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POLICY STUDY
ARMENIA

The Armenian vehicle re-export business: role for the economy and outlook

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Executive summary (1/2)

- » The ARM vehicle re-export business is not a newly established business model, as it had been already very active during 2018/2019 (EAEU accession)
- » In 2022/2023, it once again came into the focus of policy makers. However, not much is known regarding its structure and especially relevance for the ARM economy

Imports

- » After the start of the war in UKR in Feb-22, imports of vehicles and parts to ARM started to pick up significantly. While slightly deaccelerated, the imports were still strong in 2023
 - 8M 2023: USD 1.0 bn; 66,036 cars with an average price of USD 15,062
 - Mostly damaged cars were shipped to GEO from the US and afterward transported to ARM for repair. The main countries of origin of the cars were the US (8M 2023: 25%) and EU (25%)

Exports

- » Similarly, exports of vehicles and parts significantly expanded in 2022 and remained strong in 2023
 - 8M 2023: USD 478 m; 18,000 cars with an average value of USD 26,575 (own reassessment)
 - RUS main destination (8M 2023: 91%); exports through the territory of GEO via the Upper Lars checkpoint with temporary car plates or on trucks

Significant changes starting Q3 2023

- » Introduction of additional sanctions by EU/USA, with GEO prohibited exports of Western-imported vehicles to RUS through its territory (starting from Aug-23)
- » Recent policies introduced in RUS (e.g., increased motor vehicle utilisation fees) that aim to contain re-exports in favour of developing domestic car production
- » As a result: ARM car dealers started to explore alternative export routes (e.g. via IRN, shipping cars to Astrakhan in RUS). Thus: slight increase of exports in Sep-23 to USD 18.3 m

Executive summary (2/2)

Economic relevance of the vehicles business

- » The problems in Q3 2023 already showcased that the ARM vehicle re-exports business could easily disappear. In this regard: what is at stake for ARM economy?

	8M 2023	Comments
Number of enterprises	7,313 enterprises (ca. 7% of total non-financial enterprises)	A significant number of enterprises are engaged in sector, but most of them are micro businesses.
Employment	12,437 empl. persons (1.0% of total employment)	Accordingly: sector not very relevant in terms of its share in total employment ...
Salary fund	USD 31.5 m (ca. 0.5% in the total salary fund)	... and even less relevant in terms of its contribution to the salary fund.
Turnover	USD 1,235 m	However: the does sector generates a significant amount of turnover ...
Taxes	USD 254 m (ca. 7.0% of total tax revenues)	... and pays a significant amount of taxes. As micro-businesses in ARM do not pay turnover tax, most of the tax revenues come from VAT
Estimation of the overall economic relevance	USD 552 m (ca. 3.7% of GDP)	Overall, vehicle business is quite a relevant sector in terms of GDP contribution. However, it is not clear how much of it is accounted for in official statistics (around 50% might be not reflected in the GDP)

- The ARM vehicle business was a growth driver in 2022/2023
- However: the sector does not have a sustainable economic model. Should it disappear completely in 2024, there will be a notable negative impact on growth

Outline

1. Motivation
2. ARM vehicle re-exports in the course of EAEU accession
 - I. Imports of vehicles to ARM
 - II. Vehicle re-exports from ARM
3. Vehicle re-exports after the start of the war in UKR
 - I. Why did the vehicle re-export business revive?
 - II. Imports and exports of vehicles
 - III. Reassessment of car re-export data
 - IV. ARM vehicle re-export business: routes and value chain
4. Estimation of the economic impact
 - I. Enterprises, employment, salary fund, turnover and taxes
 - II. Estimation of the GDP contribution
 - III. Summary of the economic impact
5. Outlook for the ARM vehicle business
6. Policy discussion

ANNEX

1. Motivation

- » The Armenian vehicle re-export business has been in the spotlight of policymakers since the beginning of the war in UKR in Feb-22
 - However: this is not a newly established business model, as ARM already had an experience with strong car re-exports in the course of the EAEU accession (especially 2018/2019)
- » After the start of the war in UKR, car exports from ARM to RUS increased strongly
 - Important: these are not only pure re-exports. A decent amount of the value added is generated inside ARM (logistics, dealers, repairs etc.)
 - Thus: vehicle re-exports contributed to the significant growth of the economy in 2022
- » But: the current business model could come to a halt as the recently introduced sanctions by EU/USA aim to completely stop car re-exports to RUS
 - Moreover: recent policies introduced in RUS (e.g., increased motor vehicle utilisation fees) also aim to contain re-exports in favour of developing domestic car production

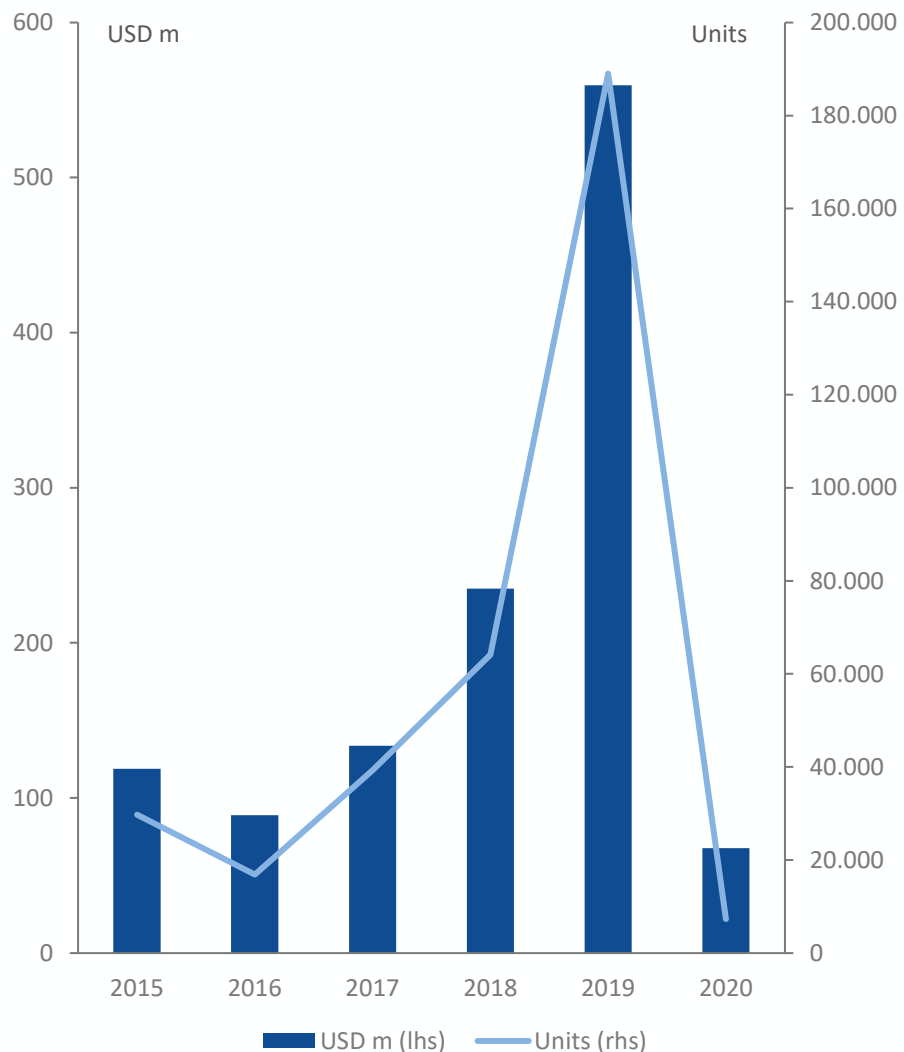
Main objectives of this Policy Study

- » Estimation of the magnitude of vehicle re-exports from ARM to RUS
- » Description of the mechanisms and value chain behind the vehicle re-exports
- » Determination of the economic relevance of sector for the ARM economy
- » Discussion of the sectoral outlook, given the recent policy changes

