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THE IMPACT OF COVID-19 ON TRADE AND STRUCTURAL TRANSFORMATION IN THE REPUBLIC OF MOLDOVA

Evidence from UNECE's survey of Micro, Small and Medium Enterprises

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Note

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This report is issued in English and Russian.

Preface

As the new coronavirus disease (COVID-19) continues to spread, its disruptive impact is becoming more pronounced, posing unprecedent challenges for all countries. Governments have seen their priorities shift overnight towards upscaling public-health preparedness and emergency support measures to cater to the vulnerable segments of their population. The challenges facing Governments are further complicated by supply-chain disruptions that have left enterprises struggling to survive. Pay cuts and furloughs have become an increasing trend, so that the losses in lives are compounded by a livelihood crisis.

If anything, countries across the globe are suffering setbacks that are akin to complex humanitarian emergencies associated with disasters. The coping strategies of businesses and State agencies are being exhausted by the unfolding economic crisis, so that vulnerabilities are aggravated and the impact on productive capacities, institutional dexterity and business confidence is severe. It stands to reason, therefore, to avoid treating the pandemic as a temporary shock whose effects can be swiftly reversed once normality is attained.

The implication is that any attempt to assess the impact of COVID-19 must proceed from a clear understanding of the development challenges that occupied the Governments' agendas at the eve of the pandemic and ground the analysis in the context of economic vulnerability. For if there is one lesson to draw from development experiences, it would be that disasters aggravate deep-seated structural weakness. Without an understanding of these weaknesses, relief and development efforts might miss the target.

It is from this perspective that the impact of the pandemic on the Republic of Moldova's trade and structural transformation was assessed. Consistent with the trade mandate of the United Nations Economic Commission for Europe (UNECE), this assessment traces the way non-tariff measures (NTMs) governing trade in goods influenced end-to-end supply chains and it captures the lingering ripple effects into the economy.

This assessment is based on a survey of micro, small and medium-sized enterprises (MSMEs) belonging to the agricultural, manufacturing and trade sectors, drawing on the experience gained from a UNECE study on regulatory and procedural barriers to trade in the Republic of Moldova.² The focus on MSMEs is consistent with their important contribution to income generation. SMEs accounted for 98.6 per cent of

¹ https://www.unece.org/fileadmin/DAM/trade/documents/ToR_SCTCS_Appendix5.pdf

² https://www.unece.org/fileadmin/DAM/trade/Publications/ECE_TRADE_433E.pdf

active enterprises in 2019, which employed 61.6 per cent of the labour force and generated around 40 per cent of the enterprise sector's total sales,³ while micro enterprises stood as an important source of jobs, particularly in rural areas. Around 38 per cent of the SMEs were engaged in international trade. However, the majority belonged to the services sector.⁴ Only 8.4 per cent of the trading SMEs belonged to the manufacturing sector, indicating a limited capacity to compete in international markets. The focus on MSMEs is also dictated by their limited resources, which renders them inherently vulnerable to negative shocks and changes.

This assessment was carried out over the period May-August 2020 using the UNECE evaluation methodology, which was adapted to support building stronger and more resilient economies in the aftermath of the pandemic. The assessment proceeded in two phases. The first phase focused on pilot-testing the UNECE actor-oriented questionnaires targeting the MSMEs and the freight forwarders, through phone interviews with 20 export-oriented enterprises belonging to the targeted sectors, and with three major forwarders. The second phase was implemented in June-August 2020 to achieve a representative sample of MSMEs. It also involved follow-up interviews with the forwarders to gain further insights into issues raised by the MSMEs.

In total, 235 enterprises from across the country participated in the survey, and their experience provides valuable insights into the immediate and long-term development challenges facing the Moldovan economy. The findings and recommendations were shared with the relevant Government agencies in November 2020, and their comments were integrated into the report.

UNECE has shared the findings and recommendations with the UN Resident Coordinator Office in the Republic of Moldova to inform the UN Country Team (UNCT) planning processes. The report was also shared with United Nations Department of Economic and Social Affairs (UNDESA) as part the United Nations surge effort for supporting MSMEs.

The findings of this assessment will also be reported to UNECE member States during the 2021 session of the Steering Committee on Trade Capacity and Standards to form the basis for discussions over future activities in the area of trade.

This assessment was funded by the United Nations Development Account (UNDA).

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³ National Bureau of Statistics of the Republic of Moldova (https://statistica.gov.md// newsview.php?l=ro&id=6716&idc=168). The Statistics do not include data on the Region of Transnistria and the municipality of Bender.

⁴ https://statistica.gov.md/newsview.php?l=ro&idc=168&id=6408

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This report was prepared by Ms. Hana Daoudi (UNECE, Economic Affairs Officer, Market Access Section, Economic Cooperation and Trade Division) under the supervision of Mr. Mika Vepsäläinen (UNECE, Chief, Market Access Section, Economic Cooperation and Trade Division). UNECE would like to acknowledge the contribution of UNECE lead consultant Mr. Veaceslav Sterbet for supervising the team of national experts who conducted the phone interviews with the MSME representatives and major forwarders operating in the Republic of Moldova.

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Abbreviations and acronyms

AA Association Agreement

ANTA National Road and Transport Agency

BCP Border crossing point

CEFTA Central European Free Trade Agreement

CIS Commonwealth of Independent States

DCFTA Deep and Comprehensive Free Trade Agreement

EN European harmonized standards

EU European Union

GDP Gross domestic product

ICT Information and communication technology

HACCP Hazard Analysis and Critical Control Points

IEC International Electrotechnical Commission

ISO International Organization for Standardization

MCS Moldovan Customs Service

MDL Moldovan leu

MOLDAC National Accreditation Centre of Republic of Moldova

MSMEs Micro, small and medium-sized enterprises

NTM Non-tariff measure

NCTS New Computerised Transit System

OEC Observatory of Economic Complexity

PCI Product Complexity Index

PPE Personal protective equipment

RCA Revealed comparative advantage

SAFE Framework of Standards to Secure and Facilitate Global Trade

SDGs Sustainable development goals

UN/CEFACT United Nations Centre for Trade Facilitation and Electronic Business

UNCT United Nations Country Team

UNDESA United Nations Department of Economic and Social Affairs

UNECE United Nations Economic Commission for Europe

USD United States dollar

VAT Value-added tax

WHO World Health Organization

WTO World Trade Organization

Executive summary

This UNECE assessment, funded through a United Nations Development Account Tenth Tranche project, "Strengthening the national capacities of selected ECE countries for evidence-based regulatory and procedural trade policies to achieve SDGs", and with a view to assessing the impact of the coronavirus (COVID-19) pandemic, traces the way that non-tariff measures (NTMs) governing trade in goods, adopted in the COVID-19 context, influenced end-to-end supply chains in the Republic of Moldova. It is based on a survey of 235 micro, small and medium enterprises (MSMEs) across the country. The survey was conducted over the period from mid-May to August 2020, and the findings were cross-referenced through interviews with major freight forwarders operating in the country.

The assessment shows that the Government of the Republic of Moldova limited trade restrictions to the minimum; implemented expansionary monetary and fiscal policies, and launched targeted relief measures, such as credit schemes and tax deferrals, to curb unemployment and support the hardest-hit sectors. It also upscaled trade facilitation measures as follows:

- *Transparency in trade was ensured* through online publication of health protection measures and applicable trade-related rules and customs procedures.
- Customs declarations continued to be submitted electronically, and the Government started issuing electronic transport authorizations in July 2020 and simplified the procedures for issuing preferential certificates of origin for goods destined to the European Union (EU), Central European Free Trade Agreement (CEFTA) countries and Turkey.
- Border control continued within the context of an integrated border management system and was risk-based, with inbound shipments of food, sanitary products and medical equipment receiving priority clearance.
- Customs and tax payments continued to be made online through the Government's online payment platform.
- Transit traffic continued to be facilitated by cooperation arrangements anchored in regional agreements and UNECE international transport conventions and protocols.
- The reconstruction and further development of the Moldovan customs offices at border crossing point (BCPs) with Romania and Ukraine continued.

However, the Government's ability to unleash the full efficiency potential of NTMs was undermined by capacity shortfalls. These shortfalls, combined with weaknesses in the national transport system, aggravated the impact of lockdown measures in the Republic of Moldova and in partner countries. These channels disrupted supply-chain operations, with adverse consequences for their post-COVID-19 recovery and development prospects.

1. The lingering effects of COVID-19 on the Moldovan economy

1.1 Trade facilitation not used to its full potential

- Business uncertainty was alleviated by transparency measures. All the MSMEs surveyed were abreast of applied trade-related regulations and administrative procedures thanks to the timely publication of new/revised NTMs and health safety guidelines.
- Trade facilitation gains were undermined by the factors below:
 - *Delayed issuance of trade documents*, as the Government has yet to fully transition to a paperless trading environment.
 - *Border closures*, which affected 70 per cent of the country's BCPs over the course of March-July 2020.
 - Continued reliance on physical inspection of inbound cargo during customs clearance, which caused unnecessary delays.
 - Lack of adequate infrastructure facilities at customs terminals, which created long queues and congestion on the Moldovan side of the BCPs
 - Extended clearance times at the Romanian side of the Leuşeni-Albiţa BCP. A major concern during the pre-pandemic period, these delays were aggravated, with the waiting time exceeding two days.
 - *Transport disruptions* under the weight of border closures in partner countries and health protection measures, which translated into delayed deliveries while inflating transport costs. At the same time, shipments to/through countries with which the Republic of Moldova has quota-based arrangements for regulating road freight was undermined by shortages in freight permits.
- *Freight-forwarding industry under stress*, with the air-forwarding branch appearing as the hardest-hit.

1.2 Stunted trade

- Over 55 of the MSMEs surveyed lost their main export partners, particularly in Romania and the Russian Federation.
- Only 25 per cent of the MSMEs maintained their pre-pandemic export earnings. Another 24 per cent suspended exports altogether, and around 46 per cent lost over 20 per cent of their export earnings over the period January-June 2020.
- All the MSMEs surveyed reported supply shortages owing to the closure on nonessential businesses in partner countries, delayed deliveries, and the depreciation of the national currency (Moldovan leu, MDL) against the United States dollar (USD). Only 7 per cent managed to find new international suppliers. The remainder reduced imports to cut down on costs.

1.3 Increased economic vulnerability

- *Reduced productive capacity:* Around 47 per cent of the MSMEs reduced production activities and another 45 per cent suspended production altogether under the weight of dwindling demand and supply shortages.
- Around 53 per cent of MSMEs put their staff on furlough (unpaid or semi-paid leave) to reduce costs. The production departments bore the brunt of these measures, providing further evidence of the MSMEs' stunted production capacity. In addition, 28 per cent introduced salary cuts, and another 15 per cent laid off staff. Most laid-off and furloughed staff were women, who were quick to resign or request unpaid leave of absence in March 2020 (when the national lockdown measures were introduced) to take care of their children.
- Limited production repurposing: Production repurposing, which is a growth enabling coping strategy, constituted an important coping strategy for only 14 per cent of the MSMEs surveyed. These were predominantly small and medium enterprises involved in textiles manufacturing that repurposed their production lines to cloth face masks and disposable protective clothing for medical personnel with the support and assistance of national and European partners. In so doing, they operated in a cluster, with medium enterprises receiving orders from European buyers, including major brands, and then subcontracting part of their production to small enterprises.
- *Limited engagement in e-commerce*: Around 32 per cent of the MSMEs surveyed increased their engagement in e-commerce, another growth enabling strategy, to maintain operations. The remainder casted doubt over their ability to

- compete in domestic and cross-border e-commerce, noting the fierce import competition and the myriad health, safety and environmental requirements in export destinations that are difficult to comply with, particularly in the EU.
- Sharp increase in MSMEs' debt burden: The MSMEs surveyed were in debt, as they postponed business expenditures and loan repayments to cope with falling revenues. Around 88 per cent of the MSMEs surveyed emphasized that their survival hinged on continued Government support.
- Marked deterioration in the living conditions of the MSMEs' households: Around 54 per cent of the owners used personal savings to cover running costs at the expense of their households' living conditions. The owners reported cutting back on, among other things, utility, and medical bills as well as food expenditures.

