Decision to leave: Economic sanctions and intermediated trade

Maxim Chupilkin, Beata Javorcik, Alexander Plekhanov and Aleksandra Peeva

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Motivation

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Growth in shipments of restricted parts fuels western suspicions that Turkish companies are conduit for Moscow

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How banks are greasing the wheels of the growing grey trade

IMAGE: REUTERS

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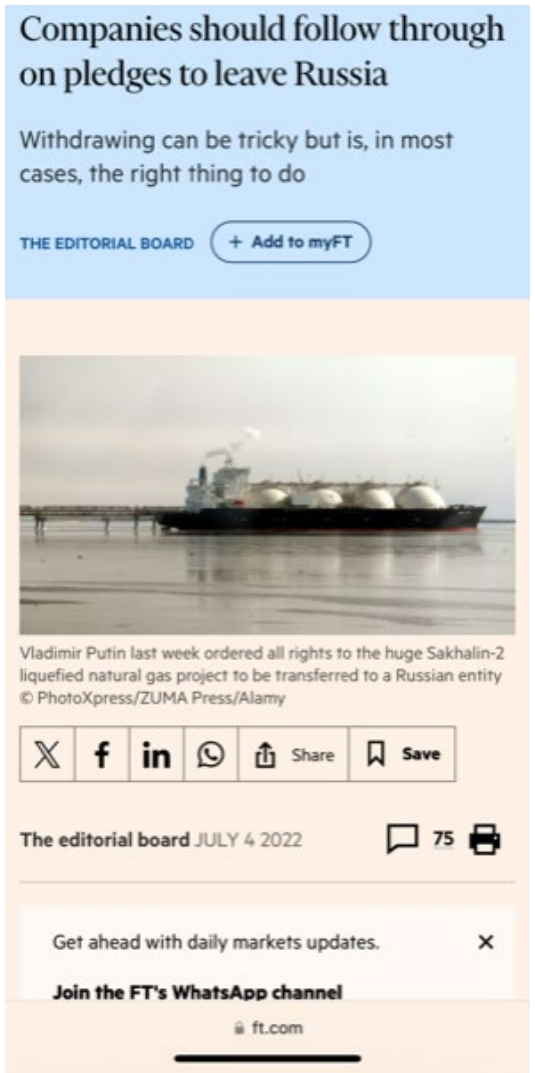

Companies should follow through on pledges to leave Russia

Withdrawing can be tricky but is, in most cases, the right thing to do

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Vladimir Putin last week ordered all rights to the huge Sakhalin-2 liquefied natural gas project to be transferred to a Russian entity
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This paper

Sheds light on 2 objectives of sanctions: technology rationing / switching + inflicted costs by tracing trademarks and thus accounting for intermediated trade / indirect routing

Under sanctions, share of goods under Western trademarks in total imports dropped from around 50% to around 35%

Increased imports of industrial and dual-use goods under neutral trademarks offset 23-39% of the drop in Western trade; sales of Western-branded goods by intermediaries in neutral economies offset a further 20%

New intermediated trade routes are diverse and were set up quickly (within months). Many new importing firms entered the business of importing Western trademarks (often via intermediaries), those importer market became less concentrated

By H2 2023, for a typical Western trademark, the share of neutral exporters increased by extra 40+pp and unit values up 25%

Despite intermediated trade and trade diversion, sanctions are partially working:

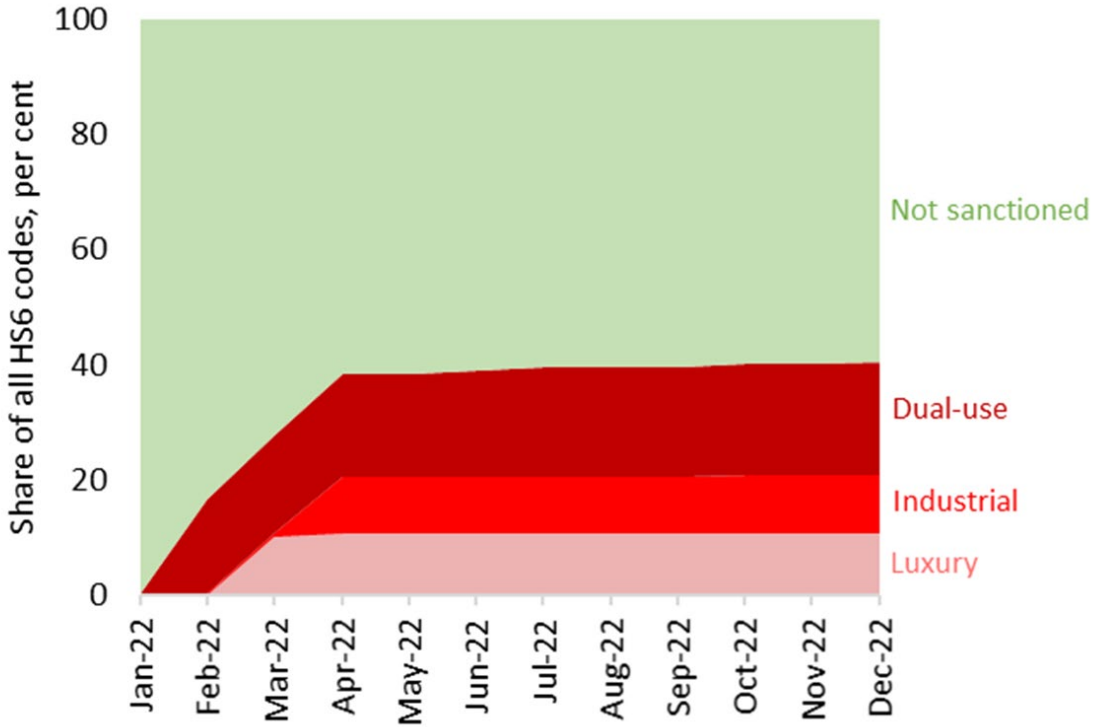
- Costs are higher for customers in the sanctioned economy (perhaps extra 25%)
- Shift towards technologically less advanced brands (for 30% of baseline imports) may matter for long-term productivity

Private sanctions matter but are also weakened by intermediaries

Data: 2016-23

- 12 million + import records in 2022
- By 74,000+ unique firms
- Date (month)
- Country of origin
- Trading country
- Trademark
- Product (HS6 to match international classification)
- Delivery terms (incorterms)

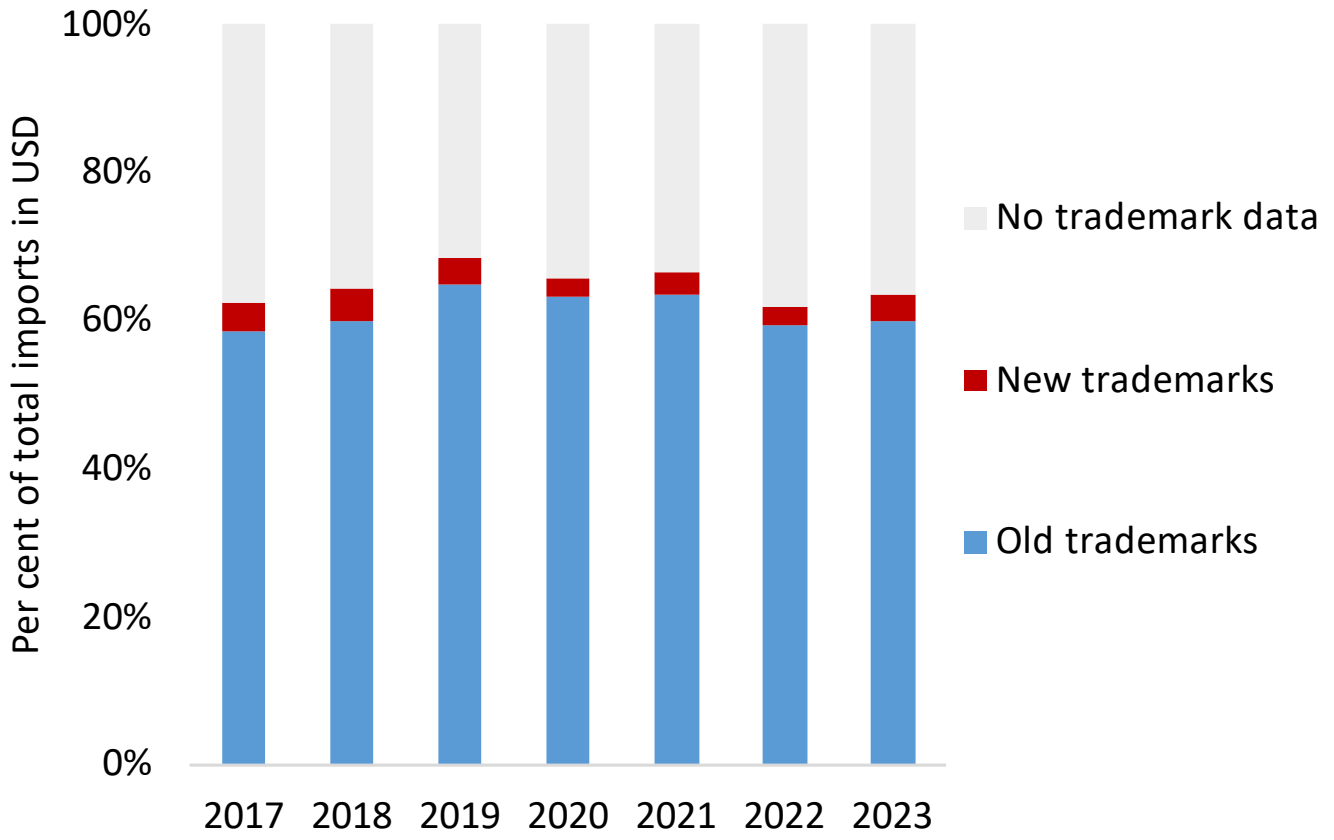
Share of sanctioned HS6 codes by month



Identifying Western trademarks: trademarks historically majority-sold by traders in sanctioning jurisdictions

Western trademarks	Neutral trademarks
BOEING	HUAWEI
AIRBUS	LENOVO
KIA	REDMI
APPLE	XIAOMI
SAMSUNG	HONOR
MERCEDES-BENZ	LAND ROVER
HYUNDAI	CHERY
TOYOTA	EKOPET
BMW	DEXP
VOLKSWAGEN	REALME
HP	T.TACCARDI
BOSCH	MIRATORG

