

# **Secrecy and Military Expenditures in the Russian Budget**

**Erik Andermo & Martin Kragh**

[Martin.Kragh@ui.se](mailto:Martin.Kragh@ui.se)

Word Count: 10,950 excluding references and appendices

# Secrecy and Military Expenditures in the Russian Budget

## Abstract

This article proposes a transparent method for collecting, structuring and analyzing Russian budget data on defence and security-related expenditures. A precise answer to the question of how big Russia's defence expenditures are is impossible because of issues concerning secrecy and accounting principles. We circumvent this challenge by constructing lower and upper bounds for Russia's military expenditure, showing that depending on the chosen measure these have increased from the range 10.3–31.2 % of federal expenditures in 2011 to 12.9–35.4 % in 2018. The analysis also yields additional insights into the concept of secrecy in the Russian budget; we show that 39 out of 96 subchapters in the Russian budget contain secret expenditures, many of which are not nominally defence- or security-related, and that secret expenditures increased as a share of total expenditures from 12 % to 17 % between 2011 and 2019

Keywords: Military spending, Russia, federal budget, secrecy, budget classification, residual analysis.

## Introduction

Russia's President Vladimir Putin has made military reform a key priority. Since 2008, Russia's Armed Forces were deployed abroad in Georgia (2008), Ukraine (2014) and Syria (2015), a trend that clearly represents an evolution towards more a capable, agile and well-equipped force (Deni 2018; Persson 2016). This development reflects the significant increase in financial resources available to the Russian military: in the two decades since 1998, when the Russian government defaulted on its debt and Russia's economy reached its post-Soviet low, the value of Russia's military expenditures has, according to Stockholm International Peace Research Institute (SIPRI), increased almost five-fold in constant dollar terms, and almost ten-fold in current dollar terms, despite an economic slowdown in recent years (SIPRI 2019b, Oxenstierna 2016). In this

paper, we examine the development of Russia's military expenditure and show how the perceived secrecy surrounding the defence budget can be circumvented by using data from publicly available, official sources. Based on this data, we calculate the share of secret expenditures in each subchapter (*podrazdel*) of the entire budget since 2011 and provide a forecast until 2021 at the aggregate chapter (*razdel*) level. We also suggest lower and upper bounds for defence expenditures and provide a summary of how those expenditures have been allocated in the period 2011–2019.

The core research question motivating this article is how much resources Russia devotes to defence and security. In order to fully answer this research question, it is necessary to study the concept of secrecy in the Russian budget, and the concept of budget secrecy yields some interesting insights in itself. In relation to previous literature, our main contribution is that we provide a transparent and reproducible method for calculating military expenditures and the share of secret expenditures with an unprecedented level of detail.

Although the main contribution of our work is empirical, the issue of secrecy in state expenditures raises several relevant political economy questions. As a rule, secrecy carries both direct costs, as in enforcement, and indirect costs, as in efficiency losses. A bureaucratic principal's incentive to conceal strategic information—such as defence expenditures—should therefore have rational motives. Hollyer, Rosendorff and Vreeland (2011) find that as a rule, transparency and accountability is positively associated with the level of democracy. We postulate that in an authoritarian system, a leader may wish to solve the principal-agent problem with a system that allows for secrecy that enables the concealment of strategic information as well as control that provides a limited form of accountability. The fact that Russia operates a budget system based on modern accounting principles is therefore not necessarily the outcome of a

culture of transparency; as we discuss below in Russia it is the prerogative of the president to decide which budget items should be secret or not.

In the tradition of Max Weber (1922, 1968, cited in Harrison [2008]), secrecy provides a private benefit to bureaucrats who can privatize the gains (shielding them from public scrutiny), whereas the losses appear as social costs of the whole population. Those losses can potentially be outweighed by collective benefits if the secrecy contributes to an increased defence capability or other public goods, but it is difficult to establish an optimal level of secrecy *ex ante*. Secrecy could also be used to conceal information on corruption and rent seeking. In an IMF survey of 120 countries Gupta, de Mello and Sharan (2000) use an econometric framework to show that relatively high military spending is correlated with high corruption at statistically significant levels. Whereas institutional reforms could hypothetically reduce corruption, secrecy thus helps preserve the status quo.<sup>1</sup> For the sake of national security and the reputation of the state, a government (or dictator) can also achieve benefits from the concealment of strategic information. Abram Bergson, for example, noted that Soviet secrecy was motivated by national security but also propaganda reasons (Bergson 1953, 14). National security as a collective good alone cannot explain drastic *changes* in the levels of secrecy, however. Indeed, it would be reasonable to assume the level of secrecy to be

---

<sup>1</sup> An alternative approach is taken by Harrison (2003), who develops a principal-agent model to explain how secrecy helped the Soviet government to inhibit theft by making data secret and to inhibit lobbying by making economic decision processes secret, thereby contributing to an equilibrium in the command economy. In this model the principal (the state) opted for secrecy to combat opportunistic behaviour on the part of the agents (defence contractors). This suggests that secrecy can have a role to play in combatting corruption but leaves out possible collusion between principals and agents in a market-oriented economy that would have the opposite effect.

largely uncorrelated with variations in the national security situation, since a rational decisionmaker would presumably consider the risk of a future security deterioration when choosing a level of secrecy, but as our empirical results show, the level of secrecy in the Russian budget does fluctuate over the years. As noted by Harrison (2008, 242), secrecy always needs to correspond to the private interests of individual decision-makers, and strategic information is concealed in order to limit an outsider's options. According to Kontorovich (2009), the mere fact that a government chooses the alternative costs of keeping information secret (domestically and internationally) is an indication that it is valuable and therefore of particular interest, not least information pertaining to defence expenditures.

Previous research has documented the evolution of Soviet and Russian defence spending since the Soviet Union started publishing comprehensive data in the late 1980s (Deger and Sen 1991, 1992; Cooper 1998), but little work has been done on secrecy as such. The launch of an ambitious State Armament Programme in Russia in 2011 led to a renewed interest in Russia's defence budget (Vendil Pallin 2012; Perlo-Freeman 2013; Cooper 2016a; Christie 2017; Connolly and Boulègue 2018). Oxenstierna (2019) notes that there are two established measures of Russian military spending in the literature: the chapter *National Defence* in Russia's federal budget and the annual estimates produced by SIPRI. SIPRI's data on military expenditure is also included in the World Bank's database World Development Indicators (World Bank 2019). In addition, the International Institute of Strategic Studies in London (IISS) provides estimates of Russian military expenditures in their annual publications (IISS 2018, 175–176). Both SIPRI and IISS base their measures on NATO's definition of military expenditure and report almost identical figures for Russia. The NATO definition includes expenditure on both military and civilian personnel, including pensions, but not veterans' benefits or

civil defence, for example (NATO 2018, 14). There is also another but incomplete source in the form of information provided annually by member states to the United Nations; for a discussion, see Kelly (2016).

The literature typically discusses Russian defence spending in a foreign and security policy context, but it has also been related to the debate about Russia's political economy, structural and socioeconomic challenges and its institutional framework (Perlo-Freeman 2013; Hakvåg 2017; Noble 2017; Oxenstierna 2019). The most comprehensive recent discussion of military expenditures in Russia's federal budget can be found in a report for the Swedish Defence Research Agency by Cooper (2013), who relates the various categories in the Russian budget to the definition of military expenditure used by SIPRI and also discusses the secrecy surrounding military expenditures. He further explores the topic of secrecy and how it can lead to tension between ministries in Cooper (2017a). The residual analysis approach used in this article has been used before to analyze the Russian budget, notably by Cooper (2006, 2017b) and Zatsepin (2008, 2014, 2019). The contribution of the present paper goes further by suggesting a transparent method for collecting, structuring and analyzing Russian budget expenditure data. This approach enables a level of detail that is unprecedented in the literature and ensures a reproducible method for calculating and estimating the degree of secrecy in the budget. Zatsepin (2008, 2014) presents the shares of secret expenditures per subchapter between 2003 and 2014 and reports results similar to ours for the period 2011–2014 but does not elaborate on how to obtain the necessary data or how to perform the calculations. The gaps in the literature on Russian military expenditures, in particular with regard to secrecy, motivates the empirical contribution of our work.

By their nature and level of aggregation SIPRI and IISS necessarily abstract away from the specific details behind the statistics for each country, making it difficult to assess exactly how the final numbers for total military expenditure were obtained. This is a reasonable approach when the purpose is to produce cross-country comparisons but leaves questions unanswered about the specific components of military expenditures in individual countries. SIPRI acknowledges that it is necessary to make estimates about the military expenditures of some countries because their official budget data does not correspond to SIPRI's definition of the term; Russia and China are singled out as two such examples (SIPRI 2019a). IISS only reports headline numbers for military expenditure, with no discussion about how those numbers are obtained. In SIPRI's latest dataset on the world's military expenditures, the entry for Russia still includes a reference to a methodological article written in the yearbook of 1998 (SIPRI [2019b], referencing Cooper [1998]). At that time, the budget was still based on Soviet-era legislation, and since then Russia's Budget Code has undergone several major revisions. In SIPRI's yearbooks from 1991 to 2004, the military expenditure of Russia was covered in a separate section with several tables and disaggregated expenditures, and occasionally with a longer analysis in a special appendix, but in later years the coverage has decreased. The latest disaggregated presentation of Russian military expenditure is from SIPRI (2002); since then, only aggregate estimates are provided.

Our analysis attempts to extract as much economic information as possible about military and security expenditure from the publicly available budget data and also uses residual analysis to quantify the amount of secret expenditures. It is noteworthy that the residual approach to measuring secret expenditures was attempted already in the 1960s but resulted in diverging estimates of Soviet military expenditures because the method necessarily relied on various assumptions to fill the many information gaps

(Kontorovich 2009). In the case of contemporary Russia, however, the residual is explicitly acknowledged as secret in the legislation and can be defined and measured precisely.

The article contributes to the scholarship on Russia's military expenditure in several ways: (1) we provide a disaggregated summary of Russian military and security spending for the period 2011–2021 and suggest lower and upper bounds for military and security expenditure; (2) we discuss how our data can be contrasted with existing estimates; (3) we show how and to what extent information regarding secret expenditures in Russia can be derived through a residual analysis of official documentation; (4) we use this method to calculate the share of secret expenditures for each subchapter of Russia's federal budget and identify some noteworthy trends; and (5) we suggest a methodological framework for analysing Russia's budget that can be applied for all expenditure types.

The first part of our article includes a discussion about the meaning of secrecy in a budget context. The second part presents our data and sources. The third part introduces the method used to obtain the necessary data. The fourth part presents the empirical results and discusses how our results compare to other existing estimates. The penultimate part discusses the limitations of our study and the last part summarizes our findings and suggests avenues for further research as well as some policy implications. A detailed description of our empirical results and a comprehensive discussion of Russia's budget system and its legal provisions, with a particular focus on secrecy, have been placed in appendices 1 and 2, respectively.

Our results show that 11 out of 14 chapters and 39 out of 96 subchapters in the Russian budget contain items that are secret, with the bulk appearing in the chapters *National Defence*, *National Security* and *General Government* (see Figure 1). Between



2011 and 2019, secret expenditures increased as a share of total expenditures by over five percentage points from 12 % to 17 %, peaking at almost 22 % in 2016, mainly due to an increase in the share of secret expenditures in the chapter *National Defence* from 45 % to 65 %, with a peak of 70 % in 2016. In the budget planning period until 2021, the overall secret share remains at a little over 16 %.

[Figure 1 about here]

The results also show that defence- and security-related expenditures in the Russian budget increased as a share of total federal expenditures by around five percentage points between 2011 and 2018 (although this share is due to decrease slightly in the current budget planning period until 2021); in relative terms this corresponds to an increase of between 20 and 30 % (depending on the chosen measure), and we therefore argue that the Russian budget has been subject to a significant degree of securitization. Our results therefore support a similar argument made by Richard Connolly who uses the term securitization to explain why the Russian economy is increasingly “operating in accordance with state-determined and military, rather than strictly economic needs” (2018, quoted in Tsygankov [2019], 175). In our broadest measure (the upper bound), the share of expenditures in the Russian federal budget that is either secret, or defence- or security-related, peaked at 40 % in 2016, corresponding to over 7 % of GDP. The narrowest measure (the lower bound) represents only expenditures explicitly designated for the Russian armed forces, which in 2011 stood at a minimum of a little over 10 % of total expenditures or slightly less than 2 % of GDP.

### **The Meaning of Secrecy in Government Budgeting**

A stereotypical view of a government secret would be a paper document marked with red stamps containing information that would be protected from unauthorized access.

The elaborate and burdensome mechanisms for administering the life cycle of such secret documents in the Soviet Union have been documented by Harrison (2013). A budget on the other hand, is supposed to be publicly debated by its very nature.

Government budgets constitute legislation and are constantly subject to political and bureaucratic processes, reviews, amendments, audits, academic and journalistic scrutiny, and so forth. Furthermore, the pure logic of addition and subtraction means that every part of a budget is intrinsically linked to the whole. If a budget item were removed, the remaining numbers would still mercilessly bear witness about the gap. Unlike other secrets, a budget secret is never silent.

This leads to the question of transparency in the Russian budget. Its categorization cannot be directly transferred to the NATO definition of military expenditures that has been established as the standard measure used by SIPRI and others. On the other hand, unlike in Soviet times, it should not be assumed *a priori* that this discrepancy results from a deliberate attempt to obscure the real value of Russia's total military expenditure. The discrepancy could just as well be explained by differences in how Russia's elaborate and multi-layered budget system functions and the obvious fact that Russia does not adhere to the NATO definition of military expenditures. There is indeed a significant degree of secrecy surrounding Russia's military expenditure but there is a conceptual difference between concealing a country's total military expenditure on the one hand, and the allocation of resources within the defence sector on the other. Note that allocational secrecy could, intentionally or unintentionally, lead also to aggregate secrecy: such discrepancies could result from a deliberate attempt to conceal total military expenditure, or, for example, from a certain ambiguity regarding the meaning of the term military expenditure. Two types of allocational secrecy can be distinguished, *chapter-internal secrecy* and *cross-chapter*

*secrecy*. Under chapter-internal secrecy, total military expenditures would be transparently included in a clearly defined military budget chapter, but the allocation between subcategories in that chapter would be secret. In contrast, under cross-chapter secrecy some military expenditures would be disguised as non-military expenditures in other budget chapters, thus distorting both the allocation and the total amount of military expenditure. Allocational secrecy could arise either from a choice of accounting principles that is not primarily motivated by a wish to hide any particular facts, or due to a deliberate attempt to conceal military expenditures. A case in point would be pensions contributions for military personnel, which are not included in the Russian budget chapter *National Defence*.<sup>2</sup> In short, the problem is not where to find Russian budget data, but rather how to structure and interpret that data. This contrasts sharply with the Soviet budget, which was subject to a large degree of government-level aggregate secrecy, except in the very final years (Hutchings 1987, 79–80; Cooper 1998; Harrison 2003).

The basis for budget activities in Russia is the Budget Code (*Byudzhethnyy kodeks*), which was adopted in 1998 and came into force on 1 January 2000.<sup>3</sup> Until that date, the Russian budget system was still based on a Soviet-era laws. The Budget Code and its subsequent amendments have been assessed as in line with “good or advanced practice” as laid out by the IMF Fiscal Transparency Code (Hughes et al. 2014). In 2011, Russia ranked higher than several EU countries in an evaluation of the transparency of national defence budgets (Transparency International UK 2011). In

---

<sup>2</sup> Cooper (2013, 17) reports that military pensions were moved in 1996 from chapter *0200 National Defence* to *1000 Social policy*.

<sup>3</sup> See federal law 159-FZ of 26 April 1999 “On the entry into force of the Budget Code” (“*O vvedenii v deystviye Byudzhethnogo kodeksa Rossiyskoy Federatsii*”).

2017, out of 115 countries surveyed by the International Budget Partnership, Russia ranked among the 26 countries whose budget transparency was assessed as sufficient, just ahead of Canada and Germany (IBP 2017).<sup>4</sup> This evidence suggests that Russia operates a relatively modern budget system. On the other hand, it has also been argued that these rankings are overly generous and a result of box-ticking in order to satisfy certain criteria rather than a genuinely transparent approach to budgeting (Cooper 2013, 48; Zatsepin 2008, 2014). Contrary to the common assumption that the Duma is simply a rubber-stamp parliament, Noble (2017) finds evidence that budgets are indeed amended by parliamentarians during the legislative process and that, on average, these amendments tend to redistribute allocations away from defence and security towards housing, education and social policy. For a more general review of Russia's budget system, see Kraan et al. (2008) and Fortescue (2017a).

The legislative details of the budget process, and in particular of the provisions concerning secrecy, are important for the empirical part of our study. A comprehensive overview is therefore included in Appendix 2, which is necessary for the transparency and reproducibility of our results and should be relevant to readers interested in the technicalities of the budget process. Summarizing the contents of Appendix 2, we note that, as with any other federal law, the budget legislation goes through three readings,

---

<sup>4</sup> Among the measures surveyed by the IBP is whether a country publishes a so-called Citizens budget, a document aimed at making the budget accessible to the wider public. Russia has set up a special website for this purpose which includes useful reference material: <https://budget.open.gov.ru/>. For an example of a Citizens budget, see MinFin (2018c). This initiative is part of a larger resource in the form of a unified Internet-based electronic portal for the entire Russian budget system, where much of the legislative and operational information concerning the budgets is summarized and presented in an accessible format, including data on regional budgets: <https://budget.gov.ru/>.

which successively contain an increasing level of detail on budget expenditures. The total amount of budget expenditures reported in the second and third reading is always less than the total amount approved in the first reading. The reason is that secret budget items are excluded. The Budget Code has a special provision for how to handle secret budget items, which stipulates that those items must be reviewed at a closed session of both houses of parliament and that only the speakers of the houses and members of the responsible committees are allowed access to the documentation concerning those budget items. Only the president has the authority to decide how such expenditures should be implemented and which government authority that should assume responsibility for controlling those expenditures. Fortescue (2017b) studied the role of the president in the budget process and found that a reasonable balance existed between presidential engagement and the formal budget process. In the early 2000s, the budget law contained an appendix with aggregate information about expenditures at the chapter-subchapter level. However, since the budget year 2008, such an appendix is no longer provided.<sup>5</sup> One consequence of this increased opacity is that it is no longer possible to perform the residual analysis immediately when the budget law is approved, but in the present study, we show how it is possible to circumvent this apparent limitation through the use of other sources, such as budget execution reports, as they become available after the budget law has been approved. In view of this discussion, it is important to note that secrecy has a precise meaning in the context of the Russian budget, namely that an item is missing from the open appendices with approved expenditures, and, consequently, that details are concealed about how those items are

---

<sup>5</sup> We are grateful to one of our anonymous referees for pointing this out. Interestingly, Zatsepin (2008) notes that the total number of secret appendices increased fourfold in the federal budget for 2008.

allocated at the most granular level of budget accounting. Secret budget items are, however, included in the chapter and subchapter summaries. By comparing the data from the non-secret detailed appendices on expenditures on the one hand, and from the chapter-subchapter summary on the other, it becomes possible to calculate the residual share of secret expenditures for each chapter and subchapter.

### **Calculating Secrecy and Military Expenditures**

Although the data necessary for this analysis is available in the federal budget laws (including the laws on the *ex post* approval of budget execution) and their complementary documentation, we have relied on data published online by the Federal Treasury (*Federal'noye kaznacheystvo*, also known by its acronym Roskazna).<sup>6</sup> The only exception is the forecasting data which is taken from federal budget law for 2019.<sup>7</sup> Roskazna provides regular reports on budget execution, including approved as well as actual expenditures, starting from 2005. Details on how to find, identify and read these files are provided in Appendix 2.

For the residual analysis, it is important to note that every budget expenditure is classified according to five categories: budgetary manager, chapter, subchapter,

---

<sup>6</sup> The Duma operates a website which contains the documentation at the various stages of legislation of all federal laws, from the initial draft to the final law, including explanatory notes and other documentation. For example, the documentation concerning the budget for 2019 (legislation draft No. 556362-7) can be obtained from the following address: <http://sozd.duma.gov.ru/bill/556362-7> (accessed February 2019).

