Arms Transfers between Russia and China

Neoclassical Realist Analysis

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Abstract

After the years of the Cold War rivalry the relations between China and Russia reached one of the highest points in history in the early 2000’s. The arms trade became one of the major aspects of the bilateral relationship.

China became one of the main buyers of the Russian arms in the 1990’s, even before the formal rapprochement happened. After reaching its peak in the beginning of the 2000’s the volume of the arms sales declined drastically in the end of the decade, when the two countries formed a weak strategic alignment. As the arms acquisitions change the power capabilities of states in the international system, a certain level of trust and similar political orientation is needed in order for one state to be willing to sell arms to the other. The study thus intends to investigate why the arms sales increased in the 1990’s, and subsided in the middle of 2000’s. The study is an intrinsic case study which aims to provide an in depth analysis of the phenomenon of arms trade between Russia and China.

The research largely builds on the neoclassical realist theoretical framework and Krause waves of arms technology transfer model. The study concludes that both the increase and the decline of the arms exports can be mostly attributed to the role of domestic factors in the decision-making of the two states. The resumption of the arms trade on the previous scale is not likely to happen due to the arms transfer system conditions and new status both China and Russia acquired in the hierarchy of arms producers.

Key words: China, Russia, arms transfers, neoclassical realism, military cooperation

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List of Acronyms

Ac - Aircraft
ASW - Anti-submarine warfare
ASM - Air-to-surface missile
BVRAAM - Beyond Visual Range Air-to-Air Missile
FGA - Fighter/ground attack
MCW - Major conventional weapons
MIC – Military industrial complex
MoND – Ministry of National Defense
MP - Maritime patrol
MREF – Ministry of Foreign Economic Relations
MTC – Military technical cooperation
RMA – Revolution in Military Affairs
PRC – People’s Republic of China
R&D - – Research and Development
RF – Russian Federation
SALW – Small arms and light weapons
SAM - Surface-to-air missile
SCO – Shanghai Cooperation Organization
SRAAM - Short-Range-Air-to-Air Missile
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1. Introduction

1.1. Research Question and Problem Formulation

The relations between China and Soviet Union and subsequently the Russian Federation witnessed striking changes throughout the second half of the XX and the beginning of the XXI century. From being strategic allies and ‘brothers in arms’ in the 1950’s the People’s Republic of China and the Soviet Union turned into antagonists and rivals in the 1960’s. The relations remained strained throughout the consequent decades of the Cold War, but after the collapse of the USSR in 1991 they saw a major improvement.

In 1996 China and Russia formed a 'strategic partnership', in 2001 they signed a Treaty of Good-Neighborliness and Friendly Cooperation and co-founded a regional security organization – Shanghai Cooperation Organization (SCO), and finally in 2005 conducted joint military trainings unprecedented in scale – developments quite unthinkable just a few decades ago. Relations kept improving ever since and until this day seemed to be developing in a dynamic and constructive manner. The two sides have successfully resolved old territorial disputes, significantly reduced their military alignments on the border, became involved into the joint confidence-building measures, co-founded a multilateral regional organization, engaged into cooperation in military and energy spheres, and have generally supported each other on a number of international issues.

Ever since the collapse of the Soviet Union the arms trade has been an important aspect of the bilateral relationship. China became one of the main buyers of the Russian arms in the 1990’s, even before the formal rapprochement between the two countries happened. After reaching its peak in the beginning of the 2000’s, the volume of the arms sales declined drastically in the end of the decade (the general trend is best illustrated by the figure one and will be further examined in the following chapters).
The issue of the arms sales itself is a rather important one. Unlike any other commodity, trade in arms involves not only economic but to a greater extent political considerations, as the acquisition of arms changes the power capabilities of states and affects the power distribution in the international system. As Kinsella infers “arms transfer relationships are not alliances per se, [but] they do represent varying degrees of alignment” (Kinsella, 1998, p. 9), as there is certain level of trust and similar political orientation needed in order for one state to be willing to sell arms to the other.

In this light the dynamics of the arms transfers between China and Russia present a puzzle, as the arms sales intensified before any kind of strategic alignment was established between China and Russia, and they subsided when the strong rapprochement happened between the two. The realist perspective, on which this works largely builds on, indicates that the main underlying factor driving China and Russia together on the international level was the power shift which took place after the collapse of the USSR with the United States emerging as the only superpower. In the 1990’s Russia with its relative power reduced considerably and China with its power growing but still lagging behind that of the US were naturally drawn together in order to counterbalance the American influence, just in the way one of the maxims of structural realism predicts that “faced with unbalanced power, some states try to increase their own strength or they ally with others to bring the international distribution of power into balance” (Waltz, 2000, p. 28).
There is a theoretical problem, however, when it comes to applying the realist approach to the issue of the sales of weapons. As Donaldson and Donaldson argue, structural realists would explain the increased arms and technology sales in the following way

“To balance power in the short run, Russia would be willing to arm its short-term ally, China (since, to structural realists, all alliances are temporary). Moreover, it would do so without any immediate military threat to its survival, and in almost total disregard of its own medium- and long-term interests and positions vis-a-vis every other country, as well as its immediate position vis-à-vis China” (Donaldson & Donaldson, 2003, p. 717).

So if we were to adhere to the structural realist explanation, we would have to assume that Russia was deliberately undermining its long terms strategic perspectives, as according to the realist vision, arming its neighbor and past antagonist would undermine Russia’s own relative power, security and international standing over time.

Moreover, the described trend of the arms transfers from Russia to China becomes particularly startling if we consider the fact that both President Yeltsin as well as President Putin (during his first term) had largely pro-Western political orientations, and sought rather to normalize relations and bring about rapprochement with the West, then to balance and/or contain it (Fortescue, 2010; Trenin, 2011). The described development becomes even more surprising if we take into account the historical burden of animosity and mistrust between China and Russia, which dates back to the times of Russian imperial conquests in XVII and XVIII centuries, and was reinforced by the Sino-Soviet rivalry during the Cold War (Lo, 2008) In other words there is certain Sinophobia still looming large both among Russian general population and political elite, which according to most observers presents one of the biggest impediments to the future development of the Sino-Russian relations in all spheres (Lo, 2008; Lukin, 2001, 2007; Voskresenskii, 1999). The fear of China is continuously nourished by the suspicion that China still harbors an ambition to redeem the “historically Chinese” territories consisting of over 1,5 million of square kilometers of land East from Baikal lake¹, that tsarist Russia annexed from China (Galenovich, 2001). In other words Russians were willingly arming its dreadful neighbor with the most advanced weapons throughout 1990’s and early 2000’s, when the memory of the recent antagonism was still fresh. However, after the PRC officially revoked all of its territorial claims, when all the border issues were resolved and both parties

¹ The biggest parts of the Russian territory East to Baikal came under Russian rule according to the treaty of Nerchinsk, 1689, and the treaty of Kyakhta, 1727; before that these lands were under the Chinese rule. With the signature of the Sino-Soviet Treaty of Friendship, Alliance and Mutual Assistance in 1950 Moscow and Beijing recognized that the governments of the USSR and the PRC were not responsible for the doings of their ‘imperialist’ precursors. The issue was not mentioned until 1964 when Chairman Mao during his conversation with a delegation of Japanese Communist Party noted that there was a big “historical register” of over 1,5 million of square kilometers of land that tsarist Russia took away from China and that the question had not been resolved yet. Since then the issue of “historical belonging” of the Russian Eastern territories kept being cultivated in the discourse of both countries (Galenovich, 2001; Voskresenskii, 1999).
showed political will to overcome the burdens of history Moscow grew more and more reluctant to sell arms to China. Such dynamics of the arms transfers in the context of the bilateral relationship presents a puzzle this thesis aspires to solve.

In order to successfully tackle such a puzzle not only an empirical research of the arms transfer dynamics should be conducted, but also there is a need for deeper theoretical comprehension of the phenomenon. As I demonstrate in the subsequent chapters there is, for the moment, no elaborate international relations theory which can explain the dynamics of the arms transfers between China and Russia from the 1990’s until today. Therefore, the arms transfers between the RF and the PRC present the main object of the study. The main research question is twofold and can be formulated in the following way - why the arms transfers increased in the 1990s and decreased in the late 2000? And what international relations theory is best suited for understanding the phenomenon in question? In order to tackle these questions, I will examine Chinese and Russian position vis-à-vis arms transfers, and will look at future prospects of arms transfers between China and Russia.

1.2. Outline of the Thesis

The thesis is divided into five chapters. Chapter Two reviews the existing literature and research on the arms transfers, introduces neoclassical realism as a prospective analytical framework, and advocates combining it with Krause arms transfers wave model. Chapter Three explains the choice of case study research design and methodology. Chapter Four provides the background of the military cooperation between China and Russia and explores in detail the trends of the arms trade in the last twenty years. Chapter Five analyses the increase of the arms sales from Russia to China in the 1990’s and early 2000’s and concludes that such increase was caused by the combination of structural and unit level factors. Chapter Six analyses the reasons for the decline of the arms transfers from Russia to China in the middle of 2000’s and the prospects for the revival of the arms trade. This thesis concludes that the rise and decline of the arms transfers between China and Russia was caused by the structural and unit level factors and suggests three potential scenarios for the future arms transfers between these two countries.
2. Theoretical Framework

In this chapter I will define the term of ‘arms transfers’, determine the scope of the research, review the existing theories of arms transfers and their applicability for the case under study, argue for a need of combining the existing arms transfer theories with another theoretical approach, namely neoclassical realism, and consequently develop a comprehensive theoretical framework for the analysis of the arms transfers between China and Russia.

2.1. Arms Transfer: Definition and Theorization

The term ‘arms transfers’ is rather self-explanatory and represents “the shipment of military capability from one state to another” (Kinsella, 1998, p. 8). More elaborate definition provided by Laurence states that arms transfers are ‘‘observable commodities that are traded in the international system for the purpose of enhancing the military power or political power of the recipient nation’’ (Laurance, 1992, p. 3). The main distinction between the definitions provided by different authors is the scope of what is included into arms transfers: some authors (including the ones quoted above) strictly define it as the transfer of the commodities, i.e. armaments from one country to another, whereas others put a broader range of activities under this label. Thus Moore, for instance, argues that “arms transfers are carried out through a variety of mechanisms including the provision of military aid, military cooperation, arms sales, and security assistance” (Moore, 2010, p. 595). For the purpose of this work I adhere to the more narrow definition of the arms transfers, as the transfer of armaments per se constitute the biggest part of the military cooperation between China and Russia.

Another issue that requires clarification is the type of armaments involved into the arms transfers. This thesis will only deal with major conventional weapons (MCW) which include aircrafts, air defense systems, anti-submarine warfare weapons, armored vehicles, artillery, engines, missiles, sensors, satellites and ships (Comola, 2012, p. 150; SIPRI, 2012a). It does not touch upon small arms and light weapons (SALW). The reason for such limitation is twofold, first of all it is the transfer of
MCW and not the SALW\(^2\) that constitutes a major part of the trade between the PRC and RF, and second, SIPRI arms transfer database is one of the main primary source used for analyses in this paper, and this database includes data only on the MCW transfers and not on SLAW.

2.1.1. Review of the Arms Transfers Theoretical Models and Their Applicability

Armaments are a unique commodity. As Brzoska and Pearson note, their production and trade “entail at once motives of state security (domestic or foreign), economic welfare (either governmental concern for the general domestic economy or firms' concern about their own survival and profits), and technological advancement (a form of prestige and a ticket to the top ranks of today's trading economies)” (Brzoska & Pearson, 1994, p. 59). Changes in weapons technologies and ability of societies to develop and adopt military-technological innovations changed the course of the world history multiple times and attracted attention of scholars from various fields of scientific inquiry from history and political science (Bean, 1973; Thompson, 1988; Van Creveld & Van Creveld, 1991), to economics (Joslin & Winter, 1975), sociology, cultural anthropology and society and technology studies (Hacker, 1977; Kranzberg & Pursell, 1967; Shaw, 1984).

International relation scholars continuously turned their attention to the arms and their transfers in the context of theorizing concepts of power and power transition,. Neuman, for instance, notes that “the global defense industrial sector is a remarkably accurate indicator of the stratification of power in the post-Cold War international system” (Neuman, 2010, p. 106). Indeed military capabilities remain the most observable and quantifiable dimension of state’s power. Until recently the main focus of the arms transfer literature was on the asymmetric relationship between the superpowers and their client states during the Cold War when Soviet Union and the United States used arms transfers as the instruments of influence in the developing world and “their arms-transfer policies were guided first and foremost by a desire to gain advantage in their global chess game, and not by the true interests of their clients, particularly those in the Third World” (Kinsella, 2002, p. 210). There is a vast body of literature dedicated to the inquiry of what effects such transfers of weapons had on the foreign policy of the recipient states and international system (Harkavy, 1994; Kinsella, 1998, 2002; Krause, 1991; Sampson, 1977; Sanjian, 1995).

Consequently an arms transfer dependence theory was developed and more comprehensively elaborated in Catrina’s seminal work “Arms Transfer and Dependence” (Catrina, 1988). The main assumption of this theory lies in the fact that the relationship between supplier and recipient state is asymmetric because the recipients’ need for weapons and security cannot be satisfied by domestic

\(^2\) The military industrial complexes of both countries were for a long time capable of producing SALW domestically, hence no need for international transfers
production, thus it has to rely on a supplier state which derives no direct benefits except for revenue from the arms sales (even such revenue was not always the case as in many instances the arms transfers were subsidized by the superpowers). Such asymmetry created a situation when “those parties that have more benefits than costs in a given relationship pay for the surplus of benefits by being dependent. And those parties that have more costs than benefits in a given relationship are recompensed by being dominant’ (Catrina, 1988, p. 149). The dependence theory has a strong explanatory power for the dynamics of the arms trade in the Cold War period, as the arms production capabilities of the developing nations were limited and they did have to rely on the exports of arms and security from the superpowers. However, after the end of the Cold War and demise of the Soviet Union the situation changed in several ways: first, the arms transfer decisions became less politicized and more commercialized; second, with the emergence of a global arms market the developing countries can choose form a big number of suppliers instead of having to choose sides in the bipolar system; third, many countries managed to develop domestic MIC’s and became capable to fulfill their security needs themselves (Brzoska †, 2004; Brzoska, 1999).