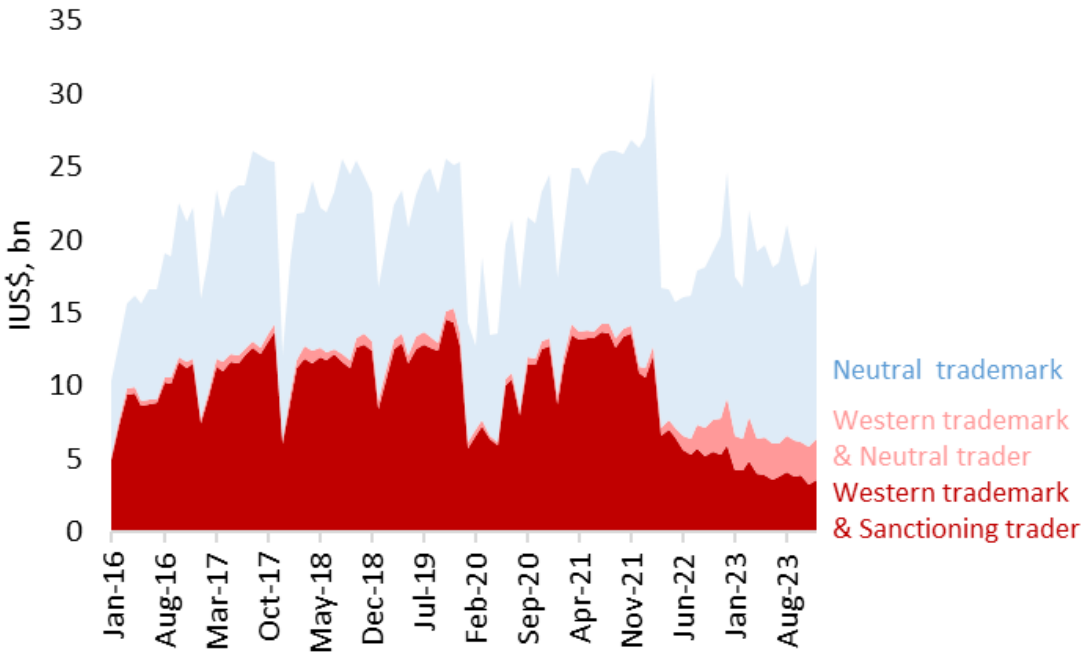
Top 1,000 trademark spelling were manually cross-checked against Sonnenfeld et al. (2022) lists, 23 reclassified trademarks account for 2.1% of imports

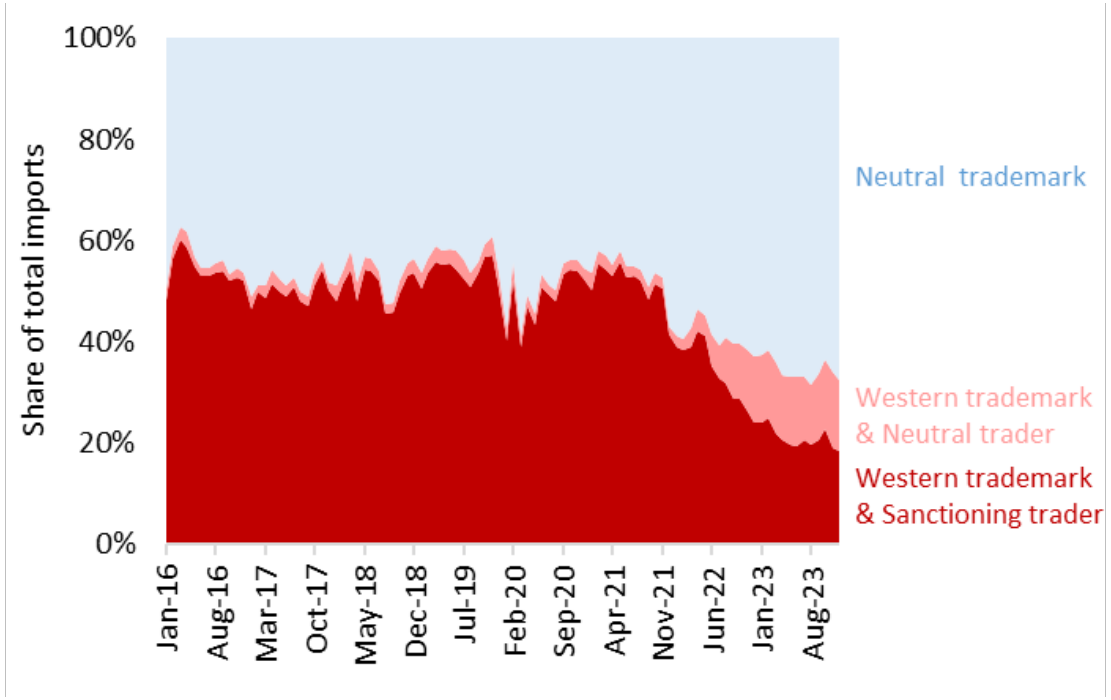


Source: Russia customs statistics and authors' calculations.

Drop in direct Western imports has been accompanied by trade diversion

Share of Western trademarks declined from around 50% of imports pre-sanctions to around 35% in 2023





Source: Russia customs statistics and authors' calculations.

Diff-in-diff: Imports of goods with Western trademarks fell sharply

For each product *p* – trademark *r* – month *t*

$$Log\ Trade_{prt} = \beta\ PostSanctions_t * WesternTrademark_r + \alpha_{pt} + \alpha_{pr} + \epsilon_{prt}$$

Product-month and product-trademark fixed effects

VARIABLES	Trade, log	0-1	Trade, hyp	Trade, ppml
Post-sanctions x Western trademark	**-0.539*** **	**-0.106*** **	**-0.903*** **	**-1.195*** **
	(0.0185)	(0.00175)	(0.0160)	(0.0806)
Observations	10,608,343	72,207,072	72,207,072	71,181,539
R-squared	0.783	0.439	0.522	

Source: Russia customs statistics and authors' calculations. ***, **, * denote statistical significance at the 1%. 5%, 10% levels. Standard errors are clustered on products. All regressions include product--month fixed effects.

Imports of Western trademarks fell more sharply **particularly for sanctioned goods**

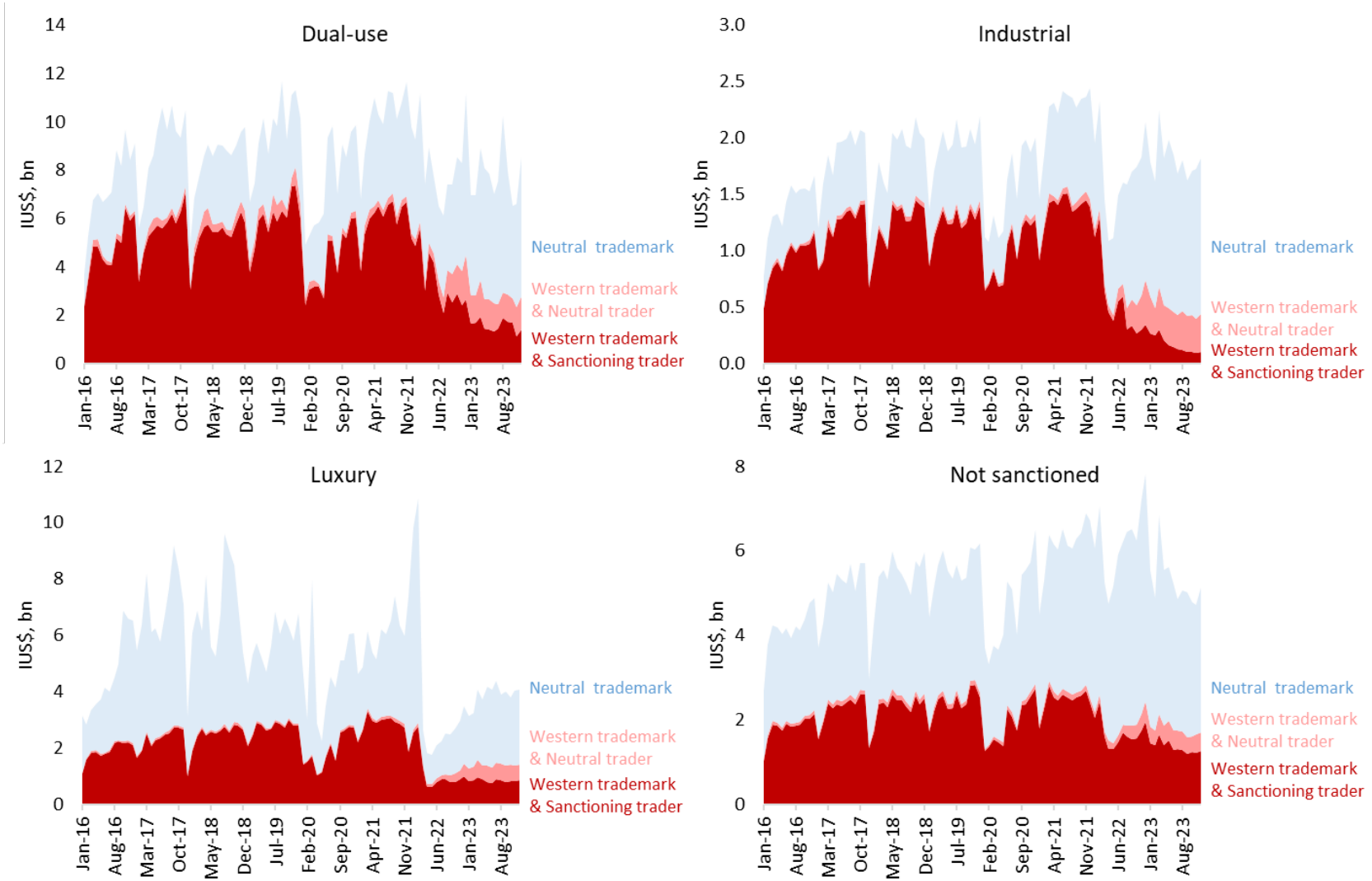
$$IHS(Trade)_{prt} = \beta\, PostSanctions_t * WesternTrademark_r + \alpha_{pt} + \alpha_{pr} + \epsilon_{prt}$$

VARIABLES	Full sample	Dual-use	Industrial	Luxury	Not sanctioned
Post-sanctions x Western trademark	**-0.903*** **	**-0.948*** **	**-1.094*** **	**-1.105*** **	**-0.702*** **
	(0.0160)	(0.0297)	(0.0466)	(0.0397)	(0.0166)
Observations	72,207,072	28,514,304	8,174,592	10,923,360	24,594,816
R-squared	0.522	0.509	0.550	0.519	0.525

Dep. var: imports (ppml estimation)	Full sample	Dual-use	Industrial	Luxury	Not sanctioned
Post-sanctions x Western trademark	**-1.195*** **	**-1.017*** **	**-1.696*** **	**-1.619*** **	**-0.921*** **
	(0.0806)	(0.0820)	(0.103)	(0.277)	(0.0803)
Observations	71,181,539	28,099,669	8,072,034	10,838,532	24,171,304

Source: Russia customs statistics and authors' calculations. ***, **, * denote statistical significance at the 1%. 5%, 10% levels. Standard errors are clustered on products. All regressions include product--month and product-trademark fixed effects.