2. Armenian vehicle re-exports in the course of EAEU accession

2.1. Imports of vehicles to ARM

ARM vehicle imports



Background

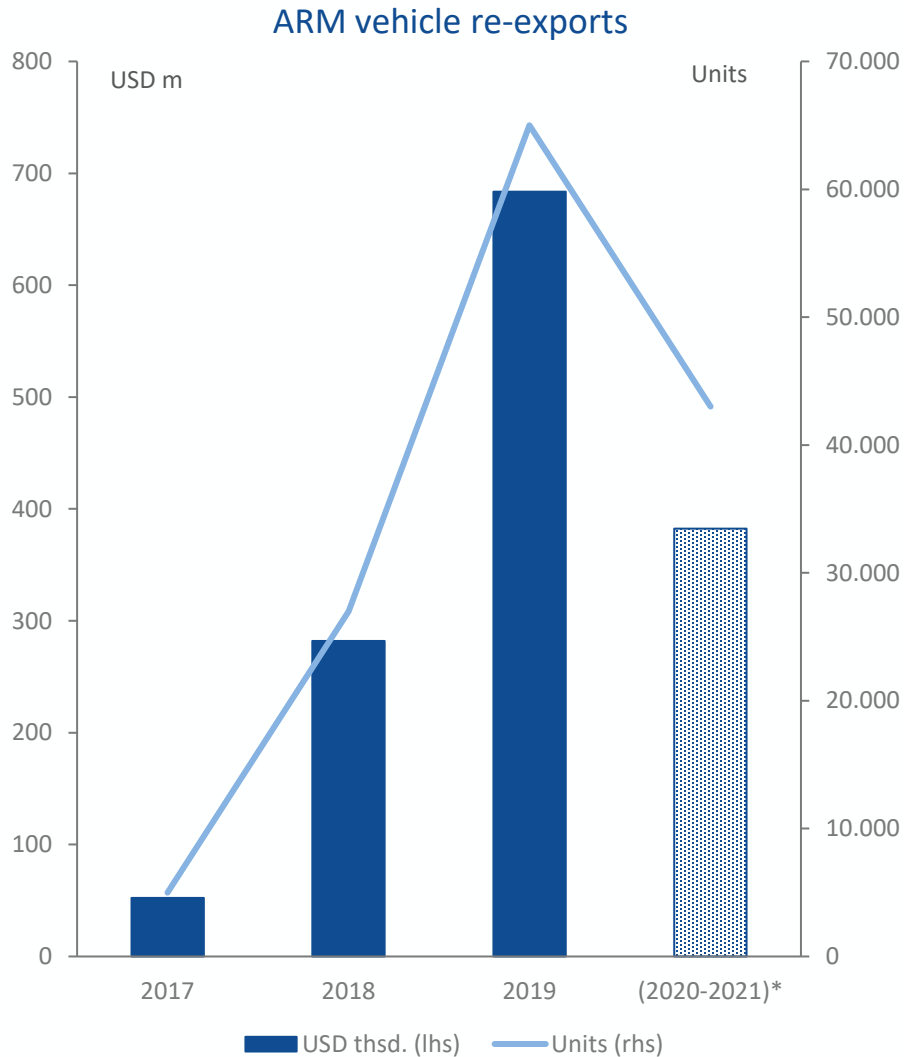
- » After joining the EAEU in 2015, ARM needed to align its customs tariffs
 - In particular: upward adjustment towards a protective car import tariff (i.e., hike from 10% to 20%)
- » However: ARM was granted a temporary exemption until 01.01.2020
- » Thus: window of opportunity with low import tariffs, but access to EAEU market

Accordingly: significant increase of imports

- » 2015: USD 119 m or 16,900 vehicles were imported to ARM
- » Significant increase in imports before the end of the exemption
 - 2018: USD 235 m; 64,000 cars
 - 2019: USD 559 m; 189,000 cars
 - However: actual USD values likely higher; problems with misreporting car prices
- » Window of opportunity for car re-exports opened in the course of the EAEU accession

Source: Armstat, State Revenue Committee (SRC), own estimations

2.2. Vehicle re-exports from ARM



Source: Armstat, State Revenue Committee (SRC), own estimations
 Note: *2020-2021 annual estimations were not possible to conduct based on underlying data and reports and are to be taken as an expert assessment

Background

- » Starting from 2017: ARM car dealers slowly began to roll out the re-export business, establishing connections with RUS/KAZ peers

Re-export of vehicles from ARM

- » 2017-2021: estimated re-export value of USD 1.3-1.6 bn; 130-150 thsd. cars
 - Main destinations: RUS and KAZ
- » Export value in USD higher than import value despite lower numbers of cars
 - Problems with data quality and signs of misreporting of car import prices

Halt of the re-export boom

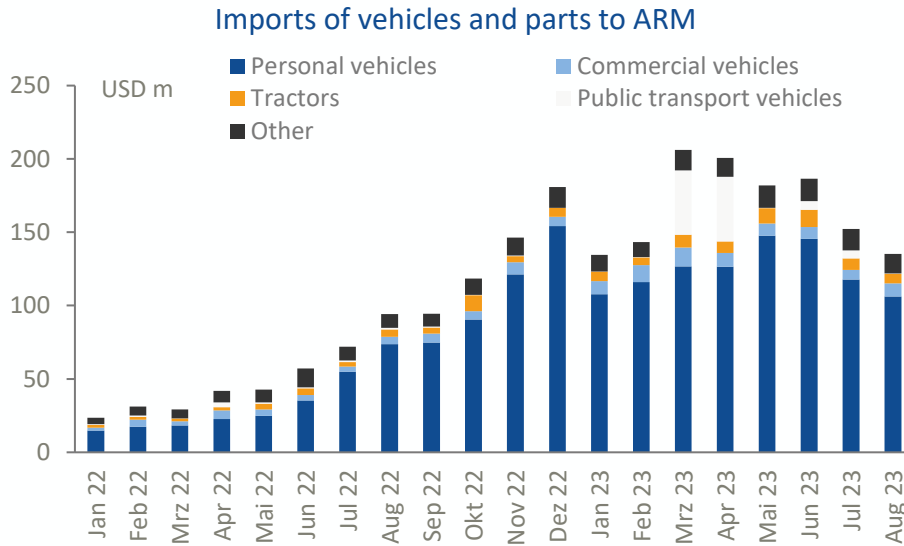
- » 2020: KAZ/RUS imposed registration requirements for cars with ARM plates
- » Also: lower demand due to COVID-19
- » Thus: re-exports decreased significantly, leading to an oversupply of cars in ARM
- ARM car dealers managed to establish a working business model for car re-exports
- However: it also disappeared quite fast

3. Vehicle re-exports after the start of the war in UKR

3.1. Why did the vehicle re-export business revive?

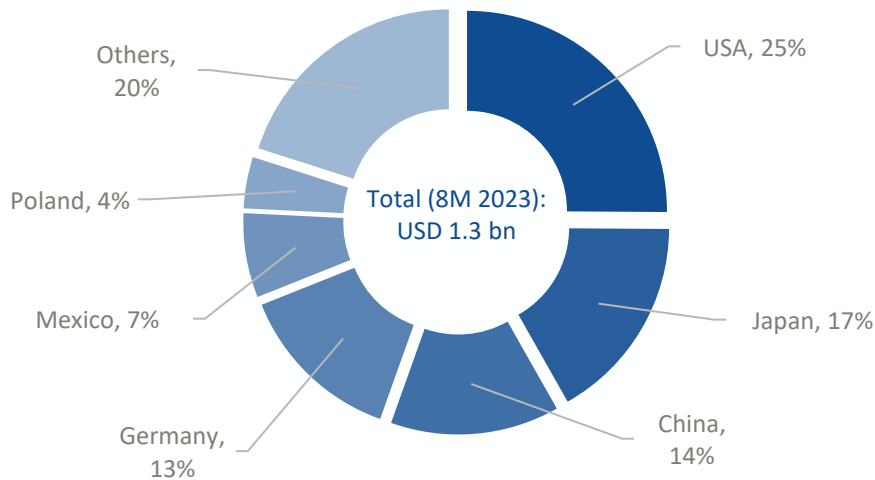
- » Starting from Feb-22: following the RUS invasion of UKR, many car producers have partly or fully withdrawn their operations from RUS
 - 12 brands left Russia (e.g., General Motors (Cadillac, Chevrolet), Jaguar, Land Rover, Mazda, Mercedes-Benz, Nissan, Renault, Toyota, Lexus, Volvo, commercial Ford (retail left in 2019))
 - Some brands (Hyundai, Kia, Mitsubishi, Skoda and Volkswagen) did not exit the market, but halted production
 - Only 14 (end 2022) out of 60 (beginning 2022) brands continued to fully operate
- » Additionally, since Mar-22: **sanctions by the EU/US banned exports of vehicles to RUS**
 - EU: any type of non-emergency vehicle worth more than EUR 50,000 and motorbikes of a value exceeding EUR 5,000 (4th sanction package)
 - US: any vehicles other than railway or tramway rolling stock (including cars, motorbikes, and mopeds) and parts and accessories thereof
- » Thus: massive drop in car supply to the RUS market (both production and imports from Western countries declined significantly)
 - Chinese car makers did not manage to significantly expand sales to the RUS market in 2022, but rather started to be stronger engaged in domestic production in RUS
- **Significant incentives for different market participants to react**
- **Initial reactions: imports of Western cars through third countries (such as ARM)**

3.2. Imports of vehicles after the start of the war



Source: Armstat; Note: HS Codes 8701-8716

Imports of vehicles and parts to ARM by country of origin



Source: Armstat; data for 8M 2023; Note: HS Codes 8701-8716

Imports of vehicles (and parts) to ARM

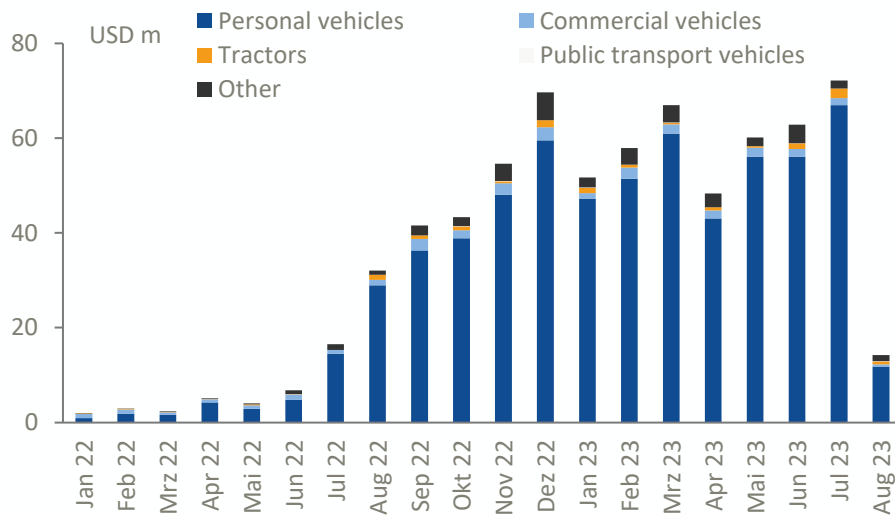
- » 2022: vehicle imports to ARM gradually picked up, reaching USD 0.9 bn
- » 8M2023: USD 1.3 bn; growth of 242% yoy
- » Predominantly import of personal vehicles (cars; HS 8703); parts not as important
 - 2022: USD 0.7 bn or 75% of total; 46,149 cars; USD 15,230 average price
 - 8M 2023: USD 1.0 bn or 74%; 66,036 cars ; USD 15,062 average price
 - However: below 2018/2019 quantities, but a higher value (and average price)

