



German
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Team

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POLICY BRIEFING
MOLDOVA

Export potential for Moldova's fruits on the EU market

by Veronika Movchan and Carolin Busch

Summary

- » MDA exports of fruits other than apples amounted to USD 99 m or 3% of total exports in 2021
- » Geography of MDA fruits exports remained stable in 2017-2021, with the EU and Russia being the leading destinations
- » MDA has specialised in exports of fresh fruits, which account for ca. 75% of the total, with fresh grapes and plums being the main export products
- » In 2021, the EU countries' imports of fruits reached USD 50 bn, out of which 56% were intra-EU imports
- » Given MDA's fruit export structure, MDA competes primarily with the EU member states
- » Using a systematic trade-based approach, we assessed which MDA fruits have the highest export potential in the EU market
- » The estimates show that the top 10 products with the highest export potential in the EU market are also the top 10 fruit export products of MDA. They have already been exported to the EU
- » For plums, dried prunes, fresh grapes and cherries, realising MDA export potential will mean taking a noticeable share of the EU fruit imports market, thus exerting pressure on EU producers
- » Therefore, for the sectors' stable development, export expansion to the EU should be complemented by diversification to new, other than MDA traditional, markets

Outline

1. Motivation
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 - 4.1. Methodology
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Annex

1. Motivation

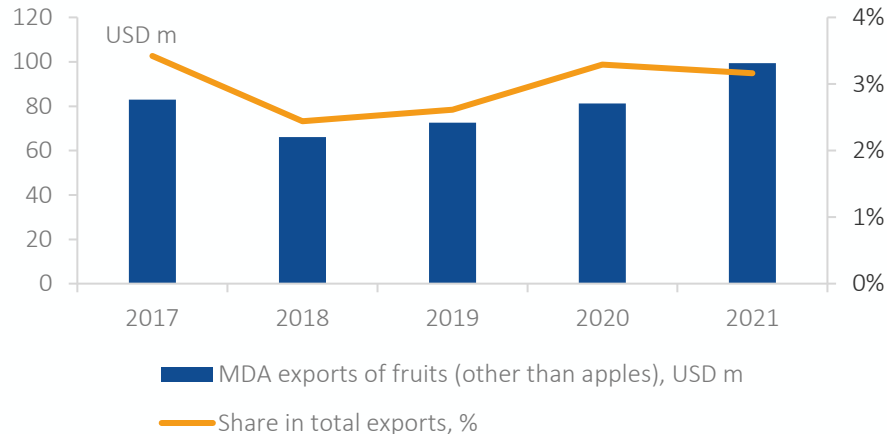
- » MDA is a large producer and exporter of fruits
- » Currently, apples are the country's top export product in the fruit category, but these exports face significant challenges (see [GET Policy Briefing PB/09/2021](#))
- » At the same time, MDA has been gradually expanding exports of other fruits, particularly targeting the EU market
- » To assess the sector's potential for further export diversification and competitiveness improvement, we researched:
 - MDA fruits (other than apples) export potential in the EU
 - Key bottlenecks for the sector's exports to the EU (PB/02/2023)
- » This policy briefing is devoted to the first issue

The aim of the policy briefing:

- » Among MDA fruit exports, identify the top 10 products with the highest export potential in the EU market

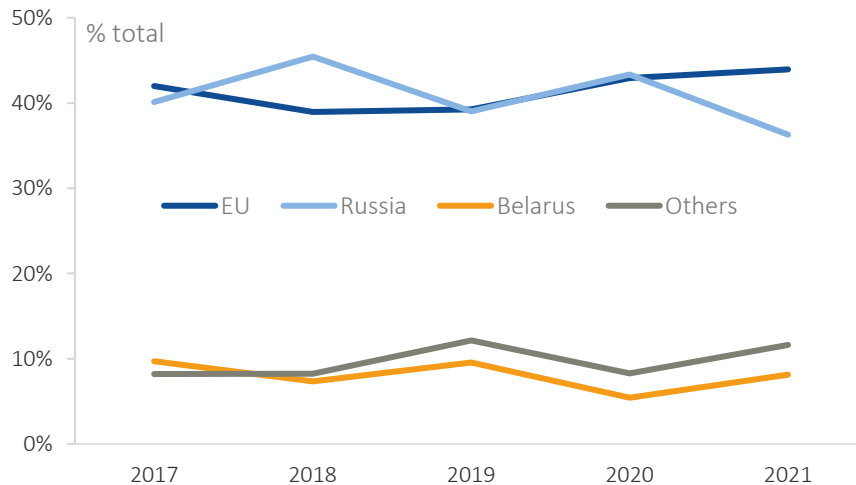
2. MDA exports of fruits

MDA exports of fruits (other than apples)



