in *Global Innovation Index 2021*.

► **Table 14: SME policy index, 2020**

Country	Innovation policy	SME skills	Business development services
Armenia	2.96	3.26	4.00
Azerbaijan	2.83	2.62	3.27
Belarus	3.21	3.06	3.11
Georgia	3.27	4.14	4.39
Moldova	2.99	3.92	3.47
Ukraine	2.28	3.19	2.90

Source: Data extracted from [SME Policy Index: Eastern Partner Countries 2020: Assessing the Implementation of the Small Business Act for Europe](#) | en | OECD

► **Table 15: Cost of business start-up procedures (% of GNI per capita)**

Country	2020
Armenia	0.8
Azerbaijan	1.2
Belarus	0.5
Georgia	2.1
Moldova	4
Ukraine	0.5

Source: Data extracted from [Cost of business start-up procedures \(% of GNI per capita\)](#) | Data (worldbank.org)

### SME policy index

SME policy index of OECD includes SME skills, business development services and innovation policy indexes. Among observing countries, Armenia do not have very competitive place with the innovation policy index and is above only from Ukraine and Azerbaijan. As for SME skills (which can be somehow interpreted as an element of innovation performance), Armenia has higher ranking than Belarus, Ukraine and Azerbaijan. Finally, with the business development index in Armenia is at second place and is lower only from Georgia (**table 14**).

World Bank's cost of business start-up procedures index shows that Armenia has a quite good position among observed countries (**table 15**).

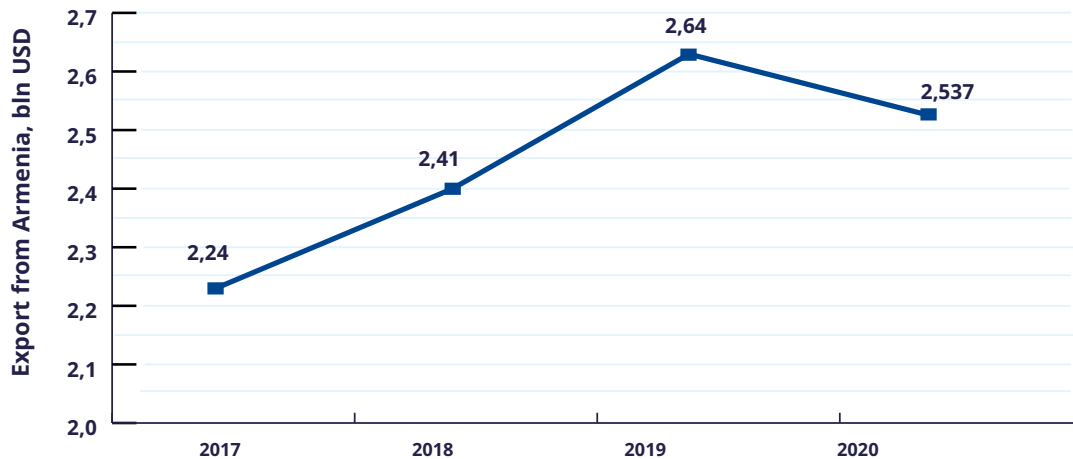
### Impact of COVID-19 on export

Exports from the Republic of Armenia has a positive trend during last years, except 2020 when COVID-19 impact brings 3.9% export decline.

Export orientation during 2020, that is the first 5 industry directions, has a slight change. All industry sectors have almost equal decrease except mining with tangible decrease. The only change of sector is planting products in 2020 instead of textile in 2019 (table 16), which is also COVID-19 specific influence.

Enterprises engaged in export reported a greater impact of COVID-19 on their business and earning potential than SMEs selling their products and services only in local market, according to the survey,

► Graph 8: Export from the Republic of Armenia, 2017-2020, bln. USD\*



Source: Data extracted from *Socio-economic condition of the RA, 2018-2021*, Armstat.

\* Data sources: *Socio- Economic Situation of RA, 2017-2020* (armstat.am)

provided by UNDP<sup>9</sup>. According to the survey results, 83% of export companies and 92% of enterprises operating both in local and foreign markets of non-agricultural products and services were negatively affected by the crisis, with 68% and 80%, respectively, mentioning a strong negative impact.

Finally, by country of destination, top 5 countries in percentage values had some internal restructuring, that is Switzerland and China increased their share in total, while Russia and Bulgaria decrease.

Among observing countries with the high-technology exports, which are products with high R&D intensity, such as in aerospace, computers, pharmaceuticals, scientific instruments, and electrical machinery, Armenia is at the leading place among all countries and has a growth in 2020 (table 18).

World bank enterprise survey database shows that Armenia is at the 2<sup>nd</sup> place with the percent of enterprises exporting at least 10% of sales, after Belarus. As for proportion of export in sales Armenia's figure is higher from Georgia, Azerbaijan and Ukraine. Armenia is at the worst place with the number of days to clear imports from customs.

According to the survey provided by UNDP<sup>10</sup> on COVID-19 impacts, access to finance is at the first place in the list of support needs. 56% of respondent enterprise told that improving access to finance is their current support need. It is worth to mention that those estimations done in 2020 have a huge influence of COVID-19 lockdowns and short-term moderate loan provision (from March - June).

In general, access to finance in Armenia is sound positive. SME policy index subindex in Armenia is one of the highest among observing countries

9 Socio-economic impact assessment of the covid-19 outbreak in Armenian communities, UNDP, 2020.

10 Socio-economic impact assessment of the covid-19 outbreak in Armenian communities, UNDP, 2020.

► **Table 16: First 5 industry export sectors in the Republic of Armenia, 2019-2020**

Industry direction of export, 2019	% in total export, 2019	Industry direction of export, 2020	% in total export, 2020
Mining	28.1%	Mining	32.5
Ready-made food	24.2%	Ready-made food	22.0
Precious and semi-precious stones, precious metals and prepared products	15.7%	Precious and semi-precious stones, precious metals and prepared products	14.4
Non-precious metals and prepared products	9.9%	Non-precious metals and prepared products	9.0
Textiles	6.3%	Planting products	5.3

Source: Data extracted from Socio-economic condition of the RA, 2018-2021, Armstat.

► **Table 17: First 5 exporting countries from the Republic of Armenia, 2019-2020**

Top five countries of export, 2019	% in total export, 2019	Top five countries of export, 2019	% in total export, 2020
Russian Federation	27.8	Russian Federation	26.8
Switzerland	17.3	Switzerland	17.9
China	7.3	China	11.4
Bulgaria	7.9	Bulgaria	5.9
Iraq	6.7	Netherlands	3.9

Source: Data extracted from Socio-economic condition of the RA, 2018-2021, Armstat.

► **Table 18: High-technology exports (% of manufactured exports)**

Country	2018	2019
Armenia	7.1	9.8
Azerbaijan	4.3	-
Belarus	4.1	4.3
Georgia	3.3	2.6
Moldova	2.5	3.0
Ukraine	5.6	-

Source: Data extracted from [High-technology exports \(% of manufactured exports\) | Data \(worldbank.org\)](#)

► **Table 19: World Bank export trade survey, 2020**

Economy	Days to clear in customs	Percent of exporting firms (at least 10% of sales)	Proportion of total sales exported, %	Days to clear imports from customs	Percent of firms identifying customs and trade regulations as a major constraint, %
Armenia	12	14.2	7.3	22.1	6.1
Azerbaijan	2.9	9	3.6	4.7	7.3
Belarus	1.4	16.9	8.4	2.9	9
Georgia	2.5	11.9	7	4.3	7.7
Moldova	2.3	12.1	6.4	2.2	13.8
Ukraine	3.9	10.5	4.2	5.9	27.3

Source: Data extracted from [Custom Query - Trade Surveys 2020 - World Bank Group](#)

► **Table 20: Access to finance subindex, WB survey, 2020**

Economy	Firms with bank account, %	Firms with a bank loan, %	Proportion of loans requiring collateral (%)	Value of collateral for a loan (% of the loan)	Percent of firms whose recent loan was rejected	Proportion of investment financed by banks, %
Armenia	91.5	40.9	71.7	207.5	2.7	14.3
Azerbaijan	94.5	16.8	77.8	198.6	10.2	0
Belarus	98.7	39.3	72.4	150.9	12.2	12.4
Georgia	93.2	43.3	80.5	194.2	12.7	19.8
Moldova	96.7	23.6	90.4	221.2	37	10.7
Ukraine	98.6	22.1	68.7	173.6	11.9	7.5

Source: Data extracted from [Custom Query - Enterprise Surveys - World Bank Group](#)

(3.81), and Armenia stands at the second place after Georgia (4.02)<sup>11</sup>.

World bank enterprise survey database shows that Armenia is the 2<sup>nd</sup> among observing countries with the enterprises proportion having bank loans, after Georgia. The proportion of loans requiring collateral is one of the smallest after Ukraine but

the value of collateral as a proportion of loan is one of the highest, after Moldova. With loan rejection proportion Armenia has the smallest proportion is also at the highest place among countries (**table 20**).

Other point banks and other creditor institutions did comprehensive actions to soften COVID-19

11 [SME Policy Index: Eastern Partner Countries 2020: Assessing the Implementation of the Small Business Act for Europe](#)  
[en | OECD](#)



negative impacts by providing loan remissions and holidays and redesigning loan repayment plans. During 2020-2021, no actual and tangible increase of credit interests are observed. Central bank implemented well designed monetary policy and supervision, banks used professional and responsible reactions and financial markets did not faced tangible shock.

## 2.5 The impact of COVID-19 crisis on Armenian MSMEs

### Policy responses

COVID-19 cases started to accelerate from early March of 2020 in Armenia. The Government acted rapidly and took decisive measures to contain the virus. Air and land travel restrictions were introduced already on March 9, followed by closure of schools and cultural institutions on March 13. A temporary state of emergency was announced on March 16, and subsequently extended four times until July 13, when it was lifted. Restrictions on self-isolation and the right to free movement as well as a close-down of public transport, shops and restaurants were introduced on March 24. On March 26, the Government allocated 150 billion AMD<sup>12</sup> (around 300 mln. USD), equal to roughly 2.2 per cent of GDP, to measures aimed at mitigating the economic and social impact of the pandemic. These measures aimed of helping small and medium sized enterprises, supporting the agriculture sector, financing low interest loans for the enterprise sector, expanding social assistance, replenishing the reserve fund and supporting structural transformation. The Government also introduced a package of 22 special programmes aimed to cushion the impact of the pandemic and support the economy from which 9 are related to enterprise support, for instance subsidized 2-3 year loans to provide short term support to affected businesses and SMEs,

direct subsidies to SMEs and businesses to help maintain their employees, grants to entrepreneurs and firm, lumpsum transfers to the vulnerable including to individuals who are unemployed after the COVID-19 outbreak, micro businesses, etc Programs are related to: cofinancing, refinancing and providing subsidies<sup>13</sup> of loans for the purpose of payrolls, taxes, duties and mandatory payments, raw materials, equipment and food trade. Other programs are about agricultural, SME, micro business, high-tech industry, start-up companies and innovation project financing, sustainable job support directions. These packages have been complemented by expansionary monetary and fiscal policy in the form of tax relief and interest rate cuts. In addition, the government temporarily increased the threshold requirement for creditor-initiated bankruptcy proceedings from AMD 1 million to 2 million in September 2020, with the aim of elevating these enterprises financial burden. The above packages helped to curb unemployment which increased by 1% year over year from 16.5% in the second quarter of 2019 to 17.5% in the second quarter of 2020. However, they placed a strain on the government's resources. The fiscal deficit increased by around 36% from AMD 63,939 million in the second quarter of 2019 to AMD 86,918 million in September 2020. The government's debt burden reached 63.5% of GDP in end 2020 up from 53.6% in 2019.<sup>14</sup>

Lockdown restrictions covered public transport, retail (i.e. hair salons, clothing stores, etc.), gyms, cultural and educational institutions, shopping malls and restaurants. These businesses were closed as of 16 March 2020. As of 13 April, the following sectors were allowed to resume activities: tobacco production, production of cement, lime, gypsum and plaster, manufacture of concrete, cement and gypsum structures, production of metal structures and their parts, construction that is near completion phase, engineering activities and related technical consultations. From midnight on 22 April, the following sectors were

12 See Annex

13 Co-financing is to address the problem of lack of collateral and improve other lending terms. Refinancing is to deal with currency-related risks and improve other lending terms. Subsidy is to tackle the interest rate problem and improve other lending terms.

14 International Monetary Fund, Armenia: <https://en.armradio.am/2021/04/22/armenias-economy-set-to-start-recovering-in-2021-imf/>

allowed to resume activities: - most manufacturing industry: most wholesale and retail trade, car and motorcycle repair, information and communication (book publishing; production of TV programmes, etc.), real estate, professional, scientific, and technical activities, administrative and ancillary services, some services (trade union activities; repair of household electronic devices, appliances, and computers; home gardening).

COVID-19 noticeably hits to enterprise closures. Firstly, according to State Revenue Committee, a total of 5,873 organizations and sole proprietors in the Armenia have temporarily suspended their activities between March 1 to May 31, 2020. This figure is higher with 41% compared to the same period of 2019<sup>15</sup>. Secondly, based on official statistics, in April 2020, only 563 legal entities and sole proprietors registered in Armenia, which is almost five times lower than in April 2019 (2,779 registrations). There is also 20 per cent decline of the same figure for March.

On 25 June 2020 Government meeting, Prime minister of Armenia announced most recent developments about contract workers who lost their job in late March-May 2020. During March-May more than 70,000 contract workers lost their job (mainly from lockdown of number of economic spheres) and this is enormous figure as it forms around 11.5 per cent of pre-pandemic total. The positive side is that during May 2020, 50,000 of mentioned jobs have been recovered. Due to this issue, the Government announced the 22<sup>nd</sup> program during mentioned meeting which is directly connected to those 20,000 former employees with a lump sum provision, equal to the minimum wage<sup>16</sup>. Currently, this figure has been recovered and as of July 2021, number of contract workers is around 656,000 and is higher from pre-COVID-19 figure in February 2020 with more than 50,000 people.

Lastly, the number of vacancies submitted by employers to the State Employment Agency in April

2020 decreased by 8.2% as compared to the same period of 2019. The number of people finding their job with the help of the Agency has decreased by 42.5% compared to the same period of 2019. Load of one free workplace within the frames of the State Employment Agency increased with 112 per cent in April 2020, comparing with April 2019.<sup>17</sup>

It can be assumed that COVID-19 related closures of companies, mentioned above, may not be polarized to MSME's or large companies as the lockdown of economic areas had a stochastic nature taking into account COVID-19 specific risks.

As a result of COVID-19, during the 2020 first quarter, the volume of construction in Armenia decreased by 12.1% as compared to the same period of the previous year, and in the second quarter - by 39.5%. Volume of activities related to real estate in 2020 increased by 4.5% in the first quarter and decreased by 30.5% in the second quarter. Wholesale and retail trade volume in 2020 first quarter increased by 1%, and in the second quarter the decrease was 19.1%. Accommodation and public catering in 2020 first quarter decreased by 9.2% in Armenia, and in the second quarter by 71.2%. The reduction of the volume of transportation services declined in 2020 and stood at 32.3%. The volume of activities of travel agencies, operators, reservation agencies, and other services in the tourism sector decreased by 77% during the first half of 2020. The sector with the least decline in the first and second quarters is culture, entertainment and leisure (respectively the decline was 0 and 13.7%). The volume of the mining sector in Armenia in 2020 in the first and second quarters increased by 20.9 and 22.4%.

As mentioned above, for COVID-19 support programs, Government of the Republic of Armenia allocated 150 billion AMD (around 300 mln. USD), equal to roughly 2.2% of GDP. The same figure in Georgia is 3.8% in GDP<sup>18</sup>.

15 How many businesses are closed in Armenia during COVID-19? News/am, 22.06.2020

16 Meeting of the Government of Armenia, 25 June 2020, [www.gov.am](http://www.gov.am).

17 Socio-economic situation in the Republic of Armenia, January-April 2020, [www.armstat.am](http://www.armstat.am)

18 [Policy Responses to COVID19 \(imf.org\)](https://www.imf.org)

According to the survey, provided by UNDP<sup>19</sup> on COVID-19 impacts, the magnitude of impact of COVID-19 on MSMEs by size show that 61.5% of micro companies find the impact strongly negative. 63.5% and 63.1% respectively accordingly small and medium sized enterprises find the impact strongly negative as well. The picture is changing for bigger companies where only 44% find the COVID-19 impact strongly negative. Another interesting finding in the survey is that the magnitude of impact of COVID-19 on SMEs by age, % becomes slightly negative moving from start-up to older enterprises.

### Adaptation measures

For a better understanding of the COVID-19 impact at enterprises in Armenia and observing countries, COVID-19 business impact World Bank Business Pulse survey database is used<sup>20</sup>. Available countries in WB Pulse from the observing ones within this report are Armenia, Croatia and Georgia<sup>21</sup>. 13 parameters are distributed in the following 3 groups:

#### Sales impact

1. Change in monthly sales compared to 1 year before, all sectors, %
2. Change in monthly sales compared to 1 year before, retail, %
3. Percentage of enterprises with decreased monthly sales, all sectors %
4. Percentage of enterprises with decreased monthly sales, retail, %

#### Enterprise reactions

1. Share of establishments that fired workers in the last 30 days
2. Share of establishments that granted leave to workers in the last 30 days
3. Share of establishments that received or expect public assistance
4. Share of firms that started or increased the use of digital platforms

#### Received support

1. Share of firms received access to credit support
2. Share of firms received cash transfer support
3. Share of firms received payments deferrals support
4. Share of firms received tax reduction or exemptions support
5. Share of firms received wage subsidies support

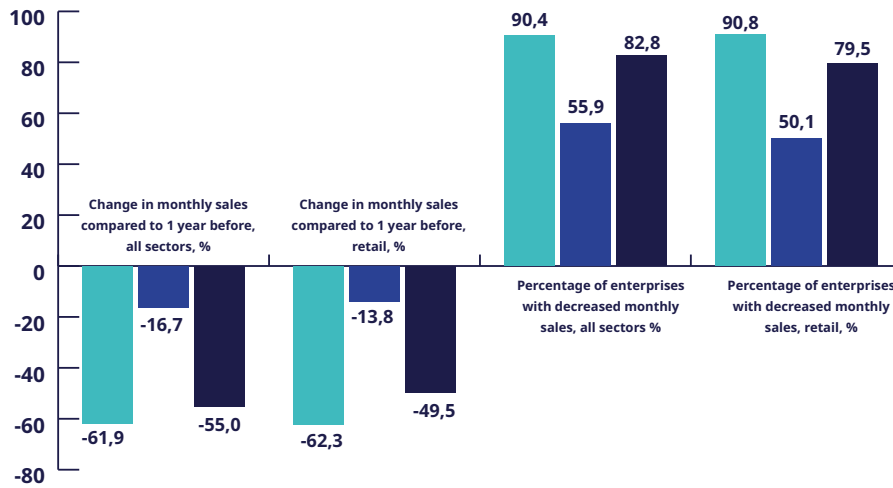
19 Socio-economic impact assessment of the COVID-19 outbreak in Armenian communities, UNDP, 2020.

20 [COVID-19 Business Pulse Survey Dashboard \(worldbank.org\)](https://www.worldbank.org/en/indicators/COVID19) - last update of the database - May 2021.

21 Figures for Azerbaijan, Moldova, Belarus and Ukraine are not available in the survey database.

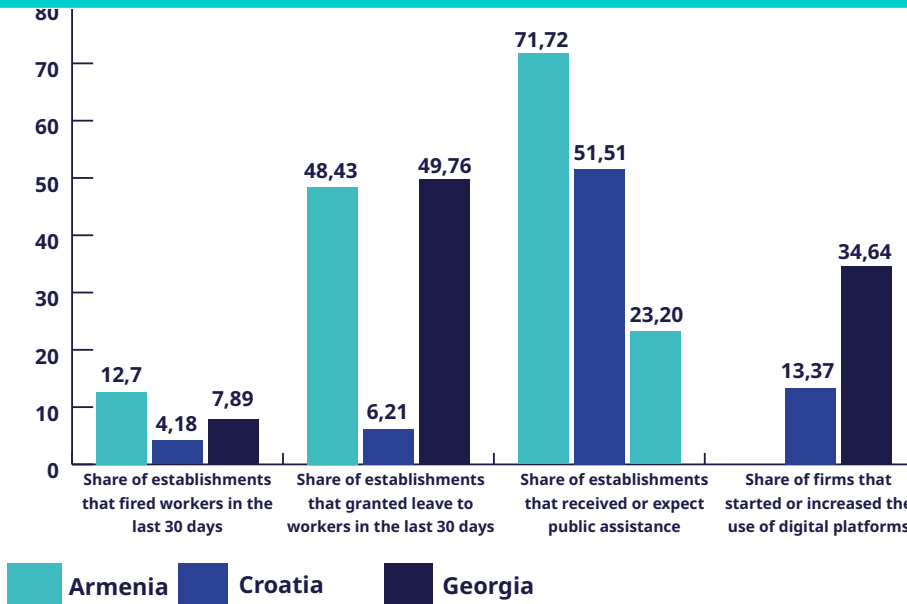
The results of analysis are as follows.

► **Graph 9: Sales Impact, World Bank Business Pulse, as of May 2021**



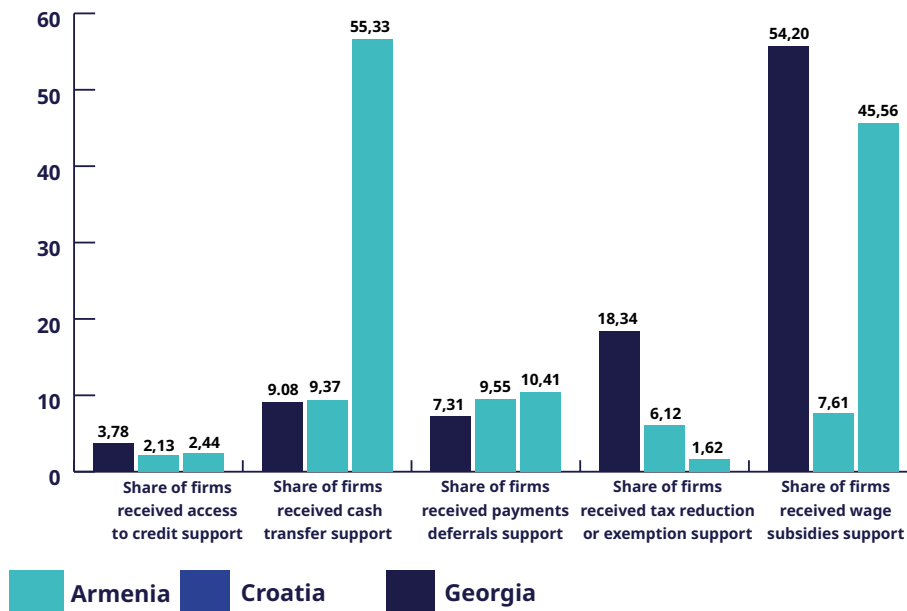
Source: Data extracted from [COVID-19 Business Pulse Survey Dashboard \(worldbank.org\)](https://www.worldbank.org/) - last update of the database - May 2021

► **Graph 10: Enterprise reactions, World Bank Business Pulse, as of May 2021**



Source: Data extracted from [COVID-19 Business Pulse Survey Dashboard \(worldbank.org\)](https://www.worldbank.org/) - last update of the database - May 2021

► **Graph 11: Enterprise reactions, World Bank Business Pulse, as of May 2021**



Source: Data extracted from [COVID-19 Business Pulse Survey Dashboard \(worldbank.org\)](https://www.worldbank.org/en/dashboards/COVID-19-Business-Pulse-Survey-Dashboard) - last update of the database - May 2021

The Graph 9 shows that Armenia has the biggest sales volume shortage comparing to Croatia and Georgia, and the shortage in retail sector is a not essentially higher. The same picture is in number of enterprises having sales shortage and, in all sectors, more than 90% of enterprises had sales shortage at annual level.

12.07% of Armenian enterprises fired workers due to COVID-19 impact, which is the biggest value in observing countries. Armenian enterprises are at the first place among Croatia and Georgia with the COVID-19 public support (71.7% of enterprises). Around 35% of Croatian enterprises started to increase digital platforms usage (data for Armenia is missing).

### Tax relief

Armenia has higher share of enterprises received any type of credit support 2.44%, than Georgia and the same figure in Croatia is not polarized higher. 55.3% of Armenian enterprises having any type of public support received cash transfer support

and with this figure Armenia is more than 5 times higher from Croatia and Georgia.

As for the tax reduction and exemption, Armenia is at the last place with 1.62%. Almost 46% of Armenian Enterprises received wage subsidies support from the government and the same figure in Georgia is 7.6%.

### Working hour

ILO STAT estimates working hours lost due to the COVID-19 crisis for the countries. This indicator represents the percentage of hours lost compared to the baseline (the latest pre-crisis quarter, i.e., the 4th quarter of 2019, seasonally adjusted).

Among observing countries, due to COVID-19, the shortage of weekly working hours in Armenia is the biggest.

Moreover, most SMEs reduced production activities under the weight of domestic demand and supply shortages. Due to the slow processing and

► **Table 21: Working hours lost due to the COVID-19 crisis, ILO modelled estimates (%), 2020**

Reference area	Working hours lost due to the COVID-19 crisis -- ILO modelled estimates (%)
Armenia	16.8
Azerbaijan	14.1
Belarus	1.3
Georgia	13.1
Moldova, Republic of	12.9
Ukraine	8.8

Source: Data extracted from [Working time - ILOSTAT](#), Last update on 17 Oct 21.

the modest appetite of customers in e-commerce, SMEs limited their engagement in e-commerce. Enterprises struggled with processing online transactions, as Armenian banks, which usually process e-payments in an efficient manner, seemed to be overwhelmed by the pandemic.

## 2.6 Recommendations

1. It is possible to theoretically conclude that as the COVID-19 cases – GDP per capita share in Armenia is one of the highest, there is a practical need to research the main factors or reason of this phenomenon. This has a high risk of heavy negative effects during the possible future waves and follow-up lockdowns.
2. Armenian enterprises have had tangible restructuring as a result of COVID-19 negative factors and lockdown of specific spheres, infrastructures, gathering restrictions, mainly during March-May, 2020. Later on, after the lockdown quantity of active enterprises, sectoral structuring is on the positive trend, but not still at the recovery threshold. The government should support start-up companies especially in prospective and innovative sectors not only with project-oriented support schemes but using permanent Government programs on innovative enterprises support with higher budget possibilities.
3. For the rest, start-up companies in other fields such as trade, tourism, etc, Government can use mandatory training programs when the company is being registered. Those trainings may give tax administration, access to finance, business ethics, financial management, innovation management topics.
4. By the produced volumes, the most vulnerable enterprises are processing industry, construction, trade, as well as in hospitality sector. Even those sectors are recovered in 2021, comparing to the lockdown, period those recoveries are not as much as pre-COVID-19 growth periods. The government should continue the support with the targets on most vulnerable sectors of Armenian enterprises.
5. Armenia is placed at low-median position with labour productivity, among observed countries with no crucial declines up to the end of 2021 and with some negative impact of COVID-19. In any case, the decline is available and one of the factors can be COVID-19. The government should design and implement “education – labour market” programs with a practical framework and solutions related to educational institutions, VET development, non-formal training and on the job training. Online business training material are practically absent in Armenia which currently is a barrier for the most jobseekers. The program must be aimed on creation of Armenian language business training materials. There is no human capital database in Armenia which will let to have big data on employers and jobseekers to make labour market development more innovative and effective.

6. COVID-19 Government support programs in general are well designed. The main issue is the small size of financing. Comparing the size with other countries and at the time tangible obstacles and issues available for Armenian enterprises, also in case of possible pandemic threats in a future, it is obvious that the volume of support is not as much to make the business be at the non-risky threshold for later on rehabilitation and development.
- 
7. Access to finance is at a positive level in Armenia, but Armenian Government needs to develop alternate start-up and enterprise financing solutions, except banking and credit organizations. FDI acceleration solutions need time and systemized framework and policies and Armenian Government is going to provide those solutions, with new 2021-2026 Government program and 2020-2024 SME Development Strategy. Except this, Armenia needs to work on the development of public credit guarantee schemes, stimulate the creation of private mutual guarantees, provide incentives to attract venture capital investors and business angels, facilitate the use of intellectual property as collateral.
- 
8. COVID-19 government programs are well designed but especially programs related to start-up support and innovation grants have small budgets comparing to the other programs and are not very comprehensively distributed by sectors. COVID-19 impact at the enterprises level, especially in those fields where classical working and sale channels are becoming old, enterprises need first of all innovative solutions and digitalisation. Hence, the Government must sharply increase innovation and digitalization COVID-19 support. COVID-19 Government programs, which assure effectiveness after piloting and can work also during post-COVID-19 situations may be transformed to the Sustainable and Innovative Entrepreneurship Support programs.
- 
9. Digital transformations of SME's are of high importance. In this regard, the government can inclusively implement grant-based programs to support SMEs in their digital transformation efforts and have a well-founded capacity for the growth in the digital economy. Government can also raise Awareness of the importance of digital transformation. Finally, the government can finance management trainings on digital skills.
- 
10. During pre-COVID-19 period online work development in Armenia had been noticeably fragmented by sectors, not very popular and mainly somehow available in IT industry. Few Armenian companies are using agile (scrum) management technique and organizing parallel online work with small and medium teams. From late March, due to lockdown, remote work relevant industry segments and workplaces greatly moved to online work which can be mostly effective for enterprises (in some sectors). Labour Code of Armenia doesn't provide regulation of online work out in regular, non-pandemic periods. The Government may think on comprehensive regulations of online work in normal conditions as well.
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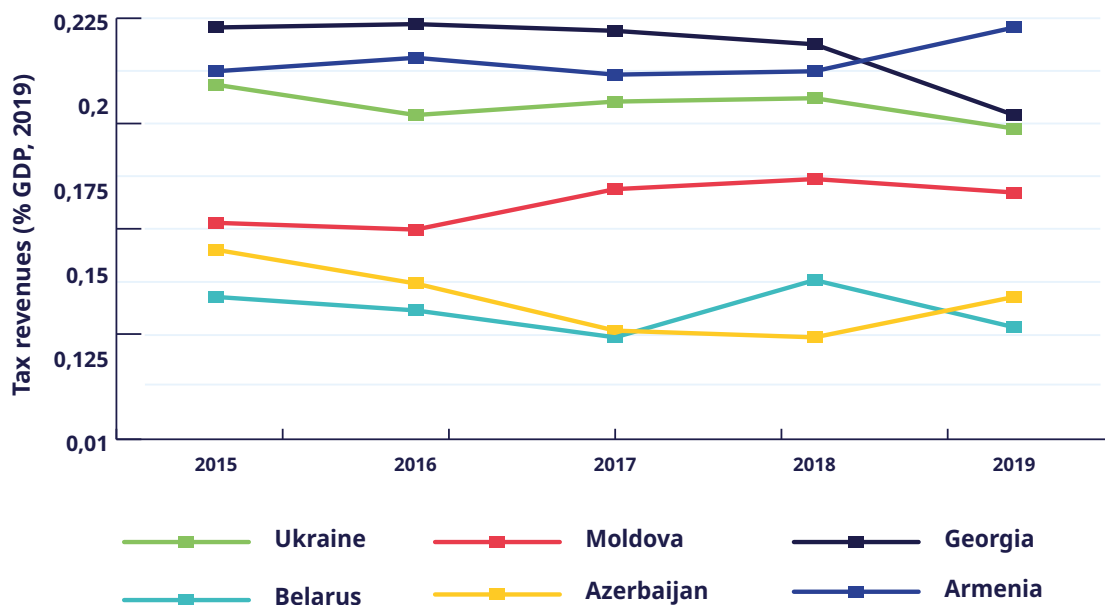
## ▶ 3. The Business Tax System in Armenia

### 3.1 Introduction

**Armenia exhibits a relatively high tax revenues-to-GDP ratio compared to the EU Eastern Partnership region.**<sup>22</sup> For a middle-income country with a nominal GDP of USD 13.79 billion (or AMD 6.57 trillion) in 2019<sup>23</sup>, the 22.2% ratio of tax revenues-to-GDP registered in Armenia in 2019 was high not only relative to countries in similar income brackets, but also greater than median levels observed across wealthier countries in Eastern Europe (e.g., the Visegrad group including the Czech Republic, Poland, Hungary, and Slovakia, amongst which the median tax revenues-to-GDP

was 18.3% in 2019). The fiscal burden in Armenia has increased in recent years, moving against what has generally occurred in the EU Eastern Partnership region (**Graph 12**). The greater fiscal burden reflects not only rising tax revenues, which grew at a rate of 8.4% per year between the end of 2015 and 2019 (slightly below the 8.9% average growth rate observed in the region), but mostly slower nominal GDP growth vis-à-vis peers, making tax revenues a larger fraction of GDP than elsewhere. According to World Bank data, pre-pandemic nominal GDP in Armenia, measured in local currency, increased at an annual growth rate of 6.8% between the end of 2015 and 2019, well below

▶ **Graph 12: Tax revenues-to-GDP ratio**



Source: World Bank Open Data

22 The Eastern Partnership region (Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine) are used throughout this section for benchmarking purposes. The measure 'EPs (ex-Armenia)' refers to the median figure amongst Eastern Partnership countries excluding Armenia.

23 On 2 November 2021, the AMD/USD exchange rate was quoted at 1 AMD equal to 0.0021 USD. This is the AMD/USD exchange rate used throughout this chapter.