Countries of origin

- » Main countries of origin of imported vehicles and parts over 8M 2023:
 - USA (25%)
 - EU (25%); out of it: Germany (13%)
 - Japan (17%)
 - China (14%)
- Imports of cars to ARM significantly picked up since the start of the war in UKR

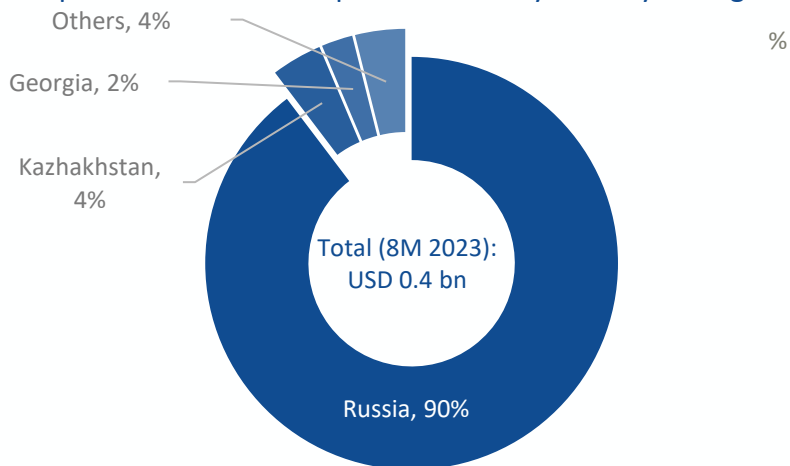
3.3. Exports of vehicles after the start of the war

Exports of vehicles and parts from ARM



Source: Armstat; Note: HS Codes 8701-8716

Exports of vehicles and parts to ARM by country of origin

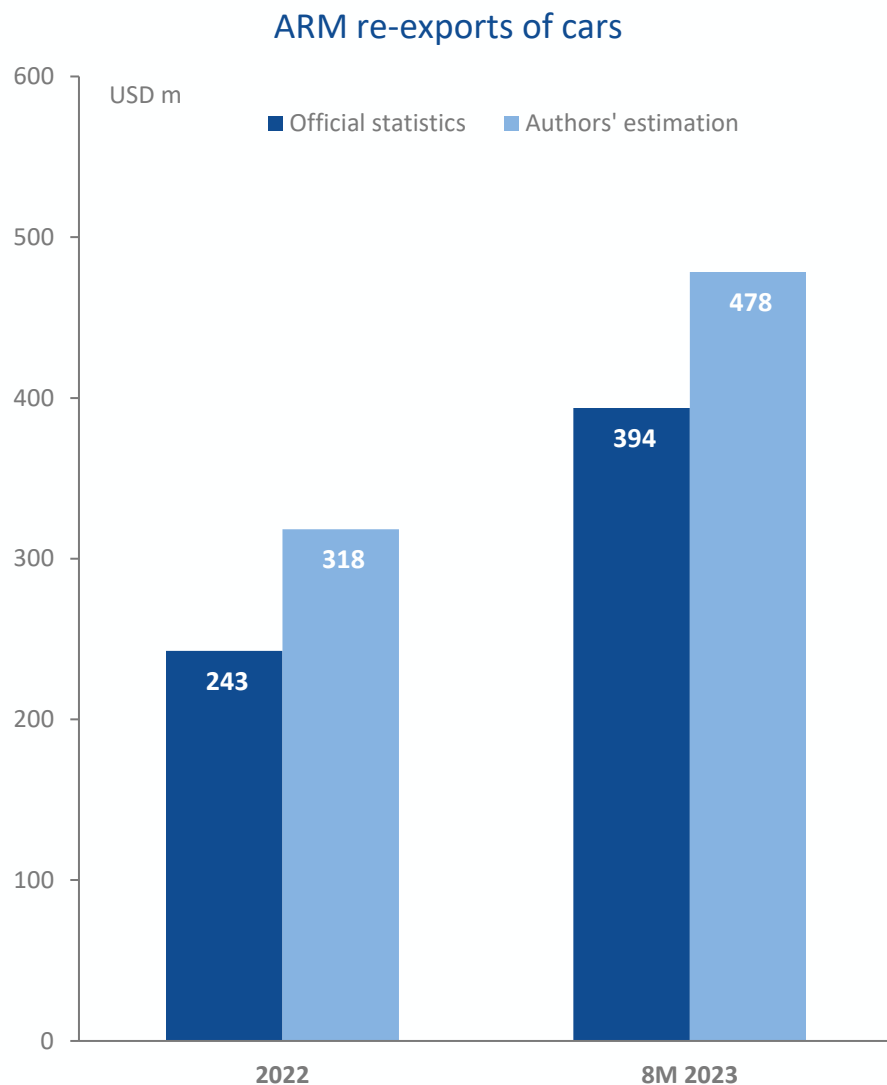


Source: Armstat; data for 8M 2023; Source: Armstat; Note: HS Codes 8701-8716

Exports of vehicles (and parts) from ARM

- » ARM does not have own vehicle production. Thus: all exports to be considered re-exports
 - » 2022: USD 281 m; 8M2023: USD 434 m
 - » Cars (HS 8703) main re-exports
 - 2022: USD 243 m or 86% of total; 11,570 cars; USD 20,963 average value
 - 8M 2023: USD 394 m or 91%; 17,891 cars; USD 22,007 average value
 - Aug-23: significant decline (11th sanctions package)
 - » Higher average export value compared to import price; hints toward the existence of a value chain in ARM
- ### Countries of origin
- » Nearly all vehicles and parts are exported to RUS (90% of total)
 - Abrupt decline in vehicle exports visible since the introduction of new sanctions

3.4. Reassessment of car re-export data



Source: Armstat, Authors' estimations

Reassessment of official data

- » Problem: many exporters don't declare the real export price for tax evasion reasons
 - Adjustment of export prices based on expert/market interviews (see Annex)
- » Our corrected estimation shows that car exports (HS 8703) exceeded the official data
 - 2022: USD 318 m (reassessment) vs USD 243 m (official data)
 - 8M 2023: USD 478 m (reassessment) vs USD 394 (official data)
- » Thus: average value of exported cars was also significantly higher
 - 2022: USD 26,526 (reassessment) vs USD 20,962 (official data)
 - 8M 2023: USD 26,575 (reassessment) vs USD 22,007 (official data)
- » Average profit margin (before tax) of one exported car was 19.8% (2022) and 21.7% (8M 2023) respectively
- Reassessment of export data suggests much higher profit margins for car exporters

3.5. ARM vehicle re-export business: routes (1/2)

- » How were the imports of cars to ARM and their re-exports to RUS conducted?

Import routes

- » Most cars were shipped to GEO and afterward transported to ARM for repair
 - Mainly from US: through Miami, Los Angeles, and New York ports; mainly damaged or used cars; the delivery of cars from the US to ARM takes usually two to four months
 - Less used route from EU: through Bulgaria and Netherlands ports; mainly damaged or used cars
- » However: also imports from UAE; mainly new cars (including electric vehicles) from CHN (e.g. VW, BYD, Toyota, etc.) or cars repaired in UAE

Export routes

- » Mainly through the territory of GEO to RUS via the Upper Lars checkpoint either by driving the re-exported cars with temporary car plates or loaded on trucks