2 Policy implications

There is no doubt that the return to normality will breathe new life into the Moldovan economy. However, the course of recovery is dependent on addressing the lingering effects of the pandemic. The recommendations provided in section 5 provide action-oriented recommendations for the Government's consideration as it forges ahead in rebuilding stronger and more resilient MSMEs in the aftermath of COVID-19.

Consistent with the Government's development strategy, the recommendations are geared to bolster the contribution of trade to structural transformation. They address emergency needs generated by the pandemic-induced crisis as well as structural weaknesses with the aim of enabling MSMEs to reap benefits from the growth opportunities generated by the Deep and Comprehensive Free Trade Area (DCFTA) and carry direct contribution to achievement of the 2030 sustainable development goals (SDGs): including goals 1 (no poverty), 8 (decent work and economic growth), 9 (industry, innovation and infrastructure), 11 (sustainable cities and communities) and 17 (partnerships for the goals).

1. Introduction

The Republic of Moldova, situated between Ukraine and Romania, is a small landlocked country,⁵ which belongs to the lower-middle-income group.⁶ The Government has consistently pursued a trade-led development strategy, anchored in the multilateral trading system⁷ and regional trade agreements.⁸ These agreements have been complemented with reduced or duty-free access to, among others, Canada, Japan, Norway, Switzerland, Turkey, and the United States of America within the context of Generalized System of Preferences (GSP) schemes.⁹

The Government's trade-led development strategy entered a new phase in 2014 following the implementation of the Deep and Comprehensive Free Trade Area (DCFTA) with the European Union (EU). The DCFTA, which crowned a series of integration arrangements between the EU and the Republic of Moldova, ¹⁰ provided

⁵ The Republic of Moldova covers 33,851 square kilometres of land area and is located 50 kilometres from the Black Sea. The Republic of Moldova's distance from the seacoast is relatively short compared to other landlocked countries. Kazakhstan has the longest distance from the nearest seacoast (3,750 km), followed by Afghanistan, Chad, Niger, Zambia and Zimbabwe, where the distance from the nearest seacoast is in excess of 2,000 km. A brief overview of landlocked countries and their profiles is available at the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and the Small Island Developing States website /http://unohrlls.org/about-lldcs/country-profiles/).

⁶ The World Bank's income classification system assigns countries with a GNI per capita between USD 1,036 and USD 4,045 to the lower middle-income countries group. Updated country income classifications are available at: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups

⁷ The Republic of Moldova joined World Trade Organization on 26 July 2001.

⁸ As of 2015, the latest WTO Trade Policy Review, the Republic of Moldova had 14 regional trade agreements with 45 partners, including: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, the EU-28, Georgia, Kazakhstan, the Kyrgyz Republic, Montenegro, the Russian Federation, Serbia, North Macedonia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. WTO (2015) Trade Policy Review: Republic of Moldova

⁽https://www.wto.org/english/tratop_e/tpr_e/s323_e.pdf).

⁹ WTO (2015) Trade Policy Review: Republic of Moldova

⁽https://www.wto.org/english/tratop_e/tpr_e/s323_e.pdf).

¹⁰ In 2006, the EU granted preferential treatment for Moldovan exports within the context of the EU GSP scheme, which was extended in 2007 through the GSP "plus" scheme before being replaced by the comprehensive Autonomous Trade Preferences (ATP) in 2008. The ATP was replaced by the DCFTA in September 2014, which marked the provisional implementation of the Association Agreement between the Republic of Moldova and the EU. The AA was signed in June 2014 and entered into full force in June 2016. A detailed overview of the Republic of Moldova's trade relations with the EU is available at: https://ec.europa.eu/trade/policy/countries-and-

new impetus for trade reforms. The agreement sets out detailed provisions for achieving full and complete compliance with the requirements of the EU *Acquis Communautaire* relating to, among other things, tariffs, and NTMs. ¹¹

Yet, despite its impressive reform achievements, ¹² the Republic of Moldova has yet to realize the full potential of the DCFTA and other economic reforms. As shown in Annex 1, the country continues to rely on low-value-added manufacturing and agriculture for income generation, along with remittances, which accounted for 15.97 per cent of its gross domestic product (GDP) in 2019. ¹³

1.1 COVID-19-induced economic crisis

The outbreak of the COVID-19 pandemic dealt a strong blow to the Moldovan economy, causing GDP to plummet by 7.2 per cent year-over-year during January-June 2020. ¹⁴ The impact of GDP losses was magnified by dwindling remittances, which are projected to drop by up to 27 per cent in 2020 to pose a serious threat to the Government's solvency. ¹⁵ Recent estimates show the share of the budget deficit in GDP as increasing from 1.4 per cent in 2019 to 7.6 per cent in 2020. ¹⁶

The labour market appeared to be immune to the direct effects of the pandemic, which can be partly explained by the Government's flexible expansionary monetary policy. ¹⁷ As shown in Figure 1.1, inflation was on a declining trend and was below the

<u>regions/countries/moldova/</u>. The text of the AA between the Republic of Moldova and the EU is available at: https://eur-lex.europa.eu/legal-

content/EN/TXT/?uri=uriserv%3AOJ.L_.2014.260.01.0004.01.ENG

¹¹ For a detailed overview of these reforms, see UNECE study on regulatory and procedural barriers to trade in the Republic of Moldova

⁽https://www.unece.org/fileadmin/DAM/trade/Publications/ECE_TRADE_433E.pdf)

¹² Government of the Republic of Moldova (http://dcfta.md/eng)

¹³ World Bank Database

⁽https://data.worldbank.org/indicator/BX.TRF.PWKR.DT.GD.ZS?locations=MD)

¹⁴ National Bureau of Statistics of the Republic of Moldova (NBS), Quarterly Statistical Bulletin, January-June 2020 (https://statistica.gov.md/ newsview.php?l=en&idc=30&id=6765&parent=0). The Statistics do not include data on the Region of Transnistria and the municipality of Bender.

¹⁵ For further details, see report by Oxford Economics, https://www.oxfordeconomics.com/recent-releases/Republic-of-Moldova-Bracing-for-domestic-and-external-COVID-19-shocks

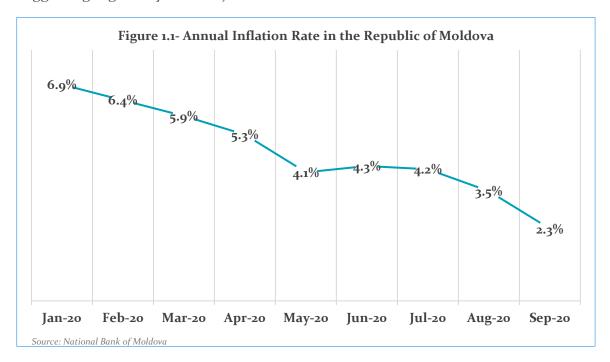
¹⁶ World Bank, Moldova Economic Update, 7 May 2020

⁽https://www.worldbank.org/en/country/moldova/brief/moldova-economic-update)

¹⁷ The National Bank of Moldova decreased the base rate applied to the main short-term monetary policy operations in March 2020 by 2.25 percentage points from 5.50 in December 2019 to 3.25 percent and by another 0.25 percentage points in August 2020 to 3 per cent

5 per cent target in May-September 2020. The labor market was also cushioned by the Government's targeted relief measures to curb unemployment and support the hardest-hit sectors (Annex 2).

Recent estimates show the unemployment rate standing at 4.2 per cent in the second quarter (Q2) of 2020 down from 5.1 per cent in 2019.¹⁸ However, this figure masks discrepancies between rural and urban areas. The unemployment rate in urban areas stood at 5.5 per cent in Q2, 2020, compared with 3.2 per cent in rural areas, ¹⁹ suggesting higher layoffs and job cuts.



1.2 Scope of the assessment

⁽https://www.bnm.md/en/content/nbm-interest-rates). It also decreased the required reserve ratio in local currency, while increasing the required reserves ratio in freely convertible currencies increased (https://www.bnm.md/bdi/pages/reports/dop/DOP2.xhtml?id=o&lang=en; https://www.bnm.md/bdi/pages/reports/dop/DOP3.xhtml?id=o&lang=en).

¹⁸ NBS, Quarterly Statistical Bulletin, January-June 2020 (https://statistica.gov.md/ newsview.php?l=en&idc=30&id=6765&parent=0).

¹⁹ NBS, Quarterly Statistical Bulletin, January-June 2020 (https://statistica.gov.md/ newsview.php?l=en&idc=30&id=6765&parent=0).

This assessment draws on a survey of 235 manufacturing and agricultural MSMEs from across the Republic of Moldova (Annex 2), with a view to capturing:

- 1. The transmission channels of the COVID-19 pandemic effects and the influence of NTMs governing international trade in goods therein.
- 2. Supply-chain disruptions and their impact on international trade activities.
- 3. The MSMEs' coping strategies, understood in terms of the manner in which they used their assets to maintain operations.²⁰
- 4. The ripple effects of the pandemic on the economy, particularly those generated by the MSMEs' coping strategies.

1.3 Report outline

This report is organized in five sections. The introduction is followed, in section 2, by a discussion of the transmission channels of the pandemic's effects. The section shows that NTMs and lockdown measures deployed by the Government of Moldova and partner countries constituted the main transmission channels of the pandemic's effects. Section 2 captures the way in which these measures influenced the MSMEs' trade activities, highlighting instances of supply-chain disruptions and their impact, with a view to setting the context for analysing the MSMEs' coping strategies.

Section 3 discusses MSMEs' strategies for coping with supply-chain disruptions. It shows how these strategies created new realities with direct consequences for structural transformation. Section 4 provides an overview of the MSMEs' income losses, the strategies used by the owners to withstand these losses and the resulting impact on the enterprises' economic vulnerability and the welfare of their households. Section 5 proposes recommendations for supporting the Government's efforts to build a stronger and more resilient economy in the aftermath of the pandemic. The recommendations address emergency and long-term development needs, with a view to bolstering the trade sector's contribution to economic recovery and structural transformation.

²⁰ Development experiences show that coping strategies often aggravate economic vulnerability by transforming assets into liabilities, as is the case when loans become unmanageable. To arrive at a clear understanding of economic vulnerability, the capital base in the broadest sense to include financial capital, natural capital (e.g. land), physical capital (i.e. infrastructure), human capital (i.e. skills), and social capital (social networks). For a concise overview of vulnerability analysis, see, for example, Cannon, Terry (2008) Reducing People's Vulnerability to Natural Hazards: Communities and Resilience, UNU-WIDER Research Paper No. 2008/34

2. TRADE DISRUPTIONS

The period since the outbreak of COVID-19 has seen Governments across the globe deploy NTMs to contain the spread of the pandemic. In most cases, the measures involved temporary export bans on medical equipment as part of a broader effort to address supply shortages. Several countries also introduced export restrictions on certain food items to hedge against food shortages.²¹

Trade restrictions were paralleled by an easing of the financial burden on enterprises through customs duties and value-added tax (VAT) exemptions on imports of, among other things, medical equipment.²² Governments also relied on trade facilitation measures advanced under the World Trade Organization (WTO) Agreement on Trade Facilitation²³ for generating savings for enterprises and ensuring compliance with the World Health Organization (WHO) safety guidelines.²⁴

As shown below, the Government of the Republic of Moldova limited trade restrictions to the minimum. However, its ability to use NTMs to reduce supply-chain disruptions was undermined by capacity shortfalls. These shortfalls combined with weaknesses in the national transport system and lockdown measures in the Republic of Moldova and in partner countries to deal a blow to the MSMEs' participation in international trade.

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²¹ https://www.macmap.org/COVID19

²² https://www.macmap.org/COVID19

²³ The Agreement on Trade Facilitation clarifies and improves the General Agreement on Tariffs and Trade articles V (Freedom of Transit), VIII (Fees and Formalities connected with Importation and Exportation), and X (Publication and Administration of Trade Regulations. These articles correspond to the following chapters of United Nations Multiagency Support Team (UN/MAST) NTM classification system (https://unctad.org/en/Pages/DITC/Trade-Analysis/Non-Tariff-Measures/NTMs-Classification.aspx): Sanitary and phytosanitary measures (Chapter A); technical barriers to trade (Chapter B); pre-shipment inspection and other formalities (Chapter C); price control measures, including additional taxes and charges (Chapter F); finance measures (Chapter G); measures affecting competition (Chapter H); distribution restrictions (Chapter J); government procurement restrictions (Chapter M); rules of Origin (Chapter O); and, export-related measures (Chapter P).