► Table 22: Nominal GDP in EU Eastern Partnership countries

Nominal GDP (local currency, Mn)	2015	2016	2017	2018	2019	CAGR 15-19
Armenia (AMD)	5.043.633	5.067.294	5.564.493	6.017.035	6.569.031	6,8%
Azerbaijan (AZN)	54.380,0	60.425,2	70.337,8	80.092,0	81.896,2	10,8%
Belarus (BYN)	89.909,8	94.949,0	105.748,2	122.319,7	134.732,1	10,6%
Georgia (GEL)	33.935,0	35.836,0	40.761,6	44.599,4	49.252,7	9,8%
Moldova (MDL)	145.753,6	160.814,6	178.880,9	192.508,6	210.351,1	9,6%
Ukraine (UAH)	1.988.544,0	2.385.367,0	2.983.882,0	3.560.596,0	3.978.400,3	18,9%

Source: World Bank Open Data

the average 11.9% annual growth rate registered in the benchmark countries (Table 22). As regards individual tax contributions, value-added tax (VAT) is the main contributor to overall Armenian tax receipts, followed closely by personal income taxes (PIT) and further down the ladder by the corporate income tax (CIT).

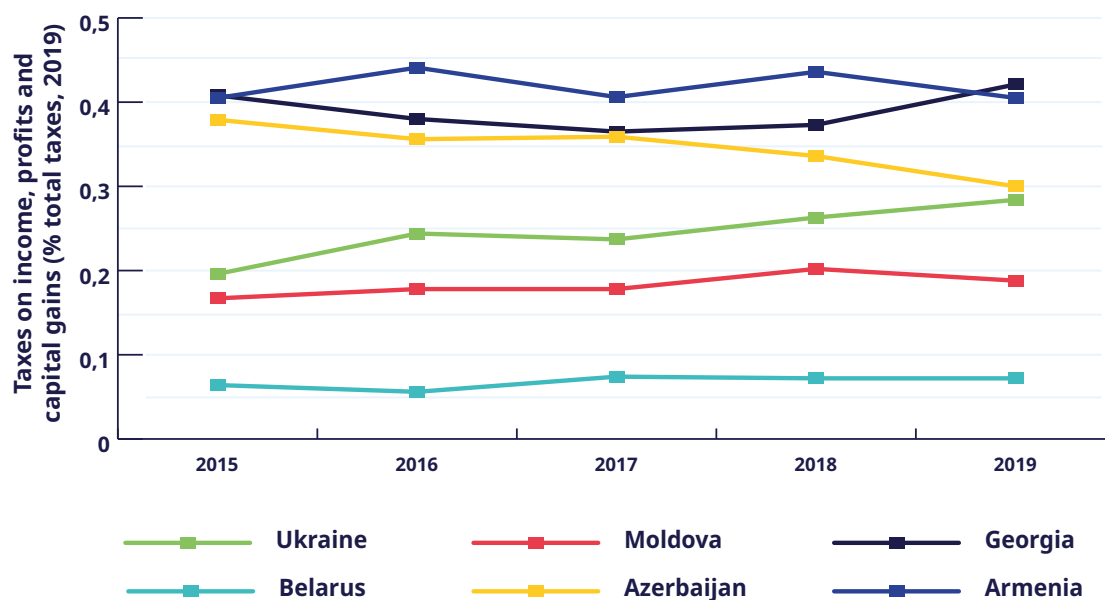
Slower nominal GDP growth in Armenia, compared to the EU Eastern Partnership region, should lead policymakers into questioning the role of taxation in spurring economic growth. Could tax policy do more to advance growth? Or is slow growth a consequence of poor policy?

**Armenia exhibits the second highest ratio of direct taxes on income and profits as a percentage of total tax revenues amongst Eastern Partnership countries.** In 2019, that ratio stood at 40.5% of total tax revenues. PIT revenues accounted for almost 75% of that total, while CIT revenues accounted for about 30%. Only Georgia experienced a greater reliance on such taxes (Graph 13), the difference being that Georgia exhibited a lower tax revenues-to-GDP ratio than Armenia's. As regards indirect taxes, VAT revenues, the main source of indirect (and overall) taxation, have stagnated just below 35% of total receipts. A greater reliance on direct taxation may have thus rendered the Armenian tax system less competitive for businesses and entrepreneurial individuals than others in the region. Yet after recent tax reforms enacted in 2019, a lesser share of taxes on income and profits in total tax revenues should be expected in Armenia moving forward. As of 2020,

the country has introduced a flat-rate structure in PIT, whereby tax rates on personal income are scheduled to decline to 20% in 2023 from 23% in 2020, bringing PIT more into line with a likewise flat-rate (18%) CIT. Already, there are signs that reforms have contributed to a rebalancing of tax revenues. This new equilibrium, following the full flattening of both personal and corporate income taxes, reflects offsetting measures also planned in 2019. These had included higher taxation on tobacco products and gambling licence fees, greater excise taxes, and an effort to reduce tax deductions overall (IMF, 2019).

**The main tax rates in Armenia are broadly in line with other countries across the EU Eastern Partnership region.** Furthermore, the flat-rate structure of income taxes, both at the personal and corporate levels, follows closely what is on display in neighbouring Georgia, which should act as a disincentive against growth obstacles. As to the level of tax rates, reports about the Armenian business environment had previously highlighted concerns about a high tax burden (ILO, 2016). Yet now, from a business point of view, the current tax rate on corporate profits is equal to the median rate observed elsewhere in the region, and so is the VAT (Table 23). Moreover, the VAT framework also includes the highest minimum mandatory registration threshold amongst peer countries (and one of the world's highest), an additional boon for small-sized businesses that are ill-equipped to deal with the tax's administrative complexity. Indeed, a previously scheduled reduction in the VAT mandatory registration threshold was briefly introduced

► Graph 13: Taxes on income, profits, and capital gains (% of total taxes)



Source: World Bank Open Data

► Table 23: Main Headline Tax Rates (2021) in Eastern Partnership Countries

Main Taxes: Headline Rates	Azerbaijan	Belarus	Georgia	Moldova	Ukraine	EPs (ex-Armenia)	Armenia
Personal income tax	25%	13%	20%	12%	18%	18%	22%
Corporate income tax	20%	18%	15%	12%	18%	18%	18%
Value-added tax	18%	20%	18%	20%	20%	20%	20%

Source: PwC Worldwide Summaries

in 2019 before being effectively cancelled in 2020 when new tax reforms were last announced. Personal income taxes, on the other hand, remain on the upper bound of rate levels encountered across Eastern Partnership countries, even after the announced changes running until 2023. Only Azerbaijan taxes individual income at a higher rate. The challenge affecting tax policy in Armenia is therefore not the general level of tax rates, but tax administration, highlighting a need for simplification and a broad-based approach to taxation.

**Armenia's tax system suffers from a narrow base of taxation.** This conclusion has also been asserted in previous assessments of Armenian taxation (World Bank, 2019; IMF, 2021a), and relates to the number of tax exemptions allowed under the tax code as well as challenges in tackling evasion. Tax expenditures in Armenia amounted to AMD 442.26 billion in 2019 – 6.7% of GDP and 30.3% of tax revenues, significantly above reported world averages of 3.6% and 23.2% (GTED, 2021). A narrow tax base, even if based on low rates, may result in intensified tax pressure on a

► **Table 23: Main Headline Tax Rates (2021) in Eastern Partnership Countries**

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Corporate income tax	20%	18%	15%	12%	18%	18%	18%
Value-added tax	18%	20%	18%	20%	20%	20%	20%

Source: PwC Worldwide Summaries

► **Table 24: Tax capacity and tax effort in Eastern Partnership countries**

Tax performance (2018)	Azerbaijan	Belarus	Georgia	Moldova	Ukraine	EPs (ex-Armenia)	Armenia
Tax capacity	n.a.	38,45	39,51	35,05	34,49	36,75	34,36
Tax effort	n.a.	0,67	0,59	0,57	0,81	0,63	0,60

Source: Collecting Taxes Database 2020-2021 (USAID)

limited number of economic agents. Such an environment exposes compliant economic agents to unruly competition from non-compliant ones, eroding incentives for compliance and limiting the scope for increased equity in tax policy. According to USAID (2021) statistics, Armenia's tax capacity (i.e., the maximum tax revenues-to-GDP ratio that could be collected based on the country's level of socio-economic development) stood just below 35% of GDP in 2018. That was the lowest tax capacity reported by USAID amongst the Eastern Partnership region (Table 24), suggesting a structural challenge in dealing with higher taxation vis-à-vis peer countries. Data also indicated that the tax effort (meaning the ratio of actual tax revenues to the estimated tax capacity) in Armenia was lower than median levels in the region, implying that tax revenues are likely shouldered by a narrower base of taxpayers.

**VAT accounts for the bulk of tax expenditures and foregone revenues.** In 2019, reported VAT expenditures amounted to AMD 348.78 billion or 5.3% of GDP (GTED, 2021). There are multiple domains in which VAT exemptions apply in Armenia, including the following: agriculture; healthcare; education; finance and insurance; casinos and online gaming; sales of gold and precious stones;

amongst others. As a result, Armenia is trailing the Eastern Partnership countries on all accounts of VAT revenue productivity (Table 25). VAT collections, as measured by the VAT efficiency ratio, are barely over a third of potential revenues. And tax evasion is seemingly still an issue. In fact, whilst many recommendations have stressed the need for better compliance and taxpayer monitoring under the VAT framework, existing data do not reflect tangible improvement over the years. According to the USAID's Collecting Taxes Database 2020-2021, the Armenian VAT gross compliance ratio (i.e., the ratio of actual VAT collections in a country relative to the potential revenues derived from applying the standard VAT rate to private consumption expenditure) was only 46% in 2018. A decade earlier, in 2008, it had been 59%. At the same time, CIT revenue productivity is also uninspiring, although a lower CIT productivity level is also reflective of the existing preferential tax regimes for micro, small, and medium-sized enterprises (MSMEs), which eat into potential CIT revenues.

**Tax revenues have grown, albeit at a slower rate than observed elsewhere.** Between 2015 and 2019, tax revenues in the Eastern Partnership countries (bar Armenia) increased at a median

► **Table 25: VAT and CIT revenue productivity**

Tax revenue productivity (2018)	Azerbaijan	Belarus	Georgia	Moldova	Ukraine	EPs (ex-Armenia)	Armenia
VAT efficiency ratio	0,30	0,43	0,55	0,49	0,53	0,49	0,36
VAT C-efficiency ratio	0,46	0,62	0,67	0,49	0,58	0,58	0,40
VAT gross compliance ratio	0,55	0,81	0,8	0,58	0,76	0,76	0,46
CIT revenue productivity	0,16	0,16	0,11	0,23	0,17	0,16	0,14

Source: *Collecting Taxes Database 2020-2021 (USAID)*

► **Table 26: Tax revenue growth in Eastern Partnership countries**

Tax revenues (local currency, Mn)	2015	2016	2017	2018	2019	CAGR 15-19
Armenia (AMD)	1.055.694	1.078.187	1.156.338	1.255.761	1.458.190	8,4%
Azerbaijan (AZN)	8.485,0	8.795,2	9.259,3	10.389,0	11.644,7	8,2%
Belarus (BYN)	12.743,0	13.091,8	13.767,4	17.947,4	17.921,4	8,9%
Georgia (GEL)	7.549,6	7.986,8	8.991,3	9.695,9	9.665,6	6,4%
Moldova (MDL)	23.905,4	26.125,6	31.201,5	34.057,9	36.417,2	11,1%
Ukraine (UAH)	406.684,4	468.250,4	597.806,6	717.135,7	763.468,5	17,1%
EPs (ex-Armenia)						8,9%

Source: *World Bank Open Data*

average annual growth rate of 8.9% (Table 26). In Armenia the tax revenue growth rate was 8.4% per year, lagging regional peers slightly (Table 27). Growth rates in Armenian taxation have been highest in excise taxes, reflecting a shift in policy towards taxes on goods. Excise taxes increased to 8.9% of total tax revenues in 2020 from 4.6% in 2015. Rising excise taxes may, however, raise issues with the business community, as has happened in neighbouring Georgia where a similar pattern has also arisen to the discontent of businesses (Bukia, 2019). The environmental tax's contribution to total tax revenues has also increased,

although it remains a minor tax. VAT, on the other hand, has lost relevance, despite remaining the most significant source of Armenian tax revenue. VAT regulation in Armenia is likely troubled by being at the crossroads of two distinct regulatory frameworks. On one hand, Armenia is bound to harmonise tax regulations with the EU, in the spirit of its EU Partnership Agreement, made effective in 2021. But on the other hand, since 2015 the country is also a member of the Eurasia Economic Union, which is itself devising common rules for VAT collection (in addition to the common customs board). As regards taxes on income, the PIT

**► Table 27: Central-level Government tax revenues in Armenia.**

Tax revenues (AMD, Mn)	2015	2016	2017	2018	2019	2020	Avg 15-20	CAGR 15-19	CAGR 15-20
VAT	423.934	391.088	408.784	438.219	474.377	471.588		2,9%	2,2%
VAT (% total)	39,8%	36,3%	35,3%	34,8%	32,4%	34,0%	35,4%		
Personal income tax (PIT)	320.221	332.779	341.227	356.639	410.348	411.165		6,4%	5,1%
PIT (% total)	30,0%	30,9%	29,5%	28,3%	28,0%	29,7%	29,4%		
Corporate income tax (CIT)	103.660	127.187	109.977	170.087	181.266	148.763		15,0%	7,5%
CIT (% total)	9,7%	11,8%	9,5%	13,5%	12,4%	10,7%	11,3%		
Excise tax	48.989	59.745	82.325	108.962	127.535	123.556		27,0%	20,3%
Excise tax (% total)	4,6%	5,5%	7,1%	8,7%	8,7%	8,9%	7,3%		
Customs duties	61.488	55.429	72.562	80.236	95.147	68.261		11,5%	2,1%
Customs duties (% total)	5,8%	5,1%	6,3%	6,4%	6,5%	4,9%	5,8%		
Environmental tax	31.256	27.381	40.118	54.249	58.262	53.051		16,8%	11,2%
Environmental tax (% total)	2,9%	2,5%	3,5%	4,3%	4,0%	3,8%	3,5%		
Turnover tax	11.859	15.260	18.291	21.339	28.998	26.599		25,0%	17,5%
Turnover tax (% total)	1,1%	1,4%	1,6%	1,7%	2,0%	1,9%	1,6%		
Other taxes and fees	64.239	69.427	84.795	28.389	88.368	82.215		8,3%	5,1%
Other taxes and fees (% total)	6,0%	6,4%	7,3%	2,3%	6,0%	5,9%	5,7%		
<b>TOTAL</b>	<b>1.065.644</b>	<b>1.078.294</b>	<b>1.158.078</b>	<b>1.258.121</b>	<b>1.464.300</b>	<b>1.385.199</b>		<b>8,3%</b>	<b>5,4%</b>

Source: Collected by the author from the State Revenue Committee

has grown steadily. And CIT, known as the profit tax, has also grown at reasonably high rates, in complementarity of the turnover tax, available to smaller businesses under Armenian preferential tax regimes for MSMEs. The turnover tax has indeed outpaced CIT.

**As elsewhere during 2020, tax revenues in Armenia were also affected by the Covid-19 pandemic.** The decrease in revenues in 2020 was observed across the board, except in personal income tax revenues which remained steady.

Note: PIT figures include mandatory pension insurance payments.

**Armenia is expected to remain fiscally constrained in the medium-term.** In 2020, the fiscal deficit reached 5.5% of GDP, and central Government debt as a percentage of GDP increased to 63.5% (IMF, 2021a). Public debt is therefore above the short-and-medium-term levels envisaged by the Government, levels which sit at 60% and 50% of GDP, respectively. What's more, public debt is projected to increase to an even higher level by the end of 2021. In coming years, the pressure will likely be on closing the fiscal gap and reducing public indebtedness. Already, limited fiscal space has constrained Armenia in her ability to cope with the Covid-19 pandemic. According to the IMF's fiscal monitor database (IMF, 2021b), designed to track countries' fiscal responses to Covid-19 since January 2020, Armenia's

fiscal response was the weakest of all Eastern Partnership countries: only 1.6% of GDP (as of September 27<sup>th</sup>, 2021) compared to a median 3.5% of GDP in benchmark countries. The Government's programmes in cushioning against the adverse economic and social effects of the pandemic have made use of grants and lump-sum payments to impacted economic agents. However, as regards tax measures, governmental action has focused on administrative measures such as reducing penalties for overdue tax liabilities or delaying enforcement actions against tax debtors (Juhász, 2020).

**Tax complexity is seemingly a characteristic trait in Armenia's system of taxation.** The country's tax code, under article 6, establishes the existence of state taxes (including VAT, excise tax, profit tax, income tax, environmental tax, road tax, and turnover tax), as well as local taxes (i.e., immovable property tax, and vehicle property tax). In addition, under article 7, Armenia's tax code also establishes state fees (including state duty, payment for the use of natural resources, welfare payments, radio permits, mandatory regulatory payments, and pension fees) and still further local fees (i.e., local duties, and local payments). Understandably, the [list of tax and administrative payments](#) is extremely long. And unsurprisingly, the administrative burden of taxes has been flagged by local interviewees as a long-standing concern. Complexity breeds instability, and frequently results in uncertainty stemming from the inconsistent and unpredictable treatment of taxes by public authorities (Devereux, 2016). Moreover, most businesses are not in the job of regulatory arbitrage, nor do they have the resources to entertain such endeavours neither to spend on unnecessary compliance costs. Indeed, it has been found that tax-related uncertainty is correlated with declining business investment (Gulen and Ion, 2015). Streamlining the tax structure and simplifying administration should thus be on the leading end of policymakers' reform agenda.

## 3.2 The General Tax System and How It Affects Taxpayers

**The existing tax code in Armenia was approved in October 2016 and made effective in January 2018.** The tax code has since undergone

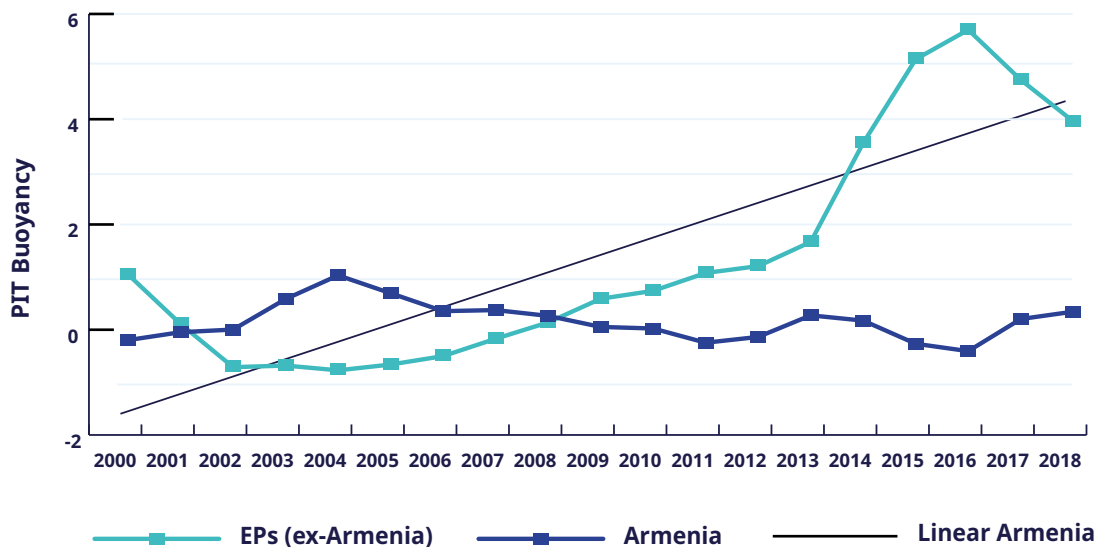
multiple amendments. As regards the most relevant Armenian institutions in the domain of taxation, these are the Ministry of Finance and the State Revenue Committee, the country's tax service and customs agency. This section contains a description of the main taxes encountered in Armenia, amongst those that are related to business and entrepreneurial activities, as well as the main features of tax administration.

### 3.2.1 Personal income taxation

**Armenia applies a 22% flat tax on personal income earned worldwide by resident taxpayers, and on non-residents earning income from activities exclusively conducted within the country.** A resident is a natural person who has spent 183 days or more in the territory of Armenia during a tax year, or whose centre of vital interests is located within the country. The 22% statutory rate on salary income in Armenia is above the median 18% personal income tax (PIT) observed in the other Eastern Partnership countries. Yet following the reform that flattened the tax's structure, the tax rate is scheduled to decrease to 20% in 2023. Furthermore, there is a reduced 10% PIT rate for individuals employed by businesses eligible for preferential tax benefits applying to firms in the Information and Technology sector (see section 3). Moreover, dividend incomes received by both residents and non-residents are taxed at 5%, while interest income (bar from Government securities) as well as royalties are taxed at 10%. Rental incomes are also taxed at 10%, except for rental incomes exceeding AMD 60 million which are subject to a 20% marginal tax rate on the amounts exceeding that threshold. Capital gains tax is due on property sales, whereby a 10% rate applies to surplus income resulting from property sold by individuals, but that does not apply on sales of stocks, equity-like investments (monetary or in-kind), and investment securities as long as sales are conducted following three years from acquisition. Nonetheless, foreign exchange transactions remain subject to capital gains tax. And surplus incomes resulting from short-term sales of cars (within 365 days from acquisition) used in entrepreneurial activities are also taxed, at a rate of 1% subject to a minimum determined by vehicle horsepower. Personal income is subject to payment at the source. Yet withholding by tax agents



► Graph 14: PIT buoyancy in Armenia relative to Eastern Partnership countries.



Source: USAID (2021), *Collecting Taxes Database 2020-21*.

is not always mandatory. There are no net wealth nor net worth taxes in Armenia.

**Personal income tax credits and exemptions are widely available under the tax code.** Under article 147, the tax code establishes the existence of about 40 different categories of non-taxable income and/or income tax deductions. The list includes examples such as: social benefits received by individuals (bar temporary incapacity benefits and maternal leave); pension incomes and voluntary pension contributions; monetary and in-kind compensations to military servicemen; lump-sum feeds received by family members of deceased servicemen; alimonies and donation-related incomes; gifts and inheritances; scholarships; indemnities; sports' prizes; state prizes; representation expenses incurred in the realm of employment contracts; incomes resulting from land sales (irrespective of the designated purpose of the land); amongst many others. Tax refunds are also applicable to mortgage interest expenses borne by individuals, student tuition fees, and re-invested dividends in share (or equity-like) capital. While some of these tax expenditures are relatively minor, others allow for sizeable reductions of taxable income. Furthermore, Armenia's tax code also establishes exemptions for agricultural activities

and investment incomes. In the case of agricultural activities, non-taxable income includes earnings arising from the sale of final or intermediate consumption products (produced through biological processing of animals and plants). And as regards investment incomes, those resulting from state-issued financial instruments are not taxable, with the same principle applying to income from investment funds and market-listed securities (bar bank-issued debt instruments). Yet despite plentiful exemptions, PIT collection has improved in real terms (Graph 14).

Methodological note: the tax buoyancy indicator measures the responsiveness of changes in tax revenues as a percentage of GDP to changes in real GDP measured at constant prices (the base year is 2010).

**Social security contributions in Armenia have undergone structural change over the past decade.** Armenia has gradually evolved from a system built on mandatory social contributions, covering social assistance and pension insurance, to one where social assistance is paid for by regular taxes and pension insurance is supported by fully funded individual pension accounts. All employees are therefore now required to pay



into their individual pension accounts, with employers acting simply as withholding agents and the Government topping-up individual accounts with additional contributions. Self-employed people may also join the scheme voluntarily. At the time of this writing, employees earning less than AMD 500 000 per month are required to pay 3.5% of monthly gross income into their individual accounts, whereas those earning more than AMD 500 000 are required to pay 10% of gross monthly income (with the 10% rate applying on a maximum AMD 1.02 million base threshold minus a fixed deduction of AMD 32.500). Self-employed people, on their part, pay 5% on an annual base threshold of up to AMD 6 million (i.e., 12 times the gross monthly income threshold of AMD 500.000) or, if above, 10% subject to a minimum of AMD 300.000. As regards Government contributions, public coffers currently complement individual accounts at the rate of 6.5% of gross monthly income on a monthly maximum base threshold of AMD 500.000. By January 1<sup>st</sup>, 2023, contributions made by employees are expected to rise to 5% of gross monthly income, matching those of the self-employed, with the public purse contributing an equal 5% rate subject to base thresholds.

### 3.2.2 Corporate income taxation

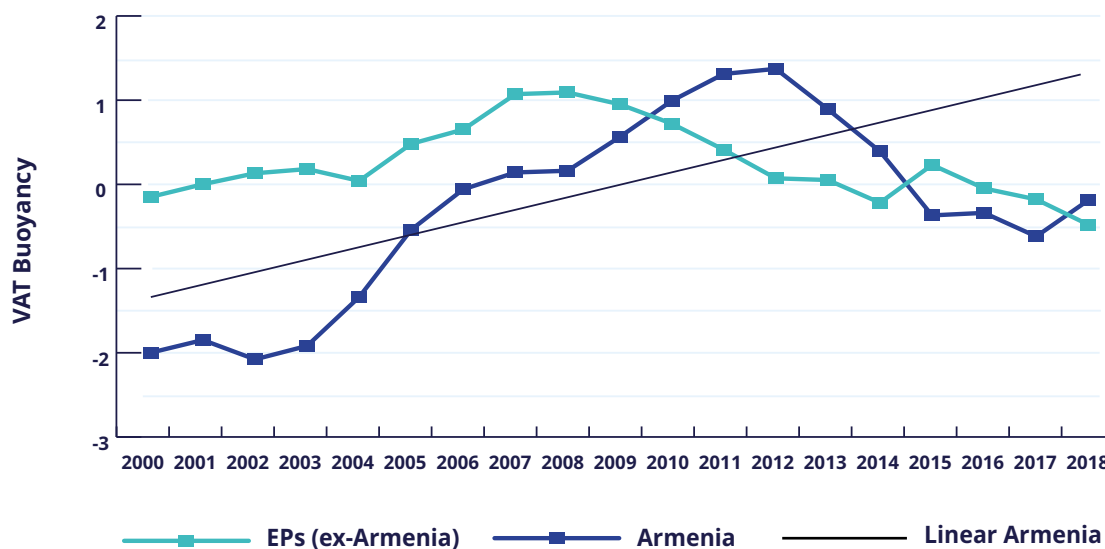
**Armenia applies an 18% flat tax on corporate profits.** The profit tax, as the corporate income tax (CIT) is known under Armenia's tax code, is paid by resident organisations, non-resident organisations or non-resident individuals operating in the country through permanent establishments, as well as by individual entrepreneurs, notaries, and investment funds (bar pension and guarantee funds). The 18% rate is at par with the median headline CIT rate in the Eastern Partnership region. The CIT is levied on a standard base of taxable profit equal to gross income minus allowed deductions. Certain activities though are exempt. For example, specific segments of agricultural production are exempt from the profit tax until 2024, having represented in 2019 a tax expenditure of AMD 4 billion (GTED, 2021). Business incomes obtained through free economic zones located in Armenia are also exempt from the profit tax (see section 3). And market-niche operators specifically addressed by the tax code, such as hand-carpet makers or licensed technology start-ups, are equally exempt. Furthermore, the profit tax is

not universally applicable to businesses with sales revenues below AMD 115 million, to whom preferential MSME tax regimes may apply (see section 3). Certain transactions are not included in the taxable income base for CIT either. Examples of items not considered as business income include the re-evaluation of company assets, capital gains obtained through equity-like offerings or repurchases valued over book value, incomes received from investment funds, as well as other more exotic items such as incomes resulting from space exploration-related activities until December 31<sup>st</sup>, 2030. In addition, existing deductions also reduce taxable income.

#### **Deductions under Armenia's profit tax are diverse and subject to different restrictions.**

Undocumented expenses are limited to AMD 3 million per month. Representation expenses are capped at 0.5% of annual gross income, or otherwise AMD 5 million. Travel expenses associated with activities conducted outside of Armenia benefit from a deduction limit of 5% of annual gross income, or 80% of sales turnover per customer contract. Acquired management services are capped at 2% of annual gross income. And companies executing business plans approved by the Government may deduct salaries associated with new jobs creation up to 30% of the annual tax liability, during five years. Interest expenses, as usually occurs worldwide, are also deductible. However, debt service in Armenia must be assessed per each credit transaction, and interest expenses arising from an interest rate greater than two times the central bank's so-called settlement interest rate are not deductible. Interest on non-bank borrowings may also be expensed by businesses up to an amount equal to twice the value of firm total equity (i.e., equity being the difference between total assets and total liabilities). Lease expenses may be considered for deduction as well. As regards capital expenses, depreciation schedules for fixed assets vary between 1 and 20 years, establishing a floor per type of fixed asset. Intangible assets are depreciated according to expectations regarding the potential use of the assets, or otherwise during a minimum ten-year period. Investments in scientific research and applied science projects may be fully depreciated within the year they are made, subject to certain limitations. And dividends received by resident profit taxpayers are also excluded from taxable income.

► Graph 15: CIT buoyancy in Armenia relative to Eastern Partnership countries



Source: USAID (2021), *Collecting Taxes Database 2020-21*.

### Deductible losses are another feature of the Armenian profit tax.

The tax code differentiates between losses caused by natural disasters or accidents, on one hand, and qualitative or technological losses, on the other. As regards the latter group, and specifically on qualitative losses (i.e., obsolete goods, unfavoured by consumers and/or regulation), these may be deducted up to 1% of annual gross income. Unpaid customer debts are also deductible within certain limits if accompanied by the creation of special bad debt reserves. Charitable activities are contemplated in the tax code as well, whereby contributed deeds are deductible up to a value of 0.25% of annual gross income. Lastly, profit taxpayers can carry-forward net operating losses five years into the future. There is no group taxation policy in Armenia, and transfer pricing regulations were only introduced in 2020. These currently apply to businesses conducting intra-group transactions of at least AMD 200 million. Overall, the policy design of Armenia's CIT is overly prescriptive, with plenty of cross-references and caveats between different articles of the tax code, thus laying the ground for a higher time to complete, file, and pay the tax. (A high time to pay CIT in Armenia, compared to other Eastern Partnership countries, has been an undesired hallmark of the country's standing in the World

Bank's Doing Business reports over the years.) This inherent complexity has led to a declining and recently negative CIT tax buoyancy in Armenia, suggesting that profit tax revenues are no longer a proxy of the general economy, despite rising, yet highly volatile, nominal profit tax revenues (Graph 15). According to local interviewees, the profit tax is prone to elision (i.e., operating within the margin of the law and in-between existing loopholes) by sophisticated firms, aiming for tax optimization.

Methodological note: the tax buoyancy indicator measures the responsiveness of changes in tax revenues as a percentage of GDP to changes in real GDP measured at constant prices (the base year is 2010).

**The profit tax in Armenia is calculated annually, yet it is paid in advance quarterly instalments.** The reporting period is the calendar year, and annual CIT filings must be reported online by April 20 the year after. Profit taxpayers are then required to pay a quarterly CIT advance equal to the lowest amount of the following two: 20% of the previous year's tax liability, or 2% of the previous quarter's gross income. Tax authorities may initiate legal proceedings claiming unpaid tax liabilities for a period of up to four years following

each tax year. The headline CIT rate is 18% for non-financial enterprises, which is levied on taxable income, whereas for investment funds the applicable rate is 0.01% levied on net assets. A special provision is also available for export-focused businesses under the Government's export promotion policy. Thus, qualifying firms exporting at least AMD 40 billion are taxed at a 5% reduced rate, while those exporting at least AMD 50 billion are levied at only 2%. On the other hand, a zero-rate CIT remains available to licensed businesses within the Information and Technology (IT) sector until 2022, albeit only for businesses with up to 30 employees (see section 3). Profit taxpayers are obliged to withhold incomes paid to non-resident organisations or individuals without a permanent establishment in Armenia. Withholding thus applies to dividend, income, and royalty payments conducted by resident businesses to foreign entities. For non-resident entities based in countries not engaged with Armenia through tax treaties, dividends are withheld at a 5% rate, while a 10% withholding rate applies to interest and royalties. On the other hand, for tax treaty countries, withholding rates vary widely. In the case of Russian recipients, the applicable rates are 5-10% for dividends (depending on the level of equity ownership), 10% for interest, and nil for royalties.

### 3.2.3 Value-added tax

**The standard VAT rate in Armenia is 20% and the mandatory registration threshold is set at AMD 115 million.** The VAT rate is exactly in line with the median level observed in other Eastern Partnership countries. Yet the minimum threshold for mandatory registration is significantly above the median level encountered in benchmark countries (Table 28). In 2019 that level was briefly lowered to AMD 58.35 million before being reversed back to its current AMD 115 million standing by 2020 (IMF, 2020). The level for mandatory VAT registration is controversial in Armenia. Some interviewees viewed it as too high, while others as still rather low. In 2019, the tax expenditure directly associated with the VAT threshold amounted to AMD 21.33 billion or 0.3% of GDP, while the indirect effect imposed by the threshold onto the profit tax reached AMD 14.22 billion or 0.2% of GDP (GTED, 2021). (Note: In Armenia, the mandatory registration threshold for VAT coincides with the level of sales revenues above which all businesses are also

mandated to comply with the profit tax. The higher the threshold the lesser the number of profit taxpayers.) Tax expenditures associated with VAT are related not only to the threshold, but also to the many exceptions the tax allows for. Multiple deductions and exemptions apply to agriculture, healthcare, education, the financial sector, and many others including casinos and online gaming. Overall, the total tax expenditure originated by VAT in 2019 was AMD 348.47 billion, or 5.3% of GDP and 80% of all tax expenditures during that year (Table 29).

