



**STRATEGY, POLICY
AND REVIEW**

The war in Ukraine and global trade

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Short and long-term trade consequences of the war in Ukraine

A first look at the effects in a World Bank report published in May 2022: [The Impact of the War in Ukraine on Global Trade and Investment](#)

In the short-term, the war created disruptions to:

- ▶ commodity markets (especially food and energy),
- ▶ logistic networks,
- ▶ supply chains,
- ▶ foreign direct investment,
- ▶ specific sectors (e.g. tourism).

Longer term: Will the war lead to a retreat from globalization?

In this talk

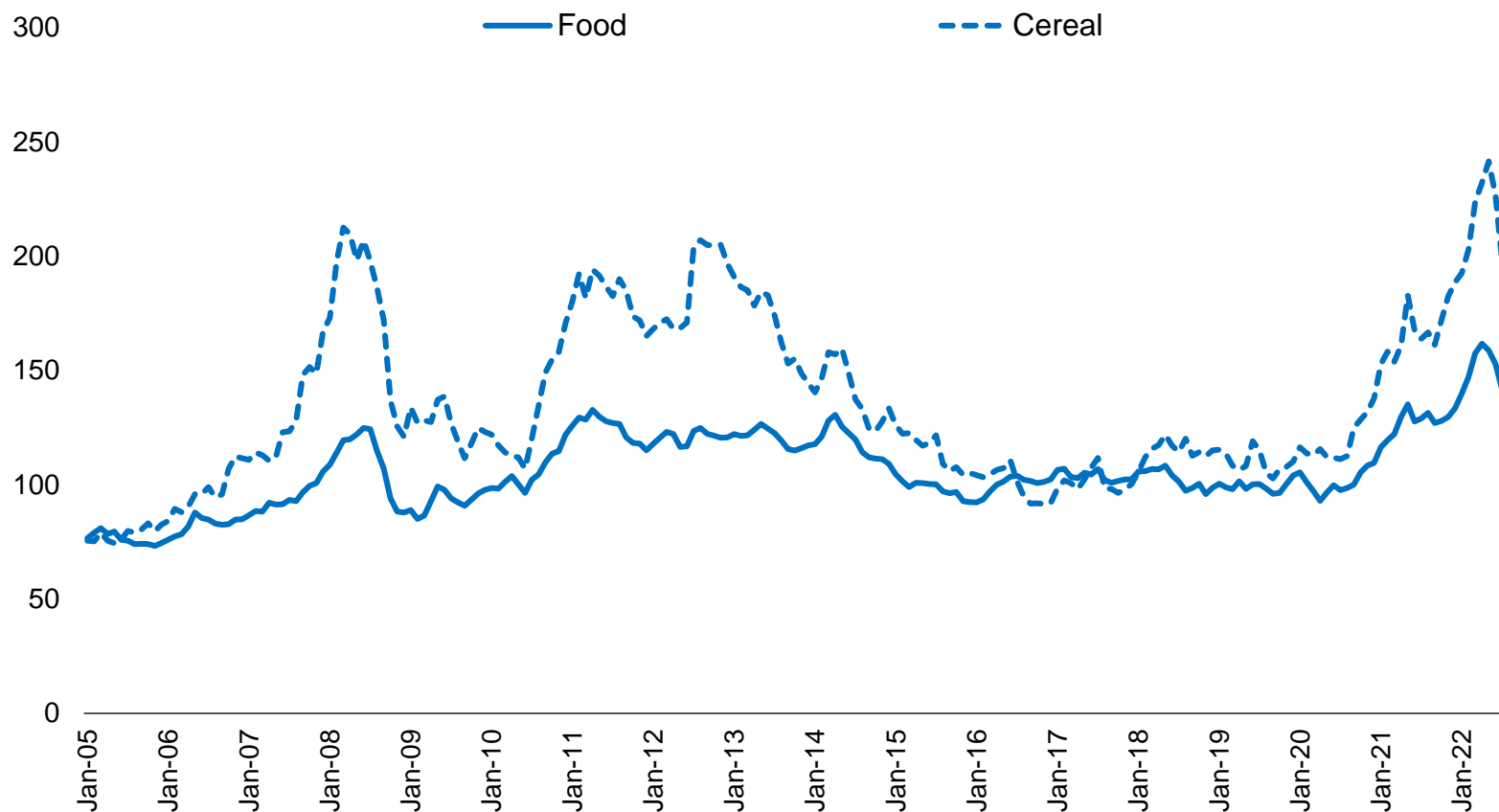
1. Short term impacts: a focus on food trade
 - ▶ Based on [Espitia, Rocha and Ruta \(2022\)](#)
2. Long term impacts: a focus on uncertainty
 - ▶ Based on [Ruta \(2022\)](#) and Jakubik and Ruta (in progress)