²⁴ See updates by the Government of the Republic of Moldova published at UNECE Observatory on Border Crossings (https://wiki.unece.org/display/CTRBSBC/Moldova). Cross border measures are geared to comply with the WHO guidelines on social distancing.

2.1 Transmission channels

The Government of Moldova used restrictive NTMs on a limited basis to address shortages in pharmaceutical and personal protective equipment (PPE).²⁵ Otherwise, it relied on generating financial savings for supply-chain actors through tax exemptions on imports of certain medical equipment and pharmaceutical products²⁶ and reinforced trade facilitation measures:

- 1. Transparency in trade was ensured through online publication of health protection measures.²⁷ Enterprises were also kept abreast of applicable traderelated rules and customs procedures through the Customs Service Trade Information Portal,²⁸ and could submit their enquires online through the Customs Call Centre.²⁹ In addition, trade partners were kept abreast of changes in NTMs and special health and safety arrangements at border crossing points through prompt submission of notifications to the WTO³⁰ and the UNECE Observatory on Border Crossings,³¹ respectively.
- 2. Customs declarations continued to be submitted electronically,³² and the Government started issuing electronic transport authorizations in July 2020.³³ The Government also simplified the issuance of preferential certificates of origin for goods destined to the EU, the Central European Free Trade Agreement (CEFTA) countries, and Turkey. Enterprises can submit copies of the certificates with the provision that they would provide the Customs Service with the original documents at a later stage.
- 3. Border control continued to proceed within the context of an integrated border management system and was risk-based, ³⁴ with inbound shipments

²⁵ The Republic of Moldova introduced temporary export ban on masks, gloves, and disinfectants over the period 25 July till 31 August 2020 (https://www.macmap.org/COVID19).

²⁶ Imports of undistorted ethyl alcohol have been subjected to a temporary exemption of excise duties since 26 March 2020 (https://www.macmap.org/COVID19).

https://customs.gov.md/ro. Moreover, enterprises could receive alerts on change in applied legislation by registering with the unified alert system (http://officialalert.md/#/).

²⁸ www.trade.gov.md. The Information Point for External Trade provides reliable authoritative information on applied customs legislation and procedures and border crossing concerning goods and transportation units.

²⁹ https://customs.gov.md/ro

³⁰ https://www.wto.org/english/tratop_e/COVID19_e/trade_related_goods_measure_e.htm

³¹ https://wiki.unece.org/display/CTRBSBC

³² https://trade.gov.md/ro

³³ www.eat.anta.gov.md

³⁴ For a detailed overview of this system, see UNECE study on regulatory and procedural barriers to trade in the Republic of Moldova, Chapter 2.

- of food, sanitary products and medical equipment receiving priority clearance. In addition, the shifts at customs offices were adjusted to ensure continuous 24/7 operations, as per established (pre-pandemic) practices. ³⁵
- 4. Customs and tax payments continued to be made online through the Government's online payment platform.³⁶
- 5. Transit traffic continued to be facilitated by cooperation arrangements anchored in regional agreements and UNECE international transport conventions and protocols. ³⁷
- 6. The reconstruction and further development of the Moldovan customs offices at border crossing point (BCPs) with Romania (Leuseni-Albita, Sculeni-Sculeni, Giurgiulesti-Galiti) and the Giurgiulesti-Reni BCP with Ukraine continued with the support of the EU.

Trade-facilitation measures were used to cushion the impact of the special movement arrangements at BCPs to ensure compliance with the Government's WHO-inspired health and safety guidelines³⁸ and to curb the inflow of drivers from highly affected countries. These measures were also meant to alleviate the impact of the temporary border closures, which affected 30 per cent of the country's BCPs (or 12 out of 40) over the course of March-July 2020.³⁹

The above transmission channels of the pandemic's effects operated alongside the nationwide lockdown measures over the period 17 March to 15 May 2020. 40 These measures involved the closure of the Chişinău International Airport, shopping centres, cultural and educational institutions along with nonessential businesses. The Chişinău International Airport was reopened on 15 June 2000, 41 but the

³⁵ https://wiki.unece.org/display/CTRBSBC/Moldova.

³⁶ www.mpay.gov.md

³⁷ For a detailed overview of this system, see UNECE study on regulatory and procedural barriers to trade in the Republic of Moldova, Chapter 2.

³⁸ Global surveillance for COVID-19 caused by human infection with COVID-19 virus: https://www.who.int/publications-detail/global-surveillance-for-covid-19-caused-by-human-infection-withcovid-19-virus-interim-guidance. Information on the Republic of Moldova's border special arrangements are available at: https://wiki.unece.org/display/CTRBSBC/Moldova

³⁹ https://wiki.unece.org/display/CTRBSBC/Moldova; and, Government's report on cross border trade measures of 2 September 2020 at: https://www.itf-oecd.org/sites/default/files/docs/md-measures-COVID19_10.pdf.

⁴⁰ Parliament of the Republic of Moldova

^{(&}lt;a href="http://parlament.md/Actualitate/Noutati/tabid/89">http://parlament.md/Actualitate/Noutati/tabid/89/NewsId/2374/language/ro-RO/Default.aspx). Updates on lockdown measures are published at https://gov.md/ro.

⁴¹ The Chisinau International Airport was closed on 17 March 2020 and reopened on 15 June 2000. Commercial airlines were to make independent decisions as to the resumption of their services. Government of the Republic of Moldova

 $^{(\}underline{https://www.COVID}_{19}\underline{healthsystem.org/countries/moldova/livinghit.aspx?} Section = 6.\%2oMeasure \\ \underline{s\%2oin\%2oother\%2osectors\&Type=Chapter})$

restrictions on non-essential businesses were imposed over a longer period (till 30 June 2020, although the Government eased these restrictions on 12 June).⁴²

As shown below, the impact of the country-wide lockdown measures was amplified by border closures and lockdown measures in partner countries. At the same time, the Government's ability to unleash the full efficiency potential of NTMs was undermined by capacity shortfalls and the lack of adequate transport facilities.

2.2 Impact on supply-chain operations

The assessment shows that trade facilitation measures played an important role in generating efficiency gains for the MSMEs and other supply-chain actors, including forwarders. However, these gains were undermined by the reduced working hours in State agencies and weaknesses in the national transport system. The MSMEs also faced dwindling international demand. These adverse conditions dealt a strong blow to the MSMEs' participation in international trade and pushed the forwarding industry into a financial crisis with adverse consequences for the enterprises' post-COVID 19 recovery and development prospects.

2.2.1 Business uncertainty alleviated by transparency measures

Transparency in trade played an important role in mitigating the adverse effects of the pandemic, providing enterprises with a certain level of certainty to plan operations. All the interviewed MSMEs and freight forwarders were abreast of applied trade-related regulations and administrative procedures thanks to the timely publication of new and/or revised NTMs and health safety guidelines. They also reported benefiting from the below sources:

- The Moldovan railway authority (Moldovan Railway SE), which kept the forwarders abreast of applied procedures and movement restrictions via email alerts.
- Freight forwarders in partner countries who kept the Moldovan forwarders abreast of national health-protection measures and movement restrictions in their respective countries via email alerts.

⁴² The restrictions on non-essential businesses were imposed till 30 June 2020. The Government started easing these restrictions on 12 June 2020 by permitting shopping centers and nonessential businesses to reopen provided they implement social distancing and health safety measures established by law. Government of the Republic of Moldova

⁽https://www.covidighealthsystem.org/countries/moldova/livinghit.aspx?Section=6.%2oMeasures %2oin%2oother%2osectors&Type=Chapter#37Transitionmeasures:Measuresinothersectors)

- Forwarders and MSMEs consulted the International Association of Road Hauliers of Moldova (AITA) institutional website.⁴³
- Forwarders consulted the National Agency for Road Transport (ANTA) institutional website.⁴⁴
- Forwarders consulted the UNECE Observatory on Border Crossings webpage.⁴⁵

2.2.2 Efficiency gains undermined by border closures and capacity shortfalls

All the MSMEs and forwarders interviewed reported that border control agencies (namely, the Moldovan Customs Service (MCS), the National Food Safety Agency and the Border Guard Service) followed established clearance procedures to the letter and did not increase reliance on physical checks. The agencies were also quick to respond to queries and kept clearance time to the minimum.

However, trade was disrupted by the reduction of working hours across State agencies, which increased the waiting time for obtaining documentary requirements to several days. These delays could have been avoided had the Government been able to fully transition into a paperless trading environment. The MCS is still in the process of establishing a Single Window (SW) facility for exports, imports and transit trade following UN/CEFACT Recommendation No. 33 on establishing a single window facility⁴⁶ (Box 2.1).

Box 2.1 Building blocks of Moldova's paperless trading system

The Moldovan Customs Service has integrated of the United Nations Conference on Trade and Development (UNCTAD)'s web-based Automated System for Customs Data (ASYCUDA) World⁴⁷ to serve as the backbone for the Customs Integrated Information System (CIIS).⁴⁸ ASYCUDA World, which is operational throughout the country at the Customs headquarters and regional offices, supports risk-based control through profiling and selectivity and accords the required flexibility for upgrades and

⁴³ http://aita.md/

⁴⁴ https://anta.gov.md/node/1068

⁴⁵ https://wiki.unece.org/display/CTRBSBC

⁴⁶ A SW is "a facility that allows parties involved in trade and transport to lodge standardized information and documents with a single-entry point to fulfil all import, export, and transit-related regulatory requirements. If information is electronic, then individual data elements should only be submitted once": UN/CEFACT Recommendation No. 33, 2005.

⁴⁷ ASYCUDA *World* supports full automation of customs clearance procedures (including data entry and direct registration, risk analysis, calculation of duties and taxes, and payment and accounting) using international standards. Detailed information on ASYCUDA *World* is available at http://www.asycuda.org/asyworld/.

⁴⁸ Moldovan Customs adopted ASYCUDA in 2003.

Box 2.1

Building blocks of Moldova's paperless trading system

connectivity with the information technology (IT) systems of relevant authorities in partner countries.

Traders and their representatives can submit customs declarations for exports and imports (structured on the basis the Single Administrative Document-SAD) online (via ASYCUDA World) and upload all the support documents issued in hard copies⁴⁹ while inputting the identification number and issuing date of the electronic permits/licences.

Steps towards migrating to paperless trade have also involved launching an electronic submittal system for permits and licences. The system, known as the "multi-agency module", allows traders to submit applications on-line, upload the support documents, and receive the permits/licenses via e-mail. ⁵⁰

Source: UNECE (2017) Regulatory and procedural barriers to trade in the Republic of Moldova: Needs assessment

The closure of national BCPs was another complicating factor. Border control agencies were overwhelmed by the sharp increase in border traffic as carriers rerouted shipments away from closed BCPs. Long queue lines and congestion on the Moldovan side of the BCPs became the norm and were also caused by the lack of adequate infrastructure facilities at customs terminals:

- Lack of parking and waiting areas for trucks and other vehicles.
- Inadequate space and facilities for vehicle and goods inspection.
- Poor traffic management: non-segregation of commercial and private traffic; non-segregation of transit consignments; delayed segregation of "fast track" consignments (treated after queuing, along with the reaming traffic, before entering the customs control zone).
- Lack of non-intrusive inspection equipment (e.g., X-ray and gamma-ray scanners).

The delays at BCPs were aggravated by extended clearance times at the other side of borders as neighbouring countries scaled down working hours at land BCPS. In this respect, congestion at the Romanian side of the Leuşeni-Albiţa BCP, a major concern during the pre-pandemic period, were aggravated, with the waiting time exceeding two days.

⁴⁹ Documents issued in hard copies could be uploaded in jpg or in pdf format.

⁵⁰ See Government Decision No. 904 of 13 November 2013 on electronic customs clearance of goods.

