National Border, Administrative Rent and Informality: Market Entrance for Chinese Traders and Farmers

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Abstract

The article focuses on the informal economy in Russia's regions bordering with China, particularly, the informal land use by Chinese farmers, and the informal ("grey") schemes for the delivery of agricultural products from China to Russia. These phenomena are caused by the state representatives' use of national borders as a tool for controlling access to the markets and, consequently, as a source of administrative rent (i.e., bribes). Based on empirical fieldwork, conducted in Amur Oblast, and the theoretical concept of "power triad," developing the public choice theory, the author discusses the conflict between power and entrepreneurs.

Introduction

The southern part of the Russian Far East (Primorskii Krai, and Khabarovskii Krai, Amur Oblast and the Jewish Autonomous Oblast) provides climate conditions suitable for crop production, livestock and bee farming. However, parts of these lands are not being used, due to the low economic activity in the region, caused, mostly, by the post reform crisis of Russian agriculture. Russia's political center is trying to influence the situation by initiating projects aimed at stimulating the development of these territories. One of these "projects" was widely discussed in the Russian and international mass media. Its main idea was to lease the lands to foreign companies. This issue was expected to be brought-up for discussion at the APEC forum in 2012. What is more, the Russian mass

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¹ "Andrei Slepnev, the deputy minister for economic development, remarked that Russia will offer roughly 20 investment projects to several APEC member countries – Vietnam, Singapore, Thailand and Japan – for developing agriculture in the Far East. ... Russia's Asian partners are being offered vast spaces of land in the country's Far East to develop projects, with some of these projects requiring up to 150–200 thousand hectares. Slepnev estimates that the investment volume for these projects will number into the billions of dollars. ... He added that the law allows for long-term leases in Russia. The Primorskii, Khabarovsk and Amur regions are among the possible regions that are being discussed at the moment. These places have the right conditions for producing soya beans, rice and other types of grain." ("Russia offers to lease land in the Far East to APEC countries." Accessed March 2012: http://farmlandgrab.org/post/view/19967)

media mentioned Russia's negotiations with countries such as South Korea, Japan, China, Singapore, Vietnam, Thailand and Taiwan. It has now become clear that this is a failed project. Nevertheless, interest from these Asian countries in Russian agriculture remains. This can be attributed to the fact that the demand for food in East Asia is rising rapidly: food prices in the late 2000s fluctuated, while areas suitable for agriculture are being exhausted or lost to urbanization.

The food crisis that East Asia is facing can actually give Russia, and particularly the Russian Far East a great incentive for developing its economic activity. This will benefit the country not only in terms of higher profits, but by also bringing the integration of foreign markets to a new level. However, the regions of the Far East are not rushing to take advantage of these opportunities and agricultural produce is not exported. According to official statistics, foreign investments are rather scarce and there is no information on the activity of mutual companies being established. However, both statistical data and the mass media indicate that there are frequently agricultural businesses established in border regions. These companies not only import agricultural produce but also distribute locally grown products.

The assessment of economic activity of Chinese farmers in Russia by the mass media is quite diverse, though a negative attitude prevails. The same can be attributed to Africa, Central Asia and South America, where Chinese farmers are viewed negatively. The foreign mass media often uses terms such as "land grabbing" and "new colonialism," though information based on research is limited, and therefore this phenomenon cannot be studied in theoretical terms.

In this paper, based on empirical fieldwork conducted in Amur Oblast, Chinese business practices in the Russian Far East are studied. The questions asked in this research include: How do these farmers enter the Russian market? What obstacles do they meet and what are the strategies for overcoming them? Do they compete with Russian farmers, and if so, how do they?

The role of Russian officials in all these processes is a special focus of the paper due to the characteristics of state power in the Russian Federation, and in particular the agricultural market. To explain the effects of the conflict between Russian and Chinese farmers, the concept of power triad, developing public choice theory, is used and its theoretical approaches are discussed in the first part of the paper. In the second part empirical data of the study is introduced. In the third part the business practices of Chinese traders and farmers in Amur Oblast markets are discussed. Empirical studies have shown that the wholesale "Chinese" market plays a crucial role in the development of the local market. This will be discussed in the fourth part. In the following part, the border as a source of administrative rent is discussed. In the conclusion, the conflict between power and entrepreneurs is discussed.

Market Entry Barriers: Theoretical Approaches

The peculiarities of entry to a certain market depend on administrative, financial, territorial and other barriers. Barriers can restrict foreign companies from entering the market by implying special legislature acts or by carrying out specific industrial policies. The most significant barriers include monopoly rights and licenses; restrictions on import tariffs; quotas; subventions; sanitary regulations and environmental protection measures; technical barriers and registration, certification

and licensing.

According to Arthur Pigou's theory of the welfare state, most of these barriers are set by the government in order to support the social efficiency of society, to protect the market from outsiders supplying it with low quality goods and services or being a source of adverse externalities, such as pollution. However, according to the public choice theory, barriers can be set by the government (politicians and bureaucrats) in order to shift the public choice and to gain some preferences. The Tollbooth Theory and the Regulatory Capture Theory, which analyze market barriers, question the "nobleness" of governments' objectives, since the government itself creates these obstacles. According to Simenon Djankov et al, market entrance regulations are a source of administrative rent (i.e., bribes paid by the new potential companies). What's more, cross-national data proves that stricter barriers don't ensure a better quality of domestic goods, higher achievements in environmental protection or healthcare, but do influence level of corruption and the share of informal (unobserved) economy.

State representatives (politicians and bureaucrats) use regulations to generate administrative rent for their own benefit through bribes, votes, etc. The development level of different government institutions defines the way various restrictive regulations are used by state representatives to the advantage of their own businesses (which, of course, leads to a larger share of corrupt informal economy). However, comparative research shows that these processes are interconnected. States, which don't fight corruption, face a situation in which informal economic transactions substitute the legal ones completely.⁵ Nevertheless, the connection between high administrative barriers, corruption and the informal economy leaves the following questions unanswered: Do barriers initially lead to corruption? Or do corrupt government representatives lobby for the implementation of these barriers?

The above mentioned classical explanation of administrative rent mechanisms includes another term, the so-called power dyad, meaning that there are only two parties – state and business (and one of them "suffers"). It should also be pointed out that neither concept indicates the possible existence of a third party. But a third party can exist (e.g., a business that doesn't have access to administrative resources). In this case, it is reasonable to talk about a "power triad:" the state, businesses with access to administrative resources, and businesses with no administrative benefits. The latter suffer the most, whereas the government and businesses close to the administrative resources acquire clear advantages.⁶

² Simeon Djankov, Rafael La Porta, Andrei Shleifer, and Florencio Lopez de Silanes, "The Regulation of Entry," *The Quarterly Journal of Economics* 117 (2002): 1–37.

