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Ethnic Networks in Ex-USSR

Do ethnic networks facilitate international trade when formal institutions are weak? Using data collected by ethnologists on the share of ethnic groups across countries, this study assesses the effect of ethnic networks on bilateral trade across the sphere of the former Soviet Union. This region provides a perfect setting to test for this effect as both forced re-settlement of entire ethnic groups during the Stalin era and artificially drawn borders in Central Asia led to an exogenous ethnic composition within countries. While ethnic networks do not seem to have played a role in inter-republic trade during the Soviet Union, they did facilitate trade in the years following the collapse of the Soviet Union, a transitional period when formal institutions were weak. This effect, however, eroded steadily from the early 2000s.



Economists and historians alike study the role of ethnic networks in international trade. Some prominent examples are the Greek commercial diaspora of the Black Sea in the 19th century (Loannides and Minoglou, 2005), the Maghribi traders in 11th-century North Africa (Greif, 1993), or the overseas Chinese all around the world in the last decades (Rauch and Trindade, 2002). Such networks facilitate trade by building trust relationships, enforcing contractual agreements in weak legal environments, matching buyers with faraway sellers that speak different languages, and by exchanging information on arbitrage opportunities.

In “Ethnic Minorities and Trade: The Soviet Union as a Natural Experiment”, forthcoming in *The World Economy*, we study the Soviet Union (USSR) to assess the role of ethnic networks in international trade. We argue that ex-USSR countries are particularly well suited for such a study. Indeed, the ethnic diversity of ex-USSR countries is exogenous, partly due to the creation of artificial borders cutting through ethnic homelands, and partly due to forced relocations (deportations) during the Stalin era, which brought ethnic groups to various remote regions of the USSR. This exogeneity adds power to our empirical strategy.

Ethnic Networks in the USSR

We first build a measure of ethnic networks based on the size of common ethnic groups using ethnologists' data from the Ethnic Power Relations Dataset on the resulting ethnic groups across ex-USSR countries (Vogt et al., 2015; Bormann et al., Forthcoming). It covers all ethnic groups in every country of the world from 1946 to 2013. While there is some yearly variation in the data, we focus on the cross-section average for the pre-1991 period as per our identification strategy based on exogenous distributions.

Figure 1 gives an overview of the spatial distribution of ethnic groups, such as Russian, Kazakh, or Uzbek.

Figure 1. Ethnic Groups in the USSR



Source: Authors' own ArcGIS mapping based on the EPR-ED dataset.

Russians are ubiquitous across the Soviet sphere. Countries with the largest ethnic Russian populations are Kazakhstan, Estonia, Latvia and Moldova. At the same time, Russia is very diverse. Almost all of the 60 ex-USSR ethnic groups are present in Russia, and ethnic Russians account for only 62% of the population. Most countries are ethnically diverse. Kazakhstan for example is home to Russians as well as Germans, Tatars, Ukrainians, Uzbeks and Uighurs.

From the information on ethnic populations within each country, we create an ethnic network index as the sum of products of common ethnic groups as a share of the country's population. Figure 2 presents a matrix overview of the ethnic network index among country pairs with darker shades corresponding to higher scores. Some high scoring country pairs are Russia—Kazakhstan, Ukraine—Russia, Uzbekistan—Tajikistan, Kyrgyzstan—Uzbekistan, Latvia—Kazakhstan, and Ukraine—Kazakhstan.

Figure 2. Ethnic Networks Index

	ARM	AZE	BLR	EST	GEO	KAZ	KGZ	LTU	LVA	MDA	RUS	TJK	TKM	UKR	UZB
ARM	.	.02	0	0	.08	0	0	0	0	0	.01	0	0	0	0
AZE	.02	.	0	0	.06	0	0	0	0	0	.01	0	0	0	0
BLR	0	0	.	.04	0	.05	.03	.02	.07	.03	.13	.01	0	.02	.01
EST	0	0	.04	.	0	.1	.06	.02	.07	.05	.21	.02	.01	.06	.02
GEO	.08	.06	0	0	.	0	0	0	0	0	.01	0	0	0	0
KAZ	0	0	.05	.1	0	.	.08	.04	.11	.08	.32	.04	.03	.11	.05
KGZ	0	0	.03	.06	0	.08	.	.02	.06	.05	.18	.06	.01	.04	.13
LTU	0	0	.02	.02	0	.04	.02	.	.03	.02	.08	.01	0	.02	.01
LVA	0	0	.07	.07	0	.11	.06	.03	.	.06	.24	.02	.01	.07	.02
MDA	0	0	.03	.05	0	.08	.05	.02	.06	.	.17	.02	.01	.04	.02
RUS	.01	.01	.13	.21	.01	.32	.18	.08	.24	.17	.	.07	.03	.27	.08
TJK	0	0	.01	.02	0	.04	.06	.01	.02	.02	.07	.	.01	.01	.23
TKM	0	0	0	.01	0	.03	.01	0	.01	.01	.03	.01	.	.01	.04
UKR	0	0	.02	.06	0	.11	.04	.02	.07	.04	.27	.01	.01	.	.01
UZB	0	0	.01	.02	0	.05	.13	.01	.02	.02	.08	.23	.04	.01	.