2.2.3 Inflated transport costs

Mirroring the national trend,⁵¹ trucks constituted the transport mode of choice for most of the MSMEs surveyed and were used in combination with maritime transport for shipping cargo to distant markets through the adjacent ports in Romania and Ukraine. The MSMEs' transport preferences are consistent with the national trend. Trucks carry over 70 per cent of the country's freight,⁵² reflecting at once the weaknesses in the national rail network,⁵³ and the small size of the Republic of Moldova's national port.⁵⁴

This heavy reliance on road transport complicated the MSMEs engagement in trade. Forwarders had to deal with border closures and the travel restrictions to/from countries included in the Republic of Moldova's list of highly affected countries. They had to make long detours and struggled to find carriers willing to make the journey to/from these countries, even at higher fees, as drivers were worried about contracting the virus and the business ramifications of the 14-day quarantine rule.

The above transport disruptions were compounded by restrictions on the circulation of foreign drivers in the Republic of Moldova and in partner countries. The restrictions created a tedious back-to-back movement procedure, whereby cargo is unloaded from the trucks of a foreign country and then reloaded onto vehicles of the country of destination or transit at BCPs of exit/entry.

⁵¹ Trucks were used for shipping 86.4 per cent of exports over the period January-August 2020, followed by maritime transport (7.9 per cent), rail (3.4 per cent) and air (2.3 per cent). Trucks also constituted the main transport mode for shipping imports. Around 86 per cent of imports were transported by truck over the period, followed by rail (5 per cent), fixed transport facilities (4 per cent), air transport (2 per cent) and maritime transport (around 2 per cent), self-propelled (0.5 per cent) and postal items (0.3 per cent).

https://statistica.gov.md/newsview.php?l=ro&idc=168&id=6777&parent=o

⁵² National Bureau of Statistics of the Republic of Moldova (http://statbank.statistica.md)

⁵³ Transport by rail is slow and unreliable (https://www.moldova.org/en/wp-content/uploads/sites/2/2018/07/MSRP-TCA-Summary-EN.pdf) and, as such, is accorded priority treatment in national infrastructure development plans and regional integration efforts. See the National Transport and Logistics Strategy for 2013-2022

⁽http://www.serviciilocale.md/public/files/drumuri/STL_2013-2022_eng.doc), the in the context of the concept note and Action Plan for 2018-2021 on the restructuring of the Moldovan railway sector (https://gov.md/sites/default/files/document/attachments/intr13_122.pdf) and the Government's update on achievements and future plans

⁽http://www.unece.org/fileadmin/DAM/trans/doc/2019/TEM/15_Oct_2019_S2_Vasile_Condreanu.p df).

The Republic of Moldova has only one port, the Giurgiulesti International Free Port (https://gifp.md/en/), which is located on the Danube River between Romania and Ukraine. It is a small port with a surface area of around 120 hectares (296.5 acres) and a maximum depth of 5 metres (for containers). As such, enterprises rely heavily on the adjacent ports of Romania and Ukraine, which handle most of Moldova's container trade and a significant portion of bulk cargo.

Road freight to/via Turkey, which stands as the Republic of Moldova's main transit link to the Russian Federation and Eastern Europe, was particularly affected by the restrictions imposed by the Turkish authorities on the circulation of foreign drivers. Forwarders noted that these restrictions were not uniformly applied and were often introduced without prior notice, making it impossible to maintain delivery times. Drivers only learnt about applicable restrictions upon arrival at the Turkish BCPs and were faced with high freight costs that put them in breach of delivery terms. As a result, several forwarders suspended shipments to/through Turkey pending the publication of clear guidelines by the Turkish authorities. Others were unsure as to whether they could continue to ship to/through Turkey, noting that the higher fees charged by Turkish carriers rendered this transport route unaffordable to many clients.

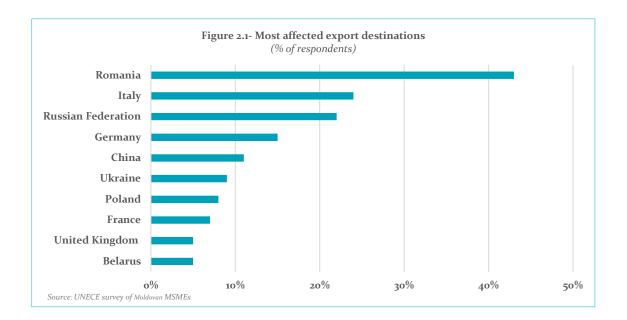
Freight shipments to/through countries with which the Republic of Moldova has quota-based arrangements for regulating road freight (e.g., the Russian Federation) were further complicated by the National Road Transport Agency (ANTA) permits-issuance system. The agency distributes the freight permits obtained through these arrangements, including bilateral and transit permits, equally among forwarders irrespective of their capacity (e.g., existing/new clients; previous and potential trade patterns; and total tonnage shipped). This system has been undermining the forwarders' ability to respond to changes in demand (as there was no possibility to obtain additional permits), while exacerbating the illicit trade of permits.

The difficulties surrounding road transport prompted increased recourse to combined shipments among the surveyed MSMEs. Shifting to maritime transport was not a feasible option. Only 5 per cent shifted to this transport mode because it presented significant challenges. This was mainly due to the closure the Pervomaisc-Cuciurgan BCP with Ukraine, which provides the shortest route from the port of Odessa (Ukraine) to the Republic of Moldova and vice versa. Forwarders were also faced with long queues at the ports of Constanta (Romania) and the ports of Odessa and Ilichivsk (Ukraine), as the authorities reduced the number of workers per shift in compliance with the WHO safety guidelines.

Shipments by air became prohibitively expensive. Freight cargo was routed to the airports of Vienna (Austria) and Frankfurt (Germany) during the closure of the Chişinău International Airport at additional costs (as goods were transported by road from/to the said airports). While the reopening of the airport alleviated these costs, MSMEs were still faced with high fees, as cargo airlines hiked their prices. In this respect, forwarders noted that shipments by air to /from China jumped from USD5 per kilogram in 2019 to USD 30 in July 2020.

2.2.4 Reduced export and import activities

The impact of transport disruptions was compounded by dwindling international demand under the weight of lockdown measures in partner countries, which also involved the closure of non-essential businesses. Over 55 of the enterprises surveyed lost their main trade partners, particularly those in Romania and the Russian Federation (Figure 2.1). Venturing into new export markets, which was difficult even before the onset of the pandemic, 55 became impossible owing to the cancellation of major trade exhibitions.



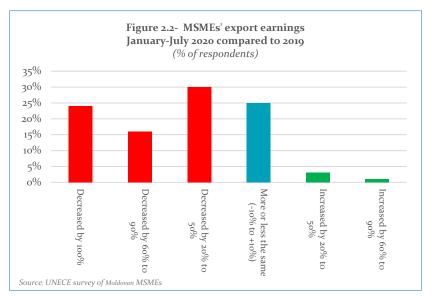
The magnitude of these adverse conditions is reflected in MSMEs' dwindling export earnings. As shown in Figure 2.2, the first half of 2020 saw 46 per cent of the enterprises losing over 20 per cent of their export earnings, and another 24 per cent suspending exports altogether (exports decreased by 100 percent).

Only 25 per cent of the MSMEs maintained their pre-pandemic export earnings and another 4 per cent saw their earnings increase, having arranged shipments in

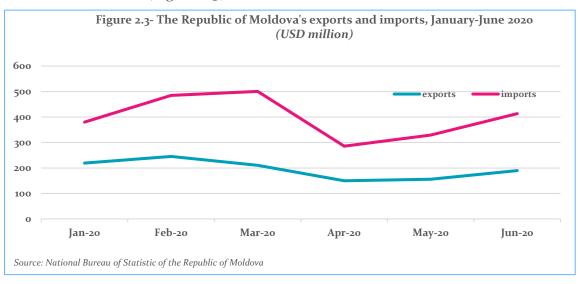
⁵⁵ For further details, see UNECE study on regulatory and procedural barriers to trade in the Republic of Moldova (https://www.unece.org/fileadmin/DAM/trade/Publications /ECE_TRADE_433E.pdf).

January-February 2020 proactively, before the pandemic placed stress on transport operations (Figure 2.2).

At the same time, sourcing from abroad became a complex undertaking owing to: the closure of non-essential



businesses in partner countries, the loss of traditional suppliers who either suspended activities or shut down, the delays in shipment deliveries, and the depreciation of the national currency (the Moldovan leu, MDL) against the United States dollar (USD). ⁵⁶ Only 7 per cent managed to find new international suppliers. The remainder reduced imports to cut costs. Official statistics show exports and imports picking up steam as of May 2020, following the easing of the national lockdown measures (Figure 2.3).



⁵⁶ According to the International Monetary Fund, the nominal exchange rate of the Moldovan leu against the dollar has depreciated by about 7 per cent since mid-March 2020 (https://www.imf.org/en/Publications/CR/Issues/2020/04/22/Republic-of-Moldova-Staff-Report-for-the-2020-Request-for-Disbursement-Under-the-Rapid-49364). Up-to-date information on the Republic of Moldova's monetary policy measures to mitigate the economic impact of the COVID-19 pandemic is published on the National Bank of Moldova's website at: https://www.bnm.md/en/content/nbm-measures-context-emergency-state-generated-COVID-19

However, both imports and exports remained below their previous pre-pandemic levels. A cursory examination of available statistics reveal that the impact of supply chain disruptions was more pronounced on imports, reflecting diminished domestic purchasing power (Table 2.1). Imports appear to have picked up steam in subsequent months, with available statistics showing imports declining by 12.6 per cent over the period January-August 2020 in relation to the corresponding period in 2019. In contrast, exports declined by 13.6 per cent over the said period.

Table 2.1- Percentage change in the Republic of Moldova's exports and imports (year over year, 2020)

Month	March	April	May	June
Exports	-18,2%	-30,5%	-26,0%	-6,2%
Imports	-6,2%	-44,6%	-31,6%	-7,3%

Source: National Bureau of Statistic of the Republic of Moldova⁵⁷

2.2.5 Freight-forwarding industry under stress

The air, road and rail freight forwarders interviewed painted a worrisome picture of the Moldovan forwarding industry. The air-forwarding branch was the hardest-hit. The road-forwarding branch, while faring better, seemed to be awkwardly placed to maintain operations should the current conditions persist till the end of 2020.

Air and sea forwarders

The air-forwarding branch was the hardest hit, with the closure of Chişinău International Airport dealing a strong blow to their operations. The forwarders interviewed reported that most of their national counterparts saw their revenues drop by around 50 per cent over the course of January-July 2020 in relation to 2019, and were forced to slash monthly salaries by up to 60 per cent to maintain operations. Moreover, deferring tax, rent and utility payments has become a widespread practice, even as it involved assuming significant debts.

Air forwarders also struggled to retain skilled staff. Several saw their logistics specialists leave for better, more secure opportunities in other sectors or abroad, with adverse consequences for the industry's ability to bounce back once normality is attained. Specialists who combine logistics management skills and intimate knowledge of national trade rules and procedures are indispensable because they

⁵⁷ NBS, Quarterly Statistical Bulletin, January-June 2020 (https://statistica.gov.md/public/files/publicatii_electronice/Buletin_trimestrial/Buletin_trim-II_2020.pdf)

are in short supply. The forwarding companies heavily invest in creating such experts through paid training and in-house coaching, which takes an average of eight months to one year to complete.

Similarly, sea forwarders are also struggling with reduced demand. In this respect, one of the major forwarders interviewed as part of this assessment reported a massive percentage drop in cargo volumes over the course of January-July 2020, from an average of 1,000 containers per month in 2019 down to 500.

Road forwarders

Road forwarders were hard hit by dwindling demand, with those focusing on the EU region registering the steepest decline in revenues (by over 50 per cent) in relation to 2019. The detours and shortage of drivers have hiked transport costs, leaving the majority struggling to cover operating expenses, despite the savings generated by the drop in gasoline and diesel prices over the course of January-June 2020.⁵⁸

Small forwarders were particularly affected, as were forwarders leasing truck fleets. The majority were unable to make the monthly lease payments and were considering shutting down temporarily if the sitiation did not improve. Large forwarders were assuming debts, as they deferred rental and tax payments in an effort to avoid salary cuts. The enterprises emphasized that keeping highly trained, experienced drivers on staff was more important than supporting the bottom line. The loss of staff would not only make recovery impossible but would also deal a blow to morale throughout the workplace.