Direct imports of Western trademarks fell more sharply for sanctioned goods



Source: Russia customs statistics and authors' calculations.

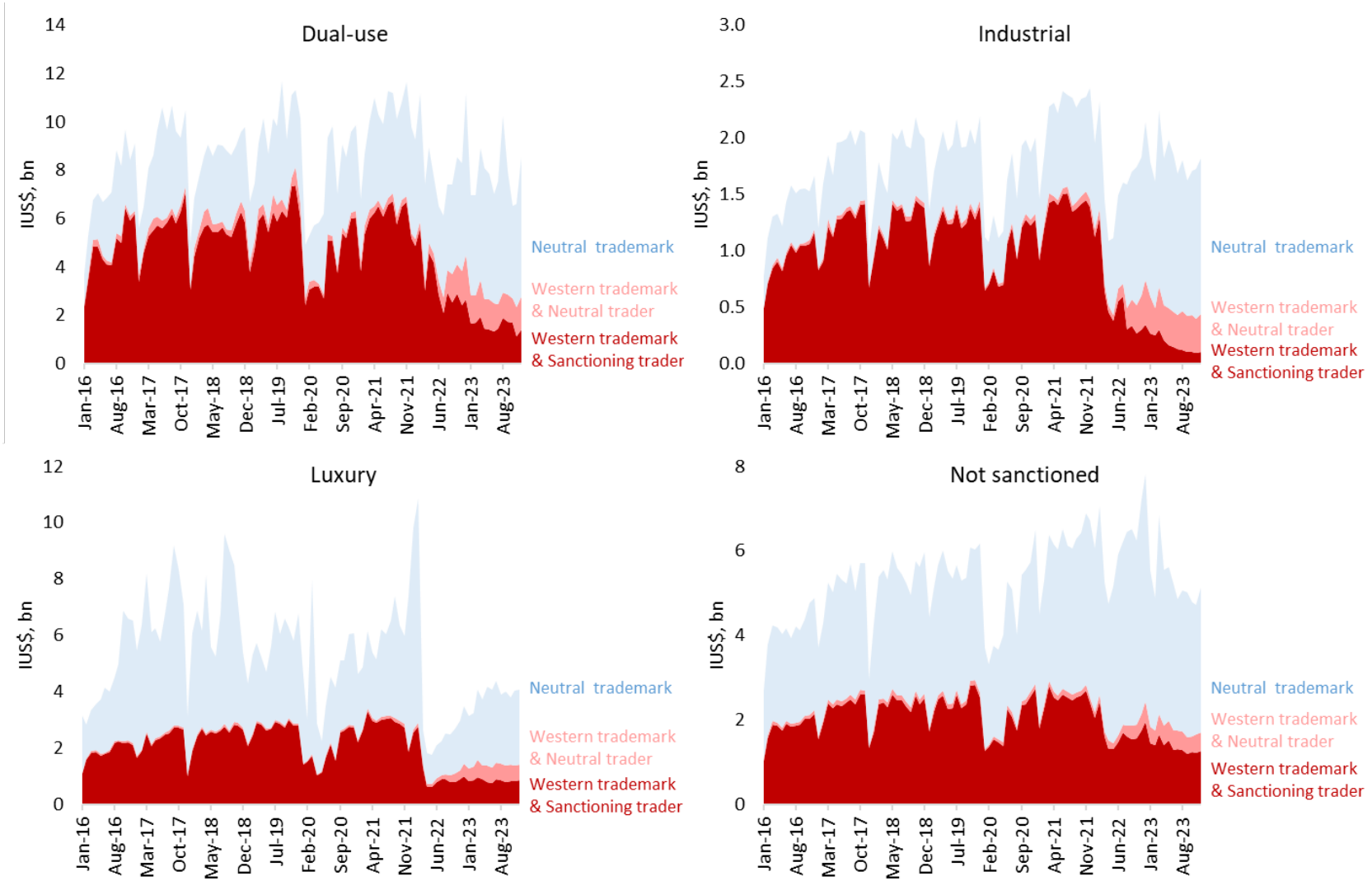
Rise of intermediated trade of Western trademarked goods

$$ShareNeutralTraders_{prt} = \beta\, PostSanctions_t * WesternTrademark_r + \alpha_{pt} + \alpha_{pr} + \epsilon_{prt}$$

	Neutral trader, share				Neutral trader, 0-1			
VARIABLES	Dual-use	Industrial	Luxury	Not sanctioned	Dual-use	Industrial	Luxury	Not sanctioned
Post-sanctions x Western trademark	**0.289*** **	**0.312*** **	**0.126*** **	**0.167*** **	**0.321*** **	**0.356*** **	**0.148*** **	**0.209*** **
	(0.00741)	(0.0107)	(0.0109)	(0.00782)	(0.00727)	(0.00836)	(0.0104)	(0.00712)
Observations	4,123,343	1,227,666	2,088,631	3,168,703	4,123,343	1,227,666	2,088,631	3,168,703
R-squared	0.793	0.817	0.816	0.847	0.756	0.780	0.753	0.825

Source: Russia customs statistics and authors' calculations. ***, **, * denote statistical significance at the 1%. 5%, 10% levels. Standard errors are clustered on products. All regressions include product--month and product-trademark fixed effects.

Rise of intermediated trade of Western trademarked goods



Source: Russia customs statistics and authors' calculations.

For dual use and industrial-capacity goods, intermediated trade compensated for 20-21% of the drop in direct Western trade; trade diversion compensated for 23-39%

	March-December, US$ bn			
	2021	2023	Difference	Substitution, %
Dual-use				
Direct	62.2	15.3	-46.9	
Intermediated	2.7	12.0	9.3	19.8
Neutral	41.1	51.9	10.8	22.9
Industrial				
Direct	14.2	1.5	-12.8	
Intermediated	0.6	3.3	2.6	20.7
Neutral	8.5	13.5	5.0	39.1
Luxury				
Direct	28.7	8.5	-20.2	
Intermediated	0.9	5.7	4.8	23.5
Neutral	32.9	26.0	-6.9	
Not sanctioned				
Direct	25.6	13.4	-12.2	
Intermediated	1.3	4.3	3.0	24.9
Neutral	36.7	35.1	-1.6	

Source: Russia customs statistics and authors' calculations.

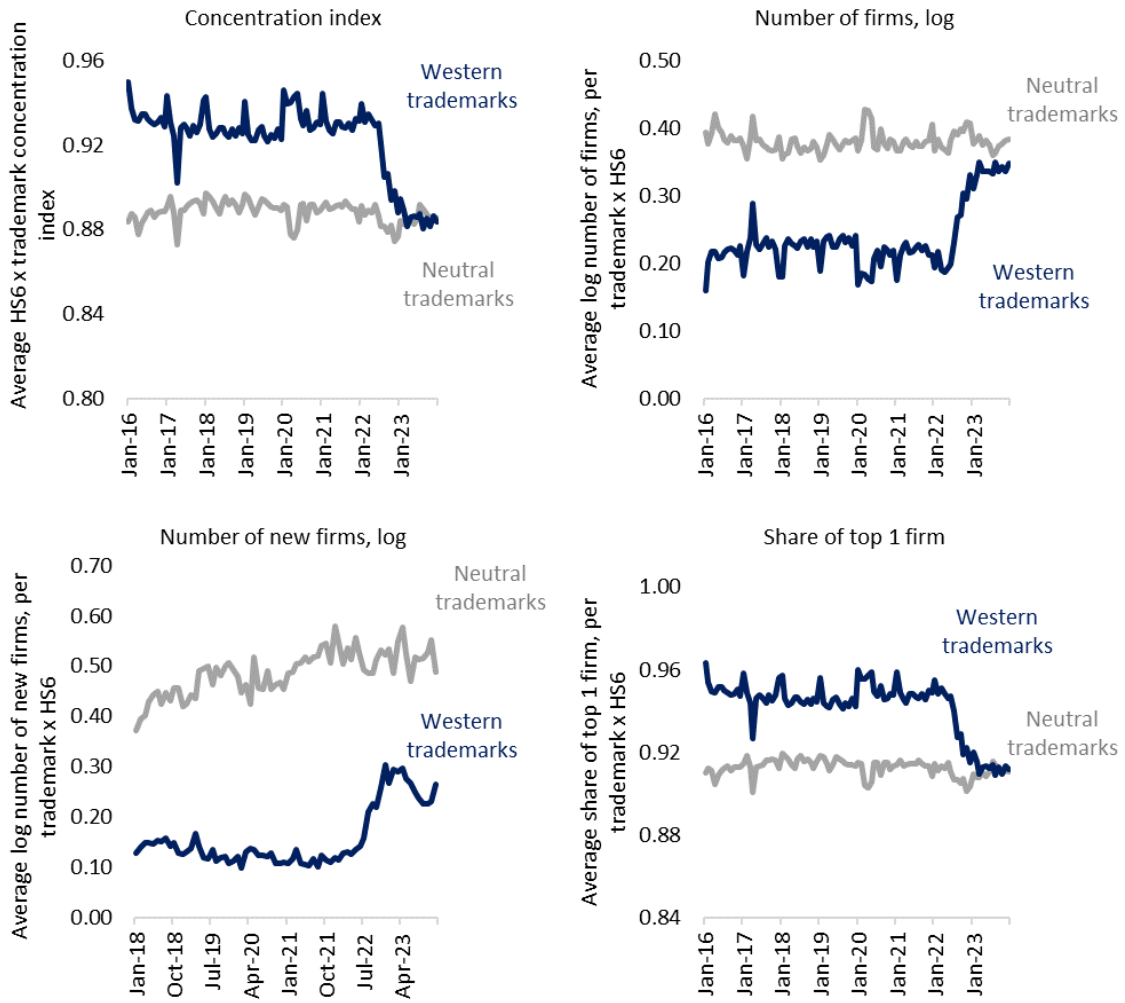
And an increase in unit values (relative to same products under neutral trademarks)

$$Log\ UnitValue_{prt} = \beta\ PostSanctions_t * WesternTrademark_r + \alpha_{pt} + \alpha_{pr} + \epsilon_{prt}$$

Dep. var: log of unit value	Full sample	Dual-use	Industrial	Luxury	Not sanctioned
Post-sanctions x Western trademark	**0.137*** **	**0.175*** **	**0.126*** **	**0.0494*** **	**0.158*** **
	(0.00696)	(0.0116)	(0.0174)	(0.0153)	(0.00730)
Observations	10,593,254	4,116,068	1,225,513	2,087,437	3,164,236
R-squared	0.890	0.861	0.899	0.906	0.901

Source: Russia customs statistics and authors' calculations. ***, **, * denote statistical significance at the 1%. 5%, 10% levels. Standard errors are clustered on products. All regressions include product–month and product-trademark fixed effects.