<sup>7</sup> Full reference: Federal law No. 459-FZ of 29 November 2018 “On the federal budget for 2019 and the planning period 2020 and 2021” (*Federal'nyy zakon ot 29 noyabrya 2018 goda N 459-FZ “O federal'nom byudzhete na 2019 god i na planovyy period 2020 i 2021”*). A digital copy of the official version of this law is available on the following address: <http://publication.pravo.gov.ru/Document/View/0001201811300026> (accessed May 2019).

expenditure purpose and expenditure type (*glavnyy rasporyaditel' byudzhetykh sredstv, razdel, podrazdel, tselavaya stat'ya raskhodov* and *vid raskhodov*). As explained in more detail in Appendix 2, these categories can be identified by means of the unique budget classification code that accompanies every budget item. That a budget item is secret means specifically that its budgetary manager, purpose and type are secret. On the other hand, the aggregate expenditure at the chapter and subchapter level is not secret. Thus, total expenditures in chapter *0200 National Defence (Natsional'naya oborona')* or subchapter *0201 Armed Forces (Vooruzhennyye sily)* are not secret, even though the detailed distribution of expenditures within these chapters is so to a significant extent. The aggregate numbers for each chapter and subchapter are included in Roskazna's budget execution reports and serve as a baseline for our analysis.<sup>8</sup> This is in contrast to the most detailed representation of the budget, the so-called departmental structure of expenditures (*Vedomstvennaya struktura raskhodov*), which is approved in the third and final reading of the budget law and excludes any secret budget items. In the departmental structure of expenditures, we can therefore take the sum of all items for any given chapter or subchapter and compare to the aggregate number from the summary. The difference will represent the amount of secret expenditures in that chapter or subchapter, and the data allows us to focus either on approved expenditures or actual expenditures, and for the purpose of this study we have chosen to use data on actual expenditures for the sake of simplicity. It can be noted, however, that the available data also makes it possible to conduct a detailed analysis of

---

<sup>8</sup> Roskazna's budget execution reports naturally only contain historical data; to obtain summaries at the chapter level it is necessary to use other sources. We have used the so-called Citizens' budget already mentioned (MinFin 2018c). However, this source does not include summaries at the subchapter level, only the chapter level.

how a budget is amended during the course of the budget year. As far as the veracity of the data is concerned, the measures in place to safeguard the secret expenditures in themselves suggest that the non-secret expenditures are complete and accurate. Indeed, one of the purposes of secrecy is to enable transparency of that which is not secret.

Roskazna's budget execution reports contain three columns with monetary data: the first column represents the expenditures approved in the corresponding budget law while the last column represents actual budget execution. The middle column represents the amount of money allocated by the Finance Ministry as an intermediate step in the so-called 'consolidated budgetary list' (*svodnaya byudzhetskaya rospis'*), which also includes any subsequent amendments to the original budget law. By focusing on actual expenditures in the third column, we avoid the problem of dealing with amendments to the budget law and obtain results that reflect real resource allocation rather than planned allocation. It should be noted, however, that a detailed analysis of how budgets are amended could potentially produce additional insights that are beyond the scope of this article. We refer to Appendix 2 for an extended discussion on the technicalities of how to read the data in the budget execution reports from Roskazna.

## **Empirical Results**

This part is divided into two sections. The first section shows the share of secret expenditures for each subchapter in the Russian federal budget. The second section shows size and the trend in military expenditure and introduces various levels of military expenditure to establish lower and upper bounds.

### ***Secret Expenditures per Chapter and Subchapter in Russia's Federal Budget***

Using the data on budget execution in Roskazna's reports (combining Table 2.1 and Table 2.4, as explained in Appendix 2) we have calculated the share of secret



expenditures for each chapter and subchapter in the federal budget for the years 2011 to 2019, and a forecast until 2021 at the chapter level, using data on actual expenditures. The results are presented in Table A1 in Appendix 1, which shows the secret share per chapter and subchapter for each year in the period, and also the average and standard deviation. As mentioned in the introduction (Figure 1), from Table A1 we see that of the 14 budget chapters, the largest shares of secret expenditures occur in *0200 National Defence* (60 % on average over the period), *0300 National Security and Law Enforcement* (30 %) and *0100 General Government* (10.6 %). Eight other chapters have secret shares between 0.1 % and 5 % on average, while three chapters have no secret expenditures, namely *0600 Environmental Protection*, *1300 Servicing of State and Municipal Debt* and *1400 Interbudgetary Transfers*.

These averages conceal some noticeable trends. First, the secret share of *0200 National Defence* expenditures increased from 45 % in 2011 to 66 % in 2019, with a peak of over 70 % in 2016. In chapter *0400 National Economy*, the secret share increased from less than 2 % to almost 10 % in 2017 and then fell back to 4 % in 2019, while in *0500 Housing and Utilities* the trend is the opposite, with a drop from almost 14 % to less than 1 %.

At the subchapter level, there are secret expenditures in 39 of 96 subchapters. We observe that *0204 Mobilization preparations of the economy* and *0206 Nuclear weapons complex* exhibit 100 % secrecy over the whole period. Subchapters *0306 Security agencies* and *0307 Border service authorities*, which include the border troops, are close behind, at 99.7 % and 99.8 %, respectively. Since 2014, the share has risen to 100 % for the border guards. This contrasts with the *0303 National Guard troops* (Interior troops before 2017) whose secret share is stable at less than 10 %. There is also a data point of 100 % secrecy for 2011 in subchapter *0207 Implementation of (defence-*

*related*) international obligations, but thereafter the share fluctuates between 60 % and 84 %. Relatively high secrecy shares appear also in subchapters *0309 Civil defence* (40 % on average, with a decrease to 30 % in the later years) and *0313 Applied research in the field of National Security and Law Enforcement* (almost 90 % and with a somewhat increasing trend over the period). The subchapter for civil defence most likely includes expenditures related to a theme that will be explored further in the next section, namely the military formations of the Ministry for Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters (EMERCOM, also known by its Russian acronym *MChS, Ministerstvo po delam grazhdanskoy oborony, chrezvychaynym situatsiyam i likvidatsii posledstviya stikhiynykh bedstviy*). Table A1 also reveals some apparently non-military subchapters with significant and stable secret expenditure shares: *0905 Sanatorium and wellness aid* (14.3 % on average, with an increasing trend) and *1202 Periodical press and publishing* (4.7 % on average, also with a somewhat increasing trend).

The diagrams in Figures 2, 3 and 4 show how the share of secret expenditures evolves for some subchapters over the period 2011–2019 (we have limited our focus here to only those subchapters which exhibit any noticeable variation over the period). Figure 2 shows the trends for nominally military and security-related subchapters, while Figures 3 and 4 show some non-military subchapters.

[Figure 2 about here]

[Figure 3 about here]

[Figure 4 about here]

As seen in Figure 2, there is an increasing trend in the subchapter *0201 Armed Forces* that is visible already in 2013, with an increase from 40 % in 2011 to a peak of almost 70 % in 2016. There also is a substantial increase starting in 2014 from around

10 % to almost 60 % followed by a jump to almost 100 % in *0314 Other issues in the field of National Security and Law Enforcement*. The increase in 2014 coincides with the rising tension in Russia's external relations following its military intervention in Ukraine, but a closer look at the numbers in the Roskazna's budget execution reports actually reveals that in rouble terms the expenditures in this subchapter dropped from 40 billion in 2013 to 10 billion in 2014, while the nominally secret expenditures were almost unchanged at around 4.5 billion. The increase to 98.3 % in 2019, on the other hand, is accompanied by a very substantial increase in nominal expenditures in subchapter 0314, from 9.7 billion in 2018 to over 240 billion in 2019.

Interestingly, in Figure 3 we see that in 2015, subchapter *0108 International relations and international cooperation* jumped from zero to 25 % secrecy and stayed at that level until 2019, when it fell back to zero again. Not only did the share of secret expenditures in subchapter 0108 increase in 2015, but the nominal expenditure in rouble terms doubled from 142 billion in 2014 to over 300 billion in 2015, of which 74 billion were secret. The total amount of secret expenditures on subchapter 0108 is 344 billion roubles from 2015 until 2019. The timing of the increase coincides with Russia's military intervention in Syria in 2015. The drop in secrecy in 2019 correlates with a drop in nominal expenditures from 316 billion in 2018 to 252 billion in 2019; thus, the increased expenditures in subchapter 0314 described in the previous paragraph is more than enough to offset the decrease in 0108, an observation which naturally leads to the hypothesis that some expenditures in subchapter 0108 were transferred to 0314 in 2019, although this is admittedly somewhat speculative.

Figure 3 also illustrates that three subchapters in chapter *0400 National Economy* have increasing secrecy shares. Most notably, subchapter *0403 Space exploration and utilization* sees a jump to over 50 % secrecy in 2017, after having had

no secret expenditures at all before or after that year. Similar to subchapter *0108 International relations and international cooperation*, this increasing secrecy share also coincides with a significant increase in nominal expenditures: they tripled from almost 28 billion in 2016 to over 83 billion roubles in 2017. All the open expenditures in this subchapter are designated for the state space corporation Roscosmos and the Finance Ministry.<sup>9</sup> The additional, secret funding in this subchapter does not necessarily indicate a military connection, however, since the subchapter is explicitly reserved for non-military expenditures (MinFin 2018a, part III section 3.2); this interpretation is also supported by the fact that some defence-related space expenditures are explicitly included in *0200 National Defence*. We also observe a similar spike in secret expenditures in subchapter *0112 Applied research in the field of general government*, from zero to 50 % in 2018, while the nominal expenditures increased from 18 billion roubles in 2017 to over 43 billion roubles in 2018. Furthermore, both subchapters *0411 Applied research in the field of national economy* and *0412 Other issues in the field of national economy* exhibit increasing secrecy, from 11 % and 2 %, respectively, to almost 20 % later in the period. Nominal expenditures in these two subchapters are relatively stable over the whole period, averaging 232 billion and 767 billion roubles, respectively. There is, however, a notable exception concerning 0412 in 2014, when nominal expenditures, of which 97 % were open, jumped to 1,583 billion roubles compared with 399 billion in 2013. Subchapter 0412 is also noteworthy because it

---

<sup>9</sup> The open expenditures in this subchapter include subsidies to the city of Baikonur in Kazakhstan, home to the eponymous space port operated by Russia. In accordance with an agreement between Russia and Kazakhstan, it is fiscally integrated into the Russian budget system and recognized as a city of federal importance, a status similar to that of Moscow, Saint Petersburg and Sevastopol but without parliamentary representation.

contains some expenditures related to nuclear weapons, which are consequently not captured by subchapter *0206 Nuclear-weapons complex*: the Finance Ministry's instructions stipulate that subchapter 0412 includes expenditures related to "questions of the national economy in the sphere of the nuclear-weapons complex, expenditures related to implementing international agreements of the Russian Federation on the use of highly enriched uranium extracted from nuclear weapons, and expenditures related to ensuring nuclear, radiological and ecological safety" (MinFin 2018a, Part III, section 3.2). The exact meaning of this formulation is not clear, but there is one non-secret budget item in the budget execution reports associated with this subchapter explicitly referencing nuclear weapons, namely the subprogramme "Ensuring production, technological and socio-economic processes for the sustainable development of the nuclear weapons complex and Russia's strategic presence in the Arctic zone," represented by purpose code 22 5 00 00000. The subcategories to this item indicate that these expenditures are associated with the nuclear icebreakers operated by the government-owned company Atomflot.

Finally, we can make a few observations about the subchapters with decreasing shares of secret expenditures in Figure 4. First of all, there is a very significant drop between 2011 and 2012 in subchapter *1101 Physical education*, from over 60 % to only 5 %. A closer look at the data reveals that this trend is entirely explained by a large increase in the total funding in that subchapter, from 177 million roubles in 2011 to 2,433 million roubles in 2012, and that the secret expenditures follow a stable trend through the whole period, roughly doubling from around 110 to 236 million roubles between 2011 and 2019. The notion that a subchapter related to physical education should include some secret expenditures hints that there might be some military connection, but there is no way for us to find out from the budget data. The Finance

Ministry instructions only state that this subchapter includes federal subsidies to regions and municipalities for the development of physical education (MinFin 2018a, part III section 3.2). Next, Figure 4 illustrates that both subchapters *0501 Housing* and *0705 Professional training, retraining and improvement of qualifications* start at around 20 % secret expenditure shares in 2011 and that those shares drop until 2019. In the case of housing, the trend is fluctuating, while in professional training the trend is more stable. As seen in Table A1, there are also two subchapters in chapter *0700 Education* with a small but stable share of secret expenditures: *0701 Preschool education* and *0706 Higher education*.

These results show that some degree of chapter-internal secrecy is common in many subchapters of the federal budget, and that the share of a given subchapter tends to be relatively stable over time, but with some notable exceptions. We can only make some tentative guesses about the underlying motivation for why all these budget items are secret. In chapters related to security and defence the interpretation is straightforward, but it is more perplexing why there should be any secret expenditures in subchapters involving healthcare, education or housing. One possible explanation could be that information in these categories could be used to estimate the staff numbers or other measures of resource allocation concerning activities that should be kept secret. Another possible explanation is that some of these expenditures are indeed closely related to military matters. For example, the presidential decree regulating state secrets mentioned in Appendix 2 lists the Ministry for Healthcare (*Ministerstvo zdavookhraneniya*) as a responsible agency in 18 of 119 secrecy categories, some of which are related to research on weapons of mass destruction. We are left with several unanswered questions in this regard, but this observation suggests the presence of some

degree of (intentional or unintentional) cross-chapter secrecy concerning military expenditures in the budget.

### ***Estimating Russian military expenditures, 2011–2021***

The most transparent measure of Russia's military expenditure is the amount included in the budget chapter *National Defence*. This figure is the one typically referred to in the Russian public debate on defence expenditures. Subchapter *0201 Armed Forces* also provides us with a transparent measure of expenditures allocated specifically to the Armed Forces. These categories can be regarded as a lower bound of military expenditures in Russia but leave out several significant components that are clearly military in nature, such as subchapters *0303 National Guard troops* and *0307 Border authorities* and the military formations (*spasatel'nye voinskiye formirovaniya*) of the EMERCOM which are presumably included in subchapter *0309 Civil defence*.

Another partly defence-related subchapter is *0109 State material reserve*, which corresponds to activities carried out by the Federal agency of state reserves (*Federal'noye agentstvo po gosudarstvennym rezervam*, also known as *Rosrezerv*). This organisation operates secret warehouses across Russia with spare supplies of fuel, foodstuffs and other essential resources that can be deployed during natural disasters or in war. This organisation has claimed on its website that it was involved in delivering supplies to the rebel-controlled areas of Ukraine's Donbas region in 2014 (Rosrezerv 2019). Cooper (2016b) reports that Rosrezerv is one of several components in a wider system for state preparation for the possibility of an armed aggression.

Furthermore, there are several substantial budget items in the departmental structure of expenditures associated with the Ministry of Defence but not with *0200 National Defence*. The most significant ones are in subchapters *1001 Pensions benefits*

and *1003 Social welfare*, but there are expenditures related to the Ministry of Defence in no less than 29 non-military subchapters, including pre-schooling, environmental protection and cinematography. On average, these expenditures correspond in scale to a little over 20 % of *0200 National Defence*, and this ratio is stable over time. Referring to the earlier discussion about cross-chapter secrecy, it is noteworthy that these budget items do not necessarily reflect an attempt to hide any military expenditure; rather, the budget system clearly separates military from non-military expenditures even if they belong to the domain of the Ministry of Defence. On the other hand, they could also be regarded as military purely on the evidence of belonging to a military organisation, and all of these items are indeed included in SIPRI's measures of military expenditure (Cooper 2017b; Tian 2018). It should be noted, however, that the inclusion of these expenditures implies that the measure becomes sensitive to possible administrative changes in the budget system. If, for example, a budget reform in Russia would transfer responsibility for some preschool educational expenditure from the Ministry of Defence to, say, the municipalities, this would register as a decrease in military spending, although no change in the resources available would actually have occurred.

Likewise, there are also expenditures associated with the Federal Service of the National Guard troops (FSVNG, *Federal'naya sluzhba voysk natsional'noy gvardii*) that are not included in subchapter *0303 National Guard troops*; including them would increase expenditure on the National Guard by around 7 %, although it would constitute a negligible share of GDP. Note that this calculation is possible only from 2017 when the FSVNG was separated from the Ministry of Internal Affairs (MVD, *Ministerstvo vnutrennykh del*) and became a separate budgetary manager.

In contrast, the border troops were absorbed into the Federal Security Service (FSB, *Federal'naya sluzhba bezopasnosti*) in 2003 and lost their status as a separate



federal entity, so a similar calculation is not possible in that case. The same is true of the military rescue formations of the EMERCOM, which also do not constitute a separate government entity. Unlike the National Guard and the border service, however, they do not have any corresponding subchapter in the federal budget. That the military rescue formations should be treated as military in nature even though they notionally belong to Russia's civil defence organisation is clear not only from the name but from legislative provisions: in accordance with the federal law "On defence" the military rescue formations can be assigned certain defence tasks (article 1, item 6).<sup>10</sup> In war, their tasks include chemical, biological, radiological and nuclear threat reconnaissance and also territorial defence, according to a presidential decree which also defines the personnel strength of these units to include 7,230 military and 17,220 civilian staff.<sup>11</sup> As already mentioned, and shown in Table A1, the subchapter for civil defence (0309) has a relatively large share of secret expenditures, 30–40 %, which can be assumed to be at least partly related to the military rescue formations.

The discussion so far focuses on budget chapters and government entities that can be identified as having a defence-related role as defined by the classification codes for budgetary manager, chapter and subchapter. In addition, there are also other budget items that can be considered military in nature by their *function* and that can be

---

<sup>10</sup> Full reference: Federal law No. 61-FZ of 31 May 1996 "On Defence" (*Federal'nyy zakon ot 31 maya 1996 g. N 61-FZ "Ob oborone"*)

<sup>11</sup> Full reference: Presidential decree No. 1265 of 30 September 2011 "On the military rescue formations of the Ministry for Civil Defence, Emergency Situations and Emergencies and Elimination of Consequences of Natural Disasters of the Russian Federation" (*ukaz prezidenta RF ot 30 noyabrya 2011 g. N 1265 "O spasatel'nykh voynskiykh formirovaniyakh Ministerstva Rossiyskoy Federatsii po delam grazhdanskoy oborony, chrezvychaynym situatsiyam i likvidatsii posledstviy stikhiynykh bedstviy"*).

identified by their purpose or type codes. Examples include research expenditures in support of activities within the State Defence Order or supplies to subsidies to the defence industry. The sheer number of such budget items makes this task significantly more challenging compared to simply identifying expenditures by their subchapter or budget manager; the remaining part of this section elaborates further.

To summarize the discussion so far into a comprehensive framework, we can define several different measures to estimate Russia's military expenditures, from the narrowest to the broadest. The narrower measures represent the lower bound of our estimates and include only budget items in the subchapter for the armed forces. The broader measures represent the upper bound and include internal security or state security in general. The broader measures also have the potential to capture potential budget items subject to internal as well as cross-chapter secrecy. With this approach we have chosen to define 11 levels of military expenditures that can be calculated from the budget data, where each level represents an incremental increase from the previous level with the addition of a qualitatively different category. As can be seen from the overview in Table 1, level 1 is represented by subchapter *0201 Armed Forces* and level 2 by chapter *0200 National Defence*. Detailed comments and sources to Table 1 are provided in Table A2 in Appendix 1, including—importantly—the budget classification codes used to identify each category in the data. The specific choice of levels and their order is to some extent arbitrary, but levels 1 to 4 coincide with established measures such as SIPRI's estimates (level 4). Level 10 represents expenditures which are almost certainly not entirely military in nature but are included because either because there is no clear distinction in the budget between military and non-military use of these categories, or because they are associated with “militarized” organizations (*voyennizirovannyye organizatsii*). Furthermore, level 10 includes expenditures which are explicitly part of the State Defence Order, but clearly

not military in nature, such as food supplies to the Federal Penitentiary Service. Finally, level 11 captures all civilian space-related expenditures, while space expenditures of a military nature are captured by the lower levels. In other words, we certainly do not suggest that the upper bound of our analysis is an accurate measure of Russia's military expenditures; we are, on the contrary, confident that actual military expenditures are *smaller* than the upper bound. We also do not suggest that any of our measures is more "correct" than the others, only that the different measures reflect different assumptions about what items to include when estimating Russia's defence expenditures. However, our results clearly show that there is openly reported defence-related information in the budget that cannot be captured by any single aggregate estimate.

[Table 1 about here.]