³ According to the first theory, government representatives seize part of economic subjects' profit by making them pay fees for entering the market; in the second theory economic subjects obtain power over government officials for their own benefit, namely to restrict access for their competitors.

⁴ Simeon Djankov et al., "The Regulation."

⁵ Simon Johnson, Daniel Kaufmann, and Andrei Shleifer, "The Unofficial Economy in Transition," *Brookings Papers on Economic Activity* 2 (1997): 159–239; Daron Acemoglu and Thierry Verdier, "The Choice between Market Failures and Corruption," *American Economic Review* XC (2000): 194–211.

⁶ Anton Oleinik, *Market as a Weapon: The Socio-economic Machinery of Dominance in Russia* (New Brunswick, NJ: Transaction Publishers, 2010).

One of the examples of a "power triad" applied to international integration can be a case when the government amends the rules of foreign investments (e.g., the cancellation of a production sharing agreement). As a result, foreign investors are forced to leave the market by selling their shares (it's the "suffering" party), and the company that acquires the right to obtain benefits usually in the form of lower prices.

In order to get a better understanding of the way Chinese agricultural companies enter the Russian border markets, the concept of power triad will be used (see figure 1).

Actor C, the state (e.g., the "security guard at the entrance"), draws the borders of the market place and creates preconditions for establishing a dominant position and receiving administrative rent. Actor A-a business that has access to the market place upon the purchase of "the admission ticket" or in exchange for an agreement

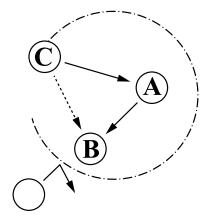


Figure 1: "Power Triad" Concept

Source: Anton Oleinik. Market as a Weapon:
The Socio-economic Machinery of
Dominance in Russia. (New Brunswick,
NJ: Transaction Publishers, 2010).

Note: "A" – economic subjects with competitive advantage; "B" – economic subjects with no competitive advantage; "C" – state officials.

with the game rules set by Actor C. Actor C creates favorable conditions for Actor A by eliminating potential competitors in exchange for a part of the rent. Actor B is the suffering party. Since it lacks access to administrative advantages, it receives only a little more than it would have received if it hadn't entered the market place.

Previous research by Natalia Ryzhova and Grigory Ioffe⁷ describe several informal business schemes that are used in the bordering cities of Blagoveshchensk and Heihe, including the informal channels for delivering goods. Here is an example of the widespread ("tourist") schemes that have been used since the early 2000s with slight changes. The official import of cheap consumer goods assumes certain customs fees that basically amount to the cost of the product or can even exceed it. One of the ways to significantly cut the amount of fees⁸ is to create an impression that the goods are bought for "personal use." Initially all the participants of cross-border trade (Chinese and Russian) imported the goods on their own. Later, the "shuttle" trips of Chinese citizens became restricted, and Russian citizens with international passports replaced them. Citizenship was of paramount importance due to the fact that entrance to Heihe is visa-free. Suppose a merchant needs to dispatch 500 units of goods from Heihe to Blagoveshchensk. In the mid-1990s only five items of one kind were allowed for transfer for "personal use." Therefore, a hundred people would have been hired. Yet,

⁸ The import fee for textiles ranges from 2 to 20 euros per kilo. In reality, this fee is no lower than 12–15 euros. In this way, 35 kilos will cost from 600 to 1,000 euros or 20,000 to 40,000 in Russian rubles. But this sum is just a part of the costs (other costs include acquiring certificates and licenses, permits, inspections, storage etc.). The transfer of one 50-kilo bag in the late 2000s through the "grey import" channel was about 20,000 rubles.

⁷ Natalia Ryzhova and Grigory Ioffe, "A Tale of Two Cities: Trans-Border Exchange between Blagoveshchensk, Russia, and Heihe, China," *Eurasian Geography and Economics* 2 (2009): 348–364.

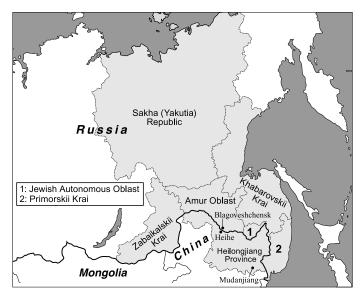


Figure 2: Sino-Russian Eastern Borderlands

it is rather difficult to control such a large number of people and a partial "loss" of goods was inevitable. That is exactly why it is a lot easier for traders to work with organized "straw men" or "informal companies" that have their own network of supervisors group leaders) and (brigadir, "phonary" (i.e., tourists who transfer goods, lit lamps). The main person in this network is called "brick" ("kirpich").9 Each brigadir hires 5-10 front people ("lamps") taking full responsibility for them, paying for their

tickets, meals and hotels if needed. This scheme was used by officially registered Russian companies as well as unregistered Chinese merchants who worked through front businesses.

This channel can be also analyzed through the concept of "power triad." In order to use the channel of informal goods transfer one needs to contact a leader of an informal group ("kirpich" or Actor A); and somebody willing to become a leader of such group needs to establish a certain relationship with a customs representative (Actor C), whose objective is to receive administrative rent. Thereby, the relationship of the government with various market players becomes unbalanced. The rent payments work to the advantage of one company, whereas the other one "suffers." The company that fails to pay the fees for imported goods, but pays a certain amount of rent (Actor A) has a competitive advantage compared to the company that fulfills all the customs procedures.

The practices discussed above show that the concept of "power triad" is a useful tool to explain the peculiarities of the entrance of Chinese traders and farmers into the Russian market as well as the reasons behind the development of the informality and corruption in the Russian border regions.

Data Sources and Grounds for the Selected Case

The "power triad" concept will be used to explain the entrance of Chinese companies into the market of agricultural produce in the border areas of Amur Oblast. The choice of this case for analysis is based on the following reasons.

⁹ "Kirpich" as a special type of employment, emerged in the Russian-Chinese border trade much earlier, approximately since 1994. Back then, however, their function was to simply carry the baggage across the border. The dispatched bags were not controlled by weight, and that is where the term comes from. Only in the beginning of the 2000s did their function change, from practically being loaders to being managers of quasicompanies.

