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POLICY STUDY ARMENIA

Armenia's economic exposure to Russia: recent developments

by Dmitry Chervyakov and Dr Ricardo Giucci

Executive summary

Starting point

- » Armenia's economic exposure to RUS has traditionally been high
- » In 2022: global economic relations with RUS shifted significantly
- » Against this background: has Armenia's economic exposure to Russia increased in 2022?
- Definition exposure: structural dependency where short-term substitution is difficult. Thus, an increasing indicator does not necessarily mean higher exposure

Goods exports

- Share of RUS in total exports increased significantly (2022: 45%; +18 pp)
- » However: increase mainly driven by re-exports; thus, only slight increase in exposure to RUS

Goods imports

- > Traditionally high exposure, especially due to energy imports
- » 2022: slight increase in exposure for gas, gold and diamonds; change in overall exposure unclear

Tourism

- 2022: assessment of change in exposure not possible due to relocation of RUS people
- » However: trend to a higher share of RUS tourists hints towards an increase in exposure

Other factors

- » Remittances: no increase; hike in money transfers from RUS not to be treated as exposure
- » FDI: no evidence for increased exposure, mostly re-invested earnings and nor new projects
- » Banking sector: very little exposure, which further decreased as VTB market share nearly halved
- » Public debt: no increase of outstanding debt (exposure) to RUS; share continues to decrease

Market sentiment: market analysts do not perceive higher risk; no increased exposure

Overall, ARM exposure to RUS remains high, but no sizeable increase in 2022

Outline

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- Re-exports of goods from ARM to RUS
- Migration from RUS as special factor in 2022
- Exports of ICT services

1. Motivation

1. Motivation

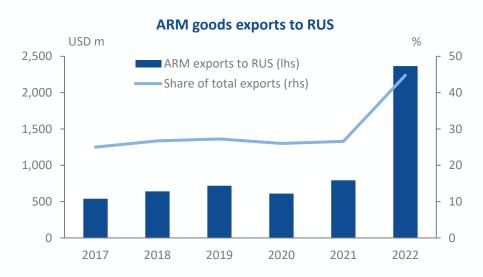
- » Russia is the most important trading partner of Armenia
 - The Russian market is usually the top destination for Armenian exports and imports
 - Especially in the energy sector, Armenia is heavily reliant on gas and oil imports from Russia
 - Also, remittances and FDI from Russia also play a major role in the Armenian economy
 - Moreover, Russian tourists are traditionally an important source of revenue
- » Therefore, Armenia's economic exposure to Russia has traditionally been high
- » However, the war in Ukraine and the sanctions imposed by the West have led to significant shifts in global economic relations with Russia, ranging from an almost complete breakdown of cooperation to even greater integration in some sectors

Key questions: has Armenia's economic exposure to Russia increased in 2022?

- Definition of exposure: we define economic exposure as a structural dependence on Russia which can not be alleviated in the short-term
 - In particular: a rising share of RUS in any of the examined indicators does not mean that exposure to RUS has increased; the effects could be temporarily (i.e. reversed relatively easily)
- » Indicators used: we look at the development of goods exports and imports, tourism, remittances, FDI, the banking sector, public debt, and overall market perception
- **Xey point**: we do not just refer to aggregated data, but also analyse it while taking into account special factors in order to assess the overall change in exposure

2. Goods exports

2.1. Overview of goods exports to RUS



Sources: UN Comtrade, Armstat

Role of ARM re-exports of goods to RUS

	2021, USD m	2022, USD m	Change, USD m	Change, %	Contribution to growth, %
Domestic exports	662	1,039	377	57%	24%
Re-exports	132	1,326	1,194	903%	76%
Total exports	794	2,365	1,571	198%	

Sources: UN Comtrade, Armstat, own calculations

Development of goods exports

- 2021: goods exports to RUS amounted to USD 794 m or 27% of total exports
- » 2022: exports to RUS tripled
 - USD 2,365 m; share in the total exports expanded to 45% (+18 p.p.)
 - Start of dynamic: spring 2022
- At first glance: exposure to RUS has considerably increased