Entry of new importers of Western trademarked goods and decline in concentration



Source: Russia customs statistics and authors' calculations. Simple averages across product * trademark observations in each month.

Entry of new importers of Western trademarked goods and decline in concentration

For each product *p* – trademark *r* – month *t*

$$Log\ UnitValue_{prt} = \beta\ PostSanctions_t * WesternTrademark_r + \alpha_{pt} + \alpha_{pr} + \epsilon_{prt}$$

Control for product-month and product-trademark fixed effects

To construct meaningful measures of market concentration / unit values, sample is restricted to trademark-product observations with 100+ post-Sanctions transactions accounting for 67% of trade in the sample

VARIABLES	Neutral traders, share	Neutral traders, 0-1	Unit value, log	Concentration index	Market share of top 1 firm
Post-sanctions x Western trademark	**0.206*** **	**0.273*** **	**0.189*** **	**-0.0117*** **	**-0.00875*** **
	(0.00934)	(0.00802)	(0.0127)	(0.00300)	(0.00243)
Observations	1,465,170	1,465,170	1,465,071	1,465,170	1,465,170
R-squared	0.824	0.735	0.920	0.677	0.658

Source: Russia customs statistics and authors' calculations. ***, **, * denote statistical significance at the 1%. 5%, 10% levels. Standard errors are clustered on products. All regressions include product–month fixed effects. Sample is restricted to 100+ transactions post-Sanctions for product-trademark (67% of trade).

Has there been a change in delivery terms (incoterms)?

Seller minimal responsibility

- EXW (Ex Works)
- The buyer handles all transport costs, duties, and risks from the seller's location onward

Port of shipment

- FAS (Free Alongside Ship), FOB (Free on Board), FOR (Free on Rail), FCA (Free Carrier)
- The seller delivers goods to the transport vessel or carrier. Risk transfers to the buyer once the goods are loaded, placed alongside, or handed over to the carrier

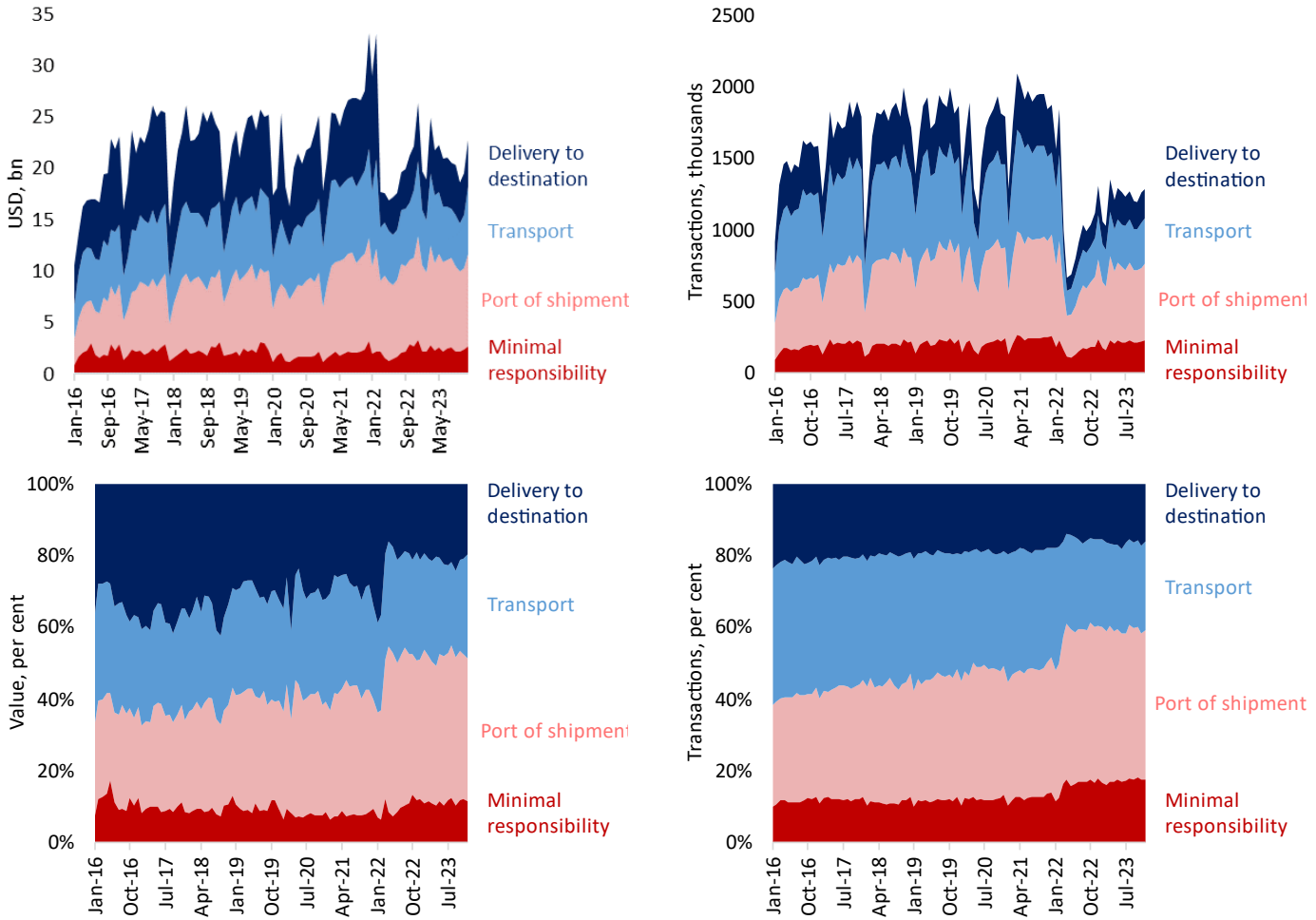
Seller arranges transport

- CFR (Cost and Freight), CIF (Cost, Insurance, and Freight), CPT (Carriage Paid To), CIP (Carriage and Insurance Paid To)
- The seller covers main transport costs (sometimes insurance). Risk transfers to the buyer once the goods are handed over to the carrier

Delivery to Destination

- DAP (Delivered at Place), DAF (Delivered at Frontier), DDP (Delivered Duty Paid), DPU (Delivered at Place Unloaded), DAT (Delivered at Terminal), DDU (Delivered Duty Unpaid), DEQ (Delivered Ex Quay), DES (Delivered Ex Ship)
- The seller bears responsibility and costs until the goods reach a specified location or terminal (including possibly handling at the destination)

Drop in Russia's imports with seller arranging transport and seller delivery to destination



Source: Russia customs statistics and authors' calculations.

Diff-in-diff: More collection from port of shipment by importers (vs full delivery) for Western trademarks after sanctions (with trademark-product fixed effects)

For each product *p*, trademark t, and month *m*:

$$TradeShare_{pmt} = PostSanctions_m x\ Western_t + \alpha_{pt} + \alpha_{pm} + \varepsilon_{pmt}$$

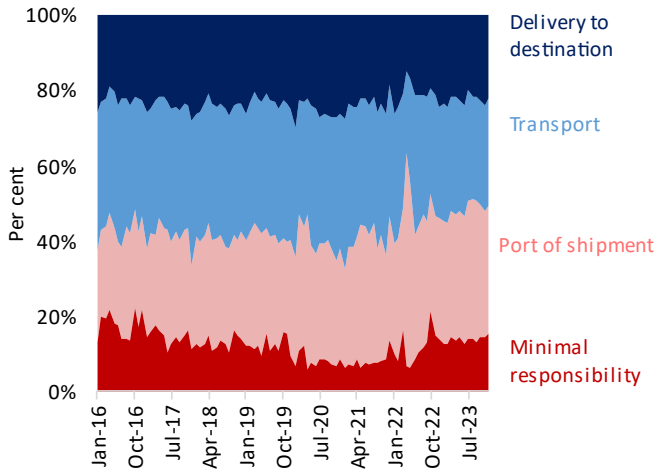
Product x trademark fixed effect
Product x month fixed effect
Standard errors clustered on trademarks

			Omitted: to destination			*Omitted: to destination*
	Share of trade			Share of transactions		
VARIABLES	Minimal	Minimal +Port	Minimal + Port + Transport	Minimal	Minimal +Port	Minimal + Port + Transport
Post-sanctions x Western trademark	**0.0234****	**0.0327****	**0.0291****	**0.0244****	**0.0360****	**0.0276****
	(0.00951)	(0.0145)	(0.0120)	(0.00960)	(0.0140)	(0.0119)
Observations	10,564,770	10,564,770	10,564,770	10,564,770	10,564,770	10,564,770
R-squared	0.649	0.706	0.718	0.663	0.721	0.736