Trade effects of the war in Ukraine

Short term impacts: a focus on food trade

In the first half of 2022, food prices surged to levels not seen since the food crises

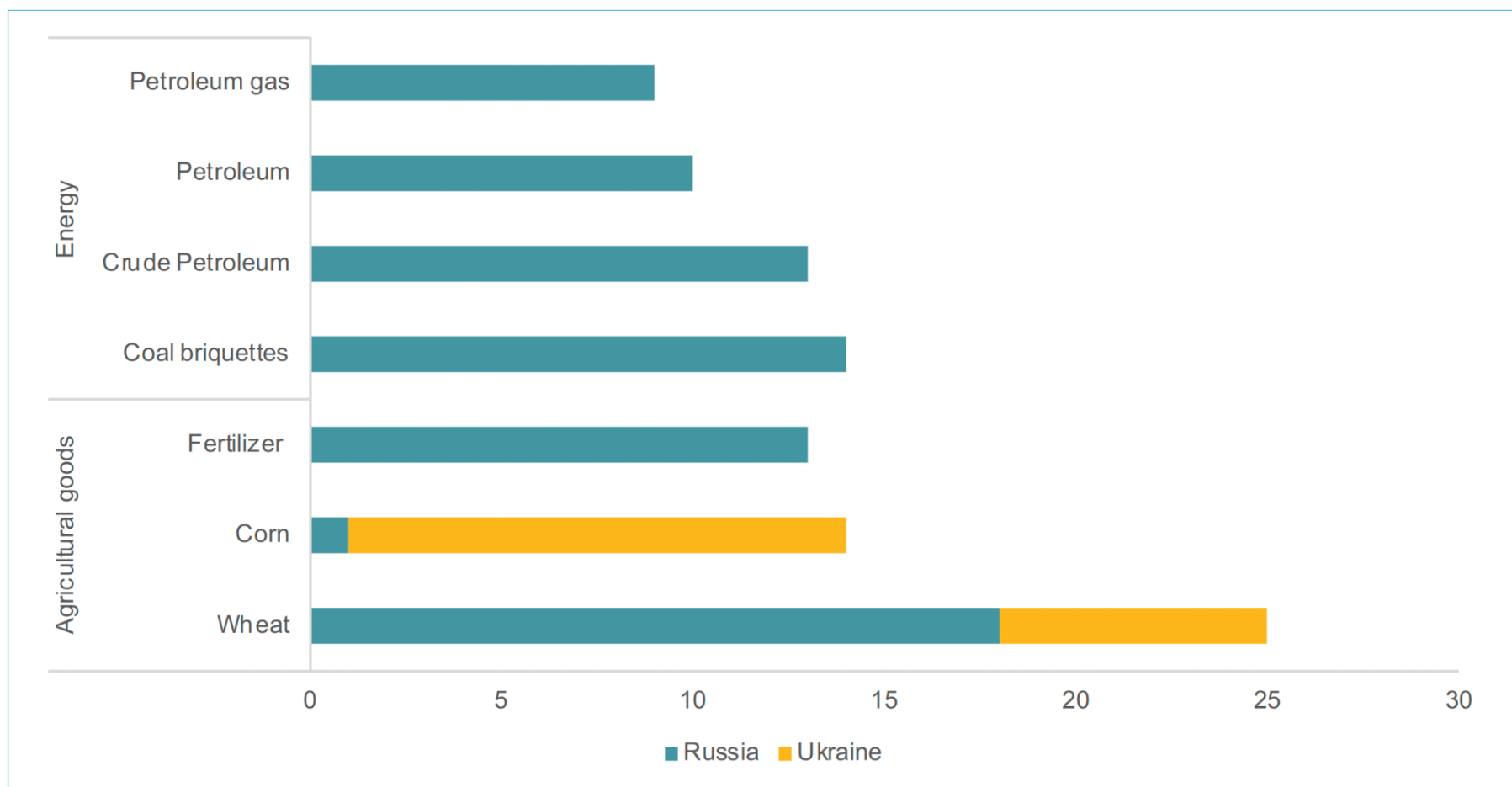
Food and cereal prices (indices 2016 = 100)