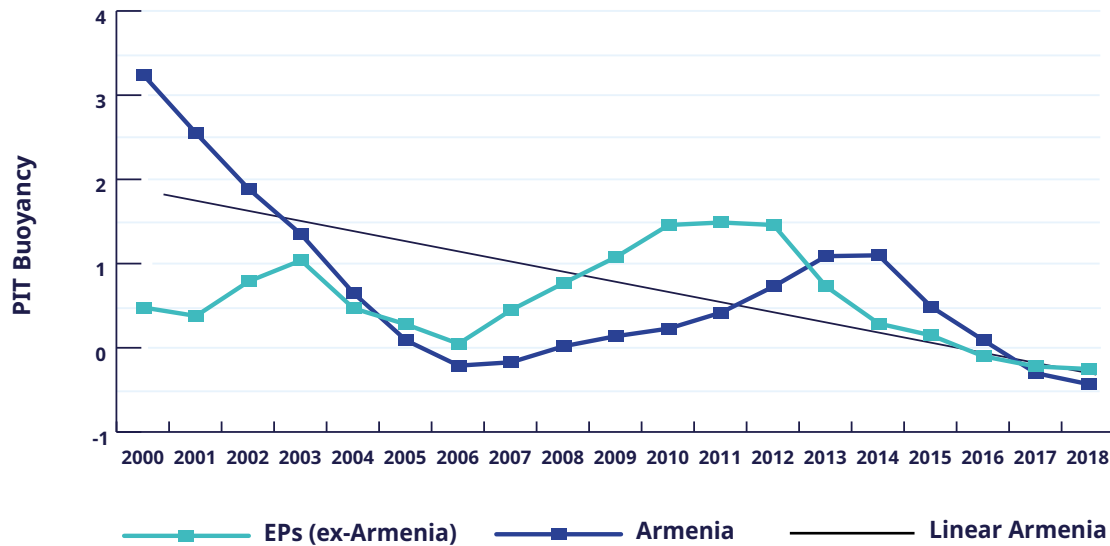
**Some of the exemptions allowed under VAT have grown in value above the annual growth rate of nominal GDP in recent years.** Others have not. Some are easy to understand, such as those in healthcare. Others should perhaps be reassessed or better justified by policymakers.

**Most businesses in Armenia are below the VAT threshold level and different regulatory frameworks influence local tax policy.** In 2018, the number of active VAT payers in Armenia was about 15,600 (WB, 2019), out of almost 68,800 entities (Armstat, 2019). This circumstance leads to a diminished incentive for VAT payers to fully comply with the tax. Indeed, reinforcing this view, perhaps pervasive across the business community in Armenia, data show that 35% of large VAT taxpayers were on average late with their monthly filings during 2018 (IMF, 2020). VAT is a tax on expenditure. Businesses charge VAT onto customers based on the expectation that they are equally able to deduct VAT charged upon them by input providers. Such is the foundation of a traditional input-output VAT model, the kind operated in Armenia, whereby deductible amounts paid on inputs reduce the final tax liability. Thus, having a high VAT threshold reduces compliance incentives for VAT payers whenever input providers are not VAT payers themselves. It also creates different layers of administrative work applicable to registered taxpayers and those that are tax-exempt. This situation was highlighted in discussions conducted with interviewees and aggravates other vulnerabilities such as the great number of exemptions and tax expenditures described above. Another concerning issue at hand relates to the regulatory framework of VAT. Armenia is a member of the Eurasian Economic Union and simultaneously part to an EU Partnership Agreement. While it is beyond the scope of this

► Table 29: VAT Tax Expenditures in Armenia.						
Select VAT Tax Expenditures (AMD, Mn)	2015	2016	2017	2018	2019	CAGR 15-19
<b>VAT tax expenses: Agriculture</b>	40.157	40.389	35.901	27.553	26.046	-10,3%
VAT tax expenses: Agriculture (% of Total tax expenses)	11,8%	10,6%	9,9%	7,0%	5,9%	
<b>VAT tax expenses: Health care</b>	26.081	26.968	28.985	35.914	47.462	16,1%
VAT tax expenses: Health care (% of Total tax expenses)	7,7%	7,1%	8,0%	9,1%	10,7%	
<b>VAT tax expenses: Education</b>	18.572	19.837	21.133	24.984	23.712	6,3%
VAT tax expenses: Education (% of Total tax expenses)	5,5%	5,2%	5,8%	6,3%	5,4%	
<b>VAT tax expenses: Finance and Insurance</b>	29.249	30.500	28.454	35.462	48.843	13,7%
VAT tax expenses: Finance and Insurance (% of Total tax expenses)	8,6%	8,0%	7,8%	9,0%	11,0%	
<b>VAT tax expenses: VAT threshold</b>	13.779	29.714	28.087	152.112	21.329	11,5%
VAT tax expenses: VAT threshold (% of Total tax expenses)	4,0%	7,8%	7,7%	38,5%	4,8%	
<b>Other VAT tax expenses</b>	132.699	134.125	137.158	38.094	181.080	8,1%
Other VAT tax expenses: VAT threshold (% of Total tax expenses)	39,0%	35,2%	37,6%	9,6%	40,9%	
<b>VAT tax expenses</b>	260.537	281.533	279.718	314.119	348.472	7,5%
VAT tax expenses (% of Total tax expenses)	76,6%	73,8%	76,8%	79,4%	78,8%	
<b>Total tax expenses</b>	340.290	381.491	364.356	395.491	442.259	6,8%

Source: Global Tax Expenditures Database, 2021

▶ Graph 16: VAT buoyancy in Armenia relative to Eastern Partnership countries.



Source: USAID (2021), *Collecting Taxes Database 2020-21*.

chapter to deconstruct the differences between VAT rules in one and another, this is a concern policymakers should be aware of due to the inherent complexity involved. As it stands though, VAT in Armenia is levied on domestic transactions of goods and services, as well as goods imports.

**A zero-rate VAT applies in Armenia to some products and services, whereas other activities are exempt from VAT altogether.** Exports of goods, and services directly associated with exports of goods, benefit from a zero-rate VAT, those businesses retaining the capacity to deduct their input VAT, whereas exempt activities while also not taxed are not allowed to deduct input VAT either. The latter, while effectively safeguarded from VAT administration, are nevertheless not exempt from VAT registration if operating above the registration threshold. Reverse-charge rules, a regular feature worldwide to fight VAT evasion, are not applicable to transactions between resident taxpayers, only to transactions involving resident taxpayers and non-residents without a permanent establishment in Armenia but operating in the country. Furthermore, in the case of taxable transactions between non-resident entities without permanent establishment and resident taxpayers not subject to VAT registration, the

arising tax liabilities fall upon the non-established non-residents (which, as a result, are required to register for VAT). A similar situation occurs in the digital economy, whereby non-resident sellers conducting business-to-consumer digital transactions in Armenia are required to register for VAT and pay accordingly. On the other hand, in business-to-business (digital) transactions resident buyers are required to self-assess the amount of VAT payable and then apply for VAT input credit. VAT administration is understandably undermined by this web of particularities. And so are VAT revenues, which have decayed into a declining path over the years (Graph 16). Concomitantly, VAT revenues in Armenia are hardly a proxy of the general state of the Armenian economy.

Methodological note: the tax buoyancy indicator measures the responsiveness of changes in tax revenues as a percentage of GDP to changes in real GDP measured at constant prices (the base year is 2010).

**VAT returns in Armenia are filed monthly and in electronic form.** VAT invoices are mandatory for registered taxpayers, who are also mandated to run separate accounts for taxable and non-taxable transactions to assist the calculus of deductible

input tax. Invoices must be filed electronically, and only taxable transactions confer the right to deduct input tax. Yet in the case of capital goods, which are depreciated over time, adjustments to input tax are made to reflect depreciation schedules. In addition, further adjustments to input tax are also made to reflect the ratio of taxable transactions to total transactions supported by those capital goods. VAT returns and payments are due monthly. However, subject to Government determination, there might be instances, such as when importing specific goods within specific investment programmes sponsored by governmental authorities, whereby VAT taxpayers may be allowed to defer payments up to three years. The time necessary to operate VAT refunds, which had been reportedly lengthier in Armenia than in other Eastern Partnership countries, has attracted the attention of the Government. Norms on VAT refunds have thus changed, and whereas the general rule had previously established quarterly refunds as the standard norm now it calls for monthly reimbursements. Audit and control procedures associated with refunds have also been adapted. The AMD 40 million threshold, above which inspection audits were required before executing VAT reimbursements, is now enforced monthly rather than quarterly. On the other hand, reimbursements below the AMD 40 million threshold benefit from a simplified procedure. These are made regardless of whether the taxpayer remains a VAT taxpayer or not. VAT returns are accompanied by excise returns using the same monthly unified tax filing.

### 3.2.4 Other taxes paid by businesses

**Armenia's tax system features many different taxes, ranging from central-level taxes to sub-national level ones.** Data on central-level taxation indicate that the contribution of taxes other than PIT, CIT, and VAT to overall (central-level) tax revenues has increased to about 25% of total in 2020 from 20% in 2015. Businesses are thus increasingly exposed to what conceptually could be termed as minor taxes, but which are in effect rising in grade. These include levies featured in the following sub-sections, as well as special taxation regimes described further along in section 3.

### 3.2.5 Central-level Government taxes

**Excise duties are a relevant feature of Armenian's tax structure.** In 2020, excise tax revenues accounted for 8.9% of total tax revenues, having exhibited a 27.0% annual growth rate since 2015. No other tax has since grown faster. Excise duties are levied on domestically produced or imported goods such as alcoholic beverages, tobacco products, and petroleum products. As of 2020, 'ad valorem' rates (i.e., defined as a percentage rather than as a specific charge per unit of measure) have been replaced by specific excise duties. Exports are exempt of excise taxes.

**Customs duties in Armenia are reflective of the country's accession to the Eurasian Economic Union (EEU).** Starting in 2015, customs tariffs imposed in Armenia have been harmonised with those of the EEU, although benefitting from a transitional period until 2022 during which certain import duties in Armenia are charged at lower levels than in other EEU member states. The EEU's customs board operates under a revenue-sharing mechanism irrespective of point of entry, whereby Armenia's share is 1.22% (WTO, 2019). Between 2015 and 2020, customs duties averaged 5.8% of Armenia's total tax revenues.

**The environmental tax remains a somewhat minor feature in Armenia.** Between 2015 and 2020, environmental tax revenues increased at an annual growth rate of 11.2%. Yet they averaged only 3.5% of total tax revenues, remaining under 1% of GDP. The tax is levied on polluting emissions, leakages, industrial waste, as well as other products harmful of the environment. It employs both specific and 'ad valorem' rates, according to a detailed grid of polluting elements. In some cases, surcharges to the main rates also apply.

**The road tax is another minor element in Armenia's tax structure.** It is imposed on trucks not registered in Armenia. And it is also imposed on economic agents placing advertisements on Armenian public roads. The tax rate levied on unregistered trucks depends on the vehicle's maximum permitted weight, the rate increasing as the permitted weight becomes larger. As regards the rates levied on road advertisements, these are a function of the billboard size, specifically the number of squared meters of surface area used by the advertising billboards.



**The patent (or licence) tax was repealed in 2020.** It included a list of fixed-fee tax payments due by natural and legal persons, resulting from activities such as hairdressing services, light-vehicle transportation, dental medical services, real estate intermediation, and others. Between 2015 and 2019, patent tax revenues had represented an average of 0.5% of total tax revenues. Yet, despite its repeal, the patent tax, which was a central-level Government tax, is survived by a host of other fixed payments – [the list grows up to 40 possible fixed payments](#) – still imposed on businesses and entrepreneurs, payable into different state bank accounts.

### 3.2.6 Local-level Government taxes

**A new property tax entered into force in 2021.** It replaced the previous property and land taxes, following long-held discussions for reform and successive delays in implementation. The new framework will now rely on more frequent updating of property market-values. It will also move away from the self-reporting of tax liabilities, established under the previous framework, and into the realm of tax collection by authorities, to better fight evasion. The current tax is levied on immovable assets as well as on vehicles (moveable assets). As regards immovable property, it is paid by natural and legal persons and charged on residential buildings, non-residential spaces of multi-apartment buildings, garages, industrial premises, public buildings, as well as other property assets registered in cadastral ledgers maintained by local-level Government. Property values are to be revalued at market-based prices every three years by public authorities. Tax rates depend on the type of asset, and the type of asset-use (i.e., agricultural vs. non-agricultural property). For non-agricultural property, base rates vary between 0.25% and 1% of cadastral value. Yet rates as high as 1.5%, as well as minimum collection amounts, may also apply. As regards the taxation of vehicles, it is levied on vehicle horsepower, whereby applicable specific rates increase as a function of increasing horsepower. The vehicle property tax in Armenia is an ownership tax, not one arising out of purchases.

## 3.3 Tax compliance, enforcement, and reporting

### **Tax compliance remains a concern in Armenia.**

A poor tax culture has long been highlighted as an unfortunate feature in the Armenian economy. As a result, local policymakers have frequently resorted to international organisations, such as the World Bank or the International Monetary Fund, for technical assistance in designing a more effective administrative framework. Data suggest that tax administration and taxpayer satisfaction have both improved over time (WB, 2019). Not only has the number of taxpayers increased across different types of taxes, but the breadth of tax services, notably those related with e-Government, have also expanded. Indeed, taxpayers have seemingly and overwhelmingly endorsed technological evolution in the domain of taxation. (In the World Bank 2019's report, referenced above, when asked about "What New Services Do You Think Should Be Delivered by the SRC [State Revenue Committee]?" respondents voted massively for "Technological changes; mobile applications, clarification portal creation, and creation of similar tools".) Tax filings and payments are generally online in Armenia, and [Egov.am](#) is the state service through which they are conducted. Yet, interviewees highlighted that server failure is a frequent nuisance when interacting with the system. Importantly, despite the advancements in e-government, international consultants have maintained the reporting of vulnerabilities in the administration of the tax system, which mostly stem from the arbitrage opportunities provided by an overly complex tax system. Concerns have also been raising about inspection procedures, risks of corruption, and a lack of stronger administrative disincentives against business underreporting or late tax filing (IMF, 2020).

### **Tax offences carry administrative and criminal responsibility in Armenia.**

In 2019, the amounts collected by the SRC reached about AMD 600 million and AMD 6.14 billion considering administrative and criminal cases, respectively, brought up against offending taxpayers. While administrative penalties represented a negligible figure in the overall context of economic activity in Armenia, tax recoveries in criminal cases during 2019 amounted to 0.4% of that year's actual tax revenues. In 2017 and 2018, recovered tax liabilities racked up through criminal cases against

taxpayers had amounted to 0.1% and 0.2% of annual tax revenues. While it is difficult to explain intra-annual changes in tax recoveries, especially those are marked by large occasional windfalls, a trend of rising enforcement revenues suggests that compliance remains troublesome (and perhaps that administrators have become keener in rooting-out unlawful behaviour). Inspection actions by tax authorities can be appealed to an appeals commission under the tax authority itself, which according to the tax code must decide on the complaint within a standard 30-day period, or otherwise to a regular court. In practice though, it is not clear how expedite these appeal procedures really are. Combatting economic informality is addressed by limiting cash payments and making use of cash registers. In Armenia, business cash payments are limited to AMD 300.000 per transaction and AMD 3 million per month (roughly USD 630 and USD 6.300, respectively). Cash registers, as prescribed by the Government, are of mandatory use for all non-financial businesses, individual entrepreneurs, and notaries.

### 3.4 Overall assessment of general taxation in Armenia

**Income taxation in Armenia is uncompetitive and inequitable.** The tax burden associated with the direct taxation of Armenian incomes is too high relative to the regional benchmark. Personal incomes are especially disadvantaged. Not only are they taxed at a greater rate, compared to business incomes, but tax minimization opportunities are also scarcer for employees and people earning only salary wages. While tax policy must promote the formal economy, it is equally important to promote equity amongst different taxpayers. Yet tax policy in Armenia creates an opportunity for arbitrage, namely in favour of own-account workers who, qualifying as individual entrepreneurs, are to benefit from lower income tax rates, as well as being able to voluntarily skip the mandatory pension insurance payments that regular employees must comply with. Different PIT rates also apply to taxpayers under the standard PIT dispositions vis-à-vis those labouring under preferential regimes for micro businesses or IT start-ups (section 3). Business income taxation is also undermined by the information asymmetries resulting from the myriad deductions allowed domestically under the

tax code, on one hand, and the inexistence of internationally competitive CIT provisions, on the other hand. CIT should be streamlined by eliminating deductions. Alternatively, policymakers could pivot the tax towards a cash-flow framework, such as the Estonian one (also used in Georgia). This alternative option, while attractive to position Armenia amongst countries with competitive CIT frameworks, should nevertheless be carefully considered. Not only would it add to policy instability in the short run, but it would also carry revenue risks at a time when Armenia is fiscally constrained. A middle-ground compromise would be to exempt reinvested profits entirely from the profit tax, as well as allowing for the full expensing of all capital assets, fixed and intangible, during the year of acquisition (as allowed in OECD-member countries Estonia, Latvia, and Chile; Asen, 2021).

#### **VAT is not contributing adequately to Armenian tax revenues nor to the country's tax culture.**

The current VAT minimum registration threshold is 4.5 times greater than the median threshold in the Eastern Partnership region, and 7.5 times greater than Georgia's (the lowest within the region). While it may seem reasonable to exempt small businesses from the administrative complexity of VAT, the object of reform should be the complexity of the tax itself rather than shying away from reform and relying on a blanket exemption for such a large segment of the business demographics. A lower threshold, and greater VAT revenues as a percentage of total tax revenues, could yield three favourable outcomes. First, tax enforcement, and critically tax compliance, could be strengthened with more businesses making use of the incentives to deduct input VAT. Second, business competition would be made fairer, harmonising the administrative playing field, while promoting professional standards at smaller businesses. And third, rising tax revenues from VAT could also allow for tax shifting, for example, reducing the PIT to the same level of the profit tax, thus minimising arbitrage opportunities between income taxpayers as well. Revamping VAT administration (Box 1) would be critical in making for a virtuous cycle, as simply increasing the threshold would likely not suffice (Asatryan and Peichl, 2017). Fully automating and simplifying VAT refunds as well as reforming reverse-charge rules would be valuable starting points. And building capacity at SMEs to facilitate firm adoption of IFRS accounting standards required of VAT taxpayers in Armenia



► **Box 1: An assessment of the VAT Compliance Burden**

**Factor A: Tax law complexity and burden resulting from core elements of VAT policy.**

Indicators: The VAT rate structure; the scale (i.e. revenue impact) of reduced rates and exemptions; the use of cash records by specified small businesses to calculate the VAT liabilities; use of rules for prescribed industries that simplify calculations of VAT liabilities; VAT registration requirements; optionality (i.e. the availability of optional regimes to small businesses).

**Factor B: The number and frequency of administrative requirements to comply.**

Indicators: Electronic VAT registration; staggered VAT payments for small businesses; staggered reporting filing periods; information requirements of typical VAT return form; documentation requirements for exported goods and services; other reporting requirements in addition to the VAT return; use of electronic VAT invoices between businesses; invoice reporting requirements to revenue body; record retention periods; number of VAT verification actions; level of disputed VAT assessments.

**Factor C: Revenue body capabilities in meeting taxpayers' service and compliance needs.**

Indicators: The revenue body's website; the revenue body's phone enquire service; support for newly registered businesses; the revenue body's online tax payment facilities; the revenue body's VAT on-line transaction services; the revenue body's refunding of excess VAT payments; the revenue body's private rulings service.

**Factor D: Monetary costs/benefits associated with the act of complying.**

Indicators: The payment of interest on delayed refunds; aggregate value of annual VAT refunds.

*Source: As in Highfield, R., Evans, C., Tran-Nam, B., & Walpole, M. (2019). Diagnosing the VAT Compliance Burden: A Cross-Country Assessment. Available at SSRN 3726376.*

– focusing perhaps on the 'IFRS for SMEs Standard' for smaller businesses, rather than the full IFRS standard – would also be helpful.

## 3.5 Tax Preferences for MSMEs

**Armenia has in place different business-level tax preferences, but little investor-level tax incentives towards investing in MSMEs.**

Developing countries are frequently affected by economic informality and challenging business environments. Tax preferences, organised in predictable manner and directed at both businesses and investors, are thus instruments for promoting the formal economy, as well as corporate growth, increasing the productivity gains that stem from secure and stable business relationships. This section focuses on the main options available in Armenia for MSMEs and concludes with policy recommendations.

### 3.3.1 Business-level preferences

**Armenia offers a preferential presumptive tax regime to small-and-medium sized enterprises through a turnover (sales) tax.** The turnover tax is a simplified preferential regime available to resident companies, individual entrepreneurs, and notaries. In the case of resident companies, it replaces both profit tax (i.e., CIT) and VAT obligations. Yet for individual entrepreneurs and notaries the turnover tax substitutes only for VAT – these economic agents remaining liable for the profit tax. Nonetheless, businesses that, while benefiting from preferential treatment, are involved in the production of excisable goods, as well as imports of excisable goods, must still charge VAT on the sales of those products. The turnover tax is available for taxpayers generating sales revenues up to AMD 115 million. Taxpayers above that revenue threshold are required to migrate to the standard profit tax regime, and they are also mandated to register for VAT. Application for the simplified regime can be requested until February 20<sup>th</sup> of the calendar year, allowing businesses some leeway in choosing the regime that best suits their economic interests. Businesses that voluntarily register for VAT are excluded from presumptive taxation, whereas those that are found in contempt of cash

register rules three times during a single year are also excluded from preferential treatment. There are many different tax rates under the turnover tax regime, depending on the type of business activity and ranging from 1.5% to 25% of sales revenues. Tax returns are submitted quarterly, and payments are made within the month following those submissions. Turnover tax revenues have grown substantially over the years (second only to excise revenues), at an annual pre-pandemic growth rate of 25% between 2015 and 2019, but they are still a small contributor to total tax revenues representing just 2.0% of total in 2019.

**Micro entrepreneurs in Armenia may benefit from a regime that exempts them from business income taxation depending on the type of business activity.** Starting from 2020, a new micro entrepreneurship taxation regime has been introduced, in part to replace the previous patent tax, whereby micro businesses engaged in specific activities, outlined by governmental decree, and generating sales revenues below AMD 24 million, are exempt from the turnover and profit taxes. Moreover, qualifying businesses are also exempt from withholding obligations related to business income. This preferential tax regime generally excludes trading activities (i.e., defined in the tax code as “purchase and sale” types), while also limiting access for services-based activities. As regards tax payments, the micro regime requires eligible businesses to withhold and pay AMD 5.000 monthly per hired employee. These

monthly payments are not taxes on the micro business itself but rather the personal income tax due by their employees. In addition, micro entities are also required to pay excise taxes associated with their activities, as well as other indirect (bar VAT) state-level Government taxes. The regime is not available to businesses registered for VAT (in the case of small taxpayers that voluntarily register for VAT) nor to those found in violation of cash register rules more than three times during a calendar year. Continued eligibility for the regime depends on the level of reported sales revenues, which must be communicated to tax authorities by February 1<sup>st</sup> of every new year with reference to the previous year’s business activities. Access to the regime is not limited to businesses of one. Micro businesses operating with paid employees, other than the leading entrepreneur, are also eligible. Since the inception of this framework, the number of registered micro entities has surged (**Table 30**).

**Start-up companies in the Information Technologies (ICT) sector can make use of preferential tax benefits.** Armenian policymakers have long cherished the IT sector as a priority field for national development. Starting from 2000, different policy initiatives have been implemented with the aim of creating in Armenia a regional hub for such activities. And since 2014, Armenian law has provided for the existence of tax benefits directed at IT companies employing up to 30 people. These tax benefits include a zero-rate profit tax

► **Table 30: Breakdown of private enterprises by size in Armenia**

Business demographics	December 2019	December 2020	June 2021	Dec19 - Jun21
Micro businesses: 1-9 employees	36.175	42.516	45.278	25,2%
Small-sized: 10-49 employees	5.010	4.743	5.089	1,6%
Medium-sized: 50-249 employees	902	873	944	4,7%
Large: more than 250 employees	182	178	186	2,2%

Source: Armstat

Note: The data above exclude sole entrepreneurs (i.e., micro entities with zero employees).

for qualifying businesses, and a 10% flat personal income tax rate for individuals employed by those businesses (Republic of Armenia, 2014). Qualifying for this preferential framework requires that companies must be certified by the Government. Furthermore, it also imposes limits on company ownership, such as companies not being owned by other IT businesses in more than 20%, as well as constraints on management practices such as companies not being allowed to sell their fixed assets. The law is due to expire on December 31<sup>st</sup>, 2022. Available data indicate that between 2015 and 2017, following the introduction of the law, there was an increase in the number of established IT businesses (BDO, 2019). And that overall, the number of IT companies in Armenia, including but not limited to beneficiaries of start-up tax benefits, doubled between 2014 and 2018, representing 7.4% of 2018 GDP (EIF, 2018).

**Free economic zones (FEZ) in Armenia are exempt from the profit and property taxes, VAT, and customs duties.** The Armenian law introduced FEZs in 2011. Since then, three FEZs have been established in the country, two of them on 10-years contracts and a third one (the Meghri FEZ, next to the Iranian border) on a 50-year contract. Priority-listed activities to be conducted within FEZs include the following: agri-food and food processing; biotech and pharmaceuticals; chemistry; industry, machinery, and electronics; new materials; and textiles (Ministry of Economy, 2021). FEZs are not exempt from personal income tax obligations.

### 3.6 Investor-level tax preferences

**Investor-level preferences in Armenian taxation consist of reduced tax rates and direct exemptions, as well as indirect tax advantages generated by preferential MSME taxation.** Investors in Armenia benefit from a reduced 5% personal income tax rate applying on dividends, and 10% on interest income and royalties. As regards dividend payments, taxes withheld by the company are refunded to the individual shareholder if dividend incomes are reinvested back into the company. Furthermore, the capital gains tax is not applicable whenever investments are sold following three years from acquisition.

Interest incomes resulting from Government securities, as well as associated surplus incomes, are not taxed either – the same principle applying to market-listed securities (bar bank-issued debt instruments). With regards to corporate income taxation, dividends received by resident profit taxpayers are tax-exempt, and so are businesses incorporated in FEZs. Interest expenses of both bank and non-borrowings are also deductible, subject to certain limits. Investor-level preferences in Armenia are undermined by an underdeveloped corporate law, which does not allow for dual-class share structures nor for the existence of hybrid securities such as convertible debt, and by an outdated foreign investment law that circumscribes arbitration procedures to Armenian courts (WB, 2020a).

### 3.7 An assessment of MSME preferential taxation in Armenia

**Preferential taxation regimes tailored to MSMEs aim at reducing the opportunity cost of taxation.** For businesses in the shadow economy, policymakers make the formal economy more alluring by lowering the level of taxes and the cost of compliance. In turn, becoming part of the formal economy opens-up new growth possibilities to such businesses. Critical to the success of formalisation strategies, when dealing with otherwise informal businesses, is the level of growth ambition embodied in them, given that subsistence-type businesses are usually less sensitive to the advantages of exiting the shadow economy (Amin et al., 2019). Yet growth-minded companies, established in the formal economy since inception, also stand to benefit from preferential taxation. That is the case of innovative and fast-growing companies, making use of different Government incentives to lower the after-tax cost of capital. Special regimes for MSMEs are thus instrumental in generating economy-wide productivity gains that eventually end up generating a larger tax base and, concomitantly, greater tax revenues. These special tax regimes are usually packaged under four grand modalities: presumptive regimes based on proxies measuring business activity (e.g., revenues, assets, or others); discounted or reduced corporate income tax rates; tax exemptions made available under certain taxes, such as VAT; and

tax credits (e.g., R&D or labour-related expenses), targeting a lower tax burden and the removal of growth obstacles (Marchese, 2021).

**Armenia has had preferential taxation available for MSMEs for many years.** The turnover tax, a presumptive tax regime based on sales revenues (turnover), had been in existence prior to the Great Financial Crisis of 2007-2008, before being retired in 2009 and then re-instituted in different clothing as of 2014. The turnover tax is closely aligned with the VAT threshold, following international best practice, whereby businesses surpassing the threshold are immediately required to register for VAT and to migrate from preferential MSME taxation to the standard profit tax regime. Accordingly, in Armenia the turnover tax substitutes for both the VAT and the profit tax for qualifying businesses operating below the VAT threshold. Nevertheless, there is an important improvement to be made in Armenia. That would be eliminating the existing schedule of different rates, ranging from 1.5% (the minimum net rate applied to trading activities) to 25.0% (which is applied to lottery activities), and replacing them with a standard rate applicable to all eligible activities. Wei and Wen (2019), based on a group of countries where turnover taxes are available, estimate that the optimal turnover threshold is located between USD 100 000 and USD 150 000, with the optimal rate at about 3% (assuming one single turnover rate across all sectors).

**The micro entrepreneurship regime in Armenia aims essentially at business registration.** Interestingly, the regime is not limited to no-employee micro entities, as is the case in Georgia where a similar framework is in place. (In Georgia the microbusiness status is available only to self-employed workers, with no employees, and subject to a maximum revenue threshold of about USD 10 000. In Armenia the employment limitation is absent, and the revenue threshold, slightly above USD 50 000, is 5 times greater than in Georgia.) Microbusiness statuses are effective instruments for first-time registration of businesses lurking in the shadow economy. But the impact of these on formalisation has been reported as a one-off effect (Bruhn and Loeprick, 2016). Furthermore, these statuses are also subject to additional challenges. First, they are frequently limited to a sub-set of economic activities as determined by Government. This leads to potential governmental micromanagement of the status

itself. Second, it may also be the case that where microbusinesses are exempt from bookkeeping obligations, in some cases also from cash registering requirements, the status may end up promoting the sort of informality (albeit within the formal economy) that it is designed to oppose. Rather than serving as an antechamber for business growth, and as a productivity enhancer, the status might contribute to perpetuating a semi-formal state-of-affairs. Yet, and herein lies an intriguing feature of Armenia's microbusiness policy, if the status allows for employee growth the likelihood of it generating revenue (and value-added) growth is also greater. Making the threshold adjustable to the number of employees might further incentivise registration, employment, and overall business growth.

Armenia's tax benefits for IT companies are expected to expire by the end of 2022. The IT sector has long been singled-out as a national development priority. In 2019, the sector generated 4.9% of total business revenues in Armenia, and 8.3% of gross value added (Armstat, 2020). The number of companies has grown, but available data is not conclusive about the role of taxation in that growth path. In addition, the tax benefits are restricted to start-up companies with up to 30 employees, therefore imposing a growth constraint that runs somewhat counter to the end-goal of industrial policy. The coming expiration date provides an opportunity for the reassessment of the policy measure. An alternative to the current policy design would be to replace it with a more comprehensive approach, focused on expenditure-based R&D tax incentives and making these available to a larger group of businesses (Box 2). According to Cabral et al. (2021), the key design features of expenditure-based R&D tax incentives are the following: eligible expenditures (including current expenditures and capital investments); the tax base against which relief is granted (CIT or others, including payroll taxes and social security contributions); the form of tax relief (tax credit, tax allowance, exemption, and accelerated or enhanced depreciation); the type of instrument (volume-base tax relief, incremental, or hybrid); taxability (taxable vs. non-taxable); and limitations to tax benefits such as floors and ceilings delimiting R&D spending. Armenia recently became the second country of the world, after the U.S., to license software (PRoA, 2021). Thus, combining a patent box framework, which is an income-based

► **Box 2: Ireland's Knowledge Development Box**

The Knowledge Development Box (KDB) was introduced by Finance Act 2015 for companies whose accounting periods commence on or after 1 January 2016. It is a regime for the taxation of income which arises from patents, copyrighted software and, in relation to smaller companies, other intellectual property that is similar to an invention which could be patented. The regime is only available to companies that carried out the research and development (R&D), within the meaning of section 766 Taxes Consolidation Act 1997 (TCA 1997), which led to the creation of the patent, copyrighted software or intellectual property (IP) equivalent to a patentable invention. A company which qualifies for the regime will be entitled to a deduction equal to 50% of its qualifying profits in computing the profits of its specified trade. The profits arising from patents, copyrighted software or IP equivalent to a patentable invention are taxed at an effective rate of 6.25%.

*Source: As in "Guidance Notes on the Knowledge Development Box (Document last reviewed July 2020)", Irish Tax and Customs.*

approach to R&D incentives, with an expenditure-based approach would likely leverage IT's strategic and competitive position in Armenia.

### 3.8 Conclusion

**The Armenian tax code urgently requires clarification and simplification.** An English-version translation of the tax code used in this assessment makes for a voluminous tome, about 220,000 words-long. Yet the complexity involved in analysing Armenia's tax code is no stranger to local citizens either. According to a 2020 survey (CRRC, 2020), when asked about "[what] tax legislation issue hinders your business or businesses like yours the most?" respondents' preferred answers were as follows: "Unclear and unprecise wording of tax laws, ambiguous points" (this answer was elected by 28.0% of respondents as the most pressing point), "Frequent change of laws" (27.2%); "Tax rates" (23.0%); and "Extensive number of laws, regulations and procedures" (15.9%). Only 3.8% of respondents chose "None of them" as an answer. Moreover, when asked in the same survey about "Are you aware of the Social Council of Revenue Administration Reforms of the RA State Revenue Committee" or "Have you ever used the services of SRC Training Center or other tax related training providers?", the surveyed overwhelmingly answered "No". Clarifying tax policy is a first step in bringing together taxpayers and tax enforcers. A complex and ineffective policy represents a burdensome, distracting transaction cost working against economic activity. Businesses (other than legal advisors) should not be concerned about having to navigate through the turbulence of

tax laws. Yet the crux of taxing usually resides in the administrative complex. Tax laws are useless guidelines if administrative procedures are out of sync or out of reality. Thus, making sense of tax obligations, and making good on them, requires simpler administration in as much as clearer policy.