Firstly, agriculture has traditionally been a sector of specialization for Amur Oblast due to the fact that it enjoys unique agro-climatological conditions not only in the Far East, but also in regard to the rest of Russia. To be more specific, the climate of the region allows for the growing of soya beans (the potential production takes up a 70% share of the whole country's potential). Secondly, the import of food supplies makes up the dominant and sustainable share of the total import from China to Amur Oblast. Thirdly, Amur Oblast is one of the regions that received the main amount of direct foreign investments into agriculture from China in 2005-2011. And finally, Amur Oblast is one of four regions that might provide land for lease to foreign companies.

The data accumulated is based on 34 expert half-structured interviews (40-120 minutes long) that took place in Amur Oblast in 2004, 2006, and 2011. The informants include: personal subsidiary plots (9 interviews); peasant farm enterprises / farmers (15 interviews); companies delivering and distributing fruits and vegetables (4 interviews); representatives of store networks (4 interviews); and owners of depots (2 interviews). Farmer-informants included two farmers with Chinese citizenship and two farmers with Russian citizenship who had experience in conducting mutual businesses with Chinese entrepreneurs. The qualitative data is supplemented by official data sources such as the customs statistics of Amur Oblast, which proves that the conclusions are three-sided.

Entrance of Chinese Traders and Farmers to the Amur Oblast Markets

In the 1992-1995 provisions composed 30% of the total amount of imported goods from China. These provisions were comprised of meat, rice, sugar, tea, apples and preserved meat; in other words products that were not produced in Amur Oblast or were produced in insufficient quantities. Meanwhile, the volumes of some imported provisions significantly exceeded the adequate norms of actual demand for them, which means that these imported products were intended for other Russian regions. In 1997 China started exporting products that substituted the ones produced in Amur Oblast (e.g., tomatoes, cucumbers, potatoes, and larger volumes of fresh meat). In 1998-2001, the volume of provisions imported substantially decreased due to the financial crisis and non-payments for Chinese products. At around the same time (in 1999-2000), Chinese suppliers "transferred" across the border to the Russian side and formed sustainable delivery channels. As a result, starting from 2003, 40% of the share of Chinese imports was made up of product-substitutes (i.e vegetables grown in China that substituted the ones produced in the Amur region) (Table 1).

Import of these substitutes was caused by an ongoing crisis in the agricultural sector, price

¹⁰ Only 24 interviews were used in the form of quotations, while the others were used to understand different aspects of agricultural market operation. To mark quotations, each interviews were numbered (1, 2, ... 24) and marked by a mention of activity (farmers, entrepreneurs, etc.); specialization (fruits and vegetables delivery, meat production, etc.); citizenship of respondent (Russian, Chinese); and interviewing time (summer 2004, November 2011). The main body of the interviews (n = 31), focusing on the agricultural market of Amur Oblast, was conducted in 2011. This was complimented following four interviews that focused on commercial real estate in Blagoveshchensk, dated 2006, as well as one interview focusing on different aspects of Russian-Chinese cooperation, dated 2004.

Table 1. Dynamics of Chinese Import volumes to Amur Obiast										
	1995	1997	1999	2001	2003	2005	2007	2009	2010	
Food Import to Amur Oblast from PRC, th. USD	9724	23241	7121	7330	11811	21825	29781	26917	24965	
Substitute Provisions* Import to Amur Oblast from PRC, th. USD	6477	12289	2700	2447	4933	8697	14328	12018	11832	
%	33	42	36	33	42	40	48	45	47	
animal origin, th.USD	3149	8022	1391	206	662					
vegetable origin, th.USD	52	1833	1192	2241	4270	8568	14328	12018	11832	
0/0	2	8	17	31	36	40	48	45	47	

Table 1. Dynamics of Chinese Import Volumes to Amur Oblast

Source: Author's calculations, adapted from data provided by the Far Eastern Branch of the Federal Customs Service, Amur Oblast.

Note: * Substitute Provisions mean imported food, which can be produced in the Amur Oblast Agricultural Firms.

disparity and land reform that was not implemented. What's more, the establishment of farming in Russia (as well as other business developments in post reform Russia) was not only based on personal entrepreneurship skills, but on personal ties, preferences and special relations with government officials: "My farm was visited by pretty much all the ministers, starting from N who is the conductor of my business...And the guarantee is M himself, who was in suspended position at that time. There are also other high-ranking guarantors" (No. 5 – farmer, meat production, Russian, November 2011)

Is this system still based on clientelism?: "in order to do so… the government should support us, or even… I would give it all away with great pleasure and go [work in kolkhoz]. I don't want this farming anymore. Honestly" (No. 6 – farmer, meat production, Russian, November 2011).

The businessman who operates in the market, with the active support of government officials, is not oriented towards fighting competition. On the contrary, they prefer either formal (i.e., based on existing legislature) or informal protection (i.e., supported by bribes) from the competition.

The Chinese traders and farmers are a lot more motivated and, therefore, competitive. "I arrived from Omskaia oblast; I used to trade there. I had the money to start a business, but it was difficult in the beginning because there was no information, no loans, no help. But then, my brother, an agronomist, helped me understand this business and it started working" (No. 7 – farmer, vegetable production, Chinese, November 2011).

In the beginning of the 2000s, as a result of all these factors (e.g., different crisis, personal ties, non-market relations among Russian farmers and officials), the local market of agricultural produce in Amur Oblast was rapidly becoming monopolized by Chinese businessmen. To monopolize a local market several instruments were used: the first is informal ("grey") export-import schemes; the second is logistic centers – wholesale markets, opened on the both sides of the border; and the third is the production of agricultural products on the Russian side of the border.

The "grey" schemes work as follows: Farmers from the People's Republic of China (PRC) sell goods to exporting companies. Usually Russian citizens run such companies de jure, while Chinese own them de facto. These companies export goods to Russia, paying bribes to custom servants. Once delivered to Russia, goods go to major wholesalers (predominantly Chinese ones), and then to medium wholesalers (can be Chinese ones or not), and finally to small-scale sellers. 11 The

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¹¹ Representatives of the Amur Laboratory for Economic and Social Studies studied *Druzhba* in 2008 and 2011.

established "grey" business schemes for delivering agricultural products differ from those used for delivering clothes, shoes and other consumer goods. The main distinction is that the agro produce is never shipped via "tourist" channels. The brokers who import agro products and comply with all the barriers (e.g., like phyto-sanitary control and other regulations) are able to minimize transaction costs during cross-border procedures. The necessity of acting with Russian officials leads to the inclusion of Russian intermediaries into the business-scheme.