Rail forwarders

Rail forwarders were also struggling to survive. This was also the case of major forwarding companies, which saw inbound and outbound shipments drop by 50 per cent during March-May 2020 in relation to the previous period, and transit shipments plunge by 90 per cent. The forwarders interviewed emphasized thay it would take the industry at least six months to recover, assuming that the return to normality is underpinned by a spike in demand.

3. THE RIPPLE EFFECTS OF TRADE DISRUPTIONS

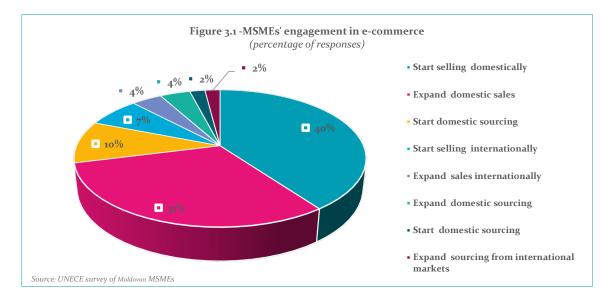
Trade disruptions had reverberating effects, which were amplified by the MSMEs' coping strategies. Most notable was the massive scaling-down of production

⁵⁸ https://autotraveler.ru/en/moldova/trend-price-fuel-moldova.html#.X3c8wW1BuSA

activities, which left the enterprises awkwardly placed to recover once normality is attained. For some MSMEs, scaling down production constituted the strategy of the last resort. It came on the heels of growth-enabling strategies, which involved upscaling e-commerce activities and/or repurposing production. This section discusses the new realities created by these coping strategies, while the next section looks into the extent to which they helped curb the MSMEs' income fallout.

3.1 Limited engagement in electronic commerce

Electronic commerce (e-commerce) figured as an important coping mechanism for 32 per cent of the MSMEs surveyed. These enterprises partnered with leading e-commerce platform operators in the country to venture into or increase their engagement in e-commerce. However, as shown in Figure 3.1, the enterprises mainly used e-commerce for boosting sales in domestic markets and not as an export enhancing tool.



Most of the remaining MSMEs expressed keen interest in venturing into e-commerce but lacked the necessary equipment and information and communication technology (ICT) skills. Some also cast doubt over their ability to compete in domestic and cross-border e-commerce, noting the fierce import competition and the myriad health, safety and environmental requirements in export destinations that are difficult to comply with, particularly in the EU. Thus, for Moldovan MSMEs, engaging in e-commerce while critical, can only be successful if they improve their competitiveness.

3.2 Limited engagement in production repurposing

Production repurposing constituted an important coping strategy for only 14 per cent of the MSMEs surveyed. These were predominantly small and medium sized enterprises⁵⁹ involved in textiles manufacturing. Specifically, 42 per cent of the MSMEs surveyed belonging to the textiles industry repurposed production to maintain operations.

The MSMEs were quick to repurpose production to make cloth face masks and disposable protective clothing for medical personnel. The majority did this by repurposing part or most of their production lines, with the support and assistance of national and European partners. In so doing, they operated in a cluster, with medium enterprises receiving orders from European buyers, including major brands, and then subcontracting part of their production to small enterprises.

International standards implementation, which is a pre-requisite for improving achieving compliance with the health, safety, and environmental protection regulatory requirements in domestic and global markets, figured as an element in the textile manufacturers' repurposing activities. Only one enterprise structured its repurposing around international standards implementation, continuing a trend from previous periods (Box 3.1). The remainder followed the instructions and specifications that were furnished by the contractors.⁶⁰

Box 3.1 How international standards drove production repurposing in the Moldovan textile industry

International standards implementation was at the centre of the repurposing activities of a leading medium-sized textiles manufacturing enterprise, which decided to repurpose production to disposable protective clothing for medical personnel in response to a large purchase order. The enterprise was familiar with this production line, having had a long experience in manufacturing disposable protective clothing in the early 2000s, in the amount of 160,000 units per month, under subcontracting arrangements with Kimberly-Clark. Its decision to relaunch these products was based on an internal assessment to ensure compliance with the most recent International Organization for Standardization (ISO) and EU harmonized standards (ENs). ⁶¹ This involved

⁵⁹ Around 53 per cent were medium with small enterprises accounting for the remaining balance, except for one micro enterprise.

⁶⁰ It was not possible to establish if these instructions were based on international standards. UNECE did not have access to the sub-contracting arrangements between the Moldovan enterprises and international partners or those established between the Moldovan medium and small enterprises.

⁶¹ The relevant ISO and EU harmonized standards referenced in the WHO guideline "Preferred Product Characteristics for Personal Protective Equipment for the Healthcare Worker on the Frontline Responding to Ebola Virus and Haemorrhagic Fever Outbreaks in Tropical Climate" (https://www.who.int/medical_devices/documentPPEfor_public_comment_6Sept2017.pdf).

Box 3.1

How international standards drove production repurposing in the Moldovan textile industry

finding ISO and ENs-certified suppliers and dispatching product samples abroad for analytical testing by accredited laboratories.

Source: UNECE survey of Moldovan MSMEs

Production repurposing also constituted an important coping strategy for one dairy producer and a manufacturer of leather-based products. The two medium-sized enterprises shifted part of their production lines to new products with a view to generating domestic demand. Just like the textile manufactures, the two enterprises repurposed with support and assistance of their European suppliers, who provided raw materials and technical support.

Thus, production repurposing was limited to the textile manufacturers with the support of their European partners. These provided the incentive for repurposing through creating demand for the MSMEs' products, furnished them with the required raw materials and technical support.

Nonetheless, the MSMEs approached production repurposing with much caution, reflecting a conservative investment stance. Only 22 per cent purchased new machinery equipment. The amounts invested were modest (less than USD 10,000) and were financed from retained earnings and/or owners' personal savings. The MSMEs were hesitant to assume risks, noting that making a major financial investment in equipment that does not generate demand as expected would harm their profit margins. The enterprises were referring to the ban on the exports of face masks, which was lifted on 31 August 2020.62 The majority also expressed concern over their weak competitive position in global markets, given their limited capacity to comply with international quality and safety regulatory requirements. The lack of internationally recognized product-certification bodies is another factor undermining the Moldovan MSMEs' competitiveness in global markets. MSMEs must send samples for testing and certification abroad at a high cost. Otherwise, they assume the cost of product testing in destination countries as well as the possibility of border rejection should the conformity assessment test results prove that their products are not fully compliant with regulatory requirements.

The MSMEs' repurposing efforts were met with success. They were able to sell their new products and acquire new skills. However, several small enterprises were unsure as to whether they would be maintaining the new production lines, having

⁶² The Government of Moldova based the export of masks, gloves and disinfectants over the period 15 March-31 August 2020 (https://www.macmap.org/covid19).

fulfilled their obligations under the existing contracts. The remainder highlight the below challenges to maintaining their new production lines:

- The fierce domestic competition from counterfeit products, which are often unsafe.
- The difficult access to bank loans for purchasing additional machinery.
- The lack of skilled labour.
- The high costs of raw materials. This was raised by textiles manufacturers, who import raw materials in view of domestic supply shortages; a challenge that the industry struggled with even before the outbreak of COVID-19.
- The lack of appropriate distribution channels. These are weak and poorly organized for effective and efficient transactions in the domestic and international markets.
- Weak production capacities to achieve compliance with health, safety, and environmental regulatory requirements in destination markets, particularly the EU. In other words, the enterprises lack the skills and resources for implementing international and EU harmonized standards (ENs).

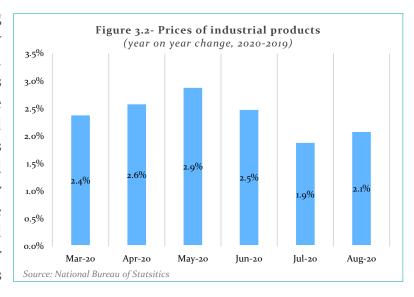
The above-mentioned challenges also created a disincentive for enterprises that were eager to repurpose production. This segment represented 13 per cent of the MSMEs surveyed, which were involved in food, beverages, and textiles manufacturing.

3.3 Stunted production

As previously shown, production repurposing and e-commerce did not figure prominently among the surveyed MSMEs' coping strategies. Rather, the majority scaled down production, with 47 per cent reducing production activities and another 45 per cent suspending production altogether.

These drastic measures were prompted by not only dwindling demand but also supply shortages. Most of the MSMEs reported having effectively depleted their raw material reserves. Only 7 per cent managed to find alternative international suppliers, and another 20 per cent switched to alternative raw materials, which they sourced domestically or from abroad.

However, sourcing domestically was only possible for 18 per cent, owing to supply shortages that were amplified by the closure of non-essential businesses. The rising costs of material raw producer goods was another factor. As shown in Figure 3.2, the prices of industrial goods increased by 2-3 per cent on a monthly basis compared to 2019.63



Further aggravating supply shortages was the decision of many enterprises to store inbound shipments at the MCS warehouse facilities in order to cut down on costs. ⁶⁴ Forwarders reported that this measure was pursued by most of their clients, particularly during March-June 2020, which saw the closure of non-essential businesses. Retaining imports at the MCS warehouse facilities generated important savings, as it meant deferring customs duties and value-added tax payments. This strategy was also pursued by MSMEs that do not have own storage facilities.

For MSMEs belonging to the agricultural sector, the impact of trade disruptions was compounded by the severe drought. Available statistics show crop, fruit tree and vegetable yields dropping by around 27 per cent during the first half of 2020 compared to the same period in 2019. The MSMEs drew attention that the impact on agricultural productivity are likely to greatly exceed the immediate drought-induced losses. They cited crop failures as a major concern, as this will translate into feed shortages and, therefore, harm the livestock sector.

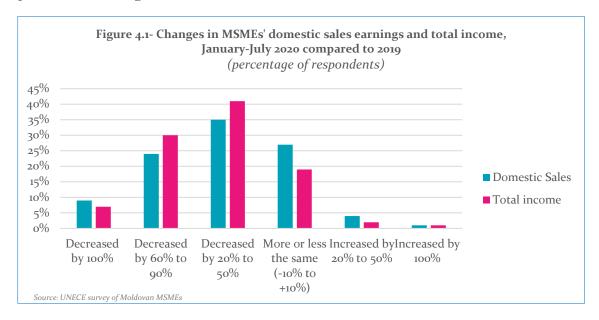
⁶³ NBS, Producer Price Indices (https://statistica.gov.md/pageview.php?l=en&idc=335&id=2343)

⁶⁴ MCS warehouse facilities are managed by the State Enterprise (SE) "Vamservinform" that was created as a result of a reorganization through merger of SE "Moldvama Group" and SE "Vamtehinform", pursuant to the Government Decision No. 178 of 23 March 2011 and MCS Order No. 102-O of 5 April 2011 "On the creation of the State Enterprise Vamservinform". The organization, which operates on a cost-recovery basis, is also responsible for the administration, maintenance and operation of the CIIS and the mobile x-ray scanning equipment at customs posts.

⁶⁵ NBS, Global agricultural production in January-June 2020 (https://statistica.gov.md/ newsview.php?l=en&idc=168&id=6712)

4. INCOME FALLOUT

The current conditions of dwindling international demand have increased the importance of domestic markets for export-oriented MSMEs. However, the extended closure of non-essential businesses and retail stores, coupled with diminished purchasing powers, left these enterprises with limited possibilities to compensate for falling export revenues while dealing a blow to domestic-oriented enterprises. As shown in Figure 4.1, only 27 per cent of MSMEs regained their prepandemic domestic sales earnings by July 2020. The remaining saw these earnings plummet, causing their overall income to take a nosedive.