However, the dependence theory can not be applied for the analysis of the military relations between China and Russia as there is hardly any evidence that Moscow received any foreign policy leverage through arms sales to Beijing nor that a desire for such leverage was the main motivation for arms sales (Donaldson & Donaldson, 2003). Moreover, the dependence theory assumes a major disparity in power between the contracting parties with the supplier state having an upper hand over the recipient one, which is conducive to the establishment of dependence relationship. After the collapse of the Soviet Union, however, the relative power of Russia contracted drastically, whereas the success of reforms in China kept its relative power growing. Therefore the dependence theory is not applicable for the analysis of the arms transfer relationship between China and Russia.

After the end of the Cold War many other theoretical models emerged to explain the arms transfer relationships and foreign policy choices. Most of such models are built on the formal statistical analysis and deal with specific cases, such as the rationale of arms producers to sell weapon to the embargoed states (Moore, 2010), the influence of the political situation in democratic states on their arms exports (Comola, 2012), the factors conducive to the development of domestic defense industry (Levine, Mouzakis, & Smith, 2000) and others. All these models provide valuable insights into the nature and dynamics of the arms transfers, but they are not fully applicable for the analysis of the arms transfer relationship between China and Russia as, to my knowledge, all of the existing models treat the issue from a unilateral perspective (i.e., the supplier or recipient side only) and do not attempt to assess it from both perspectives at once.
2.1.2. Krause Waves of Arms Technology Transfers

As was demonstrated above there is no formal theory or theoretical model that can be applied for the analysis of the arms transfer relationship between Russia and China. However, Krause’s theorization of the waves of arms technology transfers in the world history possesses certain explanatory power when applied deductively.

In his seminal work *Arms and the State: Patterns of Military Production and Trade* based on the careful historical analysis of the development of military technology and arms transfers in human history Krause distinguishes three waves in the arms technology transfers (Krause, 1995). The first wave started with the Military Revolution of the XV century, lasted until the XVII century and was followed by the two centuries of stasis and stability; the second wave, triggered by the rapid advance of the Industrial Revolution, began in the middle of the XIX century and ended with the World War II. The third and last system emerged in the post-war period and was associated with a new distribution of power in the international system, and according to Krause and Kinsella it is the third system that still lasts (Kinsella, 2002; Krause, 1995).

There are four levels of complexity in the military technologies transferred “with the least complex having the widest geographical distribution and the most complex being relatively scarce” (Krause, 1995, p. 18). The first level or Technology I constitutes in the skills required to operate the weapons exported from abroad; Technology II refers to the capacity to reproduce or copy technology I; Technology III “refers to the forms of military and economic organization needed to use, adapt or refine the weapons for particular battlefield or marketplace conditions” and Technology IV covers the social, political and economic organization needed to produce new forms of technology and to advance the production frontier” (Krause, 1995, pp. 18-19). The number of countries possessing each technological level decreases exponentially from level to level with the Technology IV being least spread. Schematically the levels of technology and their distribution can be illustrated by the Figure 2.
Each of the arms transfers systems or waves goes through five evolutionary phases. In the first phase a major military-technological innovation takes place in a small number of states which become the new centers of the emergent system and are labeled by Krause as the ‘first-tier’ arms producers (Krause, 1995, p. 27). In the phase two the resulting gaps in military technologies and capabilities stimulate feverish arms trade, as the states which do not posses new weapons are willing to pay high prices to restore the equilibrium. The first tier producers, however, are naturally interested in preserving their monopoly, and they choose one of the two policy options: either to limit the exports of the most advanced weapons thus preventing the transfer of technology, or to keep reinvesting high arms trade revenues into military R&D in order to keep outpacing technological developments in other countries. In the phase three restrictions on arms sales and prohibitive costs of new weapons combined with the pursuit of power by other states will translate into the demand not only on weapons but also on techniques for their production. The strongest clients not satisfied with the conditions of trade attempt to produce weapons based on the new technologies “with major arms recipients attempting to import skilled workers, training, patents, machinery or entire factories through licensed production and co-production deals, with or without the cooperation of first-tier suppliers” (Krause, 1995, p. 28). On the political level in this phase the possession of the most advanced weapons and domestic defense industry become seen as a main prerequisite to claim a great power status. The technology transfers will not be successful from the start but over time a limited number of states will succeed in accumulating the scientific skills needed to operate and maintain the weapons, adapt and refine the weapons, reproduce or copy the weapons.

Figure 2. Types of military technology (Krause, 1995, p. 19)
knowledge and expertise needed for production of the variety of advanced weapons and thus acquiring the Technology III. They will reach the ‘near the technological frontier’ level of production, but will be rarely able to innovate and thus will become the second-tier producers. Phase four is characterized by the further diffusion of technology in the system. The second-tier producers fulfill their security needs and sell arms to the lower level participants for lower costs. The ‘third-tier’ producers emerge, these are the states with a claim for regional hegemony that aspire to develop domestic industry but do not attempt to acquire technologies higher than Technology II. The revenue of the first-tier suppliers decreases and innovation starts to slow, and the gap in military-technological capabilities between the first-tier states and the rest of the system starts to narrow. On stage five, the diffusion of military technology is completed and the system remains in a status quo waiting for a new break-through innovation in military technology, which will either reinforce the dominance of the first-tier producers or introduce new centers of innovation. The following figure reviews the evolutionary phases of an arms transfer wave.

<table>
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<th>Phase</th>
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| I     | A major military-technological innovation takes place (Technology IV)  
- First-tier producers emerge and become the centers of the new system |
| II    | Other states attempt to restore the equilibrium and gain the newest technology  
- Active arms trade occurs |
| III   | The strongest arms buyers aspire to get not only the weapons, but also the production technology  
- Through various means a number of states acquire Technology III and become second-tier producers |
| IV    | Second-tier producers sell new weapons to the lower level participants for lower prices  
- These states acquire Technology II and become third-tier producers |
| V     | The gap between them and the rest starts to narrow  
- The diffusion of technology is complete  
- System remains in status quo until another major innovation takes place |

**Figure 3. The evolutionary phases of an arms transfer wave**
2.2. Neoclassical Realism: a New Perspective for Analyzing Arms Transfers

As was argued in the previous section there is no international relations theory that can be fully applied for the analysis of the arms transfer relationship between the two countries. All existing theoretical models assume either an asymmetric dependence of a recipient state from its supplier, or ascribe certain policy choices based on the place of a state in the arms transfer system without paying due attention to the state’s characteristics. Therefore, I argue that a new approach is needed for the analysis of the arms transfers between Russia and China. I suggest that the neoclassical realism, a relatively novel approach within the realist paradigm possesses a strong explanatory power for the analysis of the presented case.

2.2.1. Realism, State and Power: the Utility of the Paradigm

Realism is one of the oldest paradigms in the international relations theory, and aspiring to analyze the international relations the way they ‘realistically’ are (Dougherty & Pfaltzgraff, 2008), it focuses on such key concepts as power, anarchy, international system and the role they play in shaping the international politics.

The reason why it is appropriate for this analysis is that it ascribes the main agency of foreign policy decision-making to the state and sees power and its distribution as the main factor shaping the international system. Such state-centeredness is informative when scrutinizing foreign policy and bilateral relations of such countries as China and Russia, as in both of them state plays an undeniably strong role both in domestic and foreign affairs while the non-state actors, such as non-governmental organizations, transnational corporations, etc all act under the supervision and in compliance with the state. Also, since I aim to scrutinize military cooperation between the two countries, and in particular the transfers of arms, it is useful to have recourse to the realist concept of power, as the military force and weapons are the most observable dimension of power of any state.

However, as realism per se “like Marxism and liberalism, is first and foremost a philosophical position, not a single theory subject to empirical confirmation or disconfirmation”(Rathbun, 2008, p. 14); it unites many different theories and sub-schools under one roof, the question is which brand of realism would work best for the scrutiny of the presented case.

2.2.2. Neoclassical Realism and Foreign Policy

Neoclassical realism is a relatively new approach within the realist paradigm. The term was first coined by Rose in his seminal article Neoclassical Realism and Theories of Foreign Policy in which he analyses a few books produced within the
realist paradigm and places them under the roof of a new school – neoclassical realism (Rose, 1998).

Neoclassical realists acknowledge that theory informs and strengthens foreign policy analysis; however, they do not attempt to build one universal theory, but recognize instead that different approaches and micro-theories are useful for analysis of different cases. And so neoclassical realists strive to take into account variables both on systemic and unitary level, as Rose infers:

“It explicitly incorporates both external and internal variables, updating and systematizing certain insights drawn from classical realist thought. Its adherents argue that the scope and ambition of a country’s foreign policy is driven first and foremost by its place in the international system and specifically by its relative material power capabilities. This is why they are realist. They argue further, however, that the impact of such power capabilities on foreign policy is indirect and complex, because systemic pressures must be translated through intervening variables at the unit level. This is why they are neoclassical.” (Rose, 1998, p. 146)

So what makes neoclassical realism distinct from other schools within the realist paradigm is that while still recognizing “the importance of the anarchic international system, relative power distributions, and pervasive uncertainty” (Lobell, Ripsman, & Taliaferro, 2009, p. 7), neoclassical realists, unlike neorealists do not share the “black box” approach to the state’s behavior and do not assume that all states will act the same under the same structural conditions. On the contrary they seek “to explain variation in the foreign policies of the same state over time or across different states facing similar external constraints” (Lobell et al., 2009, p. 21), they suggest to turn to the analysis of domestic factors, such as perceptions of the policy-makers, internal power struggle, identity politics, social cohesion and ideology in order to explain state’s behavior at a given moment.

Neoclassical realism remains quite agnostic about what the main factors or theoretical positions may apply in order to explain behavior of a given state in a particular case (Wohlforth, 2008, p. 140), and are quite open for incorporation of ideas of other research traditions. Therefore, it is perfectly acceptable to incorporate Krause arms transfer wave model into the analysis of the arms transfer dynamics.

The bulk of neoclassical realist theories has been recently summarized and synthesized in the seminal work edited by Lobell, Ripsman and Taliaferro Neoclassical realism, the state, and foreign policy (Lobell et al., 2009), which I will be vastly drawing on further in this work. In order to explain in more detail why and how neoclassical realist model is applicable for the case under study first I have to set out its main theoretical assumptions.
2.2.3. The Key Assumptions of the Neoclassical Realism

Lobell et al. identify the main purpose of the neoclassical realism in the following: "to explain why, how, and under what conditions the internal characteristics of states – the extractive and mobilization capacity of politico-military institutions, the influence of domestic societal actors and interest groups, the degree of state autonomy from society, and the level of elite or societal cohesion – intervene between the leaders’ assessment of international threats and opportunities and the actual diplomatic, military, and foreign economic policies those leaders pursue” (Lobell et al., 2009, p. 4).

Neoclassical realists oppose neorealists’ allocation of exclusive importance on the systemic factors. For them “the behavior and outcomes of systems are determined by the interplay among the units and the structural environment within which they are embedded; therefore, the dynamics of complex systems cannot be inferred through study of unit or structural attributes alone” (Schweller, 1998, p. 7). They break away from the Waltzian deductive approach by stating that the “characteristics of a system [cannot] be known without reference to the properties of its units and how they interact. […] The systems of like structure will behave differently depending on the attributes of the constitutive states. System dynamics are related to, though not solely determined by, the properties of the constitutive units; they are the product of interaction of unit-level and structural causes” (Schweller, 1998, pp. 8-9). Therefore, the systemic factors seriously limit the foreign policy choices of a state, but not necessarily impose one choice over the others.

The neoclassical realists generally conform to the notion that power is a central factor in the world politics, and in line with the common realist logic they define it as "the capabilities or resources with which states can influence each other"(Wohlforth, 1993, p. 4). However, for neoclassical realists not only the capabilities states possess matter, but more so their ability and willingness to use those capabilities to influence other actors, and how these capabilities relate to the power of other states, the so called relative power. The biggest puzzle neoclassical realists are trying to solve is how the distribution of power among states translates into certain foreign policy decisions.

For neoclassical realists, as Lobell et al. state, on the international system level ‘state’ is “a generic term for a variety of autonomous polities with different geographic scopes, internal attributes, and relative material capabilities that coexist and interact in an anarchic environment” (Lobell et al., 2009, p. 26). Whereas on the domestic level and in the realm of the foreign policy “state consists of the foreign policy executive, principally the head of government and key ministers and officials charged with the conduct of foreign policy” (Lobell et al., 2009, p. 280). And it is the way that these foreign policy executives define national interests, assess threats and perceive the international environment will have a decisive influence on the behavior of the state on the international arena.
Neoclassical realism recognizes the existence of a complex relationship between state and society, and considers that states might possess different capabilities in the foreign policy realm depending on the configuration of such relationship and the degree of state autonomy vis-a`-vis society (Lobell et al., 2009, p. 27). Therefore, for neoclassical realists states do not act as unitary rational actors whose actions are solely dictated by the advancement of national interests, as every state to a certain degree is subject to domestic constrains and considerations.

In the neoclassical realist vision foreign policy executives always have certain degree of autonomy, because they have exclusive access to information on the foreign affairs, also the general public normally does not have expertise nor interest to understand the details of the international situation, but the importance of the security policy and the costs of its potential mishandling are so high that the public is usually willing to give the foreign policy executives more leeway in its conduct (Lobell, 2009). However, regardless of the degree of their autonomy the state leaders are always in one way or another influenced by the domestic settings, so the elaboration and implementation of the policies normally involve considerable bargaining between the foreign policy executives and other stakeholders within the society (Lobell et al., 2009, p. 26).

The natural question arises then – what kind of domestic stakeholders should be taken into consideration? Ripsman infers that in a democratic countries the main influence on the foreign policy executives comes from the legislature, organized interest groups, the media and the public opinion, whereas the non-democratic states “must take into account the demands of powerful political actors, such as the military, economic elites, and even, occasionally, the public as a whole, if they wish to remain in power” (Ripsman, 2009, p. 170). As to the degree of influence of the different domestic actors on the policy-making Ripsman concludes that the most influential groups are the ones that can provide electoral support in the democratic states. In the non-democratic states these are the groups “with decisive power to select, back, or eject leaders” such as the military and economic elites who can correspondingly lead a coup against the regime or provide resources for it to retain power (Ripsman, 2009, pp. 181-183).