Source: Rother et al. (2022)

Disruptions in supplies from Russia and Ukraine have been a key contributing factor

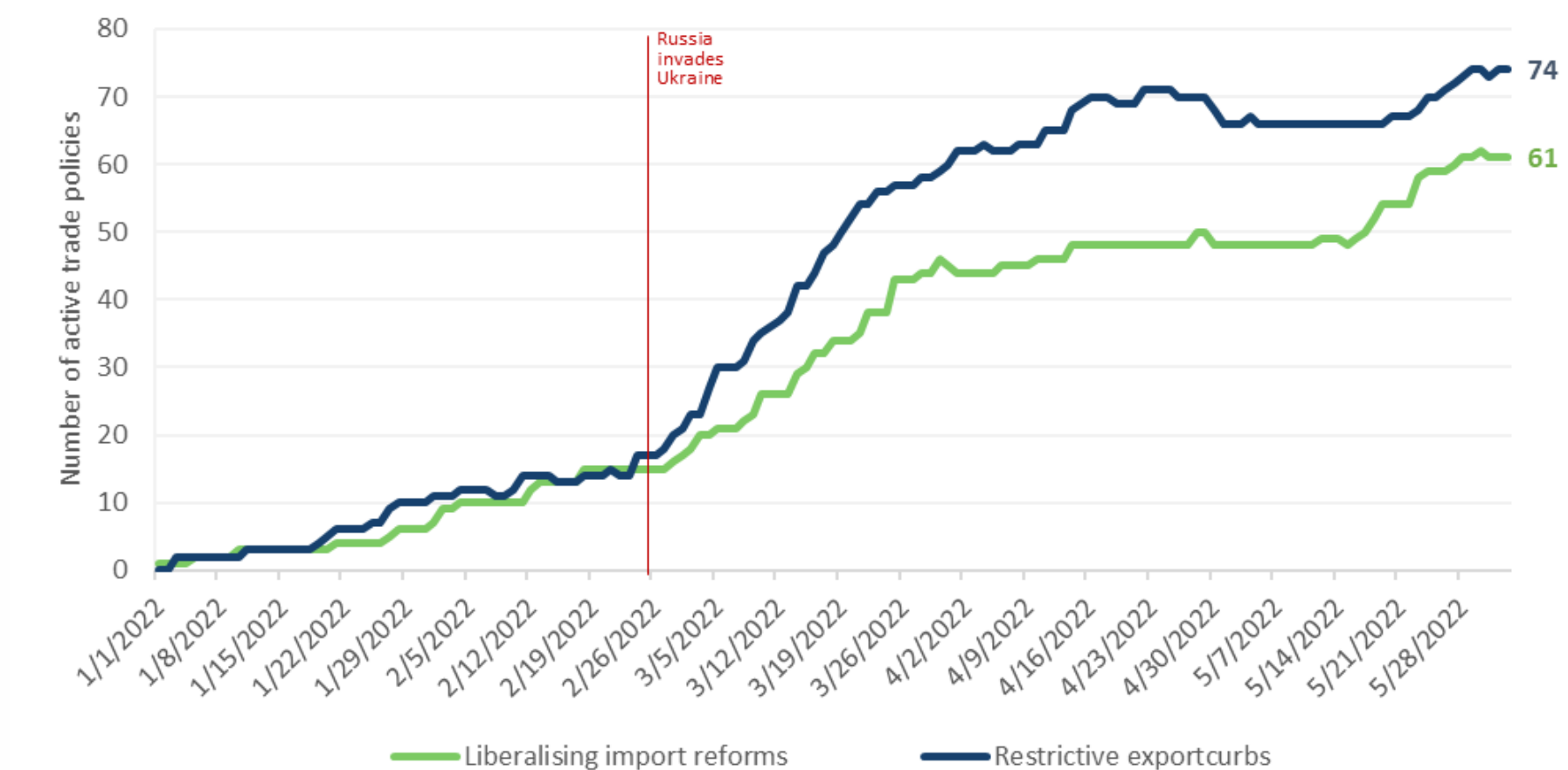
Ukraine's and Russia's share in global trade, 2019



Source: Chepeliev, Maliszewska and Pereira (2022)

Uncooperative trade policy made a bad situation worse

Number of active trade policies on food and fertilizers—January 1 to June 2, 2022



Source: World Bank and Global Trade Alert trade policy monitoring in essential goods.