The existence of "grey" business schemes can be indirectly supported by the following quantitative data (see Table 2). In the beginning of the 2000s prices on potatoes and vegetables imported from China to Amur Oblast were always slightly higher than prices for the same products imported to Russia from China. It was attributed to smaller volumes of average trade contracts in Amur Oblast. After the schemes described above were established, exporters in China and importers in Amur Oblast merged, with import prices in Amur Oblast becoming in general lower than in Russia.¹²

The described schemes can be analyzed in terms of the "power triad" concept. Actor C (the customs official) can influence border-crossing barriers for imported goods. Prices for fruits and vegetables shipped and received by the same company (Actor A) can be significantly decreased, giving the company a competitive edge over Actor B who purchased the same produce under the regular import contract. Thus, Actor A captures a dominant position in regard to Actor B, and representatives of Actor C get an opportunity to receive administrative rent.

Informal schemes, described by the "power triad" concept can be attributed not only to Amur

Table 2. The Excess of the Amur Oblast Import Prices from China over Russian Import Prices from China

Product	2001	2003	2004	2005	2006	2007	2008	2009
Potato	1.13	1.02	0.97	1.00	0.94	1.23	0.93	1.05
Carrot	1.02	1.01	0.93	1.00	0.91	1.01	0.87	0.97
Cabbage	1.15	1.05	0.97	0.97	0.88	0.97	0.96	0.95
Onion	1.08	1.08	0.97	1.07	0.99	1.10	0.91	0.93
Cucumber	1.36	1.14	1.01	0.99	0.84	1.00	0.97	0.94
Tomato	1.08	1.04	0.90	0.98	0.90	1.11	0.79	0.87

Source: Author's calculations, adapted from data provided by the Far Eastern Branch of the Federal Customs Service, Amur Oblast.; Food and Agricultural Organization of the United Nations. Accessed December 2011: http://www.fao.org/corp/statistics/en/

Note: Initial data on the prices is presented in the Appendix.

See, for example: Viktor Diatlov, Tatiana Zhuravskaia, Adrian Okhotnikov, Lidia Perevalova and Ekaterina Sobennikova, "'Kitaiskie Rynki' Rossiiskikh Gorodov – 'Ukhodiashchaia Natura'? [Have the 'Chinese Markets' in Russian Cities 'Gone Away'?]" in *Transgranichnye Migratsii i Prinimaiushchee Obshchestvo: Mekhanizmy i Praktiki Vzaimnoi Adaptatsii [Transborder Migration and Host Society: Mechanisms and Practices of Mutual Adjustment*], ed., Viktor Diatlov (Ekaterinburg: Izdatelstvo Uralskogo Universiteta, 2009).

¹² This can be explained by the producers' prices in the major Chinese province of Heilongjiang, exporting vegetables to Amur Oblast. For instance, in 2007 the price on cucumbers at agricultural fairs in this province was RMB 3.04 per kilo, while the price for the same product in the PRC was only RMB 2.48 per kilo. In 2006 producers' prices on vegetables in Heilongjiang province were not practically different from the prices in the other Chinese provinces: *The Chinese Yearbook of the Agricultural Price Survey 2008*; *Chinese Yearbook of the Agricultural Price Survey 2007*. Accessed September 2013: www.chinadataonline.org

Table 3. The Discrepancy between Russian Import Prices Statistics and Chinese Export Price Statistics

Product	2001	2003	2004	2005	2006	2007	2008	2009
Potato	1.44	0.95	1.13	1.44	1.67	2.88	1.97	1.75
Carrot	1.44	0.81	0.89	1.24	1.52	2.67	2.10	1.77
Cabbage	1.16	0.78	0.93	1.36	1.63	2.14	1.88	1.30
Onion	0.94	0.64	0.97	1.46	1.74	2.09	1.56	1.33
Cucumber	1.47	1.38	1.47	1.83	1.79	2.15	1.90	1.63
Tomato	1.70	1.10	1.60	1.76	1.92	2.59	2.23	2.08

Source: Author's calculations, adapted from data provided by the Far Eastern Branch of the Federal Customs Service, Amur Oblast.; Food and Agricultural Organization of the United Nations. Accessed December 2011: http://www.fao.org/corp/statistics/en/

Note: Initial data on the prices is presented in the Appendix.

Oblast but also to other Russian regions.¹³ That is the reason why the comparison of Chinese statistical data with the Russian customs statistics showed a major discrepancy between export and import prices (Table 3). What is more, until 2005, both Chinese and Russian prices tended to be overstated. However, after 2005 this could be attributed only to Russian import prices. It is impossible to explain the almost doubling in prices under various conditions of import-export contracts. Therefore, extra charges are collected during the border crossings. In other words, these charges are the sums of money paid by Actor A to Actor C.

It is clear that certain representatives of Actor C do not receive all of the administrative rent. The larger share of the rent goes to the state budget. Starting from 1998 the share of profit from foreign economic activity in the consolidated budget grew rapidly. In 1996-1997 only the revenue figures (i.e., foreign activity income constituted a 5% share of the total revenue) made Russia "look like" a developed country. In 2008 the share of Federal Customs Authority exceeded the share of Federal Tax Authority: 51% compared to 44% in 2008, 47% to 41% respectively in 2009.

The high barriers set for the flow of agricultural produce (or speaking in terms of a "power triad" concept, increasing the dominance of Actor C) boosted not only the transfer of agricultural goods, but also Chinese farmers:

The city authorities of Mudanjiang (Heilongjiang Province) put great effort towards cooperation with Russia in the agricultural field. This cooperation has a 20-year old history. The parties used to cooperate on the basis of labor force export to Russia for agricultural purposes and carry out barter trade. But nowadays, the bilateral cooperation has gone further, namely, now it includes the lease of agriculture suitable lands, trade for cash and fulfillment of scientific agriculture efficient projects. Currently there are 30 farms and agro produce processing companies operating in Russia mutually

¹³ Most likely, the similar informal schemes characterize not only Russian-Chinese international relations, but also relations between Russia and other countries. Considerable discrepancies between Russian trade turnover with other countries prove this point. However, the described situation of "power triad" is more solid in Amur Oblast and other regions bordering with China because these regions lack good transport access to other foreign markets.

