THE EFFECTIVENESS OF MONGOLIA’S “THIRD NEIGHBOR” POLICY:
EVIDENCE FROM TRADE DATA

By

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ABSTRACT

Landlocked countries have a severe disadvantage as they have to rely on their neighbors for access to trade routes. Mongolia has only China and Russia as neighbors and while the booming economies of these emerging countries have offered some benefits, the country has been trying to foster relations with “third neighbor” nations as well. This paper uses a gravity framework to assess the success of the “Third Neighbor” policy over the period 1992-2014. In particular, I use trade data to estimate Mongolia’s border effects with its two large neighbors and compare these to the trade hurdles between Mongolia and five other countries. The results show that Mongolia’s border effects with China and Russia are much lower than for any other country, even after controlling for distance and contiguity. Among other countries, only Korea has border effects that are close to those by Mongolia’s two neighbors. My findings suggest that Mongolia has not been very effective in expanding its trade relations with third neighbors and is likely to experience a slowdown as China’s growth rates are in decline.
1. Introduction

In a 2014 address on the US vision for Asia Pacific Engagement, Secretary of State John Kerry said, “Foreign policy is economic policy, and economic policy is foreign policy. They are one in the same. There’s no denying that, particularly in the Asia Pacific” (Pacific Council on Int’l Policy).

Similar sentiment is reflected in the structure of trade policy for many states. Indeed, the very existence of trade barriers as an international norm suggests just how inextricable political influence is in the creation of trade policy. Research has shown time and time again that tariffs, embargos, and other protectionist measures or “non-tariff barriers” often produce “dead-weight loss,” or aggregate reductions of global economic output. Economists dating back to David Hume (1742), Adam Smith (1776), and David Ricardo (1817) have advocated for free markets and free trade as a way to promote the efficient use of an economy’s resources. The analyses derived from these foundational works argue that there are tremendous gains from free trade due to increased specialization and comparative advantage, meaning that trade allows nations to increase productivity by shifting capital and resources to sectors of their economy that are more productive than other sectors. This specialization can eventually lead to higher productivity and higher living standards than if these states did not trade (Langenfield 2005). Despite this, states continue to implement limits on world economic output in the form of protectionist trade measures and barriers that often align with political relationships (Mansfield 1995).

These politically motivated trade policies are especially pronounced in post-
Communist states, where emergence and integration into the market economy is a priority for all and a quandary for many. Post-Communist states, having spent decades in isolation from global trade, have often attempted emulating advanced industrialized economies in trade policy, states that are mostly parliamentary democracies, and whose institutions are radically different from those emerging from centrally commanded economies and state-controlled civil society. Analysis of trade policy in post-Communist states; it’s goals, priorities, implementation, and effectiveness, allows for a deepened understanding of the outlook for emerging market economies (Vezina 2014).

Over the past few decades, post-Communist states have made considerable progress in liberalizing trade, in fact, the European Bank for Reconstruction and Development (EBRD), which annually reports on post-Communist state trade liberalization, observed:

“…it is striking that, within very few years of the beginning of the economic transition, import regimes have become highly liberal by international standards in most countries of the region… In fact, of the 16 countries where average tariffs have been established or can be inferred, in ten countries, it is lower than the current OECD average of 3.6%.”

While as a whole, post-Communist states have made considerable progress in trade and commercial reform, there is still wide variation across these states. Some, such as Uzbekistan, have made little effort to liberalize commerce, while others, such as Ukraine, have maintained liberal, open trade policy (Frye 2003). The body of literature examining trade policy in post-Communist remains small, and often focuses on examining institutional variation across these states, and its resulting impact on trade policy and trade liberalization in these states as an indicator of global economic
integration. Relatively little literature examines the impact of trade policy on trade flows, and its resulting impact on diplomacy among relevant actors (Frye 2003). However, an evaluation of the impact of trade policy on trade flows is a crucial variable conditioning the relationship between trade policy and diplomatic relations. The purpose of this paper is to examine the extent to which this intervening variable conditions the relationship between policy and diplomacy in the case of one post-Communist state whose location, history, and diplomatic relations pre and post-Communism make it especially advantageous for a study of this sort.