A focus on export restrictions and wheat prices

Price impact of export bans imposed on selected products (Jan-July, 2022)

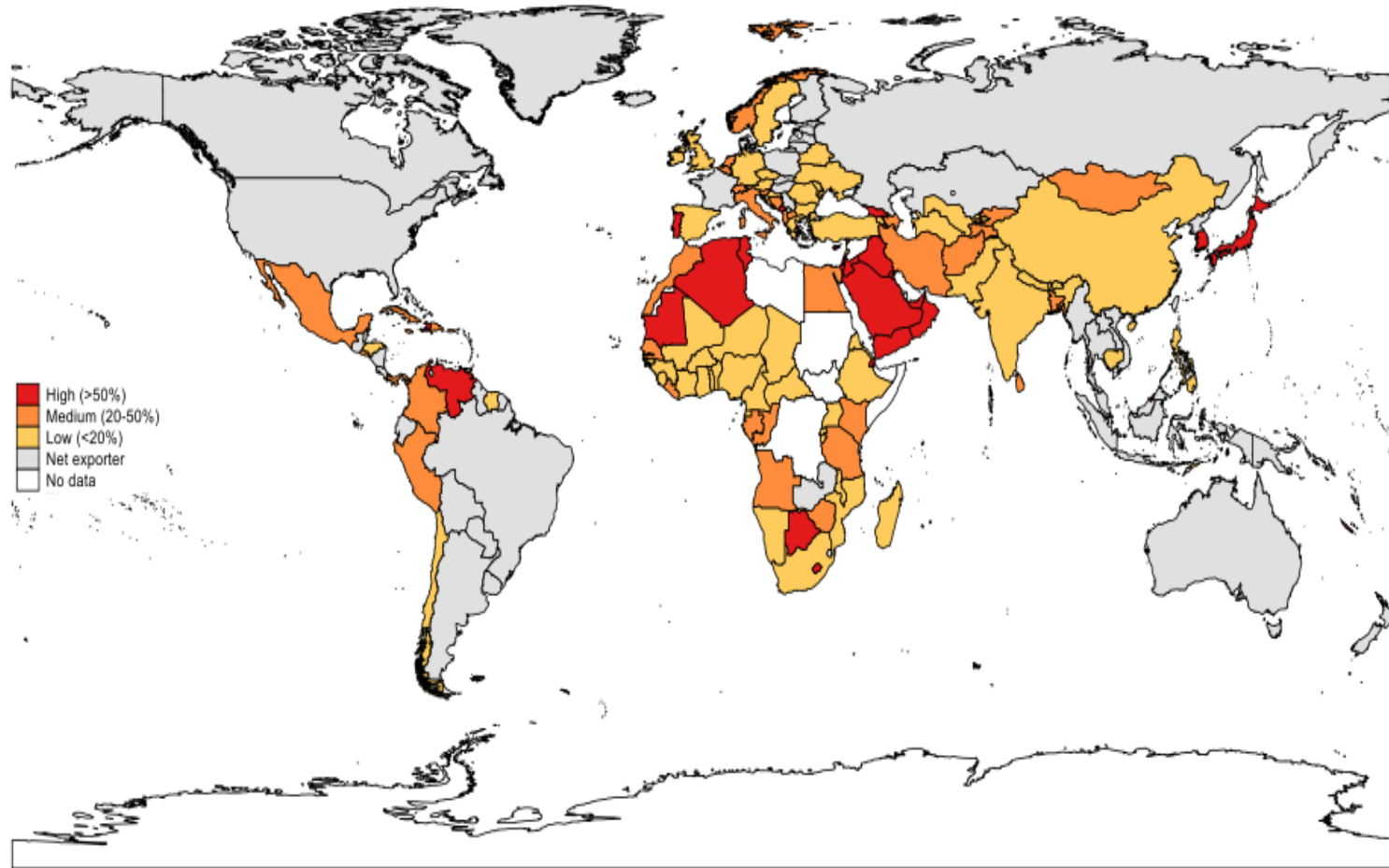
WHEAT			
Countries imposing export bans	Share of world exports in quantities (%)	Rank	Estimated price change as a result of the export ban (%)
Russian Federation*	17.5	2	7.49
Kazakhstan	2.51	10	1.08
India	0.91	16	0.39
Turkey	0.08	35	0.03
Belarus	0.01	48	0.0043
Others	0.0001	75 or above	0.00006
Total	21.0		9.0

Source: Espitia, Rocha, Ruta (2022)

Note: The direct price effects of export bans are calculated using trade elasticities from Fontagne, Guimbar and Orefice (2019) and assuming a total reduction on export quantities from trading partner. Direct Price effect (ij) = $\Delta \text{Quantity (ij)} / \text{Elasticity (ij)}$. Where i is the importer and j is the exporter.