¹⁴ For instance, the share of foreign trade taxes in the overall structure of the state management revenue in 1995–2005 took up only 1–1.4%. In China within the corresponding time period these revenues did not exceed 10.7%. Sources: United Nations Statistics Division. Accessed December 2011: http://unstats.un.org

established with Mudanjiang businessmen... Beijing "rents" the Russian border lands for Chinese farmers. According to the Xinhua News Agency, Beijing rents about 426,000 hectares of land in Khabarovskii Krai and Jewish Autonomous Oblast. These lands are used by Chinese farmers. ¹⁵

In 2009 Heihe of Heilongjiang Province (northeast China) situated on the border with Russia carried out 36 projects in Russia in the field of agricultural development. In the previous year, 27 Chinese companies took part in these projects and as a result cultivated $800,000 \, \text{mu}$ (1 hectare=15 mu). The $782,000 \, \text{mu}$ of land was utilized for growing soya beans, wheat, corn and other grains, $18,000 \, \text{mu}$ – for vegetables. 16

Certainly, the reasons for the influx of Chinese farmers in Russia's border regions (Amur Oblast, Jewish Autonomous Oblast and Primorskii Krai) are a lot deeper and more diverse. However, it is important to pay closer attention to their role in market supply and also the possibility of shifting away from the administrative rent that takes place during border-crossings both institutionally and territory wise. A good example of this is the barring of meat import in 2005 followed by the appearance of farmers and straw men in 2006 (in 1997-1998 the export of pork made up 30% of the total amount of provisions exported to Russia). Technically, foreign citizens, including Chinese citizens, can register a firm in Russia, but it is very difficult for them to operate this business. At every stage of, let's say, a pork-breeding farm, the foreign citizen will face formal and informal barriers: acquisition of land, accessing an electricity network, getting quarantine references and so on and so forth. The situation can be facilitated if the Chinese farmer finds a Russian partner who will register the company. "Chinese producers, they stuffed the market with their meat... it's been grown here, they have mutual companies, and of course, they are registered by Russians" (No. 11 – farmer, meat production, Russian, November 2011). "As of today, 80% of pork is produced by Chinese [grown]... in the Amur Oblast... they even started growing soya beans on our territories. Just imagine, 25,000 hectares in S-area. They grow soya beans and ship it to China for 5-8 rubles. They work under illegal schemes so as not to pay fees and duties... But they do it, of course, with Russian businessmen" (No. 12 – entrepreneur, vegetables delivery, Russian, November 2011).

The level of actual cooperation varies from situation to situation, such as when a Russian businessman is just a "shield" or when businessmen actually share the responsibility and operate the business mutually. For instance, a Chinese company imports the labor force and controls it, whereas, the Russian entrepreneur provides legal support, corresponding production facilities and takes care of product distribution. "We had cooperation...Based on my experience, we have more cooperation. The situation when the Chinese receive just land doesn't suit either them or Russian farmers. The farmer won't be satisfied, because he will get almost nothing for his land... So in 90% of all cases, no matter what anyone says, we are talking about cooperation. In other words, the farmer provides the territory and the required equipment, solves certain issues with the workers... Well, of course, he also operates

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¹⁵ Delovoi KITAI 50 (2010): 53–54. Accessed in November 2011: www.polpred.com

¹⁶ Ibid., 82.

his own business, but all the responsibility and paperwork lies with him" (No. 13 – farmer, experienced in cooperation with Chinese farmers, potato and vegetable production, Russian, November 2011).

The cooperation in land tenure among Russian and Chinese farmers started in the early 1990s, when the property rights on land were poorly defined, and when the economic crisis caused an increase of "no-man's" wasteland. It is important to stress that the state border was used as a mechanism for the redistribution of administrative rent, allowing certain market players to dominate over others only in the early 2000s, when the accessibility of farmland considerably declined: "Although there is abundant farmland in Amur Oblast, we can't obtain rights on land to produce things" (No. 22 – personal subsidiary plot, Russian, December 2011); "They gave notice that we can't obtain the access to the 'no-man's land'. Otherwise we would get into trouble" (No. 22 – personal subsidiary plot, Russian, December 2011); "Now that the pieces of land have been distributed, wars are waging for the shares which were distributed without payment before" (No. 24 – farmer, soya beans and vegetables production, Russian, November 2011).

However, property rights were not properly defined in the 2000s and in the 2010s. This lead to an increase in informal schemes of land distribution and administrative rents: "One has the right to dispose the land... let's say... a certain share will pass over to the village administration, it used to be under the control of the region or area administrations. Somebody has a right to lease the land. Another person just wants to make money without even organizing anything. Suppose you have land and I come to you asking for 200 hectares of land. What for? I will bring Chinese workers and they will cultivate the land. So he brings them... but he is not the master there. He appoints a Chinese businessman... an entrepreneur. And that's it! He doesn't take part in the process, he is not the master, he doesn't produce and he doesn't distribute, you see? As the youth nowadays say, he just simply receives the money and that's it, nothing else" (No. 10 – farmer, potato production, Russian, November 2011).

The informal scheme of land distribution can also be described in terms of the "power triad" concept. Actor C receives rent in exchange for allocating the land to the advantage of Actor A. Actor B is the Chinese farmer who is unable to enter the market unless he/she agrees to pay the formal land tenant part of his/her profit.

In conclusion, different barriers set by the government cause the informal economy to flourish. This will be returned to in the discussion of the border as a barrier, while the following section will discuss the real function of the "Chinese" markets in the informal economy.

Function of the "Chinese" Markets: The Fruit and Vegetable Wholesale Market Druzhba

As was mentioned above, the wholesale market was one of the instruments used by Chinese businesses to monopolize the agricultural local market in Amur Oblast. However, is this market solely "Chinese"? What is the real function of this market in the studied cases? How does it operate?

To start with it is difficult to overestimate the meaning of the market *Druzhba* for the city of Blagoveshensk because it is the main place where wholesalers buy vegetables and fruit. Vegetables

can be bought also from farmers in nearby villages. However, delivery problems cause purchases to decline in the first case, while the doubling or tripling of prices cause purchases to reduce in the second case. Fruit can be bought only at the market *Druzhba*. *Druzhba* occupies a monopolistic position in the local agricultural market:

- (1) It is the only distribution point for agro produce in the region. Basically, there is only one wholesale company, so the coefficient of cross elasticity of demand showing the interdependency of companies on the market is close to zero. This means that one seller can determine prices on his own and ignore other players in the market: "Prices rise at the same time on the whole market the suppliers are all Chinese. Especially when the river-crossing is closed. What's more, they bring up the prices before the holidays, New Year's Eve, March 8th. They know that people are still going to buy. And there is nothing left for us, the mediators to do. [Do you increase prices before the New Year?] Maybe a little bit. It's already high thanks to the Chinese" (No. 8 entrepreneur front man, ¹⁷ fruit and vegetable delivery, Russian, December, 2011).
- (2) It has a certain market power that allows for the regulation of market prices for products by varying sales volumes. This means that only the wholesaler and all buyers are aware of the essential market characteristics: prices, physical product characteristics, functions of profits and costs. Meanwhile, the wholesale market cannot set prices, since it is limited by purchasing power of the consumers and by the law of demand. The demand is limited by market networks (e.g., major supermarket chains) that in their own way enjoy monopoly rights in their business sector: "You know, our supplier is Chinese... he buys vegetables, both Chinese and foreign, at the wholesale market Druzhba and organizes its delivery in required volumes. [And who sets the prices?] We keep an eye on the supplier, make sure he doesn't cheat and offers us prices according to the market. And as for the wholesale market, their prices depend on the cost of shipment and, of course, prices in China... [And how do you choose the supplier?] We change the supplier very rarely, [though] before changing we try to negotiate new terms with the old one. [Why can't you work with two suppliers?] It is difficult for our merchandisers to work with Chinese. They get used to one person and negotiate with him" (No. 9 supermarket chain, food, Russian, December, 2011).
- (3) The important condition for the operation of *Druzhba* is that it is practically impossible or economically inefficient for other companies to enter this market. The main method of monopolistic control of the entrance barriers is to control the supply: "So there is the wholesale market Druzhba, and all the produce flows through it. That's where all the sellers and buyers meet. But it is a Chinese wholesale market, so firstly it optimizes the flow of Chinese products, the flow of Chinese imported vegetables or the ones produced here by Chinese farmers. And only after that comes everything else. So, if we [Russian farmers] had our own wholesale market, powerful, then the customer flow might change" (No. 10 farmer, potato production, Russian, November 2011).

Thus, this market performs different functions: 1) connecting farmers growing vegetables and fruit in the PRC with consumers in the Russian Federation, particularly in Amur Oblast and

¹⁷ This person is used as a cover for informal activities. The business is registered as his business, but in reality this business is a Chinese one (i.e. with Chinese money and management).

Yakutia (Sakha) Republic; 2) linking Chinese farmers growing vegetables in Amur Oblast with the same Russian consumers;¹⁸ and 3) providing opportunities for reselling vegetables and fruit imported from other countries. The first function is more crucial and widespread. The economic-geographical position of Amur Oblast leads the Chinese agro products to prevail in this market, with the result that *Druzhba* is often referred to as a "Chinese" market.

Wholesale markets have become key elements in the development of the market-oriented supply system in all of Russia's Far Eastern regions as well as in most post-soviet countries and places. It is evident that although the wholesale markets played a crucial role in social and economic changes of the post-soviet world, there is a lack of studies regarding them. Limited, but very fruitful publications about wholesale markets describe semi-legal or illegal contracts, ethnic specialization, networks of migrants, ethnic clusters of trust, and other types of activities, which are referred to as the informal economy.¹⁹

In the 1990s, "Chinese" markets, selling different types of goods, appeared and became a part of the supply system in almost all cities of the Russian Federation, especially in the eastern part of the country. "Markets are considered as 'Chinese' by the host society. It was often marked by the names of the markets (e.g., 'Shanghai,' 'Manchuria,' or simply 'Chinese market')... 'Chinese' markets have become an important part of the Russian trading system, without which it would be impossible to imagine the very fast changes that have occurred in the life of contemporary Russia."²⁰

Chinese markets, selling mostly clothes and shoes, were founded in Amur Oblast prior to the 1980s, as Viktor Dyatlov has suggested. However, in contrast to clothing markets, Chinese wholesale markets selling fruit and vegetables started to operate later, at the end of the 1990s, after the financial crises: "Only Russian businesses delivered vegetables from China and elsewhere in 1998... But all Russians left after the crises. But please mention that nobody pushed us, we left ourselves... Chinese had to rent market places and had to sell because they had vegetables. The wholesale market, now known as Druzhba, was bought by a very educated Chinese entrepreneur" (No. 1 – entrepreneur, fruit and vegetables delivery, Russian, summer 2004).

It is widely discussed by the informants that this wholesale market was informally bought by a Chinese citizen: "Officially the market is run by Russians, I mean that the legal owners are Russian, while it is well known that Chinese businessmen run this business" (No. 3 – entrepreneur, owner of a depot, Russian, spring 2006). Nonetheless, it is not necessary for the markets to be owned (formally or informally) by Chinese citizens. The reason why such kind of markets are known as "Chinese" is

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¹⁸ The second scheme does not include importing-exporting procedures, and is based on deals with vegetables produced by Chinese farmers in the Amur farmland. To sell their crops Chinese farmers come to Druzhba and bargain with wholesalers: "[How do you distribute your produce?] At Druzhba, wholesale market in bulk... [And who do you sell it to on this market?] They ask, for example, 'How much are the cucumbers?' I say 40 rubles, and they ask for a discount, let's say 35 rubles for the box. Ready to buy for 20, ok, let's go with it. It's easy, like at any market" (No. 4 – farmer, vegetable production, Chinese, November 2011).

¹⁹ Caroline Humphrey and Vera Skvirskaja, "Trading Places: Post-socialist Container Markets and the City," *Focaal –European Journal of Anthropology* 55 (1999): 61–73.

²⁰ Diatlov, "'Kitaiskie Rynki'. Rossiiskikh Gorodov – 'Ukhodiashchaia Natura'? [Have the 'Chinese Markets' in Russian Cities 'Gone Away'?]"

the domination of Chinese suppliers and sellers: "It was a grocery wholesale depot before privatization in 1995. The first contracts were signed with China in 1997. A former employee bought the depot in 2000 and started to develop cooperation with Chinese suppliers. As detached storehouses were rented out to Chinese and other non-Russian entrepreneurs, the market itself changed its specialization to vegetables and fruit. Chinese citizens were the first to rent these places and now Chinese entrepreneurs dominate the market with a share of at least two-thirds." This quotation describes firstly the wholesale market in Irkutsk, and secondly the domination of Chinese sellers in Blagoveshchensk: "Now that Chinese entrepreneur have bought Druzhba, Chinese suppliers can lease any storehouses which they need... Now they are major consumers of such kind of commercial property" (No. 2 – entrepreneur, owner of a depot, Russian, spring 2006).

To sum up, the wholesale market plays a crucial role in the agricultural products supply system in the given region. Even though informal practices are used, this wholesale business supports the market-oriented system. Entrance barriers, which prevent businesses from working in the market, also exist, but these barriers are not connected to the state representatives. Consequently, administrative rent neither arose nor was redistributed. Unfortunately for the development of the Amur region, Russian farmers have become the suffering party.