**Armenia's tax burden is not helpful of economic activity.** The country's tax burden (defined here as the tax revenues-to-GDP ratio) is currently too high relative to the regional Eastern Partnership benchmark, whereas the tax capacity (i.e., the maximum potential level of the tax revenues-to-GDP ratio, given underlying socio-economic conditions) is the lowest within the same group of countries. On the surface, tax rates are broadly in line with peer countries. However, a closer look into the details and specifics of Armenian taxation reveals the existence of structural vulnerabilities. A major vulnerability resides in the narrow tax base on which taxation rests in Armenia. Exemptions abound, not so much in PIT, but essentially in CIT and most notably in VAT. (Note: VAT alone concentrated about 80% of all reported tax expenditures in Armenia in 2019.) Policy design should reduce the scope for excessive and inefficient tax expenditure. And focusing on broadening the base of taxation, especially in a major tax such as VAT, one which is not a tax on business income, would allow to reduce the burden on compliant taxpayers in as much as reducing business tax rates elsewhere. Fiscal policymakers will not have an easy task in coming years. The country's public debt is above the medium-term level envisaged by the Government, the tax burden is already seemingly excessive, the tax culture remains poor, and economic growth has lagged in regional comparison. Lowering the tax



revenues-to-GDP ratio will likely require stronger GDP growth, not weaker tax revenues. Yet businesses, being the drivers of value-added creation and GDP growth, would welcome a friendlier tax mix even if revenue neutral.

**The general business taxation could be made more competitive.** Shifting from direct to indirect taxation, by relying less on income taxes and more on VAT, would likely reduce growth disincentives, strengthening the formal economy as well. Critically, a broad-based, low-rate approach to taxation rests on decreasing the VAT threshold, which is currently too high. Not only does it act in promoting economic informality, rather than business registration as it should, but it also contributes to dis-levelling the playing field and vitiating the country's tax culture. Tax policy must set the right balance between taxes and compliance incentives. Evasion in VAT would also be better tackled if reverse-charge rules were effectively introduced in Armenia. And improving the administrative functioning of VAT filings and refunds, moving to a fully automated and reliable system (such as Georgia's) would support a more constructive tax culture. Tax policy must also address structural weaknesses in the economy, such as Armenia's uninspiring performance in gross fixed capital formation. In this respect, making full expensing the standard amortisation rule for all capital assets could provide a powerful incentive for increasing business investment. This policy measure has been adopted amongst OECD member countries, such as Estonia, Latvia, or Chile. It increases the present value recovery rate of capital expenditures, thus lowering today's tax liability while increasing the long-term return on investment. Corporate taxation could also be reconfigured to boost the growth of internal equity at businesses, fully exempting reinvested profits from the profit tax. SMEs, which usually rely first and foremost on internal sources of finance, would likely enjoy this policy feature, but so would larger firms.

**Preferential taxation regimes for MSMEs play a role in business registration and economic development.** Early indications suggest that Armenia's micro entrepreneurship regime, introduced in 2020, has been reasonably successful in increasing business registration. Yet questions remain about its future effectiveness in generating larger businesses. And the same can be argued about the turnover tax or the tax benefits for IT start-ups. While it is too early to argue for changes in the micro entrepreneurship regime, the latter two merit a reassessment. For example, the multi-rate structure of the turnover tax should be replaced with one single rate, according to international best practice, bearing in mind that in Armenia the turnover tax replaces both the profit tax and VAT. Small businesses engaged in the production of excisable goods, which charge VAT, should perhaps be excluded from the list of business activities allowed under the turnover tax regime. Yet individual entrepreneurs included in the regime should not simultaneously remain subject to the profit tax. Tax revenues generated by the turnover tax have outpaced those of the standard profit tax, but the former represent less than one fifth of the latter. Interviewees have suggested that the turnover tax may be up for review. To start with, its threshold, which is tied to the VAT threshold, may eventually be reduced. That would not run against international best practice. Preferential taxation for IT start-ups has also featured prominently in Armenian taxation in recent years. Yet the regime restricts eligible businesses in their growth plans. Becoming a larger employer should not per se disqualify firms away from worthwhile tax benefits. Transforming existing tax benefits for IT start-ups into expenditure-based R&D tax incentives available not only to IT start-ups but rather to all businesses in Armenia, small and large, tech or non-tech, would be more equitable and efficient.

## ► 4. Export, FDI and FDI-SME linkages in Armenia

This chapter investigates the position of Armenia in the international market, focusing on exports, foreign direct investments (FDIs) and involvement in global value chains (GVCs). Armenia has a population of 2.9 million inhabitants with a GDP per capita of 4,267 US\$.<sup>24</sup> Therefore its domestic market is very small and the potential for an increasing and sustainable growth depends on the country capacity to strengthen its presence in the international markets.

In the first section, the chapter presents an updated picture of the Armenian exports of goods and services (1.1), of the inflows of FDIs (1.2) and of small and medium enterprises (SMEs) participation in GVCs (1.3). In this section, Armenia is compared and benchmarked with reference to the other countries belonging to the Eastern Partnership (EaP)<sup>25</sup>. Section 2 focuses on the ICTs industry, characterized by a strong increase in exports in the last decade. The following sections, from 3 to 5, offer an overview about the policies adopted respectively to support exports, FDIs attraction and GVC participation. Section 6 concludes presenting some recommendations aimed at addressing existing challenges and fully grasping opportunities in the international market.

### Exports, FDIs and GVC participation

#### 4.1 Exports

Armenia is a landlocked country, which for political reasons is unable to trade to or through neighboring Turkey and Azerbaijan. All exports

of goods are shipped overland and, apart from minor flows to Iran, are transported through Georgia (UNCTAD, 2019). Until the global crisis in 2008, Armenian economy was very much reliant on the dynamics of non-tradable sectors, such as construction, which proved to be vulnerable after the downturn. Yet, the effects of the global crisis pushed the country towards increasing diversification, particularly in exports, which currently represent a growing segment of the economy and in fact, if we exclude the last year, export growth has outpaced overall economic growth.<sup>26</sup>

Armenia's exports, which throughout 2003-2007 grew at an average rate of 14% annually, plummeted during the 2008-2009 crisis and then started to recover since 2010, growing at an average of 13% *per annum* until 2019 when due to the COVID-19 outbreak there was a drop of more than 30% (Graph 17). A recent UNDP socio-economic impact assessment of COVID-19 confirms that restrictions on mobility and bans on operations both in Armenia and abroad have led to high economic and market losses for export-oriented businesses (UNDP, 2020).

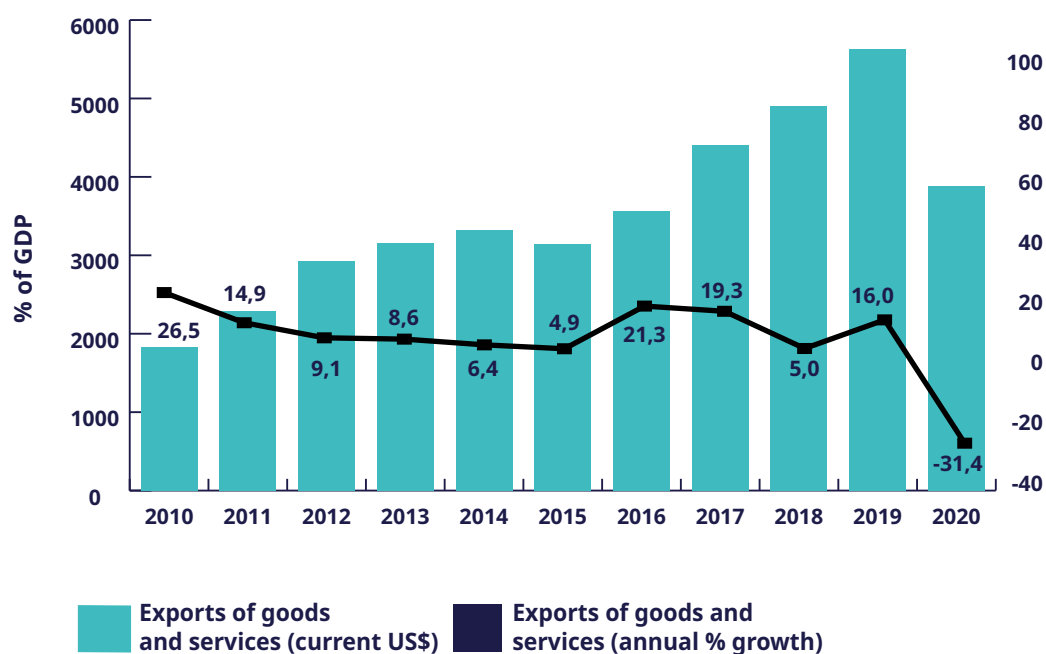
Considering trade-to-GDP ratio, which is an indicator of the relative importance of international trade in goods and services in the economy of a country, Armenia has increased openness to trade from 67% in 2010 to 93% in 2019, then decreasing again to 67% in 2020. Table 31 confronts Armenia openness to trade with the other countries belonging to the Eastern Partnership (EaP) and shows that during the period considered, Armenia is generally less open than Belarus and Georgia while in 2019 it was more open than Azerbaijan, Moldova and Ukraine but trade-to-GDP in these countries has been less affected by the pandemic.

24 Data are from [World Development Indicators](#).

25 The Eastern Partnership (EaP) is a joint initiative involving the EU, its Member States and six Eastern European Partners: Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine (see [eeas.europe.eu](#)).

26 In the period 2010-2019, the average rate of GDP growth is 4.4% ([World Development Indicators](#)).

► Figure 17: Exports of goods and services (US\$ millions and annual growth rate)



Source: World Development Indicators

► Table 31 Trade-to-GDP: EaP countries (%)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Armenia	67.4	69.5	74.4	75.4	73.9	70.5	74.7	85.4	90.3	93.4	67.4
Azerbaijan	88.5	79.8	77.5	74.7	69.5	72.5	90.1	90.4	91.7	86.0	72.2
Belarus	115.6	152.8	153.8	119.9	110.6	116.2	125.7	133.6	139.3	133.7	122.3
Georgia	82.2	86.8	91.4	95.2	96.5	98.3	96.3	103.6	111.3	116.0	92.6
Moldova	54.7	98.8	96.3	95.5	92.6	90.0	88.0	87.8	85.9	86.0	79.3
Ukraine	99.4	108.8	106.6	97.7	101.5	107.8	105.5	104.0	99.1	90.8	81.2

Source: Authors' own elaboration on UNCTAD

Therefore, in 2020 Armenia has the lowest trade-to-GDP ratio among its peer countries.

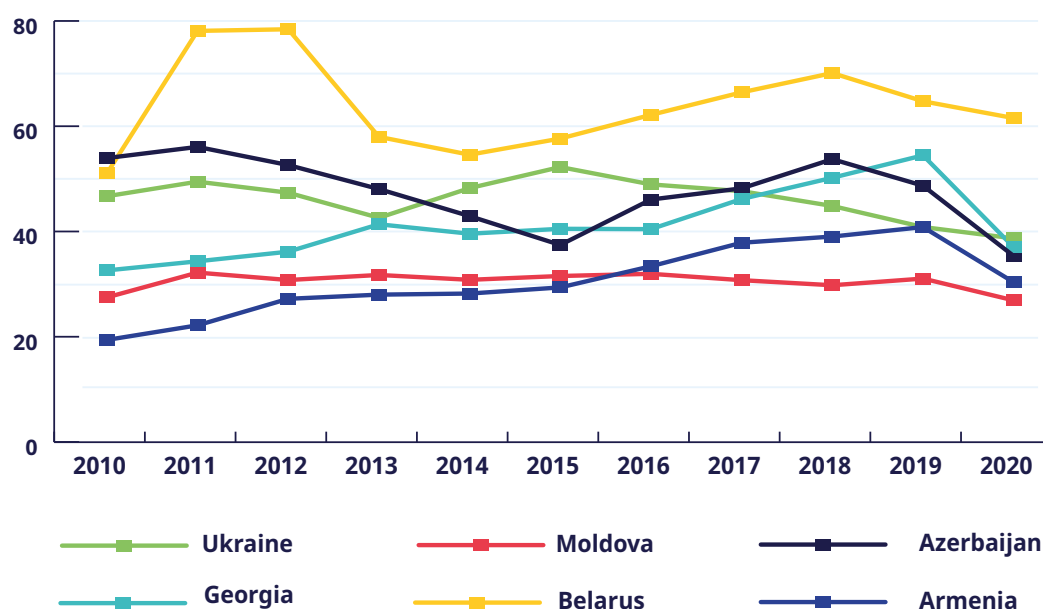
Focusing on export propensity, measured as the exports of goods and services as a share of GDP, Graph 18 shows that in Armenia it has increased from less than 20% in 2010 to 41% in 2019, then decreasing to 31% in 2020. In comparison with the other countries represented in the figure, Armenia

shows a good performance during the period considered, excluded in the last year, but still Belarus, Georgia, Ukraine, and Azerbaijan have a higher export propensity during the whole period.

Mining products, mainly copper and molybdenum, have been the backbone of exports since



► Graph 18 Export Propensity: EaP countries (%)



Source: World Development Indicators

independence and still represents almost 30% of total goods exported, although other products are increasing their importance (Table 32). Another large product group exported is ready-made food, mainly tobacco and cigars and alcoholic beverages, which represents another 30% of total exports. Precious stones and metals, mainly gold and diamonds, correspond to 15% of exports, a share which has increased from 7% in 2010. The advantage of these lightweight products is that they can be exported by plane and thus overcome the challenges that the country faces in land

connectivity. Other rising export categories are textile and clothing products and also clock and watches which have increased in volume from 4 US\$ millions in 2010 to 35 US\$ millions in 2020<sup>27</sup>, mainly directed to Switzerland, which maintains close diplomatic and commercial relationships with Armenia (UNCTAD, 2019).<sup>28</sup>

Armenia export specialization in the mining industry is confirmed by the Revealed Comparative Advantage (RCA)<sup>29</sup> presented in Table 33 showing that Copper is the product in which the country

27 The source is the [UN COMTRADE](#) and the commodity is Clocks and watches and parts thereof (HS-91).

28 Switzerland took an active part as a mediator in the negotiations between Armenia and Turkey on the normalization of their bilateral relations. The mediation process, which culminated in the signing of the Zurich Protocols on 10 October 2009, helped to cement relations between Switzerland and Armenia. Since then Armenia has entered into bilateral agreements with Switzerland Armenia covering a number of areas. The Armenia-Switzerland Business Association was set up in 2012, followed by the Swiss-Armenian Chamber of Commerce in Baar in 2017. More information about the bilateral relations between Armenia and Switzerland are available at [ed.admin.ch](#).

29 A country has a revealed comparative advantage in a given product  $i$  when its ratio of exports of product  $i$  to its total exports of all products exceeds the same ratio for the world as a whole. When a country  $RCA > 1$  for a given product, it is a competitive producer and exporter of that product relative to other countries producing and exporting it at or below the world average. A country with  $RCA > 1$  in product  $i$  is considered to have an export strength in that product. The higher the value of a country's RCA for product  $i$ , the higher its export strength in product  $i$ .

► **Table 32 Top Exported Goods (% on total exported goods)**

	2010	2015	2019	2020
Ores, slag and ash	12.35	24.64	25.11	28.91
Natural or cultured pearls, precious or semiprecious stones, precious metals	7.19	13.06	15.66	14.55
Tobacco and manufactured tobacco substitutes	N.A.	11.52	10.97	10.11
Alcoholic and non-alcoholic and vinegar	5.85	8.43	11.07	9.48
Ferrous metals	6.97	3.74	5.65	4.14
Aluminum and articles thereof	4.47	5.82	3.76	4.13
Textile clothes and clothing accessories	0.18	4.13	4.69	3.69

Source: Authors' own elaborations on [RA NSS](#)

has the higher export strength, followed by manufactured tobacco, other metal products and alcoholic beverages.

Considering the geographical breakdown of Armenian exported goods (Table 34), in 2010 the EU accounted for 48% of total exported goods but, although in 2019 the value of exports to the EU has increased (with a decrease in 2020 due to the impact of COVID19), its share decreased to 22% in 2019 and 17% in 2020. Within the EU, the main trading partner for Armenia is Bulgaria, with a share of 8% in 2019 and 6% in 2020 on total exports and the main exported goods are base metals, processed foods, tobacco and cigarettes, and watches.

The decrease in the EU share of Armenian exports is explained by an increased geographical diversification of export markets. The Commonwealth of Independent States (CIS)<sup>30</sup> becomes the main region of destination with 30% of total exports, 27% going to Russia in 2020. Besides CIS, two other destinations have significantly increased their share of Armenian exports: Switzerland, which has reached a share of 18% in 2020, mainly

consisting in watch-making products, textile, and alcohol beverages and China with a share of 11% in 2020, primarily importing ores slag and ash.

Taking into account exports in services, in 2019 their value has reached 2.4 US\$ billions with travel services accounting for 63% of the total, followed by transport (11.3%), and telecommunications, computer and information services (10.8%) (Table 35). After a continuous increase from 2012 to 2019, with the number of tourist arrivals almost doubling in the same period, due to COVID-19 pandemic, travel services have plummeted in 2020. Another fast-growing service industry is Telecommunications, computer, and information services: export boomed from 2015 to 2020 with an average annual growth rate of 17.3%, reaching a share of almost 30% of total export in services in 2020. Section 2 provides a detailed analysis about ICTs services and their recent dynamics.

For a compared and aggregated view of the diversification of the Armenian export basket and its implications in terms of future economic growth, we consider the Economic Complexity Index (ECI) ranking 133 countries and presented

30 CIS includes Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Uzbekistan and Ukraine.

**► Table 33 Revealed Comparative Advantages of Armenia**

RCA	2019
Alcoholic beverages	21.32
Tobacco, manufactured	48.76
Gold, non-monetary	5.09
Aluminum	4.82
Pig iron & spiegeleisen, sponge iron	30.52
Ores and concentrates of base metals	6.22
Ores & concentrates of precious metals; waste, scrap	40.29
Copper ores and concentrates	89.73
Electric current	8.33
Watches & clocks	4.53
Women's clothing, of textile fabrics	4.98
Men's clothing of textile fabrics	5.77
Meters & counters	6.52

Source: [UNCTAD](#)

**► Table 34 Main destinations of Armenian exports (Thousands of US\$ and %)**

	2010	2015	2019	2020
CIS	198774 (19.09)	28636 (19.28)	808721 (30.53)	744372 (29.34)
Russia	160508 (15.42)	244893 (16.49)	742696 (28.04)	680357 (26.82)
EU	502101 (48.23)	411617 (27.71)	578667 (21.80)	429126 (16.91)
Switzerland	16889 (1.62)	38953 (2.62)	457859 (17.30)	453953 (17.89)
China	30961 (2.97)	165359 (11.13)	193710 (7.30)	289826 (11.42)
Total	1041057 (100.00)	1485332 (100.00)	2648583 (100.00)	2536994 (100.00)

Source: [RA NSS](#)

► Table 35 Top Exported Services			
% On total exports in services	2010	2019	2020
Goods-related services	1.6	1.3	3.7
Transport	15.3	11.3	21.6
Travel	63.7	62.9	26.1
Telecommunications, computer, and information services	12.6	10.8	29.6

Source: [UNCTAD](#)

in Table 36<sup>31</sup>. Comparing Armenia with its peer countries, we can notice that only Azerbaijan has a lower ranking than Armenia in terms of economic complexity with Ukraine and Belarus showing a higher complexity. With respect to a decade prior, Armenia's economy has become less complex, losing 25 positions in the ECI ranking. Armenia's worsening complexity has been driven by a lack of diversification of exports with the largest contribution to export growth coming from moderate to low complexity products such as Travel and Tourism and Ores, Slag and Ash products.<sup>32</sup> According to Hidalgo and Hausmann (2009) economic growth is driven by diversification into new products that are incrementally more complex. Since 2004 Armenia has added 25 new products, namely new agricultural products such as fish and vegetables and clothing goods, so it has diversified into a sufficient number of new products but at a too small volume to contribute to a significant transformation of the economic structure and to substantial economic growth.<sup>33</sup> For instance, if we consider

textiles and garments which was a key industry when Armenia was still part of the Soviet Union with 150,000 employees, after a steep collapse in 2012 there were only 2,500 workers, which have risen to 4,700 people in 2018 (UNCTAD, 2019). The increase in employment is the result of a revival of the industry with Armenian clothing companies recently starting to supply as subcontractors world-known fashion brands, such as Moncler and Armani (Molla and Vantyghem, 2020). Therefore, new exported products could play an important role in job creation and economic growth, but so far, their impact is still limited in quantitative terms.

To take into consideration strengths and weaknesses in trade facilitation in terms of the efficiency of border procedures and related different trade costs, we consider the OECD Trade Facilitation Indicators (TFIs), covering 160 countries, and measuring several dimensions related to existing trade-related policies and regulations

31 Countries that are home to a great diversity of productive know-how, particularly complex specialized know-how, are able to produce a great diversity of sophisticated products. The complexity of a country's exports is found to highly predict current income levels, and where complexity exceed expectations for a country's income level, the country is predicted to experience more rapid growth in the future. ECI therefore provides a useful measure of economic development (Hidalgo and Hausmann, 2009).

32 Product complexity measures the diversity and sophistication of the productive know-how required to produce a product. The index of product complexity is calculated based on how many other countries can produce the product and the economic complexity of those countries. It captures the amount and sophistication of know-how required to produce a product. The most complex products (that only a few, highly complex countries can produce) include sophisticated machinery, electronics and chemicals, as compared to the least complex products (that nearly all countries including the least complex can produce) including raw materials and simple agricultural products (Hidalgo and Hausmann, 2009).

33 For the complete report on Armenia's economic complexity see [The Atlas of Economic Complexity](#).

**► Table 36 Country Complexity Ranking: EaP countries (Economic Complexity Index and Rank)**

	2000	2010	2019
Armenia	0.57 (35)	-0.02 (65)	-0.27 (76)
Azerbaijan	-0.37 (77)	-1.26 (121)	-1.19 (120)
Belarus	0.73 (29)	0.96 (27)	0.83 (31)
Georgia	0.32 (43)	-0.37 (78)	-0.01 (63)
Moldova	0.03 (61)	0.12 (57)	-0.16 (68)
Ukraine	0.62 (33)	0.47 (45)	0.30 (47)

Source: [Atlas of Economic Complexity](#)

as well as their implementation in practice.<sup>34</sup> Table 1.7 presents all the indicators for Armenia and its peer countries in comparison with the best practice values. Armenia performs better than the best practice as well as all its peer countries in the indicators about Appeal procedures and Fee and Charges. The two indicators with the worst performance, well below the best practice values, are Internal and External border agency co-operation, involving issues such as harmonization of data requirements, nationally and with neighboring countries, domestic coordination of inspections among agencies and alignment of procedures and formalities with neighboring countries.<sup>35</sup> Although Table 37 shows that border procedures are a general problems among EaP countries with the exception of Georgia, the 2020 World Bank Enterprise Survey indicates that in Armenia the number of days to clear exports through customs is 12 while

the average in the peer countries is 3 (Enterprise Surveys, 2020).<sup>36</sup>

An additional related dimension influencing trade is logistics, which is measured by the Logistics Performance Index (LPI) allowing the comparison across 160 countries on six dimensions accounting for the efficiency of the clearance process, the quality of transport infrastructures and logistics services and the timing of shipments.<sup>37</sup> Table 38 presents the results for 2018 indicating that Armenia is ranked 92, with some improvement from 2010 when it was 111 but no further progress after 2014. The dimensions with the worst performance are ability to track and trace consignments and timeliness of shipments in reaching destination. Logistics and physical infrastructures have also been indicated by several key informers as one of the main constraints to address for increasing Armenian export potential.<sup>38</sup>

34 The OECD TFIs measure the actual extent to which countries have introduced and implemented trade facilitation measures in absolute terms, but also their performance relative to others, using a series of quantitative measures on key areas of the border process. The TFIs take values from 0 to 2, where 2 designates the best performance that can be achieved.

35 For details about each indicator see [Trade Facilitation Indicators Simulator](#) for Armenia.

36 Data for Belarus are for 2018 and for Georgia and Ukraine for 2019. World Bank Enterprise Survey are available <https://www.enterprisesurveys.org>.

37 For further details about the index see [lpi.worldbank.org](http://lpi.worldbank.org). For detailed information about Armenia see [lpi.worldbank.org](http://lpi.worldbank.org).

38 Information collected with interviews done to Armenian key informers in the e-mission undertaken for the purpose of this report in September 2021.

**► Table 37 Trade Facilitation Indicators (2019): EaP countries (score from 0 to 2)**

	Best Practice*	Armenia	Azerbaijan	Belarus	Georgia	Moldova	Ukraine
Information availability	1.67	1.43	1.48	0.89	1.62	0.95	1.05
Involvement of the trade community	1.75	1.14	1.14	0.71	1.88	1.50	1.67
Advance rulings	1.91	1.67	1.33	1.29	1.27	1.67	1.00
Appeal procedures	1.5	1.75	1.25	0.38	1.15	1.56	1.63
Fees and charges	1.86	1.85	1.38	0.20	1.50	1.18	1.58
Formalities - documents	1.78	1.38	1.13	1.13	1.78	0.75	0.78
Formalities - automation	1.69	1.27	1.3	0.70	1.85	0.89	0.67
Formalities - procedures	1.6	1.48	1.27	0.96	1.65	1.19	0.80
Internal border agency co-operation	1.27	0.55	0.9	0.44	1.73	0.80	0.50
External border agency co-operation	1.27	0.82	0.8	0.60	1.00	0.30	0.64
Governance and impartiality	1.89	1.78	1.56	0.33	2.00	1.25	1.22

\*Best Practice is the highest score reached by each category considered in the table.

Source: [OECD Trade Facilitation Indicators Simulator](#)

## 4.2 Foreign Direct Investments

In the first decade of the 2000s, Armenia attracted increasing inflows of Foreign Direct Investments (FDIs) in sectors such as energy, mining, ICT, banking and real estate as a result of privatization and the diaspora channeling resources towards high growth industries (UNCTAD, 2019). The financial crisis stopped the growth of FDIs, which after reaching a record level of 944 US\$ million in 2008, have decreased to 529 million in 2010 and afterwards, apart from an increase in 2011, have been trending downwards (Graph 19). This less than

positive performance is explained by the reduced scope for privatization and some divestments in the banking sector. Moreover, the outbreak of some disputes on very visible projects such as the Almusar gold mine<sup>39</sup> and the political transition in 2018 (UNCTAD, 2019) as well a general decline in global investments flows and the COVID-19 pandemic, have all contributed to a standby attitude among investors.

Considering its peer countries, Armenia is not performing very well either as can be seen in

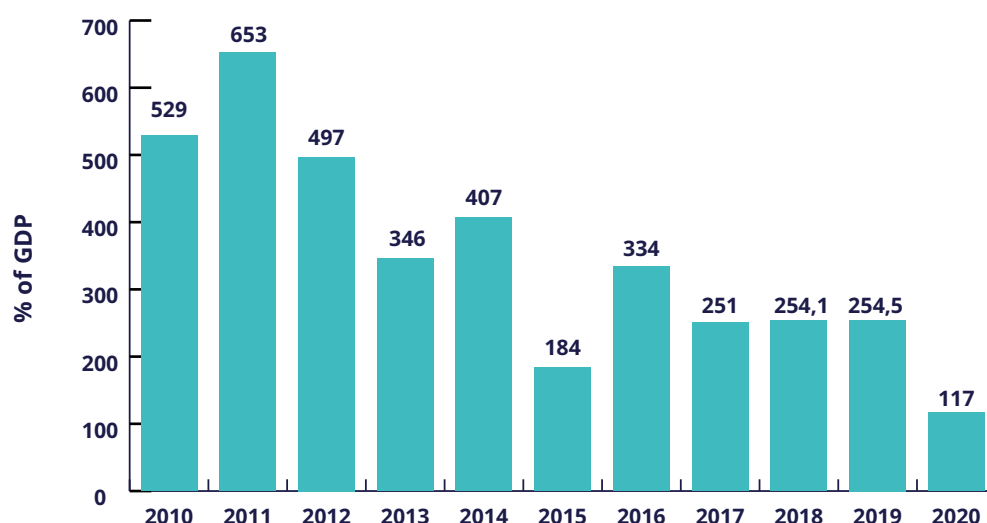
39 Amusar mine, operated by Lydian International, has been at the center of public controversy since 2014, with several blockades by local residents and environmental campaigners over ecological and social impacts, forcing a standoff between international development banks that supported the mine, the Armenian government and those against the project (OECD, 2020).

► **Table 38 Logistics Performance Index (rank and score from 1 to 5)**

	LPI Rank	LPI Score	Customs	Infra-structure	International shipments	Logistics competence	Tracking & tracing	Timeliness						
Germany	1	4.20	1	4.09	1	4.37	4	3.86	1	4.31	2	4.24	3	4.39
Armenia	92	2.61	81	2.57	86	2.48	95	2.65	97	2.50	113	2.51	111	2.90
Belarus	103	2.57	112	2.35	92	2.44	134	2.31	85	2.64	109	2.54	78	3.18
Moldova	116	2.46	124	2.25	141	2.02	90	2.69	122	2.30	142	2.21	82	3.17
Georgia	119	2.44	95	2.42	102	2.38	124	2.38	132	2.26	139	2.26	105	2.95
Ukraine	66	2.83	89	2.49	119	2.22	68	2.83	61	2.84	52	3.11	56	3.42

\*Germany is the best performer and Azerbaijan is not available

Source: [lpi.worldbank.org](http://lpi.worldbank.org)

► **Graph 19 Armenia's FDI: Inward Flows (US\$ million)**

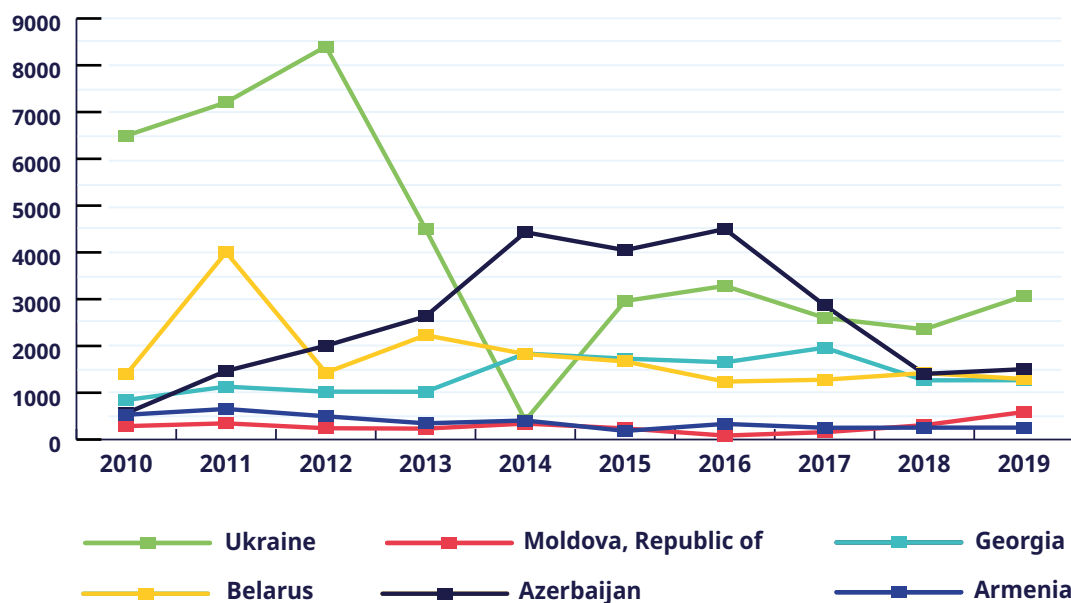
Source: [UNCTADSTAT](http://UNCTADSTAT)

**Table 39.** Although all the EaP countries have seen a slowdown of annual inflows (**Figure 20**), some of Armenia's key competitors in FDI attraction, including Azerbaijan and Georgia, have managed to reverse the decline after the financial crisis and have a higher FDI stock than Armenia.