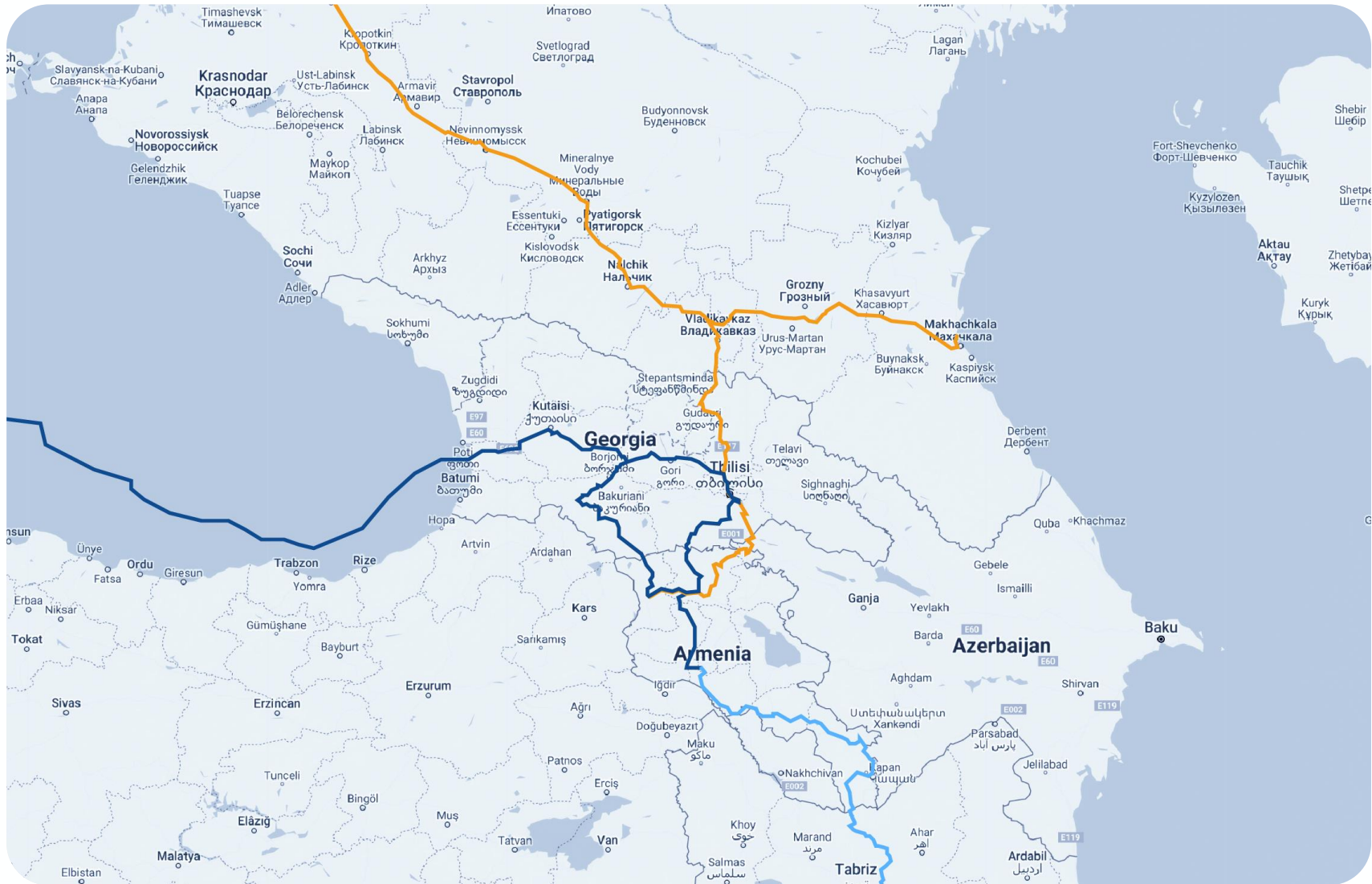
Business models

- » Commission-based: brokers purchase cars at auctions or from re-sellers at the customers' expense
- » Dealership: companies or individuals purchase cars at auctions or from re-sellers through brokers at their own expense for re-exports, local sales, and own use

Marketplaces and intermediaries

- » **Hundreds** of ARM car brokers have accounts registered on US car sales platforms such as Copart, and IAAI, and provide subaccounts to smaller car dealers in Armenia
- » Brokers and dealers have established strong business ties with Arabic and Chinese re-sellers for purchasing new or repaired cars from CHN and the UAE

3.5. ARM vehicle re-export business: routes (2/2)

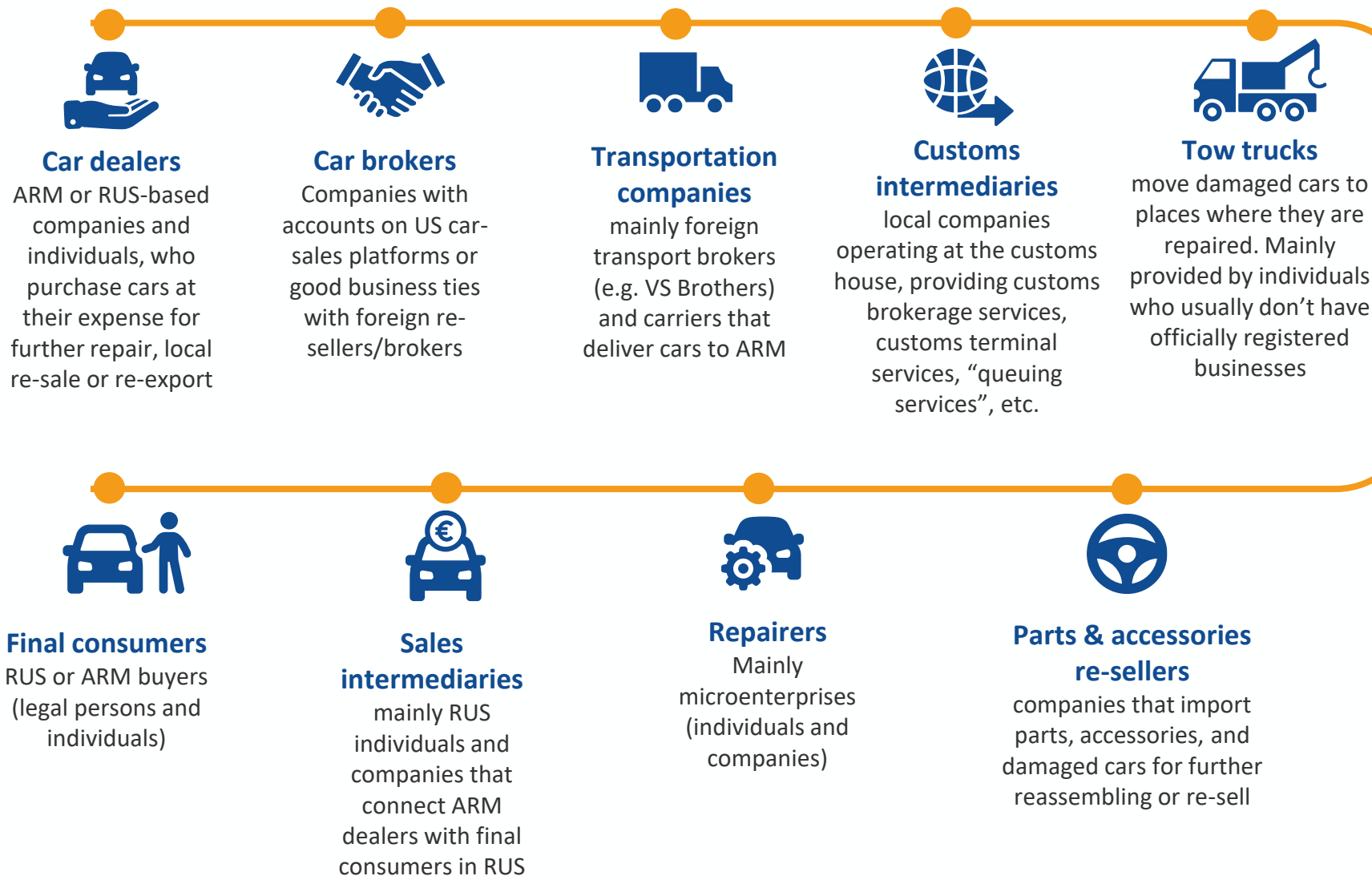


Exports routes

Import route from EU/US

Import route from the UAE

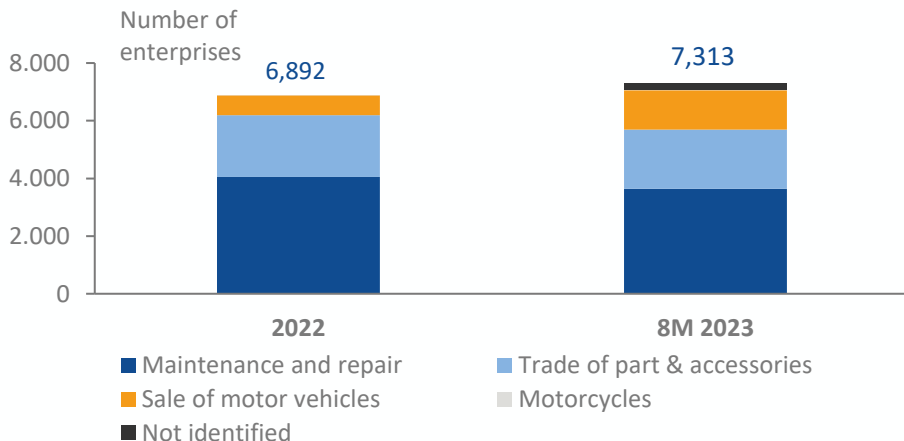
3.6. ARM vehicle re-export business: value chain



4. Estimation of the economic impact

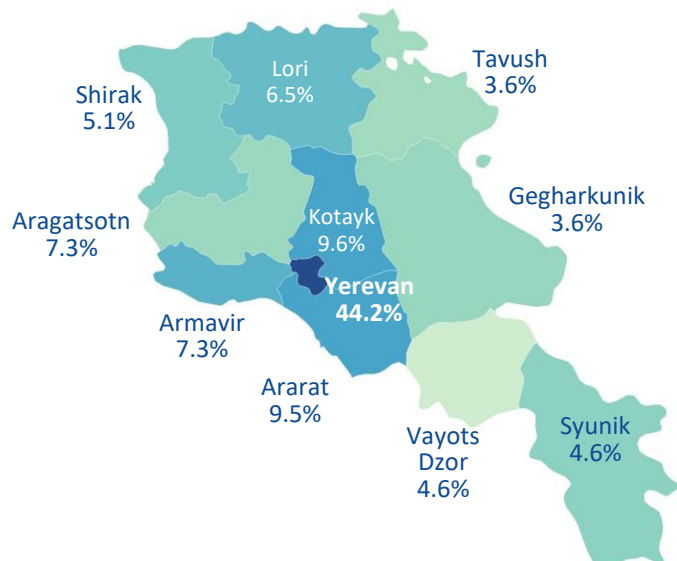
4.1. Enterprises engaged in the vehicle business

Number of enterprises engaged in the vehicle business



Source: SRC, own calculations; NACE Rev. 2 categories G.45.1-G.45.4 (see Annex)