Based on the various definitions suggested in Table 1, we have calculated the relevant measures between 2011 and 2018, with a forecast until 2021 for level 2, chapter *0200 National Defence*. The results are presented in rouble terms in Table 2a, as a share of total government expenditure in Table 2b and as a share of GDP in Table 2c. As can be seen in Table 2c, the estimates by SIPRI and IISS are placed pretty much in the middle between our suggested lower and upper bounds. The diagram in Figure 5 illustrates how the different levels evolve over time as a share of total government expenditures. Notably, the relative size of all levels is almost surprisingly stable over the whole period.

[Tables 2a, 2b and 2c about here.]

[Figure 5 about here.]

The interpretation of most levels is fairly self-explanatory. Levels 1–4, 6 and 8 are the easiest to calculate since they can be fully identified by the codes for chapter, subchapter and budgetary manager in Roskazna's reports. Level 7 represents the

residual secret expenditures in subchapters not captured by other levels, as detailed in the previous part of this section. The remaining levels require that we look at the purpose and type codes, which is technically a little more complicated but still straightforward. Some of the information captured by these levels is not given explicitly in Roskazna's budget reports (or the federal budget law) but requires that we cross-reference the meaning of some type and purpose codes with definitions provided in the Finance Ministry's instructions.

Level 4 represents expenditures in chapter *0200 National Defence* and subchapters *0303 National Guard troops* and *0307 Border authorities* plus all non-secret expenditures of the Ministry of Defence in other subchapters. This corresponds, with some minor adjustments (commented in Table A2), to the measures used by SIPRI and IISS.

The purpose and type codes typically contain more detailed information than the categories for chapter, subchapter and budgetary manager. For example, there are numerous purpose and type codes to represent expenditures associated with the State Defence Order (SDO, *Gosudarstvennyy oboronnyy zakaz*). Naturally, many such items will be captured by chapter *0200 National Defence*, but our analysis shows that there are also SDO expenditures which are not captured by that chapter. The SDO is governed by an elaborate regulatory framework based on the federal law "On the State

Defence Order”<sup>12</sup> and a corresponding government decree,<sup>13</sup> and concerns a wide range of goods, services and materials for various defence- and security-related purposes. According to this law (article 4), the SDO is formulated based on a range of military planning documents, and for every budget year it is approved by the government within a one-month period after the corresponding budget law has been signed by the president (article 5). For example, in our framework, level 5 includes subsidies to companies in the defence-industrial complex that can be identified, inter alia, by purpose code 16 5 6467 (see Table A2), which turns out to be associated with subchapter *0412 Other issues in the field of national economy* and the Finance Ministry, neither of which are captured by levels 1–4. Another example is level 9, which we have defined as “other expenditures on weapons and equipment not included in levels 1–8” and which is entirely made up of budget items related to the SDO but not associated with any of the nominally military subchapters or budgetary managers captured by other levels. Starting from 2012, there are 14 different expenditure type codes explicitly related to the annual SDO which we have included in level 9, some of which are related to the State Armament Programme (*Gosudarstvennaya programma vooruzheniya*), which is otherwise notoriously absent in the budget data (see Table A2 for details and

---

<sup>12</sup> Full reference: Federal law No. 275-FZ of 29 December 2012 “On the State Defence Order” (*Federal’nyy zakon ot 29 dekabrya 2012 g. N 275-FZ “O gosudarstvennom oboronnom zakaze”*).

<sup>13</sup> Full reference: Government decree No. 1255 of 26 December 2013 “On the Rules for drafting the State Defence Order and its main parameters” (*Postonovleniye pravitel’sstva RF ot 12 dekabrya 2013 g. “O Pravilakh razrabotki gosudarstvennogo oboronного zakaza i ego osnovnykh pokazateley”*).

Cooper [2016a] for an extended discussion concerning the State Armament Programme's relationship to the budget).

Although level 9 includes a relatively large number of budget codes, the amount is small in rouble terms, as can be seen in Figure 5 and Table 2a. Interestingly, the data shows that there are no less than 22 nominally non-military government bodies captured by level 9 and associated with expenditures on the SDO in addition to those captured by other levels. Table 3 shows how expenditures in level 9 are distributed among these 22 bodies (i.e. budgetary managers) in the period 2011–2018. The largest share is associated with the Ministry of the Interior, although the amount has decreased in recent years, presumably as a result of the transfer of the interior troops to the newly formed National Guard (which is captured by levels 3 and 5).

[Table 3 about here.]

Level 10 also relies on information provided by the purpose and type code and captures expenditures on a wide range of government entities, including some of a paramilitary nature. Several of these entities are defined as so-called 'militarized organizations' (*voyenizirovannyye organizatsii*) in Russian legislation, meaning that they are entitled to use combat weapons and often that they are organized in a military hierarchy and into military formations (*voinskiye formirovaniya*). The militarized organizations are defined in article 5 of the law "On weapons" and comprise 14 entities.<sup>14</sup> SIPRI's definition of military expenditure includes paramilitary forces "when

---

<sup>14</sup> Full reference: Federal law No. 150-FZ "On weapons" of 13 December 1996 (*Federal'nyy zakon ot 13 dekabrya 1996 goda N 150-FZ "Ob oruzhii"*). The law lists the militarized organizations by their respective functions rather than by name, but can be assumed to include the following: the Ministry of Defence, the Ministry of the Interior, the National Guard, the EMERCOM, the Federal Security Service (FSB, *Federal'naya sluzhba*

judged to be trained and equipped for military operations” (SIPRI 2019a). We do not suggest that all expenditures captured by this level fall under that definition but include them for the sake of completeness and for the purpose of establishing an upper bound for military expenditures.

As seen in Figure 5 and Table 2a, level 10 is the second largest level in rouble terms after level 1, which suggests that these partly militarized organizations indeed form a large part of the Russian government. This is an indication about the degree of militarization of Russian society. Even if these resources are not directly related to military expenditures, it could be argued that they provide the Russian government with a significant and readily available reserve to be drawn from. There is indeed a special unit within the Ministry of the Interior tasked with organizing wartime mobilization preparations, and according to information on the Ministry’s website, some individuals from this unit were taking active part in combat operations in various conflicts, including World War 2, the war in Afghanistan, as well as interethnic conflicts in Uzbekistan, Nagorno-Karabakh and the North Caucasus (MVD 2014).<sup>15</sup> The budget

---

*bezopasnosti*), the Foreign Intelligence Service (SVR, *Sluzhba vneshney razvedki*), the Federal Protective Service (FSO, *Federal’naya sluzhba okhrany*), the State Courier Service (GFS, *Gosudarstvennaya fel’d’egerskaya sluzhba*), the Federal Penitentiary Service (FSIN, *Federal’naya sluzhba ispolneniya nakazaniy*), the Federal Bailiffs Service (FSSP, *Federal’naya sluzhba sudebnykh pristavov*), the Federal Customs Service (FTS, *Federal’naya tamozhennaya sluzhba*), the Main Directorate of Special Programmes of the President (GUSP, *Glavnoye upravleniye spetsial’nykh programm Prezidenta*), the Prosecutor’s Office (*Prokuratura*) and the Investigative Committee (SK, *Sledstvennyy komitet*).

<sup>15</sup> Specifically, this unit is the Directorate for the organization of mobilization preparations of the Department for state service and personnel of the Ministry of the Interior (*Upravleniye*

terminology sometimes uses the expression “expenditures on military personnel or persons of equal status.” Without dwelling too much on the meaning of “persons of equal status”, we note that there are at least two relevant federal laws from 1998 that govern the status of military personnel: the law “On military duty and military service” and the law “On the status of military personnel.”<sup>16</sup> The first one of these laws includes a legal definition of the term ‘military service’ (*voyennaya sluzhba*), which specifies in which government bodies military service can be fulfilled (Article 2, item 1).<sup>17</sup> Table 4 summarizes how expenditures in level 10 are distributed among different government entities, with notes indicating, respectively, those entities that are militarized

---

*organizatsii mobilizatsionnoy podgotovki Departamenta gosudarstvennoy sluzhby i kadrov Ministerstva Vnutrennykh Del).*

<sup>16</sup> Full references: Federal law No. 53-FZ of 3 March 1998 “On military duty and military service” (*Federal’nyy zakon ot 28 marta 1998 goda N 53-FZ “O voinskoy obyazannosti i voyennoy sluzhbe”*) and Federal law No. 76-FZ of 27 May 1998 “On the status of military personnel” (*Federal’nyy zakon ot 27 maya 1998 goda N 76-FZ “O statute voyennosluzhashchykh”*).

<sup>17</sup> Similar to the law “On weapons,” the specific government entities are not listed by name in the law on military service, but rather by function, but can be assumed to include the following: the Armed Forces, the National Guard (also referred to as ‘other troops’ [*drugiyе voyska*]), the military rescue formations of the EMERCOM (also referred to as ‘military formations’ [*voyinskiye formirovaniya*]), the Foreign Intelligence Service (SVR, *Sluzhba vneshney razvedki*), the Federal Security Service (FSB, *Federal’naya sluzhba bezopasnosti*), the Federal Protective Service (FSO, *Federal’naya sluzhba okhrany*), the military prosecutor authorities (*organy voyennoy prokuratury*), the military investigative authorities of the Investigative Committee (*voyennye sledstvennyye organy Sledstvennogo komiteta*), the federal authority in charge of organizing mobilization preparations of federal authorities (*federal’nyy organ obespecheniya mobilizatsionnoy podgotovki organov gosudarstvennoy vlasti*) (collectively referred to as ‘authorities’ [*organy*]), military units of the Federal Fire Service (*voinskiye podrazdeleniya federal’noy protivopozharnoy sluzhby*), and special formations (*spetsial’nyye formirovaniya*) organized in wartime.



organizations and those that are designated for military service. Any secret expenditures associated with these organizations will be captured by other levels and are naturally not shown in Table 4.

[Table 4 about here.]

It should also be mentioned that of all levels in our framework, level 10 is the one mostly affected by the discontinuities of the budget structure. The discontinuities arise because the budget codes do not completely overlap before and after the amendments in 2012 and 2014, respectively (see Table A2 for details). As seen in Figure 5, this effect is particularly pronounced for level 10 by the increase in 2012 and the decrease in 2014. These changes in level 10 should not be interpreted in terms of shifts in resource allocation but rather as a result of the amendments to the budget framework. On the other hand, when we look at expenditures in level 10 at a more granular level, we see that there is also a high degree of continuity for individual government departments, as seen in Table 4. In fact, the discontinuity is almost entirely accounted for by the Ministry of the Interior. Although this discontinuity of level 10 at the aggregate level introduces a challenge for the interpretation of our results, the continuity at the departmental level actually serves as a quality check on our data and method. Another notable exception from the general continuity in Table 4 concerns the Prosecutor General and the Investigative Committee in 2017, which both see a jump from around 100 to 200 million to almost 5 billion roubles captured by level 10. This jump can only be explained in terms of a shift in resource allocations, since it does not coincide with any changes in the budget structure.

It is also noteworthy that around 90 % of expenditures in level 10 fall under chapter *0300 National Security and Law Enforcement*, and account for around half of all expenditures in that chapter. Finally, we note that level 10 has decreased in

proportion to level 4, from 36 % in 2014 to under 25 % in 2016–2018, a trend that is at least partly driven by the transformation of the interior troops to the National Guard.

Level 11 is defined to capture all space-related expenditures that have not been captured by other levels in our framework. This includes budget items which are explicitly for civilian purposes. We include them for the sake of completeness and because the space capabilities are such an integral part to Russia's nuclear deterrent. Furthermore, it seems reasonable to assume that some nominally civilian uses of space can also have a potential dual military purpose. This concerns, for example, the GLONASS satellite navigation system, although some military expenditures associated with GLONASS are accounted for in chapter *0200 National Defence* and thus captured by level 2. SIPRI's measure of Russian military expenditures actually include a small share of expenditures in level 11, namely subsidies to the city of Baikonur, where the eponymous space port is located.

### **Limitations of the study**

Part of the purpose of drafting, approving, executing and auditing a budget is to produce transparency, predictability and accountability. Therefore, the safest way to keep expenditures truly secret would be to keep them out of the budget altogether. But a budget consists of both expenditure and revenue, so it would be necessary to keep a similar amount of money outside the budget revenues to achieve true secrecy. It is possible that entirely secret budgets exist outside the scope of the federal budget, but our study is limited to only those expenditures that are accounted for in the federal budget. A possible candidate for such a "black budget" is reported by Cooper (2016b, 36), who suggests that the top-secret GUSP mentioned above might have access to funds from large-scale commercial engineering activities. However, although such

forms of financing would serve a purpose for the most sensitive parts of any government's activities, it is unlikely that they could come anywhere close to the official defence budget in terms of scale.

Admittedly, the broader measures that we suggest most probably contain some items that are neither military- or security-related and should therefore be treated with requisite care. We have included them anyway since they can be assumed to potentially serve a dual-use purpose, and because they provide a certain margin to our goal of establishing an upper bound for military and security expenditure.

Can we trust that the data used in this study is accurate? All the evidence suggests that Russian financial authorities manage the economy with a high degree of professionalism in line with international best practices. We therefore conclude with high confidence that the data is at least broadly accurate. Furthermore, as this study has shown, Russia has an elaborate system in place for managing the secret parts of the budget, which in itself suggests, indirectly, that the non-secret parts contain complete and accurate information. We acknowledge, however, that even with accurate data there is room for cross-chapter secrecy, intentional as well as unintentional, that is not captured by our analysis. The lower and upper bounds that we have estimated partly compensate for this risk.

In their review of fiscal transparency in the Russian budget on behalf of the IMF, which was conducted in Moscow in October 2013 at the request of Russia's financial authorities, Hughes et al. (2014, 8; 33–34) highlighted the share of secret expenditure as an issue where there is room for improvement. They mention the figure 14 secret percent for the budget as a whole in 2013. As shown in Table 1, this number coincides with the number we obtain for 2013. Hughes et al. also forecast that the secrecy share would rise to 25 percent in 2016, which is also in line with our findings.

Note that the share of secret expenditures in the budget as a whole can be obtained by comparing the sum of expenditures in the departmental structure of expenditures and the chapter-subchapter summary. This provides us with a mechanism to double check that our calculated secrecy shares are correct: we can obtain the total share of secret expenditures also by adding together all open and secret expenditures at the subchapter level and compare to the obtained total.

### **Concluding discussion**

The main finding of this paper is that the share of Russian budget expenditures going to military or security has increased over the period 2011-2019 regardless of the chosen measure, while at the same time the level of secrecy has increased. This result strengthens the hypothesis that a “securitization” of the Russian state budget has occurred over time, in the sense that national security considerations have become more prevalent in the allocation of resources (Connolly 2018). The suggested lower and upper bounds for military- and security-related expenditures provide nuance to this general result. As a share of GDP, the interval becomes approximately 2–7 percent, which places the standard estimates of SIPRI and IISS right in the middle of this interval (Table 2c). As a share of total government expenditures, the interval becomes 10–40 percent (Table 2b). In a foreign and security policy context the lower levels that focus on external security are probably more relevant, while the higher levels that capture security in a more general sense have relevance domestically in Russia, not least from a political economy perspective. Finally, it should be mentioned that Russia’s total federal expenditures have decreased from an average of 18.6 % of GDP on average in 2011–2016 to 16.8 % on average in 2017–2021, a fact that can be partially explained by the austerity measures put in place after 2014. That the budget has been influenced by

the securitization trend is visible also in the level of secret expenditures, which increased as a share of total expenditures from 12 % to 17 % between 2011 and 2019. Thus, our results confirm unambiguously that defence and security are prioritized when the economy deteriorates.

In obtaining our results, we have suggested a method for collecting, structuring and analyzing Russian budget expenditures and their share of secrecy in a reproducible manner, and this method has enabled us to provide an unprecedented level of empirical detail. Although our focus has been military and security-related expenditure, the method is applicable to all expenditure areas in the Russian budget.

## References

- Bergson, Abram. 1953. "Reliability and Usability of Soviet Statistics: a Summary Appraisal." *The American Statistician*, 7(3), 13–16.
- Bocharova, Svetlana. 2016. "Siluanov ob'yasn'il rost sekretnykh raskhodov byudzheta." [Siluanov explained the increased secret expenditures of the budget."] RBC, 17 October 2016.  
<https://www.rbc.ru/economics/17/10/2016/5804b6779a794763375aae81/>
- Christie, Edward Hunter. 2017. "Does Russia have the fiscal capacity to achieve its military modernisation goals?" *RUSI Journal*, 162 (5), 4–15.  
doi:10.1080/03071847.2017.1406697
- Connolly, Richard. 2018. *Russia's Response to Sanctions: How Western Economic Statecraft is Reshaping Political Economy in Russia*. Cambridge University Press
- Connolly, Richard and Mathieu Boulègue. 2018. *Russia's New State Armament Programme. Implications for the Russian Armed Forces and Military Capabilities to 2027*. Research Paper, May 2018. Chatham House, Royal Institute of International Affairs.
- Cooper, Julian. 1998. "The military expenditure of the USSR and the Russian Federation, 1987–1997." In *SIPRI Yearbook 1998. Armaments, Disarmament and International Security*, 243–259. Oxford University Press.
- Cooper, Julian. 2013. *Russian Military Expenditure: Data, Analysis and Issues*. FOI report FOI-R--3688--SE, September 2013. Swedish Defence Research Agency.  
doi:10.13140/RG.2.1.2548.6480
- Cooper, Julian. 2016a. *Russia's State Armament Programme to 2020: a quantitative assessment of implementation 2011–2015*. FOI report FOI-R--4239--SE, March 2016. Swedish Defence Research Agency.
- Cooper, Julian. 2016b. *If War Comes Tomorrow. How Russia Prepares for Possible Armed Aggression*. Whitehall Report 4-16, August 2016. Royal United Services Institute for Defence and Security Studies.
- Cooper, Julian. 2017a. "The Russian budgetary process and defence: finding the 'golden mean'." *Post-Communist Economies*, 29(4), 476-490.

- Cooper, Julian. 2017b. *Military Spending in Russia's draft federal budget, 2018-2020*. Research Note. University of Birmingham, Centre for Russian, European and Eurasian Studies.
- Deger, Saadet and Somnath Sen. 1991. "The Soviet Union." In *SIPRI Yearbook 1991. Armaments, Disarmament and International Security*, 139–153. Oxford University Press.
- Deger, Saadet and Somnath Sen. 1992. "The USSR and its successor states." In *SIPRI Yearbook 1992. Armaments, Disarmament and International Security*, 203–225. Oxford University Press.
- Deni, John R., ed. 2018. *Current Russia Military Affairs. Assessing and Countering Russian Strategy, Operational Planning, and Modernization*. Conference Executive Summaries, July 2018. United States Army War College, Strategic Studies Institute.
- Fortescue, Stephen. 2017a. "Russian federal budget formation: introduction." *Post-Communist Economies*, 29(4), 449-456.
- Fortescue, Stephen. 2017b. "The role of the executive in Russian budget formation." *Post-Communist Economies*, 29(4), 523-537.
- Gupta, Sanjeev, Luiz de Mello and Raju Sharan. 2000. *Corruption and Military Spending*. IMF Working Paper WP/00/23, February 2000. International Monetary Fund, Fiscal Affairs Department.
- GUSP. 2019. "Obshchaya informatsiya o GUSPe" ["General information about the GUSP"]. Main Directorate for Special Programmes of the President of the Russian Federation (*Glavnoye upravleniye spetsial'nykh programm Prezidenta Rossiyskoy Federatsii*). Accessed 5 March 2019.  
<http://www.gusp.gov.ru/pages/gusp/3729/index.shtml>
- Hakvåg, Una. 2017. "Russian defence spending after 2010: the interplay of personal, domestic, and foreign policy interests." *Post-Soviet Affairs* 33 (6), 496–510.  
doi:10.1080/1060586X.2017.1388472
- Harrison, Mark. 2003. *Why Secrets? The Uses of Secrecy in Stalin's Command Economy*. University of Warwick, Department of Economics and University of Birmingham, Centre for Russian & East European Studies.