Rising food prices can have devastating effects, especially on net food importers

Percentage of net food imports in domestic food supply (total calories)



Source: UN's Food & Agriculture Organization Global Perspectives Studies (2018)

What role for policy?

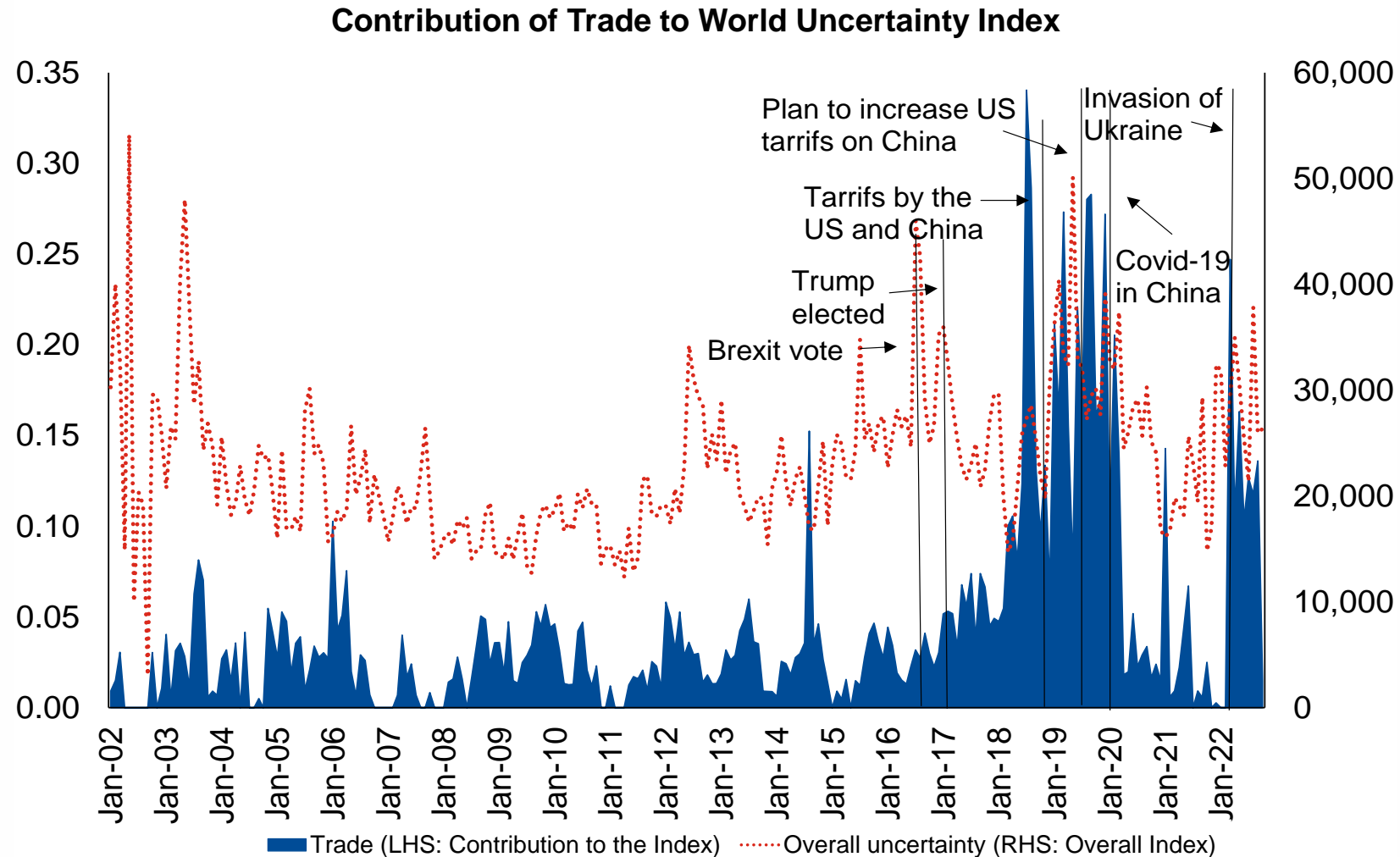
Open trade is critical to achieve food security