State Border as a Source of Administrative Rent

As mentioned previously, the state border acts as a source of administrative rent for the benefit of customs officials (Actor C). What's more, the existence of this state border barrier leads to the situation in which Chinese businessmen organize their businesses through "straw men." Consequently, the use of national borders to control access to the field of interaction²² has become a source of administrative rent for Actor C. Actor C receives, in exchange for granting Actor A with special conditions, administrative rent and, as a result, they both dominate Actor B. The government, barring access to the national market for foreign companies, forms the following types of borders:

- Spatial (it is the most evident type of barrier, it is supported by the border, customs and other sorts of control);
- Institutional formal (for example, in order to register a business, one needs to go through certain procedures, obtain the required permits, licenses, etc.);
- Institutional informal (for instance, even without obvious articulated restrictions, the
 informal guidelines might still exist limiting access for companies or workers from
 certain countries, such as China in our case, or to certain regions, such as the bordering
 regions of Russia);
- Financial (currency control limits the capital flows through banks)

²¹ Ibid.

²² Under fields we mean government-based institutionalized arenas of interaction designed for actors with various organization abilities to communicate with each other. Niel Fligstein, "Fields, Power, and Social Skill: A Critical Analysis of the New Institutionalisms," *Ekonomicheskaia Sotsilogiia* 2:1 (2001). Accessed September, 2013: http://ecsoc.hse.ru/data/2011/12/08/1208205036/ecsoc t2 n1.pdf#page=4

Cross-national monitoring carried out by the World Bank indicates that Russia has been limiting access to its market for foreign partners in the past few years. Take, for instance, the number of days needed to fulfill import/export paperwork. In 2010, it took up to 36 days.²³ By this figure Russia is similar to subequatorial developing countries of Africa. Each additional paper or document is an additional source of potential administrative rent for government officials in charge, including customs officials. According to a survey carried out by the International Bribe Payers Index (TI BPI), the overall average coefficient of customs corruption level equals 3.1; in Central and Eastern Europe (including Russia) – 2.9; in the top developed countries – 2.2; and the level of customs corruption in Russia is 3.6. This figure is similar to those in Africa and the Middle East.²⁴

It is obvious that borders are an integral part of the modern state. But why do they become a major stimulus for corruption in some countries, and do not play such a role in others (for example, according to the TI BPI, the corruption level in Singapore equaled only 1.4 in 2008)? These questions take us back to the discussion about the types of governments and the role it plays. According to the concept of a "stealing" or "exploiting" government, the objective of such as government is to reach such a "property structure that raises the rent to its maximum," even if it is to the disadvantage of society and its welfare.²⁵

The administrative rent does not necessarily go to a specific official, it is more often received by a certain group of people; the variation of the barrier's height becomes a lever for acquiring rent. In this regard let's take a look at the barriers (issuing permits) set on attracting the foreign labor force for the needs of the agricultural sector. In the early 2000s, farmers had an opportunity to bring over Chinese workers with the issuance of a corresponding permit; however, they resorted to it only if they had a Chinese partner: "[Why don't you have Chinese workers?] I don't know. I didn't get that idea in time. I've been looking for companions, partners for a long time. We need production capabilities, maybe even relative ties, as in the case we had in S. That Chinese person is married to the farmer's daughter, and he managed to organize everything and bring over Chinese workers" (No. 14 - farmer, vegetable production, Russian, November 2011); "It might have been easier and cheaper to work with the Chinese labor force, but we can't get them. On the other hand, the Chinese can work only with Chinese, so I need to find a Chinese partner. But we don't need him, we don't have any problems with equipment or money for the turnover... and if we hire the Chinese workers on our own, we'll have a rather hard time with them. They can lie down and refuse to work, saying that they don't understand anything" (No. 15 – farmer, experienced in cooperation with Chinese farmers, vegetable and potato production, Russian, November 2011).

In the late 2000s, the quota was lowered: "I tried to hire Chinese workers, but I could not... [Why is that?] I don't know. They told me that there aren't possibilities because of quota restrictions. After that I decided to stop trying" (No. 16 – farmer, vegetable and meat production, Russian,

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²³ "Ease of Doing Business: Trading Across Border," *The World Bank Database*. Accessed October 2011: http://www.doingbusiness.org/data/exploretopics/trading-across-borders

²⁴ "1" means not corrupted officials, "5" means greatly corrupted. *Transparency International Bribe Payers Index*, 2008. Accessed October 2011: http://www.transparency.org/research/bpi/bpi_2008

²⁵ Douglas North, *Economic History* (New York: Norton, 1981), 22–24.

November 2011). The ones who succeeded, received a great competitive edge: "The issue with the Chinese workers we do have... shouldn't say that, but part of the government officials... they are bought. Just imagine, last year we had a quota for 100 workers, and this year it's 120; but what is 120 people in the agriculture business? It's nothing! Our quota is for 100 people, but we have 1,000 working on the fields. I suggest that we 'zero' the quota, so that all the Chinese workers become illegal. But who do you think doesn't want to go for this? The officials don't. Some of them somewhere have a grip on financial [flows] and solve their financial problems" (No. 15 – farmer, experienced in cooperation with Chinese farmers, vegetable and potato production, Russian, November 2011).

Therefore, the representative of the state (Actor C) is once again a dominating actor in cross-border flows of labor force and funds. A dominating business (Actor A) can be either a Chinese farmer (who has access to foreign labor resources) or a Russian (who "enjoys a right" to use foreign labor even in limited quantities or rent land suitable for agriculture). As a result, the interests of small companies (Actor B), left out of the scheme of labor force and land distribution, are infringed. As a consequence, the monopolistic power is strengthened by the cooperation between government representatives (Actor C) and dominating businesses (Actor A).

As a matter of fact, restricted access for Chinese labor to the field of interaction is part of the national border barrier. Besides the state border, another essential research object for us as a source of administrative rent is land. Receiving land for rent strongly depends on the interaction with the "security guard at the entrance." As a rule, it is quite difficult for the Chinese farmer: "We used to live better, then they changed the management, so there was a new owner. Then there were more bribes, and the cases ended up going to court" (No 4. – farmer, vegetable production, Chinese, November 2011). That is exactly why Actor A (the "straw men") emerges: "There are a lot of 'farmers' like that; they have never seen the actual land. They live in the city, and Chinese cultivate the land. They just get the money. Of course, they all have ties with local management boards – those who are in charge of land allocation" (No. 16 – farmer, potato production, Russian, November 2011). As a result, according to the "power triad" concept, not much is left for Actor B: "I don't understand the Chinese. I don't understand! They buy our grain, they grow... He'd be jumping up and down with happiness because of a two-thousand ruble [profit]. He makes of this one pig. For a two-thousand ruble [profit], he lives and works in insanitary conditions. What quality of life can we talk about? He came here to make money..." (No 5. – farmer, meat production, Russian, November 2011).