**Table 40** presents the three main destination sectors of FDI in Armenia and its peer countries. In Armenia there is a very strong concentration in ICT, Finance and Business Services accounting for

54% of total inward greenfield investments. This industry attracts a lot of investments in the region and it is the main sector of attraction of FDI also in Belarus and Georgia. It can also be noted that Armenia's investment portfolio is rather concentrated while Georgia, Moldova and Ukraine have a more diversified portfolio (OECD, 2020). In 2020, in Armenia about 40% of total investments went into the supply of electricity, with more investments coming in the solar energy production after the

▶ Graph 20 FDI Inward Flows (US\$ million)



Source: [UNCTADSTAT](#)

▶ Table 39 FDI inflows and stocks: EaP countries

	Average FDI Inflows 2010-2019		FDI inflows 2020 (US\$ mln)	FDI stocks			
	(US\$ mln)	Per capita (\$)		2019 (US\$ mln)	2019 % GDP	2020 (US\$ mln)	2020 % GDP
Armenia	370,93	127,62	117	5 664	41.4	5246	42.5
Azerbaijan	2541,66	265,01	507	32 280	67.2	32787	77.0
Belarus	1778,06	188,53	1397	14 417	22.4	14519	24.1
Georgia	1373,02	340,55	617	19 283	110.3	18600	118.2
Moldova	282,15	69,40	55	4 682	39.2	4792	41.7
Ukraine	4128,30	91,39	-868	51387	33.4	48933	32.3

Source: [UNCTADSTAT](#) and [World Investment Report \(2021\)](#)

deal signed with Masdar, the United Arab Emirates based renewable energy company.<sup>40</sup>

**Table 41** presents the top 5 investing countries in Armenia and in its peer countries. Armenia receives almost 40% of investments from Russia

40 For more information see [Euroasianet](#).



**► Table 40 Three main destination sectors of greenfield FDI: EaP countries (2003-2017 - % of total FDI)**

	1 <sup>st</sup> destination sector	2 <sup>nd</sup> destination sector	3 <sup>rd</sup> destination sector
Armenia	ICT, Finance and Business Services 54%	Metals and mineral products 17%	Renewable energy 9%
Azerbaijan	Coal, Oil and natural gas 50%	Transport and storage 15%	ICT, Finance and Business Services 13%
Belarus	ICT, Finance and Business Services 25%	Transport equipment 13%	Transport and storage 10%
Georgia	ICT, Finance and Business Services 24%	Consumer products Coal, Oil and natural gas 12%	Renewable energy Transport and storage 11%
Moldova	Transport equipment 24%	Renewable energy 21%	ICT, Finance and Business Services 17%
Ukraine	Construction 20%	ICT, Finance and Business Services 17%	Food and Tobacco 10%

Source: [OECD 2020](#) (based on *fDiMarkets*)

followed by Cyprus, Jersey, the United Kingdom and The Netherlands. In comparison with the other countries considered, Armenia has the highest concentration in one single investor. Russian FDIs have been traditionally concentrated in energy, mining, transport and banking and more recently on gas and telecommunications. Jersey is the home country of Lydian International, the company operating the Almusar gold mine (UNCTAD, 2019). Cyprus, the second origin of FDI, is an important center of the Armenian diaspora, a community of over seven million people, more than double the population of the country. In the past years, other notable investor countries have been Argentina (airports and wine), France (beverages) and United States (ICTs and electricity), which are all important centers of the diaspora (UNCTAD, 2019).

The Global Competitiveness Index (GCI) for 2019, prepared by the World Economic Forum, measures national competitiveness based on several performance indicators and ranking 141 countries.<sup>41</sup> Armenia ranks 69 and Table 42 presents the dimensions of the index which are relevant in terms of FDI attractiveness in comparison with its fellow countries. With regard to institutions, the worst indicator is the incidence of corruption, although according to the Corruption Perception Index<sup>42</sup> the country, which was 105<sup>th</sup> over 180, it has improved to 60<sup>th</sup> in 2020, registering the second largest increase in the world thanks to a recent Anti-Corruption and Implementation Plan introduced for the period 2019-2022.

Transport infrastructures are clearly a problem in a landlocked country like Armenia, although

41 Belarus is not covered in the Global Competitiveness Index.

42 The Corruption Perception Index is available at [Transparency.org](https://www.transparency.org).

► **Table 41 Top Investing countries: EaP countries (2019 - % of total FDI)**

Top 5 investing countries		
Armenia	Russian Federation	37.0
	Cyprus	9.5
	Jersey	6.9
	United Kingdom	5.6
	The Netherlands	5.6
Azerbaijan	United Kingdom	20.2
	Turkey	19.8
	Norway	9.5
	Iran	8.3
	Cyprus	6.5
Belarus	Russian Federation	31.4
	Cyprus	20.5
	The Netherlands	4.1
	Austria	3.9
	Turkey	3.8
Georgia	Azerbaijan	20.9
	United Kingdom	12.8
	The Netherlands	8.2
	Cyprus	6.3
	Turkey	6.2
Moldova	Russian Federation	20.3
	Cyprus	16.7
	The Netherlands	12.6
	Romania	8.5
	Germany	6.3
Ukraine	Cyprus	31.2
	The Netherlands	22.7
	Switzerland	6.2
	Germany	4.8
	United Kingdom	4.2

Source: [IMF Coordinated Direct Investment Survey \(2020\)](#)

they are not a barrier in promising sectors such as ICTs. Armenia ranks 114<sup>th</sup> in road connectivity, 91<sup>st</sup> in quality of roads and 93<sup>rd</sup> in airport connectivity, which could represent a constraint also to

industry such as ICT and tourism. With regard to ICT adoption, Armenia ranks 59<sup>th</sup> in the GCI and it is ranked 75<sup>th</sup> over 115 countries in the Enabling

► **Table 42 Armenia in the Global Competitiveness Ranking (2019)**

	Aggregate Index	Institutions	Infrastructure	ICT adoption	Skills	Labor Market
Armenia	69	62	60	59	61	32
Azerbaijan	58	49	38	73	48	21
Georgia	74	43	73	55	46	37
Moldova	86	81	76	48	74	56
Ukraine	85	104	57	78	44	59

Source: [WEF \(2019\)](#)

Digitalization Index in which the two weakest dimensions are knowledge and infrastructure.<sup>43</sup>

Considering the labor market, the impact of investments in terms of job creation is undefined. It has been shown that FDIs contribute to economic growth, expanding productive capacity, easing capital constraints and creating jobs. In lower-income countries, FDIs are considered a central aspect of the development strategy because complement domestic resources, provide higher-paid jobs and transfer know-how and technology, increasing productivity (ILO, 2017; Jansen and Lee, 2005). However, FDIs may also lead to creative destruction in the labor market because of the competitive pressure on the domestic firms and the introduction of labor-saving technology. Juse and Silaghi (2016) show that job losses due to FDI introduction of labor-saving technology, particularly among low skilled employees, can be compensated by job creation in export-oriented FDI, resulting in negligible effects on the job market. Besides to widen employment benefits in the long run, the creation of linkages with domestic suppliers is key and as it will be discussed in the next

section these linkages are still rather limited in the Armenian case.

Conversely, high skilled human capital enjoys a positive contribution from FDI because Armenia has a wage cost advantage for skilled staff and it still has a skilled labor force in the areas of excellence assigned to the country within the Soviet Union<sup>44</sup>: science and microelectronics, which are reflected in the today flourishing high-tech sector, as it has also been widely stressed during the interviews. Even so, the country is ranked 100<sup>th</sup> in skillset of graduates because in other areas, skills are less well developed. Recent empirical studies have shown that there is a skill mismatch between labor market needs and the university curricula, particularly in sectors which are a priority for Armenia's development, such as tourism and agriculture. These deficiencies in the educational and training system and the management of educational institutions have also been stressed by several among the key informers interviewed, who have complained about the lack of involvement of the private sector in defining curricula and skills needed in the labor market.

43 The Enabling Digitalization Index measures the ability of countries to support the development of digital technologies in companies and increase their level of application. Assessment is based on five components: regulation, knowledge, communication, infrastructure and size. Knowledge accounts for education and training, innovation in companies, University- Industry linkages and Intellectual Property laws. Infrastructures consider both soft and digital infrastructures. More information is available at [eulerhermes.com](http://eulerhermes.com).

44 The first Soviet computer was built in Armenia and 40% of mainframes for the entire Union were manufactured in Armenia (UNCTAD, 2019).

### 4.3 SMEs internationalization and GVC participation

According to OECD (2018), in Armenia SMEs<sup>45</sup> represent more than 99% of all enterprises in the business economy, account for 66% of employment and generate up to 60% of value added in the business sector, similarly to Georgia and Moldova (Table 1.13) and broadly comparable with the SME performance in the EU.

Nevertheless, SME internationalization is well below the EU, with only 13% of total exports coming from SMEs with respect to an EU average of 50% in 2017 (OECD 2020). The Enterprise Survey (2020) confirms that small firms are less export-oriented than large firms, both considering direct and indirect exports (Table 44).

To account for indirect exports, we can consider participation in Global Value Chains (GVC). For a small country like Armenia, GVCs can be a powerful platform for integration in the global market

and can also amplify the positive impact of FDIs on the domestic economy generating spillover in terms of job creation, knowledge transfer and innovation (Amendolagine et al, 2019). Nonetheless, Table 45 shows that Armenia, as well as the other countries in the table, has a very low value of GVC participation, with Ukraine only showing a bit higher level of participation indicator.<sup>46</sup> Moreover, as shown by the larger value of DVX with respect to FVA, Armenia's limited participation in GVC is predominantly as a seller of intermediate goods that are used as inputs for export production by other countries.

### 4.4 The ICT industry

Because Armenia is a landlocked country with comparatively high trading costs in physical goods, high-tech digital exports are key to Armenia's growth (World Bank, 2020). Exports of ICT services grew from 124 US\$ million in 2010 to 312 US\$ million in 2020 (Table 46) and they represent

► Table 43 SMEs Contribution to the Economy, 2018 or latest available: EaP countries (%)

	Employment	Value Added
Armenia	66	60
Azerbaijan	43	13
Belarus	47	29
Georgia	64	61
Moldova	60	71
Ukraine	63	49

Source: OECD et al. (2020)

45 Since 2011, in Armenia the SME definition is in line with the EU definition and based on three criteria: employment, turnover and balance sheet (OECD, 2020).

46 Gross exports can be decomposed into two main components: 1) foreign value-added (FVA) that is the value of intermediate imports embodied in gross exports, and 2) domestic value added which is the value of domestically produced exports (DVA). The latter is further decomposed into: a) direct domestic value added—i.e. the value added embodied in exports of final goods and intermediates, absorbed by direct importers; b) indirect domestic value added (DVX)—i.e. the value added embodied in intermediates re-exported to third countries; and c) re-imported domestic value added—i.e. the value added from exported intermediates that are reimported. FVA is a measure of backward linkages. This is the "Buyer" perspective, when an economy imports intermediates to produce its exports. DVX is a measure of forward linkages, which captures the domestic value added contained in inputs sent to third economies for further processing and export. This is the "Seller" perspective, which is how Armenia mainly participates in GVCs. GVC participation is given by (FVA+DVX) divided by Total country exports. Data on GVC participation are not available for Belarus and the last available year is 2018.

► **Table 44 Share of exporting firms by size**

	All firms	Small firms	Medium firms	Large firms
% of firms exporting directly (at least 10% of sales)	14.2	12.6	15.0	19.4
% of firms exporting directly or indirectly (at least 10% of sales)	15.6	14.4	15.8	20.7

Source: [Enterprise Survey \(2020\)](#)

► **Table 45 Global Value Chain Participation as a share of gross exports: 2018 (%)**

	GVC Participation	FVA	DVX	DVA
Armenia	0.02	0.007	0.010	0.030
Azerbaijan	0.01	0.003	0.011	0.030
Georgia	0.02	0.007	0.010	0.039
Ukraine	0.06	0.030	0.033	0.085

Source: [UNCTAD-Eora GVC Database](#)

30% of total trade in services (see Table 34). On the contrary, the exports of ICT goods are rather low, only 10 US\$ million in 2020. The main destination markets for ICT services are the US (45%), followed by the EU (25%) and Russia and other CIS countries (11%).<sup>47</sup>

Most of the export activity is in software programming, building on a tradition in outsourcing services since when Armenia was part of the Soviet Union. More recently, Armenian ICT services are upgrading from a service model towards product design, customized software, web design and there are emerging areas including data science, artificial intelligence, cybersecurity and quantum computing. The number of firms actively operating in ICTs exceeds 1,000, employing more than 20,000 workers (World Bank, 2020). In the industry, there are around 240 foreign owned companies and US firms represent the majority of them, including major multinationals such as Synopsis,

Microsoft, Intel, Cisco, IBM and Oracle (Enterprise Incubator Foundation, 2018). There is also a significant presence from Europe (23%) and Russian (17%) investors (Republic of Armenia and UNCTAD, 2020). Moreover, there is a vibrant startup movement, including firms that have achieved global success such as PicsArt, an image-editing and social-networking app, valued around 250 US\$ million and backed by venture capital firms like Sequoia Capital (World Bank, 2020). Other examples of successful startups are SoloLearn, an app for learning programming languages and Vineti, a cloud-based platform for simplifying access to cell and gene therapy and personalized cancer vaccines.

According to the information collected with interviews to key informers, Armenia has a strong advantage in terms of skilled human capital, as already discussed in Section 4.2, but technical competences are rarely associated with

47 Data are from a survey undertaken in 2018 on 750 ICT companies operating in Armenia and conducted by the Enterprise Incubator Foundation (2018).

entrepreneurial skills such as strategic and critical thinking, business management, analytical and problem-solving knowledge. Moreover, while export growth is encouraging, the Armenian ICT industry may struggle to stay competitive in the future because it mainly targets highly saturated mass-market vertical sectors such as lifestyle mobile applications, banking software or educational training applications, with low barriers to entry and high global competition both from lower wage countries and from automation. Moreover, these vertical solutions are rather disconnected from other high-tech activities in the value chain and therefore offer limited opportunities for

upgrading (World Bank, 2020). Concerns about the innovation potential of the Armenian ICT industry have also been risen in the interviews in relation to the IP law and to the need for a land reform to overcome a highly fragmented property system, which may represent an obstacle for large investing projects.

To assess Armenia readiness to use, adopt and adapt frontier technologies with respect to its fellow countries we can refer to the UNCTAD Readiness for Frontier Technologies Index considering five building blocks: ICT deployment, skills, R&D activity, industry activity and access

► Table 46: Exports of ICT services\* (US\$ millions)

	2010	2019	2020
Armenia	124,5	241,8	312,5
Azerbaijan	82,2	39,8	51,5
Belarus	385	2389,5	2679,4
Georgia	26,7	108,9	107,6
Moldova	133	244	291,2
Ukraine	694	4298	5137

Source: UNCTADSTAT

\*UNCTAD classifies ICT services as an aggregation of computer and telecommunications services.

► Table 47: Readiness for Frontier Technology Index: EaP countries (2021)

Country	Total Score*	Total Ranking	ICT	Skills	R&D	Industrial activity	Access to finance
Armenia	0.39	83	77	69	103	105	67
Azerbaijan	0.30	100	70	95	90	154	128
Belarus	0.53	59	45	35	91	63	109
Georgia	0.44	79	71	56	87	81	56
Moldova	0.41	81	47	98	88	83	121
Ukraine	0.56	53	66	40	47	58	97

Source: UNCTAD (2021a)

to finance.<sup>48</sup> Table 46 shows that Armenia ranks 83 over 158 countries and its position is even lower in R&D (103) and Industrial Activity (105). Furthermore, considering the share of population using internet, notwithstanding a big progress from 6% in 2010 to 77% in 2019, this is still below the average for Europe and Central Asia (excluding high income countries) which is 82%. Similarly, the fixed broadband subscriptions (per 100 people) are 14.5 in Armenia and 21.3 on average in Europe and Central Asia.<sup>49</sup>

## 4.5 Export promotion policies

While the new Armenia export-led strategy 2020-2024 is being debated, the strategy adopted in 2011 continues to be the main guiding policy in the area of internationalization and export. The *Export-led Industrial Development Strategy* is aimed at fostering the discovery of new opportunities to turn Armenia into a country producing high-value and knowledge-intensive goods and services through the improvement of the general business climate as well as sector specific initiatives to address market failures and expand exports (World Bank, 2015). To achieve exports growth and diversification, the Strategy identifies six clusters with expansion potential: food, health, tourism, jewelry and diamonds, high-tech and light industry (i.e. textile and footwear). Central components of horizontal, cross-cutting measures for improving the business environment are the modernization of infrastructures, the attraction of foreign investments, the establishment of favorable external trade regimes and the elimination of trade barriers. Another key area in export promotion concerns products certification and technical and quality standards adoption which will be addressed in Section 5, given its fundamental importance in GVC participation.

Among the measures adopted within the framework of the export-oriented industrial policy, there is the establishment of Free Economic Zones (FEZs) with the aim of attracting export-oriented FDI (see the next section for further details on Armenian FEZs).

Within the Strategy framework in 2013 the Export Insurance Agency of Armenia (EIAA) was established as a state-owned company with the aim of promoting exports and controlling the export risks by offering to exporters insurance against the financial losses as a result of non-payment risk of foreign buyers.<sup>50</sup> It provides short-term insurance against economic and political risks, which is particularly crucial for small firms. Moreover, EIAA offers pre-export financing insurance, which gives exporters the possibility to receive short-term bank financing, without collateral for raw materials purchasing, packaging costs, transportation and custom expenses. Although an evaluation of the activity of EIAA is not available, the evidence collected in the interviews indicates that particularly the SMEs, which are the main targets of the agency, are often not fully informed about the services on offer and therefore the impact on export promotion of the Agency could be strengthened by a closer involvement with the private sector.

Another area in which several initiatives have been launched is the improvement of access to market, which includes supporting firms' participation to international expos, incoming and outgoing business missions as well as country branding and marketing. Promotion activities are among the services provided by Enterprise Armenia, the national investment promotion authority which is also in charge of supporting Armenian exporters seeking to enter new export markets or to grow in existing markets. Enterprise Armenia offers services in the areas of market advice, capacity

48 There are 11 frontier technologies included in the index, including artificial intelligence, robotics, biotechnology and nanotechnology. The five building blocks are as follows: a) ICT deployment indicating the level of ICT infrastructures; b) Skills accounting for relevant skills needed for using, adopting and adapting frontier technologies; c) R&D activity measured by publications and patents in the 11 technologies considered; d) Industrial activity considering adoption and exports in manufacturing, finance and ICTs and e) Access to finance assessing the availability of finance to the private sector. More information is available in UNCTAD (2011).

49 Data are available at [data.worldbank.org](https://data.worldbank.org).

50 More information is available at [eia.am](https://eia.am).

building as well as participation in trade missions and exhibitions<sup>51</sup>.

A sector in which Armenia has invested in branding and marketing initiatives is the wine industry which has a long historical heritage given that Armenia is the cradle of winemaking in the human history, on which it could build up an international reputation.<sup>52</sup> Several private initiatives around this industry have developed, such as Wine Works a winery incubator born in 2011 aimed at offering winemaking and viticulture services as well as marketing and management support.<sup>53</sup> Overall, the country wine reputation is increasing and becoming the central platform for promotion campaigns. For some examples about international best practice initiatives which have contributed to

building a national brand in industries as different as wine and the digital sector see **Box 1**.

With a focus on the high-tech industry, there are many public and private supporting initiatives contributing to an increasingly lively and dynamic domestic ecosystem and among them we report some examples. There is the National Centre of Innovation and Entrepreneurship, a public hub organization with four regional branches providing scientific and technical information and advisory services to entrepreneurs, also in the area of protection and commercialization of intellectual property.<sup>54</sup> Among the private organizations, the Foundation for Armenian Science and Technology (FAST) aims at building an innovation ecosystem coordinating the activities of scientists,

#### ► **Box 1 International experience with national branding**

**Chile and Argentina** are well-known cases of umbrella branding in the wine industry. Both countries have extensively promoted their brand worldwide, raising awareness about their wine products and building a positive image. In both cases, strong associations had been set up, Wines of Chile and Wines of Argentina, which have a mandate to control the quality of exports and promote the sector overseas. Both bodies are independent and the absolute majority of producers in the sector are involved in the associations, which provide most of the necessary funding through subscription fees. Besides, there is also effective cooperation with the state, which provides some financial support to their operations. The 2025 Wines of Chile strategy is built upon four pillars: diversity and quality; sustainability; country brand and innovation.

**Enterprise Estonia** was established in 2000 with the strategic objective of building a nation brand in the digital sector. Capitalizing on the country's growing reputation for digital expertise, Enterprise Estonia introduced the e-Residency program in 2014 to grow Estonia's community by inviting foreign citizens to open businesses in Estonia. It was introduced a transnational digital identity available to anyone interested in running an online business. This enabled Estonia to generate domestic revenues through digital companies. Estonia has become one of the best places for digital nomads and entrepreneurs aiming at hosting a company in the EU. Enterprise Estonia has built the nation digital brand on some key factors: security, credibility and trust. Estonia's performance in several rankings has contributed to the nation brand. Estonia ranks 7th in the [Digital Economy and Society Index](#) which monitors progresses made by EU countries in terms of digitalization and is 1st in the world in the [Digital Life Abroad](#) ranking. Enterprise Estonia also promotes digitalization in traditional sectors such as manufacturing and mining with instruments such as the [digitalization grant](#) to support investments in digital technologies, automation and robot adoption in manufacturing and mining enterprises.

In 2021 Enterprise Estonia has 265 employees and a budget of more 100 US\$ million. It has a widespread network of branches in Estonia and international representations in 8 EU countries, Russia, UK, USA, China, India, Singapore, Kazakhstan and Dubai.

*Source: World Bank (2015); Wines of Chile, Wines of Argentina, Enterprise Estonia, Enterprise Estonia: Joining efforts in supporting business development*

51 More information about Enterprise Armenia is presented in Section 4.

52 In 2010 evidence of the world's oldest known winery was discovered in the village of Areni in South eastern Armenia, dated back to 6,100 years ago. More information is available at [smithsonianmag.com](http://smithsonianmag.com).

53 More information is available at [wineworks.am](http://wineworks.am).

54 More information is available at [innovcentre.am](http://innovcentre.am).



inventors and entrepreneurs to amplify their work and impact at local and global levels in the areas of IT and computer science, artificial intelligence, high-tech materials, robotics, biotechnology and advanced engineering.<sup>55</sup> Moreover, incubators and research centers have been established to support the development of the sector. The Enterprise Incubator Foundation (EIF) is a public initiative which offers incubator facilities as well as advisory services to multinationals, startups, and public organizations.<sup>56</sup> EIF together with the Government of Armenia and the World Bank, is among the founders of the Gyumri Technological Centre launched in the second city of Armenia and housing state-of-art laboratories, an educational center and a business incubator. Among the labs there are the Microsoft Innovation Centre, the Innovative Solutions and Technologies Centre created by IBM, USAID and other partners and the Armenian-Indian Centre for Excellence in ICT (OECD et al, 2020). Another initiative is the EU TUMO Convergence Centre for Engineering and Applied Science, a hub for research, education and startups, geared towards university students and young professionals.<sup>57</sup>

Overall, there are not recent assessment about the results obtained by the Export-Led Strategy. According to World Bank (2015), the Strategy has made possible to shape a long-term vision for growth, but industrial dynamism has been quite uneven across the target sectors and there are gaps in execution capacity, resources are inadequate and bureaucratic inertia has slowed down implementation. Furthermore, it can be noticed that the last action plan for implementation

goes back to 2018 and after that it seems that the Strategy has been set aside waiting for a new policy document, which is still in the discussion phase.

Considering fiscal incentives in favor of export firms, the Tax Code which entered into force in January 2018 has introduced some tax breaks for exporters. Firms engaged in exports of goods and services with an annual group turnover of at least AMD 50 billion enjoy a 2% reduction of the Corporate Income Tax (CIT) rate and for companies whose total annual export turnover is at least AMD 40 billion, the CIT rate is reduced to 5%.<sup>58</sup> Taking into account Armenia participation in regional trade agreements, the country, which is member of WTO since 2003, is part of the Free Trade Treaty between the members of CIS since 2012 and participates in the Eurasian Economic Union (EAEU) since 2014.<sup>59</sup> Moreover, since 2017 Armenia is also eligible to the EU GSP+ system<sup>60</sup> and since March 2021 the trade relationship between EU and Armenia is regulated by the Comprehensive and Enhanced Partnership Agreement (CEPA).<sup>61</sup> CEPA allows 96% of Armenia goods to enter the EU single market with zero tariffs and it also contains provisions on cooperation areas such as infrastructure, energy, health, climate change, education, rule of law, crime and corruption. In addition to the regional agreements, Armenia has also trade agreements with Georgia, Kazakhstan; Kirghizstan, Moldova, Turkmenistan and Ukraine.<sup>62</sup>

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55 More information is available at [fast.foundation](https://fast.foundation).

56 More information is available at [eif.am](https://eif.am).

57 More information is available at [convergence.centre](https://convergence.centre).

58 Information is available at [taxsummaries.pwc.com](https://taxsummaries.pwc.com).

59 The EAEU members are Armenia, Bielorrussia, Kazakistan, Russia and Kirghizistan.

60 The GSP+ system is a special incentive arrangement for sustainable development and good governance. It slashes tariffs to 0% for vulnerable low and lower-middle income countries that implement 27 international conventions related to human rights, labor rights, protection of the environment and good governance. More information is available at [ec.europa.eu](https://ec.europa.eu).

61 More information is available at [eur.lex](https://eur.lex).

62 Data about regional trade agreements are available at [rtais.wto.org](https://rtais.wto.org).

## 4.6 The investment framework

An open and non-discriminatory business environment is vital for an attractive investment climate and it helps to ensure that foreign-owned enterprises are treated no less favorably than domestic enterprises in similar circumstances (OECD, 2020). The OECD FDI Regulatory Restrictiveness Index (FDI index) assesses and benchmarks market access and exceptions to national treatment, ranging between 0 (open) to 1 (close). The index accounts for a) foreign equity limitations; b) discriminatory screening and approval mechanisms for foreign investments; c) restrictions of the employment of foreign key personnel; d) other operational restrictions (e.g. restrictions on capital repatriation or land ownership) (OECD, 2020).<sup>63</sup>

Table 48 presents the aggregate FDI index as well as the disaggregated index for some selected sectors and shows that Georgia and Armenia are among the most open economies among their peers, also more open than OECD countries on average. Armenia is also very open at the sectoral level. Nevertheless, OECD (2020) underlines that the legibility of Armenia legal framework is quite opaque because foreign investors need to review a multiplicity of sectoral laws and regulations to understand the market access and the treatment conditions applicable to them and often an English translation is not available.

FDIs are still regulated by the Law on Foreign Investments of 1994, which indicates the main principles of Armenia's FDI regulation, and includes entry rules and establishment procedures, guarantees on investment treatment and protection as well as access to incentives. In 2015 an Investment Policy Concept was adopted including a timetable of activities to address investment climate challenges. The document highlights the key role of foreign investments in Armenia and lists the overarching institutions in charge of the effective realization of the investment policy. The Ministry of Economy is the main government body

responsible for the elaboration and implementation of the investment policy (UNCTAD, 2019).

The 1994 Law is widely regarded as outdated as many of the key informers interviewed have repeatedly stressed, indicating that a reform has been for long time under consideration but yet not carried out. In general, many provisions are too generic and there is not any reference to the role of investment promotion authorities regarding business facilitation and access to incentives. The definition of foreign investment is quite broad and goes beyond direct investments, including intellectual property and debt securities. There is no definition of what threshold of foreign ownership is required for foreign investments to be considered as FDI in terms of percentage of shareholding, location of headquarters or business activities (UNCTAD, 2019).

Armenia has not a screening mechanism on any sector, apart from some entry restrictions contained in the sectoral legislation (e.g. in media and air transport). However, there are limitations mostly caused by the high concentration and little degree of privatization in some sectors such as electricity, rail transport, and oil and gas which are *de facto* monopolistic markets in which market entry is limited both for locals and foreign investors. On the investor side, the legislation ensures high standards of protection and guarantees, expropriation of foreign investments is not allowed and there is no restriction on capital repatriation (UNCTAD, 2019).

Foreign investors can enjoy specific privileges when they locate in export-oriented Free Economic Zones (FEZs), created with a law in 2011 (last amended in 2018). Investors established in FEZs benefit from tax and custom incentives, including permanent exemptions on Corporate Income Tax (CIT), Value Added Tax (VAT) on imports, custom duties and property tax. There are also non-tariff benefits such as access to land, infrastructure, logistics and other services provided within FEZs. There are four FEZs: 1) Alliance FEZ existing since

<sup>63</sup> The FDI Regulatory Restrictiveness Index is not a full measure of FDI climate attractiveness because there are other factors coming into play, including FDI rule implementation but anyhow it is useful to benchmark countries in terms of restrictiveness of FDI regimes. The index is calculated for 69 countries, including all OECD and G20 countries and for 22 economic sectors (OECD, 2020).

► **Table 4.8 OECD FDI Restrictiveness Index and Selected Sectors: EaP countries (2020)**

	FDI Index	Agriculture & Forestry	Mining & Quarrying	Manufacturing	Communications	Business services	Electricity
Armenia	0.02	0	0	0	0	0.006	0
Azerbaijan	0.07	0.05	0.01	0.01	0.01	0.01	0.01
Belarus	0.08	0.05	0.01	0.01	0.01	0.25	0.01
Georgia	0.02	0.07	0	0	0	0	0
Moldova	0.06	0.10	0.05	0.05	0.05	0.05	0.05
Ukraine	0.12	0.18	0.08	0.08	0.08	0.08	0.06
OECD average	0.06						

\*0 indicates no restrictions

Source: [OECD](#)

2013 and focused on production and exports in the field of electronics, engineering, ICT, pharmaceuticals, biotechnologies and energy, managed by Sitronics, a Russian company; 2) Meridian FEZ located in Yerevan, existing since 2015 with a focus on jewelry, stones cutting and watchmaking manufacturing; 3) Meghri FEZ, located at the border with Iran, existing since 2017 with a logistics and industrial vocation in agriculture, manufacturing, electricity supply, transportation and storage, tourism, entertainment and recreation sectors; 4) Ecos FEZ located in Hrzazdan, with a focus on high-tech and digital industries.<sup>64</sup> In general, the FEZs operate as enclaves with very limited linkages with the rest of the economy (OECD, 2020).

Considering foreign hire, many foreign workers are from the diaspora and they are not required to apply for work permits. Also, investors, key personnel and certain categories of skilled workers are exempted from work permits but they still need to obtain temporary or permanent residence visas (UNCTAD, 2019).<sup>65</sup> In general, Armenia ranks 7<sup>th</sup> in the world on ease of hiring foreign labor according to the Global Competitiveness Index (WEF, 2019).

Armenia has a fragmented system of institutions aimed at investment promotion, which has kept changing over the last five years. Enterprise Armenia is the actual national Investment Promotion Agency, created after the abolishment of Business Armenia. It provides a One-Stop-Shop to support investors during the entire investment cycle, undertaking a comprehensive range of activities: a) investment promotion for attracting FDI through roadshows and business missions; b) information and advice on laws, regulations, taxation and location identification; c) investment aftercare for accessing finance, matchmaking with local partners, B2B services and advice in post-investment problems. A recent analysis of Investment Promotion Agencies in Eastern Partner countries, including Armenia, it is very critical about the efficacy of these agencies because they tend to have too many mandates and too few resources (OECD, 2020). This is the case of Enterprise Armenia which is also in charge of export promotion, as we have seen in Section 3. Moreover, the Investment Promotion Agency should be autonomous from the ministry and preferably involved the private sector while Enterprise Armenia is under the Ministry of the Economy and there are

64 More information is available at [mineconomy.am](http://mineconomy.am).

65 There is a list of technical and high-tech skills which are exempted from work permits (UNCTAD, 2019).

not representatives of the private sector in the board.<sup>66</sup>

The Armenian National Interest Fund (ANIF) is a state-owned enterprise aimed at co-investing with global investors in large-scale projects, established in 2019.<sup>67</sup> One of the projects in the ANIF is the creation of a solar photovoltaic station in collaboration with Masdar, which was mentioned in Section 4.1.

To simplify the registration procedures of foreign branches an electronic platform, eRegulations Armenia, was launched in 2019 with a partnership between the Ministry of Economy and UNDP and with the technical assistance of UNCTAD, providing a step-by-step guide on investment-related procedures.<sup>68</sup> 10 key business procedures have been fully mapped and listed online, including all requirement for starting a business, obtaining residency, registering intellectual property and other property rights (Republic of Armenia and UNCTAD, 2020). Nevertheless, according to the information collected in the interviews, the public service digitalization is not yet fully operative and the electronic signature of documents not yet always possible.

A crucial role in Armenia's future attractiveness for high tech investments is the legal framework for intellectual property (IP) protection. Domestic legislation, including the 2006 Law on Copyright and Related Rights, provides for the protection of copyright with respect to literary, scientific, and artistic works (including computer programs and databases), patents and other rights of invention, industrial design, know-how, trade secrets, trademarks, and service marks. The Intellectual Property Agency in the Ministry of Economy is responsible for granting patents and overseeing

other IPR-related matters. Armenia's legislation follows the World Trade Organization's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Despite a comprehensive legal framework on IP, UNCTAD (2019) reports low awareness and poor monitoring of IPR violations, which harm the business climate. An important step towards IPR regulation is the introduction of a new law in July 2021, which allows to patent software, making Armenia the second country in the world after the USA to regulate software IPR.<sup>69</sup>

Armenia has signed 39 bilateral investment treaties (BITs), which are currently in force.<sup>70</sup> The agreements provide additional guarantees for investors of both sides and supplementary protection in accordance with international laws. UNCTAD (2019) emphasizes that Armenia signed many BITs in the 1990s and they are therefore old-generation treaties. Recent treaties tend to include provisions to preserve regulatory space and minimize exposure to investment arbitration. Nevertheless, Armenia has been respondent to few international arbitration cases in recent years.

## 4.7 The policy framework to support SMEs internationalization and GVC participation

A general overview of SME policy in Armenia and in the other Eastern Partner countries is available in OECD et al. (2020). The SME Policy Index is a benchmarking tool for assessing and monitoring the level of policy development for SMEs on 12 main dimensions.<sup>71</sup> Internationalization is one of these dimensions, disaggregated in the 4 sub-dimensions presented in Table 49 In Armenia

66 Information about Enterprise Armenia is available at [enterprisearmenia.am](http://enterprisearmenia.am).

67 Information about ANIF is available [anif.am](http://anif.am).

68 More information is available at [armenia.eregulations.org](http://armenia.eregulations.org).

69 More information about the Law on patents is available at [mineconomy.am](http://mineconomy.am).

70 Information about BITs is available at [investmentpolicy.unctad.org](http://investmentpolicy.unctad.org).

71 Level 1 means that there is no law, institution, tool or (information) service in place to cover the area concerned. Level 3 + implies that there is some significant record of concrete and effective policy implementation of the law, institution, tool or service. This level comes closest to good practices identified for OECD countries. For further information see [oecd.org/global-relations/](http://oecd.org/global-relations/)

**Table 49 SME Policy Index: Internationalization: EaP countries (2020)\***

	Internationalization Aggregate Index	Export Promotion	Integration in GVCs	Trade facilitation	E-commerce
Armenia	2.86	3.77	1.68	3.00	1.70
Azerbaijan	3.08	3.60	1.59	3.24	3.17
Belarus	2.68	3.73	1.29	2.14	1.70
Georgia	3.76	4.27	2.85	4.10	3.20
Moldova	2.74	3.44	1.92	2.99	1.70
Ukraine	2.64	3.39	1.56	2.99	1.70
EaP average	2.96	3.70	1.81	3.08	2.19

\*1 no policies, 3+ effective policy (see footnote 7 for detail)

Source: OECD et al (2020)

the weakest areas with very limited policies are Integration in GVCs, which is rather weak also in the other EaP countries with the exception of Georgia, and E-Commerce in which Azerbaijan and Georgia perform much better than the other countries presented in the table.