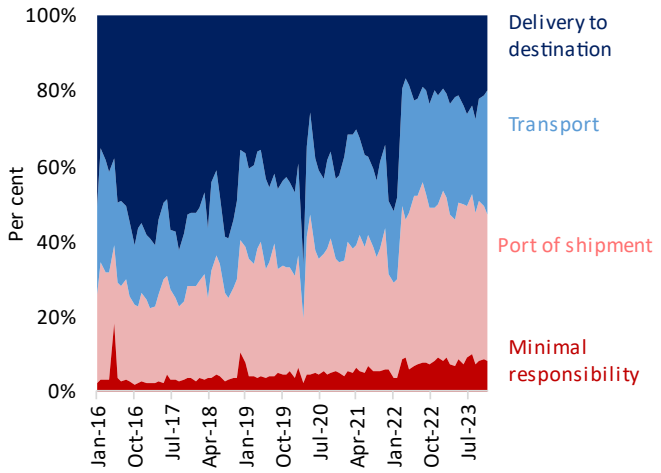
Source: Russia customs statistics and authors' calculations. Sample of top trademark spellings with average imports > US$10 mln. 13,545 trademark spellings covering 88% of imports; 3,862 neutral trademarks

More min responsibility / collection from port of shipment by importers (vs full delivery) after sanctions, more so for transactions involving Western trademarks

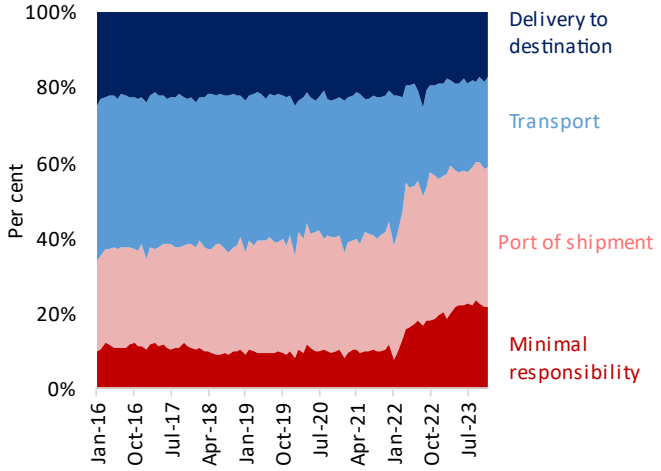
Western trademarks, by value



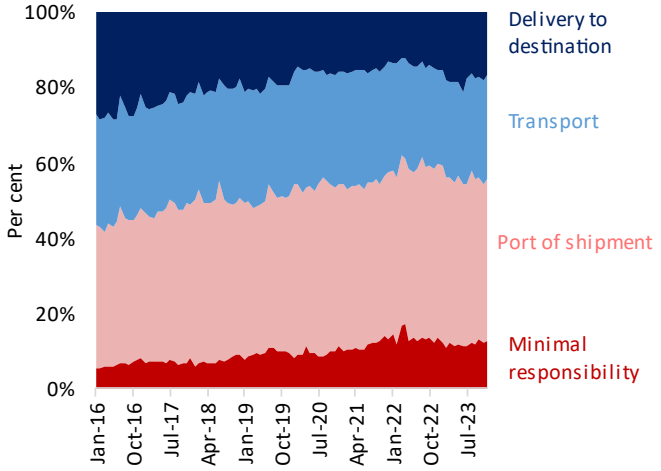
Neutral trademarks, by value



Western trademarks, by number of transactions



Neutral trademarks, by number of transactions



Source: Russia customs statistics and authors' calculations. Sample of top trademark spellings with average imports > US$10 mln. 13,545 trademark spellings covering 88% of imports; 3,862 neutral trademarks

Conclusions

Shedding light on 2 objectives of sanctions: technology rationing / switching + inflicted costs by tracing trademarks and thus accounting for intermediated trade / indirect routing

Under sanctions, share of goods under Western trademarks in total imports dropped from around 50% to around 35%

Increased imports of industrial and dual-use goods under neutral trademarks offset 23-39% of the drop in Western trade; sales of Western-branded goods by intermediaries in neutral economies offset a further 20%

New intermediated trade routes are diverse and were set up quickly (within months). Many new importing firms entered the business of importing Western trademarks (often via intermediaries), those importer market became less concentrated

By H2 2023, for a typical Western trademark, the share of neutral exporters increased by extra 40+pp and unit values up 25%

Despite intermediated trade and trade diversion, sanctions are partially working:

- Costs are higher for customers in the sanctioned economy (perhaps extra 25%)
- Shift towards technologically less advanced brands (for 30% of baseline imports) may matter for long-term productivity

Decision to leave: Compare Western trademarks where trademark owners announced early and active withdrawal from Russia vs others vs major neutral multinationals

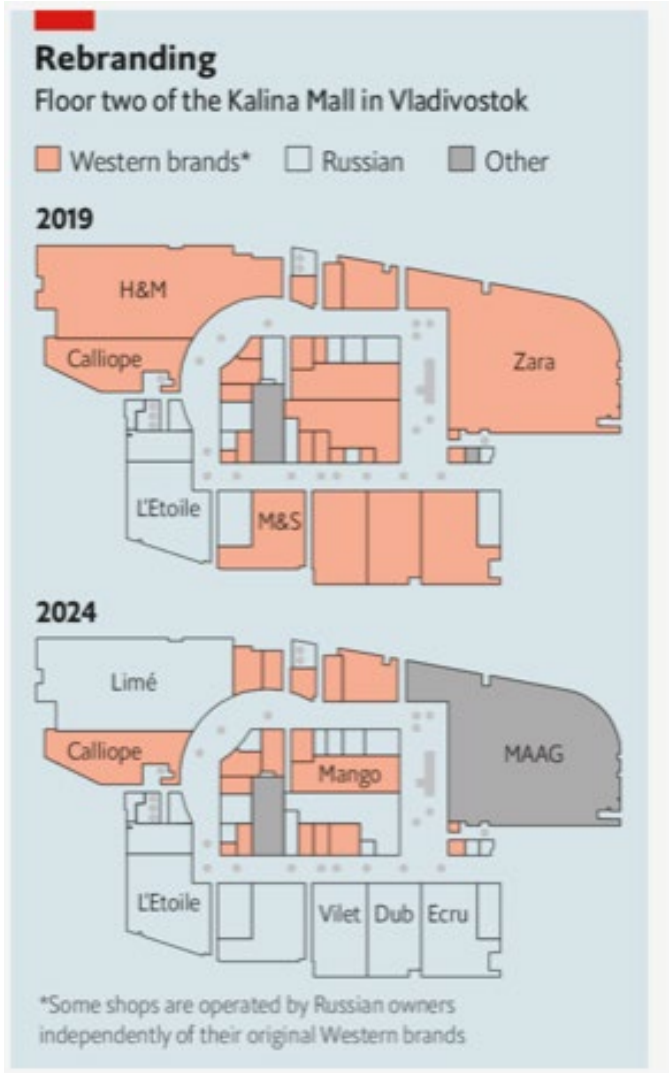
Focus on top 1,000 trademark records by total imports in Russia

- With generics [35%], 68% of Russia's imports in 2016-22
- Most are matched to trade mark owners in Sonnenfeld et al (2022, 2023), 28% of Russia's total imports in 2016-22
- Top 501-1000 trademarks account for only 5% of Russia's imports vs 63% for top 500

Sonnenfeld et al. (2022, 2023) look at firms with "substantial exposure to Russia" and their public announcements, annual statements, official filings

Criteria for inclusion:

- Companies with verifiable operations in home country, Russia/Belarus and at least 1 other country
- 51%+ ownership outside Russia / Belarus
- Companies with verifiable recent active business presence in Russia: investment, selling, sourcing or manufacturing
- Global revenues > US$ 100 million in at least one recent year
- Russia accounting for approximately 1%+ of global revenue



Did decisions to leave [withdraw / scale back] affect exports to Russia, taking into account also intermediated trade?

Withdrawing:
Withdrawing from the market – 108 (Mercedes, Toyota, HP): *Making a clean break/permanent exit from Russia or and/or leaving behind no operational footprint*

Scaling back:
Suspending operations inside – 172 (Boeing, Hyundai, Apple): *Suspending almost all operations without permanently exiting or divesting*
Scaling back – 52 (Skoda, General Electric, Linde): *Suspending a significant portion (but not all) of their business in Russia*

Buying time:
Buying time – 113 (Airbus, Bosch, Philips): *Pausing new investments/minor operations in Rus but largely continuing substantive business*
Digging in – 32 (MSI, Liebherr, Mitsubishi): *Largely doing business-as-usual*

Base group:
Neutral – 182 (31 also classified in Sonnenfeld et al (2022, 2023): Huawei, Lenovo, Xiaomi;
151 additionally drawn from top-1,000, not included in Sonnenfeld et al (2022) and confirmed as neutral: Chery, Great Wall, Sitrak)

- Grid: Product * Trademark * Month
- Fixed effects: Product * Trademark and Product * Month
- Estimate: Decision to leave (trademark type) * Post-sanctions period
- Sample: Classified trademarks, monthly imports 2016-23 from all countries

New routes emerging especially strongly in the case of withdrawing trademarks, for buying time new route use is similar to neutral trademarks

Trade in Mar'22-Dec'23, by type of firm, %

	New routes, per cent		
	Trade	Routes	Firms
Neutral	10.0	63.1	53.0
Buying time	8.0	59.2	62.3
Scaling back	32.6	67.9	67.8
Withdrawing	47.1	69.4	67.1

Source: Russia customs statistics and authors' calculations. Firm shares do not add up to 100% as the same importing firm may use multiple routes or traders. New route is a new combination of trademark, product and trading (exporting) country.