- Harrison, Mark. 2008. "Secrecy." In *Guns and Rubles: The Defense Industry in the Stalinist State*, edited by Mark Harrison, 230–254. New Haven, CT: Yale University Press.
- Harrison, Mark. 2013. "Accounting for Secrets." *The Journal of Economic History* 73 (4): 1017–1049. doi:10.1017/S0022050713000867.
- Hollyer, James, Peter Rosendorff, James Raymond Vreeland. 2011. "Democracy and Transparency," *Journal of Politics* 73 (4): 1191-1205. doi.org/10.1017/S0022381611000880
- Hughes, Richard., Tom Josephs, Viera Karolova, Vladimir Krivenkov, and Gösta Ljungman. 2014. *Russian Federation. Fiscal Transparency Evaluation*. IMF Country Report No. 14/134. International Monetary Fund, Fiscal Affairs Department and Statistics Department.
- Hutchings, Raymond. 1987. *Soviet Secrecy & Non-Secrecy*. Totowa, New Jersey: Barnes & Noble Books.
- IBP. 2017. "Open Budget Index 2017". International Budget Partnership. Accessed January 2019. <https://www.internationalbudget.org/open-budget-survey/open-budget-index-rankings/>
- IISS. 2018. "Russia and Eurasia." In *The Military Balance. The Annual Assessment of Global Military Capabilities and Defence Economics*, 169–218. London: The International Institute for Strategic Studies.
- Kelly, Noel. 2016. "The reporting of military expenditure data to the United Nations." In *SIPRI Yearbook 2016. Armaments, Disarmament and International Security*, 535–537. Oxford University Press.
- Kontorovich, Vladimir. 2009. "Secrecy and Western Study of the Soviet Military Sector." Unpublished; presented at the November 2009 convention of the American Association for the Advancement of Slavic Studies. Department of Economics, Haverford College, Haverford, PA.
- Kraan, Dirk-Jan, Daniel Bergvall, Ian Hawkesworth, Valentina Kostyleva and Matthias Witt. 2008. "Budgeting in Russia." *OECD Journal on Budgeting* 8 (2). doi:10.1787/budget-v8-art7-en
- MinFin. 2010. *Order No. 190n "On the approval of the Instructions on the method for applying the budget classification of the Russian Federation"* (prikaz N 190n "Ob utverzhdenii Ykazaniy o poryadke primeneniya byudzhetnoy klassifikatsii



- Rossiyskoy Federatsii*”). Ministry of Finance of the Russian Federation. 28 December 2010, with amendments through 29 December 2011.
- MinFin. 2011. *Order No. 180n “On the approval of the Instructions on the method for applying the budget classification of the Russian Federation” (prikaz N 180n “Ob utverzhdenii Ykazaniy o poryadke primeneniya byudzhetnoy klassifikatsii Rossiyskoy Federatsii”)*. Ministry of Finance of the Russian Federation. 21 December 2011, with amendments through 13 December 2012.
- MinFin. 2012. *Order No. 171n “On the approval of the Instructions on the method for applying the budget classification of the Russian Federation for 2013 and the planning period of the years 2014 and 2015” (prikaz N 171n “Ob utverzhdenii Ykazaniy o poryadke primeneniya byudzhetnoy klassifikatsii Rossiyskoy Federatsii na 2013 god i na planovyy period 2014 i 2015 godov”)*. Ministry of Finance of the Russian Federation. 21 December 2012, with amendments through 31 December 2013.
- MinFin. 2013. *Order no. 65n “On the approval of the Instructions on the method for applying the budget classification of the Russian Federation” (prikaz N 65n “Ob utverzhdenii Ykazaniy o poryadke primeneniya byudzhetnoy klassifikatsii Rossiyskoy Federatsii”)*. Ministry of Finance of the Russian Federation. 1 July 2013.
- MinFin. 2018a. *Order no. 65n “On the approval of the Instructions on the method for applying the budget classification of the Russian Federation” (prikaz N 65n “Ob utverzhdenii Ykazaniy o poryadke primeneniya byudzhetnoy klassifikatsii Rossiyskoy Federatsii”)*. Ministry of Finance of the Russian Federation. 1 July 2013, with amendments through 22 June 2018.
- MinFin. 2018b. *Order No. 132n “On the method for forming and applying budget classification codes of the Russian Federation, their structure and assignment principles” (prikaz N 132n “O poryadke formirovaniya i primeneniya kodov byudzhetnoy klassifikatsii Rossiyskoy Federatsii, ikh strukture i printsipakh naznacheniya”)*. Ministry of Finance of the Russian Federation. 8 June 2018.
- MinFin. 2018c. *Citizens budget to the federal law on the federal budget for 2019 and the planning period 2020 and 2021. [Byudzhets dlya grazhdan k federal'nomu zakonu o federal'nom byudzhete na 2019 god i na planovyy period 2020 i 2021 godov.]* Ministry of Finance of the Russian Federation. Accessed June 2019.

- [https://www.minfin.ru/common/upload/library/2018/12/main/BDG\\_2019\\_all.pdf/](https://www.minfin.ru/common/upload/library/2018/12/main/BDG_2019_all.pdf/).
- MVD. 2014. “Mobilizatsionnym organam v sisteme MVD Rossii – 75 let.” [“75 years of the mobilization authorities in the system of the Ministry of Interior of Russia”]. Press centre of the Ministry of the Interior (*Ministerstvo Vnutrennykh Del, MVD*). Accessed June 2019.  
[https://мвд.рф/mvd/structure1/Upravlenija/uos/Publikacii\\_i\\_vistuplenija/item/7097143](https://мвд.рф/mvd/structure1/Upravlenija/uos/Publikacii_i_vistuplenija/item/7097143).
- NATO. 2018. “Defence Expenditure of NATO Countries (2010-2017).” Communiqué PR/CP(2018)16, 15 March 2018. NATO, Public Diplomacy Division.
- Noble, Ben. 2017. “Amending budget bills in the Russian State Duma.” *Post-Communist Economies* 29 (4), 505–522. doi:10.1080/14631377.2017.1333791
- Oxenstierna, Susanne. 2016. “Russia’s defence spending and the economic decline.” *Journal of Eurasian Studies* 7 (2016), 60–70. doi:10.1016/j.euras.2015.06.001
- Oxenstierna, Susanne. 2019. “A new trend in Russia’s defence spending.” In *The Russian Economy under Putin*, edited by Torbjörn Becker and Susanne Oxenstierna, 87–105. Abingdon: Routledge.
- Perlo-Freeman, Sam. 2013. “Russian military expenditure, reform and restructuring.” In *SIPRI Yearbook 2013. Armaments, Disarmament and International Security*, 142–145. Oxford University Press.
- Persson, Gudrun, ed. 2016. *Rysk militär förmåga i ett tioårsperspektiv – 2016* [Russian Military Capability in a Ten-Year Perspective – 2016]. FOI report FOI-R--4367--SE, December 2016 (in Swedish with English summary). Swedish Defence Research Agency.
- Roskazna. 2019a. “Ispolneniye byudzhetrov. Federal’nyy byudzhets.” [“Budget Execution. Federal Budget.”] The Federal Treasury of Russia. Accessed January 2019. <http://roskazna.ru/ispolnenie-byudzhetrov/federalnyj-byudzhets/>
- Roskazna. 2019b. “Ispolneniye byudzhetrov. Konsolidirovanny byudzhets Rossiyskoy Federatsii i byudzhetrov gosudarstvennykh vnebyudzhetynykh fondov.” [“Budget Execution. Consolidated budget of the Russian Federation and the budgets of the extrabudgetary state funds.”] The Federal Treasury of Russia. Accessed August 2019. <https://www.roskazna.ru/ispolnenie-byudzhetrov/konsolidirovannyj-byudzhets/>

- Rosrezerv. 2019. “Zapasy gosudarstvennoy vazhnosti, 2016g.” [“Reserves of state importance, 2016”] (online video material). Federal Agency for State Reserves, Rosrezerv (*Federal'noye agentstvo po gosudarstennym rezervam*). Accessed 15 February 2019. [https://rosreserv.ru/Virtualnij\\_muzej/Filmi\\_o\\_Rosrezerve/](https://rosreserv.ru/Virtualnij_muzej/Filmi_o_Rosrezerve/) and <https://rosreserv.ru/video/7171/>.
- Sköns, Elisabeth. 2004. “Military Expenditure. IV. Major spenders in the shadow of the titan. Japan—The United Kingdom—France—China—Russia—India—Brazil.” In *SIPRI Yearbook 2004. Armaments, Disarmament and International Security*, 320–339. Oxford University Press.
- SIPRI. 2018. *SIPRI Yearbook 2018. Armaments, Disarmament and International Security*. Oxford University Press.
- SIPRI. 2019a. “SIPRI Military Expenditure Database Sources and Methods”. Accessed 5 March 2019. <https://www.sipri.org/databases/milex/sources-and-methods>
- SIPRI. 2019b. “SIPRI Military Expenditure Database. Data for all countries 1949–2018” (dataset). Stockholm International Peace Research Institute. Accessed May 2019. <https://www.sipri.org/sites/default/files/SIPRI-Milex-data-1949-2018.xlsx>
- Tian, Nan. 2018. “Global developments in military expenditure.” In *SIPRI Yearbook 2018. Armaments, Disarmament and International Security*, 151–170. Oxford University Press.
- Tian, Nan and Diego Lopes da Silva. 2018. “Debt, oil price and military expenditure.” In *SIPRI Yearbook 2018. Armaments, Disarmament and International Security*, 171–178. Oxford University Press.
- Transparency International UK. 2011. *The Transparency of National Defence Budgets. An Initial Review*. Transparency International UK Defence and Security Programme.
- Tsygankov, Andrei P. 2019. *Russia and America. The Asymmetric Rivalry*. Cambridge: Polity.
- Vendil Pallin, Carolina, ed. 2012. *Rysk militär förmåga i ett tioårsperspektiv – 2011* [Russian Military Capability in a Ten-Year Perspective – 2011]. FOI report FOI-R--3404--SE, March 2012 (in Swedish with English summary). Swedish Defence Research Agency.

Weber, Max. 1922/1968. *Economy and Society: An Outline of Interpretative Sociology*. Edited by Guenther Roth and Claus Wittich. 3 vols. New York, NY: Bedminster.

World Bank. 2019. “World Development Indicators” (Indicators MS.MIL.XPND.CD and MS.MIL.XPND.GD.ZS. Accessed 6 March 2019.  
<https://data.worldbank.org/indicator/MS.MIL.XPND.GD.ZS>.

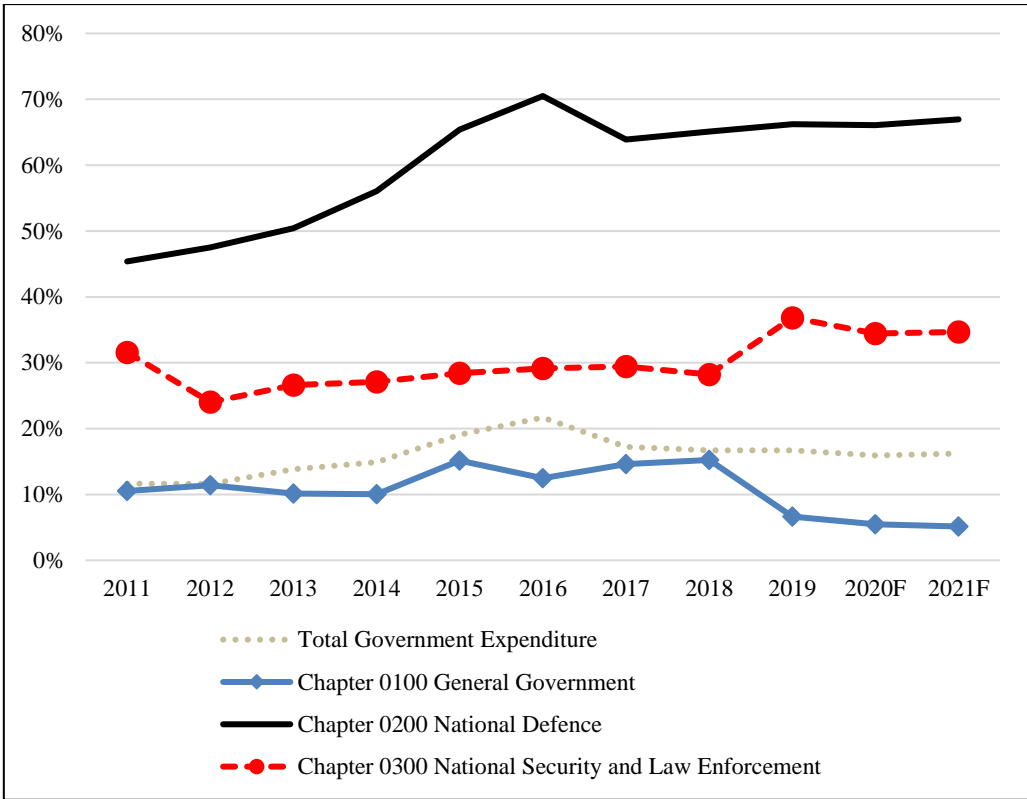
Zatsepin, Vasily. 2008. “Defence in the 2008 federal budget.” *Russian Economy: Trends and Perspectives. Monthly Bulletin*, November 2008, 56–60. Moscow: Institute for the Economy in Transition.

Zatsepin, Vasily. 2014. “Laws, secrecy and statistics: Recent developments in Russian defence budgeting.” In *Proceedings. Forum for Economists International. Conference held in Amsterdam May 30-June 2, 2014*, edited by M. Peter van der Hoek. Papendrecht: Forum for Economists International.

Zatsepin, Vasily. 2019. “Voyennaya ekonomika i voyenna reforma v Rossii.” [”Military economy and military reform in Russia”], in Vladimir Mau et al, *Rossiyskaya ekonomika v 2018 godu. Tendentsii i perspektivy [Russian economy in 2018. Trends and outlooks]*. Moscow: Gaidar Institute Publishers. ISBN 978-5-93255-554-5.

## Figures

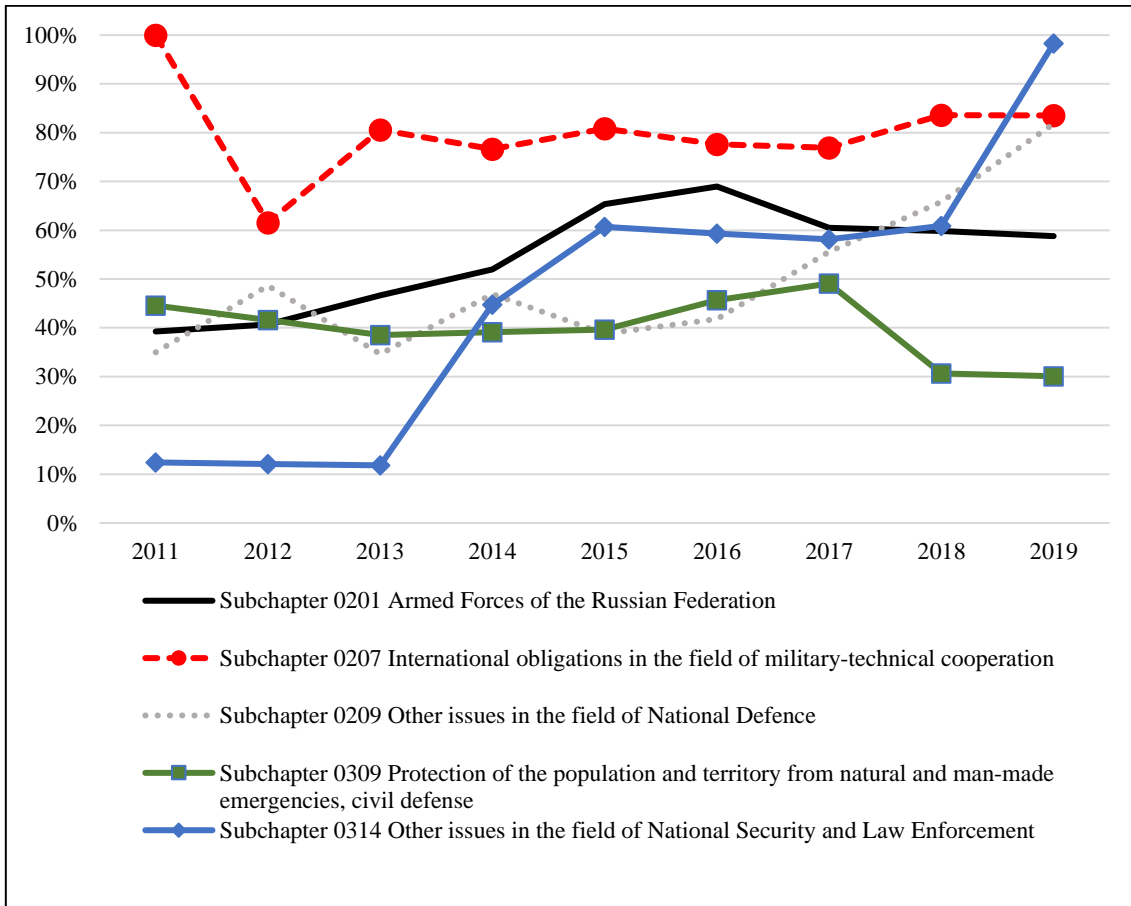
**Figure 1: Shares of secret expenditures in the Russian federal budget, 2011–2021**



Source: Table A1.

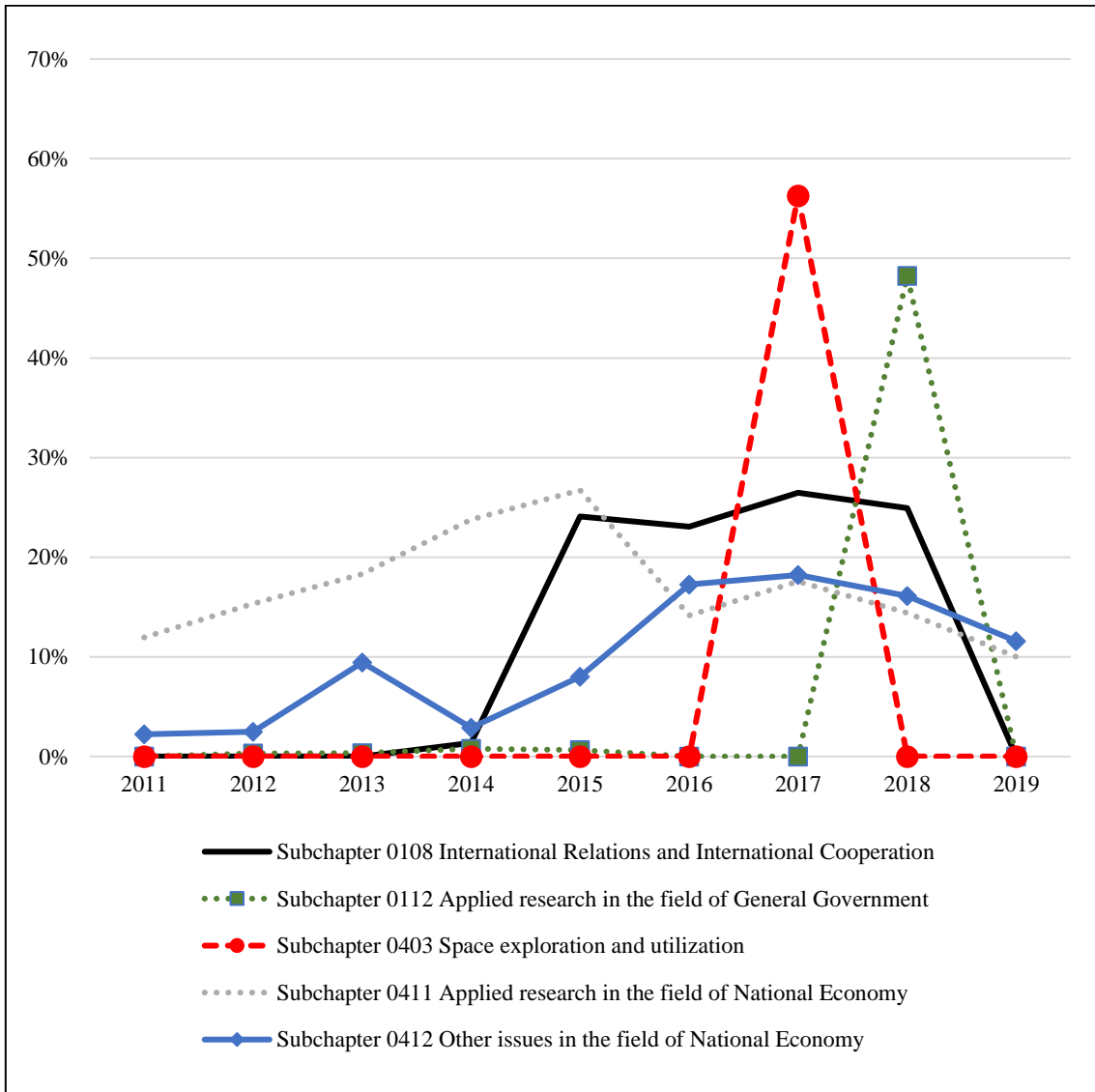
Note: The period 2011–2018 represents actual budget execution. The period 2019–2021 represents the budget approval in federal law 459-FZ of 29 November 2018.