Based on the above mentioned assumptions the neoclassical realists make several predictions about states foreign policy: 1). states will respond to the insecurity of anarchic international system by aspiring to shape and control their external environment; 2). the increment of the relative material power will lead to expansion in the ambition and scope of a state’s foreign policy, a decrease of power will bring a corresponding contraction; 3). such process will not be gradual or uniform, because it will depend not only on objective trends but also on how policy-makers subjectively interpret them and on the constrains they face from the domestic environment; 4). in countries with weak states it will take longer to translate growth of material power into expanded foreign policy, in the countries where states enjoy higher autonomy from the society such process will be more rapid and uniform (Rose, 1998, p. 167)
2.3. Synthesizing Theoretical Argument

No existing arms transfer model can be utilized on its own to explain the arms transfer dynamics between Russia and China, as most of models focus on the asymmetric dependence or assess a specific issue in the arms transfer relations but do not analyze bilateral relations. The model suggested by Krause has a strong explanatory power in assessing the dynamics of the arms technology transfers, however, as the model suggests the use of deductive reasoning, it does not allow to fully understand the underlying causes behind the decisions of a particular state to buy or to sell arms. Hence it is not fully applicable for the case under study, as it would limit the scope of the analysis to the structural level, and would not allow the exploration of complexities on the bilateral level. The mere fact of one country being a second-tier producer does not mean that this country will necessarily act according to just one scenario ascribed to the second-tier producers. Therefore, this model can be instructive when analyzing the dynamics of the arms trade between Russia and China, but it does not help to understand what reasoning either country had when adopting certain foreign policy decisions related to the military cooperation.

Neoclassical realism in its turn, with its openness to incorporate other theories into its analysis, allows both to take into consideration the implications of both international relations and arms transfer systems, but at the same time scrutinize unitary level variables, and in such manner produce an exhaustive and all encompassing analysis of the arms transfers between Russia and China.

Just like any other school of thought, the neoclassical realist has certain shortcomings. For instance, neoclassical realists tend to perceive international system and domestic factors as perfectly separable variables, whereas they actively interact and in the contemporary globalized world it is often hard to draw a line between the domestic and international influences. Also most of the research done within the neoclassical realist framework usually focuses on the foreign policy failures rather then success (Tang, 2009, p. 801), which somewhat undermines the analytical utility and generalizability of the approach.

However, I think that despite its limitations the neoclassical realist framework is rather useful for the analysis of the Sino-Russian relationship and of the arms transfers in particular, as it is theoretically informative but also provides certain practical prescriptions and methodological implications for the analysis of the foreign policies of the states in question. It allows to account for the systemic factors influencing the bilateral relationship, but also to take into consideration the subtleties of the decision-making and ideational factors affecting the foreign policy of the two states and in this way can help to provide a comprehensive understanding of the nature of the military cooperation.
3. Methodology

As I undertake my research from the neoclassical realist theoretical stance, I also adhere to the methodological preferences this school of thought advocates.

The neoclassical realists advocate keeping in mind the systemic level while addressing the full complexity of the processes of foreign policy decision-making, taking into account of both internal and external contexts in which the decisions are made. Therefore, neoclassical realists argue that “significant area expertise is critical for an accurate understanding of countries' foreign policy behavior” (Rose, 1998, p. 167). When applied to actual research within neoclassical realist tradition it translates into conducting “detailed historical analysis with attention to causal mechanisms” (Lobell et al., 2009, p. 7). Most of the neoclassical realists’ works consist of descriptive analytical narratives dedicated to the study of one or several cases. Therefore, the case study research design would be most appropriate.

3.1. Case Study

There are many definitions and interpretations of the case study method. The Dictionary of Social Research, for instance, emphasizes the form rather than the content of study and defines the ‘case study’ as “an approach that uses in-depth investigation of one or more examples of a current social phenomenon, utilizing a variety of sources of data. A ‘case’ can be an individual person, an event, or a social activity, group, organization or institution” (Jupp, 2006, p. 20). Whereas Yin focuses rather on the content or situation case study can be applied to and describes it as “an empirical inquiry that investigates a contemporary phenomenon within a real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (Yin, 2003, p. 20). George and Bennett on the other hand highlight the purpose of the study and determine a case study to be “detailed examination of an aspect of a historical episode to develop or test historical explanations that may be generalizable to other events”, (George & Bennett, 2005, p. 5).
3.1.1. Appropriateness of the Case Study Design

How is the case study an appropriate research strategy for this study? As Yin suggests, “the first and most important condition for differentiating among the various research strategies is to identify the type of research question being asked”, and he further suggests that case study is the most appropriate strategy for “how” and “why” questions, and when a researcher plans to examine “contemporary events, but when the relevant behaviors cannot be manipulated” (Yin, 2003, p. 7). As in the present study the main research question is a “why” question - namely why the arms transfers between Russia and China increased in the 1990’s and decreased in the late 2000’s, the contemporary events are being examined, and the author has no control whatsoever over the course of events, it can be inferred that the case study design would be appropriate.

As Yin further specifies, choosing the case study method is appropriate when a researcher desires to (a) define research topics broadly and not narrowly, (b) to cover contextual or complex multivariate conditions and not just isolated variables, and (c) to rely on multiple and not singular sources of evidence (Yin, 2003, p. xiii). These criteria are applicable to the present research, as arms transfers are a broad research topic involving complex conditions instead of isolated variables. Another advantage of the case study method for this work is that the case study research has a capacity for addressing causal complexity and is aimed at finding the conditions under which specified outcomes occur and the mechanisms through which they occur (Yin, 2003, p. 31). Thus, the application of the case study method enables to see the complexity of causality and identify several reasons/ explanations behind the arms transfer dynamics between China and Russia.

With the case study method being appropriate for the suggested research, the next step is to define what can be a case and what would be a case in this work.

3.1.2. Defining the Case

Hammersley and Gomm point out that “the case need not be a person or enterprise. It can be whatever ‘bounded system’ [...] is of interest. An institution, a programme, a responsibility, a collection or a population can be the case” (Gomm, Hammersley, & Foster, 2000, p. 8).

Also George and Bennett suggest that in order to define a case the class of events should be identified that the case is an example of, they define class of events as following:

“Class of events refers here to a phenomenon of scientific interest, such as revolutions, types of governmental regimes, kinds of economic systems, or personality types that the investigator choose to study with the aim of developing theory (or generic knowledge) regarding the cause of similarities or differences among instances (Cases) of that class of events” (Bennett & George, 2005 pp.17-18)
Therefore, in the present study the class of events would be the foreign policy of a state, and the case for this work would be the foreign policy of a state in a particular dimension, namely arms sales. According to Gerring’s (2004) classification, it would be a within-unit analysis. Gerring states that “within-unit cases consist of all cases that lie at a lower level of analysis relative to the inference under investigation” (Gerring, 2004, p. 344). Therefore there are four within the case units: 1). foreign policy of China from 1990’s to early 2000’s, 2). foreign policy of Russia from the 1990’s until early 2000’s, 3). foreign policy of China from the mid-2000’s until present, and 4). foreign policy of Russia from the mid-2000’s until present.

3.2. Data Collection

The primary data used in this thesis consists of official government documents (China’s defense white papers, Russian reports and development strategies, etc.), statements of both Chinese and Russian officials quoted in media, official statistics of defense expenditure and military procurement, opinion polls results, media reports on various events and issues related to arms transfers. The Stockholm International Peace Research Institute’s (SIPRI) databases – the Military Expenditure Database and the Arms Transfers Database were an important source of primary quantitative information on a number of arms deals, the size of the orders, volumes of trade and the type of arms transferred3.

In addition, an extensive study of secondary literature was done in order to understand the context of the Sino-Russian relations in general, as well as of the subtleties of military cooperation and arms transfers.

3.3. Availability of the Data

There are certain limitations imposed by the very nature of the topic of this thesis. First of all, the arms acquisitions are an important security issue and the information available for the public access is rather scarce as many decisions are made behind the closed doors, especially in the countries such as China and Russia – non-democratic states known for their secrecy and opaque decision-making process. For these reasons it was hardly possible to conduct interviews with government officials of either state and get an official opinion on this matter4.

3 SIPRI grants permission for free use of its materials and databases for the purposes of “criticism, comment, news reporting, scholarship, or research in which the use is for non-commercial purposes” without a need of prior authorization (Terms and conditions of use at www.sipri.org/databases/terms)

4 I did try sending e-mails to both Russian and Chinese public bodies, but they remained unanswered.
Another limiting factor was the language barrier; I am fluent in Russian, so I extensively used Russian sources along with sources in English. However, I have only very basic knowledge of Mandarin Chinese, therefore I could only use Chinese sources translated into English. So this work despite the best efforts of its author might be overly influenced by the Russian and Western points of view on the issue and not present the Chinese position fully enough. I tried to overcome this shortcoming with extensive discussions with the members of the SIRPA faculty (School of International Relations and Foreign Affairs) at Fudan University. These discussions generated many ideas and insights on the Chinese position on the matter and on the topic and also strongly influenced this work in general. However, the professors I talked to refused to be formally interviewed; therefore I do not directly quote them in this work.

3.4. Data Analysis

Once the choice of the research design is substantiated, the next step is to elaborate on the purpose and strategy of the research. Hammersley and Gomm introduce three types of the case study research, depending on their aim case studies can be used to test a hypothesis or theory, develop a new theory or describe and/or explain a particular situation for its own sake (Gomm et al., 2000). As my aim is not to test or develop a theory, but rather to acquire deeper understanding of the nature of arms transfer dynamics and find the best theoretical framework for its analysis, my case study would be of a latter type. In other words the aim of the study could be described as a theoretical/configurative that George and Bennett define in the following way:

“Case studies provide good descriptions that might be used in subsequent studies for theory building, but by themselves, such cases do not cumulate or contribute directly to theory” (Bennett & George, 75: 2005)

In my research I adhere more to the logic expressed by Hammersley and Gomm best conveyed by the following – “the aim of case study research should be to capture cases in their uniqueness, rather than to use them as a basis for wider generalization or for theoretical inference of some kind. And this is often held to require a narrative approach rather than one framed in terms of variable analysis” (Gomm et al., 2000, p. 4).

Another aim case studies often pursue is to generalize their findings in which case the units of study have to be representative of the class of events they belong to (May, 2011). I do not aim to do that with my study either. The goal of my study is opposite to generalization, it is what Simons calls the particularization which constitutes in presenting “a rich portrayal of a single setting to inform practice, establish the value of the case and/or add to knowledge of a specific topic” (Simons, 2009, p. 24). Therefore, my case falls into the category of an ‘intrinsic’ one “which aims to develop the case’s own issues, contexts and interpretation”
and “to capture the wholeness of the case, to provide a detailed write up of the case as a stand-alone entity” (May, 2011, p. 238).

The strategy I pursue in this research project logically results from the purpose of my study and the theoretical standpoint I am departing from. Therefore I implement the in-depth study of the arms transfers between China and Russia to identify the causal mechanisms underlying the relations and producing descriptive analytical narrative of the within-unit cases from which I attempt to make a general conclusion about the nature of the bilateral arms sales relationship.
4. Overview of Military Cooperation between China and Russia since 1992

4.1. The Content and Volume of the Arms Trade since 1992 until Present

The arms and technology sales have for a long time been one of the central aspects of the bilateral relationship between Russia and China and have contributed a great part of the strategic partnership agenda. Since the conclusion of the agreement on the military-technical cooperation in 1992, China purchased more military and defense items from Russia than from all other countries combined (Weitz, 2008, p. 25). To be more specific, according to the SIPRI Arms Transfers Database, around 90 percent of all the military purchases of the PRC in the period from 1991 to 2011 came from Russia, and China accounted for around 40 percent of the Russian arms sales (SIPRI, 2012a). Throughout that period, China purchased from Russia several Tor-M1 mobile air defense systems, transport aircrafts, Mi-17 military transport helicopters, Su-27/Su-30 combat aircrafts, Sovremenny destroyers, Type 636E and Type 877E submarines, S-300PMU1/2 air defense systems, and a wide range of missiles. The two countries signed the agreements for the licensed production of Su-27 combat aircraft, Mi-17 helicopters and anti-tank and anti-ship missiles in China (for a detailed account of the types and numbers of weapons and licenses transferred see Appendices 1 and 2) (SIPRI, 2012a). In financial terms the value of the purchases reached around one billion US dollars per year in the 1990’s, and in the mid-2000’s on average amounted to two billion per annum (detailed information on the arms trade value is enclosed in the Appendix 3).

There are opinions expressed, however, that the mentioned figures might be underestimated. Makienko, one of the leading Russian military experts, notes that despite the fact that the level of transparency of the Russian arms exports has increased significantly since the year 1996, it does not apply to the military technical cooperation (MTC) with China. He suggests that there exist special agreements between the two sides on this matter according to which this information is treated with a higher level of secrecy than on the arms transfers form Russia to any other country (Makienko, 2002, pp. 6-7).

However, recently the volume of trade and technology transfers from Russia to China has dropped down substantially. As the SIPRI experts note, the year 2005
has become the turning point or the “beginning of the end for Chinese orders for complete systems from Russia” (L. Jakobson, Holtom, P., & Knox, 2011, p. 14). Before 2007, the Russian Federation maintained a steady trade surplus with China, largely due to the arms sales, but since 2007 the balance has shifted to China’s favor, with Russian arms exports declining exponentially. During the last three years China’s imports from Russia were limited to a few transport aircrafts and engines. In 2010 the share of China in the Russian arms sales constituted only 10 percent (L. Jakobson, Holtom, P., & Knox, 2011, p. 15), whereas in the beginning of 2012 the Chinese imports from Russia constituted only one sixth of what they were in 2006 (Farley, 2012), and China was not even among the top-5 exporters of Russian arms being surpassed by India, Venezuela, Algeria, Vietnam and Syria in the beginning of 2012 (Ptichkin, 2012).

4.2. Arms Transfers and Other Dimensions of Military Cooperation

Transfers of arms and technology represent one of the largest and most important dimensions of the military cooperation between China and Russia; however, there are other aspects of cooperation that are closely related to the arms transfers. Although these other aspects such as consultations on high military level and joint military exercises do not represent the main focus of this study, it is important to elaborate on them and their relation to the arms transfers, because it enhances understanding of the arms transfer dynamics by setting a context in which arms trade takes place.