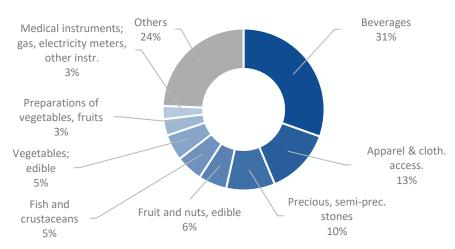
Role of re-exports

- A tripling of exports within one year suggests the existence of substantial re-exports
- As re-exports are not reported within EAEU, we conducted own estimation for 2022
 - Re-exports grew by USD 1,194 m and accounted for 76% of the surge
 - Domestic exports to RUS increased by USD 377 m, explaining 24% of total surge
- Share of RUS has increased significantly in
 2022, but mostly due to a surge in re-exports
- However: domestic exports increased as well

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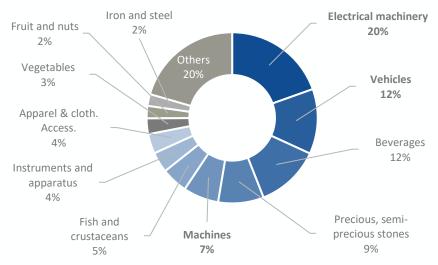
2.2. Structure of goods exports to RUS

Structure of ARM goods export to RUS, 2017-2021



Source: UN Comtrade; Note: 2017-2021 average

ARM goods export to RUS, 2022



Source: UN Comtrade

What are traditional (domestic) ARM exports to RUS and what is being re-exported?

Domestic exports to RUS

- Soods manufactured in ARM and then exported to RUS
- 2017-2021: beverages (31%) main domestic export to RUS; also: clothes (13%), precious stones (10%), fruits (6%) and fish (5%)

Goods re-exported to RUS

- » No major re-exports to RUS before 2022
- 2022: surge of new products that were not manufactured in ARM (re-exports)
 - Electrical machinery (20%, +18 p.p.)
 - Vehicles (12%, +11 p.p.)
 - Machines (7%, + 5 p.p.)
- Thus: structure of goods exports to RUS changed significantly in 2022
- Significant structural changes in ARM goods exports to RUS in 2022
- New products exported in 2022 can be mostly considered as re-exports

2.3. Exposure to RUS as an export market

Changes in the share of ARM exports to RUS

	USD m		RUS sh	Change	
	2021	2022	2021	2022	in pp.
Total exports to RUS	794	2,365	27	45	+18
Re-exports	132	1,326	*	*	*
Electrical machinery	12	462	50	91	+41
Vehicles	10	290	29	94	+65
Machines	15	158	48	84	+36
Domestic exports	662	1,039	23*	26*	+3
Beverages	210	288	72	80	+8
Apparel and clothing accessories	88	87	47	46	-1
Precious, semi- precious stones	77	204	24	21	-3
Fish and crustaceans	63	118	99.5	99.2	-0.3
Fruits and nuts	62	55	97	89	-8

Sources: UN Comtrade, Armstat, own calculations; Note:*based on own estimates as reexports and domestic exports are not reported; main assumption: no other major re-exports aside from RUS (i.e., share of 100%)

Aggregate view

- On first sight: exposure to RUS increased significantly (RUS share 2022: 45%; +18 pp)
- » But: mostly due to a surge of re-exports; "pass-through", not higher exposure
- » However: domestic exports to RUS increased as well (RUS share 2022: 26%; +3 pp)

Sectoral perspective (domestic exports) Beverages

- Most important traditional export to RUS; well-established business, brand recognition
- Exposure further increased in 2022 (+8 pp)
- » Short-term diversification difficult

Clothes, fruits and nuts

Value of exports and share of RUS decreased

Precious stones and fish

- » Value increased, but share still declined; other export destinations
- Exposure to RUS increased slightly
- Re-exports do not constitute exposure, but some domestic exports to RUS increased

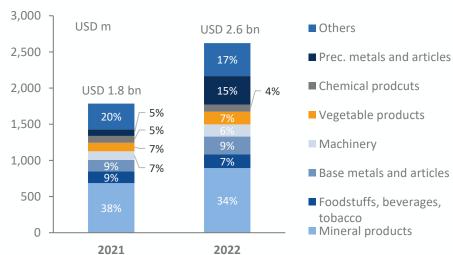
3. Goods imports

3.1. Overview of goods imports from RUS



Sources: UN Comtrade, Armstat

Structure of imports from Russia



Sources: UN Comtrade, Armstat

Development of goods imports

- 2021: goods imports from RUS averaged USD 1.8 bn or 34% of total imports
- 2022: imports from RUS surged by 47% yoy, amounting to USD 2.6 bn
 - However: share decreased compared to previous year (30%; -4 pp) on the back of stronger imports from other countries