**Figure 2: Shares of secret expenditures in some military and security subchapters of the Russian federal budget, 2011–2019**



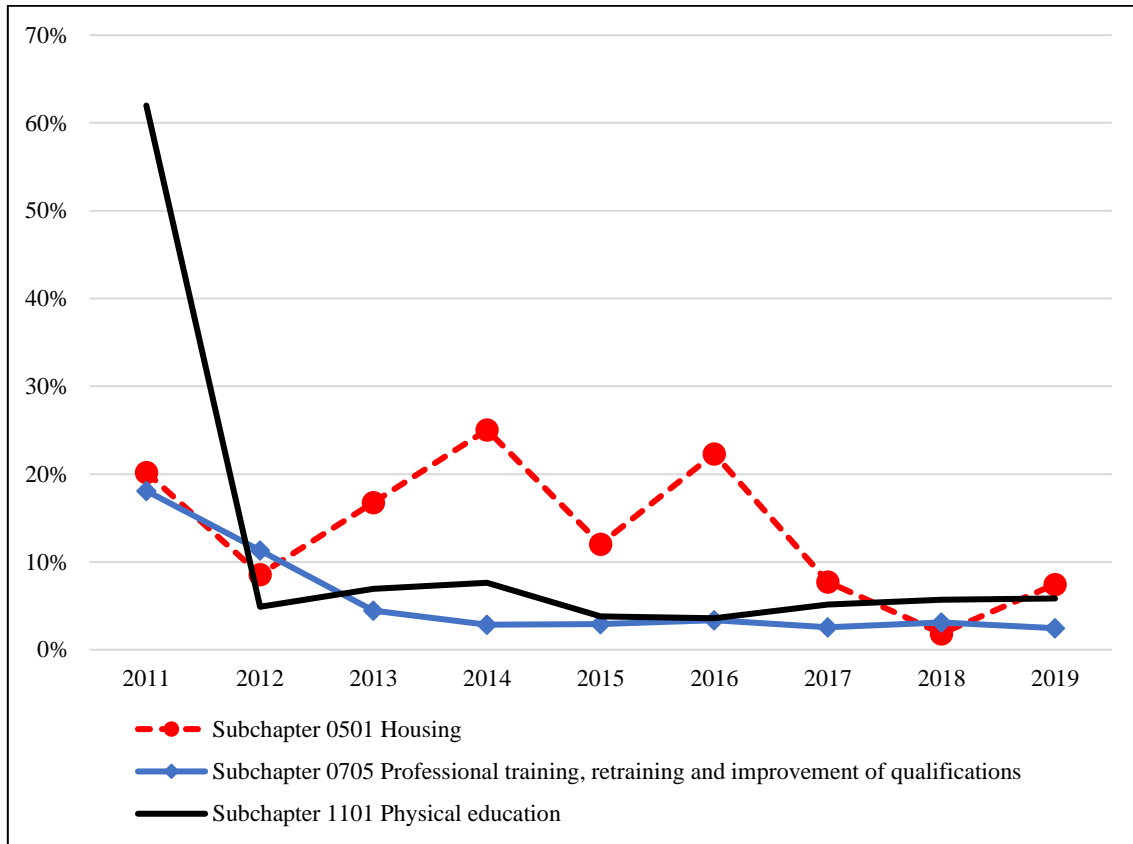
Source: Table A1.

**Figure 3: Shares of secret spending in some non-military subchapters of the Russian federal budget 2011–2019**



Source: Table A1.

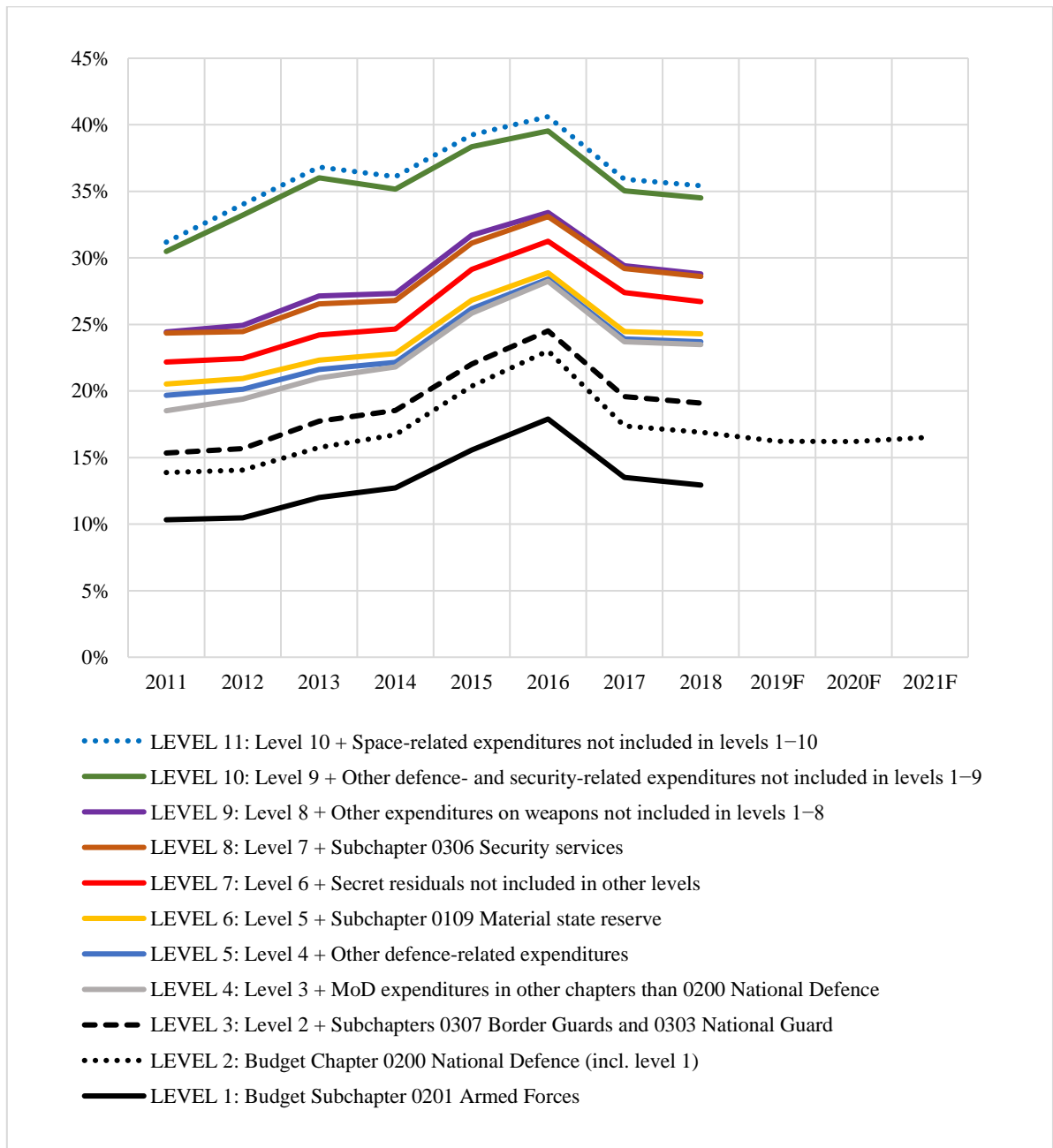
**Figure 4: Shares of secret spending in some non-military subchapters of the Russian federal budget, 2011–2019 (subchapters with decreasing trend)**



Source: Table A1.



**Figure 5: Military and Security Expenditure as a Share of Total Government Expenditures of Russian Federal Budget, 2011–2021 (Accumulative Levels)**



Source: Table 2b.

Note: The structure of the budget underwent significant revisions in 2012 and 2014, which created discontinuities in the data (in particular concerning level 10 in 2014). Level 4 corresponds, with minor adjustments, to the measures based on the NATO definition used by SIPRI and IISS. Refer to Table 1 for additional comments.

## Tables

**Table 1: Different measures of Russia’s military expenditures**

Levels	Corresponding budget items
Level 1	Budget subchapter 0201 Armed Forces.
Level 2	Budget chapter 0200 National Defence (including level 1).
Level 3	Level 2 + subchapters 0303 National Guard troops and 0307 Border services.
Level 4	Level 3 + Expenditures associated with the Ministry of Defence in other budget chapters than those included in levels 1–3. <i>Note: Level 4 corresponds, with some minor adjustments, to the definition used by SIPRI. Refer to Table A2 in Appendix 1 for details.</i>
Level 5	Level 4 + Other defence-related expenditures not captured by levels 1–4, including: <ul style="list-style-type: none"> <li>- Expenditures on other defence-related entities than the Ministry of Defence</li> <li>- Subsidies to the defence and nuclear industry and to closed cities of the defence-industrial complex</li> <li>- Social support and housing subsidies to former military personnel</li> <li>- Arms recycling and disposal and improved weapons storage conditions</li> <li>- Defence expenditures in budget chapter 0200 in regional budgets</li> </ul>
Level 6	Level 5 + Subchapter 0109 Material state reserve. <i>Note: The state reserve is managed by the Federal Agency for State Reserves, which is identified by budgetary manager code 171. There are expenditures associated with this agency in other subchapters than 0109. Some of these are captured by other levels; for example, level 9 includes expenditures on the State Defence Order associated with this agency and subchapter 0113 Other issues in the field of general government.</i>
Level 7	Level 6 + Secret expenditures other than those included in other levels. <i>Note: Levels that are defined based on chapter and subchapter aggregates already capture secret expenditures in those categories, i.e. chapter 0200 (level 2), subchapters 0303 and 0307 (level 3), 0109 (level 6) and 0306 (level 8). Level 7 captures secret expenditures in all other chapters and subchapters.</i>
Level 8	Level 7 + Subchapter 0306 Security services.
Level 9	Level 8 + Other expenditures on weapons and equipment not included in levels 1–8. <i>Note: All expenditures in this level are explicitly related to the State Defence Order (with the exception of a few budget items with purpose code 247 63 00 until 2013 which is only partly related to the State Defence Order). Several items are also related to the State Armament Programme. Refer to Table A2 in Appendix 1 for details.</i>
Level 10	Level 9 + Other defence- and security-related expenditures not included in levels 1–9, including salaries, food, fuel and material supplies associated with paramilitary and militarized organizations. <i>Note: The budget categories used to identify expenditures at this level do not necessarily distinguish between military and law enforcement functions. This is true even for expenditures associated with the State Defence Order. For example, type code 223 represents “Food supply within the framework of the State Defence Order” and can be found in budget items associated with the Ministry of Defence (level 1) and the National Guard (level 3 and 5), but also with the Federal Penitentiary Service, which is included here in level 10. It is therefore necessary to correlate expenditures in level 10 with the manager category to get a more complete description of the nature of these expenditures. A summary is provided in Table 4. Refer to Table A2 in Appendix 1 for additional details.</i>
Level 11	Level 10 + Space-related expenditures not included levels 1–10.

Note: Detailed comments and sources to Table 1 are provided in Table A2 in the Appendix.

**Table 2a. Different levels of military and security expenditures in the Russian budget**

UNIT: Million roubles

Level	Description	2011	2012	2013	2014	2015	2016	2017	2018	2019F	2020F	2021F
LEVEL 1	Budget Subchapter 0201 Armed Forces	1,128,393	1,350,047	1,601,884	1,885,859	2,432,905	2,935,634	2,219,075	2,163,038			
LEVEL 2	Budget Chapter 0200 National Defence (incl. level 1)	1,515,955	1,812,386	2,103,579	2,479,074	3,181,367	3,775,348	2,852,275	2,827,008	2,926,249	2,999,400	3,142,700
LEVEL 3	Level 2 + Subchapters 0307 Border Guards and 0303 National Guard	1,676,325	2,020,248	2,365,035	2,750,332	3,438,601	4,021,747	3,215,249	3,192,314			
LEVEL 4	Level 3 + MoD expenditures in other chapters than 0200 National Defence	2,023,286	2,499,761	2,798,972	3,236,425	4,036,731	4,632,831	3,892,651	3,927,385			
LEVEL 5	Level 4 + Other defence-related expenditures	2,149,740	2,595,713	2,883,955	3,286,122	4,090,637	4,659,434	3,926,436	3,962,623			
LEVEL 6	Level 5 + Subchapter 0109 Material state reserve	2,242,769	2,699,403	2,977,954	3,382,931	4,189,262	4,737,520	4,018,298	4,060,566			
LEVEL 7	Level 6 + Secret residuals not included in other levels	2,423,211	2,894,789	3,231,725	3,658,398	4,552,436	5,126,342	4,499,196	4,465,532			
LEVEL 8	Level 7 + Subchapter 0306 Security services	2,660,944	3,153,963	3,540,986	3,973,706	4,859,566	5,430,545	4,794,624	4,779,822			
LEVEL 9	Level 8 + Other expenditures on weapons not included in levels 1–8	2,670,069	3,214,740	3,621,760	4,052,265	4,951,228	5,480,441	4,830,246	4,811,235			
LEVEL 10	Level 9 + Other defence- and security-related expenditures not included in levels 1–9	3,330,708	4,281,860	4,805,976	5,215,795	5,992,421	6,485,425	5,752,809	5,766,967			
LEVEL 11	Level 10 + Space-related expenditures not included in levels 1–10	3,406,857	4,387,248	4,912,519	5,353,252	6,129,954	6,662,055	5,896,647	5,918,471			
	Total Government Expenditure (actual) <sup>a)</sup>	10,925,617	12,894,987	13,342,922	14,831,576	15,620,253	16,402,973	16,420,303	16,713,003	18,037,246	18,519,394	19,024,728
	GDP (current prices) <sup>b)</sup>	60,282,500	68,163,900	73,133,900	79,199,700	83,101,100	86,010,200	92,089,300	103,626,600	105,820,000	110,732,000	118,409,000

Source: Authors' calculations from actual budget execution based on Roskazna (2019a). See Table A2 for details. 'F' = Forecast.

a) Forecasts for Total Government Expenditure are from federal law 459-FZ of 29 November 2018 "On the federal budget for 2019 and the planning period 2020 and 2021", article 1, point 1, item 2) (2019) and article 1, point 2, item 2) (2020 and 2021). Total Government Expenditures include conditionally approved expenditures amounting to 5 percent of the total in 2020 and 10 percent of the total for 2021.

b) GDP data for 2011–2018 from Rosstat, accessed 6 March 2019. Forecasts for 2019–2021 are from federal law 459-FZ article 1, point 2. Note that data for 2015–2017 was recalculated in 2018; see original source for details. [http://www.gks.ru/free\\_doc/new\\_site/vvp/vvp-god/tab1a.xls](http://www.gks.ru/free_doc/new_site/vvp/vvp-god/tab1a.xls).

**Table 2b. Different levels of military and security expenditures as share of total government expenditures**

Level	Description	2011	2012	2013	2014	2015	2016	2017	2018	2019F	2020F	2021F
LEVEL 1	Budget Subchapter 0201 Armed Forces	10.3%	10.5%	12.0%	12.7%	15.6%	17.9%	13.5%	12.9%			
LEVEL 2	Budget Chapter 0200 National Defence (incl. level 1)	13.9%	14.1%	15.8%	16.7%	20.4%	23.0%	17.4%	16.9%	16.2%	16.2%	16.5%
LEVEL 3	Level 2 + Subchapters 0307 Border Guards and 0303 National Guard	15.3%	15.7%	17.7%	18.5%	22.0%	24.5%	19.6%	19.1%			
LEVEL 4	Level 3 + MoD expenditures in other chapters than 0200 National Defence	18.5%	19.4%	21.0%	21.8%	25.8%	28.2%	23.7%	23.5%			
LEVEL 5	Level 4 + Other defence-related expenditures	19.7%	20.1%	21.6%	22.2%	26.2%	28.4%	23.9%	23.7%			
LEVEL 6	Level 5 + Subchapter 0109 Material state reserve	20.5%	20.9%	22.3%	22.8%	26.8%	28.9%	24.5%	24.3%			
LEVEL 7	Level 6 + Secret residuals not included in other levels	22.2%	22.4%	24.2%	24.7%	29.1%	31.3%	27.4%	26.7%			
LEVEL 8	Level 7 + Subchapter 0306 Security services	24.4%	24.5%	26.5%	26.8%	31.1%	33.1%	29.2%	28.6%			
LEVEL 9	Level 8 + Other expenditures on weapons not included in levels 1–8	24.4%	24.9%	27.1%	27.3%	31.7%	33.4%	29.4%	28.8%			
LEVEL 10	Level 9 + Other defence- and security-related expenditures not included in levels 1–9	30.5%	33.2%	36.0%	35.2%	38.4%	39.5%	35.0%	34.5%			
LEVEL 11	Level 10 + Space-related expenditures not included in levels 1–10	31.2%	34.0%	36.8%	36.1%	39.2%	40.6%	35.9%	35.4%			

Source: Authors' calculations based on data from Table 2a.

**Table 2c. Different levels of military and security expenditures as share of GDP**

Level	Description	2011	2012	2013	2014	2015	2016 <sup>c)</sup>	2017	2018	2019F	2020F	2021F
LEVEL 1	Budget Subchapter 0201 Armed Forces	1.9%	2.0%	2.2%	2.4%	2.9%	3.4%	2.4%	2.1%			
LEVEL 2	Budget Chapter 0200 National Defence (incl. level 1)	2.5%	2.7%	2.9%	3.1%	3.8%	4.4%	3.1%	2.7%	2.8%	2.7%	2.7%
LEVEL 3	Level 2 + Subchapters 0307 Border Guards and 0303 National Guard	2.8%	3.0%	3.2%	3.5%	4.1%	4.7%	3.5%	3.1%			
LEVEL 4	Level 3 + MoD expenditures in other chapters than 0200 National Defence	3.4%	3.7%	3.8%	4.1%	4.9%	5.4%	4.2%	3.8%			
LEVEL 5	Level 4 + Other defence-related expenditures	3.6%	3.8%	3.9%	4.1%	4.9%	5.4%	4.3%	3.8%			
LEVEL 6	Level 5 + Subchapter 0109 Material state reserve	3.7%	4.0%	4.1%	4.3%	5.0%	5.5%	4.4%	3.9%			
LEVEL 7	Level 6 + Secret residuals not included in other levels	4.0%	4.2%	4.4%	4.6%	5.5%	6.0%	4.9%	4.3%			
LEVEL 8	Level 7 + Subchapter 0306 Security services	4.4%	4.6%	4.8%	5.0%	5.8%	6.3%	5.2%	4.6%			
LEVEL 9	Level 8 + Other expenditures on weapons not included in levels 1–8	4.4%	4.7%	5.0%	5.1%	6.0%	6.4%	5.2%	4.6%			
LEVEL 10	Level 9 + Other defence- and security-related expenditures not included in levels 1–9	5.5%	6.3%	6.6%	6.6%	7.2%	7.5%	6.2%	5.6%			
LEVEL 11	Level 10 + Space-related expenditures not included in levels 1–10	5.7%	6.4%	6.7%	6.8%	7.4%	7.7%	6.4%	5.7%			
	SIPRI's estimate <sup>a), c)</sup>	3.42%	3.69%	3.85%	4.10%	4.86%	5.45%	4.23%	3.93%			
	IISS's estimate <sup>b), c)</sup>	3.36%	3.64%	3.81%	4.07%	4.84%	5.40%	4.17%	3.90%			

Source: Authors' calculations based on data from Table 2a.

a) SIPRI (2018b).

b) IISS (2018, 175).

c) In 2016, the Russian government made one-off debt repayments concerning state-guaranteed loans taken by the defence industry within the framework of the State Armament Programme since 2011. The SIPRI and IISS estimates for 2016 include these repayments. IISS reports that the number for 2016 would be 4.46% if these repayments were excluded.