The Export-led Industrial Development Strategy adopted in 2011 continues to be the main strategic document guiding internationalization of SMEs, but its implementation has been limited as seen in Section 3. The institution in charge of discussing issues related with SMEs is the SME Development Council, or Business Support Office (BSO), established in 2011 as a joint initiative of the Armenian government and the EBRD (European Bank for Reconstruction and Development). The Council serves as a platform for policy dialogue aimed at identifying and resolving key constraints to SME development. In the Council board, together with the Ministry of the Economy, the EBRD representative and non-government organizations representing the business communities, there is the head of the SME Development National Center (DNC), with the support of the Enterprise Europe Network, provides mainly information services to SMEs interested in exporting or co-operating with international partners. The agency acts as the main public organization for providing SMEs support in areas such as training, marketing and financial planning. SME DNC is set up as a one-stop-shop with 10 offices widespread throughout

the country. One of the projects aimed at improving SMEs export capacity under the umbrella of SME DNC in cooperation with the Ministry of the Economy and Enterprise Armenia, funded by the World Bank, is the Exporter Development Grants Scheme. The project offers grants for the creation of shared resource centers for SMEs in the areas of logistics, marketing and innovation to scale up production, trade and export capacity. The joint provision of services and the establishment of network of exporters have also been indicated in the interviews as key areas of intervention for increasing Armenian SMEs export capacity in large countries such as for instance the Russian market.

Another organization supporting SMEs is the Export Insurance Agency (see Section 3) which provides exporters, including SMEs, with export insurance services but according to the information collected with the interviews SMEs are not sufficiently aware about the services offered by EIAA and the market for export finance beyond insurance products is still poorly developed and lacks a broader set of public export finance tools (OECD et al, 2020).

In the area of SME-FDI linkages and GVC integration as well as in the use of e-commerce as a sales channel, Armenia does not provide any specific support. Box 2 presents the experience of Malaysia with the SCORE system, which is a successful diagnostic tool used to create linkages

between domestic SMEs and GVC lead firms. Box 3 presents a pilot success case from Armenia in the area of e-commerce within the framework of the EU4Digital initiative, funded by the European Union.<sup>72</sup>

Related with GVC integration, another key dimension of the Index is Standards and Regulations in which Armenia with 2.66 is well below the EaP average of 3.43, particularly considering the two most relevant sub-dimensions for GVC integration: Approximation with the EU technical regulations and standards (2.81 vs 3.43) and SMEs access to standardization (2.08 vs 2.92.). In practices, SMEs do not have problems in accessing the market of the other EAEU countries because there is mutual recognition of standards but trade with the rest of the world, in particular EU and the US, requires information about other countries' standard systems as well as internationally recognized

conformity systems. The National Body for Standards and Metrology operates under the Ministry of the Economy and is the main standards organization in Armenia.<sup>73</sup> Currently, certificates of quality/safety issued or accepted by SARM are required for most food products, tobacco products, alcoholic drinks, and petroleum products. Armenia has cooperation agreements in the field of standardization with Georgia, Belarus, Turkmenistan, Kazakhstan, Kyrgyzstan, Ukraine, Russia, China, India, Slovakia and Iran. Besides, SARM is a member of the International Organization for Standardization (ISO) since 1997 and participates in technical standardization activities of 13 ISO technical committees and 17 subcommittees. Armenia is also a member of the WTO and the Armenian government notifies technical regulations to the WTO Committee on Technical Barriers to Trade. Moreover, SARM is a partner standardization body (PSB) of the European Committee for

#### ► Box 2 – Malaysia SCORE system

Since 2007, Malaysia has introduced the SME Competitiveness Rating for Enhancement (SCORE), a diagnostic tool used to rate and enhance competitiveness of SMEs, based on their performance and capabilities. SMEs are rated between 0 and 5 and are offered tailored assistance depending on their score. SMEs assess themselves against the following areas: financial strength, business performance, human resources, technological capability and adoption (including level of automation), quality systems and certifications and market presence (export or only domestic market). Upon request the companies can ask for a verified assessment by an auditor of SME Corporation of Malaysia, which is in charge of SCORE. The auditor provides recommendations for improvement and indications about the type of assistance needed.

SCORE is used as tool for 1) acquiring baseline data on SMEs; 2) evaluate and track SMEs capabilities and performance; 3) facilitate linkages between SMEs and foreign and domestic buyers; 4) link export ready SMEs (achieving 4 or 5 stars) to the National Trade Promotion Agency (MATRADE) and 5) ensure better fund access. To achieve these objectives the SME Corporation of Malaysia collaborates with various public and private bodies that have the potential to assist and support SMEs in building their capacity and capabilities.

The SCORE tool allows the identification of support services that are better matched to individual business needs. For instance, SMEs with 3 stars rating or below receives support for improving their capacities, while 4- and 5-stars companies are sustained in getting involved in supply chains. Another advantage of SCORE is that it allows SMEs to benchmark their performance against the industry average, on the basis of all the information available in an online database collecting all the rating scores of the SMEs having completed the assessment exercise.

A challenge has been to train auditors able to support SMEs for completing the online SCORE assessment tool and undertake direct assessment in those companies asking for it. The solution was to organize a specific training program in the SCORE methodology, including both online assistance and site visits for direct assessment.

In Armenia an SME diagnostic tool could allow SME DNC to assess the strengths and weaknesses of SMEs to understand their readiness for connecting with foreign investors as well as directly with export markets.

Source: [smeorp.gov.my](http://smeorp.gov.my)

72 More information about the EU4Digital initiative are available at [eufordigital.eu](http://eufordigital.eu).

73 More information is available at [sarm.am](http://sarm.am).



► **Box 3 – Selling Armenian Socks to Germany: EU4Digital bringing EU markets closer through e-Commerce support**

**The Armenian Zeal Socks brand has launched itself on the German eBay online marketplace in a simple and fast way – an opportunity provided to the company by an eCommerce pilot launched by the EU4Digital initiative, funded by the European Union.**

As part of the EU4Digital initiative, the European Union is seeking to increase the flow of eCommerce between Armenia and the EU. To support this objective, an innovative solution was tested in May-June 2021 that brought together small and medium enterprises, delivery operators and customs authorities in the Eastern partner countries, for an eCommerce pilot solution for the automatic exchange of eCommerce data between Armenia, Georgia, Azerbaijan and Germany.

*A platform has been created within the framework of the initiative. The solution enables Armenian producers and entrepreneurs to enter data about their products in the virtual warehouse, which then automatically shares this data with online marketplaces operating in the EU, postal operators and customs, eliminating the need for sellers to enter data multiple times and prepare customs documents.*

The data entered in the virtual warehouse follows EU and international requirements, and so only needs to be submitted once, instead of providing the same data to the post or customs for each sale. The postal and customs documents necessary for a cross-border transaction are generated by the virtual warehouse.

The virtual warehouse is a game changer for local sellers: once logged into the warehouse, their products can then be marketed on any number of international online marketplaces such as eBay or Etsy, while the standardized data allows postal services to launch delivery and ensures seamless cross-border customs procedures.

*This project allows Armenian SMEs to enter the European market without extensive analysis of the markets and legislation, it helps them in finding partners, and attracting additional resources to introduce products on different platforms. Besides, the Armenian diaspora also benefits. The community had always wanted to buy Armenian products, but the opportunities were limited.*

The development of this eCommerce promotion model will continue and in Armenia, HayPost is responsible for developing the eCommerce solution.

Source: [eufordigital.eu](http://eufordigital.eu). For more information about Zeal Socks see [zealsocks.am](http://zealsocks.am) (in Armenian)

Standardization (CEN) since 2007 and it is expected that Armenia's entry into CEPA with the EU will lead to pursue harmonization efforts with the EU on a range of laws, regulations and policies relevant to trade and economic issues.

## 4.8 Final recommendations

Armenia needs to strengthen its position in the international market, rebalancing its growth from being domestic demand oriented towards exportable/tradable goods and services and foreign investments. Its performance in terms of exports, FDI and GVC involvement has not been very satisfactorily during the last few years. Exports are still concentrated in very few products and markets, FDI performance has been mediocre and GVC involvement is insignificant. Nonetheless, there are some notable positive signals such as the ICT boom, which has attracted to Armenia many leading multinationals, generating a domestic, very lively startup scene and a dynamic ecosystem

and leading to a significant increase in exports of ICT services. Besides, Armenia has started several reforms and it is a very open country with few restrictions to foreign direct investments, with tangible improvements in areas such as e-regulations and corruption fight. In order to address the constraints and challenges identified in this chapter as well as to fully take advantage of the existing opportunities in the international market, a multi-pronged approach combining actions in different areas is needed. Table 6.1 summarizes the recommendations for actions that would contribute addressing challenges and fully grasp opportunities, identifying the challenges to address, the actions to implement, the output expected, and the main actors involved.

**FDI legislation.** The Law on Foreign Investments is outdated and there is need for a new law addressing the shortcoming of the 1994 Law, including the definition of the mandate and role of investment promotion authorities regarding business facilitation and their role in determining

access to incentives. A new law has been debated for long time and an acceleration of the legislation process is strongly needed.

**Education system.** Armenia's high-tech boom is based on a strong human capital base but to ensure a continuous and sustainable growth the education system should provide skills relevant to the labor market. At this aim it is necessary to improve the public-private dialogue and to increasingly involve private sector representatives, such as employers' associations, in the definition of curricula to adapt them to industry needs, also introducing a better balance between theoretical and practical content in school and university curricula. University-Industry links in the fields of research and innovation must be strengthened. Technical equipment and instruments used in the educational process must be improved, with an increasing role of the private sector in the establishment of an internship system which could offer students an early opportunity to experiment the job market.

**Logistics and infrastructures.** This includes improving basic transport infrastructures to enable efficient transfer of passengers and goods and also enhancing transport facilitation services in areas such as logistics and border management. In particular there is a need for improving export-import procedures, streamlining the process, reducing time, simplifying the required documentation and introducing an efficient electronic system for the submission of custom documents.

**Digital infrastructure.** Leveraging the digital economy will help the country to overcome physical landlockedness. This requires investing in ICT infrastructures and improving internal and external connectivity. In this respect it is important to improve internet access, to support e-commerce development and to incentivize the adoption of digital technology among domestic firms, in particular small and medium enterprises. Employers' associations can play an important role in providing the knowledge needed by firms to make the digital transition and fully understand its potential.

**Stable, predictable and supportive investment climate.** Armenia has significantly improved its investment climate, but a number of important gaps remain. The country exhibits a significant lack of market contestability, which hinders domestic

and foreign firms' entry and growth. Regulations for starting a business, registering property, enforcing contracts or protecting property rights are easy but getting things done is much more cumbersome because there is often a gap between rules and implementation on the ground.

**Standards and accreditation systems.** Armenia should seek international recognition of the country' accreditation system and invest in strengthening metrology and accreditation laboratories. Progresses in this area could be facilitated by the cooperation with the EU in the framework of CEPA. This is a key area to strengthen GVC involvement and to diversify export markets.

**E-government solutions.** This is essential for lowering trade costs and making easier for small companies to manage interactions in the global supply chains. Beyond improving the business ecosystem, this is an opportunity for the Armenian high-tech industry to develop expertise in the provision of IT services and solutions that can be exported in the region.

**Promotion agencies.** Armenia should strengthen the capacities of promotion agencies with the identification of a clear mandate, separating export from investment promotion and ensuring that they have adequate resources and qualified staff.

**Diaspora.** There is room for greater and more systematic leverage of diaspora trade, investment and knowledge networks. In the area of export promotion, the diaspora can help trade institutions to reduce the fixed costs that firms face when entering new markets, playing a key role in export intelligence services. In FDI, the diaspora can be key in attracting funds, knowledge and technologies.

**Regional trade agreements.** Armenia can take advantage of its EAEU membership by positioning the country as a base for market-seeking investors wishing to access the EAEU market. This implies to build a business and policy environment more supportive to FDI than those of other EAEU partners. Besides, participation in CEPA represents an opportunity for cooperation and learning in areas such as infrastructure, energy, health, climate change, education, rule of law, standards and accreditation systems, crime and corruption.



► **Table 50. A multi-pronged strategy for improving Armenia involvement in international markets, attraction of foreign investments flows and participation in global value chains**

Challenges addressed	Actions	Output expected	Actors involved
Outdated FDI legislation	<ul style="list-style-type: none"> <li>► Finalize the elaboration of a new FDI law</li> <li>► Approve and implement the law</li> </ul>	<ul style="list-style-type: none"> <li>► Attraction of FDI</li> </ul>	<ul style="list-style-type: none"> <li>► Ministry of economy</li> <li>► Enterprise Armenia</li> </ul>
Mismatch between skills provided by the education system and skills needed in the labor market	<ul style="list-style-type: none"> <li>► Improve the public-private dialogue to adapt curricula to industry needs</li> <li>► Strengthen university-industry links</li> </ul>	<ul style="list-style-type: none"> <li>► Increase in high value-added exports</li> <li>► Attraction of FDI, particularly in ICTs</li> <li>► Increase in GVC participation</li> </ul>	<ul style="list-style-type: none"> <li>► Private sector</li> <li>► Business and employers' associations</li> <li>► Ministry of education</li> <li>► Ministry of high-tech industry</li> <li>► Universities</li> </ul>
Difficult land connectivity	<ul style="list-style-type: none"> <li>► Improve transport infrastructures</li> <li>► Improve transport facilitation services in areas such as logistics and border management</li> </ul>	<ul style="list-style-type: none"> <li>► Increase in exports</li> <li>► Attraction of FDI</li> <li>► Increase in GVC participation</li> </ul>	<ul style="list-style-type: none"> <li>► Ministry of transport and communication &amp; IT</li> <li>► Logistic companies</li> </ul>
Limited internal and external digital connectivity	<ul style="list-style-type: none"> <li>► Improve internet access</li> <li>► Increase e-commerce</li> <li>► Incentivize adoption of digital technology among domestic firms</li> </ul>	<ul style="list-style-type: none"> <li>► Increase in exports</li> <li>► Attraction of FDI, in particular in ICTs</li> <li>► Increase in GVC participation</li> </ul>	<ul style="list-style-type: none"> <li>► Ministry of transport and communication &amp; IT</li> <li>► Ministry of high-tech industry</li> <li>► Business and employers' associations</li> </ul>
Market contestability Gap between rules and implementation on the ground	<ul style="list-style-type: none"> <li>► Improve the investment climate</li> </ul>	<ul style="list-style-type: none"> <li>► Increase in exports</li> <li>► Attraction of FDI</li> <li>► Increase in GVC participation</li> </ul>	<ul style="list-style-type: none"> <li>► Ministry of finance</li> </ul>
International recognition of standards and accreditation systems	<ul style="list-style-type: none"> <li>► Acquire international recognition of accreditation system</li> <li>► Strengthen metrology and accreditation laboratories</li> </ul>	<ul style="list-style-type: none"> <li>► Increase and diversify exports</li> <li>► Increase in GVC participation</li> </ul>	<ul style="list-style-type: none"> <li>► National Body for Standards and Metrology</li> </ul>
Very limited interactions in global supply chains	<ul style="list-style-type: none"> <li>► Strengthen e-government solutions</li> </ul>	<ul style="list-style-type: none"> <li>► Increase Armenian exports in IT services and solutions</li> <li>► Increase in GVC participation</li> </ul>	<ul style="list-style-type: none"> <li>► Ministry of economy</li> <li>► Ministry of high-tech industry</li> <li>► Business Support Office</li> <li>► High-tech startups</li> </ul>
Lack of a clear mandate and of adequate resources and qualified staff in trade and investment promotion organizations	<ul style="list-style-type: none"> <li>► Strengthen the capacities of promotion agencies</li> </ul>	<ul style="list-style-type: none"> <li>► Increase in exports</li> <li>► Attraction of FDI</li> <li>► Increase in GVC participation</li> </ul>	<ul style="list-style-type: none"> <li>► Ministry of economy</li> <li>► Enterprise Armenia</li> </ul>
Lack of resources in trade and investment promotion organizations	<ul style="list-style-type: none"> <li>► Diaspora support in export intelligence services</li> <li>► Diaspora support in attracting foreign direct investments, knowledge and technologies</li> </ul>	<ul style="list-style-type: none"> <li>► Increase in exports, particularly SMEs export capacity</li> <li>► Attraction of FDI</li> </ul>	<ul style="list-style-type: none"> <li>► Ministry of economy</li> <li>► Enterprise Armenia</li> <li>► Business and employers' associations</li> <li>► Diaspora associations</li> </ul>
Leverage trade agreements	<ul style="list-style-type: none"> <li>► Learn through cooperation in CEPA</li> <li>► Improve investment climate with respect to EAEU partners</li> </ul>	<ul style="list-style-type: none"> <li>► Increase in exports</li> <li>► Attraction of FDI</li> <li>► Increase in GVC participation</li> </ul>	<ul style="list-style-type: none"> <li>► Ministry of Economy</li> </ul>



## ► 5. Digitalisation of the business enabling environment

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Digital technologies have deeply transformed economies and societies over the last decades. It is already obvious that digitalisation benefits for business are significant: reducing of operational costs, providing innovative and efficient ways of information access, communication channels and networks. With digital technologies it is already a reality for micro, small and medium-sized enterprises (MSMEs) to make a rapid integration into world markets to overcome barriers of scale and expensive infrastructures and to foster innovation. Digitalisation accelerates access to the markets, access to finance, training, recruitment, public services. It also helps to make better decisions, reduce risks, and do better crisis management.

The COVID-19 pandemic has further accelerated digital developments. Ongoing paradigm shifts, such as the increased reliance on e-commerce and teleworking, are bound to outlast the pandemic, becoming permanent features of the economy and society.

This chapter analyses the digitalisation state in Armenia and its business enabling environment. More specifically, the section will offer an overview of Armenia's enabling environment from a digital perspective, explaining where there has been progress and where there is still room for improvement. The focus is on the following dimensions: 1. Information and communications technology; 2. Legal and regulatory environment; 3. Trade system; 4. Getting Credit and 5. Training and life-long learning. When presenting international indicators, the chapter will compare Armenia to the other 5 countries of the EU Eastern Partnership (Georgia, Azerbaijan, Belarus, Moldova and Ukraine). At the end of the chapter policy recommendations are presented for the strengthening the digital dimension of the national enabling environment.

### 5.1 Information and communications technology

During last two decades the Armenian government is playing an active role in supporting the development of the ICT industry. Armenia aspires to have a highly innovative and productive information and communications technology (ICT) infrastructure and business image, as well as to have a developed, advanced information society and knowledge-based economy. To achieve its ultimate goal, Armenia somehow moved from being low-cost IT service provider to a highly-valued products and services. The need and possibility to develop the ICT sector in Armenia is conditioned by the relatively high level of technical educational potential, traditional efficiency and productivity of the R&D potential and creativity. Forbes article from the early 2020 stressed the technology sector rapid growth and its potential to build-up the world's next tech hub<sup>74</sup>.

There are number of fast developing directions within the Armenian ICT sector. Armenian ICT is growing with its customized software, web design and development, IT services and consulting, mobile app development, chip design and testing, computer graphics and multimedia, and games. E-business areas are also started their development pathway, such as data science, artificial intelligence, quantum computing, and electronic design automation. US International Trade Administration stressed the message that ICT companies explore opportunities to sustain aggressive growth in Armenia<sup>75</sup>.

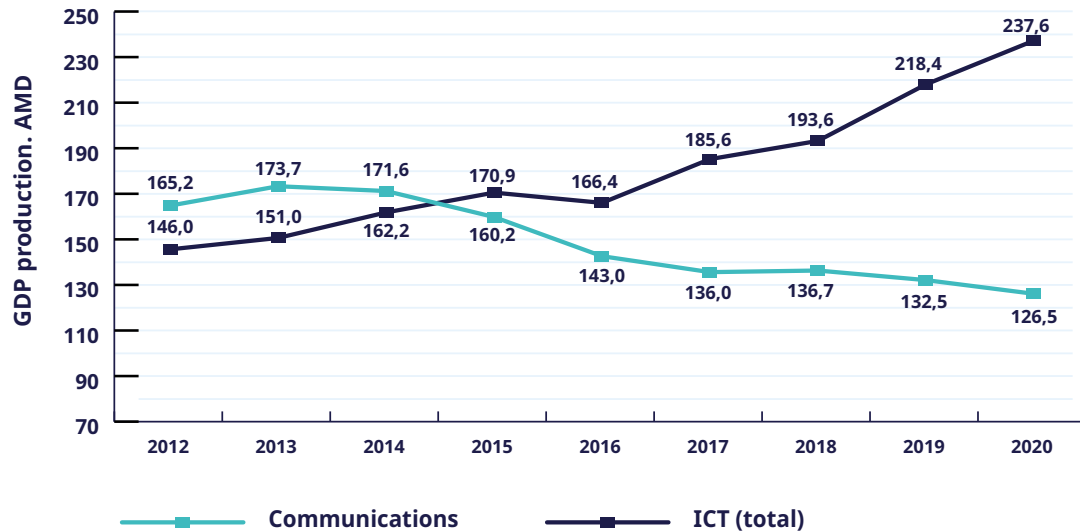
From the early 2000's the sector of ICT is one of the one of the extensive and fastest growing in the Armenian economy.

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74 Wade Shepard, Welcome to the World's Next Tech Hub: Armenia, Forbes, Jan. 2020.

75 [Armenia - Information and Telecommunication Technology \(trade.gov\)](https://www.trade.gov/armenia-information-and-telecommunication-technology).

► Graph 19: ICT production (in GDP) volume in the Republic of Armenia, bln. AMD\*



Source: Data extracted from the Central Bank of Armenia statistical tables and Armstat publications – 2013-2021 reports on Socio-Economic Situation of RA.

\*The average annual exchange rate for 1 USD in 2020 was 489.01 AMD. As for fluctuations, in 2010 the annual average rate was 373.66 AMD and the main increase was in 2016 when the rate was 480.49 AMD.

### A growing sector with higher salary on average

In the graph 19, a highly positive trend of ICT sector growth is obvious. Even, under the condition of communications sector decline, the IT sector separate growth is as much high (see graph 20) to ensure the total ICT growth over the last years. The communications technology sector passed its evolution and the observing decline is mainly connected with the prices decrease over the last years in Armenia. Analysis of International Telecommunication Union ICT price trends database shows that from 2013 up to 2021 the mobile broadband prices in Armenia decreased more than by 371%<sup>76</sup>. In general, similar declines are also available for rest Eastern Partnership Countries (EPC).

As for the IT sector, from 2012, it has grown 7 times in Armenia, reaching to around 143 billion AMD of output volume.

Linear trendlines on the graph 20 show that IT sector growth in GDP is tangibly higher than in the total ITC sector.

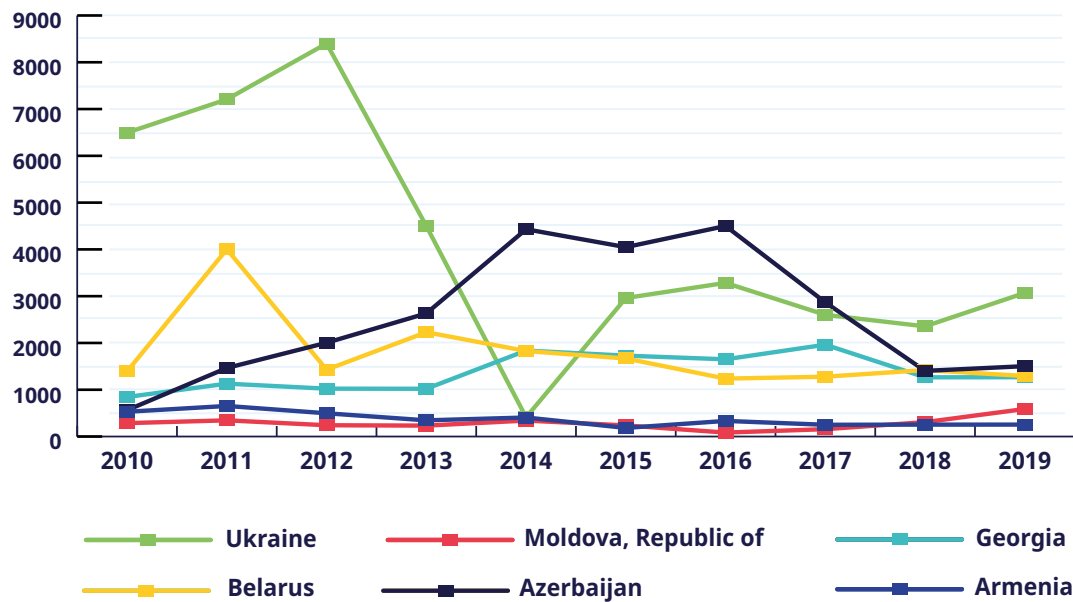
Average salary in ITC sector in Armenia is the highest comparing to all other sectors and as of January 2021 forms 552,000 AMD in ICT and 706,000 AMD in IT sectors. In 2012 ICT average salary was only at the third place after financial and mining sectors and from 2012 the average salary in ICT increased by 2.2 times<sup>77</sup>.

There are more than 2,500 ICT companies in Armenia with around 28,500 employees, out of

76 International Telecommunication Union, ICT Price Baskets, 2020 - [ICT prices \(itu.int\)](https://www.itu.int/ITU-T/price/)

77 Socio-Economic Situation of RA, Armstat, August 2021 and Jan-Dec, 2012.

► Graph 20: IT and ICT sectors in GDP, %



Source: Data extracted from the Central Bank of Armenia statistical tables and Armstat publications – 2013-2021 reports on Socio-Economic Situation of RA.

which 16,200 or around 57% are in IT companies. One of the significant facts is that 45.2% of ICT employees are women and are not only in business and marketing departments but in game development, programming and QA<sup>78</sup>.

There is an actively growing IT startup ecosystem in Armenia during recent years. As for the international big actors, Intel, Microsoft, IBM, Teamable, Joomag, Synopsys, Cisco are available in Armenia. There are also Armenian backed big IT actors available, such as Pixart, Krisp, etc.

Armenia, like most of the countries, is now in its way of the recovery from the COVID-19 crisis. Post COVID-19 economic recovery may be highly correlated with the timing and deepness of COVID-19 influences. It is now very much likely that Armenian

economy will go to “U” and not “V” shaped recovery after COVID-19 shock. With 7.6% economy decline in 2020, IMF 2021<sup>79</sup> forecast is 1% and World Bank’s forecast<sup>80</sup> in June 2021 is already 3.4%.

Despite the economic shock, from early 2020 Armenia accelerated the process of digitalization of the economy and society. Ongoing paradigm shifts, such as the increased reliance on e-commerce and distance working, expansion of online public services, e-banking becoming permanent features of our society.

PwC survey in late 2020 shows that 100% of Armenian companies did not consider deferring or cancelling planned investments in digitalisation as a result of COVID-19<sup>81</sup>.

78 Armenian Tech Sector in Numbers, Darpass, Feb, 2021.

79 [Armenia’s economy set to start recovering in 2021 – IMF](#)

80 [Global Economic Prospects, June 2021 \(worldbank.org\)](#)

81 [COVID-19 response study, PwC, 2020 \(pwc.com\)](#)

Pandemic shock and lockdowns forced companies to accelerate their move to digital platforms and society – to be more digital. Companies and society have grown using the internet, social media, online public services, specialized applications, work platforms and other digital platforms in their day-to-day business operations. E-commerce and digital transformation boosted mainly in small and medium-sized companies more than in micro-companies. Based on Central Bank of Armenia statistics, comparing to January 2020 in January 2021 number of monthly card transactions for online shopping increased from 12,227 to 19,430 or by 59%. The volume of online shopping transactions for the same period increased from 289 mln. AMD up to 648 mln. AMD or by 124%. Mentioned growth is continuing up to current period and in September 2021 number of monthly transactions form 24,453 and the total volume is 753 mln. AMD<sup>82</sup>.

### **The declining trend on accessibility and use of ICT technology**

Despite the fact that digitalisation boosted in Armenia in 2020, lack of awareness of the benefits of technology, lack of resources, lack of infrastructure, privacy concerns, and data security may be some of the barriers for SMEs to adopt technologies in Armenia faster.

For understanding digitalisation spectrum current state, and developments trends in Armenia and observing countries several indexes and other data from various institutions are used.

The Global Innovation Index 2021 captures the innovation ecosystem performance of 132 economies and tracks the most recent global innovation trends. It relies on a wide set of indicators to measure the innovation performance of economies, including ICT and technological factors<sup>83</sup>.

The chart 21 shows that except Ukraine all observing countries have the decline of the global

innovation index since 2013. In 2020 Armenia outperforms all countries except Ukraine.

The ICT Development Index (IDI), previously implemented by the International Telecommunication Union, is a composite index including ICT access, ICT use and ICT skills subindexes. Currently World Intellectual Property Organization in the frames of Global Innovation Index calculates ICT access, ICT use indexes following the methodology of the International Telecommunication Union ICT Development Index.

ICT access index is a composite index that captures ICT readiness and weights five ICT indicators (20% each): (1) Fixed telephone subscriptions per 100 inhabitants; (2) Mobile cellular telephone subscriptions per 100 inhabitants; (3) International Internet bandwidth (bit/s) per Internet user; (4) Percentage of households with a computer; and (5) Percentage of households with Internet access.

Armenia has the highest, more than by 65% increase among observing countries of its ICT access index score reaching from 4.1 to 6.8 points between 2013 and 2020 (graph 22). However, the score slightly decreased in 2020 compared to 2019 (7.7 score in 2019), which also led Armenia to lose position in the world ranking from 36th to 62th. In this specific sub-index, Armenia outperforms Azerbaijan and Ukraine, while it lags behind Georgia, Belarus and Moldova.

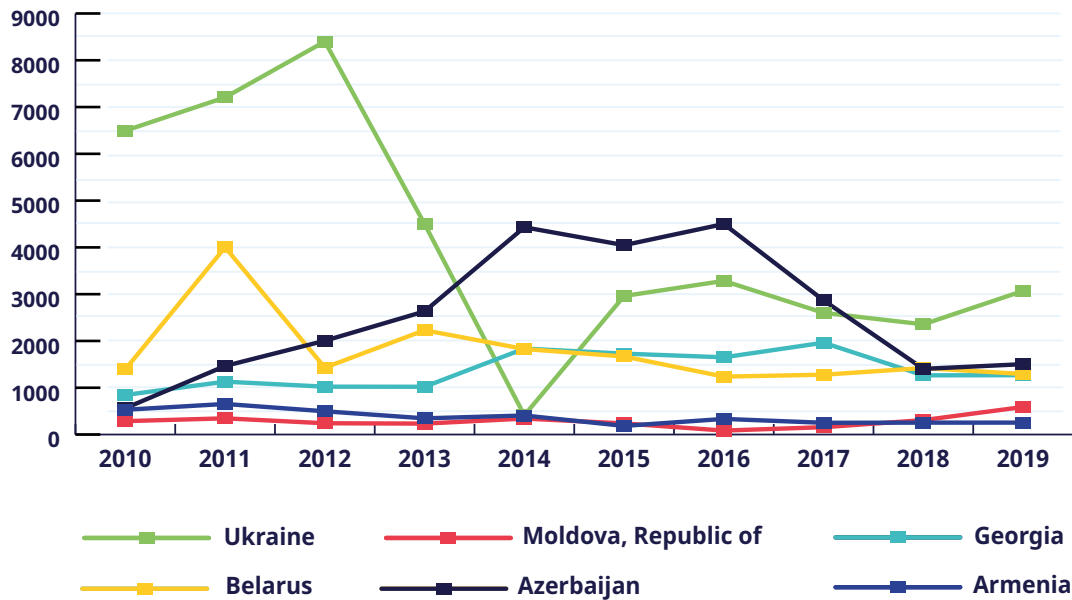
With its ICT access ranking Armenia is at better place than Azerbaijan and Ukraine. Belarus is at leading position among observing countries. Except Belarus rankings are not very diversified and close to each other, which somehow means that there are also regional specific factors affecting ICT access similarities.

ICT Use is a composite index that weights three ICT indicators (one third each): (1) Percentage of individuals using the Internet; (2) Fixed (wired) broadband Internet subscriptions per 100 inhabitants; (3) Active mobile broadband subscriptions per 100 inhabitants.