**Mongolia: Landlockedness and Trade**

Landlocked countries have a severe disadvantage in the age of globalization as they have to rely on transit corridors to gain access to ports if they want to benefit from international trade (Carmingnani 2015). As a result, the majority of landlocked countries exhibits extremely low levels of socioeconomic development, and is categorized as least developed countries (LDCs) by the United Nations. Because many of these countries have relatively small economies, they do not possess enough political weight to extract greater gains in trade negotiations with larger neighboring countries. As a result, the trade of landlocked countries is on average 28% less than for maritime ones (Carrere, 2006). Moreover, these countries have significantly lower per-capita income and human development levels; in fact, nine of the twelve countries with the lowest HDI scores are landlocked.

For landlocked countries, effective trade policy is crucial for economic performance. However, for many landlocked countries, tumultuous relations with
neighbors color trade negotiations and often lead to less than favorable outcomes. Many African landlocked nations (such as Burundi or Zimbabwe) have trade relations with neighbors that are fraught with embargos and other trade barriers, as a history of ethnic violence and socio-political tensions has severely inhibited economic integration in the region. In less extreme cases, such as that of post-communist states, relations with Russia and other Soviet Union countries have lingering effects on trade relations and primary trade partners (Sharma 2015).

This paper uses Mongolia as a case study for the relationship between trade policy, trade flows, and diplomacy, because it exhibits many of the common problems of other landlocked countries but also offers some unique features that make it an interesting case. It is located between Russia and China, which have traditionally been at odds with each other. Mongolia had been part of the Chinese empire for more than two centuries when it declared independence after the fall of the Qing dynasty in 1911. Soviet Russia helped Mongolia establish a Communist regime in 1921. The country remained closely associated with the Soviet Union for the following seven decades and its relations with China deteriorated after the Sino-Soviet split in the early 1960s. The demise of the Soviet Union ushered a new period marked by growing Chinese influence, while Russia was preoccupied with the transformation of its political and economic system (Radchenko 2014).

Since the start of its transition towards democracy and a market economy in the early 1990s, Mongolia has tried to maintain good ties with both neighbors and take advantage of their rapid economic growth. This is especially evident with the development of Mongolia’s mining sector, as China’s demand for raw materials for its
expanding economy has offered Mongolia the chance to exploit its natural resources with the help of foreign investment and expertise.

At the same time, Mongolia remains wary of Russia and China and its foreign policy over the past quarter century has been guided by the “Third Neighbor” doctrine.¹ The basic tenet of this doctrine is the notion that Mongolia should foster closer relationships with countries other than Russia and China in an attempt to counterbalance the influence of its large neighbors. The degree of concerted effort made by Mongolian officials to implement this trade policy, by facilitating trade with countries that are farther away than its neighbors, is unparalleled in global trade.

*Mongolia and Third Neighbor Policy*

Over the years, various countries have been considered suitable partners, including, among others, the United States, Australia, India, Turkey, South Korea and Japan. However, the “Third Neighbor” policy is likely to prove successful only if diplomatic relations are reinforced with closer economic ties. Mongolia’s landlockedness and remoteness limit the number of potential partners to the ones that have expertise in mining (e.g., Australia, Canada, USA), close regional connections (South Korea, Japan), or traditional ties (e.g., Central and Eastern European countries in the EU).

The main objective of this paper is to examine the effects of Mongolia’s “Third Neighbor” policy on trade flows and on diplomacy by focusing on trade flows as a measure of economic integration and closer relations. For this purpose, I estimate a gravity model for the period 1992-2014 using data on Mongolia’s trade with seven of its

¹ Its name derives from a speech given by James Baker in Mongolia in 1990 when the then US Secretary of State called the United States Mongolia’s “third neighbor.”
major partners that account for 95% of its exports and imports. In particular, I quantify
the so-called border effects that measure the costs associated with cross-border trade in
goods.