1. Support households vulnerable to food insecurity
2. Establish guardrails to uncooperative food trade policy
3. Create incentives to boost food production and invest in climate-resilient agriculture

Trade effects of the war in Ukraine

Long term impacts: a focus on uncertainty

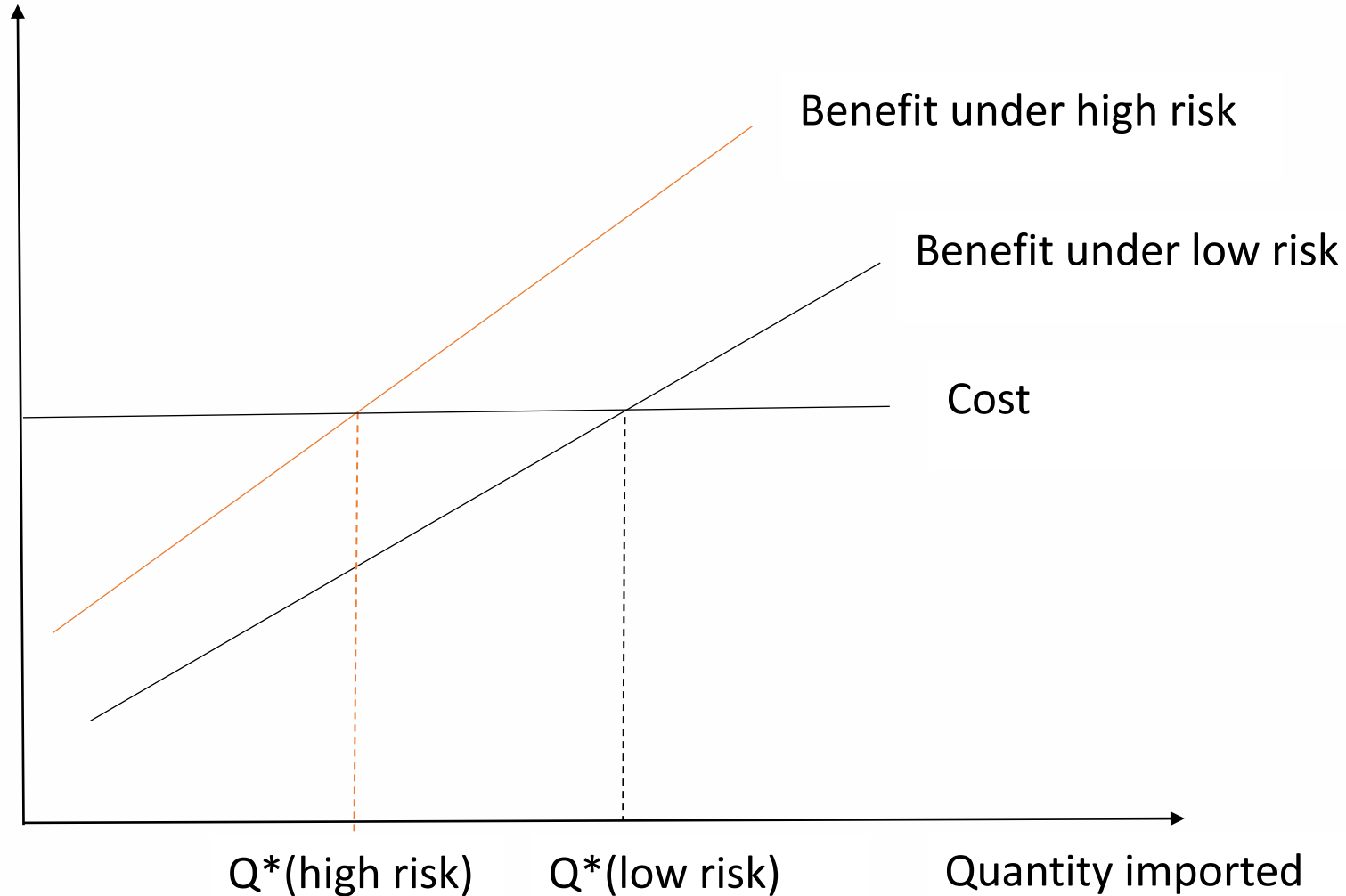
Geopolitical tensions increase trade uncertainty



Source: Ahir, H, N Bloom, and D Furceri (2022), "World Uncertainty Index", NBER Working Paper.