Structure of imports

- Mineral products (gas and oil) traditionally constitute the main share of imports from RUS; no other dominant groups
- 2022: no major changes in the structure even though the value increase
 - Exception: prec. metals and stones
- Strong increase of imports from RUS in 2022
- But: while the value increased, the share of RUS in total imports has decreased

3.2. Exposure to imports from RUS

Overview of selected ARM imports from RUS

	USD m		% yoy	RUS sh	Change	
	2021	2022	∕₀ y∪y	2021	2022	in pp.
Total RUS imports	1,785	2,622	47	34	30	-4
Natural gas	414	477	15	85	88	+3
Oil products	269	413	54	72	72	-0.4
Gold	71	209	194	79	89	+10
Diamonds	19	178	837	15	46	+31
Wheat, corn and wheat flour	82	136	66	99	98	-0.6
Iron, steel and products thereof	63	122	94	28	32	+4
Sunflower oil and margarine	59	86	46	90	92	+2
Nuclear fuels	15	17	13	100	100	+0
Other imports	793	985	24	19	15	-4

Sources: UN Comtrade, own calculations

Aggregate view

- On first sight: exposure to RUS decreased (RUS share 2022: 30%; -4 pp)
- But: overall imports increased heavily in2022 due to temporary re-export business
- Thus: share in imports is not a reliable indicator, sectoral perspective important

Sectoral perspective

Energy products

- <u>Gas</u>: slightly higher exposure (2022: +3 pp); short-term diversification is not possible
- <u>Oil</u>: no increase in exposure; higher values, but a nearly constant share of RUS; diversification much easier than gas

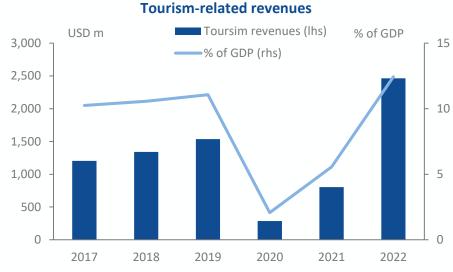
Precious metals and stones

- Exposure increased significantly in 2022; traditional imports for value addition
- Higher exposure for gas, gold and diamonds
- Change in overall exposure difficult to tell, due to temporary large imports induced by re-export business

4. Services exports

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4.1. Tourism



Source: CBA; no breakdown by country available

Number of tourists from RUS*



Source: Armstat, own calculations; Note: According to WTO methodology, tourists staying longer than one year count as residents

Overview

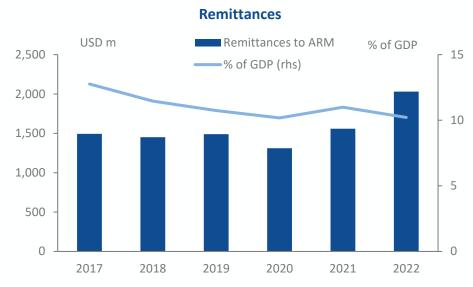
- Tourism-related revenues are an important factor for ARM: 11% of GDP (pre-COVID)
 - 2022: recovery to pre-COVID level
- However: the role of RUS in revenues is not clear, as tourism revenues are not available by country
- » But: tourists by country are available; RUS has a significant share, likely to directly impact revenues
- » Important: different economic impact than RUS migrants (see Annex)

- Relative low exposure to RUS pre-COVID (share of tourists around 21%)
- Significant increase throughout 2020-2022, reaching 52% in 2022; increase in exposure
- » However: 2022 numbers might be distorted by relocation of 55,000 people from RUS
- 2022: no conclusive statement on change in exposure possible due to relocation effect

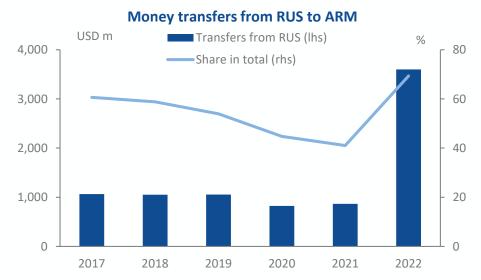
5. Other factors

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5.1. Remittances and money transfers