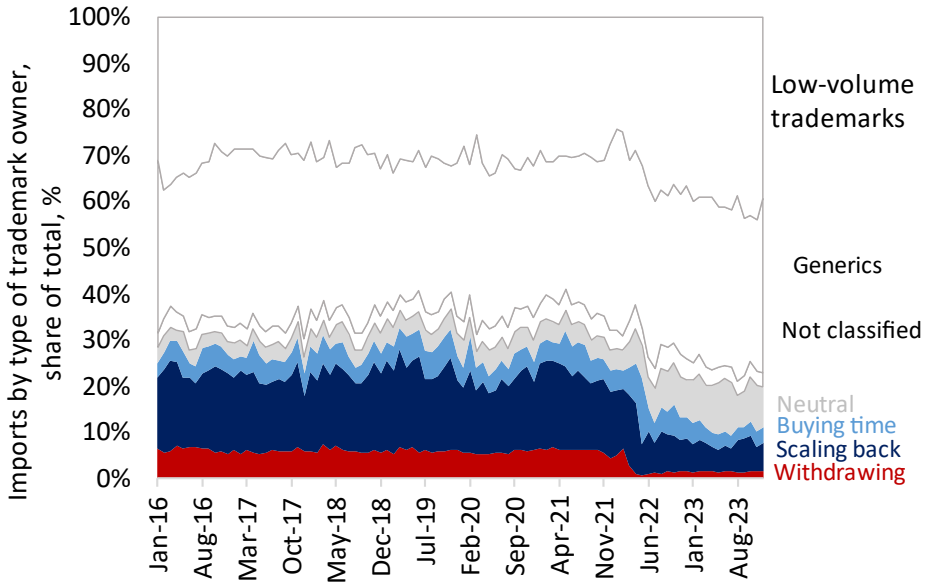
All types of trademark owners covered a mix of product types, goods of sanctioning origin but also neutral origin

	Sanctioned dual-use and industrial products (pre-sanctions)	Luxury goods (pre-sanctions)	Goods originating in sanctioning economies (pre-sanctions)
Neutral	55.4	30.0	12.7
Buying time	67.8	11.4	83.4
Scaling back	68.4	24.4	71.0
Withdrawing	46.2	42.9	65.7

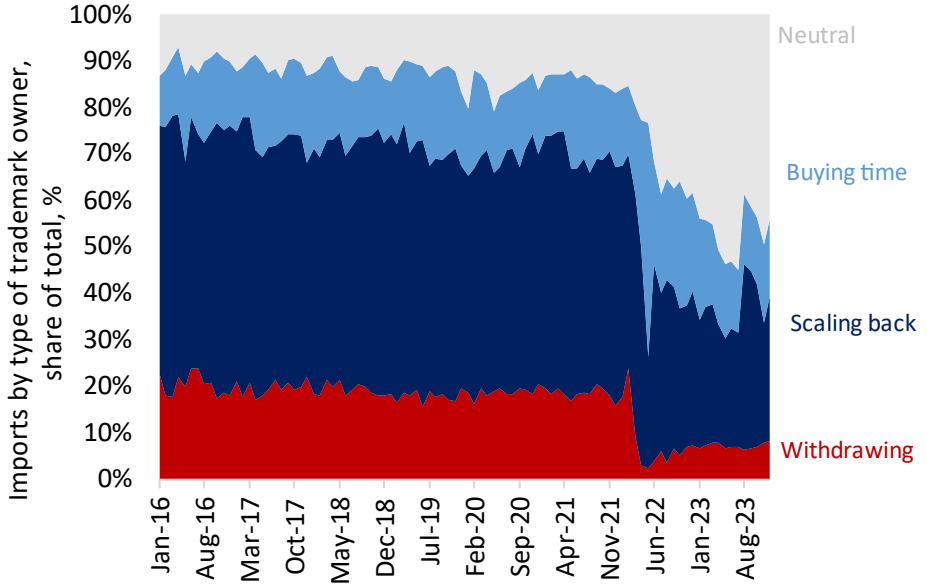
Source: Russia customs statistics and authors' calculations. Sample is restricted to imports where the attitude of the trademark owner to serving the Russian market is defined.

The import share of trademark owners withdrawing or scaling back has shrunk markedly

Total trade, including generics, volumes



Total trade, shares of classified trademarks



Source: Russia customs statistics and authors' calculations. Sample is restricted to imports where the attitude of the trademark owner to serving the Russian market is defined.

Relative to neutral trademarks, smaller drop in trade where buying time, trade sharply down if scaling back / withdrawing

$$Log\ Trade_{prt} = \beta\ PostSanctions_t * TrademarkType_r + \alpha_{pr} + \alpha_{pt} + \epsilon_{prt}$$

All imports, base category: 182 neutral trademarks

Ref.group: neutral trademarks	Trade, log	0-1	Trade, hyp	Trade, ppml
Post-sanctions x Buying time	**-0.702*** **	**-0.148*** **	**-1.290*** **	**-1.202*** **
	(0.0491)	(0.00322)	(0.0336)	(0.232)
Post-sanctions x Scaling back	**-1.342*** **	**-0.211*** **	**-1.876*** **	**-1.774*** **
	(0.0441)	(0.00383)	(0.0411)	(0.251)
Post-sanctions x Withdrawing	**-2.027*** **	**-0.235*** **	**-2.282*** **	**-2.158*** **
	(0.0457)	(0.00407)	(0.0463)	(0.218)
Observations	2,501,611	9,941,856	9,941,856	9,310,957
R-squared	0.791	0.552	0.647	

Source: Russia customs statistics and authors' calculations. ***, **, * denote statistical significance at the 1%. 5%, 10% levels. Standard errors are clustered on products (HS6). All regressions include product * trademark and product * month FE. Sample is restricted to imports where the attitude of the trademark owner to serving the Russian market is defined. Base group = 182 neutral trademarks.

Relative to neutral trademarks, no change in unit values where buying time, if scaling back / withdrawing, unit values up 16-35%

$$Log\ Unitvalue_{prt} = \beta\ PostSanctions_t * TrademarkType_r + \alpha_{pr} + \alpha_{pt} + \epsilon_{prt}$$

Share of neutral exporting trading countries up 44pp for withdrawing (on top of increase for neutral trademarks) vs 21 pp for buying time

To construct meaningful measures of market concentration / unit values, sample is restricted to trademark-product observations with 100+ post-Sanctions transactions accounting for 67% of trade in the sample

Ref. group: neutral trademarks	Neutral traders, share	Neutral traders, 0-1	Unit value, log	Concentration index	Market share of top 1 firm
Post-sanctions x Buying time	**0.209*** **	**0.164*** **	**0.0597** **	-0.00136	-0.00575
	(0.0131)	(0.0130)	(0.0263)	(0.00734)	(0.00604)
Post-sanctions x Scaling back	**0.320*** **	**0.302*** **	**0.188*** **	**-0.0721*** **	**-0.0601*** **
	(0.00941)	(0.00850)	(0.0258)	(0.00659)	(0.00532)
Post-sanctions x Withdrawing	**0.444*** **	**0.347*** **	**0.337*** **	**-0.0878*** **	**-0.0731*** **
	(0.0108)	(0.0104)	(0.0365)	(0.00818)	(0.00649)
Observations	532,439	532,515	527,609	532,515	532,515
R-squared	0.815	0.663	0.900	0.621	0.589

Source: Russia customs statistics, authors' calculations. ***, **, * denote significance at 1%, 5%, 10%. S. e. clustered on products. Includes product * trademark and product * month FE. Sample is restricted to imports where the attitude of the trademark owner to serving the Russian market is defined and 100+ transactions post-sanctions. Baseline category = 182 neutral trademarks.

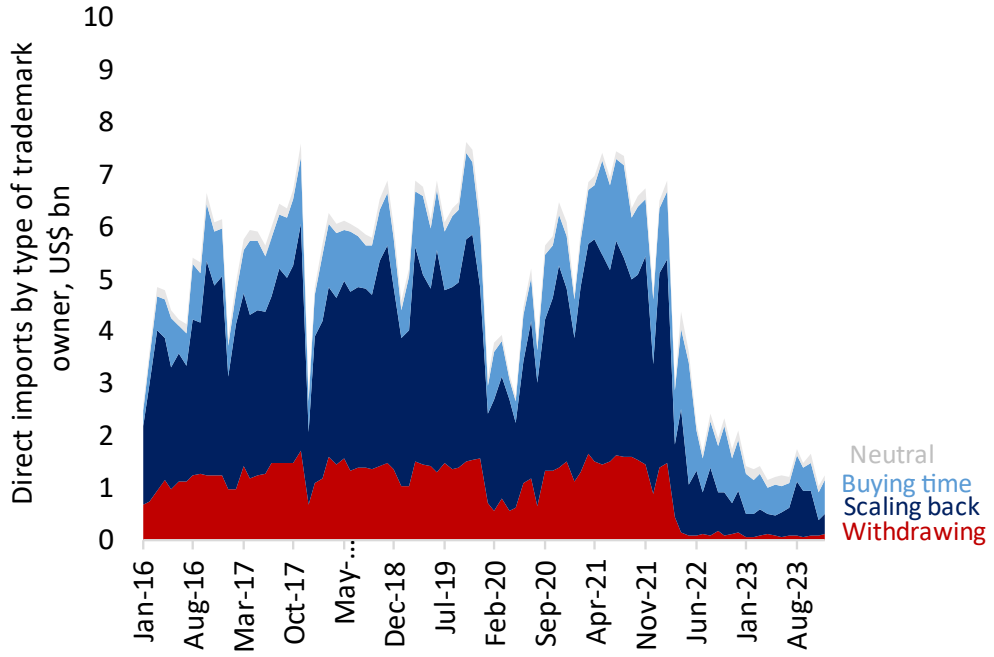
Sharp drops in market concentration for withdrawing trademarks relative to buying time / neutral can also be seen in raw data

	Concentration index		Market share of top 1 firm		Neutral traders, share		Neutral traders, 0-1		Unit value, log	
	Pre-sanctions	Post-sanctions	Pre-sanctions	Post-sanctions	Pre-sanctions	Post-sanctions	Pre-sanctions	Post-sanctions	Pre-sanctions	Post-sanctions
Neutral	0.88	0.82	0.91	0.87	0.83	0.91	0.88	0.94	2.73	3.04
Buying time	0.83	0.78	0.87	0.83	0.12	0.33	0.28	0.46	3.54	3.76
Scaling back	0.82	0.66	0.87	0.74	0.09	0.54	0.35	0.75	3.97	4.36
Withdrawing	0.78	0.59	0.84	0.69	0.08	0.64	0.36	0.81	3.64	4.27

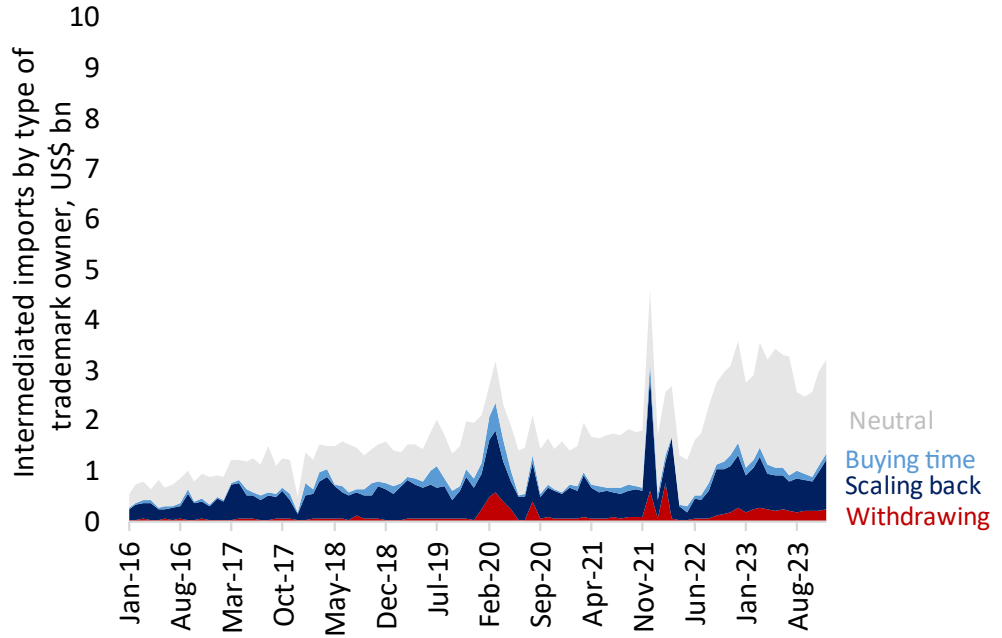
Source: Russia customs statistics, authors' calculations. Sample is restricted to imports where the attitude of the trademark owner to serving the Russian market is defined and 100+ transactions post-sanctions.