Distribution of enterprises by regions



Source: SRC, own calculations; data for 8M 2023

Number of enterprises

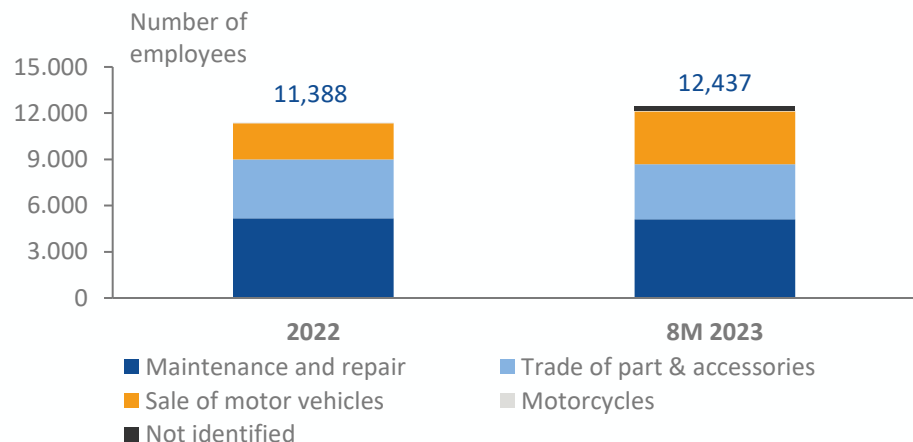
- » A significant number of enterprises is engaged in “trade & repair of motor vehicles and motorcycles”:
 - 2022: 6,892 (ca. 7% of total non-financial enterprises)
 - 8M 2023: 7,313; 1,278 of them were newly established in 2023
 - However: majority of those enterprises are individuals/ micro businesses
- » “Maintenance & repair of motor vehicles” is the main field of economic activity
 - 2022: share of 59%; 8M 2023: 50%
- » Number of enterprises engaged in “sale of motor vehicles” increased recently
 - 2022: 683 firms; share of 10%
 - 8M 2023: 1,362; 19%

Regional distribution

- » High concentration in Yerevan (44%) and neighboring provinces (Kotyak, Ararat, etc.)
- Significant number of enterprises are engaged in the ARM vehicles business

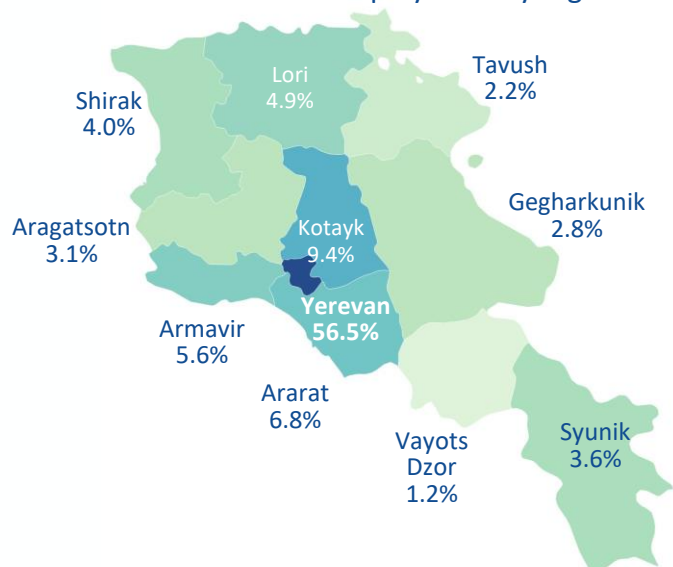
4.2. Employment in the vehicle business

Number of employees in the vehicle business



Source: SRC, own calculations; NACE Rev. 2 categories G.45.1-G.45.4 (see Annex)

Distribution of employment by regions



Source: SRC, own calculations; data for 8M 2023

Number of employed people

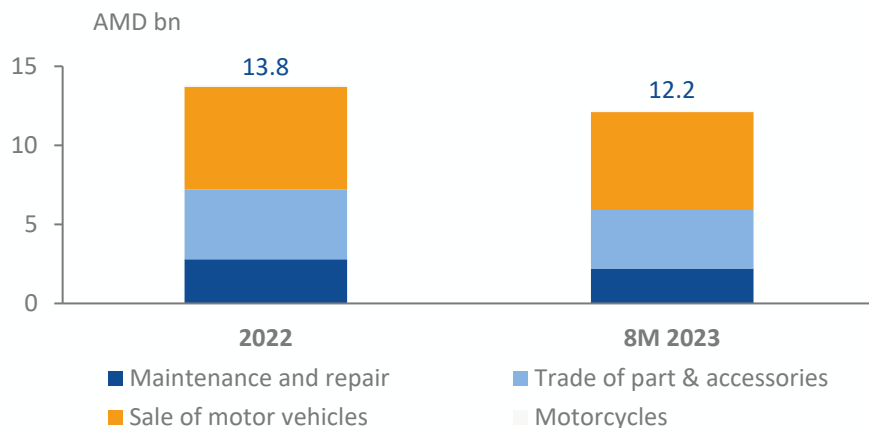
- » Share of people employed in “trade & repair of motor vehicles and motorcycles” less significant than the share of enterprises
 - 2022: 11,388 (1.0% of total employment)
 - 8M 2023: 12,437 (ca. 1.0%)
 - From Feb-22 to Aug-23, 1,581 new jobs were created in the vehicle business
- » Similarly, most people are employed in “maintenance & repair of motor vehicles”
 - 2022: 45%; 8M 2023: 41%
- » Also: most new jobs were created in “sale of motor vehicles”, making it more relevant:
 - 2022: 2,341 employees; share of 21%
 - 8M 2023: 3,432 employees; 28%

Regional distribution

- » Strong concentration in Yerevan (57%), followed by Kotayk (9%)
- Less relevance in terms of employment, as the majority of businesses in the sector operate as micro enterprises

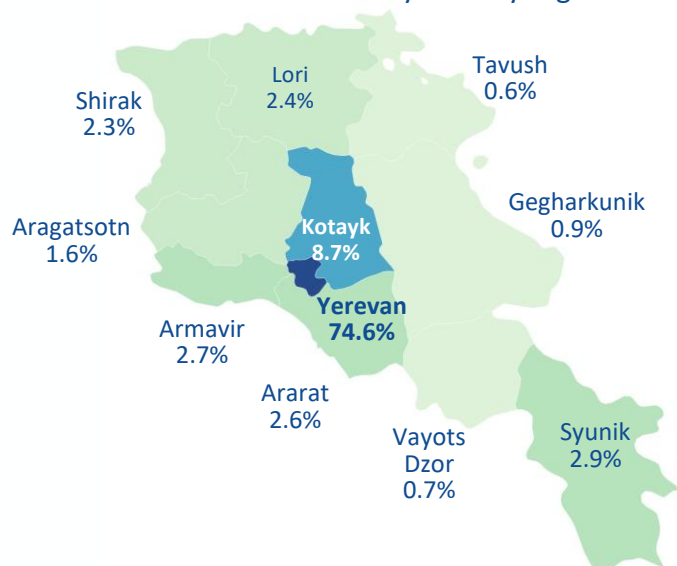
4.3. Salary fund of vehicle business

Salary fund in the vehicle business



Source: SRC, own calculations; NACE Rev. 2 categories G.45.1-G.45.4 (see Annex)

Distribution of salary fund by regions



Source: SRC, own calculations; data for 8M 2023

Salary fund

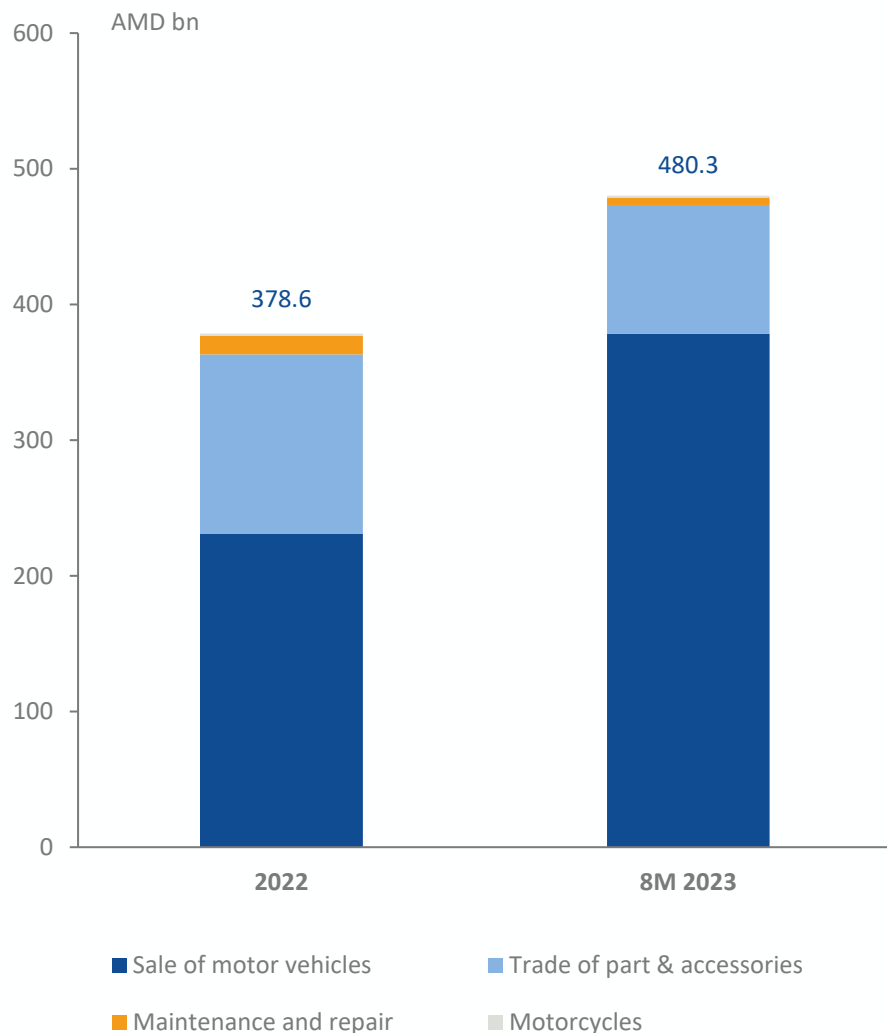
- » The share of the salary fund of the vehicle business is even smaller than the share of employment
 - 2022: AMD 13.8 bn (USD 31.7 m); share of 0.7% in the total salary fund
 - 8M 2023: AMD 12.3 (USD 31.5 m); share of 0.5%
- » Composition of the total salary fund in the vehicle business mostly dominated by “sales of motor vehicles”
 - 2022: 47%; 8M 2023: 51%