4.2.1. Consultations on the High Military Level

The cooperation on the high military level can hardly be overestimated as it sets the agenda for the cooperation in the other dimensions. However, since matters of national security are discussed during such consultations, detailed information on the content of such meetings is not fully available, which presents a challenge for assessing the degree of cooperation or the strength of the relationship in this aspect. However, the rhetoric surrounding this dimension is rather positive; in the Defense White Paper of the People’s Republic of China, for instance, Russia is the first country mentioned in the “Strategic Consultations and Dialogues” section. The document describes the cooperation between the two countries on the highest level as following:

“The strategic and cooperative partnership between Russia and China continues to be comprehensively and vigorously reinforced. The two militaries established a strategic consultation mechanism in 1997. The 13th round of strategic consultations between the two general staff headquarters in 2010 resulted in consensus on the international strategic situation, issues in Northeast Asia, Central Asia and South Asia, and cooperation between the two militaries” (China’s National Defense in 2010, 2011).
From the Russian side the military chief of staff of the Russian Federation general Nikolai Makarov stated that the consultations on the higher level are very important, and that such practices help to build mutual confidence and trust. He also stated that the military cooperation is developing rather successfully with the increase of not only number of joint operations but also of their quality and intensity ("Макаров: Необходимо обмениваться опытом военных реформ с Китаем [Makarov: It Is Necessary to Exchange Experience in Military Reforms with China]," 2011). Other facts in support of the strengthening of the contacts and relations between the two militaries include the establishment of direct telephone line between Russian and Chinese defense ministers in 2008 -the first and only such hotline between China and another country-, and the regularity with which the meetings of the military personnel of different levels take place throughout a year all surrounded by amicable official statements (Weitz, 2009, p. 2).

Therefore, on the official and public level the consultations on high military level are characterized by the very positive dynamics and should be conducive to enhanced cooperation on the other levels. However, the scarcity of the information available does not permit to state that the chiefs of staff and other military officials from both sides indeed share mutual warm feelings and understanding, and the positive rhetoric is not merely serving propaganda purposes. It can be only said with certainty that this is the image of the relationship the two parties wish to project to the rest of the world.

4.2.2. Joint Military Exercises

The joint military exercises between the Chinese and Russian military is a quite novel phenomenon in the military cooperation between the two. Throughout the long period of the Cold War there was very little contact between the militaries of the two states. In fact the last time when Chinese and Russian army men joined arms for a common cause date back to the times of the Korean war and military exercises in the 1950’s and 1960’s; since the Sino-Soviet split until the collapse of the USSR the contacts between the militaries were either non-existent or rather negative (like in the border conflict of 1969).

Therefore, the importance of the joint military exercises can hardly be overestimated, and both the Chinese and Russian sides stated on a number of occasions that such trainings help to build trust. Thus the Minister of Defense of the Russian Federation stated that the joint trainings are not aimed against any third parties, but aspire to promote more understanding and deepen the relationship between Moscow and Beijing (Karamaev, 2005). Whereas the press-release by China’s Ministry of Defense states that the joint trainings are aimed "to deepen Sino-Russian mutual trust, promote mutual friendship and enhance the cooperation and coordination of the two armed forces in the areas of defense and security" ("China, Russia to launch 1st joint military exercises," 2005). The SIPRI
report summarizes the formal objectives of the joint military exercises between China and Russia as being the following – “to strengthen joint operational capabilities, exchange experience, facilitate cooperation in the fight against the ‘three forces’ of terrorism, separatism and extremism, and enhance mutual combat readiness against emerging threats” (L. Jakobson, Holtom, P., & Knox, 2011, p. 24)

Since the year 2005 there were five Peace Mission exercises held in the years 2005, 2007, 2009, 2010 and 2012 respectively. In all of the exercises the PRC and RF were the main driving forces, however, Shanghai Cooperation Organization (SCO) member states were also involved as either participants or observers. In August 2011 during another round of consultations on the high military level between the heads of Chinese and Russian general staffs in Moscow Colonel General Chen Bingde and General Makarov reached the agreement to extend the scope of the joint trainings to the naval exercises ("Генштаб РФ рассчитывает провести с Китаем морские учения [The General Staff of the RF reckons to hold naval exercises with China]," 2011). The first naval exercises were planned and took place in the end of April beginning of May 2012.

Among the five Peace Missions only the ones of the years 2005 and 2009 were held on the bilateral basis, and the other involved the SCO states. As this work assesses the bilateral military cooperation I will focus on these two missions.

The Peace Mission-2005 occurred on 18-25 of August and began in Vladivostok and then moved to the Shandong Peninsula. It was designed according to the following scenario: in a certain state broke out civil unrest triggered by ethnic clashes, government of this fictitious state turned to the UN and its neighbors for help in suppressing the insurgency, after obtaining the UN mandate China and Russia joined forces to restore peace and order (de Haas, 2005, p. 2). The training was impressive in scope and became an unprecedented event in the history of bilateral relationship, as even during the times of the Sino-Soviet friendship the two sides never held joint trainings of such scale. There were around 70 naval ships and submarines used in the exercise with over 10,000 military personnel participating (de Haas, 2005). Moscow sent around 2,000 army men, ten ships of the Pacific fleet, the air forces of over twenty fighter jets, including two Tu-95 strategic bombers, four Tu-22 long range bombers and Su-27 fighters (Karamaev, 2005). China participated with 8,000 military personnel, anti-aircraft artillery and communications units, special forces and tank battalions, mechanized infantry, air force and around 60 naval ships and submarines (de Haas, 2005, p. 2). The activities practiced during the exercise included “neutralizing anti-aircraft defenses, enforcing a maritime blockade, and conducting an amphibious assault and other joint maritime operations” and according to some observers presented “a conventional all-out assault using the Russian and Chinese tactics developed in the 1970s and 80s” (Weitz, 2009, p. 4).

The Peace Mission-2009 was held on July 22-27 and began with the consultations in Khabarovsk and the operational phases took place in northeast China at the
Taonan training base in China’s Shenyang Military Area Command. The mission again was designed as an anti-terrorist operation against a terrorist group that took an entire city hostage. The trainings were much smaller in scale this time: around 2,600 military personnel participated in the maneuvers from the both sides, with over 60 military aircrafts and 100 tanks, armored vehicles and self-propelled cannons (“Chinese, Russian troops showcase anti-terror power in joint military exercise,” 2009). The Russian side sent some of its most advanced military units - about 20 military aircrafts among which were Su-25 and Su-27 combat jets, Il-76 transport planes and Mi-8 helicopters (Weitz, 2009, p. 5).

As a result of the above trainings and of the smaller scale activities such as military exchanges, and numerous small-scale border drills, “the Russian and Chinese militaries have developed a more professional and balanced bilateral relationship” (Weitz, 2009, p. 2).

The declared objectives, however, according to many observers did not match the scale of the military trainings (Karamaev, 2005; Weitz, 2009), as the classes of troops (air force, navy, armored vehicles) and types of weapons used in both missions suggest an exercise in conventional warfare, and not the combat with ethnic insurgency or terrorism. So just as with the arms transfers the question of what are the underlying causes and intentions behind the joint military trainings between Russia and China remains open.

The immediately obvious purpose of the joint maneuvers is indeed the confidence building and gaining experience, the last aspect being particularly important for the Chinese side as the PLA has a relatively limited real combat experience. Whereas Russia still possesses a long tradition of military education and army with recent combat experience from conflicts in Afghanistan and Northern Caucasus, and numerous peace-keeping operations around the world. This goes in line with the aspiration of Beijing to raise its profile in military diplomacy and provide more on hand experience for its army men, for the same reason China increased participation in the UN peace-keeping missions around the globe (Gill & Huang, 2009; Sachar, 2003).

However, most authors agree that the main hidden agenda behind the military exercises was to showcase Chinese and Russian military strength and their preparedness to use it if a need for it would occur. Thus de Haas infers that “the most likely real main objective of the maneuvers was that in this way China and Russia made clear to the (Western) world that they consider themselves to be in control of the Asian-Pacific region and that others are denied interfering in their sphere of influence” (de Haas, 2005, p. 5). The fact that Beijing initially suggested to conduct the 2005 joint trainings in Zhejiang province near Taiwan suggests that it is more Chinese than Russian agenda to send such a message to the West (Qi, 2008). Moscow did not agree to hold maneuvers so close to Taiwan, as it obviously does not want to get directly involved into the tensions across the Taiwan Strait. The Kremlin does, however, aim to raise its profile in Asia and showcase its resurgent military might.
Another important objective Moscow pursued in participating in the joint trainings is directly connected to the arms sales. As Weitz notes, “Peace Mission 2005 could be seen as an elaborate stage for the demonstration of Russian military technology to potential Chinese buyers” (Weitz, 2008, p. 35). Considering that after actual warfare military exercise is the best way to demonstrate the combat capabilities of new weapons Russian willingness to participate in the maneuvers and to send some of its most advanced MCW’s seems more than logical. Such rationale also explains why the 2009 Peace Mission was so much smaller in scale, as by that time it was evident to Moscow that Beijing would not place any big orders in the near future, at least not on the types of weapons Russia was willing to sell. There was never any official acknowledgement of such hidden agenda, but it seems quite probable that it was one of the strong incentives of Moscow in participating in the joint exercises.

4.3. Concluding Remarks

The review of the military cooperation between Russia and China demonstrates that the relations between the two countries kept improving throughout the 1990’s and 2000’s, and the two came as close as it gets to forming a security alliance without formally signing an alliance treaty (forming regional security organization, conducting joint military trainings, meeting regularly for consultations on all military levels). And then again according not only to realist logic but general common sense the stronger the relationship became the more willing the parties should have been to trade weapons to each other. This, however, did not occur. The subsequent chapters will scrutinize in detail the reasons why arms transfers followed such an unexpected dynamics.
5. Analysis of the Increase of Arms Transfers in the 1990’s and Early 2000’s

This chapter will examine in detail the reasons for the increase of the arms trade between China and Russia from the early 1990’s to the middle of 2000’s. It will first address the international system factors which set the framework for bilateral cooperation and the arms transfer system factors which condition the arms trade on the global level. It will further scrutinize and the unit level factors affecting the phenomenon, i.e. the role of domestic situation, relations between the leaders, and pressure of the interest groups on the decision making in the sphere of the arms transfers.

5.1. System Level Factors

Following the neoclassical realist logic we start the analysis from looking at the international level and structural factors affecting the relationship between the two countries.

The collapse of the Soviet Union and the end of the Cold War brought a major change in the international relations system. In fact the entire bipolar system crumbled together with the Warsaw bloc. The decomposition of the Soviet Empire left the Russian Federation with 4/5 of the territory, half of the population and half of the GDP of the former USSR (Voskresenskii, 1999, p. 254). At the same time China was experiencing stable economic growth and increase in its relative power; however, it found itself in the international isolation and subject to harsh criticism from the West after the bloody suppression of the democratic movement on the Tiananmen Square in 1989. The United States emerged as the only superpower with seemingly unlimited opportunities. The Western intervention in Kosovo and Iraq, the promotion of the human rights agenda, the persistent presence of the United States in the Asia Pacific, the growth of Japanese military power, NATO eastward expansions and other factors highlighted the American dominance at the time (Peng, 2002, pp. 123-125). The power shift prompted the other less powerful states to balance US. As the choice of potential allies was quite limited at the time for both China and Russia, it was rather logical for the two to abandon old rivalry and start mending fences.
Another set of structural factors arises from the current phase of arms transfer system described by Krause, and it can provide some insights into how the development of military technology per se and the current stage of its distribution in the system affected the arms transfer relationship between Russia and China. The Krause model, similar to the product life-cycle and industry transfer model, is deductive in nature and cannot account for all the complexities of the arms transfer relationship between the two countries. However, it can provide understanding of the objective factors influencing the arms transfers and therefore increase the explanatory power of neoclassical realist model.

According to Krause classification, we are currently witnessing the fourth phase of the arms transfer wave, which is characterized by the emergence of new second-tier producers, commercialization of the arms sales and tough competition among the growing number of the suppliers (Krause, 1995, p. 28). There was remarkable change in the arms transfer hierarchy that happened with the collapse of the Soviet Union, as Russia gradually turned from a first-tier producer to a second-tier one. This change did not happen immediately, as the hierarchy in the system is defined by the ability to produce and innovate, and despite the economic decline such ability would be preserved over time until the weapons produced become outdated due to the lack of the R&D investment. Therefore, by selling arms to China it might be said that Russia was acting as a first-tier producer aspiring to preserve its status in the system by earning revenue and reinvesting it into the R&D in order to keep outpacing possible competitors.

![Hierarchy of the arms producers in the bipolar international system](Krause, 1995)

Figure 4. The hierarchy of the arms producers in the bipolar international system (Krause, 1995)
At the same time China was a third-tier producer, and throughout the 1990’s and 2000’s acted according to Krause’s prescription for an aspiring power pursuing military modernization and aiming to obtain Technology II and III by any means. The desire to acquire advanced military technologies and to develop domestic military-industrial complex is rather normal for any state, as it allows minimizing security dependence from the outside sources; not every state, however, can afford moving up the ladder in the arms producers hierarchy as it requires substantial investment into the military R&D. Beijing’s access to the technologies from most of the second-tier suppliers was very limited or non-existent, because the US and EU introduced arms embargo against China after the Tiananmen incident in 1989. Therefore, Beijing was willing to purchase as much technology as possible from a declining but still a first-tier producer which Russia was in the 1990’s.

Therefore, the collapse of the bipolar system and new power setting accounts for the gradual rapprochement between Moscow and Beijing. On the other hand, the arms transfer system characteristics explain why the intensification of the arms sales happened before the actual rapprochement happened.

As we have defined the structural factors which conditioned the arms trade, now let us look how these factors translated into the foreign policy decision making of the two countries.