For withdrawing trademark owners intermediated trade overtook direct Western trade – although increase is not sufficient to compensate for the loss of direct trade

Exported by sanctioning traders



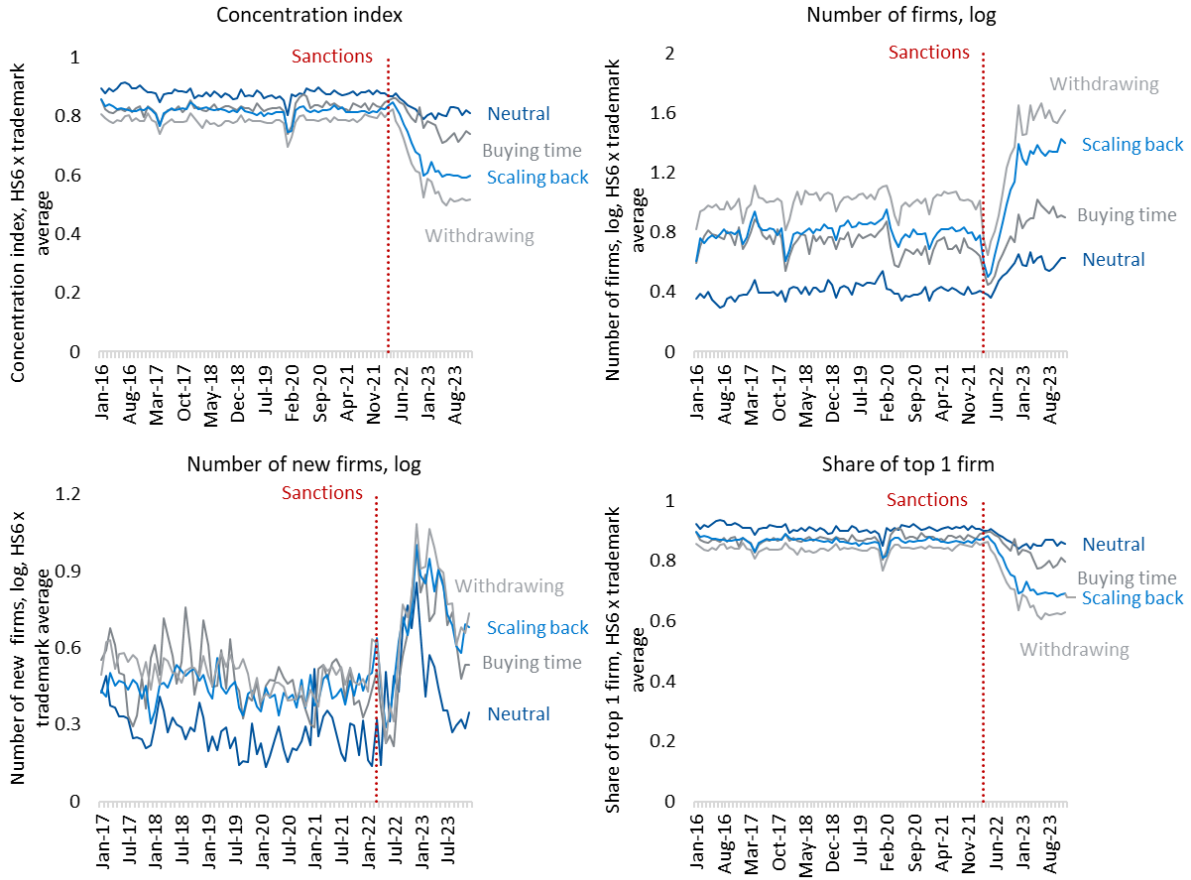
Exported by neutral traders (intermediated trade)



Source: Russia customs statistics and authors' calculations. Sample is restricted to imports where the attitude of the trademark owner to serving the Russian market is defined. Imports are direct if exporting trader is located in a sanctioning jurisdictions and intermediated if exporting trader is located in a neutral jurisdiction.

Under sanctions, exporter-importer relationships changed. Entry of many new importers resulted in less concentration on the importer side, more so for withdrawing trademarks

Increased monopolistic power of importers does not seem to explain higher mark-ups for goods with more restrictive attitudes of Western firms – if anything, those importer markets are more competitive



Source: Russia customs statistics and authors' calculations. Hirschman-Herfindahl index of concentration of imports across importing firms. Calculated for each trademark, product and month and averaged across each type of trademark + product. Sample is restricted to imports where the attitude of the trademark owner to serving the Russian market is defined and 100+ transactions post-sanctions

Private sanctions: Conclusion

Where firms had more restrictive attitudes to serving the Russian markets, import volumes were lower, but more intermediated trade

Private sanctions matter, they further increased unit values but are also weakened by intermediaries

Annex

European Bank
for Reconstruction and Development

Annex: Sanctioning economies

Sanctioning Economies

European Economic Area

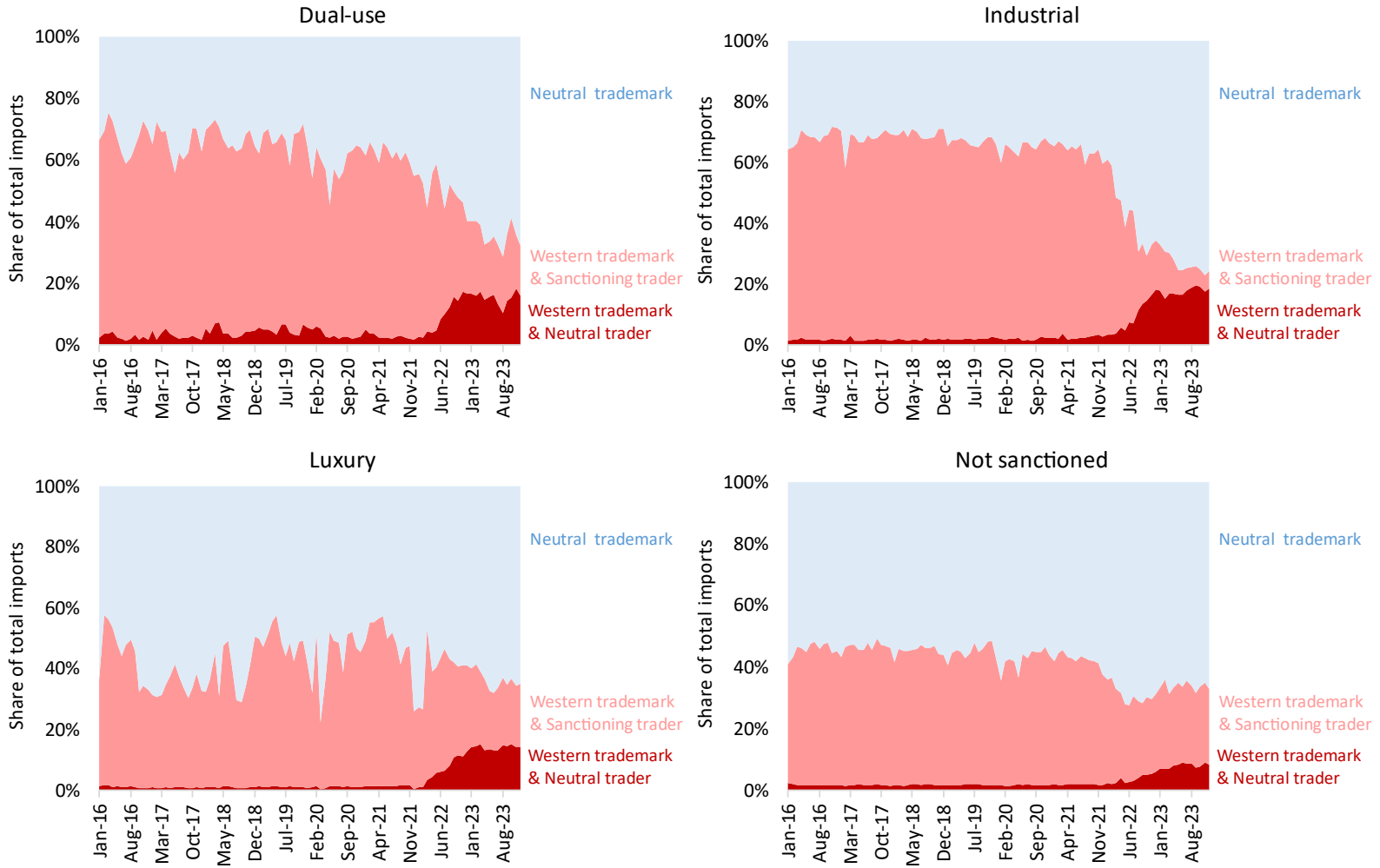
Austria	Belgium	Bulgaria
Croatia	Cyprus	Czech R.
Denmark	Estonia	Finland
France	Germany	Greece
Hungary	Iceland	Ireland
Italy	Latvia	Liechtenstein
Lithuania	Luxembourg	Malta
Netherlands	Norway	Poland
Portugal	Romania	Slovak R.
Slovenia	Spain	Sweden