Under such conditions, around 53 per cent of the MSMEs put their staff on furlough (unpaid or semi-paid leave) to reduce costs. As shown in Table 4.1, the production departments bore the brunt of these measures, lending further evidence to the MSMEs' stunted production capacity. In addition, 28 per cent introduced salary cuts, and another 15 per cent laid off staff. Most laid-off and furloughed staff were women, who were quick to resign or request unpaid leave of absence in March 2020 (when the national lockdown measures were introduced) to take care of their children.

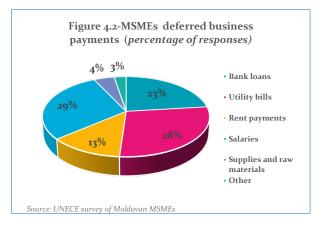
Table 4.1- MSMEs furloughs, salary cuts and layoffs by department (percentage of responses)

Department	Furloughs (Unpaid and semi-paid leave)	Salary cuts	Layoffs
Finance and accounting	4%	4%	4%

Department	Furloughs (Unpaid and semi-paid leave)	Salary cuts	Layoffs
Human resources	15%	15%	15%
Information technology	1%	4%	4%
Management	3%	7%	7%
Marketing and promotion	4%	4%	4%
Other	5%	3%	3%
Production	49%	48%	48%
Sales and exports	13%	11%	11%
Transport	6%	4%	4%
Total	100%	100%	100%

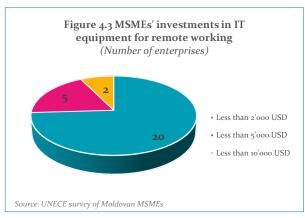
Source: UNECE survey of Moldovan MSMEs

Job cuts and furloughs were paralleled by erosive coping strategies that amplified the MSMEs' debt burden. Around 47 per cent have deferred business payments, particularly salaries, utility bills (including electricity, internet, and phone bills) and bank loans (Figure 4.2).



Moreover, 54 per cent of owners

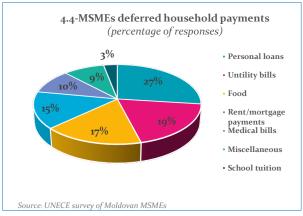
used personal savings to cover running expenses. These included the additional costs associated with bringing their facilities up to the national health and safety



guidelines. Working from home was only possible for management, accounting, and human resources departments, and this is evidenced from the MSMEs' modest investments in IT equipment. Only 27 MSMEs invested in new laptops and other IT equipment to work from home, using retained earnings (Figure 4.3).

Thus, the MSMEs had to assume the costs of arranging for the transport of staff hesitant to make the journey back and forth for fear of being infected by the COVID-19 virus, purchasing hand sanitizers and face masks and the reorganization of working hours around shifts of fewer persons in compliance with social-distancing guidelines. As previously mentioned, owners covered these additional monthly costs used personal savings.

By using their personal savings, the owners increased their debt burdens, as they had to postpone the payment of personal loans, rent, and utility bills. The owners also harmed the welfare of their households, as they cut back on, among other things, utility and medical bills as well as food expenditures (Figure 4.4).



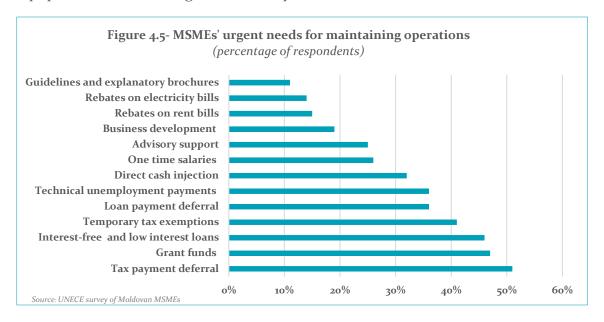
The MSMEs surveyed were struggling to survive, with only 33 per cent reporting that they could maintain operations for more than a year without support. These were predominantly medium-sized enterprises, who noted that this can only be possible if they introduce further salary cuts and/or turn furloughs into permanent layoffs. The MSMEs described further salary cuts, which as of August 2020 were predominately between 20 and 30 per cent (Table 4.2), and layoffs as last resource measures. These measures place a major drain on the MSMEs resources and accelerate their death. It would be difficult to replace lost staff, given the shortage of skilled workers domestically and recruiting new staff would make no business sense under conditions of shrinking revenues.

Table 4.2 Salary cuts introduced by the surveyed MSMEs

Responses	Number	Percentage
10 or less	5	8%
11 - 20%	9	14%
21 - 30%	23	35%
31 - 40%	11	17%
41 - 50%	10	15%
51 - 60%	4	6%
61 - 70%	0	ο%
71 - 80%	1	2%
81% or more	2	3%
Total	65	100%

Source: UNECE survey of Moldovan MSMEs

The magnitude of the MSMEs' income fallout is reflected in the fact that around 88 per cent emphasized that their survival hinged on receiving Government support. Of these, 73 per cent noted that they need "a lot of support" to reduce their tax burden and cover running expenses (Figure 4.5). In this respect, many MSMEs were in dire need of financial assistance for importing raw materials from and machinery equipment and obtaining the necessary PPE for their staff.

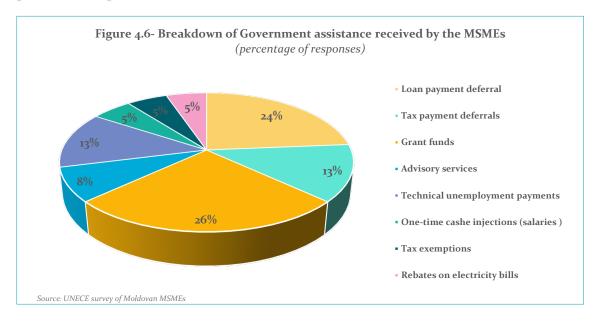


All the MSMEs noted that banks were refusing to reschedule their loan payments without introducing an upward revision in interest rates. Many also reported that their efforts to obtain bank loans were met with limited success, which will further constrain their ability to recover and compete in domestic and global markets. The MSMEs were replete in drawing attention to their weak production capacities, and highlighted the need for strategic business support to:

- Resolve commercial disputes with international suppliers and buyers.
- Upgrade production.
- Fulfil the requirements for products certification (PPE manufacturers).
- Increase their engagement in e-commerce.
- Introduce modern irrigation systems, as a prerequisite for improving resilience to droughts (farmers).

In terms of tangible support, only 8 per cent of the MSMEs surveyed received government support in the form of grants (mainly under agricultural credit

schemes) and tax payment deferrals (Figure 4.6). Another 28 per cent received support from international organizations within the context of donor-funded projects. This included low-interest loans for purchasing raw materials and machinery, training, and advisory services along with guidance and explanatory brochures on adapting workplaces and workflows to ensure the safety of staff and prevent the spread of COVID-19.



Around 28 per cent applied for Government support, which included subsidized loans, tax deferrals and wage subsidy schemes (Annex 2). Some were still waiting to hear from the relevant State agencies, while the remaining said that they were denied assistance without explanation. MSMEs that did not apply noted that the application procedures were complicated. Owners also drew attention that they did not apply for unemployment benefits under the Government's technical unemployment benefit scheme, launched to support enterprises that were forced to suspend activities due to lockdown measures, since they were unable to continue paying salaries.66

⁶⁶ Under technical unemployment benefit schemes, employers can claim unemployment insurance benefits if they continue paying the salaries of staff sent home.

5. RECOMMENDATIONS

This assessment traced the way NTMs deployed by the Government of Moldova and its trade partners, combined with health-protection measures, influenced the MSMEs' trade activities and the impact of trade disruptions on production activities. In so doing, it provided an overview of the COVID-19 effects on end-to-end supply chain operations. The Government of the Republic of Moldova limited trade restrictions to the minimum, and it implemented expansionary monetary and fiscal policies and launched targeted relief measures, such as credit schemes and tax deferrals, to curb unemployment and support the hardest-hit sectors. It also upscaled trade-facilitation measures.

However, the Government's ability to unleash the full efficiency potential of NTMs was undermined by capacity shortfalls within relevant State agencies, which manifested themselves in the predominance of paper-based trade procedures; the continued on physical inspection of inbound cargo; and the lack of lack of internationally recognized conformity assessment bodies.

Combined with weaknesses in the national transport system and the lack of adequate facilities at the main border crossing points, these shortfalls inflated trade costs. In so doing, the shortfalls aggravated the impact of dwindling international demand and supply shortages triggered by lockdown measures and special border arrangements in the Republic of Moldova and in partner countries.

These shortfalls reflect incomplete reforms, and their impact was compounded by the lack of MSMEs' weak productive capacities. Only a limited segment engaged in growth-enabling coping strategies, such as e-commerce and production repurposing. The remainder scaled down production and delayed business payments. Owners also used personal savings to bail out their enterprises at the expense of the overall welfare of their households.

The MSMEs weak productive capacities bring forward the urgent need for a new generation of support services aimed at furnishing the enterprises with the required skills and resources for efficient specialization in technology-intensive activities, for extending and deepening these activities, and for drawing selectively on other technologies to complement existing capabilities.⁶⁷

⁶⁷ For a concise discussion of this concept, see Lall, S. (1992) Technological Capabilities and Industrialization, World Development, Vol. 20, No. 2: 165-186.

Table 5.1 provides action-oriented recommendations for the Government's consideration. These include emergency support measures for improving the MSMEs' resilience and capacity building measures aimed at addressing shortfalls within State agencies and improving the MSMEs' technological capabilities. The two sets of measures could be sequenced with an eye to creating dynamic synergies between relief measures and long-term development objectives. For example, credit schemes can go beyond addressing the MSMEs' liquidity crunch to enabling them to invest in their production facilities.

Consistent with the Government's development strategy, the recommendations are geared to bolster the contribution of trade to structural transformation. They aim at enabling MSMEs to reap benefits from the growth opportunities generated by the DCFTA and carry direct contribution to achievement of the 2030 sustainable development goals (SDGs): including goals 1 (no poverty), 8 (decent work and economic growth), 9 (industry, innovation and infrastructure), 11 (sustainable cities and communities) and 17 (partnerships for the goals).

Table 5.1 Proposed measures for stronger and more resilient Moldovan MSMEs

Area	Challenges	Recommendations	Contribution to sustainable development goals (SDGs)
Emergency Measu	ıres		
Financial support	MSMEs are experiencing shortages in working capital	• Expand the scope of emergency credit schemes to cover all sectors and publish detailed information on application procedures.	SDG 9.3: Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets
	Freight forwarders are experiencing shortages in working capital	• Establish emergency credit schemes to support forwarders and publish detailed information on application procedures.	SDG 9.3: Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets
Legal support	MSMEs are ill- equipped to resolve commercial disputes with international buyers and buyers	• Establish legal advisory facilities to help MSMEs resolve commercial disputes with international suppliers and buyers. Such facilities can be hosted by enterprise support organizations.	SDG 9.3: Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets
Regional cooperation	Outbound cargo destined to/transiting through Romania is delayed by congestions at the	• Strengthen cross-border cooperation through joint control arrangements guided by, among others, the World Customs Organization Revised Kyoto Convention and the UNECE International Convention on the Harmonization of Frontier Controls of	SDG 17.6: Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the

Area	Challenges	Recommendations	Contribution to sustainable development goals (SDGs)
	Romanian side of the Leușeni - Albița BCP	Goods. ⁶⁸ Such arrangements could involve, among others things, joint processing (e.g., single stops), common facilities (e.g., administrative buildings, road and parking areas and utilities) and common technical equipment (e.g., scanners).	achievement of the Sustainable Development Goals in all countries, in particular in developing countries
	Outbound cargo destined to/transiting through Turkey is delayed by the lack of clarity over applied safety and health protection arrangements at the Turkish side of BCPs	• Intensify the exchange of information with relevant Turkish authorities on situational awareness and applied safety and health protection measures at BCPs, inter alia, through online exchange of information using electronic data interchange (EDI).	SDG: 16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements
	Outbound cargo to/through countries with which the Republic of Moldova has quota-based road transport	• Revise the existing road freight permits issuance system. The permits should be issued based on the forwarders' actual cargo traffic (volume and direction).	SDG 11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

 $^{^{68}}$ The Republic of Moldova and Romania acceded to this Convention in 2008 and 2000, respectively (https://www.unece.org/trans/maps/number-of-un-transport-conventions-and-agreements-per-country.html).