5.2. Reasons for China to Buy Russian Arms

For China the rationale to opt for Russian arms in the period under study was quite straightforward. In the 1990’s China was continuing its military modernization, which was started by Deng Xiaoping in the 1980’s. In the beginning of the reformation of the People’s Liberation Army (PLA), the Soviet Union was still seen as the primary potential military threat, which in its turn translated into military cooperation with the United States, Britain, France and to a lesser extent other Western countries (Dreyer, 1988, pp. 218-219). In the face of a common enemy it was logical for the West to assist China in its military modernization, as the increase of its military capabilities was to be used to balance the USSR. With the resumption of détente and liberalization in the Soviet Union, the situation started to change. The end of the active military cooperation between the West and China took place after the Tiananmen incident in 1989, when most of the Western states introduced embargo on arms sales to the PRC. Beijing, however, did not give up aspirations to modernize its military; quite on the contrary the defense budget kept growing in absolute terms quite steadily until this day (Bitzinger, 2011, p. 7).
It is worth noticing that the continuous increase of the military expenditure was and remains a result of the economic growth. As it is stated on the website of the Ministry of National Defense (MoND), China adheres to the principle that “defense development should be both subordinated to and in the service of the country's overall economic development, and that the former should be coordinated with the latter” ("Defense Expenditure," 2007). As can be seen in the Figure 5, there was a substantial growth of the military expenditure in the absolute terms, this growth accelerated in 1998 and according to the Ministry of National Defense it was associated with the plan of China “to maintain national security and development and meet the requirements of the RMA with Chinese characteristics”, as the MoND website further notes since 1998 “the average annual increase of defense expenditure was 15.9 percent, while that of GDP was 12.5 percent and that of the state financial expenditure was 18.4 percent” ("Defense Expenditure," 2007). The growth in the absolute numbers is quite impressive; however, as can be seen in the Figure 6, the percentage of the GDP allocated for the military expenditure dropped down since the 1989 and remains quite low.
In other words due the unprecedented economic growth China managed to allocate more resources for its military needs. The dynamics of the military expenditure reflects the strategy of the military modernization of the Chinese military. In the 1980’s and early 1990’s, military modernization was focused on enhancing the efficiency and reducing the number of the military personnel of the PLA, as it was declared that the military contingency China was most likely to face was “local, limited war” instead of the “early, major, and nuclear war” envisioned by the chairman Mao (Blasko, 2005, p. 68). Therefore, during that time as can be seen from the graphs above there were no major changes in the military spending, in fact the percentage of the GDP allocated for the military needs even dropped down in that period.

Since the late 1990’s, however, Beijing officially adopted the strategic concept of fighting “limited local wars under high-technology conditions” which entailed heavy investment into more advanced armaments and military R&D activities (Bitzinger, 2011, pp. 7-8). Thus in the White paper on National Defense in 1998 it was stated that Chinese army “strives to make the transition from a numerically

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5 The presented graphs are built based on the data provided by the Stockholm International Peace Research Institute. Various sources calculate the military spending of China in different ways, therefore the numbers provided by the Chinese government are lower than that of SIPRI, whereas Western, especially American, observers provide higher numbers. I used the SIPRI data not because I intend to cast doubt on other sources of information, but solely because SIPRI uses the same methodology to calculate military expenditures of all the other countries and it is therefore more feasible to make comparisons and evaluate trends using SIPRI data. Moreover, the purpose of the presented graphs is not so much to assess the value of the defense budget per se, but to illustrate a general trend in China’s defense spending.
superior type to a qualitatively efficient type, and from a manpower-intensive type to a technology-intensive type. In view of the characteristics of modern wars, no effort will be spared to improve the modernization level of weaponry, reform and perfect the army system and setup” (China's National Defense, 1998). The military reform strategy adopted by the PRC was later termed as the Revolution in Military Affairs (RMA) with Chinese characteristics. The RMA is a concept and strategy first developed and adopted in the United States and according to one of the authors of the term, Andrew Marshall, RMA “is a major change in the nature of warfare brought about by the innovative application of new technologies which, combined with dramatic changes in military doctrine and operational and organizational concepts, fundamentally alters the character and conduct of military operations” (Gongora & Von Riekhoff, 2000, p. 2).

The first white paper where the term of Revolution in Military Affairs with Chinese Characteristics is mentioned and thoroughly elaborated upon is the White Paper on China’s National Defense in 2004, where it is stated that “the PLA, aiming at building an informationalized force and winning an informationalized war, deepens its reform, dedicates itself to innovation, improves its quality and actively pushes forward the RMA with Chinese characteristics with informationalization at the core” (China's National Defense in 2004, 2004). According to this white paper the RMA with Chinese characteristics includes the following aspects: reducing the number of military personnel strengthening the navy, air force and second artillery force, speeding up informationalization, accelerating the modernization of weaponry and equipment, mainstreaming and promoting talented individuals, intensifying joint training, deepening logistical reforms, innovating political work and governing the armed forces strictly and according to law (China's National Defense in 2004, 2004). RMA is a rather costly and time consuming endeavor, which requires significant investment into the new technologies, military equipment, training and infrastructure (Jean-Claude, 1997). Therefore, a steady and continuous growth of China’s defense budget can be observed from the late 1990’s and is best illustrated in the Figure 4.

The emphasis on the informatization and technological innovation was reinforced in 2006 Development Program of Science and Technology for National Defense for 2006 to 2020 ("China unveils plan for developing defence technologies by 2020," 2006), in which the long term goals of the modernization are set forth with the aim of “upgrading of existing equipment combined with the selective introduction of new generations of conventional weapons [...] in priority areas such as combat jets, submarines, ballistic missiles, and surface warships” (Cheung, 2009, pp. 31-32). The aim of transforming the PLA into a more efficient and hi-tech force is also highlighted in all the subsequent defense white papers including the most recent one issued in 2011, where the entire section III is dedicated to the issue of modernization of the PLA (China's National Defense in 2010, 2011).

Therefore, since the 1990’s Chinese leadership has embarked an ambitious project of transforming the PLA from a bulky and technologically backward force to the modern state-of-the-art military compatible with the new status of China in the
international system (Cheung, 2009, p. 29). Such a task, difficult to achieve in itself, had been further complicated by the introduction of the arms sales embargo by the West, which limited Chinese access to the world’s most advanced military technologies. With the technologically underdeveloped and oversized domestic military industrial complex it was evident that it would be difficult to arm the PLA with advanced weapons if relying only on the domestic development and production; the need to acquire hi-tech arms and technologies in order to ensure speedy modernization became quite acute. In such conditions the choice to turn to Moscow for the arms purchases was more than logical, as Russia was one of the few arms producers of high technological weapons in the world which was willing to cooperate with China at the time.

Another important unit level factor that contributed not only to the Chinese choice of turning to the Russian Federation for the arms acquisition but also facilitated the general rapprochement and establishment of the confidential relationship was the fact that a number of the top leaders in China in the 1990’s came of age during the time of the so called golden decade of the Sino-Soviet friendship. Many of them studied in the Soviet Union and spoke Russian fluently and therefore maintained certain sympathy towards Russia. As Bobo Lo puts it, on the personal level “Sino-Russian rapprochement was facilitated by the chemistry between Yeltsin and Chinese president Jiang Zemin” and “bilateral ties benefited from the presence of a strong “Russia lobby” within the Chinese leadership” (Lo, 2008, p. 30). Thus President Jiang Zemin studied as an electrical engineer in Moscow in 1955, Premier Li Peng studied at the Moscow Power Institute from 1948 to 1954 and the Foreign Minister Qian Qichen received training at the Central Communist Youth League School in Moscow in 1954–55, and served two diplomatic postings in Moscow in 1955–62 and 1972–74 (Lo, 2008, p. 206). Certain positive inclination of Chinese leadership towards Russia might not have been a decisive factor in the rapprochement and intensification of arms transfers, but it certainly played an important role in overcoming old enmity and mistrust, and an overall improvement of the relationship.

Therefore, considering all of the above mentioned factors, China’s decision to become one of the biggest buyers of Russian arms seemed more than logical.

5.3. Russian Rationale to Export Arms to China

As we have seen above the strive for military modernization combined with the limited access to the world’s arms market left China with little alternatives from where to purchase weapons. And the positive relations on the personal level were conducive to the rapprochement in general and the increase in the arms acquisitions from Russia in particular. However, the question then remains why Russia was willing to sell its weapons to China in spite of the mentioned potential long term threats the rise of its immediate neighbor might have entailed.
There were, I argue, both objective pragmatic considerations and perceptual factors which influenced the decision of Russian leadership to sell arms to China. Sergounin and Subbotin list three main factors that prompt states to export arms: (a) the economic interest of arms-producing companies in profits, economies of scale, the recouping of research and development (R&D) costs, and employment; (b) the interest of the governments of supplier states in maintaining a viable base of arms production and technology, employment and tax revenues; and (c) the interest of governments in supporting allied or friendly states by increasing their military capabilities and acquiring some measure of influence over recipient governments (Sergounin & Subbotin, 1999, p. 12). Other authors also note that arms sales create certain strategic advantages for the supplier states as they put the importing states into “some degree of dependence on outsiders for the implements of national defense” (Kinsella, 1998, p. 7) and can serve a number of strategic interests of a supplier from changing the regional balance of power in its favor, “providing an ally the means of deterrence, increasing interoperability between armed forces, gain access to military leaders and other elites within a country, and to try to influence the political orientation of the recipient country” (Moore, 2010, p. 596).

As we can see the incentives to engage into the arms transfers with other countries might vary from purely economic to strategic ones, however, as “the arms transfers always have some political implications, states tend to transfer arms primarily to states with similar foreign policy outlooks” (Moore, 2010, p. 596). Most scholars assume some kind of strategic alignment and/or even security alliance to exist between the countries engaged into arms transfers especially in the case of their geographic proximity (Kinsella, 1998). So the question remains: what kind of goals did the Moscow officials have when initiating the sales of weapons to China.

As Rangismaporn notes after analyzing the discourse on arms sales in Russia, there is no one coherent position on the arms sales to China among the Moscow’s political, military and academic elite (Rangsimaporn, 2006). So in order to understand how the decisions to intensify arms and technology transfers to the PRC came about, following the neoclassical realist prescription, we have to analyze the positions of the main interest groups involved into the MTC; in case of Russia these groups are the central government, defense firms and Russian military.

As was mentioned in the previous section on the top political level warm relations between the leaders of the two countries facilitated the rapprochement. Not only Chinese leadership held certain positive attitude towards Russia as was described above, but also President Yeltsin in his memoirs recalled the visits to Beijing and the meetings with his Chinese counterpart Jiang Zemin with special warmth. In his Midnight Diaries Yeltsin recollected that “it was in China, during all of our visits abroad, where we felt ourselves to be light and free. We came away from Beijing with only the happiest of emotions”, and as for his personal relations with Jiang Zemin he talked about how they “sat in the armchairs and contemplated our
long lives already gone by. We remembered the past, the 1950s, when [Jiang] did his student apprenticeship in Moscow at ZIL automakers. We recalled those hungry, merry student days” (Yeltsin, 2000, pp. 162-163). In his turn Yeltsin often demonstrated certain voluntarism and based his decision-making on personal preferences rather than pragmatic calculations (Breslauer, 2002), so the fact that he enjoyed warm personal relations with the top leaders of China made him more willing to cooperate even on such a sensitive issue as the arms sales. The growing disenchantment and frustration with the West in the mid 1990’s contributed to Russia’s eagerness to expand areas of cooperation with China. This trend affected the change of foreign policy executives: pro-Western foreign affairs minister Andrei Kozyrev was replaced by pro-Eurasian⁴ Evgenii Primakov in 1996. With Primakov in office Moscow subsequently started making decisive steps to raising its profile in Asia and to more actively engaging China; in this light the willingness of Russia to accommodate Chinese demand for arms can be seen as a conscious step aimed at winning an old-new ally (Peng, 2002; Wishnick, 2001).

However, after the collapse of the USSR the political landscape in Russia in the 1990’s was in chaos and flux. The state mechanism to regulate the arms sales was quite tangled, and the decisions about the arms and technology transfers were sometimes taken by the defense firms themselves, like in the case of the Su-27 license deal which was allegedly negotiated by the general director of Sukhoi Mikhail Simonov without any authorization from Moscow, but was further agreed on by the Kremlin as the rupture of the already negotiated deal might have undermined the relations with Beijing (Bagrov, 1996).

The lack of coordination in the sphere of arms sales in the 1990’s was associated with the chaos of transitional period and the lack of a well defined state system of arms trade regulations. The initial arms exports decision-making system was established in 1992: it gave Russian parliament the power to supervise arms transfer decisions, but the main decision-making was delegated to the executive branch. The main organization in charge of the arms trade was the Interdepartmental Commission on Military-Technical Cooperation between the Russian Federation and Foreign Countries, and it was made up of the heads of the Ministry of Foreign Economic Relations (MREF), Ministry of Foreign affairs, Foreign Intelligence Service, the ministry of Defense, the Ministry of Economy, the Ministry of Industry, the Ministry of Finance and the Ministry of Security, and was headed by the president (Sergounin & Subbotin, 1999, p. 46). There were few organizations within the MREF established which were in charge of the different aspects of the arms transfers: “Oboronexport (export of armaments and military matériel, ammunition and spare parts, and technical support); Spetsvneshtekhnika

⁴ Eurasianism is a school of thought in Russian geopolitics, history and philosophy which dates back to 1920’s with its starting point being the idea that Russia is culturally and historically closer to Asia than to the West. The school unites many trends and sub-schools under one roof. While there are some differences, most of them agree on anti-Western agenda and legitimize Russian imperial ambitions (Ismailov & Papava, 2010). After the collapsed of the Soviet Union, it became one of the mainstream ideologies in Russian political elite.
The tangled system of the arms sales supervision with its opaque decision-making practices was one of the impediments for an increased arms transfer cooperation, as it allowed the government officials to fight over the arms exports profits and control over the sector, sidelined the defense firms from the negotiation process and reduced their revenues by allowing a sizable commissions to be taken by various governmental agencies and siphoned money from the MIC to the private accounts of the corrupt politicians (Donaldson & Donaldson, 2003, p. 714). It complicated the trade relationship with all of the Russia’s arms buyers, and it was no exception with China. The low efficiency of the system also explains the volatility of the transfers in early 1990’s which can be well seen in the figure 1. Even though there was an increase in the arms transfers to China in the early 1990’s, it was only with the centralization of the arms exports system introduced by Putin that the arms sales reached its peak.