Other

Albania	Australia	Canada
Japan	Monaco	Montenegro
New Zealand	North Macedonia	Singapore
South Korea	Switzerland	Taipei China
Ukraine	United Kingdom	United States

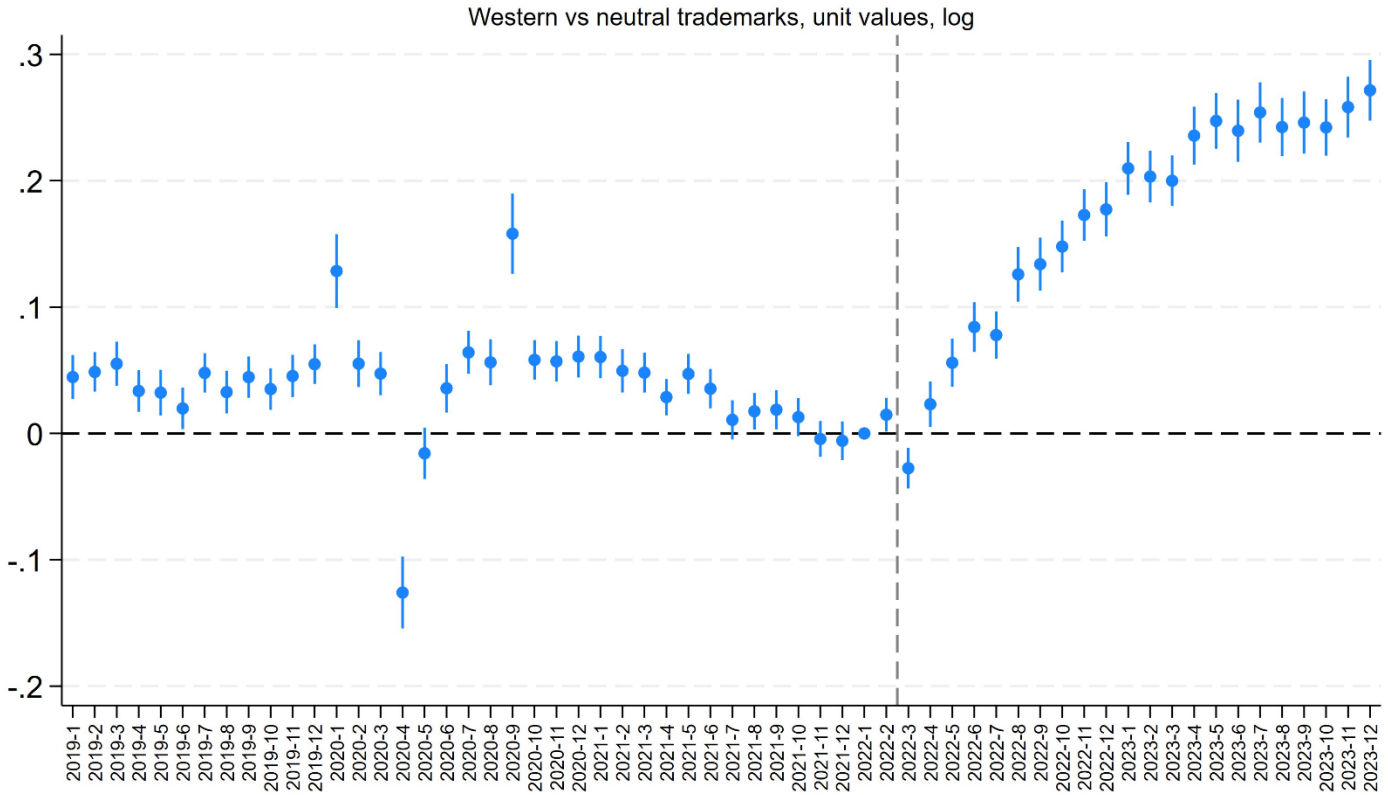
Source: Russia customs statistics and authors' calculations.

The rise of intermediated trade was observed for all types of goods but was more pronounced for dual-use and industrial goods under sanctions



Source: Russia customs statistics and authors' calculations.

Event study: No pre-trend for unit values for Western vs neutral trademarks; steady increases in 2022 and stable premium of around 25% in 2023



Source: Russia customs statistics and authors' calculations. ***, **, * denote statistical significance at the 1%. 5%, 10% levels. Standard errors are clustered on products. All regressions include product--month and product-trademark fixed effects. Base period: Jan 2022. Coefficients: Western trademark * month

Robustness: Similar results for trade when restricting the sample to product-trademarks with 100+ post-sanctions transactions

$$Log\ Trade_{prt} = \beta\ PostSanctions_t * TrademarkType_r + \alpha_{pr} + \alpha_{pt} + \epsilon_{prt}$$

All imports, base category: 182 neutral trademarks

100+ transactions post-sanctions per product-trademark

Ref. group: neutral trademarks	Trade, log	0-1	Trade, hyp	Trade, ppml	Quantity, log	Quantity, ppml
Post-sanctions x Buying time	**-1.099*** **	**-0.209*** **	**-2.881*** **	**-1.186*** **	**-1.159*** **	**-0.934*** **
	(0.0871)	(0.00976)	(0.140)	(0.316)	(0.0957)	(0.296)
Post-sanctions x Scaling back	**-2.011*** **	**-0.255*** **	**-4.127*** **	**-1.742*** **	**-2.200*** **	**-0.874** **
	(0.0780)	(0.00868)	(0.121)	(0.334)	(0.0838)	(0.400)
Post-sanctions x Withdrawing	**-2.759*** **	**-0.276*** **	**-5.071*** **	**-2.161*** **	**-3.097*** **	**-1.815*** **
	(0.0805)	(0.00909)	(0.112)	(0.289)	(0.0913)	(0.241)
Observations	527,664	614,496	614,496	610,384	527,613	610,384
R-squared	0.795	0.495	0.668		0.803	

Source: Russia customs statistics and authors' calculations. ***, **, * denote statistical significance at the 1%. 5%, 10% levels. Standard errors are clustered on products (HS6). All regressions include product * trademark and product * month FE. Sample is restricted to imports where the attitude of the trademark owner to serving the Russian market is defined and 100+ transactions post-sanctions. . Base group = 182 neutral trademarks.

Exports of neutral traders clearly show relatively higher growth in exports of western trademarks

Dep. var: log of imports	Full sample	Dual-use	Industrial	Luxury	Not sanctioned
Post-sanctions x Western trademark	**0.454*** **	**0.507*** **	**0.407*** **	**0.505*** **	**0.345*** **
	(0.0250)	(0.0390)	(0.0579)	(0.0666)	(0.0405)
Observations	2,973,674	1,108,905	336,313	604,151	924,305
R-squared	0.789	0.766	0.815	0.689	0.840

Dep. var: imports (ppml estimation)	Full sample	Dual-use	Industrial	Luxury	Not sanctioned
Post-sanctions x Western trademark	**0.515*** **	**0.662*** **	0.119	**0.560*** **	**0.389*** **
	(0.118)	(0.227)	(0.252)	(0.173)	(0.0925)
Observations	32,702,810	12,952,531	3,732,680	5,363,956	10,653,643
HS6 x Trademark FE	YES	YES	YES	YES	YES

Source: Russia customs statistics and authors' calculations. ***, **, * denote statistical significance at the 1%. 5%, 10% levels. Standard errors are clustered on products.

Trademark x product x month grid, **only neutral traders sample**, **split by sanctions table**

Western trademarks imported through neutral traders also have a unit value premium of 30-35% relative to neutral trademarks

Dep. var: log of unit values	Full sample	Dual-use	Industrial	Luxury	Not sanctioned
Post-sanctions x Western trademark	**0.335*** **	**0.331*** **	**0.340*** **	**0.387*** **	**0.297*** **
	(0.0152)	(0.0276)	(0.0324)	(0.0321)	(0.0230)
Observations	2,972,328	1,108,095	336,131	604,111	923,991
R-squared	0.899	0.874	0.903	0.905	0.909

Source: Russia customs statistics and authors' calculations. ***, **, * denote statistical significance at the 1%. 5%, 10% levels. Standard errors are clustered on products.

Under sanctions, share of neutral traders exporting Western trademarks increased by extra 22 pp and unit values by extra 14pp compared with neutral trademarks

For each product *p* – trademark *r* – month *t*

$$Log\ UnitValue_{prt} = \beta\ PostSanctions_t * WesternTrademark_r + \alpha_{pt} + \alpha_{pr} + \epsilon_{prt}$$

Control for product-month and product-trademark fixed effects

VARIABLES	Neutral traders, share	Neutral traders, 0-1	Unit value, log
Post-sanctions x Western trademark	**0.219*** **	**0.254*** **	**0.137*** **
	(0.00552)	(0.00500)	(0.00696)
Observations	10,608,343	10,608,343	10,593,254
R-squared	0.817	0.779	0.890

Source: Russia customs statistics and authors' calculations. ***, **, * denote statistical significance at the 1%. 5%, 10% levels. Standard errors are clustered on products. All regressions include product--month fixed effects.

Relative to neutral trademarks, no change in unit values where buying time, if scaling back / withdrawing, unit values up 16-25% (unrestricted sample)

$$Log\ Unitvalue_{prt} = \beta\ PostSanctions_t * TrademarkType_r + \alpha_{pr} + \alpha_{pt} + \epsilon_{prt}$$

Share of neutral exporting traders up 41pp for withdrawing (on top of increase for neutral trademarks) vs 17 pp for buying time

Ref.group: neutral origin	Neutral traders, share	Neutral traders, 0-1	Unit value, log
Post-sanctions x Buying time	**0.172*** **	**0.159*** **	0.0139
	(0.00693)	(0.00698)	(0.0148)
Post-sanctions x Scaling back	**0.315*** **	**0.301*** **	**0.157*** **
	(0.00574)	(0.00470)	(0.0171)
Post-sanctions x Withdrawing	**0.406*** **	**0.354*** **	**0.252*** **
	(0.00708)	(0.00622)	(0.0232)
Observations	2,529,646	2,530,565	2,497,713
R-squared	0.781	0.710	0.866

Source: Russia customs statistics and authors' calculations. ***, **, * denote statistical significance at the 1%. 5%, 10% levels. Standard errors are clustered on products. All regressions include product * trademark and product * month FE. Sample is restricted to imports where the attitude of the trademark owner to serving the Russian market is defined.