Source: CBA; no breakdown by country available



Overview

- » Remittances are an important economic factor for ARM (ca. 11% of GDP); RUS: largest diaspora with > 1 m people
- Usually: as the source of remittances is not available by country, money transfers are used as a proxy

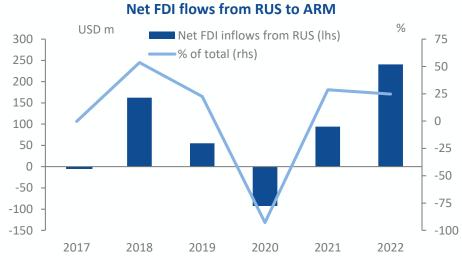
Exposure to RUS

- 2021: RUS share in money transfers at 41%
- 2022: very strong increase (USD 3.6 bn, 70% of total)
- But: rise in money transfers not driven by remittances; in 2022, rather special factors at play:
 - Relocation of RUS people to ARM
 - Capital flight
 - Arbitrage opportunities
- > Thus: no increase in exposure for remittances

Source: CBA; Note: inflows

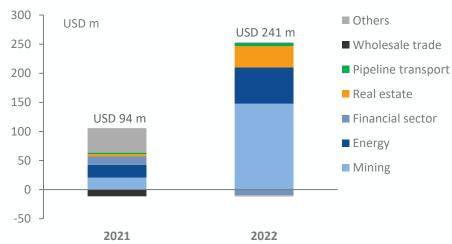
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5.2. FDI



Source: Armstat, own calculations; Note: Net inflow is calculated as a sum of net inflow of investments in the real sector and net inflow of investments made by non-residents in the financial organizations

Structure of net FDI flows from RUS to ARM



Source: Armstat, own calculations

Overview

- Overall, FDI inflows not as important for ARM as tourism and remittances
 - 2017-2021: average of 1.9% of GDP
- » But: high sectoral importance

- Overall high exposure as RUS is usually amongst the top investors
 - 2022: FDI stock of RUS around USD 2 bn or a third of total FDI
- Moreover: FDI statistics based on country of registration. Firms often register in countries with favorable tax/arbitration laws
- Thus: RUS share in FDI might be higher
- 2022: FDI inflows from RUS increased in value terms, but share remained as in 2021
 - Most FDI in mining and energy sector
 - Mostly re-invested earnings
- Role of Russia in FDI difficult to establish, but no indications for increase in overall exposure
- Sectoral exposure in mining and energy could be especially high

5.3. Banking sector

Size of commercial banks in ARM

	Share as % o	Share as % of total assets				
	2021	2023 Q1				
Ardshinbank	14.2	17.4				
Ameriabank	15.4	15.5				
Armbusinessbank	12.4	10.0				
Acba Bank	7.7	8.1				
Inecobank	6.0	6.1				
Converse Bank	5.3	5.7				
Armeconombank	5.0	4.8				
Armswissbank	5.6	4.7				
Araratbank	3.8	4.3				
Evocabank	3.4	4.2				
Unibank	3.6	3.8				
ID Bank	2.8	3.7				
HSBC Armenia	3.7	3.4				
VTB Armenia	5.1	2.9				
Artsakhbank	2.8	2.2				
Byblos Bank	1.4	1.2				
Mellat Bank	1.2	1.1				
Fast Bank	0.9	1.0				
Total assets, AMD bn	7,142	8,456				

Source: CBA, financial statements of the banks

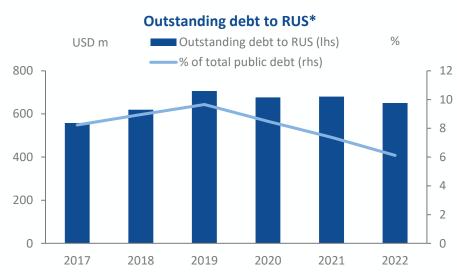
Overview

- In total: 18 banks operating in ARM
- Sector is highly diversified with no bank larger than 20% of total assets
- Strong performance in 2022 (ROE of 28%) as sector benefitted from large RUS inflow