**Table 3: Expenditures on other weapons and equipment in the State Defence Order (Level 9) distributed by budgetary manager**

UNIT: Million roubles

<b>Government Entity</b>	<b>Budgetary manager code</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Ministry of Industry and Trade	020		1,083	362	427	310	533	102	351
Ministry of Health	056					359	1,521	1,282	797
Ministry of Education and Science	074		35	51	346	263			
Federal Service for Veterinary and Phytosanitary Surveillance	081		749	673	358	78	81	37	119
Ministry of Agriculture	082		102	102	536	409		5	
State Courier Service	089		5	4	2	10			
Ministry of Transport	103						122	264	108
Federal Service for Supervision of Consumer Rights Protection and Human Well-Being	141		714	662	261	43	84	44	41
Federal Customs Service	153		79	463	918	1,074	832	555	226
Federal Agency for State Reserves	171		3,253	5,339	4,624	10,389	7,493	6,269	5,365
Ministry for Civil Defense, Emergencies and Disaster Management (EMERCOM)	177	9,025	15,689	13,608	9,881	10,216	5,536	6,565	6,900
Ministry of the Interior (MVD)	188	6	24,994	24,891	30,767	20,624	15,602	10,239	7,463
Federal Migration Service	192		25	46					
Federal Drug Control Service	204	94	2,632	1,959	2,053	1,990			
Federal Space Agency	259			20,173	6,711	20,901			
Federal Agency for the Development of the State Border	260		2,041	2,296	214				
Federal Penitentiary Service	320		8,638	9,082	12,174	17,221	12,605	4,454	2,817
Federal Biomedical Agency	388		311	505	989	915	187	204	484
Federal Service for Technical and Export Control	587		118	211					
Federal State Budget Institution "National Research Center 'Kurchatov Institute'"	595		309	348					
State Atomic Energy Corporation "Rosatom"	725				8,298	6,862	4,001	3,654	5,661
State Space Corporation "Roscosmos"	730						1,301	1,948	1,080
<b>TOTAL</b>		<b>9,125</b>	<b>60,777</b>	<b>80,774</b>	<b>78,559</b>	<b>91,662</b>	<b>49,896</b>	<b>35,622</b>	<b>31,413</b>

Source: Authors' calculations based on budget codes defined in Table A2.

**Table 4: Other defence and security expenditures (Level 10) distributed by budgetary manager**

UNIT: Million roubles

<b>Government Entity</b>	<b>Budgetary manager code</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
State Courier Service <sup>a)</sup>	089	2,600	2,786	3,703	3,583	3,570	3,453	3,512	3,609
Federal Customs Service <sup>a)</sup>	153	54,965	56,321	61,939	60,406	56,068	53,067	54,626	56,468
EMERCOM <sup>a), b), c)</sup>	177	101,004	100,276	122,932	89,312	90,209	93,327	84,914	90,042
Ministry of the Interior <sup>a)</sup>	188	313,039	714,057	733,611	731,712	653,518	683,379	601,524	618,052
Federal Migration Service	192	6,150	6,703	10,237	38,283	31,064			
Federal Drug Control Service	204	18,588	20,705	29,478	30,367	27,378	38		
Federal Space Agency	259	97							
Federal Penitentiary Service <sup>a)</sup>	320	164,187	165,269	221,155	208,880	178,699	171,092	168,426	177,299
Federal Bailiff Service <sup>a)</sup>	322		315	356	357	285	279		
Federal Biomedical Agency	388								12
Prosecutor General <sup>a), b)</sup>	415		301	436	393	272	216	4,606	5,103
Investigative Committee <sup>a), b)</sup>	417		385	369	237	132	131	4,956	5,149
Supreme Court	437	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.02
Judicial Dept. at the Supreme Court	438	7	2						
<b>TOTAL</b>		<b>660,639</b>	<b>1,067,121</b>	<b>1,184,216</b>	<b>1,163,530</b>	<b>1,041,193</b>	<b>1,004,984</b>	<b>922,563</b>	<b>955,733</b>

Source: Authors' calculations based on budget codes defined in Table A2.

Notes:

a) Denotes entities that belong to the so-called militarized organizations in accordance with the law "On weapons"; cf. footnote 14.

b) Denotes entities designated for military service in accordance with the law "On military duty and military service"; cf. footnote 17.

c) EMERCOM is an acronym for the Ministry for Civil Defense, Emergencies and Disaster Management.

## Appendix 1: Detailed empirical results

**Table A1: Share of Secret Expenditures per Chapter and Subchapter in Russia's Federal Budget, 2011–2021**

Chapter, Subchapter	Code	Average	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Std.Dev (percent. points)
<i>Type of data*:</i>			E	E	E	E	E	E	E	E	A	P1	P2	
<b>TOTAL FEDERAL BUDGET</b>		<b>16.0%</b>	<b>11.67%</b>	<b>11.59%</b>	<b>13.81%</b>	<b>14.92%</b>	<b>19.08%</b>	<b>21.68%</b>	<b>17.25%</b>	<b>16.72%</b>	<b>16.70%</b>	<b>15.93%</b>	<b>16.19%</b>	<b>3.0 p.p.</b>
<b>GENERAL GOVERNMENT</b>	<b>0100</b>	<b>10.6%</b>	<b>10.5%</b>	<b>11.4%</b>	<b>10.1%</b>	<b>10.1%</b>	<b>15.1%</b>	<b>12.5%</b>	<b>14.6%</b>	<b>15.2%</b>	<b>6.7%</b>	<b>5.5%</b>	<b>5.1%</b>	<b>3.7 p.p.</b>
Functioning of the President of the Russian Federation	0101	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Functioning of legislative (representative) bodies of state power and representative bodies of municipal formations	0103	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Functioning of the Government of the Russian Federation, the highest executive bodies of state power of the subjects of the Russian Federation, local administrations	0104	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Judicial system	0105	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Ensuring the activities of financial, tax and customs authorities and bodies of financial (fiscal) supervision	0106	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Ensuring the conduct of elections and referendums	0107	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
International Relations and International Cooperation	0108	11.1%	0.0%	0.0%	0%	1.4%	24.1%	23.1%	26.5%	24.9%	0.0%			12.9 p.p.
State material reserve	0109	86.2%	85.6%	86.5%	86.1%	86.7%	87.2%	84.1%	86.6%	87.2%	86.1%			0.9 p.p.
Fundamental research	0110	0.7%	0.5%	0.8%	0.7%	0.8%	0.8%	0.8%	0.6%	0.9%	0.7%			0.1 p.p.
Reserve funds	0111	0.0%									0.0%			-
Applied research in the field of General Government	0112	5.6%	0.0%	0.3%	0.4%	0.8%	0.7%	0.0%	0.0%	48.2%	0.0%			16.0 p.p.
Other issues in the field of General Government	0113	3.9%	1.7%	1.6%	3.6%	5.1%	5.3%	3.4%	4.4%	3.9%	5.9%			1.5 p.p.
<b>NATIONAL DEFENSE</b>	<b>0200</b>	<b>60.3%</b>	<b>45.4%</b>	<b>47.5%</b>	<b>50.4%</b>	<b>56.0%</b>	<b>65.4%</b>	<b>70.5%</b>	<b>63.9%</b>	<b>65.1%</b>	<b>66.2%</b>	<b>66.1%</b>	<b>67.0%</b>	<b>8.8 p.p.</b>



Armed Forces of the Russian Federation	0201	54.7%	39.3%	40.7%	46.7%	52.0%	65.3%	69.0%	60.5%	59.9%	58.8%			10.6 p.p.
Mobilization and preparation outside of military units	0203	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Mobilization preparations of the economy	0204	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			0.0 p.p.
Preparation and participation in collective security and peacekeeping	0205	0.0%	0.0%	0.0%										0.0 p.p.
Nuclear weapons complex	0206	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			0.0 p.p.
Implementation of international obligations in the field of military-technical cooperation	0207	80.1%	100.0%	61.6%	80.6%	76.7%	80.8%	77.7%	76.9%	83.6%	83.5%			9.9 p.p.
Applied research in the field of National Defense	0208	94.0%	92.4%	92.9%	94.3%	92.1%	91.7%	96.3%	95.7%	95.1%	95.3%			1.7 p.p.
Other issues in the field of National Defense	0209	49.9%	35.0%	48.6%	34.6%	47.0%	38.8%	41.8%	55.6%	65.8%	81.8%			15.7 p.p.
<b>NATIONAL SECURITY AND LAW ENFORCEMENT</b>	<b>0300</b>	<b>30.0%</b>	<b>31.6%</b>	<b>24.0%</b>	<b>26.6%</b>	<b>27.1%</b>	<b>28.4%</b>	<b>29.1%</b>	<b>29.4%</b>	<b>28.2%</b>	<b>36.8%</b>	<b>34.4%</b>	<b>34.7%</b>	<b>3.9 p.p.</b>
Prosecution and investigation authorities	0301	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Internal Affairs authorities	0302	4.7%	3.9%	3.3%	3.8%	3.9%	4.9%	5.8%	5.8%	5.6%	5.7%			1.0 p.p.
National Guard troops of the Russian Federation	0303	6.2%	7.4%	4.6%	4.4%	5.3%	6.9%	7.7%	7.0%	5.6%	7.0%			1.2 p.p.
Justice authorities	0304	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	3.4%	3.9%	5.3%			2.2 p.p.
Penitentiary system	0305	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Security agencies	0306	99.7%	99.7%	99.7%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.3%			0.2 p.p.
Border Guard authorities	0307	99.8%	99.2%	99.1%	99.6%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%			0.4 p.p.
Authorities responsible for drug and psychotropic substance control	0308	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%						0.0 p.p.
Protection of the population and territory from natural and man-made emergencies, civil defense	0309	39.9%	44.5%	41.6%	38.5%	39.1%	39.7%	45.7%	49.1%	30.6%	30.1%			6.4 p.p.
Fire safety	0310	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Migration	0311	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%			0.0 p.p.
Applied research in the field of National Security and Law Enforcement	0313	88.2%	86.6%	86.6%	82.5%	82.7%	91.2%	90.5%	92.4%	91.0%	90.0%			3.7 p.p.
Other issues in the field of National Security and Law Enforcement	0314	46.5%	12.4%	12.1%	11.8%	44.8%	60.7%	59.4%	58.2%	60.9%	98.3%			29.5 p.p.
<b>NATIONAL ECONOMY</b>	<b>0400</b>	<b>4.6%</b>	<b>1.9%</b>	<b>2.5%</b>	<b>4.7%</b>	<b>3.6%</b>	<b>5.5%</b>	<b>7.0%</b>	<b>9.5%</b>	<b>6.7%</b>	<b>4.1%</b>	<b>3.0%</b>	<b>1.8%</b>	<b>2.4 p.p.</b>
General economic issues	0401	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.

Fuel and energy complex	0402	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Space exploration and utilization	0403	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	56.3%	0.0%	0.0%			18.8 p.p.
Reproduction of the mineral resource base	0404	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Agriculture and Fisheries	0405	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Water management	0406	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Forestry	0407	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%			0.1 p.p.
Transportation	0408	0.0%	0.0%	0.0%	0.1%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%			0.1 p.p.
Road management (road funds)	0409	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Communication and informatics	0410	0.5%	0.0%	0.02%	1.8%	2.0%	0.5%	0.0%	0.0%	0.0%	0.0%			0.8 p.p.
Applied research in the field of national economy	0411	16.9%	11.9%	15.4%	18.3%	23.8%	26.7%	14.2%	17.6%	14.4%	10.0%			5.4 p.p.
Other issues in the field of national economy	0412	9.8%	2.2%	2.5%	9.4%	2.9%	8.0%	17.3%	18.2%	16.1%	11.6%			6.4 p.p.
<b>HOUSING AND UTILITIES</b>	<b>0500</b>	<b>5.1%</b>	<b>13.8%</b>	<b>6.7%</b>	<b>9.2%</b>	<b>9.8%</b>	<b>4.3%</b>	<b>7.8%</b>	<b>1.4%</b>	<b>0.3%</b>	<b>0.9%</b>	<b>1.0%</b>	<b>0.9%</b>	<b>4.6 p.p.</b>
Housing	0501	13.6%	20.2%	8.6%	16.8%	25.0%	12.0%	22.3%	7.8%	1.8%	7.5%			7.9 p.p.
Utilities	0502	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Public spaces, parks, landscaping	0503	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Applied research in the field of housing and communal services	0504	0.0%	0.0%	0.0%	0.0%					0.0%	0.0%			0.0 p.p.
Other issues in the field of Housing and Utilities	0505	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
<b>ENVIRONMENTAL PROTECTION</b>	<b>0600</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0 p.p.</b>
Collection and disposal of waste and wastewater treatment	0602	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Protection of flora and fauna and their habitats	0603	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Applied research in the field of Environmental Protection	0604	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Other issues in the field of Environmental Protection	0605	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
<b>EDUCATION</b>	<b>0700</b>	<b>3.3%</b>	<b>4.0%</b>	<b>3.3%</b>	<b>3.8%</b>	<b>4.1%</b>	<b>3.4%</b>	<b>3.1%</b>	<b>3.1%</b>	<b>2.9%</b>	<b>2.8%</b>	<b>2.8%</b>	<b>2.7%</b>	<b>0.5 p.p.</b>
Preschool education	0701	2.9%	3.7%	3.2%	0.7%	0.8%	1.2%	7.2%	6.9%	2.2%	0.8%			2.5 p.p.
General education	0702	0.7%	0.7%	0.3%	0.5%	1.1%	1.0%	0.6%	0.8%	0.8%	0.6%			0.3 p.p.
Additional education of children	0703	0.0%	0.0%	0.0%	0.0%				0.0%	0.0%	0.0%			0.0 p.p.
Secondary vocational education	0704	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.

Professional training, retraining and improvement of qualifications	0705	5.7%	18.1%	11.3%	4.5%	2.9%	2.9%	3.4%	2.6%	3.1%	2.5%			5.4 p.p.
Higher education	0706	4.2%	5.0%	4.1%	4.9%	5.1%	3.9%	3.6%	3.7%	3.6%	3.9%			0.6 p.p.
Youth policy	0707	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Applied research in the field of Education	0708	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Other issues in the field of Education	0709	0.4%	0.3%	0.4%	0.5%	0.9%	1.2%	0.9%	0.0%	0.0%	0.0%			0.4 p.p.
<b>CULTURE AND CINEMATOGRAPHY</b>	<b>0800</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.1 p.p.</b>
Culture	0801	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%			0.0 p.p.
Cinematography	0802	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Applied research in the field of Culture and Cinematography	0803	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Other issues in the field of Culture and Cinematography	0804	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
<b>HEALTH CARE</b>	<b>0900</b>	<b>2.6%</b>	<b>2.4%</b>	<b>2.1%</b>	<b>2.8%</b>	<b>2.6%</b>	<b>2.6%</b>	<b>2.9%</b>	<b>3.4%</b>	<b>3.0%</b>	<b>2.8%</b>	<b>2.0%</b>	<b>2.2%</b>	<b>0.4 p.p.</b>
Inpatient medical care	0901	2.4%	2.1%	1.5%	2.3%	1.6%	1.7%	1.9%	3.3%	3.7%	3.8%			0.9 p.p.
Outpatient care	0902	2.8%	2.3%	2.3%	3.3%	3.0%	2.6%	3.3%	2.7%	2.5%	2.8%			0.4 p.p.
Medical care in day hospitals of all types	0903	0.0%					0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Ambulance services	0904	0.0%	0.0%				0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Sanatorium and wellness aid	0905	14.3%	10.0%	10.6%	12.3%	14.6%	15.3%	16.1%	17.1%	16.9%	15.8%			2.7 p.p.
Harvesting, processing, storage and ensuring the safety of donated blood and its components	0906	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Sanitary and epidemiological well-being	0907	0.6%	0.6%	0.7%	0.8%	0.6%	0.7%	0.7%	0.7%	0.5%	0.5%			0.1 p.p.
Applied research in the field of Health Care	0908	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%			0.1 p.p.
Other issues in the field of Health Care	0909	0.4%	0.4%	0.3%	0.4%	0.6%	0.5%	0.5%	0.7%	0.5%	0.3%			0.1 p.p.
<b>SOCIAL POLICY</b>	<b>1000</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.02%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.2%</b>	<b>0.3%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.1 p.p.</b>
Pension benefits	1001	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%			0.1 p.p.
Social service of the population	1002	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Social welfare	1003	0.3%	0.0%	0.3%	0.4%	0.1%	0.2%	0.3%	0.4%	0.4%	0.8%			0.2 p.p.
Family and child Protection	1004	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%			0.1 p.p.
Applied research in the field of social policy	1005	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Other issues in the field of Social Policy	1006	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.

<b>PHYSICAL CULTURE AND SPORT</b>	<b>1100</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.2%</b>	<b>0.3%</b>	<b>0.2%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.3%</b>	<b>0.5%</b>	<b>0.1 p.p.</b>
Physical education	1101	11.7%	62.0%	4.9%	6.9%	7.6%	3.8%	3.6%	5.2%	5.7%	5.8%			18.9 p.p.
Mass sport	1102	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
High Performance Sports	1103	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Applied research in the field of physical culture and sport	1104	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Other issues in the field of physical culture and sport	1105	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
<b>MEDIA</b>	<b>1200</b>	<b>0.5%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.3%</b>	<b>2.2%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.4%</b>	<b>0.5%</b>	<b>0.4%</b>	<b>0.6 p.p.</b>
TV and radio broadcasting	1201	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Periodical press and publishing	1202	4.7%	2.9%	3.1%	5.0%	5.4%	4.5%	5.1%	5.4%	5.3%	5.5%			1.0 p.p.
Applied research in the field of Media	1203	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%						0.0 p.p.
Other issues in the field of Media	1204	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	12.9%	0.0%	0.0%	0.0%			4.3 p.p.
<b>SERVICING OF STATE AND MUNICIPAL DEBT</b>	<b>1300</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0 p.p.</b>
Servicing of domestic state and municipal debt	1301	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Servicing of external state debt	1302	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
<b>INTERBUDGETARY TRANSFERS OF A GENERAL CHARACTER TO BUDGETS OF THE BUDGET SYSTEM OF THE RUSSIAN FEDERATION</b>	<b>1400</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0 p.p.</b>
Grants for equalization of budgetary sustainability of the subjects of the Russian Federation and municipalities	1401	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Other subsidies	1402	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.
Other general interbudgetary transfers	1403	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0 p.p.

\* – Type of data: ‘E’ for budget execution; ‘A’ for budget approval; ‘P1’ and ‘P2’ for planned expenditures one and two years ahead according to the approved budget law for the consecutive budget year; see sources below for further details.

Sources: Authors’ calculations. Calculations for 2011–2018 are based on budget execution data from the Federal Treasury of the Russian Federation, OKUD report 0507011 for each year, Tables 2.1 “Departmental structure of expenditures” (Vedomstvennaya struktura raskhodov federal’nogo

byudzheta) and 2.4 “Distribution of budget allocations according to chapters and subchapters of the budget expenditure classification” (*Raspredeleniye byudzhetykh assignovaniya po razdelam i podrazdelam klassifikatsii raskhodov byudzhetov*). Downloaded from <http://roskazna.ru/ispolnenie-byudzhetov/federalnyj-byudzhet/> (Accessed in June 2019).

Calculations for 2019–2021 are based on data from the Federal law No. 459-FZ of 29 November 2018 “On the budget for 2019 and the planning period 2020 and 2021”, Appendix 10 “Departmental structure of expenditures”. Downloaded from [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_312362/90a72456adb47c93b67905e0acbf78fddd88df7c/](http://www.consultant.ru/document/cons_doc_LAW_312362/90a72456adb47c93b67905e0acbf78fddd88df7c/) (Accessed June 2019). For 2019, chapter and subchapter aggregates are taken from the OKUD report 0507011 for the first quarter of 2019 (cf. 2011–2018). For 2020 and 2021, we have been able to identify the aggregates only at the chapter level, not at the subchapter level; chapter values are taken from the Citizens' Budget for 2019 (MinFin 2018c, 7). (Draft figures at the subchapter level for 2019–2021 can be found in the explanatory note to the draft budget presented to the Duma by the government, but these are typically amended during the legislation process).

Note: Values of zero indicate that all expenditures in the subchapter are open. Missing values indicate that the chapter (subchapter) was not being used for that particular year or that it was used but there were no expenditures (secret or open). Some subchapters are missing, e.g. 0202, because they were discontinued before 2011. The list contains 14 chapters and 96 subchapters. Subchapter *0111 Reserve funds* refers to the president and prime minister’s reserve funds, not to be confused with the reserve funds of the Central Bank or the Finance Ministry of Russia.