Regional distribution

- » The salary fund has an even more pronounced regional concentration, with 74.6% paid in Yerevan and 8.7% in Kotayk
- Sizeable, but not high, contribution of the vehicle business to the salary fund

4.4. Turnover of the vehicle business

Turnover in the vehicle business



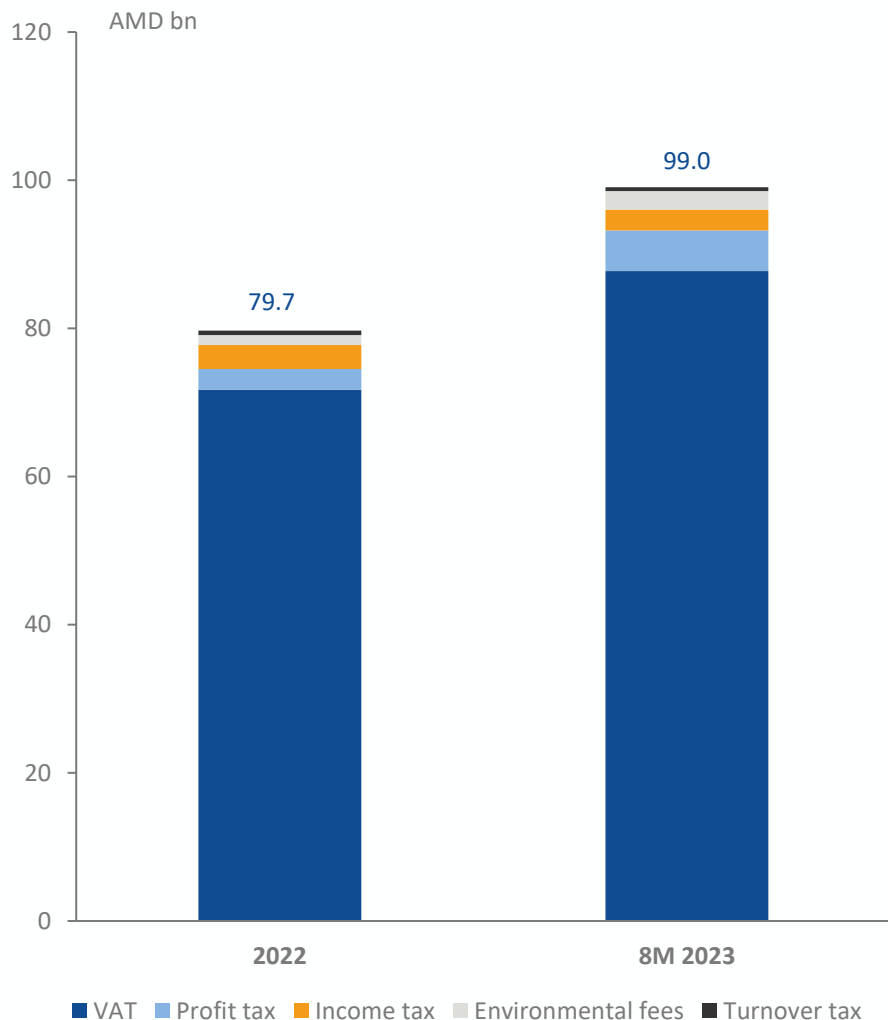
Source: SRC, own calculations; NACE Rev. 2 categories G.45.1-G.45.4 (see Annex)

Turnover

- » Despite not a very high share of employment or salary fund, significant turnover in the car business
 - 2022: AMD 378.6 bn (USD 869 m)
 - 8M 2023: AMD 480.3 bn (USD 1.2 bn)
 - Significant increase in 2023
- » Most of the turnover is general in the category “sale of motor vehicles”, with the share also increasing in 2023
 - 2022: AMD 231.3 bn; share of 61%
 - 8M 2023: AMD 378.5 bn: share of 79%
- » Turnover in “trade of parts & accessories” also quite significant
 - 2022: AMD 132.0 bn; share of 35%
 - 8M 2023: AMD 95.0 bn: share of 20%
- » Far lower turnover in the other categories; especially maintenance falls behind
- **Quite significant turnover in the sale of motor vehicles and parts**

4.5. Taxes paid by the vehicle business

Taxes paid by the vehicle business



Source: SRC, own calculations; for all NACE Rev. 2 categories G.45.1-G.45.4 (see Annex)

Amount of taxes paid

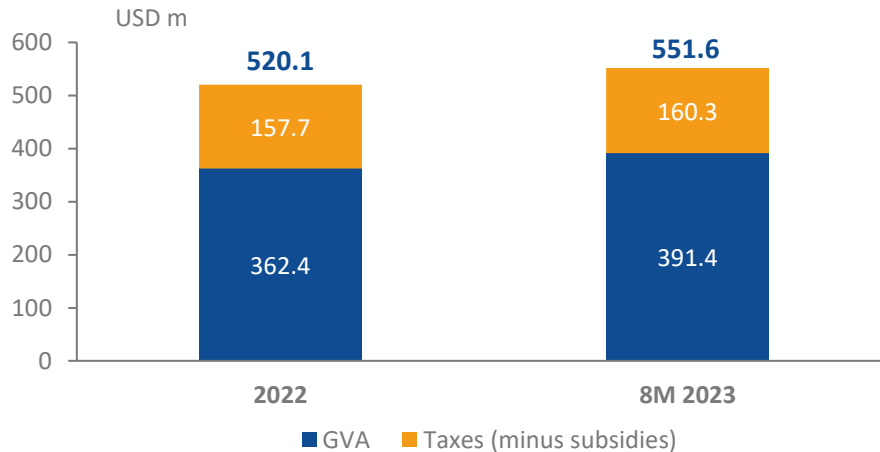
- » Significant and growing amount of taxes paid by the vehicle business:
 - 2022: AMD 79.7 bn (USD 182.9 m)
 - 8M 2023: AMD 99.0 bn (USD 253.7 m)
- » Thus: significant and growing share of the paid taxes in the total tax revenues
 - 2022: 4%; 8M 2023: 7%

Types of taxes paid

- » VAT makes up for most of the paid taxes (ca. 90%); followed by profit tax (ca. 5%)
 - 8M 2023: VAT of 87.7 bn (USD 224.8 m) paid; equal to 18.5% of the total VAT
- » But: significant amount of VAT returned to the taxpayers in the sector
 - 2022: AMD 12.1 bn (USD 27.8 m)
 - 8M 2023: AMD 20.7 (USD 53.0 m)
- » Very low amount of turnover tax paid, as many micro enterprises (who are exempt from it) operate in the sector
- **The vehicle business is a significant taxpayer**

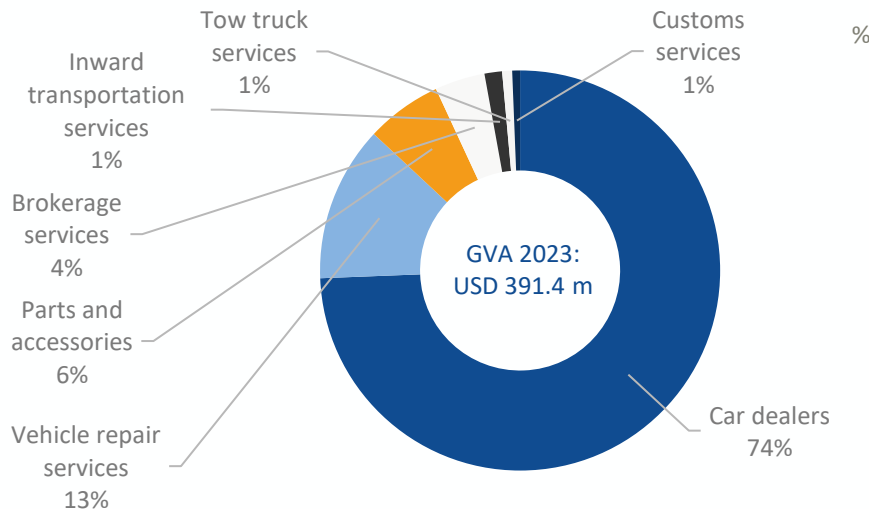
4.6 Economic relevance of the vehicles business