Source: Authors' estimates. The index is the sum of products of common ethnicities as a share of the country's population.

Effect of Ethnic Networks on Bilateral Trade in the USSR

Next, we evaluate the impact of ethnic networks on aggregate trade between the countries of the former Soviet sphere. We use trade data from two sources. First, the data on internal trade between Soviet republics from 1987 to 1991 are from the input-output tables of each Soviet Union republic as compiled by the World Bank mission to the Commonwealth of Independent States (Belkindas and Ivanova, 1995). Second, the Post-1991 to 2009 trade data are from the Correlates of War Project (Barbieri et al., 2009, 2016), which offers the best coverage of the trade in the region.

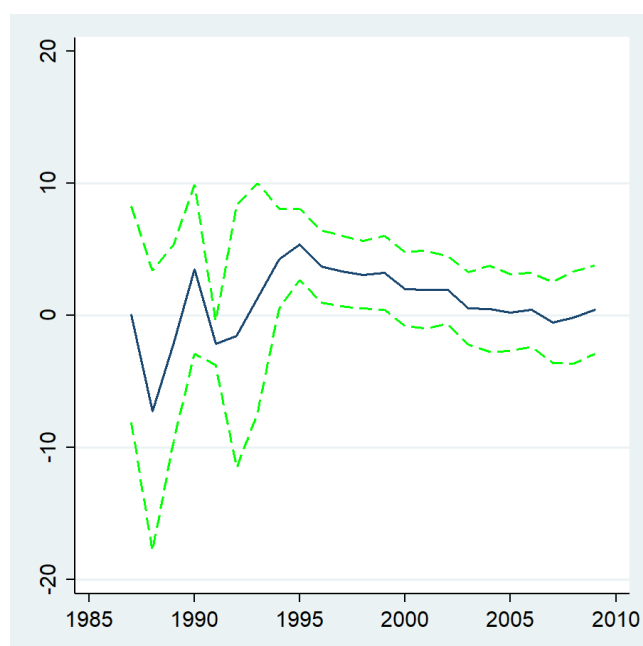
We follow the migrant network and trade literature and estimate a standard log-linear gravity equation controlling for importer-year and exporter-year fixed effects (Anderson and van Wincoop, 2003).

Figure 3 presents the results on the effect of ethnic networks on trade over time. We observe that there is no effect in the period before the end of the USSR, a positive effect after the breakup of the Soviet Union, and an erosion of this effect

from 2000s on (omitting Russia from the sample does not alter the results).

These results can be explained with the fact that in the Soviet Union ethnic ties did not matter as official production and trade were centrally planned by the State Planning Committee, Gosplan, and by State Supplies of the USSR, or Gossnab, which was in charge of allocating producer goods to enterprises. Free trade was forbidden. However, once the Soviet system collapsed and before countries could establish more formal trade ties, the first reaction and fallback option for many people was to reach out to their co-ethnics (in the 1990s) to substitute for the broken chains of the centrally planned trade (Gokmen, 2017). The other reason is that the institutional framework was at its weakest in this transitional period, and hence, reliance on informal institutions such as ethnic networks may have been especially strong (Greif, 1993). Once systematic and formal trade ties could be established, more and more traders no longer had to rely on their ethnic networks and this could explain the decline in the effect in the 2000s.

Figure 3. The Effect of Ethnic Networks on Trade over Time



Source: Authors' estimates. Estimate of the effect of ethnic networks on bilateral trade in a gravity model controlling for distance, contiguity, and importer and exporter fixed effects.



Conclusion

This study shows that ethnic minorities played a role in shaping trade patterns across ex-USSR countries, but only in the early years following the collapse of the Soviet Union. Thus, we argue that reliance on informal institutions, such as ethnic networks, in forming trade relations is especially strong when the institutional framework is at its weakest in the transition period. This message may hold, not only for transition countries, but also for other developing countries with poor institutions.

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