Source: WITS, ITC Trade Map, own estimates

Geography of MDA exports of fruits (other than apples)



Source: WITS, year 2021

MDA exports of fruits (other than apples)

- » Nominal, 2021: USD 99 m
(MDA exports of apples: USD 88 m)
- » Share in the total exports: 3.2%
- » Growth, 2021/2020: +22%
- » Growth, 2021/2017: +5% annually
- Moderate-sized but steadily growing

Key export destinations

- » 2021: EU (44%), RUS (36%), BLR (8%)
- » Export geography has remained quite stable over 2017-2021
- No explicit reorientation trends yet

Product structure of MDA fruits exports

HS 2012	HS description	MDA total exports, 2021, USD m	Share in total, %	Growth, 2021/2017, % annually
080610	Fresh grapes	36.1	36%	-2%
080940	Fresh plums and sloes	23.0	23%	7%
081320	Dried prunes	10.8	11%	7%
200799	Jams, jellies, marmalades, pastes of fruit	5.7	6%	2%
080929	Fresh cherries (excl. sour cherries)	4.4	4%	2%
080910	Fresh apricots	2.9	3%	24%
081340	Dried peaches, pears, other edible fruits	2.9	3%	18%
081020	Fresh raspberries, blackberries	2.3	2%	25%
081010	Fresh strawberries	2.3	2%	64%
080930	Fresh peaches, incl. nectarines	2.2	2%	6%
	Other fruits and preparations	6.7	7%	18%
	Total	99.4	100%	5%

Source: WITS, own estimates

- » MDA specializes in exports of fresh fruits, which account for ca. 75% of the total exports of fruits and preparations thereof
- » Fresh grapes and plums are currently the key export products by value, but berries featured the strongest growth rates in 2017-2021

Geography of the top 10 MDA fruit export products

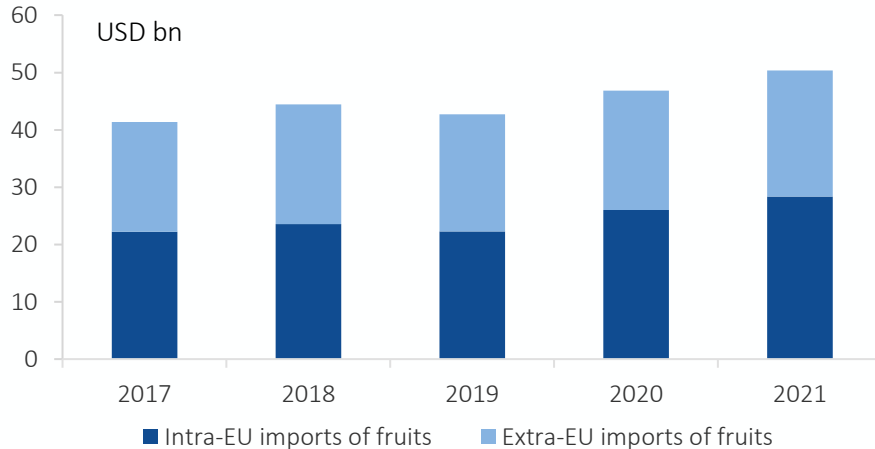
HS 2012	HS description	The share of partner in MDA fruit exports, 2021, %				MDA reliance on exports to...	
		EU	RUS	BLR	Others	EU	RUS + BLR
080610	Fresh grapes	35%	45%	9%	11%	Moderate	High
080940	Fresh plums and sloes	61%	33%	5%	1%	High	Moderate
081320	Dried prunes	47%	23%	6%	24%	Moderate	Moderate
200799	Jams, jellies, marmalades, pastes of fruit	70%	3%	1%	26%	High	Very low
080929	Fresh cherries (excl. sour cherries)	3%	73%	21%	3%	Very low	Very high
080910	Fresh apricots	40%	28%	12%	20%	Moderate	Moderate
081340	Dried peaches, pears, other edible fruits	36%	12%	8%	44%	Moderate	Low
081020	Fresh raspberries, blackberries	66%	17%	17%	0%	High	Moderate
081010	Fresh strawberries	15%	84%	1%	0%	Low	Very high
080930	Fresh peaches, incl. nectarines	4%	42%	33%	21%	Very low	Very high