82 [Statistical overview, CBA, Sept. 2021, Jan. 2021 and Jan. 2020.](#)

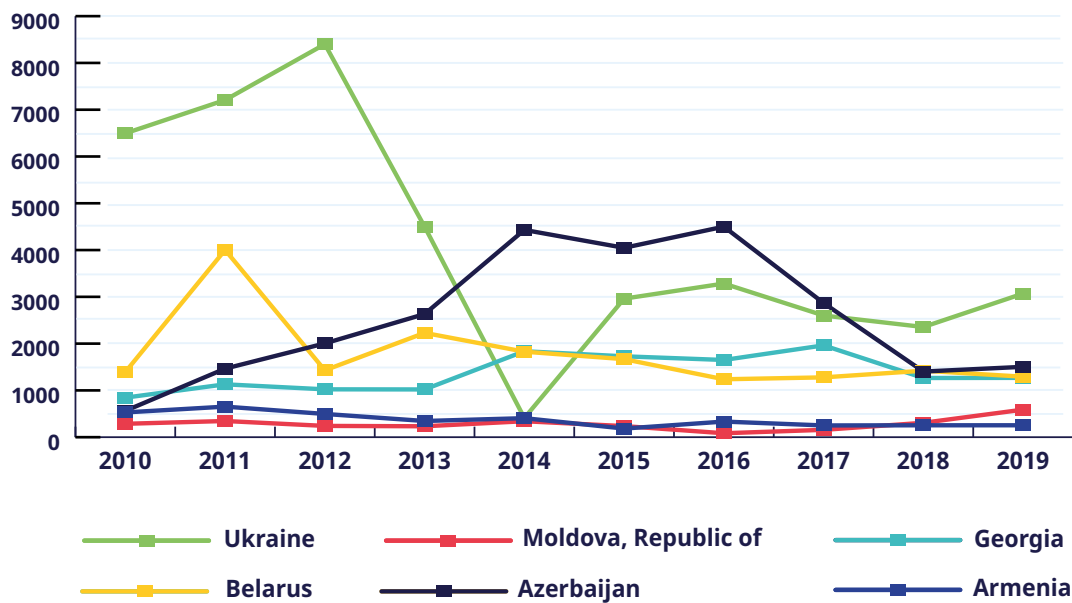
83 [Global Innovation Index 2021, World Intellectual Property Organization, 2021.](#)

► Graph 21: Global innovation index, 2013-2020 (0-100)



Source: Data extracted from the World Bank TCDATA360, Global Innovation Index database. [Global Innovation Index database](#), World Bank, 2021.

► Graph 22: ICT access index, 2013-2020 (0-10)



Source: Data extracted from the World Bank TCDATA360, Global Innovation Index database.

► **Table 51: ICT access rank, 2013-2020 (over 149 countries)**

Country	2013	2014	2015	2016	2017	2018	2019	2020
Armenia	79	73	68	65	62	65	36	62
Azerbaijan	69	65	65	64	57	63	64	63
Belarus	48	45	35	34	32	31	23	19
Georgia	70	68	66	63	67	68	59	60
Moldova	54	55	55	53	61	37	-	-
Ukraine	66	64	63	62	64	64	65	65

Source: Data extracted from the World Bank TCData360, Global Innovation Index database.

ICT use has sustainable positive trend for Armenia between 2013 and 2020 (graph 23, table 52), which has also led to an improvement in the overall global ranking from the 82<sup>th</sup> position of 2013 to the 68<sup>th</sup> position of 2020. Among EPC, Armenia outperforms only Ukraine.

The data on ICT skills is missing for Armenia. A survey<sup>84</sup> funded by EU pointed out 47% of the Georgian population did not have the basic knowledge to use computers. Armenia displays a similar situation with 34% of individuals not having basic digital skills in 2019. A survey by the Ukrainian Ministry of Digital Transformation in 2019 shows that in Ukraine 53% of the population had lower than basic digital skills, and 15.1% did not have any digital skills. As of 2019, in Azerbaijan around one fourth of the surveyed individuals (22.7%) used internet for chat communication, whereas only one in six internet users sent emails with attached files (17%) and used search engines to find information (18.2%). In terms of knowledge acquisition, one third (32.4%) of internet users in Azerbaijan reported to develop their e-skills by learning-by-doing, one fourth (26.8%) mentioned education institutions, and one tenth (12.1%) pointed at training courses and only one twentieth (5.5%) reported to acquire digital skills through vocational training.

With the female share of graduates in the ICT sector Armenia with 39% overcomes all EAP countries except Azerbaijan (46%). In Belarus the share is 23%, in Georgia 24%, in Moldova 23% and in Ukraine 18%.

Another indicator of skills is the human capital index E-government survey, which includes adult literacy, gross enrolment ratio, expected year of schooling and mean year of schooling sub-indices. Armenia outperforms Azerbaijan and Moldova with the human capital index (table 55).

According to the EU4Digital Bi-annual Report<sup>85</sup> digital skills solutions in EPC's are observed. Based on the report National Coalition was established in Armenia in 2017 but is currently inactive.

ICTs and business model creation index show average answer to the question: "To what extent are information and communication technologies creating new business models, services and products in your country?". 1 equal to not at all and 7 equals to a significant extent.

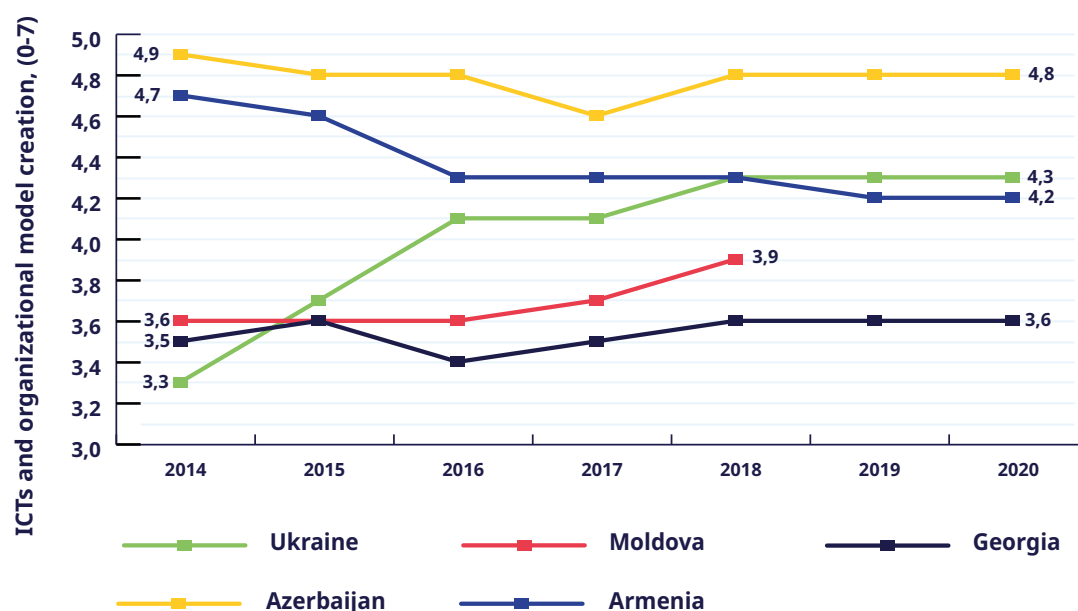
With ICTs and business model creation index Armenia outperforms Georgia, Moldova and Ukraine. From the other side there is a slight, 0.1-point decline from 2014 to 2020.

84 [Tinatin Akhvediani, Digital literacy in times of the COVID-19, Eastern Partnership, Civil Society Forum, 2020 ; EU4Digital-eSkills-FactSheet.pdf \(eufordigital.eu\).](#)

85 [Bi-annual Report No.5. EU4Digital Facility, July 2021.](#)



► Graph 23: ICT use index, 2013-2020 (0-10)



Source: Data extracted from the World Bank TCData360, Global Innovation Index database.

► Table 52: ICT use rank, 2013-2020 (over 149 countries)

Country	2013	2014	2015	2016	2017	2018	2019	2020
Armenia	82	67	70	76	72	72	70	68
Azerbaijan	69	48	49	56	45	56	63	63
Belarus	49	44	38	43	39	36	37	33
Georgia	70	62	81	77	68	70	67	62
Moldova	55	74	57	61	64	64	-	-
Ukraine	66	87	89	92	93	95	90	89

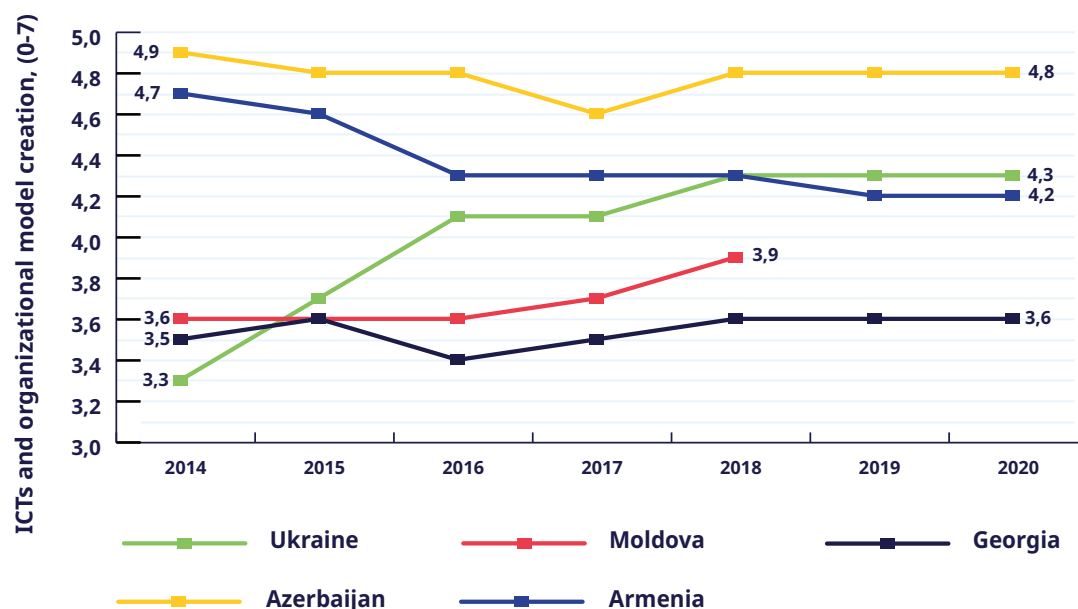
Source: Data extracted from the World Bank TCData360, Global Innovation Index database.

ICTs and organizational model creation index show average answer to the question: "In your country, to what extent do ICTs enable new organizational models (e.g. virtual teams, remote working, telecommuting) within businesses?". 1 equal to not at all and 7 equals to a significant extent.

With ICTs and organizational model creation index Armenia outperforms only Georgia and the index declined by 0.5-point from 2014 to 2020.

ICT adoption index is the degree of dissemination of specific information and communication technologies. ICTs reduce transaction costs and accelerate the exchange of information and ideas, increase efficiency and promote innovation. Since

► Graph 24: ICTs and business model creation index, 2013-2019 (0-7)



Source: Data extracted from the World Bank TCDData360, Global Innovation Index database.

ICTs are general purpose technologies increasingly introduced into the structure of the economy, they become as important as power and transport infrastructure<sup>86</sup>.

Armenia improved its ICT adoption index from 2017 and is at the third place after Georgia and Moldova.

Armenia is at 4<sup>th</sup> place in internet access at home and is at first place with 4G mobile network coverage (table 53).

The Network Readiness Index (NRI) is also a widely used ICT index developed by Portulans university. The 2020 NRI ranks a total of 134 economies based on their performance across 60 variables. The NRI consists of four pillars: Technology (access, content and future technologies), People (individuals, businesses and governments), Governance (trust,

regulation and inclusion) and Impact (economy, quality of life and SDG contribution).

Table 54 presents results for the EPC, showing that Armenia outperforms all five countries in the overall NRI with 55<sup>th</sup> position and 51.91 score. The results within the rest five countries are relatively similar, ranging between 47.09 (Moldova) and 49.43 (Ukraine).

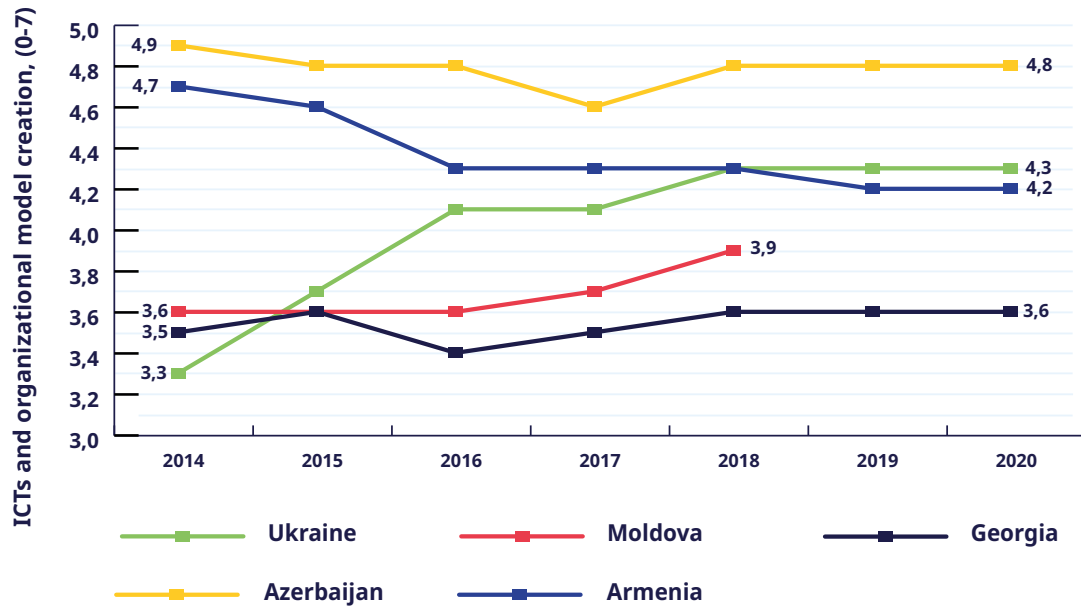
Armenia's main competitive positions are the area of people and technology (graph 27), while its main weakness is the dimension of impact. Armenia is leading all countries also with business sub-pillar with 57.56 score.

E-Government development index (EDGI) incorporates the access characteristics, such as the infrastructure and educational levels, to reflect how a country is using information technologies to promote access<sup>87</sup>.

86 World Economic Forum Global Competitiveness Index, ICT adoption subindex, World Bank database, 2020.

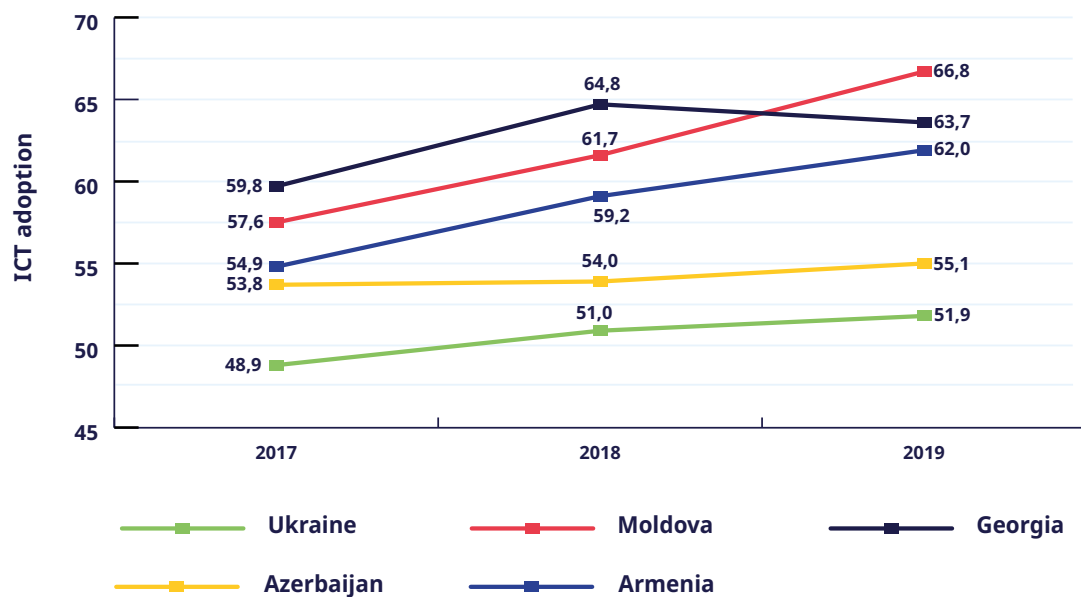
87 UN E-Government Survey, United Nations, 2020.

► Graph 25: ICTs and organizational model creation index, 2013-2020 (0-7)



Source: Data extracted from the World Bank TCDData360, Global Innovation Index database.

► Graph 26: ICT adoption index, 2017-2019 (0-100)



Source: Data extracted from the World Bank TCDData360, Global Competitiveness Index database.

► **Table 53: Internet access from home and at least 4G network coverage, %**

	Households with Internet access at home (%), 2019	Population covered by at least a 4G mobile network (%), 2020
Armenia	76,39	100
Azerbaijan	79,1	93
Belarus	78,59	89,5
Georgia	79,26	99,72
Moldova	60,76	99
Ukraine	65,78	87,15

Source: Data extracted from the International Telecommunication Union users launched Digital Development Dashboard database, 2021

Digital Development Dashboard, ITU - <https://www.itu.int/en/ITU-D/Statistics/Dashboards/Pages/Digital-Development.aspx>

► **Table 54: Network readiness index 2020, overall rank and score**

Country	NRI Rank	NRI Score
Armenia	55	51,91
Ukraine	64	49,43
Belarus	65	49,16
Azerbaijan	66	48,76
Georgia	68	47,95
Moldova	71	47,09

Source: Data extracted from the Portulans university NRI 2020 database  
NRI 2020 database, PU - <https://networkreadinessindex.org/>

Using EDGI 2020 and Global Innovation Index databases high correlations are found out between e-governance index and business environment index (**graph 28**).

Above graph shows the sound correlation between e-government and business environment which firmly states that e-governance is also an important factor for the better business enabling environment.

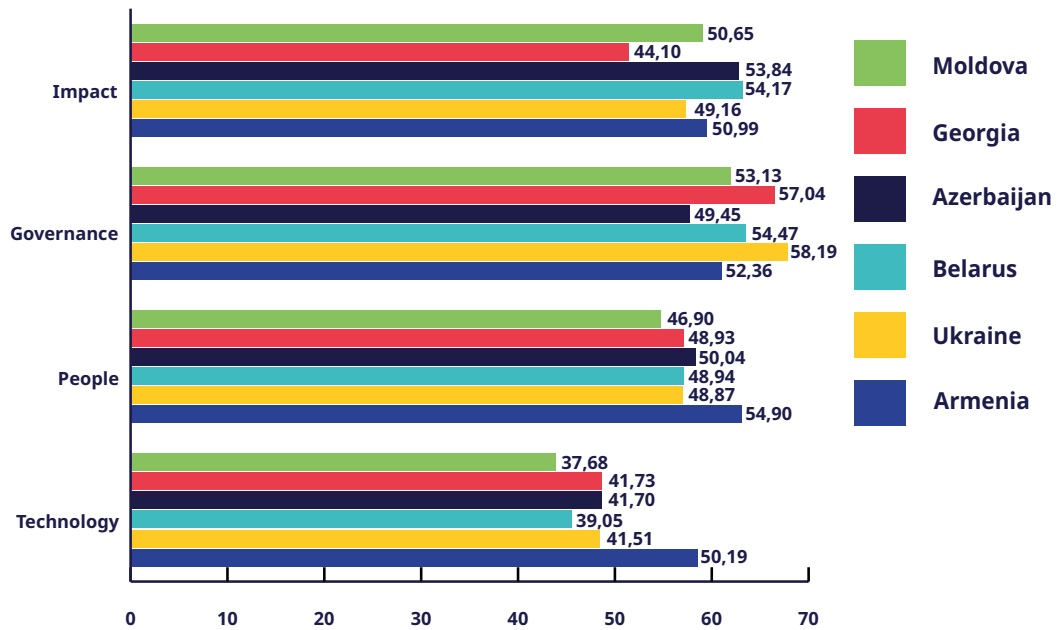
Table 55 shows that within EPC Armenia outperforms with EDGI rank (68) Ukraine (69) and Azerbaijan (70). Armenia has relatively firm position with e-government, e-participation and online services indexes. Telecommunication

infrastructure index (0.65) in Armenia among regional averages is low only comparing with Europe, average TII in Europe is 0.82. All other regions have lower average (America – 0.85, Africa – 0.37, Asia – 0.59, Oceania – 0.39)

Telecommunication infrastructure index is calculated using the following sub-indexes:

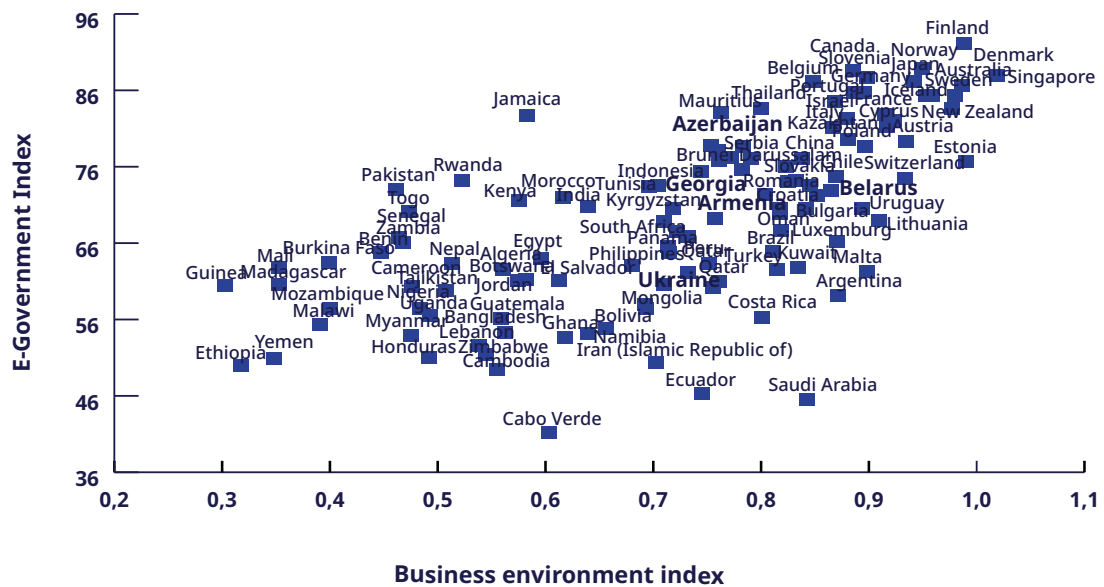
1. estimated internet users per 100 inhabitants;
2. number of mobile subscribers per 100 inhabitants;
3. active mobile-broadband subscription; and

► Graph 27: Network readiness index pillars, 2020, score



Source: Data extracted from the Portulans university NRI 2020 database.

► Graph 28: E-government and business environment indexes, 2020



Source: Data extracted from the UN E-Government Survey and the Global Innovation Index databases.

► **Table 55: EDGI 2020, overall rank and indexes, 2020**

Country	E-Government Rank	E-Government Index	E-Participation Index	Online Service Index	Human Capital Index	Telecommunication Infrastructure Index
Armenia	68,00	0,71	0,75	0,70	0,79	0,65
Azerbaijan	70,00	0,71	0,69	0,71	0,77	0,65
Belarus	40,00	0,81	0,75	0,71	0,89	0,83
Georgia	65,00	0,72	0,64	0,59	0,87	0,69
Ukraine	69,00	0,71	0,81	0,68	0,86	0,59

Source: Data extracted from the UN E-Government Survey database, 2020.

#### 4. number of fixed broadband subscriptions per 100 inhabitants.

In case of Armenia the lowest sub-index is (i) estimated internet users per 100 inhabitants and it forms 64.74 in 2020.

Finally, Armenia had a progress from 2016: in 2016 internet users per 100 inhabitants in Armenia was 46.3 and up to 2020 Armenia the progress formed 18.44. Armenia had a tangible progress also of the overall Telecommunication infrastructure index: in 2016 the index formed 0.39 and in 2020 – 0.65.

Another correlation is founded out between EDGI online services index and business environment index which again shows that digitalisation of services highly and positively affects to business environment in the world. EPC are also in the general trend of correlation.

### Chapter conclusions

Armenian ICT sector has a boosting growth and development trends during last decade, with leading growth of IT sector. The tangible growth also continued in 2020 when economy declined by 7.6%. The growth is also connected with COVID-19 challenges and business sector ICT solutions response.

Communication sector prices in Armenia declined appropriately and similar to rest EPC. Competition in communication sector is fully available in Armenia.

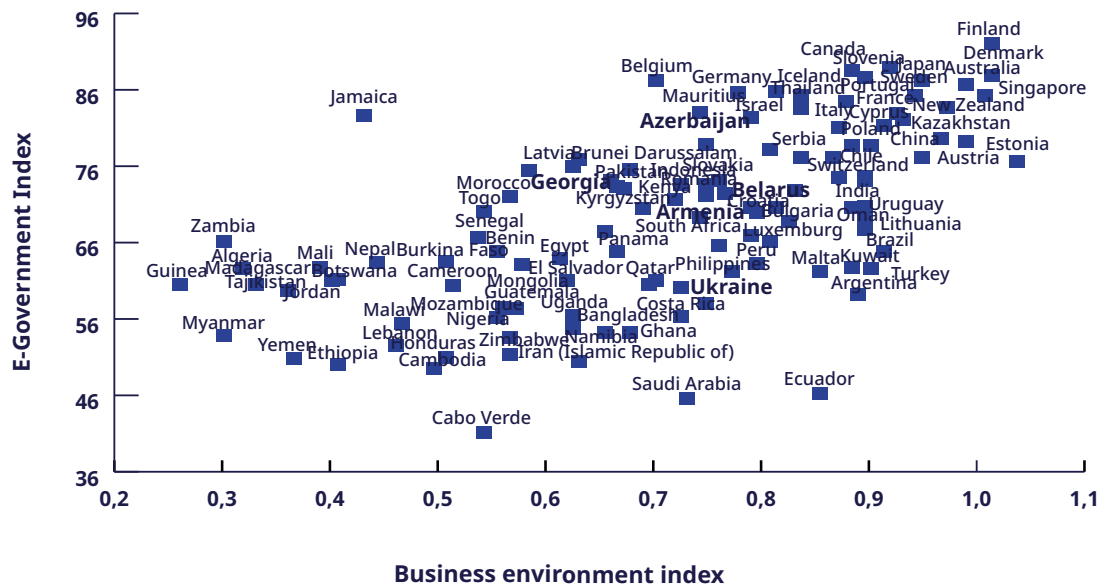
Armenia and other EPC, except Ukraine have declines in global innovation index during last 8 years. Armenia is worthening its GII noticeably.

The country has the highest increase and competitive place among observing countries with its ICT access index score, however, during COVID-19 year (2020) Armenia has a significant and biggest decline of ICT access index. The country has a positive developing trend of ICT use over last years, however the country needs to improve its place among EPC. At the same time, Armenia has a declining trend on ICT's organisational and business model creations which enable new organizational models and start-ups (e.g. virtual teams, remote working, telecommuting, graph 6 and 7).

Armenia has a strong competitive position in network readiness index, but still has a space to improve the impact and governance pillars. The country outperforms all EPC's with the network readiness index. As for the pillars, Armenia's main competitive positions are the area of people and technology, while the main weakness is the dimension of impact.

The country is relatively strong in ICT skills but elderly population and micro enterprises workforce are the most vulnerable. There are no specific state institutional solutions on digital skills enforcement currently in Armenia. E-government report analysis shows that Armenia has relatively firm position with e-government, e-participation and online services indexes among EPC's. In general, EPC's are noticeably close with many of observed ICT indicators.

► Graph 29: Online services and business environment indexes, 2020



Source: Data extracted from the UN E-Government Survey and the Global Innovation Index databases.

## 5.2 Legal and regulatory environment

### A rapid evolution of ICT regulation, yet a weak position in existing regulatory regime

The ICT Regulatory Tracker of the International Telecommunication Union is an evidence-based tool to help decision-makers and regulators make sense of the rapid evolution of ICT regulation. The Tracker pinpoints the changes taking place in the ICT regulatory environment. It facilitates benchmarking and the identification of trends in ICT legal and regulatory frameworks. It helps track progress and identify gaps in regulatory frameworks, making the case for further regulatory reform towards achieving a vibrant and inclusive ICT sector<sup>88</sup>.

ICT Regulatory Tracker Score breakdown is as follows G1:  $\geq 0$ ; G2:  $\geq 40$ ; G3:  $\geq 70$ ; G4:  $\geq 85 \leq 100$ .

- G1: Regulated public monopolies– command and control approach
- G2: Basic reform – partial liberalization and privatization across the layers
- G3: Enabling investment, innovation and access – dual focus on stimulating competition in service and content delivery, and consumer protection
- G4: Integrated regulation – led by economic and social policy goals

Armenia is the lead CIS rankings and is the only G4 country within CIS countries with 88.5 score. Among EPC Armenia is at the third place after Georgia and Moldova.

Armenia has a weak position in general and among EPC with the regulatory regime pillar which is about regulations existing in major areas. In regulatory regime sub indicators Armenia particularly

88 [Global ICT Regulatory Outlook 2020, International Telecommunication Union, 2020.](#)

has no unbundled access to the local loop which is a prerequisite for developing high-speed access to the Internet<sup>89</sup>. Another missed regulation is the absence of number portability available to consumers and required from fixed-line operators.

Armenia among leaders in Eastern Partnership Countries on the quality of the regulation

Regulation quality index of World Bank World Development Indicators database has the following picture for EPC.

Armenia is at second leading place after Georgia with the regulatory quality index. From the other side the country has a significant space to improve its position and there is a slight decline from 2018.

With the ranking and general score (table 59) Armenia is again at the second place after Georgia. As for sub indicators Armenia has a space to improve government integrity, tax burden and trade freedom. Comparing to other EPC's the most vulnerable sub index for Armenia is the trade freedom.

The European Union's EU4Digital initiative supports efforts to achieve a common roaming space in Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine, by changing

telecom rules. By delivering these objectives in the area of Telecom rules, EU support will bring clear benefits to citizens and businesses in the Eastern Partnership region, in the form of lower roaming costs, stronger regulation that will lead to greater competition and investments, as well as the prospect of new wireless broadband opportunities and 5G. It is stated that by 2026, it is expected that retail prices for consumers of roaming services in the region will be reduced by 87%<sup>90</sup>.

### The development of e-government system

The digitalization of public services and e-governance development is still on its way of formation. Armenia adopted an action plan for the development of the e-government system in 2008. As a result, a number of initiatives have been implemented, including the e-government platform ([www.e-gov.am](http://www.e-gov.am)) with more than 20 online services. The platform unites real estate ([www.e-cadastre.am](http://www.e-cadastre.am)), state payments ([www.e-payments.am](http://www.e-payments.am)), electronic registration of organizations ([www.e-register.am](http://www.e-register.am)), electronic submission of tax reports ([file-online.taxservice.am](http://file-online.taxservice.am)), unified platform for electronic inquiries ([www.e-request.am](http://www.e-request.am)) and other electronic systems. There are other systems that support the process of construction permits ([ww-w.e-permits.am](http://ww-w.e-permits.am)), the unified electronic register of

► Table 56: ICT regulatory score, 2020

Country	Generation	Overall score (0-100)
Armenia	G4	88.5
Azerbaijan	G2	66
Belarus	G2	50.5
Georgia	G4	92.5
Moldova	G4	91
Ukraine	G3	78

Source: Data extracted from ICT Regulatory Tracker of the International Telecommunication Union, 2020.

89 Regulation (EC) No 2887/2000 of the European Parliament and of the Council of 18 December 2000 on unbundled access to the local loop

90 [Telecom rules factsheet. EU4Digital project, 2019.](#)



► **Table 57: ICT regulatory score pillars, 2018**

	Regulatory score pillars			
	Regulatory Authority	Regulatory Mandates	Regulatory Regime	Competition Framework
Armenia	95	88.6	66.7	96.4
Azerbaijan	40	61.4	80	89.3
Belarus	30	52.3	36.7	57.1
Georgia	90	75	100	100
Moldova	95	79.5	86.7	92.9
Ukraine	85	79.5	76.7	85.7

Source: Data extracted from ICT Regulatory Outlook report of the International Telecommunication Union, 2020.

► **Table 58: Regulation quality index\*, World Development Indicators, 2018-2020**

Country	2018	2019	2020
Armenia	0.33	0.25	0.25
Azerbaijan	-0.20	-0.23	-0.31
Belarus	-0.65	-0.54	-0.65
Georgia	1.13	1.12	1.11
Moldova	-0.03	0.01	0.04
Ukraine	-0.30	-0.26	-0.30

Source: Data extracted from World Bank's World Development Indicators database, 2020

World Bank World Development Indicators, regulatory Quality, 2020

\*-2.5 (weak) to 2.5 (strong) regulatory quality.

licenses ([www.e-license.am](http://www.e-license.am)), the human rights national strategical platform ([e-rights.am](http://e-rights.am)).

A number of additional e-services are currently being implemented, in particular, the [www.e-civil.am](http://www.e-civil.am), [www.armed.am](http://www.armed.am) and [www.e-justice.am](http://www.e-justice.am) systems will enable the expansion of digital services available to citizens.

However, there are still number of issues in e-governance solutions in Armenia. Available digital infrastructure is fragmental, disproportionate, not synergic and unified. There is not a single concept of digitalization in e-governance products. Databases of various public services, such as tax

system, financial services, companies and natural persons registries, employment, health, etc. have various core architectures and are not cross connected which makes follow-up public digitalization innovations harder to implement. Some solutions are not digitally comprehensive, making digital services partial. More detailed analyses will be done in following chapters of the report.