Smaller border effects facilitate trade and can thus be interpreted as a sign of
closer economic ties. In this evaluation of the “Third Neighbor” policy, I compare
Mongolia’s border effects with Russia and China to those with third countries and
attempt to identify the ones that have potential as the third option. There is a large
literature on trade that uses gravity models and often includes landlockedness as one of
the control variables in the regression. This is also the case for the sub-category of works
estimating border effects. However, relatively few articles have dealt specifically with a
sample of landlocked developing countries. Faye et al. (2004) argue that besides the
distance from the coast, the performance of these countries depends on four aspects of
their neighbors, including infrastructure, political stability, administrative practices, and
cross-border political relations. The relative importance of each of these factors depends
on the specific situation of each country in question. These findings are supported by
Paudel (2014) who uses a large dataset to demonstrate that while landlockedness hampers
economic growth, countries with good governance and infrastructure projects coordinated
with their neighbors exhibit significantly higher growth rates. Case studies on the trade of
landlocked countries are also scarce. Carrere and Grigoriu (2008) use a gravity equation
to investigate the impact of infrastructure and landlockedness in Central Asia. Paudel and
Burke (2015) explore the effects of exchange rate policies on trade in landlocked Nepal.
In the absence of previous research on the topic, this paper contributes to the literature by
exploring Mongolia’s trade and border effects in a gravity framework with the goal of
assessing the country’s “Third Neighbor” policy.

The paper is structured as follows. The next section presents the regression model used in the empirical investigation. In Section 3 I discuss the data, while Section 4 provides an overview of Mongolia’s trade and presents the estimates of the border effects. Section 5 summarizes the findings and offers policy recommendations.

2. Methodology

Anderson and van Wincoop (2003) provide the theoretical basis for the gravity framework used in this paper. They use a two-country trade model assuming that each country is specialized in the production of a single good and that consumer preferences are identical, homothetic, and approximated by a constant elasticity of substitution (CES) utility function. Under certain assumptions (e.g., market clearance, symmetrical trade costs), the model yields the following expression for the exports of country $i$ to country $j$:

$$x_{ij} = \frac{y_i y_j}{y_w} \left( \frac{t_{ij}}{P_i P_j} \right)^{1-\sigma}$$  \hspace{1cm} (1)

where $y$ denotes the country’s nominal income, $y_w$ is the world income, $t$ denotes the bilateral trade costs, $P$ is the price index, and $\sigma$ is the elasticity of substitution. Eq. (1) indicates that bilateral trade is determined by the size of each economy, trade costs, and price levels. The price levels, labelled as multilateral trade resistance terms by Anderson and van Wincoop (2003), are more broadly interpreted as the average trade barriers that each country faces with all of their trading partners.

After linearizing Eq. (1) and decomposing trade costs into several components, the gravity equation takes the form of:
\[ 
\ln x_{ij} = \ln (y_iy_j) - \ln y^W + (1 - \sigma) \ln b (1 - \delta_{ij}) + (1 - \sigma) \rho \ln d_{ij} + (1 - \sigma) \tau_{ij} - (1 - \sigma) \ln P_i - (1 - \sigma) \ln P_j \] 

(2)

where \( b \) is defined as the border effect, \( \delta_{ij} \) is a dummy variable that takes the value of one for intra-national trade, and zero otherwise, \( d \) is bilateral distance, and \( \tau_{ij} \) includes all remaining trade costs besides border effects and distance.

The regression model derived from Eq. (2) and used in the empirical investigation is given by:

\[ 
\ln \left( \frac{x_{ijt}}{y_{it}y_{jt}} \right) = \beta_0 + \alpha_i \lambda_i + \alpha_j \lambda_j + \eta_t + \beta_1 \ln d_{ij} + \beta_2 \text{CONT}_{ij} + \beta_3 (\text{MNG} \times \text{RU}) \\
+ \beta_4 (\text{MNG} \times \text{CHN}) + \beta_5 (\text{MNG} \times \text{ROW}) + \epsilon_{ijt} 
\] 

(3)

The dependent variable is the log of size-adjusted trade, while the control variables are the log of distance and contiguity (CONT). The main variables of interest are the three border effects that define Mongolia’s trade flows with Russia, China, and the rest of the world. Each of these is specified as a dummy variable that takes the value of 1 for trade between Mongolia and one of these countries, and zero otherwise. I also include border effects for all possible remaining combinations of trade relationships between Russia, China, and the rest of the world but I do not report these as they serve only as controls and are of little interest for the purposes of the paper. Eq. (3) takes into account factors that vary across countries but not across time via exporter and importer fixed effects. Similarly, factors that vary across time but not across countries are controlled for by including time-fixed effects (\( \eta_t \)).
3. Data