Source: WITS, own estimates. Note: orientation scale the following: "Very high" for export share $\geq 75\%$, "High" for $\geq 50\%$, "Moderate" between 25% and 50%, "Low" for $\leq 25\%$ and "Very low" for $\leq 5\%$

- » The EU is already the dominant destination for several products, including jams & jellies of fruit (70%), fresh raspberries and blackberries (66%) and fresh plums (61%)
- » At the same time, MDA fruit exports are still oriented to increasingly unreliable RUS & BLR, with eight out of the top 10 products featuring from moderate to very high reliance on these markets

3. The EU imports of fruits

EU countries' imports of fruits (other than apples)

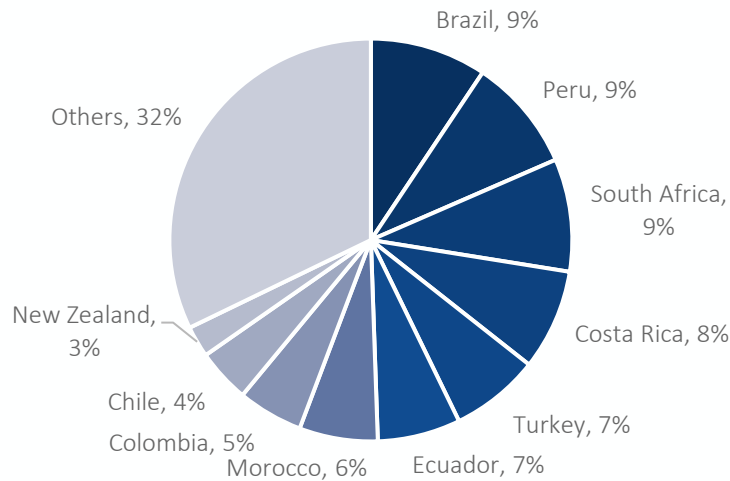


Source: WITS, own estimates

EU countries' imports of fruits (other than apples)

- » The EU countries' imports reached USD 50 bn in 2021, out of which ca. 56% are "intra-EU imports"
- » Growth, 2021/2017:
 - Intra-EU: +6.3% annually
 - Extra-EU: +3.5% annually
- Steady expansion, but featuring almost twice faster growth of intra-EU imports

Geography of extra-EU imports of fruits (other than apples)



Source: WITS, data for 2021

Key sources of extra-EU imports, 2021

- » The extra-EU imports are focused on partners from other continents (Latin America, Africa, Asia)
- » Non-EU Europe supplied only 11% of extra-EU fruit imports in 2021, out of which Turkey shipped two-thirds
- EU tends to primarily buy fruits either domestically or from far-away partners

The product structure of EU fruits imports

HS 2012	HS description	EU total imports, 2021, USD m	Share in total, %	Growth, 2021/2017, % annually	Intra-EU imports, 2021, %
080390	Fresh or dried bananas	5,519	11%	4%	26%
080610	Fresh grapes	3,272	7%	5%	52%
080440	Fresh or dried avocados	3,171	6%	12%	39%
080520	Fresh or dried mandarins	2,396	5%	7%	73%
080510	Fresh or dried oranges	2,385	5%	1%	71%
081040	Fresh cranberries	1,971	4%	24%	52%
080550	Fresh or dried lemons	1,894	4%	3%	63%
081050	Fresh kiwifruit	1,879	4%	10%	65%
081190	Frozen fruit and nuts	1,565	3%	8%	55%
080930	Fresh peaches, incl. nectarines	1,432	3%	3%	94%
081010	Fresh strawberries	1,361	3%	6%	93%
081020	Fresh raspberries, blackberries	1,307	3%	14%	70%
	Other fruits and preparations	24,853	49%	3%	57%
	Total	50,338	100%	5%	56%

Source: WITS, own estimates

- » The EU imports are concentrated on exotic fruits like bananas, avocados etc. and citruses like mandarins, oranges and lemons
- » Among traditional MDA fruits, fresh grapes, peaches, strawberries, and raspberries are in the top EU fruit imports; however, the EU is the largest supplier of these fruits
- MDA competes primarily with the EU member states in the EU fruit market