In Georgia a unified portal of electronic services, [my.gov.ge](http://my.gov.ge), provide people and legal entities with access to government and private-sector electronic services. The number of e-services provided, is 700 in 2020. With the help of the United Nations Development Programme, 133 new services were

**▶ Table 59: Index of economic freedom\*, World Development Indicators, 2018-2020**

Country Name	World Rank	2021 Score	Property Rights	Judicial Effectiveness	Gov't Integrity	Tax Burden	Gov't Spending	Business Freedom	Labor Freedom	Trade Freedom	Investment Freedom	Financial Freedom
Armenia	32	71,9	57,3	55,3	45,0	87,1	81,3	81,9	74,5	73,8	75,0	70,0
Azerbaijan	38	70,1	67,9	55,8	46,8	88,1	65,2	80,5	65,9	68,0	70,0	60,0
Belarus	95	61,0	58,6	40,4	39,8	92,9	55,5	75,9	75,7	76,0	30,0	20,0
Georgia	12	77,2	66,9	59,3	64,6	89,1	76,9	84,9	76,7	86,0	80,0	70,0
Moldova	85	62,5	60,6	29,9	38,7	94,0	71,0	66,2	39,2	76,8	55,0	50,0
Ukraine	127	56,2	48,5	41,1	37,9	88,7	48,2	63,5	48,7	79,2	35,0	30,0

Source: Data extracted from World Bank's World Development Indicators database, 2020

\* Index of Economic freedom 2021, The Heritage Foundation, 2021.

introduced into the portal during the first Covid-19 wave, including an innovative approach to authenticate official documents using an e-Apostille<sup>91</sup>.

In 2000, the IT sector was declared a priority by the government of the Republic of Armenia, after which the sector strategy was developed and the development concept was introduced in 2001 and 2008. In February 2021 the government adopted Digitalisation Strategy 2021-2025 and action plan. Mentioned strategy is a comprehensive document and touches to the broad aspects of digitalization in the country.

According to the IT sector State Support Law of RA, IT start-ups, innovative IT companies, and individual entrepreneurs working in the IT sector can apply for registering in the state register of IT companies. Being included in mentioned register IT companies get a full exemption of corporate income tax, as well as personal income tax reduction by 12% (from 22% to 10%). These tax benefits are not available to larger companies with 30 or more employees and to subsidiaries or branch offices of foreign companies.

Sectoral eligibility requirements are that companies have be involved in following IT sub sectors:

- ▶ Software development
- ▶ IT consulting activities
- ▶ Computer system management
- ▶ Data processing, distribution of information
- ▶ Activities related to web-portals and websites
- ▶ Implementation of educational and research programs in the field of IT
- ▶ Design, testing and production of electronic systems
- ▶ Computer animation and modelling
- ▶ Design and testing of integrated circuits

#### **The existing law on licensing and the need for a comprehensive legislation**

The law "On Licensing" provides for two types of licenses: Simple and compound (automatic and non-automatic). The simple license is issued within three days upon submission of application

documents and does not require the approval of the licensing commission. Compound licenses are issued within 30 days after submission of documents and may only be issued by a licensing commission. A list of activities subject to licensing is provided in Chapter VII of the licensing law. Licenses are issued by a number of government agencies. Currently 96 types of activities are subject to licensing, 12 of which are subject to simple licensing, and the other 4 to compound licensing procedure. Licenses in Armenia can be obtained online through a new electronic system<sup>92</sup>. Mentioned electronic system is not comprehensive and covers only 33 types of licenses among 96 types available.

Armenia has carried out significant reforms to simplify requirements and procedures to obtain permits. Among the most important beneficiaries of the reform is the construction industry, where issuance of permits was streamlined by simplifying procedures, and costs to obtain them significantly reduced. Currently construction permits are provided within 27 days, as opposed to the 137 days required before simplification reforms were introduced. Online system of construction permits (E-permits) is available in Armenia, as well<sup>93</sup>.

For the property registration in Armenia E-services platform of the Cadastre Committee is functioning<sup>94</sup>. The platform allows not only property registration, but also to get official statements, check personal property, etc.

Digitalisation related legislation is not comprehensive in Armenia. There is no cybersecurity related legislation available. Digital identification (e-signature) regulation is complicated. Regulation improvements are also necessary in the field of data privacy. E-signature policy assumes annual payment to the corresponding state authority. The solution of e-signature is based on old technologies using ID card and card reader. All those

aspects do not stimulate of e-signature expansion among company authorities and natural persons. The latter one put boundaries in overall digitalisation process in Armenia.

Another issue is that Civil Code of the Republic of Armenia regulates the cases of signing digital (online) agreements. At the same time, regulation do not refer to the cases when one of the parties is not a natural person and the signing is taking place by the system. This tangibly barriers the development of ethical and responsible e-commerce systems and other online technological solution development.

There is no comprehensive regulation of online trade in Armenia. Definition of the whole processes and defined obligations of online traders and buyers are absent. According to the EU4Digital Bi-annual Report<sup>95</sup> EPC's eCommerce legal framework and standards have a space of improvement particularly in Armenia, Azerbaijan, Belarus. Based on the report in Armenia specific eCommerce legislation and eCommerce strategy are not developed. eCommerce law is in progress of update by 2023.

E-commerce is not taxable in Armenia currently. The State Revenue Committee of Armenia is currently working on legislative changes and developing of e-commerce taxing infrastructure<sup>96</sup>.

### Chapter conclusions

Armenia has the highest generation (G4) of the ICT regulatory score and a week position within regulatory regime pillar. The country is at second leading place after Georgia with the regulatory quality index with a tangible space of improvement.

92 [E-licenses electronic system](#)

93 [E-Permits - Online building permit system ; Permits and Licenses, State Regulations \(investinarmenia.am\)](#)

94 [E-services platform of the Cadastre Committee](#)

95 [Bi-annual Report No.5. EU4Digital Facility, July 2021.](#)

96 <https://www.petekamutner.am/irInterNews.aspx?ntsub=irInterNews&nid=7083>

Armenia is at second leading place after Georgia with the index of economic freedom and has a space to improve government integrity, tax burden and trade freedom sub-indexes.

The digitalization of public services and e-governance have a tangible space for development. Still tangible part of public services is not provided online. Some of available solutions need to be modernized and capture the whole business processes.

There are barriers in legislation for e-commerce development and digital integration and identification in Armenia.

## 5.4 Trade system

### The digitalization of tax administration, a growing trend

Tax administration is fully electronic today in Armenia. It was introduced in 2010 and passed a long way of improvements. Not only reporting but also applying for the activation of special tax regimes (for example turnover tax) is also online and well managed from tax authority. Due to COVID-19, the State Revenue Committee has developed new digital solutions to transfer to a fully electronic platform also those paper transactions which were still not digital<sup>97</sup>.

Currently tax administration in Armenia is provided with the electronic management “Taxpayer 3” system. The overall IT tax administration system includes the following electronic products: Personal E-ledger, Treasury Data Registration, Third Party Data Registration, Cameral Investigations, Legal Proceedings, National e-Payment Portal, Registration of taxpayers, VAT refund for legal entities and foreign citizens (Tax Free), Collection of information presented by third parties, Mobile terminals (New Generation Multifunctional Cash Register Machines), Registration of acts of audit,

Registration of budget entries, Issuing, electronic invoices, Generating electronic tax declarations, and Generating standard and non-standard reports<sup>98</sup>.

From the other side the tax compliance in Taxpayer 3 system is not simplified for self-employed, individual entrepreneur or other small companies. The rules, content, and difficulty of online reporting and other tax administration functions are same for all individuals, not depending on the size and legal status<sup>99</sup>.

State Revenue Committee recently made number of improvements in National Trade Window Portal (<https://trade.gov.am/trade/services/agencies>). The portal includes 18 new (improved) functional interfaces including but not limited to the following topics:

- ▶ Product Declaration: makes it possible to submit a declaration of goods to the customs authority electronically using a digital signature in accordance with the customs procedures
- ▶ Customs Value Declaration: the system ensures the process of electronic submission, acceptance and processing of customs value declarations
- ▶ Transit Declaration: the system ensures the submission of electronic declarations for all transit cases defined by the EEU legislation, as well as the exchange of relevant information with the customs authorities of the EEU member states
- ▶ Customs Entry Orders: in case of import of goods for personal use by individuals, it has become possible to submit direct declarations instead of product declarations
- ▶ Preliminary decision of product classification: companies has the opportunity to apply to the

97 [New digital solutions to strengthen relations with taxpayers, State Revenue Committee of the RA, June 2021.](#)

98 [Tax Administration Modernization Project, Armenia, World Bank, 2019](#)

99 Found out from practical accountants.

customs authority, attaching all the necessary documents describing the product

- ▶ Risk Management System is an effective, modern tool for customs risk management
- ▶ Certificate of the Ministry of Health: the certificates of the Ministry of Health of the Republic of Armenia are provided exclusively electronically.<sup>100</sup>

### **An important step forward: the improvement of the one-stop-shop system**

According to the State Revenue Committee development program<sup>33</sup> recently the one-stop-shop system of national trade has been improved, where a new set of tools has been introduced, as a result of which the work between economic entities and customs bodies has been significantly facilitated, helping to reduce time spent on customs clearance, reduce risks and implement electronic document circulation. From the other side it is mentioned in the program document that further development in digitalization of customs offices will be implemented up to 2024.

According to the UNECE's report during COVID-19 acceleration, the trade documents issuance is slowed down by the continued reliance on paper-based procedures scale up efforts for establishing the national single-window facility through the integration of state agencies involved in issuing trade documents into the single window system. An important step in this direction would be to conduct a detailed business process analysis of the ICT systems of these agencies and administrative procedures underpinning the issuance of trade documents<sup>101</sup>.

Real estate transactions online platform ([www.e-cadastre.am](http://www.e-cadastre.am)) allows to do comprehensive

line of transactions online. As for the transportation it is possible to sign online trade contracts in <https://roadpolice.am/>.

The issue of open data is also the case for some services in Armenia. For example, State Statistical Committee portal ([www.armstat.am](http://www.armstat.am)) provides statistical data in a very complicated ways, using pdf format reports and complicated structured pages. Same situation is with Electronic Register of legal entities where except company registration it is possible to search in companies' database and there is no practically data about companies except registration number and the search engine is not much sensitive.

Many state programs related to business entities are not digitalized. Number of state employment, agricultural, cultural state programs do not have online servicing platforms. The case of employment programs is one of the important ones when except application number of pre and follow-up processes are available.

According to the EU4Digital Bi-annual Report<sup>102</sup> EPC's have the following current state in eTrade direction:

- ▶ Armenia - eInvoicing is already being used inside the country. Peppol BIS 3.0<sup>103</sup> is being tested and one eDelivery access point is available in production.
- ▶ Azerbaijan - eInvoicing is already being used on a national level. Peppol BIS 3.0 is not adopted and there are no eDelivery access points established.
- ▶ Belarus - eInvoicing is already being used on a national level. Peppol BIS 3.0 is not adopted and there are no eDelivery access points established.

100 Development program of the State Revenue Committee, 2020-2024.

101 The Impact of COVID-19 on trade and structural transformation in Armenia: Evidence from UNECE's survey of Micro, Small and Medium Enterprises. UNECE, 2020.

102 Bi-annual Report No.5. EU4Digital Facility, July 2021.

103 PEPPOL Business Interoperability Specifications (BIS) utilising the Universal Business Language (UBL – ISO/IEC 19845) Facilitates standards based end-to-end electronic procurement processes.

► Table 60: Enabling Trade Index (2016)						
	Armenia	Azerbaijan	Belarus	Georgia	Moldova	Ukraine
<b>Enabling Trade Index</b>	4.3	4.3	NA	4.8	4.2	4.0
<b>Country rank</b>	68	71	NA	41	79	95

Source: Data extracted from the Global Enabling Trade Report 2016, World Economic Forum, 2016

- Georgia - eInvoicing is not being used. Peppol BIS 3.0 is not adopted and there are no eDelivery access points established.
- Moldavia - eInvoicing is not being used but is considered. Peppol BIS 3.0 is not adopted and there are no eDelivery access points established.
- Ukraine - eInvoicing is already being used inside the country. Peppol BIS 3.0 is being tested and one eDelivery access point is available in production (realised in the scope of EU4Digital eDelivery pilot).

Armenia and Ukraine are the only countries in EPC implemented both eCommerce programs provided.

EU4Digital Bi-annual Report also touches to the eHealth development recommendations in EPC's. Based on the recommendations all EP countries still have a space to improve eHealth systems.

B2B solutions are well formulated in Armenia in various sectors such as banking and other financial institutions, insurance. Retail trade is still not digital, even tangible part of small shops do not have POS terminals. Recently adopted law on Non-cash transactions makes POS terminals mandatory for all business entities.

There are number of online work platforms including taxi solutions (GG, Yandex, Ani, Utaxi, etc), repairing, renovating and engineering solutions (Ideal Master, Ideal Partner, Varpet), agriculture (Koriz) in Armenia. Development of online work platforms have noticeably active during last 3

years and still have a huge potential of employment support as number of sectors do not such solutions yet. Online work platforms make labour markets more flexible, centralized and provide high liquidity.

According to The Global Enabling Trade Index 2016 (the latest version available), Armenia ranked 68<sup>st</sup> out of 136 countries, outperforming only Moldova and Ukraine.<sup>104</sup>

The Global Enabling Trade Index consists of 7 pillars: domestic market access, foreign market access, efficiency and transparency of border administration, availability and quality of transport infrastructure, availability and quality of transport services, availability and use of ICTs, and operating environment.

### Chapter conclusions

Enabling trade systems such as customs digital solutions, tax administration automation real estate and transportation transactions, system of intellectual property applications are ready and well-functioning systems currently with some space of later on development.

Many online platforms for business entities need to be reconstructed, are very complicated and do not provide open data service.

Another issue is that retail trade and micro, small enterprises are mostly not using modern payment systems, even POS terminals, and other front office digital technologies in Armenia.

104 [The Global Enabling Trade Report 2016, World Economic Forum, 2016.](#)

## 5.4 Digital access to credit and payments

### The credit system and their accessibility in Armenia

From 2004 Armenia started the formation and strengthening getting credit infrastructure, when a private ACRA credit bureau started operating. Currently ACRA has a comprehensive centralised database and established all data source channels to provide credit reports to its customers. Besides using ARCA's credit scores currently many banks operating in Armenia have their own credit reporting systems with AI solutions as well. ARCA provides online individual report generation service not only to lending institutions but also to natural persons<sup>105</sup>. Armenia unified movable collateral registry such as in Georgia and Belarus<sup>106</sup>. The online platform [www.registration.am](http://www.registration.am) provides functionality of registering, searching and getting information on movable property rights. The register resolved the issue of determining the right of preference over secured property rights, enabling parties to access the registration of movable property rights without additional costs and efforts, as well as increase the security of these types of transactions and reduce the risks associated with them. The information of registered movable property is public and free of charge in [www.registration.am](http://www.registration.am).

Mobile apps are free of charge and widely available in Armenia as in other observing countries. In Armenia 16 banks from total 17 offer their mobile banking solutions. Most of the apps provide ease of use, time saving and cost saving features with modern biometric identification and AI solutions.

Not all banks use AI technologies to make service more flexible, faster and wiser. The research done by AMBERD center shows that 2 of 6 respondent banks in Armenia do not have practically working

AI systems and are only working currently to setup AI strategies and technology base<sup>107</sup>.

Technology has also played a role in the development of the financial system in Armenia. Although mobile and internet banking transactions are still having moderate proportion of all transactions, the usage of these services has been rising rapidly. Quantities and volumes of mobile, POS, and noncash transactions have been growing exponentially since 2012.

One of the features of the Armenian market of fintech services is that all payment and settlement organizations of Armenia carrying out processing and clearing also have a license to make money transfers, i.e. are larger services with a wider range of services. According to the register of the Central Bank of the Republic of Armenia, there are almost twice more money transfer organizations than clearing and processing organizations: 10 and 5, respectively. Those fintech companies have their mobile superApps with a big range of services. As for the business model, the Armenian payment services focus on either money transfers or working as an electronic wallet (payment for goods and services, replenishment through the terminal, etc.). The niche of payment services that deal with digital banking (i.e. providing full-fledged settlement account services for businesses and individuals) is still not very competitive<sup>108</sup>. PayX, Qsak, EasyPay, Text And Pay Me are innovative brands in Armenian Fintech. Text And Pay To Me is a new startup offering "text payments," allowing users to perform peer-to-peer (P2P) transfers on any messaging app simply by entering text commands.

Besides payments, other fintech segments are also represented in Armenia, including crowdfunding with platforms such as BoostBloom and Ayo; corporate services with online invoice service My Online Invoice; and data with the likes of Cognaize

<sup>105</sup> [ACRA Credit Bureau official web site](#)

<sup>106</sup> [The Registry of Encumbrances on Movable Property, Belarus](#)

<sup>107</sup> Artificial intelligence solutions in Armenian financial infrastructure, research report, AMBERD research center, Yerevan, 2020.

<sup>108</sup> <https://banks.am/ru/news/fintech/19680>



a startup that specializes in AI based processing of financial information<sup>109</sup>.

### Chapter conclusions

Getting credit environment in Armenia is well formulated and digitalisation in financial institutions is actively growing, but since not all banks have AI technologies used in their digital products, and in general, financial institutions still have a space to develop their fintech solutions. Armenian market of fintech services is also growing, but there is still lack of innovative digital financial tools. There are no comprehensive digital solutions for investment and stock market transactions, both for enterprises and citizens, which is also connected with the weak development level of the stock market in Armenia.

## 5.5 Training and lifelong learning

### The range of digital training in Armenia

Workforce training and managerial training in Armenian enterprises is highly conditioned with the sector of activity. Most banks in Armenia have their training departments. Banks, consulting, insurance and other companies recently are active in outsourcing of managerial trainings. COVID-19 highly influenced to the organization of online trainings for the personnel of several sectoral companies at once, where the scale effect works. Sectoral unions are also active in trainings organization. Union of Banks of Armenia organizes several times a year online trainings and seminars for the personnel of banks<sup>110</sup>.

Armenian universities widely offer continuing education. National Polytechnic University of Armenia, Armenian State University of Economics, American University of Armenia, Armenian National Agrarian

University, Erevan State Medical University After Mkhitar Heratsi, Brusov State University and other universities have various continuing education programs dedicated to the employees of specific sectors or professions or offering wide range of courses.

There are no wide range digital training online resources or platforms in Armenia currently. This is mainly connected with the lack of the digital training content in Armenian language. Some organizations, as well as banks develop their own training and knowledge checking digital tools.

According to the European Training Foundation report the portal <http://vetarmenia.am/> was designed as a resource to support the implementation of distance learning in VET. The EU, GIZ and the United Nations Development Plan have all been involved at different stages of its development. Currently, the portal is mainly informative in nature, but according to the report it may be possible to use it in the future as a platform to conduct distance learning<sup>111</sup>.

Trainings for enterprises is not well coordinated by the government in Armenia. There is no single agenda covering all aspects and full curricula of needed trainings. Investment Support Center, State Employment Department and other government organizations have some agendas which aren't formulated considering general pattern of training lack. Another issue is the lack of digital knowledge in Armenian enterprises. No state digital training support programs targeted to this issue are elaborated and conducted. The government can more actively involve "big" partners to implement training programs more effectively. Republican Union of Employers of Armenia can be one of the efficient partners to elaborate practical training needs in digital area and not only, and to implement those trainings.

109 [COVID-19 Accelerates Digital Payment and Fintech Adoption in Armenia | Fintech Schweiz Digital Finance News – FintechNewsCH](#)

110 [Ethics in the banking system and in the real sector. Online training. Union of Banks of Armenia.](#)

111 [Digital skills and online learning in Armenia: Digital factsheet 2020, European Training Foundation.](#)



### A change to more digital solutions due to Covid

As a result of COVID-19 lockdowns enterprises moved online in Armenia mainly smoothly and fast. During pre Covid-19 period online work development in Armenia had been noticeably fragmented by sectors, not very popular and mainly somehow available in IT industry. Few Armenian IT companies are using agile (scrum) management technique and organizing parallel online work with small and medium teams. From late March, due to lockdown, remote work relevant industry segments and workplaces greatly moved online work mostly effective in a technical sense. In several sectors and especially for elderly people one of the main issues is technological readiness and IT literacy. There is a lack of online work experience and corporate (adopted) online work procedures. Targeted sector-based training programs may be effective.

In late April 2020 Ministry of Labour and Social Affairs made changes in the Labour Code eliminating several norms in the law related to the imperative physical presence at working place in emergency and suchlike situations in the country, referring to the possibility of using online work mechanism from employer. This solution may be not very comprehensive. Even after Covid-19 period companies may adopt for example partial online work solution directly after State emergency situation and in a long term in general. Managers may find this method productive and flexible. Labour Code of Armenia doesn't provide regulation of online work out of State emergency situations. The Ministry may think on comprehensive regulations of online work in normal conditions as well.

There are very few executive training institutions and this narrows the market of the workforce high quality education in Armenia. The RA government decision on organization of additional educational

and recognition of non-formal education, regulates non-formal training organizations but this regulation do not work in practice as it states that the registry of non-formal training institutions must be managed, but no registry available in the ministry yet<sup>112</sup>.

A number of policies, such as the Digital Agenda for Ukraine, highlight actions towards the digitisation of education, using digital and online learning (DOL) in education and training<sup>113</sup>. Ministry of Education and Science of Ukraine announced in august 2021 the launch of a free online platform (<https://speakukraine.net/#project>) for learning the Ukrainian language.

Number of domestic public projects with online courses are available in Ukraine: Prometheus, Ed Era, Open University of Maidan, which certificates validity is acknowledged by large scale of employers<sup>114</sup>.

In general, research shows that all EPC's have some constraints in online trainings due to the lack of professional training resources in national languages.

### Conclusions

Workforce trainings in Armenian enterprises are mainly available in productive economic sectors. SMEs itself are not very active in workforce training solutions.

Absence of training materials in Armenian language is a serious obstacle for training platforms development.

Informal training providers are mainly small and non-professional training providers and there is a lack of competition in training market in Armenia, as well.

112 Organization of additional educational and recognition of non-formal education, RA government decree, 2015.

113 [Digital agenda for Ukraine, Ministry of Economic Development and Trade of Ukraine.](#)

114 [Sergiy Kvitka , Valentyna Yehorova, Tetiana Chepulchenko, Mykola Taranenko, Ivan Bakhov, Elena, Feshchenko Development of Ukrainian and Global Online Education. TEM Journal. Volume 9, Issue 4, Pages 1640-1646, ISSN 2217-8309, DOI: 10.18421/TEM94-41, November 2020](#)

Trainings for enterprises is not well coordinated by the government in Armenia. There is no single agenda covering all aspects and full curricula of needed trainings. Another issue is the lack of digital knowledge in Armenian enterprises and, again no any dedicated assessments available and state training support programs elaborated targeted to this issue.

## 5.6 Recommendations

1. For the better and innovative digital transformations in Armenia, further inclusive development of ITC sector is a must. The government should pay more attention and support the development of appropriate environment for ITC, which include but not limited to venture financing and business angels' institutions expansion. The government must continue and boost ICT innovations financing within COVID-19 response programs.
2. Targeted innovation development state programs must be implemented in Armenia in ICT and other sectors. There are no dedicated and influencing innovation development programs available. During last 4 years Armenia worthened its global innovation index in both input and output pillars. As Armenia performs better in innovation outputs than innovation inputs it is obvious that more investments in technology is of high importance.
3. As during COVID-19 year (2020) Armenia has a significant and biggest decline of ICT access index and the most vulnerable sub-index is the percentage of households with a computer the government and NGO sector must push up the competitiveness in computer hardware market and eliminating import barriers for the price drop effect of computers.
4. The country has a developing trend of ICT use over last years, however the country needs to improve its place among EPC. Despite the fact that internet subscription prices decreased over last decade the government should work to push down the prices in the medium term. As telecommunication companies already passed large scale investments stage (cables network and equipment) the price decrease can have economic sense in a close future.

5. Armenia has a declining trend on ICT solutions. ICT solutions which enable new organizational models (e.g. virtual teams, remote working, telecommuting). This can be resolved in a long run as such products are cloud based and international competition pressure is obvious. However, progressive local IT start-up projects can become global, fostering demand in local market, as well. The government may implement IT start-up support programs more intensive and scaled.

6. Armenia has a strong competitive position in network readiness index, but still has a space to improve the impact and governance pillars.

**Governance pillar:** A country's network readiness does not take place in a vacuum and is a function of the national context within which people operate. Thus, this pillar seeks to capture how conducive the national environment is for a country's participation in the network economy, based on issues of trust, regulation, and inclusion.

▶ **Trust:** How safe individuals and firms are in the context of the network economy, as reflected by an environment conducive to trust and the trusting behaviour of the population.

▶ **Regulation:** The extent to which the government promotes participation in the network economy through regulation.

▶ **Inclusion:** The digital divides within countries where governance can address issues such as inequality based on gender, disabilities, and socioeconomic status.

**Impact pillar:** Ultimately, readiness in the network economy is a means to improve the growth and well-being of society and the economy. This pillar, therefore, seeks to assess the economic, social, and human impact of participation in the network economy.

▶ **Economic:** The economic impact of participating in the network economy.

▶ **Quality of life:** The social impact of participating in the network economy.

The government should consider above indicators in strategic programs of justice, education and cybersecurity.

7. Digitalisation related legislation is not comprehensive in Armenia. There is no cybersecurity related legislation and institutional solutions available. Digital identification (e-signature) regulation is complicated which put boundaries in overall digitalisation process in Armenia. Regulation improvements are also necessary in the field of data privacy. Privacy concerns, and data security may be some of the barriers for SMEs to adopt technologies in Armenia faster. Armenia needs cybersecurity institutional body, where all international standards have to be considered and needed solutions met, to address them to MSME's and make needed arrangements for the overall cybersecurity infrastructure development.
8. Many state programs related to business entities are not digitalized in Armenia. For example, 14 active labour market programs of the State Employment Department, where employers are stakeholders in several programs, are being provided mainly based on the paperwork, and no online systems available. Except taxing authority and tax related digital solutions, there is no an online hub system available, where enterprises be aware on state programs and can apply to and implement those programs using online digital tools. The design and launch of centralised system on enterprises support programs will raise state program flow effectiveness and other KPI's sharply, and will help enterprises to be informed in all eligible programs and to manage those programs online.
9. There is noticeable ICT skills lack in elderly workforce in Armenia. State employment programs can be dedicated to ITC skills trainings which will obviously have a high demand among beneficiary enterprises and jobseekers.
10. Trainings for enterprises support have to be well coordinated by the government in Armenia. The single agenda covering all aspects and full curricula of needed trainings have to be developed. The government can more actively involve "big" partners to implement training programs more effectively.
11. Another issue is the lack of digital knowledge in Armenian enterprises. No state digital training support programs targeted to this issue are elaborated and conducted. TUMO center can be a good example of training organization model for Armenian enterprises, and again, for the better efficiency, the organizational aspect of enterprises' training support programs have to be outsourced from the government to the Republican Union of Employers of Armenia.
12. Armenian government, NGO sector and diaspora institutions can conduct a master project of the development of online training hub (like IMF's edX) with professional course content in Armenian language, in various and demanded sectors of economy.
13. EP Countries with observed ITC related indicators are noticeably close with many of observed ICT indicators. This means that there are regional specific factors which affecting to observing countries somehow proportionally. So, the regional cooperation in digitalisation may have positive influence of overall ICT development in the region.
14. Insufficient development levels of some sectors in Armenia barriers digitals tools to be developed. There are no comprehensive digital solutions for investment and stock market transactions, both for enterprises and citizens, which is also connected with the lack on comprehensive development level of the stock market in Armenia. More active state support should be provided on activation of investment related sectors.
15. Following up adopted Digitalisation Strategy 2021-2024 by the government Armenia should fully improve its regulations related to eCommerce, FinTech, eTrade and other directions, considering mainly EU solutions.
16. The digitalisation of public services and e-governance have a tangible space for development. Still tangible part of public services is not provided online. Some of available solutions

need to be modernized and capture the whole business processes.

enterprises in digitalization process. The need of firm cooperative environment is a must.

- |   |   |
|---|---|
| <p>17. Armenian government must fully implement Digitalisation Strategy 2021-2024 and keep a target of public services comprehensive digitalisation, with the high class brand formation and front-end quality for developed IT platforms.</p>  | <p>20. As many state programs provided to the business entities, such as active labour market programs, are not digitalized and online in Armenia, the government must develop an action plan and make those services digital in a medium term.</p>   |
| <p>18. Armenian government must renovate eSignature old technology (ID card reader) with better technology (using multidimensional validation, such as QR code scanning, biometric check, etc). eSignature service must be free of charge in Armenia.</p>   | <p>21. As many online platforms for business entities need to be reconstructed, are very complicated and do not provide open data service, the government may develop open data regulation and action plan to make all the public digital data open and easy to use.</p>  |
| <p>19. State programs on digitalisation development must be elaborated and implement taking using sectoral NGO's professional resources and institutional abilities on raising the real problems for enterprises. The action plan of the Digitalisation strategy 2021-2025 of the RA does not include any co-implementer of specific tasks provided. The government cannot elaborate all the practical issues available for</p> | <p>22. The government of Armenia must seek solutions to "visualize" non-formal education institutions in Armenia and use licensing procedures for keeping necessary quality standards.</p> <p>23. Online work platforms may be stimulated by the government with corresponding G2B partnerships. There is no regulation for online work platforms in Armenia.</p> |

## ► Annex

### Fiscal and financial measures to support businesses in Armenia:

Measures	Description
<b>Targeted Loans</b>	Targeted loans have been provided to commercial entities (except for licensed activities, health, transport, education sectors and/or State-owned entities) from Armenia licensed banks or credit organisation through co-financing, refinancing and subsidies to cover one or more expense(s) of the commercial entity: 1) salary or equivalent payments to employees; 2) payment of taxes, duties, mandatory payments to State or to Community budget; 3) purchase or import of raw materials; 4) purchase or import of new equipment; 5) payments for public utility services (gas, electricity, communication, telecommunication); 6) import of food and medicines by companies.
<b>Assistance to Commercial Entities operating in Agricultural Sector of Economy</b>	Assistance for the agricultural sector is provided to individuals and commercial entities through co-financing of targeted loans received from licensed banks or credit organisations and (or) loan /leasing interest rate subsidy.
<b>Targeted financing to SMEs</b>	Targeted financing was initially provided to commercial entities performing major activities in the following six SMEs: 1) manufacturing; 2) accommodation and catering; 3) transportation and storage; 4) tourism services; 5) other customer services; 6) healthcare. The scope of the economic activities was further expanded to include pre-school education (private kindergartens); sports services (sports clubs and swimming pools); entertainment and other leisure services. The financing covers one or more of the expenses of the commercial entity: 1) salary or equivalent payments to employees; 2) payment of taxes, duties, mandatory payments to State or to Community budget; 3) purchase or import of raw materials (except fuel); 4) payments for one or several public utility services (gas, electricity, communication, telecommunication); 5) Lease payments for real estate and land for production or provision of services by the commercial entity.
<b>Support to commercial entities with 2-50 employees</b>	Beneficiaries of the measure are provided with a one-time grant, calculated based on the formula provided in the decision, if they constantly had 2-50 employees for the period of January 1, 2020, to April 1, 2020, and the actual fund of income did not decrease in the mentioned period.
<b>Support for Employees and Sole Proprietors of Affected Sectors of Economy</b>	Lump-sum allowances in certain ranges are paid in 32 affected sectors of the economy (except retail services under which food, tobacco, drugs, or alcohol are sold). The list of affected services was updated during the implementation of the measure to include broader, 32 affected sectors, instead of previously 5.
<b>Support to micro enterprises</b>	One-time assistance in an amount of 10% of the turnover of goods, services provided in the first quarter of 2020, but not more than twice the minimum wage, and not less than AMD 10,000.
<b>Support for the Preservation of Effective Jobs by Certain High-Tech Companies</b>	The beneficiaries of the measure are high tech companies, and the assistance will be provided through a one-time grant, after winning the bid, carried out by an independent professional tender commission

<p><b>Support to Legal Entities with 2-100 Employees</b></p>	<p>One-time grant is provided to legal entities, calculated based on a pre-determined formula, which within the period of February 1, 2020, to April 30, 2020, had 2 to 100 employees and the actual fund of income did not decrease during the mentioned period of time, or the decrease was not more than 5%. Sectoral limitations are applicable to legal entities.</p>
<p><b>Support to Competitive Business Ideas, Promotion of Innovative Plans</b></p>	<p>The beneficiary of the measure (a commercial entity or a sole proprietor) will receive support in a form of 75% of interest-free financial resources for a period of 8 years and 25% as grants. The purpose of this measure is to enhance entrepreneurial knowledge of beneficiaries and increase access to finance by implementation of business ideas and innovative development of beneficiary's business plans.</p>
<p><b>Assistance to Employees in Private Sector Based on Civil Contract and Sole Proprietors</b></p>	<p>Assistance provided in a lump-sum amount in the amount of minimum wage in 13 Coronavirus-affected sectors of economies: hotel-guest services; public catering services; tourism services; pre-school education (private kindergartens); activities in the field of sports (sports clubs, swimming pools); other entertainment activities of organising recreation; activity of cinemas; Activities in the field of photography; renting cars or other items; educational activities in the field of culture, music, sports, dance; services in the field of organising creative, art and spectator performances; casino services; social services for people in need of health rehabilitation by providing accommodation.</p>
<p><b>Support for Continuation of Activities and Preservation of Jobs in Certain Businesses Sectors Directly Related to Tourism Industry</b></p>	<p>Support in the form of monthly grants to business entities established before March 31, 2020. At least 50% of economic activities must be in the spheres of accommodation, public catering, travel agencies and other directly related services. Monthly grant support will be provided until March 2021.</p>
<p><b>Sale-Related Risks Mitigation in Grape Processing Entities and Conditions of Attracting Extra Funds for the Procurement of Grapes</b></p>	<p>The measure will be implemented through subsidising the interest rates of loans provided to the agro-processing sector for the purpose of procurement of agricultural raw materials, financial lease of agro-food equipment in Armenia.</p>

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ISBN 978-9-220-36517-5



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