Estimated size of ARM vehicles business



Source: own calculations

Gross value added of ARM vehicles business by sub-sectors



Source: own calculations; data for 8M 2023

Methodological notes

- » Estimation of the size of the sector related to the whole car businesses value chain
- » Problem: significant discrepancies between Armstat and more detailed SRC data (Annex)
 - Correction for data quality problems and underreporting by individuals
 - We estimate that Armstat underreports close to 50% of the sector's turnover

Economic relevance of the sector

- » 2022: USD 520.1 m; 2.7% of GDP
- » 8M 2023: USD 551.6 m; ca. 3.7% of GDP
- » Majority of GVA is generated by car dealers (8M 2023: 74%) and services (13%)
- » Significant part is attributed to changes in inventories; many cars are either being repaired or have not been sold yet
 - 8M 2023: 66k imported; only 36k sold
- Significant economic relevance of the ARM vehicle business
- But: half of its value might not be reflected in official GDP number due to underreporting

4.7. Summary of the economic impact

Indicator	2022	8M 2023	Comments
Number of enterprises	6,892 enterprises (ca. 7% of total non-financial enterprises)	7,313 enterprises (ca. 7% of total non-financial enterprises)	A significant number of enterprises are engaged in sector, but most of them are micro businesses.
Employment	11,388 employees (1.0% of total employment)	12,437 employees (1.0% of total employment)	Accordingly: sector not very relevant in terms of its share in total employment ...
Salary fund	USD 31.7 m (ca. 0.7% in the total salary fund)	USD 31.5 m (ca. 0.5% in the total salary fund)	... and even less relevant in terms of its contribution to the salary fund.
Turnover	USD 869 m	USD 1,235 m	However: the does sector generates a significant amount of turnover ...
Taxes	USD 183 m (ca. 4.1% of total tax revenues)	USD 254 m (ca. 7.0% of total tax revenues)	... and pays a significant amount of taxes. As micro-businesses in ARM do not pay turnover tax, most of the tax revenues come from VAT.
Estimation of the overall economic relevance	USD 520 m (ca. 2.7% of GDP)	USD 552 m (ca. 3.7% of GDP)	Overall, vehicle business is quite a relevant sector in terms of GDP contribution. However, it is not clear how much of it is accounted for in official statistics (around 50% might be not reflected in the GDP)

5. Outlook for the ARM vehicle business

5.1. Current challenges

Logistical problems with the re-export of cars via GEO

- » **New sanctions:** in Jun-23, EU/US extended the export sanctions to include all new and second-hand cars above a certain engine size ($> 1.900 \text{ cm}^3$), as well as electric and hybrid vehicles
- » Accordingly: GEU restricted exports to RUS of US cars (from Aug-23) and EU cars (from Sep-23)
- » Thus: **ARM can't transit Western-imported cars to RUS through GEO territory anymore**, which was the main trade route for car exports from ARM to RUS

RUS restricted the import of cars

- » From 01.08.2023: RUS increased motor vehicle utilisation fees. Depending on the engine capacity and the age of the car, **the utilisation fee for passenger cars (new and used) imported by legal entities increased 1.7-3.7 times**
 - For individuals: a preferential tariff is still in place. However: now limited to only one car per year. For the second imported car, individuals are treated as a legal entity
- » From 01.10.2023: change of the mechanism for importing cars under **parallel import regulation**. It is now **limited for brands that have not left RUS and continue to import cars**

Other factors

- » Strong depreciation of the Russian ruble (Aug-23 vs Jan-23: 36%) further **reduced the demand for imported cars** on the RUS market
- » Increase in CHN carmakers' exports to RUS (6M 2023: increase of CHN car exports by 5.7 times, reaching 405 thsd. cars), **substitutes the demand for Western cars in RUS**

5.2 Alternative re-export routes and modes (1/2)

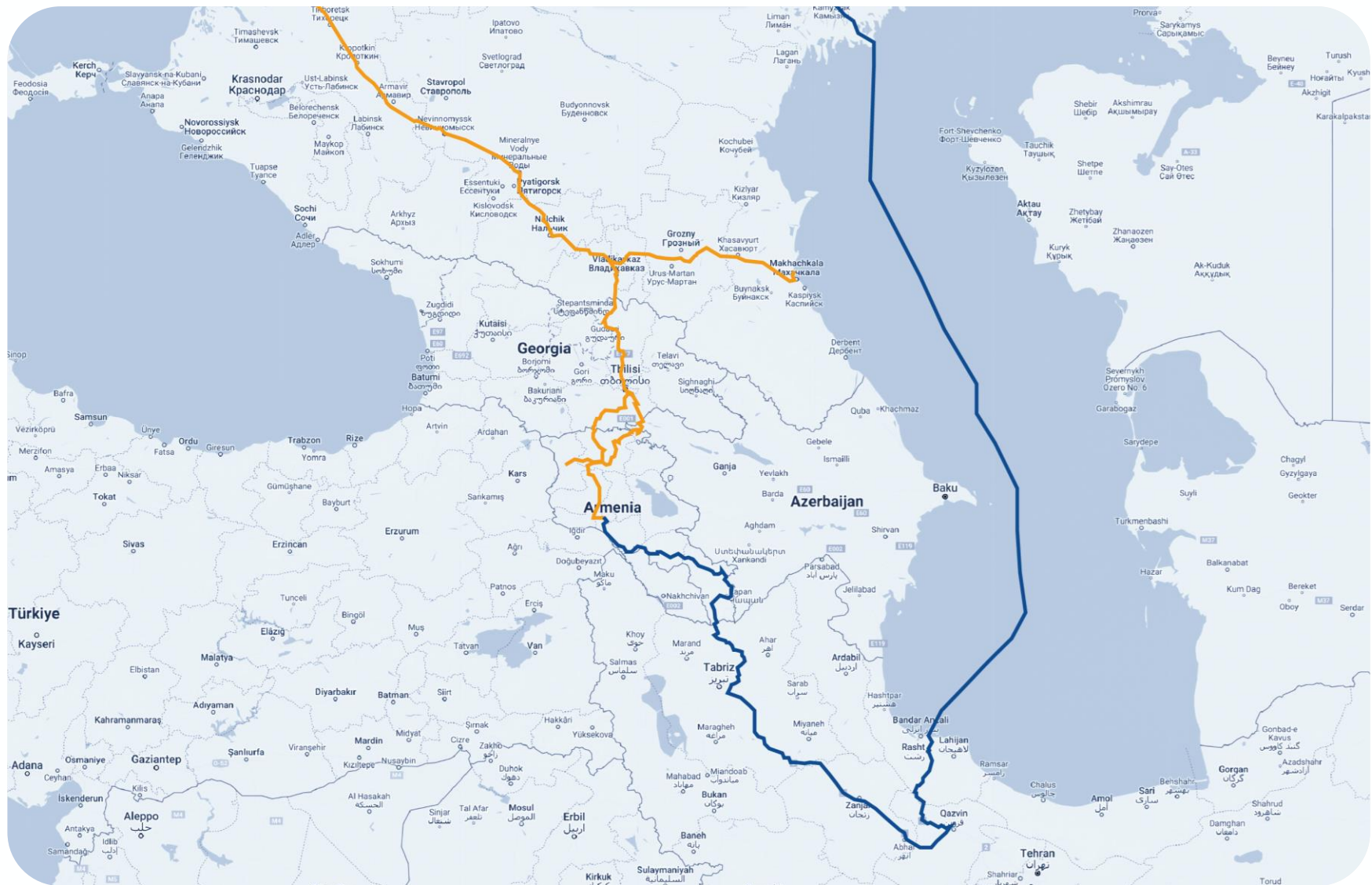
Significant drop in ARM car re-exports

- » Due to the previously outlined challenges (sanctions and restrictions), re-exports of passenger cars from ARM to RUS declined significantly in Aug-23:
 - Re-exports in Aug-23 amounted to USD 11.8 m vs the monthly average USD 54.6 m in Jan-Jul-23
 - In Sep-23, re-exports recovered slightly to USD 18.3 m. Most likely as people started to explore alternative re-export routes

Alternative routes and modes

- » ARM car dealers started to explore alternative re-export routes to RUS
 - Alternative 1:
 - From Yerevan (ARM) to Bandar Anzali (IRN) via trucks, from Bandar Anzali to Astrakhan (RUS) via ferries or ships, and from Astrakhan to Moscow (RUS) via trucks
 - Costs: ca. USD 2,000- USD 2,200 per car (according to face-to-face interviews)
 - Alternative 2:
 - From Yerevan (ARM) to Moscow (RUS) via GEO with cars loaded on (tow) trucks
 - Costs: ca. USD 1,600-USD 1,800 per car
 - Alternative 3:
 - Driving the car with ordinary ARM car plates from Yerevan (ARM) to Moscow (RUS) through GEO
 - Costs: ca. USD 700-USD 900 per car
- » Alternative 2 and 3 are cheaper, but they rely mostly on not clearly declaring the intention to sell the cars in RUS and thus are regarded as much less reliable due to possible problems at the GEO border (especially for more expensive cars)