4.1. Methodology for export potential assessment

- » Three dimensions to assess export potential (see Annex 3 for details):
 - I. **Supply side:** export performance of MDA products in the world
 - II. **Demand side:** import performance of the EU in the world
 - III. **Trade interaction:** scoring of MDA export products based on their potential competitiveness and current presence on the EU market
- » To be included in the ranking, products have to meet the price feasibility criterion:
 - EU import price of a product should be at least twice higher than the MDA export price
 - The lower bound ensures a sufficient margin to cover logistics and other costs. That includes a potential reinstalment of tariff rate quotas on several fresh fruits (table grapes, plums and cherries)
- » Other feasibility criteria: see Annex 4

Steps to identify products with the highest potential

Identification of top 10 products with the highest export potential:

- » Step 1: Estimation of “compound indicator” for all products based on the average of normalised scores of 3 dimensions
- » Step 2: Elimination of products not meeting the feasibility criterium
- » Step 3: Building of top 10 ranking with the highest potential in the EU market
- » Step 4: Check the plausibility of products by available open-source market information, correct the list if needed
- » Step 5: Form the final list of the top 10 products

4.2. Export potential in the EU: top 10 products

Rank	HS2012	HS description	Composite score	MDA total exports, 2021, tt	EU total imports, 2021, tt	MDA potential share in EU total imports, %	MDA potential share in intra-EU imports, %
1	080610	Fresh grapes	89	58	1,438	4%	7%
2	080929	Fresh cherries	75	6	152	4%	7%
3	080910	Fresh apricots	74	5	143	3%	4%
4	081320	Dried prunes	73	8	62	12%	32%
5	080940	Fresh plums and sloes	72	45	252	18%	30%
6	081020	Fresh raspberries, blackberries	71	1	213	1%	1%
7	200799	Jams, jellies, marmalades, pastes of fruit	71	6	552	1%	1%
8	081340	Dried peaches, pears, other edible fruits	71	1	61	2%	3%
9	080930	Fresh peaches, incl. nectarines	62	3	859	0%	0%
10	081010	Fresh strawberries	55	3	422	1%	1%

Source: WITS, own estimates

- » The top 10 products with the highest export potential on the EU market are also the top 10 products of MDA fruit exports and have already been shipped to the EU
- » For plums, dried prunes, fresh grapes and cherries, realising MDA export potential will mean taking a noticeable share of the EU fruit imports market, thus exerting pressure on EU producers
- » Therefore, for the sectors' stable development, export expansion to the EU should be complemented by diversification to new, other than MDA traditional, markets

About the German Economic Team

Financed by the Federal Ministry for Economic Affairs and Climate Action, the German Economic Team (GET) advises the governments of Ukraine, Belarus*, Moldova, Kosovo, Armenia, Georgia and Uzbekistan on economic policy matters. Berlin Economics has been commissioned with the implementation of the consultancy.

**Advisory activities in Belarus are currently suspended.*

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Annex 1: Product coverage

- » The study covers MDA exports of fruits (fresh, prepared or processed), excluding apples and preparations thereof
- » The analysis is conducted at HS 6-digits using the 2012 edition
- » The following codes were analyzed:

Chapter 8 “Edible fruits and nuts”: 080310, 080390, 080410, 080420, 080430, 080440, 080450, 080510, 080520, 080540, 080550, 080590, 080610, 080620, 080711, 080719, 080720, 080830, 080840, 080910, 080921, 080929, 080930, 080940, 081010, 081020, 081030, 081040, 081050, 081060, 081070, 081090, 081110, 081120, 081190, 081210, 081290, 081310, 081320, 081340, 081350, 081400

Chapter 20 “Preparations of vegetables, fruit, nuts or other parts of plants”: 200600, 200710, 200791, 200799, 200820, 200830, 200840, 200850, 200860, 200870, 200880, 200891, 200893, 200897, 200899, 200911, 200912, 200919, 200921, 200929, 200931, 200939, 200941, 200949, 200961, 200969, 200981, 200990

Annex 2: Moldova's and EU fruits production

	EU-27 production, 2021, tt	<i>including top producers within the EU-27</i>	Moldova production, 2021, tt	Ratio of MDA production to EU-27 production, %
Apricots	510	<i>ITA (37%), ESP (22%), GRC (15%)</i>	9	2%
Cherries	545	<i>ESP (23%), ITA (17%), GRC (15%)</i>	10	2%
Grapes	24,586	<i>ITA (33%), ESP (25%), FRA (21%)</i>	537	2%
Peaches and nectarines	3,064	<i>ESP (39%), ITA (33%), GRC (19%)</i>	19	1%
Plums and sloes	1,572	<i>ROU (51%), ESP (11%), ITA (9%)</i>	136	9%
Raspberries	213	<i>POL (49%), ESP (23%), PRT (13%)</i>	5	2%
Strawberries	1,198	<i>ESP (30%), POL (14%), DEU (11%)</i>	13	1%