How do firms respond to uncertainty?

Benefits and costs of switching import sources induced by changes in uncertainty



How the war may reshape global value chains

- The war will induce GVCs to reorganize, particularly for firms that rely heavily on countries where geopolitical risks have surged.
 - But several factors create inertia: cost differentials between countries; sunk cost of building new infrastructure; search costs of establishing new relationships.
 - Products with higher fixed costs and/or relying on sophisticated intermediates are less likely to relocate in response to higher risks—unless policy intervenes.
- How will uncertainty reshape bilateral trade relationships?

Will uncertainty lead to more trade with “friends”?

- Jakubik and Ruta (2022) use a structural gravity specification to address this question.

$$TradeFlow_{ijt} = \exp(\beta_1 WTUI_t \times IPD_{jt} + \delta_{it} + \delta_{jt} + \delta_{ij}) \times \varepsilon_{ijt}$$

- WTUI is a quarterly “news based” index covering 1996-2022 based on word counts in EIU reports (Ahir, Bloom, Furceri, 2022).
- Geopolitical distance (IPD) based on UNGA voting as a measure of “friendship” (Bailey, Strezhnev, Voeten, 2017).
- Gravity dataset containing trade and production from USITC (Borchert, Larch, Shikher, and Yotov, 2022)

Results

Effects of global (trade) uncertainty on trade flows depend on the extent of bilateral relations

	(1) TPU x IPD	(2) Weighted TPU x IPD	(3) WUI x IPD	(4) Weighted WUI x IPD
IPD_{ijt}	-0.00204 (0.02040)	0.00008 (0.01990)	0.01712 (0.01973)	0.01038 (0.01945)
$WTU_t \times IPD_{ijt}$	-0.01211*** (0.00352)			
GDP Weighted $WTU_t \times IPD_{ijt}$		-0.01106*** (0.00269)		
$WUI_t \times IPD_{ijt}$			-0.01590* (0.00719)	
GDP Weighted $WUI_t \times IPD_{ijt}$				-0.01450** (0.00527)
Constant	9.78462*** (0.00419)	9.78414*** (0.00409)	9.78257*** (0.00389)	9.78341*** (0.00404)
Observations	571,204	571,204	571,204	571,204
Pseudo R-squared	0.992	0.992	0.992	0.992
Exporter-Year FE	YES	YES	YES	YES
Importer-Year FE	YES	YES	YES	YES
Importer-Exporter FE	YES	YES	YES	YES

Notes: Robust standard errors are in parenthesis, clustered at three levels: exporter, importer, and year.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Results

Results are similar across goods and commodities, not for services

	(1) Agriculture	(2) Manufacturing	(3) Mining and Energy	(4) Services	(5) Total
IPD _{ijt}	-0.02077 (0.02347)	0.01636 (0.02030)	0.02180 (0.05911)	-0.09221* (0.03846)	0.00008 (0.01990)
GDP Weighted WTU _t × IPD _{ijt}	-0.01102** (0.00392)	-0.00906** (0.00285)	-0.01750*** (0.00263)	-0.00220 (0.00741)	-0.01106*** (0.00269)
Constant	6.29890*** (0.00717)	9.50692*** (0.00458)	8.47569*** (0.02270)	8.92115*** (0.00307)	9.78414*** (0.00409)
Observations	400,086	569,535	300,840	76,320	571,204
Pseudo R-squared	0.969	0.993	0.975	0.979	0.992
Exporter-Year FE	YES	YES	YES	YES	YES
Importer-Year FE	YES	YES	YES	YES	YES
Importer-Exporter FE	YES	YES	YES	YES	YES

Notes: Robust standard errors are in parenthesis, clustered at three levels: exporter, importer, and year.

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What role for policy?

- The world economy will be hurt by the uncertainty-induced reshaping of trade, but some countries will gain and others lose.
 - As firms adjust their trade structure to the new environment in the pursuit of economic efficiency, they may seek new suppliers in developing countries that have a latent comparative advantage and lower risks.
- In this context, the true risk comes from measures that aim at reshoring, nearshoring, or fragmenting the trade system.
- Rather, government policies should focus on defusing tensions and strengthening global value chains against future disruptions.

Thank you

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