Data on bilateral trade flows over the period 1992-2014 is obtained from the IMF’s *Direction of Trade Statistics (DOTS)* database. In line with the literature, I calculate a given bilateral exchange by averaging the numbers reported by the exporting and importing nation. The EU is treated as a single entity, which was assumed to have existed in its current composition of 28 member states since 1992. Switzerland is counted as part of the EU given its status as a one of the major trading partners of Mongolia. Similarly, CIS is considered a single trading bloc with a constant composition that excludes Russia. Finally, China’s trade is the sum of the trade of mainland China, Hong Kong, and Macao.

Geographical distances are collected from CEPII’s *GeoDist* database (Mayer and Zignago, 2011) and are based on the great-circle distance between the principal cities of the trading partners weighted by the share of each city’s share in their respective country’s total population. Moreover, the database reports internal distances, which reflect the average distance between producers and consumers within a given country (Head and Mayer, 2010). The distance between a trade bloc (CIS or the EU) and a given country is the weighted average of the distances between each member state and that country with trade shares serving as weights.

Following the gravity literature, intra-national trade is calculated as gross output net of exports. Given our focus on trade in goods, I deduct the value added of services from the gross output. All variables involved in this computation were taken from the World Bank’s *World Development Indicators* database.
4. Results

4.1. Overview of Mongolia’s trade

At first, I conduct a preliminary exploration of Mongolia’s trade. The sample period is divided into two sub-periods (1992-2002 and 2003-2014) and trade flows are averaged across time. The resulting trade networks are illustrated in Fig. 1. Trade flows not involving Mongolia are left out for clarity. The width and length of the lines is proportional to the bilateral trade volume and distance, respectively, while the area of the circles reflects the average share of a given country in Mongolia’s overall trade. Trade with the seven countries and trade blocs accounts for approximately 96% of Mongolian exports and 95% of imports. Over the 1990s, Russia and China dominate Mongolia’s trade. The EU ranks third with a trade volume equivalent to the ones of Japan and Korea taken together. In the 2000s, China emerges as the main trading partner of Mongolia, eclipsing all other countries.
Fig. 1: Trade network of Mongolia, 1992-2002 and 2003-2014
A similar pattern becomes apparent in Fig. 2, which shows Mongolia’s exports and imports over the entire sample period. Since the late 1990s, China gradually
surpasses Russia and the rest of the world as the main destination for Mongolian exports. The expansion of mining leads to an exponential rise in Mongolian exports to China since the mid-2000s. In 2014, Mongolian exports to the rest of the world were less than 4% of exports to China. For imports, the picture is more nuanced. Russia remains the major importer in Mongolia until China takes over in the aftermath of the global financial crisis in 2009. However, the gap between China on the one hand and Russia and the rest of the world on the other is notably smaller for imports then exports.

4.2. Estimates of border effects

The estimated coefficients of the regression model in Eq. (3) are presented in Table 1. The first column reports the estimates for the entire sample period. The coefficients for distance and contiguity have the expected sign suggesting that longer distances have an adverse effect on trade, while shared borders promote the exchange of goods. The three coefficients for the border effects are similar in magnitude. To facilitate the interpretation, the estimates are converted to ad-valorem tariff equivalents using two different levels of elasticity of substitution (5 and 10) common in the literature. Accordingly, Mongolia’s border effects with Russia (between 78% and 264%) are lower than those for China (between 78% and 267%) but the difference between the two numbers in not statistically significant. Similarly, all other countries taken together have the highest border effect with Mongolia but it is also not significantly different from those for Mongolia’s two large neighbors.