Area	Challenges	Recommendations	Contribution to sustainable development goals (SDGs)
	arrangements is constrained by the existing permits-issuance system		
Structural Mea	asures		
Customs clearance	Customs clearance procedures are still paper-based	 Establish the Single Window facility, following UN/CEFACT Recommendation 33 on establishing a single window as envisaged in national trade facilitation plans. Establish the legal framework for an international single window, following UN/CEFACT Recommendation 35 on establishing a legal framework for an international trade single window.⁶⁹ Link the ASYCUDA World system to the EU New Computerized Transit System, since ASYCUDA World is fully operational nationwide, and has a built-in transit module.⁷⁰ 	SDG 17.10: Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda SDG 17.6: Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries
	Moldova's Authorized Economic	• Establish mutual recognition arrangements/agreements of AEO audits, controls and authorizations between MCS and	SDG 17.6: Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder

⁶⁹ https://www.unece.org/fileadmin/DAM/trade/Publications/ECE-TRADE-401E_Rec35.pdf

⁷⁰ Regulation (EC) No 837/2005 and Decision No 4/2005 of the EC/EFTA Joint Committee on Common Transit make the use of the NCTS compulsory for all EU/ common transit declarations.

Area	Challenges	Recommendations	Contribution to sustainable development goals (SDGs)
	Operator (AEO) audits, controls and authorizations are not recognized internationally	its counterparts in the Central European Free Trade Agreement, EU, Turkey and other trade partners in accordance with the World Customs Organization Framework of Standards to Secure and Facilitate Global Trade (SAFE).	partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries
	At the border, Customs terminals lack the required infrastructure	 Equip border Customs terminals with: Parking and waiting areas for trucks and other vehicles. Facilities for vehicle and goods inspection. Modern traffic management for segregating commercial and private traffic; transit consignments; and "fast track" consignments. Non-intrusive inspection equipment (e.g., X-ray and gamma-ray scanners). 	SDG 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
Conformity assessment	MSMEs assume additional costs to prove compliance with regulatory requirements in export markets due to the lack of internationally recognized	Support the National Accreditation Centre of Republic of Moldova (MOLDAC) in its efforts to develop competence in new areas, including certification of persons and verification bodies, and further improve existing competences in accordance with international and regional standards (including the International Organization for Standardization, ISO; the International Electrotechnical Commission, IEC, and the	SDG 9.4: By 2030 upgrade infrastructure and retrofit industries to make them sustainable, with increased resource use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, all countries taking action in accordance with their respective capabilities

Area	Challenges	Recommendations	Contribution to sustainable development goals (SDGs)
	conformity assessment bodies	European harmonised standards, ENs) as follows:	
		- Implement the national accreditation scheme for verification bodies according to ISO14065:2013. Specifically, equip MOLDAC experts and assessors with the necessary expertise knowledge and skills through advanced training courses and practical experience (advanced training courses and study tours and participation in assessments undertaken by other EA recognized national assessment bodies).	
		- Further develop the national accreditation scheme for inspection according to ISO/IEC 17020:2012. Specifically, equip MOLDAC experts and assessors with the necessary expertise knowledge and skills through advanced training courses on the different aspects and applications of this scheme, with a special emphasis on the EU New Approach Directive.	
		-Further develop the national accreditation scheme for product certification according to ISO/IEC 17065:2012. Specifically, equip MOLDAC experts and assessors with the necessary expertise, knowledge and skills through advanced training courses on the different aspects and applications of this	

Area	Challenges	Recommendations	Contribution to sustainable development goals (SDGs)
		scheme, with a special emphasis on the EU New Approach Directive and Moldova's strategic export and imports.	
		- Develop a national accreditation scheme for the certification of persons according to ISO/IEC 17024. Specifically, equip MOLDAC experts and assessors with the necessary expertise, knowledge and skills through advanced training courses and practical experience (advanced training courses and study tours and participation in assessments undertaken by other EA recognized national assessment bodies).	
		- Further develop national testing laboratories. Specifically, equip testing laboratories with modern equipment and expertise skills through advanced training courses and study tours.	
Transport development	The national railway system is underdeveloped	Accord priority to ensuring full implementation of the concept note and Action Plan for 2018-2021 on the restructuring of the Moldovan railway sector. 71	SDG 11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

⁷¹ https://gov.md/sites/default/files/document/attachments/intr13_122.pdf

Area	Challenges	Recommendations	Contribution to sustainable development goals (SDGs)
Enterprise development	MSMEs are facing unfair competition from counterfeit products ⁷²	Protection and Market Surveillance with	SDG 8.2: Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high value added and labour-intensive sectors SDG 3.9d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks
Enterprise support	MSMEs are ill- equipped to meet regulatory requirements in destination countries	• Develop training programmes on international standards implementation, particularly the European Union (EU) harmonized standards, to enable MSMEs to achieve compliance with health, safety, and environmental regulatory requirements in	SDG 8.2: Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high valueadded and labour-intensive sectors

The Republic of Moldova ratified most of international conventions in the field of intellectual property, including the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights Agreement, and its legislation is harmonized with the European Directives. These include the law on market surveillance, the law on general product safety (transposing EU Directive 2001/95) and the civil code (transposing Directive 85/374/EEC on liability for defective products), which together provide the legislative basis for bringing the national market surveillance system up to the EU rules. MCS ensures intellectual property rights protection through its electronic risk profiling system, which has been effective in curbing the inflow of counterfeit products (https://customs.gov.md/ro/articles?tag=news&tag=customs-fraud&page=1). Efforts are underway to establish a Rapid Alert System for dangerous non-food products (RAPEX) based system to facilitate the exchange of information on dangerous non-food consumer products (https://eu4business.eu/programme/support-quality-infrastructure-framework-within-dcfta-context-republic-moldova). For an overview of the MCS risk-based clearance module and the Republic of Moldova's conformity assessment system, see UNECE Study on Regulatory and Procedural Barriers to Trade, Chapter two (https://www.unece.org/fileadmin/DAM/trade/Publications/ECE_TRADE_433E.pdf).

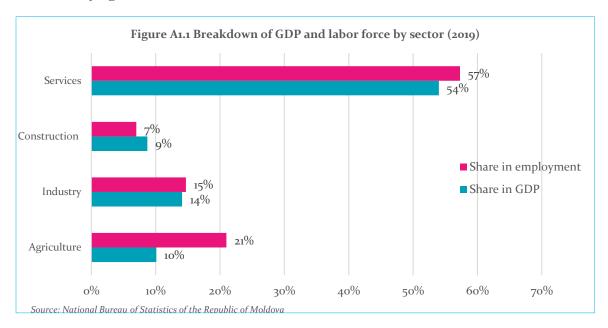
Area	Challenges	Recommendations	Contribution to sustainable development goals (SDGs)
		destination markets, particularly the EU. Implementing international and EU standards also enable MSMEs to benefit from the DCFTA and engage in e-commerce. • Launch targeted technical assistance programmes for food producers to enable them to implement the Hazard Analysis and Critical Control Points (HACCP).	SDG 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
	Farmers are illequipped to withstand droughts	• Launch targeted technical assistance programmes to help farmers introduce modern irrigation systems, as a prerequisite for improving resilience to droughts.	SDG 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
	MSMEs are struggling to find skilled workers	• Strengthen vocational training institutions with resources to develop targeted training for: (a) existing MSMEs' employees to improve their skill sets within their areas of work; and (b) unemployed individuals whose skills could be upgraded to the specific requirements of the demanding jobs within their areas of work. The emphasis should be on enabling the individuals on acquiring the necessary skills for engaging in production activities with high value added.	SDG 8.2: Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high value-added and labour-intensive sectors. SDG 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries

Area	Challenges	Recommendations	Contribution to sustainable development goals (SDGs)
		• Develop advanced, forward-looking curricula and programmes within the higher education institutions, which tailor both the content and approaches to industry needs.	taking action in accordance with their respective capabilities.
		• Establish a national skills-matching strategy (or sectoral/ field-specific matching strategies) for guiding the above.	
	MSMEs are ill equipped to engage in e-commerce	In addition to the above training programmes: • Launch credit schemes for enabling the MSMEs' to procure the necessary ICT equipment and skills. • Launch linkages programmes to integrate MSMEs with regional and global value chains. Such programmes should target both labour-intensive industries and those with technology intensive activities and could be tailored to create: (a) horizontal collaboration, such as sharing the costs of expensive equipment or research and development; (b) vertical collaboration through facilitating the decentralization of the production process; and/or (c) exchange of information on technology and common problems.	SDG 9.3: Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets

Annex 1 - Country background

A1.1 Economic structure

The Moldovan economy has historically been service-based, and the past two decades has seen this sector register steady growth. As shown in Figures A1.1, services generated 53.5 per cent of gross domestic product (GDP) and employed 57 per cent of the labor force in 2019. ⁷³ The industrial sector (including mining, quarrying and manufacturing) stood as the second source of income generation and job creation, followed by agriculture and construction.



However, the services sector continues to be driven by wholesale and retail trade, along with real estate.⁷⁴ Moreover, the move away from industrial and agricultural activities has not been accompanied by improved productivity levels. The enterprises belonging to these sectors continue to be held back by weak technological capabilities,

⁷³National Bureau of Statistics of the Republic of Moldova (https://statistica.gov.md/public/files/publicatii electronice/Anuar Statistic/2020/Anuar statistic ed itia 2020.pdf). The Statistics do not include data on the Region of Transnistria and the municipality of Bender.

⁷⁴ Ibid.

lacking the skills and resources for efficient specialization in technology-intensive activities, for extending and deepening these activities, and for drawing selectively on other technologies to complement existing capabilities.⁷⁵

These structural weaknesses find their strongest expression in the country's limited export mix. As shown in the next section, exports continue to be dominated by products with low value-added, as enterprises are awkwardly placed to adapt to consumer preferences and to meet the regulatory requirements in destination countries, particularly the EU.

A1.2 The trade sector

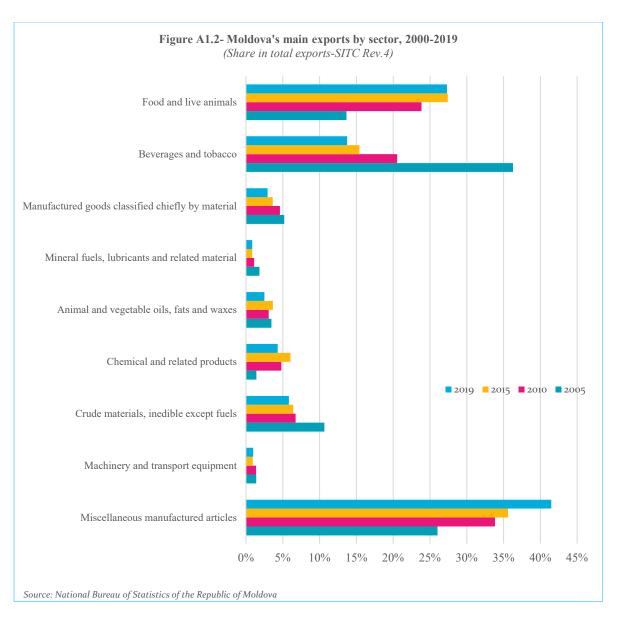
The Republic of Moldova boasts an impressive trade diversification record, with the export product concentration index carrying a value of 0.176 and the import product concentration index well below the threshold of 1.77

However, as shown in Figure A1.2, exports continue to be driven by relatively low value-added manufactured goods and primary products. Combined with Moldovan enterprises' heavy reliance on international markets for sourcing raw material, this narrow export mix has meant that imports continued to outstrip exports, causing a fiscal leakage of USD 3 billion in its 2019 trade deficit.⁷⁸

⁷⁵ For a concise discussion of this concept, see Lall, S. (1992) Technological Capabilities and Industrialization, World Development, Vol. 20, No. 2: 165-186.