With the change of leadership in Russia in the year 2000 and Vladimir Putin ascending as a president there were certain changes happening in the policy towards China. As Wishnick puts it “Putin’s government appears to view relations with China with far less idealism and is attempting to take a more hard-nosed approach to developing a truly equal partnership” (Wishnick, 2001, p. 801). President Putin initially appeared as a more pro-Western leader, as he worked in Germany for a long time, spoke fluent German and made quite a few steps towards rapprochement with the West (Wishnick, 2001, p. 802). However, a certain distancing from China in favor of closer relations with the West during the first Putin’s term did not affect the dynamics of the arms transfers. Quite on the contrary, with the centralization of power and introduction of better organized and efficient arms exports system the sales of weapons to China kept rising steadily in the early 2000’s. The record of inefficiency and corruption in the arms industry prompted Putin to reconsolidate arms export agencies, with all of the arms related affairs put under the control of a new state agency, Rosoboronexport. The arms sales were put under the close scrutiny of the Ministry of Defense and the president himself, with the Cabinet of Ministers formerly heavily involved into the matter sidelined from the main decision-making process (Donaldson & Donaldson, 2003, p. 714).

As for the other domestic groups involved into the arms transfers, it was the defense firms which were most interested in the increase of the arms sales. With the collapse of the Soviet Union the state military spending was drastically reduced and the massive Soviet military-industrial complex (MIC) was left with
little choice but to commercialize its activities and search for buyers of its produce abroad. On the other hand to preserve the cash starved MIC was also considered a strategic task by most government officials, as it constituted a sizable part of the industrial base inherited from the Soviet Union, and remained one of the few industries with high-tech manufacturing which could compete on the international markets. The loss of the military research and development (R&D) capacities would also become detrimental for the Russian military and defense in a long run as it would deprive the army of opportunities to acquire domestically produced high-tech weapons. Another important argument in favor of saving MIC at any cost was the fact that it provided jobs for thousands of high-skilled workers and in some places in Siberia and Russian Far East it remained the only employment opportunity and source of income for the local population (Weitz, 2008, p. 26). All things considered, it was quite evident that the collapse of the MIC would have detrimental effect on the Russian economy which was already experiencing deep crises.

The proponents of such view mostly represented by the defense enterprises advocated enthusiastically for the extended arms and technology sales to China. As we can see the rationale of this group falls into the first and second category of the factors prompting states to engage into arms transfers, with the defense enterprises interested in the survival of their industry and profits from the sales and the government officials concerned with preserving employment and tax revenue.

As for the Russian military, another important group involved into the MTC with China, the views it held on the issue were more skeptical. Few Russian generals voiced concerns about Chinese potential threat to Russian security, and expressed dissatisfaction with the fact that the PLA was supplied with the more advanced weapons than the Russian army, and insisted that the arms supplies to China had to be balanced by the procurement of more weapons to the Russian military units in the Far East (Rangsimaporn, 2006, p. 486). Some military officials also pointed out to the times of recent rivalry with the PRC and the fact that during the border conflict in 1969 the Chinese side used Soviet-supplied arms (Rangsimaporn, 2006, p. 487). At least on the official level the skeptical position was largely marginalized overtime and Russian generals started to express views more in line with the official Kremlin consisting in that China does not pose a threat to Russian security and the arms transfers should be continued.

In total the supporters of the idea that China does not present a military threat in the foreseeable future provided the following arguments. First, the modernization of the PLA would take long enough for Russia to modernize its own military. Although no particular deadlines were set for the modernization of Russian military, Beijing planned to finalize it revolution in military affairs by the year of 2020. Second, Chinese military doctrines and strategic thinking remain focused on Taiwan and South China sea, with the North and West of the country perceived as a “strategic rear” (Riumer, Trenin, Zhao, & Menon, 2007). In other words until the disputes the South China Sea were settled and the “unification of China”
complete, China was not likely to turn its sight to the North. And meanwhile, it needed a stable and secure environment along its land borders. Both issues are not likely to be resolved in any foreseeable future; therefore Russia has plenty of time to develop its own military might. Third, an alliance with China gives Moscow a greater lever over the US and the West, and can help to realize Russian foreign policy ambitions in other spheres. Fourth, the arms sold to China are either of defensive capabilities (air radars, transport aircrafts) or are designed for air and maritime warfare (fighter jets, submarines), so even if a conflict breaks out between the two countries, China would not be able to use Russian arms against Russia, as Moscow hardly sells any armaments for the ground troops. Fifth, the purchases of Russian weapons increase China’s material and psychological dependency on Russian defense technology, (Lo, 2008, pp. 80-81).

5.4. Critical Assessment

Therefore, we can infer that for China the decision to opt for Russian arms was quite straightforward, and was mainly dictated by the needs of domestic military modernization and limited arms supplier options associated with the Western arms sales embargo. From the Russian side, the decision to intensify the arms transfers to China was predominately dictated by domestic factors such as the general economic decline and strong MIC lobby. Also since the Russian state was in a transitional stage after the collapse of the USSR and was torn by various political and social tensions, it had little ability to withstand the power of the MIC lobby nor capacity to solve socio-economic problems in any other way rather than giving green light to the arms transfers to China. On the initial stage the general rapprochement between the two countries and in its turn the intensification of the arms sales was facilitated by the amicable relations between the leaders of the two countries. However, there was no alliance relationship in the beginning of the arms sales; even after the countries became strategic partners in 1996 and signed the treaty of Good Neighborly Friendship and Cooperation in 2001 the alliance relationship still was too weak to possibly speculate that Russia decided to arm China out of the desire to strengthen its ally (Donaldson & Donaldson, 2003, p. 710). The issue of exerting some sort of influence over China by making it dependent on the Russian arms was voiced out, but considering the importance of the economic factors such potential dependence should be seen more as the by-product than initial goal of the arms transfers. The predominance of the economic considerations over political and strategic ones in Russia’s decision making demonstrates that states do not always respond adequately to the system requirements, and unit level factors can prevail over the structural ones.

Krause model also explains Beijing’s aspiration to modernize its army and military arsenal. With its economy on the rise China could allocate more funds for its military needs, and just as Krause model prescribes it attempted not only to upgrade its weapons but also its MIC production capabilities and turn from the third-tier producer it was in the 1990’s to the second-tier one. Russia, on the other
hand, acted as a first-tier producer aiming to earn money through the arms exports in order to keep its MIC afloat. However, there is one deviation from the behavior predicted by Krause. According to his model, Moscow would have kept reinvesting all its revenues into the military R&D in order to secure its place in the system. However, more often than not the arms trade revenues were siphoned off into unknown destinations, which became detrimental for the future of arms production.
6. Analysis of the Decline of Arms Transfers from Russia to China

The arms sales between China and Russia has been declining since 2005, which again, from the realism perspective presents a puzzle as the relations kept improving throughout the early 2000’s. So according to the realist calculations we would expect the arms transfers to increase with the improvement of the bilateral relationship and a growing probability of the strategic alignment. But despite the recent talks about the possibility of the military technical renaissance and China purchasing the Su-35 fighter jets and S-400 anti-aircraft weapon system (Karneev, 2012), the arms sales have not been resumed at the same scale as before and the talks on the Su-35 deal for the moment remain frozen ("Продажа истребителей Су-35 Китаю заморожена из-за малого объема партии [The Sales of the Su-35 Fighter Jets Are Frozen Because of the Small Consignment]," 2012). This chapter attempts to tackle this phenomenon through the analysis of the system conditions, and intervening variables affecting the foreign policy choices of the parties involved.

6.1. System Level Factors

In the middle of 2000’s the relative power of China kept increasing, as well as certain restoration of Russia’s power took place. Moreover, the world witnessed the emergence of the aspiring poles of influence such as India and Brazil. In other words, the condition of unipolarity still remains, but the American power is not as unquestionable and unchallenged as it was in the 1990’s. Although the American influence still stays quite strong and provides incentives for balancing against it, the steady and continuous growth of the Chinese power did not remain unnoticed in the Kremlin. With China becoming one of the world’s leading powers and Russian development remaining moderate, there arise structural incentives for Russia to balance not only the US but also China.

There is a clear sign that despite the fact that Moscow still aims to be strategically engaged with China and is willing to further deepen the cooperation, the Kremlin is well aware of the challenges China’s rise poses for Russia. Thus in the newly published Strategy of Development of the Russian Federation until 2020, in the
section of international environment, the rise of China and its increased presence on the “traditionally Russian” markets and competition on the advanced technology markets (almost a direct reference to the arms market as it is both “traditionally Russian” and technologically advanced) is listed as one of the three key external challenges to the economic development of Russian Federation (Стратегия-2020: Новая модель роста – новая социальная политика [Strategy-2020: New Model of Growth - New Social Policy], 2012, p. 803). The fact that the rise of China is openly called a challenge is rather telling, as Moscow has hardly ever allowed itself any negative connotations in relation to China. Certainly it was not the government officials but a group of experts who drafted the text of the strategy, so it can be claimed that their opinions do not necessarily coincide with the views held by the Kremlin. However, such characteristic given to China is suggesting a high level of concern among the top political, economic and academic experts, and even made some political observers wonder if such a wording means a change of Moscow’s course in relation to China (Lukyanov, 2012). Such formulation might not necessarily mean a change of course but rather a more cautious and balanced position of Moscow in certain issues, in particular the arms exports.

The conditions of the arms transfer system also influence the dynamics of the arms trade. As was mentioned in the previous chapter with the economic decline Russia started losing its first-tier position and has transformed into a second-tier producer in the late 2000’s. Despite the fact that it did manage to secure sizeable arms export revenues in the 1990’s, a big part of that money was not reinvested into the MIC and R&D (Donaldson & Donaldson, 2003; Sergounin & Subbotin, 1999). A fact that clearly illustrates that Russia turned into a second-tier producer is that it started itself purchasing weapons from abroad (Barabanov, 2010). The first prerequisite for the first-tier status is the ability to produce full range of weapons domestically and maintain cutting edge research and innovation in the military technology. Russia still maintains a well developed MIC, but the pace of innovation is on the similar or even lower level with many Western countries. Thus currently only the US remains the first-tier supplier (Neuman, 2010). At the same time China kept investing heavily into its MIC and managed to develop certain “pockets of excellence” in the fighter jets, navy and artillery technologies (Bitzinger, 2011), thus transforming itself into a second-tier producer. Beijing is capable of producing more and more weapons domestically and is itself becoming a major arms exporter. Therefore the decline of the Chinese demand for Russian arms can be explained by the fact that the technological gap between the two countries has narrowed, and countries with virtually the same place in the hierarchy are competing for the customers among the states of lower technological levels. Therefore, unless some breakthrough developments take place in the military industry of either country, in other words unless China or Russia becomes a first-tier producer, there will remain an incentive for them to compete on the international markets. Therefore the revival of the arms transfers to the same level as in the late 1990’s and early 2000’s would not be likely.
The system level suggests again certain foreign policy preferences, but in order to understand the choices of the countries in question we have to turn to the intervening variables on the unit level.

6.1. The Decline of Chinese Demand on Russian Arms

A rising power on the international political landscape, China is well aware of the potential security dependence associated with over reliance on arms imports. Moreover, any country with aspirations of becoming one of the world’s poles of influence should develop its own military industrial complex, because “without an indigenous arms industry, one could not ultimately act independently on the world stage” (Krause, 1991, p. 28).

As Cheung points out, self-sufficiency has always remained one of the cornerstones of China’s defense modernization tactics (Cheung, 2009, p. 46). The goal of self-reliance has also been highlighted in the PRC 2000 Defense White paper, where it is stated that “China’s fundamental aim in developing science, technology and industry for national defense is to satisfy the basic demands of national defense, guarantee the production and supply of military equipment, and raise the level of national defense modernization” (China's National Defense in 2000, 2000). The importance of the development of viable domestic MIC is highlighted in every consequent defense white paper. In other words, Beijing from the very beginning was interested not so much in the purchases of the off-the-shelf complete systems, but rather in getting access to the advanced technologies which could be used for modernization of the domestic military industrial complex. Thus, arms and technology exports from Russia were viewed as a temporary solution for modernization until China develops its own military industry (Crane, Cliff, Medeiros, Mulvenon, & Overholt, 2005). As Bitzinger infers, a continuous efforts of Beijing to build a self-reliant MIC finally paid off, and it becomes “evident in the growing number of new types of weapons, increasingly of a quality and capability comparable to Western systems” (Bitzinger, 2011, p. 9). Consequently the decline of Beijing’s arms purchases from Russia can be explained with the enhanced development and production capacities of the Chinese domestic MIC.

With the development of domestic industry, China itself has become one of the large arms exporters of conventional weapons being ranked as the sixth arms supplier in the world in 2011 (SIPRI, 2012a). However, it must be noted that a Chinese breakthrough into the world arms market is yet to come. So far, China managed to increase its arms exports due to the revived demand from Pakistan, its traditional client for decades. At the same time for various political and economic reasons, the sales to the other traditional buyers of Chinese arms, such as Myanmar, North Korea, Iran, and Thailand, lately dropped down (see Appendix 4). As recently as 2009, Beijing even lost a bid for a fighter jets deal to Russia, when Myanmar government opted for Russian MiG-29 aircrafts instead of
Chinese J-10 and FC-1 jets (Ramachandran, 2011). Even regular buyers of Chinese weapons such as Pakistan, Myanmar and Iran, were mostly forced to have recourse to Chinese weapons due to the lack of other options, mainly due to political reasons or a lack of resources to buy more advanced weapons from other states (Iran, for instance, always preferred Russian arms to Chinese, and began only to purchase more Chinese MCW’s after Russia announced that it would halt further transfers of arms to Teheran in 1995) (Byman & Roger, 1999). The main reason for such disregard of Chinese arms was their low quality and technical inferiority to both Western and Russian technology (Byman & Roger, 1999, p. 12). In order to challenge the Russian position in the world arms market, China needs to improve the reputation of its weaponry, and with the recent successes of the Chinese MIC, it seems to be just a matter of time.

However, there are still challenges remaining for the Chinese MIC, it still has technological weaknesses in the areas of propulsion and defense electronics, and has to rely on purchases of components of its arms from abroad, so there is still an incentive for China to keep importing most advanced arms to improve its technological base (Bitzinger, 2011, p. 9). Jet engine technology remains a particularly enduring problem, as “China’s inability to domestically mass-produce modern high-performance jet engines at a consistently high-quality standard is an enduring Achilles heel of the Chinese military aerospace sector” (Collins & Erickson, 2011). The problems with engine technology supposedly remain a major impediment for domestic production of the J-20 fifth generation tactical aircrafts with stealth capabilities. Consequently China expressed interest in purchasing the most advanced pieces of Russian military technology such as Su-35 fighter jets and S-400 Triumph air defense system (Karneev, 2012). The access to the Su-35 jet is of particular interest as it would allow China access to the latest Russian propulsion technology. The sides were close to signing the deal in 2012, but the negotiations remain in a stalemate due to the differences of Chinese and Russian positions.