I also estimate the regression for two subperiods and present the results in the second and third columns. Over the 1990s, Russia border effects were significantly lower than
those for China or for the rest of the world. During this period, Russia’s trade with Mongolia seems to have encountered fewer hurdles than with any other trading partner, and this was not due to distance or contiguity. China, on the other hand, was no different than the rest of the world in

Table 1: Border effects of Mongolia, 1992-2014

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>$MNG \times RU$</td>
<td>-5.166*** (0.268)</td>
<td>-4.647*** (0.403)</td>
<td>-5.642 (0.314)</td>
</tr>
<tr>
<td></td>
<td>$\sigma=5$ 263.82</td>
<td>$\sigma=10$ 77.54</td>
<td>$\sigma=5$ 309.80</td>
</tr>
<tr>
<td></td>
<td>$\sigma=10$ 77.54</td>
<td>$\sigma=10$ 67.59</td>
<td>$\sigma=10$ 87.18</td>
</tr>
<tr>
<td>$MNG \times CHN$</td>
<td>-5.199*** (0.258)</td>
<td>-5.377*** (0.389)</td>
<td>-5.036*** (0.304)</td>
</tr>
<tr>
<td></td>
<td>$\sigma=5$ 266.84</td>
<td>$\sigma=10$ 81.75</td>
<td>$\sigma=5$ 252.19</td>
</tr>
<tr>
<td></td>
<td>$\sigma=10$ 78.19</td>
<td>$\sigma=10$ 81.75</td>
<td>$\sigma=10$ 74.99</td>
</tr>
<tr>
<td>$MNG \times ROW$</td>
<td>-5.350*** (0.228)</td>
<td>-5.128*** (0.344)</td>
<td>-5.553*** (0.268)</td>
</tr>
<tr>
<td></td>
<td>$\sigma=5$ 280.95</td>
<td>$\sigma=10$ 76.79</td>
<td>$\sigma=5$ 300.78</td>
</tr>
<tr>
<td></td>
<td>$\sigma=10$ 81.20</td>
<td>$\sigma=10$ 76.79</td>
<td>$\sigma=10$ 85.34</td>
</tr>
<tr>
<td>ln(Distance)</td>
<td>-0.377*** (0.032)</td>
<td>-0.480*** (0.048)</td>
<td>-0.283*** (0.038)</td>
</tr>
<tr>
<td></td>
<td></td>
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</tr>
<tr>
<td>Contiguity</td>
<td>1.562*** (0.113)</td>
<td>1.575*** (0.170)</td>
<td>1.551*** (0.132)</td>
</tr>
<tr>
<td>Constant</td>
<td>-22.934*** (0.351)</td>
<td>-22.317*** (0.513)</td>
<td>-23.705*** (0.401)</td>
</tr>
<tr>
<td>Obs.</td>
<td>1421</td>
<td>677</td>
<td>744</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.83</td>
<td>0.84</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Note: Robust standard errors are in parentheses. The coefficients of the dummy variables for trade not involving Mongolia are not reported. The tariff equivalent of the border effects (in %) is shown for two levels of the elasticity of substitution ($\sigma$). * $p<.10$; **$p<.05$; ***$p<.01$. 
terms of border effects with Mongolia. However, over the 2000s and early 2010s, roles were reversed. China now exhibited trade barriers with Mongolia significantly lower than those for Russia or the rest of the world. By contrast, Russia was not any different than the rest of the world in terms of barriers to trade with Mongolia. This pattern reversal was due to the deepening trade relationship between Mongolia and China thanks to the boom in mining in the former and the rapid growth in the latter.