- » Role of RUS banks rather limited; VTB only bank in ARM with RUS ownership (100%)
 - Q1 2023: share decreased from 5.1% in 2021 to 2.9% of total assets
 - Main reason: financial sanctions against RUS; major outflow of deposits
 - Going forward, unclear whether VTB can maintain its presence in ARM
- Despite absorption of RUS inflows: banks were very careful with any transactions affiliated with RUS
- Exposure to RUS was already limited in 2021
- Further decrease in the wake of 2022

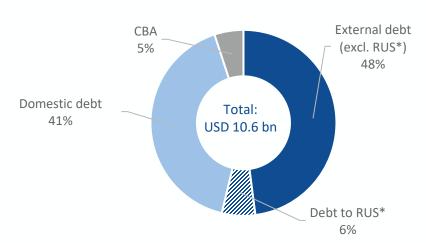
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5.4. Public debt



Source: Ministry of Finance, own calculations; *including loans Eurasian Fund for Stabilization and Development

Structure of public debt, 30.04.2023



Source: Ministry of Finance, own calculations; *including loans Eurasian Fund for Stabilization and Development

Overview

- 2017-2021: outstanding debt to RUS (incl. EFSD) averaged 8.5% of total public debt
- 2022: USD 651 m, share decreased to 6.1%

- » Overall, rather low exposure to RUS
- Share of RUS continued to decrease as other sources of financing were predominantly used (e.g. Eurobonds, domestic market)
- Thus: exposure is decreasing
- » However: new loans for NPP upgrade are currently being discussed
- Public debt exposure to RUS is not very high and continues to decrease

6. Market perception

6. Market perception

Eurobond risk premium to US Treasury Note



Source: Ministry of Finance, US Treasury, own calculations; Note: Armenia 2029

ARM country ratings

Agency	2021	2022	2023
Fitch	B+ Stable	B+ Stable	B+ Positive
Standard & Poor's	B+ Positive	B+ Stable	B+ Positive
Moody's	Ba3 Stable	Ba3 Negative	Ba3 Stable

Source: respective institutions; Note: as of Jun-23, last available rating actions of each year considered

Overview

- » Eurobond as indicator for market sentiment
 - ARM issued four Eurobonds since 2013 (value USD 1.75 bn)
- Development of risk premium and country ratings indicate market perception of ARM as a lender

Market perception

- 2022: spike in risk premium after start of the war and downgrade of rating outlook by S&P and Moody's
 - No significant normalisation throughout the year
 - Another escalation of ARM-AZB conflict in Sep-22
- 2023: decrease of risk premium toward pre-war level
 - All three agencies upgraded their outlook for ARM
- No major change in market risk perceived by analysts
- As such: no change in exposure likely

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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

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Annex: Re-exports of goods from ARM to RUS (1/2)

Top-10 goods re-exported from ARM to RUS

HS code	Description	ARM re-exports to RUS, 2022		
		USD m	Share,%	
851713	Telephone sets; smartphones for cellular or other wireless networks	213.4	16%	
870323	Vehicles; spark-ignition internal combustion reciprocating piston engine, cylinder capacity exceeding 1500cc but not exceeding 3000cc	124.3	9%	
852872	Reception apparatus for television	79.7	6%	
870324	Vehicles; spark-ignition internal combustion reciprocating piston engine, cylinder capacity exceeding 3000cc	71.7	5%	
847130	Data processing machines; portable, digital and automatic	50.1	4%	
851762	Communication apparatus	32.8	2%	
901890	Medical, surgical or dental instruments and appliances	27.8	2%	
870431	Vehicles; spark-ignition internal combustion piston engine, for transport of goods, (of a g.v.w. not exceeding 5 tonnes), nes in item no 8704.1	25.2	2%	
230990	Dog or cat food	21.9	2%	
040510	Dairy produce; derived from milk, butter	17.4	1%	
	Other re-exported goods	662.2	50%	
	Total re-exports	1,326.5	100%	

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Annex: Re-exports of goods from ARM to RUS (2/2)