**Table A2: Detailed comments and sources to Table 1**

Level	Corresponding budget items
Level 1	Budget subchapter <i>0201 Armed Forces</i> .
Level 2	<p>Budget chapter <i>0200 National Defence</i> (including level 1).</p> <p><b>Comments:</b></p> <p>In the budget for 2018, most expenditures in chapter 0200 were associated with the Ministry of Defence (manager code 187), but there were also items associated with the Ministry for Industry and Trade (020), The Federal Service for Military-Technological Cooperation (721) and the Federal Space Corporation “Roscosmos” (730, cf. level 11). This distribution of funds within chapter 0200 seems to represent a considerable consolidation compared to 2011, when expenditures were distributed among eleven other government departments in addition to the Ministry of Defence, including the Finance Ministry (092), but also more obscure institutions, such as the Siberian Branch of the Academy of Sciences (401).</p>
Level 3	<p>Level 2 + subchapters <i>0303 National Guard troops</i> and <i>0307 Border services</i>.</p> <p><b>Comments:</b></p> <p>Subchapter 0303 was associated with the Ministry of Interior (188) and called “Interior troops” prior to 2017 when the National Guard was established as a separate Federal Service (180).</p> <p>As can be seen in Table 1, most expenditures in subchapter 0303 are open, while almost all expenditures in subchapter 0307 are secret. The few non-secret items in subchapter 0307 are associated with the Federal Security Service (FSB, 189), which absorbed the Federal Border Service in 2003.</p>
Level 4	<p>Level 3 + Expenditures associated with the Ministry of Defence in other budget chapters and subchapters than those included in levels 1–3.</p> <p><b>Comments:</b></p> <p>Level 4 corresponds, with some minor adjustments, to the NATO definition of military expenditures used by SIPRI (e.g. in Cooper 2013, 2017b) and the Military Balance by IISS (2018, pp. 175–176). Compared to level 4, the NATO definition excludes some expenditures related to arms recycling, which we identify by their purpose code under level 5 below. SIPRI also includes subsidies to closed towns in the defence-industrial complex, also captured by level 5 in our framework, and some space-related expenditures that we include in level 11.</p> <p>The motivation for assuming that items in level 4 are military in nature rests on the fact that they are managed by the Ministry of Defence. However, it includes items in budget chapters that are clearly not military, such as preschool education or cinematography.</p>
Level 5	<p>Level 4 + Other defence-related expenditures not captured by levels 1–4, including:</p> <ul style="list-style-type: none"> <li>- Expenditures on other defence-related entities than the Ministry of Defence</li> <li>- Subsidies to the defence and nuclear industry and to closed cities of the defence-industrial complex</li> <li>- Social support and housing subsidies to former military personnel</li> <li>- Arms recycling and disposal and improved weapons storage conditions</li> <li>- Defence expenditures in budget chapter 0200 in regional budgets</li> </ul> <p><b>Comments:</b></p> <p>Most budget items in these categories can be identified by inspecting the purpose code, a task that necessarily becomes quite technical due to the large amount of such codes; we have identified over 6,000 unique purpose codes detailing expenditures in the period under study. Moreover, the structure of the purpose code changed twice during the period considered here, once in 2014 when a more elaborate system for representing state programmes was introduced, and again in 2016, when the purpose code was extended from seven to ten characters and also</p>

incorporated the term ‘main activity’ (*osnovnoye meropriyatiye*) as a new subcategory. We have attempted to identify all individual purpose codes referencing defence-related expenditures on all three forms of the purpose code. Consequently, the following list runs over several pages, although we have excluded codes that are captured by other levels. This list is compiled from several different sources; details at the end of the list.

#### **Other defence-related government agencies**

As mentioned under level 2 above, expenditures in chapter 0200 *National Defence* are distributed among several other government entities apart from the Ministry of Defence (manager code 187). Some of these entities are only partly active in the defence sphere, while their main functions are of a civilian nature, such as the Federal Agency for Air Transport (107). Others, however, are unambiguously defence-oriented and should therefore be accounted for in their entirety, including expenditures outside chapter 0200, e.g. 1000 *Social policy*. These agencies are (manager codes in parentheses):

- Federal Service of the National Guard (180). *Note: There is a distinction between the National Guard as a Federal Service, and the troops that are subordinated to it. Most expenditures naturally occur in subchapter 0303 (level 3), but there are also expenditures in other chapters. The FSNG became a separate entity in 2017.*
- Federal Service for the Defence Order (185). *Note: Existed 2004–2014; its functions were later transferred to the Federal Antitrust Service, the Ministry for Industry and Trade, and others and are consequently impossible to track in the federal budget after 2014.*
- Federal Agency for Deliveries of Weapons, Military and Special Equipment and Material Reserves (Rosoboronpostavka) (186). *Note: Existed 2008–2014; its functions were transferred to the department for state orders of the Ministry of Defence and is thus captured by level 4 after 2014.*
- Federal Agency for Special Constructions (Spetsstroy) (279). *Note: Existed as a separate entity 2011–2017 subordinated to the Ministry of Defence. When it was absorbed again by the Ministry of Defence in 2017, it was renamed Military-Construction Complex of the Ministry of Defence and is thus captured by level 4 after 2014.*<sup>18</sup>
- Federal Service for Military-Technical Cooperation (721).

#### **Defence-related subsidies**

There are various forms of subsidies to the defence-industrial complex. Unless indicated otherwise below, these subsidies are paid out by the Finance Ministry (092):

- Closed towns (*zakrytyye administrativno-territorial'nyye obrazovaniya*) receive subsidies based on their special security regime. These expenditures are included in SIPRI's measure of Russian military expenditures. They appear in subchapter 1402 *Interbudgetary transfers* and can be identified by their purpose codes (listed below). In addition, there is also an expenditure category for persons moving from closed towns; these expenditures are listed under the heading Social support and housing below.
- Subsidies to the defence and nuclear industry come in various forms and their representation in terms of budget codes has evolved in recent years as the form and structure for the purpose codes have changed, while also new types of dedicated programmes have been established for this purpose. Before 2014, such subsidies were accounted for in a dedicated federal target programme (with the exception of subsidies to Rosatom, which were not associated with any programme). In 2014–2015, there was a subprogramme dedicated to this purpose within the state programme “Industrial development and competitive improvement.” Since 2016, there is a separate state programme for the defence industry. Purpose codes associated with these programmes are listed below.

***Purpose codes 2011–2013:***

<sup>18</sup> The Military-Construction Complex currently operates its own website: <http://vskmo.ru/>.

- 099 01 02 Subsidies to the State Corporation for Nuclear Energy “Rosatom” to fulfil state mandates assigned to it. *Note: Items with this purpose code appear in subchapter 0412 Other issues in the field of national economy. Corresponds to 22 4 6514 in 2014–2015.*
- 100 04 00 Federal target programme “Development of the defence-industrial complex of the Russian Federation in the period 2011–2020.” *Note: All items with this purpose code are secret, but we include it here as a reference, since it seems to overlap partly with programme 16 5 0000 “Accelerated development of the defence-industrial complex” in 2014 and 2015, listed below.*
- 340 20 00 Subsidies to organizations in the defence-industrial complex to compensate for interest payments on state-guaranteed loans received with the purpose to realize the State Armament Programme for 2011–2020 within the framework of the State Defence Order. *Note: All expenditures in this category are secret but we include it here to illustrate the similarity to the non-secret subsidies with purpose codes 340 83 13 and 340 83 18 (listed below), which are typically associated with the Finance Ministry (budgetary manager 092) and subchapter 0412 Other issues in the field of national economy. Assuming that this is true also for 340 20 00, this category will be captured by level 7 (secret expenditures). If on the other hand it belongs to the Ministry of Defence or budget chapter 0200 National Defence, it would be covered by level 2 or 4.*
- 340 83 13 Subsidies to organisations in the defence-industrial complex to compensate for interest payments on loans received from Russian credit organisations and the state corporation “Bank for development and foreign economic activity (Vneshekonombank)” for the purpose of realizing innovative and investment projects to produce high-technology products. *Cf. note to 340 20 00 above. Corresponds to 16 5 6467 in 2014 and 2015.*
- 340 83 18 Subsidies to organisations in the defence-industrial complex to compensate for interest payments on loans received from Russian credit organisations and the state corporation “Bank for development and foreign economic activity (Vneshekonombank)”. *Cf. note to 340 20 00 above. Corresponds to 16 5 6483 in 2014 and 2015.*
- 517 01 00 Subsidies to the budgets of closed administrative-territorial entities. *Note: Corresponds to 36 2 5010 in 2014–2015 and 36 2 04 50100 since 2016.*
- Purpose codes 2014–2015:**
- 16 5 0000 Subprogramme “Accelerated development of the defence-industrial complex” of the state programme “Industrial development and competitive improvement”. *Note: there are several direction codes associated with this subprogramme in the range 16 5 0019 to 16 5 9999. Several of these items belong in chapter 0200 National Defence (level 2) and are not listed here, but some codes are associated with subchapters 0108 International relations and cooperation and 0412 Other issues in the field of national economy. Starting from 2016, a separate state programme was launched dedicated specifically to the defence industry, see 44 0 00 00000 below.*
- 16 5 3102 Stipends for specialists and young (up to 35 years old) workers in organizations fulfilling the State Defence Order in recognition of significant contributions in the creation of breakthrough technologies and the development of modern types of weapons, military and special equipment in the interest of the defence of the country and security of the state.
- 16 5 6056 Subsidies to organisations in the defence-industrial complex to compensate for interest payments on loans received in 2013–2015 to implement the federal target programme “Development of the defence-industrial complex of the Russian Federation in 2011–2020”, including loans guaranteed by the Russian Federation. *Note: all items in this category are secret but we list it here because it possibly corresponds to 340 20 00 in 2011–2013 and clearly corresponds to 44 1 01 60560 from 2016. This item is of particular interest because it seems to relate to the significant increase of military expenditure in the amended federal budget for 2016: an additional 740 billion roubles were assigned to chapter 0200 National Defence in order to repay loans taken by the defence industry against government guarantees between 2011 and 2014 to accelerate investments in the defence industry (see Bocharova 2016).*
- 16 5 6467 Subsidies to organisations in the defence-industrial complex to partially compensate for interest payments on loans received from Russian credit organisations and



the state corporation “Bank for development and foreign economic activity (Vneshekonombank)” for the purpose of realizing innovative and investment projects to produce high-technology products. *Note: Corresponds to 340 83 13 prior to 2014.*

16 5 6483 Subsidies to Russian exporters of industrial products of military purpose to partially compensate for interest payments on loans received from Russian credit organisations and the state corporation “Bank for development and foreign economic activity (Vneshekonombank)”. *Note: Corresponds to 340 83 18 prior to 2014.*

16 5 6747 Subsidies to the limited liability company “Chelyabinsk tractor factory URALTRAK” to finance (reimburse) expenses related to production activities.

16 5 9999 Realization of the subprogramme “Accelerated development of the defence-industrial complex” of the state programme “Industrial development and competitive improvement.”

22 4 6514 Subsidies to the State Corporation for Nuclear Energy “Rosatom” to fulfil state mandates assigned to it. *Cf. purpose code 099 01 02 for 2011–2013 and 22 4 01 65140 since 2016.*

36 2 5010 Subsidies related to the special security regime of closed administrative and territorial entities. *Note: Corresponds to 517 01 00 before 2014 and 36 2 04 50100 since 2016.*

99 9 6709 Subsidies to organisations in the defence-industrial complex to compensate for interest payments on loans taken to implement the State Armament Programme for the years 2011–2020 within the framework of the State Defence Order under state guarantees by the Russian Federation. *Note the similarity to expenses within subprogramme 16 5 0000 listed above; cf. note to 16 5 6056. All items with this code are secret to illustrate the connection between the State Armament Programme and the State Defence Order.*

***Purpose codes since 2016:***

22 4 01 65140 Subsidies to the State Corporation for Nuclear Energy “Rosatom” to fulfil state mandates assigned to it. *Cf. purpose code 099 01 02 for 2011–2013 and 22 4 6514 for 2014–2015.*

36 2 04 50100 Subsidies related to the special safety regime of closed administrative and territorial entities. *Note: Corresponds to 517 01 00 before 2014 and 36 2 5010 in 2014–2015.*

44 0 00 00000 State programme “Development of the defence-industrial complex.” *Note: Several items within this programme belong to chapter 0200 National Defence and are thus captured by level 2. However, some non-secret items belong to chapters 0400 National Economy and 0700 Education and are listed below.*

44 1 00 00000 Subprogramme “Stimulation of the development of the defence-industrial complex.” *Note: Corresponds to 16 5 0000 before 2016.*

44 1 01 00000 Main activity “Research, developmental and technological works for the purpose of import substitution of technological equipment and components.” *Note: This code is combined with direction codes to form the following budget items:*

44 1 01 60560 Subsidies to organisations in the defence-industrial complex to compensate for interest payments on loans received in 2013–2015 to implement the federal target programme “Development of the defence-industrial complex of the Russian Federation in 2011–2020”, including loans guaranteed by the Russian Federation. *See also note to 16 5 6056 above.*

44 1 01 64670 Subsidies to organisations in the defence-industrial complex to partially compensate for interest payments on loans received from Russian credit organisations and the state corporation “Bank for development and foreign economic activity (Vneshekonombank)” for the purpose of realizing innovative and investment projects to produce high-technology products.

44 1 01 67482 Property contribution of the Russian Federation to the state corporation “Bank for development and foreign economic activity (Vneshekonombank)” with the purpose to compensate for non-payment on credits given within the framework of supporting the production of high-technology products of civilian and dual purpose by organizations of the defence-industrial complex.

- 44 1 02 67470 Subsidies to the limited liability company “Chelyabinsk tractor factory URALTRAK” to finance (reimburse) expenses related to production activities.
- 44 1 03 00000 Main activity “State support for the development of the human resource potential of organizations of the defence-industrial complex.” *Note: This code is combined with direction codes to form the following budget items:*
- 44 1 03 60990 Subsidies to organizations of the defence-industrial complex to conduct activities to monitor the staffing of organizations of the defence-industrial complex and for analytical support of work in the sphere of maintaining and developing the human resource potential of the defence-industrial complex.
- 44 1 03 61000 Subsidies to organizations of the defence-industrial complex to create and develop a system for training and retraining workers in the most demanded specializations on co-financing terms.
- 44 1 05 66801 Subsidies to organizations of the defence-industrial complex to reimburse expenses related to high performance computing, including supercomputer technologies, in the interest of creating weapons, military and special equipment.

### **Defence-related social support and housing**

#### ***Purpose codes 2011–2013:***

- 100 88 11 Acquisition of housing by citizens dismissed from military service (service), and persons of equal status. *Note: these subsidies are associated with subchapter 1003 Social support for citizens and the Ministry for Regional Development (manager code 309) or the Federal Agency for Construction and Housing and Communal Services (360). This item is a subcategory to federal target programme 100 88 00 “Housing”.*
- 100 88 12 Acquisition of housing by military personnel and employees of internal affairs bodies subject to dismissal from military service (service), and persons of equal status. *Cf. note to 100 88 11. Corresponds to 05 4 3584 in 2014–2015.*
- 102 04 01 Ensuring service housing and housing in dormitories for military personnel of federal authorities in which military service is prescribed by law. *Note: This code is associated expenditures on the Ministry of Defence, the Ministry of Interior, the EMERCOM and the Federal Agency for Special Constructions.*
- 102 04 02 Construction and acquisition of housing for permanent living for military personnel of federal authorities in which military service is prescribed by law. *Cf. note to 102 04 01.*
- 102 05 01 Ensuring service housing and housing in dormitories for employees with special ranks of federal authorities in which service of equal status to military service is prescribed. *Note: This code is associated expenditures on the Ministry of Interior, the State Courier Service, the EMERCOM, the Federal Customs Service, the Federal Service for Drug Control and the Federal Penitentiary Service.*
- 102 05 02 Construction and acquisition of housing for permanent living for employees with special ranks of federal authorities in which service of equal status to military service is prescribed. *Cf. note to 102 05 01.*
- 505 34 01 Subsidies to implement mandates to ensure housing for certain categories of citizens according to the law of 12 January 1995 No. 5-FZ “On veterans” in accordance with presidential decree No. 714 of 7 May 2008 “On ensuring housing for veterans of the Great Patriotic War 1941–1945. *Note: These expenditures were the result of the very first decree signed by president Dmitry Medvedev on the day of his inauguration on 7 May 2008. Expenditures in this category are noteworthy because of their size: 46 billion roubles in 2011, which corresponds to two-thirds of expenditures in subchapter 0303 Interior troops in the same year. Until 2013 these expenditures are of an order of magnitude larger than expenditures in the related category 505 34 02 concerning veterans of other conflicts. In subsequent years the amount has decreased steadily from 38 in 2012 to two billion in 2018. Corresponds to 05 1 5134 in 2014–2015.*
- 505 34 02 Subsidies to implement mandates to ensure housing for certain categories of citizens according to the law of 12 January 1995 No. 5-FZ “On veterans.” *Note: Cf. note to 505 34 01. The source document (MinFin 2010, Part III, section 3.2.2) further specifies that this category pertains to persons disabled in combat operations and to personnel in*

*internal affairs bodies, the State Fire Service and the penitentiary system who were disabled while carrying out military or official duties.*

520 06 00 Relocation of citizens from closed towns. *Note: corresponds to 05 1 5159 in 2014–2015.*

**Purpose codes 2014–2015:**

05 1 5159 Other interbudgetary transfers for relocation of citizens from closed towns. *Note: corresponds to 05 1 12 35700 since 2016.*

05 4 3584 Acquisition of housing by military personnel and employees of internal affairs bodies subject to dismissal from military service (service), and persons of equal status. *Cf. note to 100 88 12.*

05 1 5134 Subsidies to implement mandates to ensure housing for certain categories of citizens according to the law of 12 January 1995 No. 5-FZ “On veterans” in accordance with presidential decree No. 714 of 7 May 2008 “On ensuring housing for veterans of the Great Patriotic War 1941–1945. *Cf. note to 505 34 01 in 2011–2013. Corresponds to 05 1 03 51340 since 2016.*

05 1 5135 Subsidies to implement mandates to ensure housing for certain categories of citizens according to the law of 12 January 1995 No. 5-FZ “On veterans.” *Cf. note to 505 34 02 in 2011–2013. Corresponds to 05 1 03 51350 since 2016.*

**Purpose codes since 2016:**

05 1 12 35700 Acquisition of housing by citizens subject to removal from closed towns and from territories previously included in closed towns.

05 1 12 35840 Acquisition of housing by military personnel and employees of internal affairs bodies, subject to dismissal from military service (service), and persons of equal status. *Cf. note to 100 88 11.*

05 1 03 51340 Subsidies to implement mandates to ensure housing for certain categories of citizens according to the law of 12 January 1995 No. 5-FZ “On veterans” in accordance with presidential decree No. 714 of 7 May 2008 “On ensuring housing for veterans of the Great Patriotic War 1941–1945. *Cf. note to 505 34 01 in 2011–2013.*

05 1 03 51350 Subsidies to implement mandates to ensure housing for certain categories of citizens according to the law of 12 January 1995 No. 5-FZ “On veterans.”

**Arms recycling and related items**

Some expenditures for arms recycling occur in chapter 0200 *National Defence* are captured by level 2. The NATO definition of defence expenditures excludes arms recycling, and SIPRI’s measure consequently removes such items. The following codes represent arms recycling expenditures and are occasionally associated with other chapters than 0200:

**Purpose codes 2011–2013:**

100 21 00 Federal target programme “Restructuration of reserves of rockets, ammunition and explosive materials, introduction of a system for their safe storage and handling in conditions ensuring fire and explosive safety in the period 2005–2010.” *Note: there was one item with this code in 2011 associated with subchapter 0113 Other issues in the field of general government; all other items were associated with chapter 0200 or subchapter 0303 and thus captured by level 3.*

100 96 00 Federal target programme “Industrial disposal of weapons and military equipment in 2011–2015 and the period until 2020.” *Note: Most items associated with this purpose code belong to subchapters 0208 Applied research in the field of National Defence and 0209 Other issues in the field of national defence, but there are also some items in subchapters 0411 Applied research in the field of national economy and 0412 Other issues in the field of national economy.*

100 99 00 Federal target programme “Industrial disposal of weapons and military equipment of the nuclear weapons complex in 2011–2015 and the period until 2020.” *Note: all budget items with this code are secret but can be assumed to belong in the same subchapters as 100 96 00 above and would thus be captured by level 2 or 7; we include it here to illustrate the difference between secret and open expenditures. See also comment to level 7.*

100 99 02 Subprogramme “Industrial disposal of nuclear submarines, surface ships with nuclear power plants, nuclear technology service vessels and rehabilitation of radiation hazardous facilities in 2011–2015 and the period until 2020.” *Cf. note to 100 99 00.*

**Purpose codes 2014–2015:**

22 9 0000 Federal target programme “Industrial disposal of weapons and military equipment of the nuclear weapons complex in 2011–2015 and the period until 2020” within the framework of state programme “Development of the nuclear energy complex.” *Note: All items in this programme are secret. This code combines with various direction codes to form several purpose codes (not listed). Cf. note to 100 99 00.*

99 4 0000 Activities of the federal target programme “Industrial disposal of weapons and military equipment in 2011–2015 and the period until 2020.” *Note: some budget items in this category are associated with chapter 0200 National Defence and/or the Ministry of Defence and are thus captured by levels 2 and 4, but the following codes are associated with the Federal Biomedical Agency (Federal’noye mediko-biologicheskoye agentstvo, manager code 388) and subchapters 0411 Applied research in the field of national economy or 0412 Other issues in the field of the national economy. Cf. note to 100 96 00. This code combines with various direction codes to form the following purpose codes:*

99 4 0059 Expenditures to ensure the activities (supply of services) of state institutions related to activities of federal target programme 99 4 0000.