Despite the fact that Russia did manage to revive its R&D activities, the pace of innovation remains relatively slow. Moscow tries to overcome the slowdown of technological innovations in the Russian MIC and the consequent lagging behind the Western defense firms, by purchasing weapon systems from abroad (Makienko, 2010) and is itself becoming one of the biggest arms importers (Barabanov, 2010). So there is less and less advanced technologies Russian MIC can offer. In other words there is a certain saturation of the Chinese arms industry with the Russian military technology, and unless Moscow is willing to sell most advanced weapons to China the MTC renaissance is not likely to happen.

Also China exerted continuous pressure on the EU to lift its arms embargo and there were talks regarding such possibilities in 2003, 2005 (Watt, 2005) and 2010 (Cendrowicz, 2010). Considering the current crises in the Eurozone and the EU’s dire need of investment, Beijing’s hopes for the embargo to be lifted in the near future might not be groundless. There is also a lobby headed by France and supported by other big arms producers inside the EU for the embargo to be lifted.
Back in 2003 French Defense Minister Michele Alliot-Marie visited Beijing and declared that France would urge the EU to relax its restrictions on sales of arms and military technology to China, which was a clear demonstration of the stance Paris took on this matter (Tracik, 2003). Main opponents of the embargo argue that it presents an impediment for the development of the Sino-European relations, and that the embargo has always been quiet porous and inefficient (Kreutz, 2004). The efficiency of the embargo indeed can be questioned; there was never any definition of scope of the embargo, no list of sanctioned goods ever compiled, nor has embargo ever been incorporated into any other legal frameworks. In other words every member state decides the meaning of the embargo itself, France and UK, for instance, have been interpreting the conditions of the embargo rather freely and kept selling dual use goods and technologies such as the British Searchwater Radar and the French AS-365N Dauphin-2 helicopter to China ever since the embargo was implemented (SIPRI, 2012a).

The embargo has more of a symbolic meaning for both the EU and China; for Europeans, it serves as a manifestation of their firm position on human rights, whereas Beijing perceives it as a humiliating condition which puts China on the same level with other embargoed states like Sudan or Zimbabwe (Kreutz, 2004). In case the embargo is repealed China might get hold of more European technologies, but it is not likely to change the status quo drastically, as due to strong pressure from the USA, the EU is not likely to sell to China its strategic or sensitive technologies (Weitz, 2012). Although the lift of the embargo would give European defense firms more freedom in dealing with China, and the need of funding under the tight economic conditions of the current crisis might make them more willing to compromise on the types of goods and technologies sold to Beijing. It seems that Chinese leadership had high hopes for the embargo to be lifted in 2003-2005, and only after such hopes had failed did Beijing turn again for Russian arms. In other words Russia still remains the only producer of high-tech weapons willing to cooperate with China on all military levels, but the state of Sino-European relations and the future of the arms embargo might greatly affect Chinese demand for Russian weapons.

As for the Chinese leadership, it has to be noted that a significant change happened with the fourth generation of leadership succeeding power in 2004. Hu Jintao is the first Chinese leader without any revolutionary credentials, nor does he have any international experience. The fourth generation is largely represented by pragmatic technocrats rather than charismatic revolutionaries (L. Jakobson & Knox, 2010). Many of them came of age during the Cultural Revolution, when the relations with Soviet Union were experiencing one of the lowest points in history. None of the top party officials of the fourth generation studied in the Soviet Union, nor had any other personal ties with it. Therefore since 2004 the “Russian lobby” disappeared, and was replaced by calculated pragmatism devoid of any sentimental sympathies.

Another important factor is that a growing number of Chinese officials receive their education in the West. Among the fourth generation this number is quite low.
with only a handful of the party members holding foreign degrees or having other international education experience. Thus the Foreign Affairs Minister Yang Jiechi attended the University of Bath and the London School of Economics, the Secretary of the Central Secretariat of the CPC Wang Huning was a visiting fellow at the University of Iowa and University of California at Berkley, and Wang Yi, a prominent diplomat and a member of the Central Committee of the CPC, spent six months as a visiting scholar at Georgetown University (L. Jakobson & Knox, 2010, p. 12). A growing number of Chinese students pursue education in the West and later obtain high positions back in China, whereas Russia lost its previous attractiveness on the Chinese educational market. Therefore Russian diplomacy will not be able to enjoy the soft power dividends of the education and personal ties of the Chinese leaders to Russia in any foreseeable future. The disappearance of the “Russian lobby” in itself does not affect the demand for weapons, but it makes the Chinese side less willing to compromise and complicates the negotiations on the arms deals. The Su-35 fighter jets deal, for instance, remains in an impasse due to the reluctance of either side to compromise, in the previous decade the negotiations might have been smoother due to the good personal relations of the leaders of the two states.

The opinions the Chinese hold about Russia are quite ambiguous, but with the memory of the Sino-Soviet friendship fading away together with the older generation the image of Russia is not likely to improve without concerted public diplomacy efforts from Moscow. MacFarquhar, for instance, talks about the overwhelming avalanche of negative comments which the Russian Embassy received just within a few hours after opening an account in 2011 on Sina Weibo (a Chinese microblogging website analogous to Twitter), with the netizens accusing modern Russia of the imperialist sins of the Tsarist Russia and the Soviets, and even in exporting communism to China (MacFarquar, 2012). Many of those on line comments from the Chinese internet users accused Russia in that it still occupies 1.5 million square kilometers of the historically Chinese territory, that in the XX century the USSR tore off Outer Mongolia from China, attempted to annex Xinjiang, murdered over one million Chinese in the border regions and looted Northeast of China after World War II (MacFarquar, 2012). I must note that these are quite popular issues that were mentioned in one way or another by a number of Chinese I talked to (including some of the faculty professors), especially the issue of the historically Chinese territories is often brought up. However, I did not find any opinion polls on these issues that could allow assessing how widespread such opinions are in the Chinese society in general. Also on the official level there is no mentioning of any accusation or territorial disputes. MacFarquhar concludes that “what these tweets reveal is that national images are slow to change” (MacFarquar, 2012), and the image of Russia in contemporary China is not as positive as the official propaganda would want it to be. Such image in itself might not influence the Chinese demand on Russian arms, however it affects Russian willingness to sell arms to China, as such accusation feed the existing notion of the “Chinese threat” in Russia and strengthen the position of fear mongers in Russian political and academic elite.
So it can be inferred that there are factors conducive for the decline of Chinese demand on Russian arms. However, the incentive to keep purchasing Russian arms still remains and the interest Beijing expressed in buying certain weapon systems in recent years is a good demonstration of that. Now let us examine the reasons for Russians to be reluctant to sell its most advanced weapons to China.

6.2. Russian Position on Arms Sales to China

As was mentioned before, there are system level factors which prompt Russia to not abandon the arms transfers to China altogether, but to become more cautious in this sphere. However, it is the intervening variables on the unit level that dictate the final policy choices of the RF.

In comparison to the 1990’s the economic and political situation in Russia has changed significantly. During his second presidential term Putin managed to consolidate political power in his hands: his administration eliminated political influence of the oligarchs, reabsorbed strategic economic sectors (energy and armaments) into the state sector, enforced control over the media and strengthened power of the presidency and central government over the local governments (Cheng, 2009, p. 159). With the consolidation of power the state-run arms exporter Rosoboronexport started controlling over 85% of Russian arms trade, the remaining 15% constituting mostly spare parts and outdated equipment which the defense firms were authorized to sell independently (Kramnik, 2010). All the important decisions are made under the control of the Ministry of Defense and the President himself, in other words the lobby of the defense firms and other government actors virtually disappeared. Since the middle of the 2000’s all the important decisions in arms transfers can be attributed solely to the Kremlin, with other actors having a minor say.

At that time Moscow also managed to significantly diversify its client base, and despite the reduced demand from China, Russian arms sales, as Figure 7 demonstrates, kept growing throughout the 2000’s.
Therefore, by securing a vast client base, Moscow managed to secure the vital revenue needed to keep its MIC afloat, and thus reduced its dependence on the Chinese arms imports. In line with this, goes another important factor that due to high gas and oil prices, steady growth of the GDP and economic recovery, Russia managed to allocate more funds for its own defense needs. The constant growth of Moscow’s military expenditure since the beginning of 2000’s is well illustrated in the Figure 8.
Consequently, the Russian army has again become an important client of the Russian MIC. As the military procurement also kept growing throughout 2000’s and can be observed in the figure 9.

![Figure 9. Russian armed forces defense procurement, billion USD in current prices](Russian exports of arms and military equipment, 2012)

The growing military budget combined with the major rearmament and modernization efforts calmed concerns of the Russian generals about the Chinese military might. At least there have been no statements from the military representatives in the media for the last few years. Also with the enhanced cooperation and contacts between the two militaries, Russian army men have fewer reasons to perceive China as a threat. So it may be inferred that the lobby of the Russian army against arms sales to China disappeared in the middle of 2000’s, and it does not seem that it had any influence on the decline of the arms exports to China. At least it appears so from the information available in the public access.

In the previous decade the economic considerations seemed to prevail over other factors. When the economic problems in Russia became less acute and the survival of the Russian MIC had been secured through the abundance of orders from domestic and international clients, the Kremlin could afford itself to be more fastidious when it came to the arms export deals.
Another issue of concern for Moscow became the intellectual property rights which China is known to violate when importing Russian technologies. Thus a great resonance in Russian press received the issue of the Su-27SK fighter jet. According to the Russian side, the Chinese jet J-11B is a copy of the Su-27SK, rights for license production of which Sukhoi bureau sold to China in 1995 ("Китай скопировал российский истребитель Су-27 [China copied Russian fighter jet Su-27]," 2008). The criticism of China for copying the jet and of Moscow for selling the license was unprecedented in the Russian media and raised a high degree of concern about copyright issues in the arms trade in general (Khramchikhin, 2012).

The Su-27 is not the only piece of Russian technology that was reengineered by China. According to Russian observers, the Shenyang J-11 jet is a copy of the Su-30 Flanker-C, Chinese/Pakistani Chengdu FC-1 is largely based on the Russian MiG-29 technology, and the J-15 aircraft was designed after the Sukhoi T-10K-3 carrier borne fighter ("Russia close to Sign Su-35 Fighter Deal With China," 2012). Hence in 2011 Russia adopted a new law requiring tighter control and stricter obligations regarding the intellectual property from the states buying Russian arms (Gavrilov, 2011).

The impasse with the Su-35 deal can also be attributed to the Russian concern over the copyright. Initially it was widely announced in Russian media that China would buy 48 fighters worth around 4 billion USD in 2012, but later it was revealed that Beijing was interested in buying only a handful of jets ("Russia close to Sign Su-35 Fighter Deal With China," 2012). The disagreement about the size of the consignment became a major stumbling block of the negotiations. Moscow suspects that the small number of purchased jets would mean that China acquires them for the sake of technology and its further reproduction, and fears that China would start selling copycats of the Su-35 on the international markets for much lower prices ("Продажа истребителей Су-35 Китаю заморожена из-за малого объема партии [The Sales of the Su-35 Fighter Jets Are Frozen Because of the Small Consignment]," 2012). Therefore, Russia attempts to gain maximum revenue in compensation for the loss of profits in case China copies the Su-35 technology. If China does not attempt to export its domestically produced version of Su-35, it would incorporate Su-35 technology into the design of its indigenous fifth generation J-20 jet. As was mentioned before, the main obstacle for the completion of the J-20 is the Chinese inability to design a reliable engine appropriate for such type of machines. Once Beijing manages to finish the J-20, it will not have any need of Russian aircrafts for the years to come. In fact that would mean that Chinese aircraft industry reached approximately the same technical level with Russian MIC, and that would mean an end for large aircraft orders from China.

The concerns over the intellectual property started playing a much greater role because with the technological advances of the Chinese MIC it is becoming an ever more serious competitor on the international arms markets. As for now Russia still holds an upper hand being ranked number two arms exporter in the
world (SIPRI, 2012a), but the competition is likely to grow fierce, as both China and Russia target the same market – large developing countries with aspirations to maintain foreign policy independent from the West. In this regard Beijing holds a long term advantage – with continuing investments in Asia, Africa, and Latin America, Chinese influence in the developing world probably will only keep growing. In its turn such influence is likely to prompt countries of these regions to opt for Chinese arms. The relatively low costs of the weapons made in China are another factor that might make developing countries to prefer Chinese arms over Russian. This trend is already evident and is well demonstrated by the fact that countries such as Algeria, Bangladesh, Egypt, Indonesia, Namibia, and Venezuela started placing a growing number of orders for Chinese weapons (SIPRI, 2012a).

According to many authors another issue possibly affecting the Sino-Russian arms trade is the persistent notion of the “Chinese threat” in Russia. It is not pronounced in the official rhetoric or political statements, but many observers point out that it remains an impediment for cooperation in many spheres with arms transfers not being an exception (Lo, 2008; Lukin, 2001, 2008). In terms of military cooperation there is certain fear mongering in the Russian media, and even some experts express an opinion that China might use arms bought from Russia in a future war, and urge “not to sell the rope we will be hanged on” (Khramchikhin, 2012).

Such concerns go in line with Russia’s centuries old “Mongol complex”, which stems from the invasion of Tatar-Mongols in the XIII century. The invasion ravaged the ancient Slavic state of Kievan Rus, and was followed by the two hundred years of the Tatar yoke. Later during the imperial period “Russia was constantly at war with such Asiatics as the Ottoman Turks, Central Asian Muslims, and the Japanese” (Halperin, 1985, p. vii). The centuries of subjugation and constant wars with the non-European neighbors bred the deep-rooted sense of fear and disdain to all things Asian, and brought about the perception of a “besieged tower” – notion that Russia is constantly in danger as it is surrounded by aggressive enemies and alien cultures (Eitelhuber, 2009; Igumnova, 2011). Bobo Lo labels this Russian dread of its Eastern neighbors as “Mongol complex” and depicts it as “a subliminal but existential fear that resonates strongly to this day. The notion of a “yellow peril” […] conjures up the nightmare of a barbarian horde sweeping through Russia, impervious to all reason and humanity” (Lo, 2008, p. 18).