It's important to mention, that Amur Oblast farmers have a rather negative attitude towards the situation concerning the agro produce market and they expect the government to strengthen the barriers for Chinese farmers and the flow of Chinese goods. "You know, when Chinese work here, our government should control the situation, take measures. Otherwise, what a wild market this is (No. 18 – farmer, soya beans and vegetable production, Russian, November 2011)? At the same time, actions that have hardly anything to do with market competition are appreciated by the Russian farmers: "One phone call from the governor to the Russian Agriculture Committee and the ships are stopped at the fairway for a week. Potatoes are washed, carrots are washed... it all rots in the holds, that's it. It has happened before several times. We really don't care, [the government] says... the only reason why we allow them to import the provisions is because otherwise the people in the region

would starve" (No. 15 - farmer, experienced in cooperation with Chinese farmers, vegetable and potato production, Russian, November 2011). The surveyed respondents would like to restore the previously owned (not by all of them of course) non-competitive distribution channels that guaranteed profits and were based on specific relations with government officials (Actor C): "Here's what market relations used to be like: you came, negotiated with military men or with a prison, delivered the products and no pay-offs what so ever. Well, the prices were marked up a bit in bookkeeping, but not much-just to make a better living. It was only 5-10 %, not more. And now it can amount up to 40%" (No. 19 – farmer, soya beans and potato production, Russian, November 2011). They keep waiting for large profits that could only be ensured if the "security guard at the entrance" protected the market: "You say we don't need barriers, but they should exist. When our pork costs 3 rubles, they sell for 2.5. Yakutia²⁶ said 'What do we need your expensive pork for,' and it was already unprofitable for our farmers, 'we buy Chinese.' All the major farms collapsed... We can't compete with them, because our actual costs for electricity, greenhouses, and for the Chinese it's cheaper. [Why is it cheaper if they are produce here?] Well ...the cost of labor. [Farmers say, that the Chinese worker isn't any cheaper?] Well...I don't know about that. [Maybe it has something to do with profitability? Do Russians expect a higher rate of return?] Maybe... Yes" (No. 20 - entrepreneur, vegetables delivery, Russian, December 2011). Some of them understand that it is essential to develop market-oriented institutions and believe that officials care little about this: "It must be the concern of our Ministry, the Ministry which we have. I told them, you are not the Agricultural Ministry, you are the Ministry of Kolhoz, collective farms. They can think only as a soviet, as collective persons. This is the problem facing agriculture economic development" (No. 21 – farmer, soya beans and potato production, Russian, November 2011).

Conclusion

Presumably, an "easy" solution to the problem of national borders being a source of extracting administrative rent could be lowering the barriers for foreign farmers, and including Chinese wanting to enter the market. Economic theory suggests that this might attract more direct foreign investment into agriculture and competition in the market might increase, therefore bringing down prices or improving the quality of products. It may also influence the efficiency level of farming businesses and favorable conditions for technology transfers may be established. After all, due to lower corruption levels, an increase is expected in the quality of institutions. However, even if it were possible to resolve the contradiction between the government – attempting to ensure the welfare of society – and separate individuals or groups – aiming at maximizing their own profits – by lowering barriers, there would still be another issue. The real market competition brought by Chinese – or other foreign farmers – could easily destroy the long-existing system that has nothing to do with modern "ideals" of market production, or even the long-gone socialist model of production.

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²⁶ Yakutia is the Russian region bordering with Amur Oblast and is a long-term consumer of agro produce from the Amur Oblast.

However, this solution is not easily achieved. There are several reasons behind this, and all of them can be referred to as a conflict of interest between power and business. If barriers are decreased, officials will be denied benefits. It is not a fair bargain not only for them, but also for the dominant business with access to administrative resources. On the other hand, all businesses suffer from barriers, including those who have or have no access to administrative resources. A dominant business (Actor A), of course, loses less compared to the totally suffering one (Actor B). However, if the given balance of forces is disturbed, the dominant/suffering position of the business could be also disturbed. For instance, when procedures for migrant workers were changed, Chinese farmers, having better access to the Chinese labor market, unexpectedly received advantages because they could assess the quality of the workers before they entered Russia. In contrast, their Russian competitors had to refuse to hire workers, with the result that they started informal cooperation with Chinese partners or decreased the volume of production. This allowed Chinese farmers to gain more bargaining power and improve their position in the "power triad." In other words, every solution to the border as barriers can affect the force balance. That is why all actors support the status quo, whereas both actors A and B suffer from the domination of power.

Appendix

Export and Import Prices on Vegetables

Products	2001	2003	2004	2005	2006	2007	2008	2009		
	•		Chinese Ex	port Prices t	o World	1				
Potato	117	136	164	186	186	221	239	293		
Carrot	198	221	246	269	314	298	356	384		
Cabbage	156	162	192	201	201	259	299	381		
Onion	199	188	216	207	270	226	244	298		
Cucumber	102	139	140	186	213	227	228	263		
Tomato	145	200	168	209	248	306	352	381		
Chinese Export Prices to Russia										
Potato	98	167	154	153	147	149	218	239		
Carrot	99	178.5	177.1	177.7	174.2	180.2	228.3	268.5		
Cabbage	112	182	165	168	154	147	168	245		
Onion	151.4	232.1	165.3	150.6	134.7	138.8	187.6	223.5		
Cucumber	200	224.4	245.2	259.9	317.6	351.2	395.6	451.8		
Tomato	191	308	264	309	333	380	445	463		
]	Russian Imp	ort Prices fr	om China					
Potato	141	159	174	220	245	429	430	418		
Carrot	142.28	145.38	158.48	220.55	265.22	481.43	479.3	475.74		
Cabbage	129.7	142.7	154.1	228.7	250.8	314.4	315.3	318.8		
Onion	142.05	147.48	161.05	220.35	233.96	290.22	291.84	297.64		
Cucumber	294.42	310.28	360.03	476.73	566.97	754.24	752.54	735.01		
Tomato	324.35	337.68	422.84	543.72	638.9	982.39	992.48	964.56		
Amur Oblast Import Prices from China										
Potato	159	162	169	220	230	528	402	440		
Carrot	145	147	147	221	241	488	418	461		
Cabbage	149	150	150	221	221	305	302	304		
Onion	153	159	157	235	232	320	266	277		
Cucumber	400	353	363	470	476	754	731	689		
Tomato	349	350	381	530	573	1089	788	835		

^{*} Author's calculations, adapted from data provided by the Far Eastern Branch of the Federal Customs Service, Amur Region; and the Food and Agricultural Organization of the United Nations. Accessed December 2011: http://www.fao.org/corp/statistics/en/