5.2 Alternative re-export routes and modes (2/2)



— Traditional export routes,
but new modes

— New export route

5.3. Implications for Q4 2023 (1/2)

General considerations

- » Considerations based on in-depth interviews with experts and data observations
- » **Imports:** in general, imports of cars are expected to continue to decline in Q4 2023
 - The inflow of RUS intermediaries and car re-exports at the Nubarashen car market (one of the most active car markets in ARM) significantly decreased in Oct-23
 - In Sep-23, car imports declined significantly (USD 89.0 m in Sep-23 vs the monthly average of USD 124.3 m in Jan-Aug-23), which indicates a decline in demand/change in market situation
 - Should this trend continue, ARM car imports in Q4 2023 will probably remain below their Q4 2022 values
- » **Exports:** as there already was a sharp drop in Aug-23, a slight recovery is expected in Q4 2023
 - In Sep-23, re-exports recovered slightly to USD 18.3 m (Aug-23: USD 11.8; Jun-Jul-23: monthly average of USD 54.6 m)
 - Increase due to gradual exploitation of new routes
 - However, overall re-exports are likely to remain well below their Q4 2022 value
- » **Moreover:**
 - ARM car dealers reported to have already a significant oversupply of cars
 - According to forecasts by car dealers, market prices are slowly starting to decline already
 - Small investors/dealers prefer to barter cars (for example for real estate)

5.3. Implications for Q4 2023 (2/2)

» Implications for GDP

- Over 8M 2023, we estimate the economic relevance of the car business at ca. 3.7% of GDP. The negative challenges will lead to a shrinkage of this sector and thus negatively impact Q4 2023 GDP
- However, since a large part of the vehicle business is in a non-observed economy, the negative impact observed on official GDP will be probably much smaller

» Implications on the financial market

- Many dealers have raised debt funding for doing car business and now need to make repayments. This will be difficult, as they might be not able to sell the imported cars
- As a result, non-performing loans are expected to increase (ceteris paribus)

» Implications for the budget revenues

- Similarly, a reduction of the sector's size will lead to lower tax revenues
- However: recent government tax incentives for the registration of vehicles in ARM might compensate for this (currently, a large number of cars is still registered in GEO)
- Moreover: since Dec-23, introduction of new tax regulation that takes 1.2 of the car's sales value as further tax basis (assumption of heavy underreporting)

➤ Due to the negative trends starting from Q3 2023, there will be a noticeable negative impact on the sector in Q4 2023

➤ However, there will still be a significant positive contribution of the sector to GDP in 2023

5.4 Outlook for 2024

» Implications on the foreign trade

- Considering the build-up of inventories, problems regarding logistics, and reduction of demand for Western cars on the RUS markets, we expect a significant oversupply of cars in the ARM market
- Hence: car import and export will significantly decrease. However, the decrease in imports will likely be more pronounced, thus narrowing down the negative trade balance related to passenger cars

» Implications on the financial market

- The non-performing loans related to the sector are likely to slightly increase again (ceteris paribus)

» Implications for the budget revenues

- Based on our estimations, in 2023 taxes paid by the vehicle business (G45 economic activities) will amount to around **5%** of planned tax revenues of the state budget
- As the overall car business is likely to shrink, it should also be expected to negatively impact tax revenues for 2024 (especially VAT)

➤ **The negative impact on the GDP will be more tangible in 2024 as the vehicle sector will shrink in comparison to 2023**

6. Policy discussion

6. Policy discussion

- » **Improving the national statistics.** Given that the ARM car business has a significant impact on the economy, there is a strong incentive to have it better reflected in the GDP
 - As a lot of the value added is generated in the non-observed economy (ca. 50%), there are weaknesses and discrepancies in the underlying data
 - The statistical business register should be updated more frequently to include a more comprehensive list of enterprises to be more reflective of real-time changes specifically in this economic activity
 - Against this background, the capacities of the SRC related to export statistics should be enhanced, which would allow to mitigate data discrepancies
- » **Oversupply of vehicles.** We expect a significant oversupply of cars in 2024, especially as inventories are already quite significant. There is an economic incentive to ensure that the oversupply in the car market will be reduced
 - Possible: negotiate with RUS or other EAEU countries to temporarily soften restrictions
- » **Fiscal implications.** The planned budget for 2024 will likely need to be adjusted
 - According to the current draft, tax revenues in 2024 will amount to AMD 2,566 bn
 - However: the reduction of the car business will likely lead to a decline in tax revenues
- » **Preparing for a shutdown of the activity.** Considering that the "re-export boom" has increased capacities in the car repair industry, it would make sense to encourage the already existing businesses to continue their operation in other sectors (or even the establishment of new businesses)

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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Implemented by



ANNEX

Methodology (1/4)

Data sources

- » RA Statistical Committee (Armstat):
 - Monthly export and import transactions at 10-digit level products under the HS87 code between ARM and other countries from Jan-22 to Aug-23
- » RA State Revenue Committee:
 - Information regarding activities conducted by entities operating in “wholesale and retail trade and repair of motor vehicles and motorcycles” (NACE G45): turnover, declared taxes and duties by type, number of employees, salary fund, the amount of VAT refund to taxpayers, transactions taxed at the VAT zero rate (exported), the value of goods and services acquired by the taxpayers on monthly bases, tax regimes the taxpayers operate in, etc.
- » Primary data collection (in-depth interviews, market observations, mystery shopping):
 - 4 car dealers (at least 20 cars imported by each one)
 - 3 brokers
 - 2 tow truck drivers and 1 transporting company
 - 2 customs brokers
 - 3 repairers
 - 2 car parts and accessories re-sellers
 - Representatives of SRC and Armstat
 - 2 market observations at the Nubarashen car market and discussions with sellers
 - Observation of list.am and auto.am (leading car-selling platforms of ARM)

Methodology (2/4)

Methodological approach

» Estimation of the re-exports of vehicles (2015-2021):

- Given that in 2015-2021 the re-export of cars from ARM was conducted mainly by individuals and was not captured by official statistics, we estimated the re-exports of cars using: estimations from BOP (2018-2019), number of cars with CMTPL contract, information collected from official press-releases, average number of cars imported annually in previous periods, inputs from in-depth interviews from dealers.

» Estimation of re-exports of vehicles (2022-2023):

- Logical check and data cleaning of the export-import transaction dataset provided by Armstat
- The team has discovered discrepancies within the dataset provided by Armstat. During the data-cleaning stage, the research team discussed the discrepancies with Armstat, adjusted the errors, and estimated the amount and value of exports at 4-digit level products under the HS 87 code
- The discrepancies were found in exports of HS 8703 (Motor cars and other motor vehicles for the transport of persons) and HS 8704 (Vehicles for the transport of goods)

HS 8703: The adjusted quantity of export in 2022 is 11,570 vs the initial 11,496; the adjusted value of export is USD 243 m vs the initial USD 264 m. The adjusted quantity of exports in 8M 2023 is 17,891 vs the initial 190,300

HS 8704: The adjusted quantity of export in 2022 is 216 vs the initial 9,291; the adjusted value of export is USD 9.9 m vs the initial USD 31.6 m. The adjusted quantity of export in 8M 2023 is 327 vs the initial 345; the adjusted value of export is USD 12.6 million vs the initial USD 12.7 million.

Methodology (3/4)

- Examination of monthly patterns of export and import (value and amount) of the HS 10-digit transactions for every HS 4-digit commodity under the HS 87 code
- Based on in-depth interviews with dealers, we identified the average ratio between the import value and export value of a passenger car that was applied to the import data for estimating the real re-export size of ARM (1.6) and RUS dealers (1.15)
- » **Estimation of gross value added (based on in-depth interviews and official statistics):**
 - Calculation of the average value of imported cars
 - Estimation of passenger cars imported by local and RUS dealers/citizens
 - Identification of the additional transportation costs not included in customs declarations
 - Identification of payments per car to brokers
 - Estimation of the share of cars transported from Batumi to Gyumri by ARM carriers
 - Estimation of the share of cars that used tow truck services and average fee per car
 - Estimation of the share of damaged cars and the average cost for the repair
 - Estimation of average cost of parts and accessories per car
 - Estimation of the number of cars imported by RUS dealers and repaired in ARM
 - Estimation of ratios between imported value and the price at which it was actually sold based on more than 200 cars from the interviewed (four) dealers
 - Identification of intermediate consumption for each business activity within the passenger cars value chain
 - Estimation of the number of vehicles either in stock or in the process of repair
 - Calculation of gross value added according to the 2008 SNA principles using the following formula: $GVA = \text{Total Output} - \text{Intermediate Consumption} + \text{Changes in Inventories}$ (at **basic** prices)

Methodology (4/4)

» Estimation of revenues, paid taxes, employment in the car business:

- Grouping of economic activities of enterprises by NACE Rev. 2 at 3-digit level (G45.1, G45.2, G.45.3, G45.4)
 - G. 45.1: “Sale of motor vehicles”
 - G. 45.2: “Maintenance and repair of motor vehicles”
 - G. 45.3: “Sale of motor vehicle parts and accessories”
 - G. 45.4: “Sale, maintenance and repair of motorcycles and related parts and accessories”
- Determination of the main activity of the entities considering the turnover in the largest type of activity in the total turnover of the company in the reporting period.
- Determination of coefficient (share of the turnover in the main activity in the total turnover of the enterprise) that was applied for the calculation of revenues, taxes paid, and employed persons attributable to the main activity.

» Other estimations:

- The share of the non-observed economy in G45 was identified by using the total turnover of activities reported by Armstat and our own calculations based on SRC data.

Limitations

- » The export and import dataset of the HS 10-digit transactions under the HS 87 code provided by Armstat had discrepancies, which during the analysis were adjusted by the research team. However, given the volume of the dataset, it is possible that there are other discrepancies too which are not possible to identify and correct within the scope of this study and need to be thoroughly reviewed by Armstat in the future
- » Many estimations and assumptions have been made using input from a relatively small number of industry experts
- » The information reported by enterprises to SRC and Armstat is not always correct (e.g. number of employees, salary fund)
- » The gross value added generated in the car business value chain doesn't include indirect and induced effects which is not possible to calculate in the frame of this study