Initially China itself was not perceived as the main threat. However, the Sino-Russian rivalry during the Cold War and the border conflict of 1969 nourished the fear of the East cultivated for over 700 years, and Russians grew ever more suspicious of its large Eastern neighbor (Lo, 2008). The animosity towards Chinese is also fed by the apprehension that China still harbores an ambition to redeem a “big historical register” of over 1.5 million square kilometers of land that tsarist Russia allegedly annexed from China in the XVII and XVIII centuries (Galenovich, 2001). There is no mentioning of the territorial claims on the official level, but as was mentioned in the previous sections, the notion of the “historically
Chinese” lands occupied by Russians does exist in Chinese society, and Russians seem to be acutely aware of it.

However, opinions regarding China and the Chinese are currently quite ambiguous in the Russian public. According to opinion polls conducted by the All-Russian Center for the Study of Public Opinion (VTsIOM) in 2001 18% of Russians thought that in the XXI century, China would be a friend of Russia, 37% - an ally, 24% - not an ally, nor a foe, 17% - dangerous neighbour and 3% - a foe ("All-Russian Public Opinion Poll," 2001). In 2009, 20% deemed China an ally and friend, 27% - an important partner, 24% dangerous neighbour, rival and 5% - a foe ("All-Russian Public Opinion Poll," 2009). So the Russian society is persistently split on its attitudes towards China; the opinion has worsened since 2001, although the two questionnaires are somewhat different, so it is not possible to fully assess the change. On the other hand the notion of the military threat from Asia has diminished over the years. In 2006 12% of Russians thought that a war with its South-Eastern neighbours (China, Japan, North Korea) was quite possible, 37% - not likely, but possible, 45% - virtually impossible ("All-Russian Public Opinion Poll," 2006). Whereas in 2012 only 5% considered a war with either China, Japan or North Korea as quite possible, 20% though it was not likely, but possible, and 65% - virtually impossible ("All-Russian Public Opinion Poll," 2012).

The described fear of China affected the arms trade to a certain extent; Russia, for instance, never sold China any weapons for the ground troops, only MCW’s for the navy and air force. Other than that the notion of the Chinese threat does not seem to influence the Kremlin’s decision-making on the arms exports to China that much. As Lukin notes, the Sinophobia is more pronounced in the Far Eastern regions of Russia (Lukin, 2007), whereas the exports of weapons are controlled entirely by the federal government in Moscow. Additionally, even if there is an opposition towards arms transfers to China (and it is quite plausible that the respondents who deem China to be a foe or a dangerous neighbour would be opposed to the arms exports), after the consolidation of power in Moscow and the Russian regime becoming more authoritarian, the Kremlin can afford to disregard the public opinion on this matter.

Overall, it seems that it is predominantly economic considerations that dictate Russian reluctance to supply China with its most advanced arms. This point is best expressed by the military observer Kramnik, who concludes in his article with the conspicuous title *Russia’s arms exports: Farewell to arms, hello to profits* that “Russia has completely changed its arms-export model. Instead of using arms as means to ensure military and political balance in the Third World, Russia now sees the arms trade as business” (Kramnik, 2010)
6.3. Critical Assessment

Once again the use of the neoclassical realist perspective provided some valuable insights into the underlying causes of the arms transfers dynamics between China and Russia. With China swiftly rising and Russia developing at a slower pace, the gap in relative power and the concern it raises in Russia becomes a more important factor influencing the arms transfer dynamics between the two countries. From the first look the decline of the arms transfers was coherent with the structural conditions – the increase of Chinese power prompted Russia to take a more cautious approach and start balancing not only with, but also against China, and thus to halt its arms transfers to the potential hegemon. Such explanation seems quite plausible, but it is somewhat misleading, as it was demonstrated that it was mainly economic, rather than strategic consideration that conditioned the decline of the arms trade.

Moreover, the arms transfer system conditions had stronger implications than political factors. In the middle of 2000’s both China and Russia became second-tier producers and thus the technological gap between them has narrowed. This condition prompted the two countries to become rivals, rather than partners on the global arms market. Chinese MIC still faces certain technological challenges, and lags behind the Russian technological level, but this gap is likely to disappear quite soon. Russia is interested in postponing this from happening for as long as possible, as every arms producer is interested in preserving its monopoly and status in the hierarchy. Thus in order to allow time for its own defence firms to innovate and outpace their Chinese competitors, Russia switched to another model of behaviour – to limit the transfer of technology to its potential rival as much as possible. Therefore, Russia is reluctant to sell to China its most advanced weapons, as it would speed up the pace of innovation in China. It is only interested in selling big enough consignments which would compensate for the loss of future revenues and allow Russia to reinvest more funds into the domestic military R&D.
7. Conclusion

Presented research answers the question of why the arms transfer between China and Russia followed such a rollercoaster dynamics and demonstrates the utility of the theoretical framework based on the neoclassical realism and Krause waves of arms technology transfer model.

An extensive review of the literature on arms transfers demonstrated that there is no suitable theoretical model for the analysis of the case of the arms trade between Russia and China. The arms transfer waves model developed by Krause is instructive as it provides insight into how the transfers of arms technology create a certain hierarchy among states and how roles assigned by such hierarchy dictate states’ behavior. However, adhering solely to this model might have been misleading; due to its deductive nature the model poses a risk of forgoing important factors on the unit level which influence the foreign policy of the states under study. Therefore, a synthesized theoretical framework was developed which combined the Krause model and the neoclassical realist perspective in the analysis of the arms transfer dynamics between Russia and China. Such approach demonstrated to be productive as it helped to uncover the underlying causes behind the Sino-Russian arms trade.

The dynamics of the arms transfers from Russia to China are influenced by a complex tangle of both structural and unit level factors. Thus the structural factors such as unbalanced dominance of the US after the collapse of the Soviet Union and the arms embargo introduced against China by the Western countries were conducive for the rapprochement and enhanced military cooperation between Russia and China. However, the increase in arms transfers between the two was triggered to a greater extent by the intervening variables on the state level, than by the system level factors. China’s ambition to modernize its army and acquire advanced military technology in order to become a second-tier arms producer generated a demand for the Russian arms in the 1990’s and early 2000’s. On the other hand the domestic factors within Russia such as the strong defense firms lobby, the need to save the MIC from collapsing and the need for hard currency earnings made Moscow willing to satisfy Chinese demands.

While Russia still preserved its position of the first-tier producer it could offer a variety of arms which China was not capable of producing itself and therefore was
willing to buy. In the early 2000’s Russia had lost its first-tier status, whereas Chinese industry and army became saturated with Russian technology. Moreover, China managed to develop a powerful domestic military industrial base and became capable of producing advanced weapons itself. These factors were conducive to Beijing’s demand for Russian arms to subside. Chinese MIC, however, is still experiencing technological problems in the area of propulsion and defense electronics, and with Western arms embargo still in place Beijing has very limited options for acquisitions of advanced technologies from other sources, therefore the incentive to keep buying most advanced Russian arms still remains.

Since the early 2000’s Russian Federation managed to significantly diversify its client base on the world arms market, at the same time with the improvement of economic situation Russian military procurement kept substantially increasing, therefore Russian MIC managed to secure constant revenues. Hence Moscow could afford to become more fastidious with the choice of clients. The Russian unwillingness to sell its most advanced technologies to China is also grounded in the concerns about the intellectual property rights which China allegedly violates in respect to the imported weapons. Also since China itself is becoming a major arms exporter and is targeting the same markets as Russia, the concerns that China would sell arms based on Russian technologies to the third parties for much lower prices started playing a decisive role in Russian decision making.

Other factors such as relations between the leadership of the two countries also played if not decisive, but nevertheless important role in the bilateral relationship and in the sphere of arms trade in particular. Thus the “Russian lobby” within the Communist party in China in the 1990’s and warm personal relations between Boris Yeltsin and Jiang Zemin were conducive to the rapprochement in general, and helped to smooth out possible contradictions. On the other hand both Vladimir Putin and Hu Jintao are leaders of more pragmatic nature, this had its effect on the arms transfers, as the two countries started taking more firm positions in negotiations and became more reluctant to compromise.

The influence of the mutual perceptions on the arms trade proved to be rather limited as the leadership of both countries seems to largely disregard the ideational factors when it comes to the issue of the arms trade.

The future of the arms transfers will depend on a number of factors, both structural and unit level. In general there are three possible scenarios of the development of the arms trade between Moscow and Beijing. First scenario mainly depends on the position of the European Union and the United States on lifting the embargo on arms sales to China. There are a number of European states which expressed opinion in favor of lifting the embargo; however, such calls were suppressed by the strong pressure from the US. However considering the financial problems the Eurozone is currently experiencing and the exerted pressure from China, the situation might change and Beijing might eventually get access to the Western military technologies. In such case it is unlikely that the arms transfers between China and Russia will resume. In the case of the embargo being
preserved the military-technical renaissance between the two countries is possible under certain conditions. Russia might become more willing to sell its most advanced technologies to China if the latter agrees on the Russian copyright obligations, and if it would be willing to buy big enough numbers of the Russian arms. However, even in such case the revival of arms trade would be rather limited and unlikely to reach the same scale as in the 1990’s early 2000’s. With Beijing investing substantial resources into R&D and Chinese arms industry becoming more developed and mature, it will be more and more difficult for Russian MIC to offer technology China does not already possess. With the current dynamics of the R&D investment in China it itself might turn into a first-tier producer in the foreseeable future.

The presented topic leaves many perspectives for future research open. This thesis focuses on the dynamics and the underlying causes of the arms transfers between China and Russia, but the issue of the international reaction on such transfers and the effects it had on the regional and international balance of power were not touched upon. As the arms transfers mean the transfers of military capabilities and do change the balance of power to a certain extent it would be interesting to look at the response of the other actors to the growing military capabilities of China, and pressures that might have been exerted on Russia to halt its arms exports to China.
References


7 References were formatted and the reference list compiled with the EndNote X5 software


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Appendix 1.

**Transfers of major conventional weapons from Russia to China from 1991 to 2011**

Based on the SIPRI Arms Transfer Database (SIPRI, 2012)

*Note:* The ‘No. delivered/produced’ and the ‘Year(s) of deliveries’ columns refer to all deliveries since the beginning of the contract. Deals in which the recipient was involved in the production of the weapon system are listed separately. The ‘Comments’ column includes publicly reported information on the value of the deal.

<table>
<thead>
<tr>
<th>No. ordered</th>
<th>Weapon Designation</th>
<th>Weapon Description</th>
<th>Year of order</th>
<th>Year(s) of Deliveries</th>
<th>No. delivered</th>
<th>Comments</th>
</tr>
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<tr>
<td>300</td>
<td>R-73/AA-11 Archer</td>
<td>SRAAM</td>
<td>1991</td>
<td>1992</td>
<td>300</td>
<td>For Su-27 combat aircraft; ordered from Soviet Union and delivered from Russia after break-up of Soviet Union</td>
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<tr>
<td>24</td>
<td>Su-27S/Flanker-B</td>
<td>FGA Aircraft</td>
<td>1991</td>
<td>1992</td>
<td>24</td>
<td>$700 m deal (offsets 40%); incl 4 Su-27UBK; ordered from Soviet Union and delivered from Russia after break-up of Soviet Union</td>
</tr>
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<td>1</td>
<td>76N6/Clam Shell</td>
<td>Air search radar</td>
<td>1992</td>
<td>1993</td>
<td>1</td>
<td>For use with S-300PMU (SA-10) SAM systems</td>
</tr>
<tr>
<td>10</td>
<td>Il-76M/Candid-B</td>
<td>Transport aircraft</td>
<td>1992</td>
<td>1993</td>
<td>10</td>
<td>$200 m deal (offsets 60% as barter); incl 3 for military-owned airline</td>
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<tr>
<td>4</td>
<td>S-300PMU-1/SA-20A</td>
<td>SAM systems</td>
<td>1992</td>
<td>1993-1997</td>
<td>4</td>
<td>No. could be 6</td>
</tr>
<tr>
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<td>ST-68U/Tin Shield</td>
<td>Air search radar</td>
<td>1992</td>
<td>1993</td>
<td>1</td>
<td>For use with S-300PMU (SA-10) SAM systems</td>
</tr>
<tr>
<td>Quantity</td>
<td>Description</td>
<td>Subtype/Model</td>
<td>Year</td>
<td>Type</td>
<td>Notes</td>
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<tr>
<td>75</td>
<td>AS torpedo</td>
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<td>1993</td>
<td>1995-</td>
<td>75 For Kilo submarines</td>
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<tr>
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<td>Project-636E/Kilo Submarine</td>
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<td>1993</td>
<td>1997-</td>
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<td>Project-877E/Kilo Submarine</td>
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<td>1993</td>
<td>1995</td>
<td>2 Originally built for Poland and Romania but cancelled</td>
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<tr>
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<td>TEST-71 AS/ASW torpedo</td>
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<td>1993</td>
<td>1995-</td>
<td>75 For Type-877 and Type-636 (Kilo) submarines</td>
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<td>1996-</td>
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<td>1996-</td>
<td>24 $2.2 b deal; incl 2 to 10 Su-27UBK</td>
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<td>1999-</td>
<td>150 9M38M1 (SA-N-7) version; for Sovremenny (Hangzhou) destroyers</td>
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<td>Sovremenny Destroyer</td>
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<td>1996</td>
<td>1999-</td>
<td>2 Type-956E version; originally ordered for Soviet Union/Russia but cancelled before completion and sold to China</td>
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<td>400</td>
<td>9M338/SA-15 Gauntlet SAM</td>
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<td>1999</td>
<td>400 For Tor-M1 SAM systems</td>
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<td>Tor-M1/SA-15 Mobile SAM</td>
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64
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<td>9M338/SA-15 Gauntlet</td>
<td>SAM</td>
<td>1998</td>
<td>2000</td>
</tr>
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Appendix 2.

**Transfers of licenses for major conventional weapons from Russia to China from 1991 to 2011**

Based on the SIPRI Arms Transfer Database (SIPRI, 2012)

**Note:** The ‘No. delivered/produced’ and the ‘Year(s) of deliveries’ columns refer to all deliveries since the beginning of the contract. Deals in which the recipient was involved in the production of the weapon system are listed separately. The ‘Comments’ column includes publicly reported information on the value of the deal.

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Appendix 3

Trend Indicator Values (TIVs) of arms exports to China, 1992-2011

Source: SIPRI Arms Transfers Database (SIPRI, 2012)

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