Source: FAO, own estimates

- » MDA production of fruits (other than apples) is small but not negligible compared to the EU-27 production, ranging from 1% of the EU output for peaches to 9% for plums
- » Spain and Italy are the leading EU producers of grapes and most stone fruits
- » However, Romania is the largest EU producer of plums and sloes in the EU and, thus, the most significant competitor of MDA in this market
- » For berries, Poland is among the top producers, including being the largest strawberry producer

Annex 3.1: Supply side dimension

- » *Total export value*: the larger the country's total exports, the greater its potential for expansion.
- » *Total export growth (in fixed prices)*: the faster the export growth, the better it is for export potential.

Products with negative growth get a zero score for this indicator.

- » *Revealed comparative advantage (RCA)*: the RCA is traditionally used to evaluate the competitiveness of exporters. The country is considered competitive in products with $RCA \geq 1$.

Products with $RCA < 1$ get a zero score for this indicator.

- » *World market share*: an indicator of the product's competitiveness. While the total export value is biased towards large industries, the world market share could show the potential of smaller industries.
- » *Trade specialisation index (TSI)*: The TSI compares the net flow of goods (exports minus imports) to the total flow of goods (exports plus imports). The closer TSI to 1, the stronger the country's export specialisation.

Products with $TSI \leq 0$ get a zero score for this indicator.

Annex 3.2: Demand side dimension

- » *Total value of imports*: it shows the market's potential size. As the EU member states are large fruit producers, we used both total EU imports and extra-EU imports to analyse the demand side dimension.
- » *Import growth (in fixed prices)*: the higher growth of imports signals the demand expansion and thus could produce more opportunities for the exporter than a stagnant or declining market.

Products with negative growth get a zero score for this indicator.

Annex 3.3: Trade interaction dimension

- » *Revealed comparative advantage (RCA) in the target market*: it shows whether the exporter is competitive in the importer's market. The country is considered competitive in products with $RCA \geq 1$.

Products with $RCA < 1$ get a zero score for this indicator.

- » *Relative unit value (UV ratio)*: it shows whether the exporter can supply to the importing market cheaper than its competitors. We set a threshold at UV ratio > 2 . The lower bound is aimed to ensure that exporters have sufficient margin to cover logistics and other costs.

As we study a clearly defined set of products, we do not fix the upper bound, usually aimed at reducing the risk of selecting non-comparable products.

- » *Export specialisation (ES)*: it provides product information on revealed specialisation in the country's export on the partner's market. It is calculated as the ratio of the share of a product in a country's total exports to the share of this product in imports to a specific partner. The country has revealed specialisation in products with $ES \geq 1$.

Products with $ES < 1$ get a zero score for this indicator.

Annex 4: Feasibility criteria

1. *Trade existence criterion*: only products featuring non-zero total exports (MDA) and non-zero total imports (EU) are included
2. *Export size criterion*: to control for capacity constraints in MDA, only exports over USD 10,000 per annum on average over the last five years
3. *Import size criterion*: to control for sufficient absorption capacity in the EU, only markets with over USD 10 m per annum on average over the last five years are considered
4. *Price feasibility criterion*: only products for which the ratio of EU import price of a product over MDA export price exceeds two are included. The lower bound ensures a sufficient margin to cover logistics and other costs.

Annex 5: MDA export potential scores' composition

Rank	HS2012	HS description	Composite score	<i>including</i>		
				Supply score	Demand score	Interaction score
1	080610	Fresh grapes	89	85	87	93
2	080929	Fresh cherries	75	81	67	76
3	080910	Fresh apricots	74	91	37	92
4	081320	Dried prunes	73	94	33	93
5	080940	Fresh plums and sloes	72	88	35	94
6	081020	Fresh raspberries, blackberries	71	75	84	55
7	200799	Jams, jellies, marmalades, pastes of fruit	71	81	48	85
8	081340	Dried peaches, pears, other edible fruits	71	89	34	89
9	080930	Fresh peaches, incl. nectarines	62	74	60	53
10	081010	Fresh strawberries	55	65	45	56

Source: WITS, own estimates