Table 2: Estimates for potential “third neighbors”, 1992-2014

<table>
<thead>
<tr>
<th></th>
<th>EU</th>
<th>USA</th>
<th>Korea</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MNG × RU</strong></td>
<td>-4.523*** (0.324)</td>
<td>-5.007*** (0.334)</td>
<td>-5.100*** (0.341)</td>
<td>-5.219*** (0.333)</td>
</tr>
<tr>
<td><strong>MNG × CHN</strong></td>
<td>-4.674*** (0.279)</td>
<td>-5.070*** (0.284)</td>
<td>-5.147*** (0.291)</td>
<td>-5.244*** (0.285)</td>
</tr>
<tr>
<td><strong>MNG × TN</strong></td>
<td>-5.453*** (0.272)</td>
<td>-6.633*** (0.338)</td>
<td>-5.565*** (0.321)</td>
<td>-6.690*** (0.291)</td>
</tr>
<tr>
<td><strong>MNG × ROW</strong></td>
<td>-4.626*** (0.296)</td>
<td>-5.077*** (0.300)</td>
<td>-5.393*** (0.305)</td>
<td>-5.596*** (0.298)</td>
</tr>
<tr>
<td>ln(Distance)</td>
<td>-0.549*** (0.036)</td>
<td>-0.419*** (0.040)</td>
<td>-0.394*** (0.044)</td>
<td>-0.362*** (0.040)</td>
</tr>
<tr>
<td>Contiguity</td>
<td>1.565*** (0.136)</td>
<td>1.483*** (0.111)</td>
<td>1.814*** (0.121)</td>
<td>1.651*** (0.120)</td>
</tr>
<tr>
<td>Constant</td>
<td>-22.195*** (0.411)</td>
<td>-22.674*** (0.419)</td>
<td>-22.826*** (0.443)</td>
<td>-22.732*** (0.432)</td>
</tr>
<tr>
<td>Obs.</td>
<td>1421</td>
<td>1421</td>
<td>1421</td>
<td>1421</td>
</tr>
</tbody>
</table>
In Table 2, I show the results from the empirical model for each of the potential “third neighbors” of Mongolia, which were previously lumped together as the rest of the world. The findings indicate that in all specifications the four countries have higher border effects with Mongolia than either China or Russia. However, Korea exhibits the coefficients that are closest in magnitude to those of Mongolia’s two large neighbors. This means that Korea has the best chances of becoming a “third neighbor” of Mongolia in terms of trade relations.

5. Conclusion

This paper used a gravity model to explore the effects of landlockedness on trade flows between Mongolia and its major neighbors and trading partners over the period 1992-2014. In addition, the paper assessed the success of the “Third Neighbor” doctrine, which has dominated Mongolian foreign policy over the past quarter of a century.

The results indicate that Russia and China have a significant impact on Mongolia’s trade. While Russia had the lowest trade hurdles in its trade with Mongolia over the 1990s, it was gradually eclipsed by China over the 2000s and early 2010s. Relative to intra-national trade, Mongolia’s cross-border trade with its two large neighbors is still less intensive, but when compared to the trade with the rest of the world, China and Russia have a major advantage in their dealings with Mongolia. This is true even when controlling for the effects of distance and contiguity.
The findings also showed that none of the other major trading partners of Mongolia has the potential to replace China or Russia as a “third neighbor”. Japan, Korea, USA, and the EU all exhibited higher border hurdles in their trade with Mongolia, which were not due to remoteness or lack of shared borders. Our analysis identified Korea as the most likely candidate to become a “third neighbor” in trade. In that sense, Mongolia’s “Third Neighbor” policy has not been particularly successful in breaking the country’s economic dependence from its two neighbors. This is understandable given the benefits that Mongolia enjoys from exporting its natural resources to China. But the recent slowdown of China’s economy is a sign that Mongolia should be cautious in its reliance on commodities.

Mongolia’s government needs to invest more efforts in expanding its economic relations with other countries and promote existing ties, especially with powerful economies in the region like Japan and South Korea. Furthermore, Mongolia should try to foster the development of the tertiary sector as this sector relies less on physical infrastructure, such as roads or railways.

Future research should explore the determinants of border effects and attempt to explain the causes for the lower trade hurdles between Mongolia and its neighbors. This would allow researchers to develop more specific policy recommendations on what third neighbor countries could do to expand their trade relationship with Mongolia. In addition, this type of gravity-model research could be applied to other regions of the globe to examine what potential trade alliances exist for other landlocked states with notoriously politically tumultuous relationships with neighboring states. The identification of these potential trade partners through policy, and the evaluation of the effectiveness of this
policy could aid these states in attempts to fully integrate into global trade patterns. In essence, gravity-model analysis, confined though it usually has been to Economics research, can (and arguably should) guide diplomacy, as it has the potential to foster trade diplomacy that is inclusive to all regions and states, even those with severe geographical disadvantages.
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