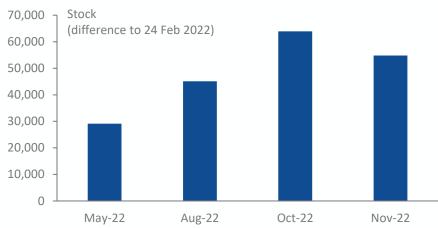
Geography of relevant imports

		% share of ARM imports, 2022					
HS code	Description	CHN	EU	USA	VNM	JPN	Others
851713	Telephone sets; smartphones for cellular or other wireless networks	49%	0%	0%	32%	0%	19%
870323	Vehicles; spark-ignition internal combustion engine, cylinder capacity > 1500cc but < 3000cc	1%	13%	40%	0%	21%	26%
852872	Reception apparatus for television	53%	17%	0%	19%	0%	11%
870324	Vehicles; spark-ignition internal combustion reciprocating piston engine, cylinder capacity > 3000cc	0%	25%	31%	0%	26%	19%
847130	Data processing machines; portable, digital and automatic	91%	0%	0%	9%	0%	0%
851762	Communication apparatus	53%	6%	2%	30%	1%	9%
901890	Medical, surgical or dental instruments and appliances	19%	49%	7%	0%	4%	21%
870431	Vehicles; spark-ignition internal combustion piston engine, for transport of goods	1%	4%	66%	0%	1%	28%
230990	Dog or cat food	0%	71%	0%	0%	0%	28%
040510	Dairy produce; derived from milk, butter	0%	20%	0%	0%	0%	80%
	Other re-exported goods	23%	33%	5%	2%	3%	34%
	Total re-exports	25%	24%	10%	6%	6%	28%

Sources: UN Comtrade, Armstat, own estimates

Annex: Migration from RUS as special factor in 2022

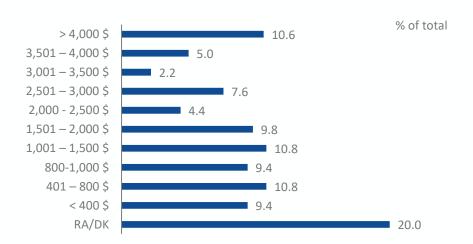
Stock of relocated people from RUS/BLR after start of the war



Sources: Armstat, GET calculations

Note: Stock of visitors calculated as the difference between incoming and outgoing visitors, excluding visitors in Jan-22 and Feb-22; end of month

Average monthly household expenditures



Source: survey results by GET and CRRC-Armenia; N=500

Relocation of people from RUS

- Strong inflow since the start of the war
- Stock of relocated people from RUS estimated at 55,000 (Nov-22)
 - Significant spike after the announcement of mobilisation in Sep-22

GET survey: results

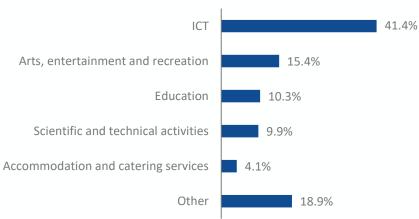
- CRRC conducted a survey on behalf of GET
- >> 500 migrants interviewed; main results:
 - 57% came after the start of mobilisation
 - Mostly young and highly skilled professionals working in the IT sector
 - Average monthly income of USD 3,100;
 average expenditures of USD 1,600
 - 45% plan to stay longer than one year; a third does not plan to return to RUS
 - 16% have registered a business in ARM;
 30% plan to open one
- Relocation of people from RUS a major special factor in 2022
- Explains trends in money transfers and exports of services (tourism and ICT)

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Annex: Exports of ICT services

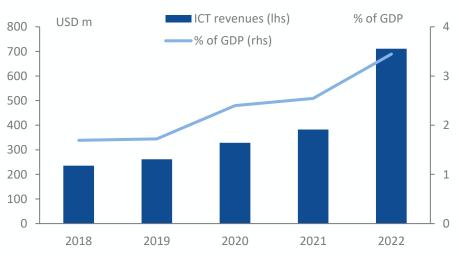
In which sector is your primary job?

(% of employed respondents)



Source: survey results by GET and CRRC-Armenia; N=435

Exports of ICT services



Source: CBA, own calculations

Overview

- » ICT sector in ARM still relatively small, but rapidly developing
- » 2022: significant increase in ICT exports
 - USD 711 m; 3.6% of GDP
- » Main reason: relocation of people from RUS
 - GET survey: many migrants have background in IT

- » High increase in ICT services exports likely explained by relocation
- But: increase does not constitute exposure to RUS per se
- Should RUS migrants return at some point: decrease in exports likely (current increase then "one-off" event)
- No significant exposure in exports of ICT services