⁷⁶ Calculated using UN Comtrade data. The value of the export concentration index ranges between zero and one. An index with a value closer to 1 point to a heavy concentration in a limited number of sectors, with one indicating that only a single product is exported. UNECE (2017) Regulatory and Procedural Barriers to Trade in the Republic of Moldova: Needs Assessment, Chapter 4 (https://www.unece.org/fileadmin/DAM/trade/Publications/ECE_TRADE_433E.pdf) 77 Calculated using UN Comtrade data. The value of the import product concentration index ranges between zero and one. An index with a value closer to zero signifies that imports are distributed among many types of products. UNECE (2017) Regulatory and Procedural Barriers to Trade in the Republic of Moldova: Needs Assessment, Chapter 4.

⁷⁸ National Bureau of Statistics of the Republic of Moldova

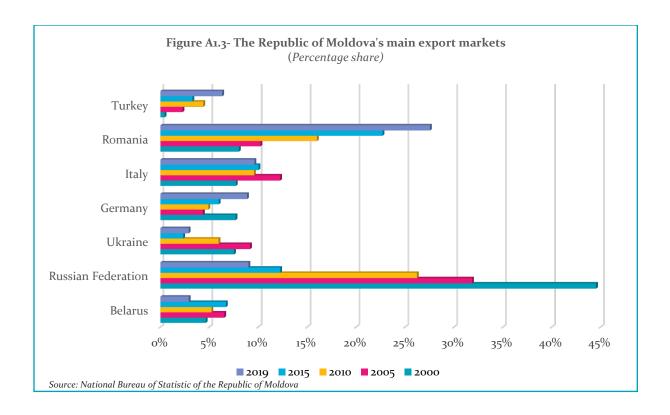


As regards trade partners, the past two decades have seen a re-orientation of Moldova's exports away from the Commonwealth of Independent States (CIS) towards the EU. By 2019, the share of the EU in Moldova's exports stood at 67 per cent, up from 51 in 2007, while the share of CIS dropped from 41 per cent 16 per cent during the same period.⁷⁹

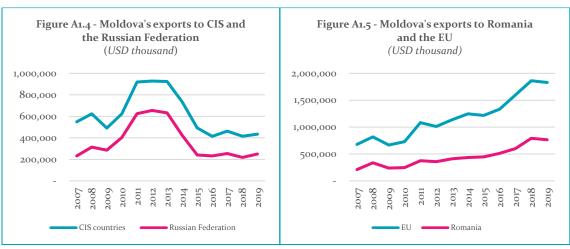
This shift has been mainly driven by Romania, which joined the EU in 2007.⁸⁰ As shown in Figure A1.3, Romania accounted for the largest share of Moldova's exports in 2019 (27.5 per cent), followed by followed by Italy (9.6 per cent), the Russian Federation (8.9 per cent), and Germany (8.5 per cent).

⁷⁹ National Bureau of Statistics of the Republic of Moldova

⁸⁰ Romania joined the EU on 1 January 2007



Romania, along with the Russian Federation, has also been driving Moldova's regional trade patterns. This is demonstrated in Figures A1.4 and A1.5, which show Moldovan exports to the CIS and EU, as mirroring the evolution of exports to Romania and the Russian Federation.



Source: National Bureau of Statistic of the Republic of Moldova

A1.3 Modest steps towards structural transformation

The above figures mask modest steps towards structural transformation. As shown in Table A1.1, the Republic of Moldova's highest complexity exports, as measured by the product complexity index (PCI), ⁸¹ are in machines for testing mechanical properties, machinery equipment for non-domestic heating or cooling systems and copper foil manufacturing.

Table A1.1- The Republic of Moldova's top 10 knowledge-intensive products, 2018

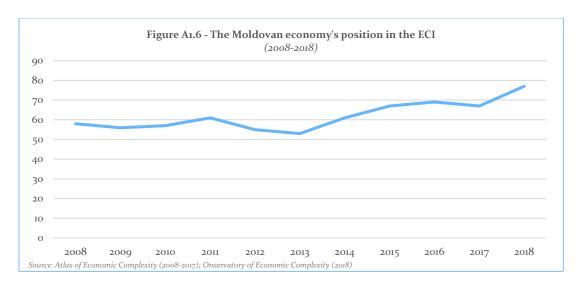
Products (Harmonized System) HS4	PCI
	101
Machines for testing mechanical properties of material	1.63
Machinery, non-domestic, involving heating or cooling	1.43
Copper foil, thickness (except any backing) < 0.15mm	1.25
Binoculars, monoculars, telescopes, etc.	0.96
Slag wool, rock wool, insulating minerals not asbestos	0.81
Nickel tubes, pipes and tube or pipe fittings	0.79
Electric transformers, static converters and rectifiers	0.77
Derivatives of cyclic alcohols	0.68
Bar, rod, hot-rolled alloy steel, irregular coils	0.67
Signals etc. for rail, tram, waterway, port, airfield	0.6

Source: Observatory of Economic Complexity⁸²

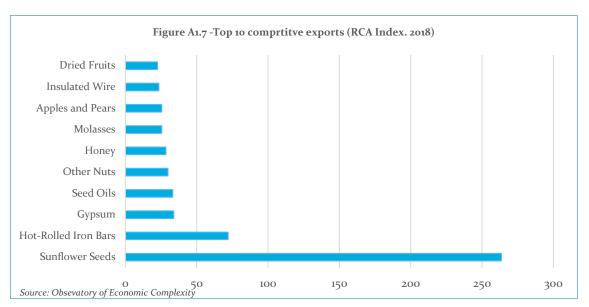
However, these successes seem to fall short of sustaining a continuous move towards increased specialization in technology-intensive/knowledge-based activities with high value-added, with its position in the economic complexity index (ECI) fluctuating over the past 11 years (Figure A1.6).

⁸¹ The PCI ranks the diversity and sophistication of the productive know-how that went into manufacturing of individual product. It is used as a proxy for measuring the technical and knowledge intensity of products.

⁸² Observatory of Economic Complexity (https://oec.world/en/profile/country/mda)



Moreover, except for hot-rolled iron bars, the Republic of Moldova does not have export advantages, measured in terms of the revealed comparative advantage (RCA) index,⁸³ in all of its top products of complexity index. As shown in Figure A1.7, the country's export advantages are mainly in agricultural products.



⁸³ The RCA indicates whether a country is specializing in products with trade potential. It is based on the idea that if a country exports more than the global average exports of a specific product, then the country has a comparative advantage in that product. If the RCA is higher than 1, then the producer is said to have an RCA in producing a certain good.

Annex 2- The Government of the Republic of Moldova's relief and support measures

Area	Measures
Tax relief	 Deferment of tax payments until 25 June 2020. Suspension of tax audits until 1 June 2020. Suspension of the 2019 audit obligations for enterprises that were hard-hit by lockdown measures. Reduction of value added tax (VAT) from 20 to 15 per cent as of 1 May 2020 (Only for enterprises involved in the food industry and hospitality sector). VAT Refund Program (1 May-31 December 2020) of MDL 1 billion (USD 56 million).
Enterprise support	 State subsidies for enterprises that were forced to suspend operations during the lockdown period (state of emergency), with a view to enabling them to cover social and health insurance contributions. The subsidies involved financing interest rates on bank loans taken out by the enterprises over the period March-May 2020 (for up to three months). Exemptions from patent payments for patent holding enterprises that were forced to suspend operations during the lockdown period. Interest Grant Programme facilitating businesses' access to credit: Co-financing interest rates on bank loans taken out by the enterprises as of 1 May 2020 (the programme was launched in April 2020 with duration until end 2020). Grants in the amount of LEU 100 million (approx. USD 5.6 million) to support entrepreneurs, with a special emphasis on female entrepreneurs.
Economic	 The amount of unemployment benefits was increased by 55 per cent and eligibility criteria were expanded to cover returning migrant workers. The minimum amount of "guaranteed monthly income" for low-income families was increased by almost 20 per cent. Reimbursement of 43 per cent of the monthly salaries of employees sent into technical unemployment during the lockdown period. Base rate applicable to short-term monetary policy operations
Stimulus Other	 reduced by 2.25 percentage points to 3.25 per cent. Reserve ratio in local currency decrease by 6.5 percentage points to 34 per cent. Reserves ratio in freely convertible currencies increased by 1.0 percentage point to 21 per cent. Deferral of payments under banks loans till 30 June 2020. Mortgage guarantee programme.

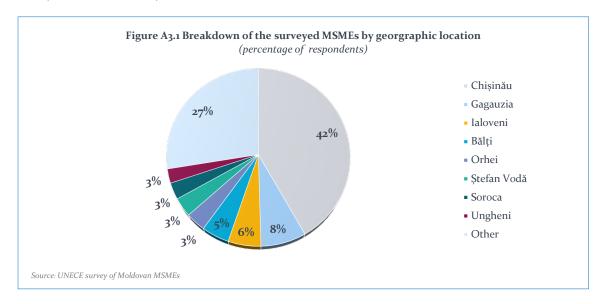
Source: International Monetary Fund (https://www.imf.org/external/index.htm); Government of the Republic of Moldova (https://www.covid19healthsystem.org/countries/moldova/livinghit.aspx?Section=6.%20Measures%20in%20other%20sectors&Type=Chapter#37Transitionmeasures:Measuresinothersectors; https://www.legis.md/cautare/getResults?doc_id=121284&lang=ro)

Annex 3-Profile of the MSMEs surveyed

This assessment draws on a survey of 235 MSMEs from across the Republic of Moldova. This annex provides a breakdown of these enterprises by location, size and economic activity.

A_{3.1} Location

Mirroring the countrywide spatial distribution of enterprises, the municipality of Chişinău was home for the largest segment of the MSMEs surveyed.⁸⁴ The municipality of Bălți, the region of Gagauzia and districts of Ialoveni, Orhei, Soroca, Ștefan, Vodă and Ungheni accounted for the second-largest segment (Figure A3.1). The remaining MSMEs were located in Anenii Noi, Basarabeasca, Briceni, Cahul, Călărași, Cantemir, Căușeni, Cimişlia, Criuleni, Dondușeni, Drochia, Dubăsari, Edineț, Fălești, Florești, Hîncești, Nisporeni, Ocnița, Rezina, Rîșcani, Sîngerei, Şoldănești, Strășeni and Telenești.



A_{3.2} Size

Small enterprises employing between 50 and 249 persons represented the largest segment. These accounted for 49 per cent of the MSMEs surveyed, followed by small enterprises, employing between 10 and 49 persons (39 per cent), with micro

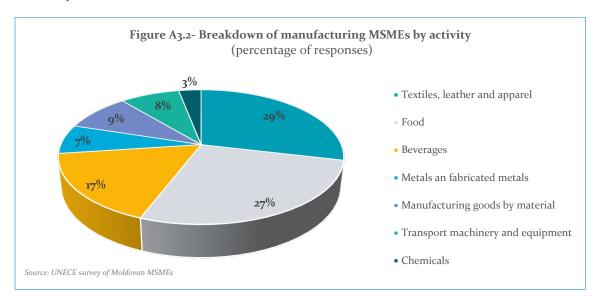
⁸⁴ Chişinău accounted for 62 percent of total registered enterprises in 2019 (statistica.gov.md). The Republic of Moldova is divided into three municipalities (Bălți, Bender and Chişinău, which represent the first level of territorial organization), 32 districts and 2 regions (Gagauzia and Transnistria).

enterprises, employing fewer than 10 persons, accounting for the remainder balance (12 per cent).⁸⁵

A_{3.3} Economic activities

The majority of the MSMEs belonged to the manufacturing sector. These accounted for 70 per cent of the enterprises surveyed, followed by those involved in agricultural activities, including harvesting and animal husbandry (27 per cent). MSMEs engaged in trade and domestic retail activities accounted for the remainder (3 per cent).

As shown in Figure A_{3.2}, manufacturing enterprises represented strategic sectors, including food and beverages; metals and fabricated metals; textiles and apparel; transport machinery and equipment; and chemicals. Enterprises engaged in textiles, leather and apparel manufacturing accounted for the largest segment, or 29 per cent of the enterprises surveyed, followed by those belonging to the food and beverages industry.



⁸⁵ The classification of MSMEs follows the EU Commission Recommendation 2003/361/EC "Concerning the Definition of Micro, Small and Medium-sized Enterprises".