99 4 2018 Development of weapons, military and special equipment, products of a production-technical nature and property within the framework of the State Defence Order related to activities of federal target programme 99 4 0000.

**Purpose codes since 2016:**

22 9 00 00000 Federal target programme “Industrial disposal of weapons and military equipment of the nuclear weapons complex in 2011–2015 and the period until 2020” within the framework of state programme “Development of the nuclear energy complex.” *Note: All items in this programme are secret. This code combines with various direction codes to form several purpose codes (not listed). Cf. note to 100 99 00.*

31 6 00 99998 Realization of activities of federal target programmes (direction code 99998) related to federal target programme “Industrial disposal of weapons and military equipment in the period 2011–2015” (purpose code 31 6 00 00000). *Note the similarity to codes 99 4 00 90059 and 99 4 00 92018 below. This code is associated with the Federal Biomedical Agency and is only valid starting from 2019, when a new state programme was included in the budget: 31 0 00 00000 “Ensuring the country’s defence.” (There was a gap between state programmes 30- and 32- that left the slot for 31- undefined in previous years). Most items associated with this code in the budget for 2019 are also associated with chapter 0200 National Defence and/or the Ministry of Defence and are therefore already captured by level 4.*

99 4 00 00000 Federal target programme “Industrial disposal of weapons and military equipment in 2011–2015 and the period until 2020.” *Cf. note to 99 4 0000 above.*

99 4 00 90059 Expenditures to ensure the activities (supply of services) of state institutions related to activities of federal target programme 99 4 00 00000.

99 4 00 92018 Development of weapons, military and special equipment, products of a production-technical nature and property within the framework of the State Defence Order related to activities of federal target programme 99 4 00 00000.

**Defence expenditures in the regional budgets**

Data for the regional budgets is presented in the consolidated budget of the Russian Federation, which combines expenditures on the federal and regional levels. Roskazna publishes budget execution reports alongside the reports for the federal budget; the consolidated budget execution reports have the OKUD identification number 0507021. The structure of the consolidated budget is identical to the federal budget at the chapter and subchapter level. We can therefore simply add regional expenditures on chapter 0200 National Defence by taking the difference between the consolidated budget and the federal budget and add this difference our measure for level 5. It turns out that the regional share of expenditures on National Defence is very small, typically only 0.2 percent of the total consolidated expenditures in this chapter, but we have included them for the sake of completeness.

	Sources: MinFin (2010), MinFin (2011), MinFin (2012), Part III, section 3.2.2; MinFin (2013), Part III, section 4.2.2.36 and Appendix 10; MinFin (2018a), Part III, section 4(1).2.4(1) or Appendix 10.1 (until 2018), MinFin (2018b), Part III, section 42.40 or Appendix 6 (from 2019); Roskazna (2019b).
Level 6	<p>Level 5 + Subchapter 0109 <i>Material state reserve</i>.</p> <p><i>Note: The state reserve is managed by the Federal Agency for State Reserves, which is identified by budgetary manager code 171. There are expenditures associated with this agency in other subchapters than 0109. Some of these are captured by other levels; for example, level 9 includes expenditures on the State Defence Order associated with this agency in subchapter 0113 Other issues in the field of general government.</i></p> <p><b>Comments:</b></p> <p>Subchapter 0109 contains budget items with type code 230 (at the subgroup level), which concerns purchases of goods, works and services for the formation of the material state reserve. The subgroup contains two element codes, 231 and 232, with the former explicitly related to purchases within the framework of the State Defence Order.</p> <p>Occasionally, expenditures in subchapter 0109 occur in the regional budgets, but the amounts are so small as to be negligible for our purposes.</p>
Level 7	<p>Level 6 + Secret expenditures other than those included in other levels.</p> <p><i>Note: Levels that are defined based on chapter and subchapter aggregates already capture secret expenditures in those categories, i.e. chapter 0200 (level 2), subchapters 0303 and 0307 (level 3), 0109 (level 6) and 0306 (level 8). Level 7 captures secret expenditures in all other chapters and subchapters.</i></p> <p><b>Comments:</b></p> <p>Secret expenditures are calculated by the method used to obtain the data in Table 1, i.e. by calculating the subchapter residuals between aggregate expenditures and the departmental structure of expenditures. The inclusion of these items rests on the assumption that they can be referred to military or security expenditures purely on the basis of being secret. This is reasonable since in some cases it is possible to establish the nature of such secret items: For example, purpose codes 100 99 00 and 100 99 02 (valid until 2013) represent expenditures on the disposal of <i>nuclear</i> weapons and nuclear submarines (see definitions in level 5 above), but all items are secret. However, we know that disposal of <i>conventional</i> weapons, represented by purpose code 100 96 00 (included in level 5), belongs in subchapter 0412 <i>Other issues in the field of national economy</i>.</p> <p>Another example concerns subsidies to organizations in the defence-industrial complex <i>within the State Armament Programme</i> (purpose code 340 20 00 until 2013), which are secret but similar in nature to subsidies to the defence-industrial complex <i>outside the State Armament Programme</i>, represented by purpose codes 340 83 13 and 340 83 18 (included in level 5), which are associated with the Finance Ministry and subchapter 0412 <i>Other issues in the field of national economy</i>.</p>
Level 8	<p>Level 7 + Subchapter 0306 <i>Security services</i>.</p> <p><b>Comments:</b></p> <p>Almost all items in this subchapter are secret, but there are some non-secret expenditures related to the FSB and the FSO—which includes the Kremlin Regiment—both of which belong to the so-called militarized government organizations (cf. footnote 14 in the main text and the comments to level 9 below). There are also some items related to the Federal Service for Technical and Export Control (<i>Federal'naya sluzhba po tekhnicheskomu i eksportnomu kontrol'yu</i>, manager code 587).</p> <p>Occasionally, expenditures in subchapter 0306 occur in the regional budgets, but the amounts are so small as to be negligible for our purposes.</p>
Level 9	<p>Level 8 + Other expenditures on weapons and equipment not included in levels 1–8.</p> <p><b>Comments:</b></p>

All expenditures in this level are explicitly related to the State Defence Order (with the exception of a few budget items with purpose code 247 63 00, which is only partly related to the State Defence Order). Several items are also related to the State Armament Programme.

**Type codes 2012–2013:**

*Note: The type code system was reformed in 2012, with several new categories associated with the State Defence Order added in group 200 and 400, that were identified by their purpose code until 2011. Furthermore, in 2014, the codes in group 400 were amended; these categories are listed below under the heading Type codes for the respective periods. As can be seen in Figure 5, level 9 increases in 2012 when the new framework was adopted.*

210 Development, purchase and repair of weapons, military and special equipment, production equipment and property within the framework of the State Defence Order. *Note: This category and the corresponding subcategories were introduced in 2012. As mentioned in footnote **Fel! Bokmärket är inte definierat.**, starting from 2016 the subgroup is not explicitly listed in Roskazna's budget execution reports, but rather given indirectly by the subordinated element codes. Note also that the following codes at the element level make a distinction between expenditures inside and outside the State Armament Programme.*

211 Purchases of weapons, military and special equipment, production equipment and property within the framework of the State Defence Order with the purpose to support the State Armament Programme;

212 Purchases of weapons, military and special equipment, production equipment and property within the framework of the State Defence Order outside the framework of the State Armament Programme;

213 Deliveries of goods, works and services to support state requirements in the field of geodesy and cartography within the framework of the State Defence Order. *Note: This code was reintroduced in 2017. Before 2014, type code 213 was defined as Purchases of weapons, military and special equipment, production equipment and property outside the framework of the State Defence Order. (MinFin [2012], Part III, section 3.3.2).*

214 Repair of weapons, military and special equipment, production equipment and property within the framework of the State Defence Order with the purpose to support the State Armament Programme;

215 Repair of weapons, military and special equipment, production equipment and property within the framework of the State Defence Order outside the framework of the State Armament Programme;

216 Fundamental research in the interest of National Defence, National Security and Law Enforcement within in the framework of the State Defence Order with the purpose to support the State Armament Programme;

217 Research in the field of development of weapons, military and special equipment, production equipment and property within the framework of the State Defence Order with the purpose to support the State Armaments Programme;

218 Research in the field of development of weapons, military and special equipment, production equipment and property within the framework of the State Defence Order outside the framework of the State Armaments Programme;

219 Purchases of works and services with the purpose to support activities within the framework of the State Defence Order;

*Note: Type codes 231 and 232 also concern the State Defence Order, but they pertain only to subchapter 0109 State material reserve, which is included in level 6.*

412 *Only 2011:* Purchases of special equipment and industrial and technical products within the framework of the State Defence Order in support of anti-terror activities. *Note: All items in this category are secret in 2011, but it is included for the sake of comparison since the definition changed in 2012. Source: MinFin (2010), Part III, section 3.3.2.*

412 *Only in 2012 and 2013:* Budget investments by state-financed organizations (*kazyonnyye uchrezhdeniya*) in objects of state ownership within the framework of the State Defence

	<p>Order.<sup>19</sup> <i>Note: The codes 412 and 414 seem to have been replaced by 413 starting from 2014. Source: MinFin (2011), MinFin (2012), Part III, section 3.3.2.</i></p> <p>414 <i>Only in 2012 and 2013:</i> Budget investments by state-financed organizations (<i>byudzhetye uchrezhdeniya</i>) in objects of state ownership within the framework of the State Defence Order. <i>See note to 412.</i></p> <p><b>Type codes from 2014:</b></p> <p>210 <i>Note: all codes in subgroup 210, i.e. 211–219, keep the same definitions as in 2012 and 2013; refer to heading ‘Type codes 2011–2013’ above.</i></p> <p>411 Budget investments in the acquisition to federal ownership of real estate objects within the framework of the State Defence Order.</p> <p>413 Budget investments in capital construction objects within the framework of the State Defence Order. <i>Note: 413 seems to have replaced 412 and 414 that were used before 2014.</i></p> <p><b>Purpose codes 2011–2013:</b></p> <p>101 02 00 Research in the field of development of weapons, military and special equipment, production equipment and property within the framework of the State Defence Order with the purpose to support the State Armaments Programme. <i>Note: All budget items with this code are secret, but it is included for the sake of comparison since it seems to correspond to type code 217 starting from 2012.</i></p> <p>101 03 00 Research in the field of development of weapons, military and special equipment, production equipment and property within the framework of the State Defence Order outside the framework of the State Armaments Programme. <i>Note: All budget items with this code are secret, but it is included for the sake of comparison since it seems to correspond to type code 218 starting from 2012.</i></p> <p>101 57 00 Other weapons, military and special equipment. <i>Note: All budget items with this code are secret but it is included for the sake of completeness. This category has no obvious successor code in the new code structure launched in 2012.</i></p> <p>247 63 00 Industrial and technical products. <i>Note: this is a combination of purpose code 247 00 00 “Realization of other functions related to ensuring national security and law enforcement activities” and programme code 63 00. The source further specifies (MinFin [2012], section 3.2.4) that the category 63 00 includes purchases both within and outside the framework of the State Defence Order, as well as purchases based on “special decisions”.</i></p> <p>705 00 00 Development, purchases and repairs of weapons, military and special equipment, products of a production-technical nature and property within the framework of the State</p>
--	--

<sup>19</sup> The term state-financed organization (*byudzhetye or kazyonnoye uchrezhdeniye*) is a legal form representing a government-funded entity that is a separate legal person. Type codes 412 and 414 (in 2012 and 2013) are identical except for the distinction between ‘*byudzhetye*’ and ‘*kazyonnoye*’ and we have translated both as ‘state-financed organization’. Some forms of military units can be designated as such in accordance with article 11.1 of the law “On Defence.” This includes regiments or separate units of a smaller size (which collectively represent a unit type known as military unit [*voinskaya chast*’]) as well as the headquarters (*upravleniye*) of larger permanent or temporary formations (*soyedineniya* or *ob’edineniya*). The legal name of a military unit that is also a legal person consists of the words ‘Troop unit’ (*Voyskovaya chast*’) followed by a five-digit number, as defined in order No. 560 of the Ministry of Defence of 13 September 2016 (*Prikaz Ministra oborony RF ot 13 sentyabrya 2016 g. N 560*).

Defence Order. *Note: There are several subcategories associated with this purpose code in the range 705 01 00 to 705 07 06. Several such items belong in chapter 0200 National Defence (level 2) or subchapter 0303 Interior troops (level 3), but some codes are associated with other subchapters in 0300 National security and law enforcement and are thus included in this level and listed below. The meaning of some of these codes changed in 2012 and therefore two definitions are listed in some cases, one for 2011 and one for 2012–2013.*

705 01 00 2011: Fundamental research in the interest of national defence, national security and law enforcement activities with the purpose to ensure the State Armament Programme within the framework of the State Defence Order.

2012–2013: Development of weapons, military and special equipment, products of a production-technical nature and property within the framework of the State Defence Order.

705 02 00 2011: Research in the field of developing weapons, military and special equipment with the purpose to ensure the State Armament Programme within the framework of the State Defence Order.

2012–2013: Purchases and repairs of weapons, military and special equipment, products of a production-technical nature and property within the framework of the State Defence Order.

*The following subcategories to 705 02 00 were valid only in 2012 and 2013 and replaced the codes on the form 705 04 xx–705 07 xx that were valid in 2011 (listed below):*

705 02 01 Aviation equipment.

705 02 02 Ships and boats.

705 02 03 Armoured vehicles.

705 02 04 Artillery.

705 02 05 Small arms and cold arms.

705 02 06 Electronic and communications equipment.

705 02 07 Ammunition.

705 02 08 Other weapons, military and special equipment.

705 02 09 Other products of a production-technical nature.

*The following categories were valid only before 2012:*

705 03 00 Research in the field of developing weapons, military and special and other production-technical equipment within the framework of the State Defence Order outside the State Armament Programme.

705 04 00 Purchases of weapons, military and special and other production-technical equipment and property to ensure the State Defence Order within the framework of the State Armament Programme.

705 05 00 Purchases of weapons, military and special and other production-technical equipment and property to ensure the State Defence Order outside the framework of the State Armament Programme. *Note: the subcategories are similar to those of 705 02 00.*

705 06 00 Repairs of weapons, military and special and other production-technical equipment and property to ensure the State Defence Order within the framework of the State Armament Programme. *Note: the subcategories are similar to those of 705 02 00.*

705 07 00 Repairs of weapons, military and special and other production-technical equipment and property to ensure the State Defence Order outside the framework of the State Armament Programme. *Note: there two subcategories, 705 07 03 and 705 07 06, with definitions corresponding to 705 02 03 and 705 02 06 above.*

**Purpose codes 2014–2015:**

xx x 2018 Development of weapons, military and special equipment, Industrial and technical products and property within the framework of the State Defence Order. *Note: 'xx x' indicates*



that this is a direction code; it is not used on a standalone basis but combined with programme codes to form complete purpose codes, listed below. Some items in this category also belong to chapter 0200 National Defence and are captured by level 2 and therefore not listed here. In practice, purpose codes on this form largely overlap with the type codes in subgroup 210 listed above.

08 4 2018 Subprogramme “Ensuring the implementation of the state program” of the state program of the Russian Federation “Ensuring public order and combating crime” (08 4 0000). *Note: this code occurs only in 2014 and is associated with the MVD (manager code 188) and subchapter 0313 Applied research in the field of national security and law enforcement activities.*

10 2 2018 Subprogramme “Support and control” of the state programme of the Russian Federation “Protection of the population and territories from emergency situations, ensuring fire safety and safety of people on water bodies” (10 2 0000). *Note: this code is always associated with EMERCOM (manager code 177) and subchapter 0313 Applied research in the field of national security and law enforcement activities.*

xx x 2019 Purchases and repairs of weapons, military and special equipment, Industrial and technical products and property within the framework of the State Defence Order. *Note: ‘xx x’ indicates that this code is not used on a standalone basis but combined with purpose codes, listed below. Some items in this category also belong to subchapter 0303 Interior troops and are captured by level 3 and therefore not listed here. In practice, purpose codes on this form largely overlap with the type codes in subgroup 210 listed above.*

09 1 2019 Purchases and repairs of weapons, military and special equipment, Industrial and technical products and property within the framework of the State Defence Order within the framework of subprogramme “Comprehensive anti-drug trafficking measures” of the state program of the Russian Federation “Countering illegal drug trafficking” (09 1 0000). *Note: this code is always associated with The Federal Service for Drug Control (Federal’naya sluzhba po kontrol’yu za oborotom narkotikov, manager code 204) and subchapter 0308 Authorities responsible for drug and psychotropic substance control.*

10 1 2019 Purchases and repairs of weapons, military and special equipment, Industrial and technical products and property within the framework of the State Defence Order within the framework of subprogramme “Warning, rescue and assistance” of the state programme of the Russian Federation “Protection of the population and territories from emergency situations, ensuring fire safety and safety of people on water bodies” (10 1 0000). *Note: this code is always associated with EMERCOM (manager code 177) and subchapter 0309 Protection of the population and territory from natural and man-made emergencies, civil defence.*

42 3 2019 Purchases and repairs of weapons, military and special equipment, Industrial and technical products and property within the framework of the State Defence Order within the framework of subprogramme “Regulation of the state policy in the sphere of execution of criminal punishments” of the state program of the Russian Federation “Justice” (42 3 0000). *Note: this code is always associated with the Federal Penitentiary Service (Federal’naya sluzhba ispolneniya nakazaniy, manager code 320) and subchapter 0305 Penitentiary system.*

**Purpose codes since 2016:**

xx x xx 92018 Development of weapons, military and special equipment, industrial and technical products and property within the framework of the State Defence Order. *Note: ‘xx x xx’ indicates that this is a direction code; it is not used on a standalone basis but combined with programme codes (or main activity codes) to form complete purpose codes, listed below. Compare with xx x 2018 above. (This code was initially defined as xx x xx 20180 but that designation was never used in practice in Roskazna’s budget execution reports.)*

10 2 02 92018 Research support for the EMERCOM (10 2 02 00000). *Compare with 10 2 2018 above.*

xx x xx 92019 Purchases and repairs of weapons, military and special equipment, industrial and technical products and property within the framework of the State Defence Order. *Note: ‘xx x xx’ indicates that this is a direction code; it is not used on a standalone basis but combined with programme codes (or main activity codes) to form complete purpose codes,*

	<p><i>listed below. Compare with xx x 2019 above. (This code was initially defined as xx x xx 20190 but never used in practice in Roskazna's budget execution reports.)</i></p> <p>08 4 03 92019 Logistical support (08 4 03 00000). <i>Note: this is a subcategory to state programme 08 0 00 00000 "Ensuring public order and fighting crime."</i></p> <p>10 1 04 92019 Equipping the units of the EMERCOM with modern forms of material and equipment within the framework of the State Defence Order (10 1 04 00000). <i>Compare with 10 1 2019 above.</i></p> <p>42 3 08 92019 Ensuring the observation of international standards for handling convicts in prisons and people under arrest (42 3 08 00000). <i>Note: this is a subcategory to state programme 42 0 00 00000 "Justice."</i></p> <p>Sources: MinFin (2010), MinFin (2011), MinFin (2012), Part III, sections 3.2.2, 3.2.3 and 3.2.4. MinFin (2013), Part III, section 4.2.4 and Appendix 10. MinFin (2018a), Part III, section 4(1).2.5(1) and section 5(1).2 (until 2018), MinFin (2018b), Part III, sections 45.24–25 and sections 51.2.1.1–51.4.3.3 (from 2019).</p>
Level 10	<p>Level 9 + Other defence- and security-related expenditures not included in levels 1–9, including salaries, food, fuel and material supplies associated with paramilitary and militarized organizations.</p> <p><b>Comments:</b></p> <p>The budget categories used to identify expenditures at this level do not necessarily distinguish between military and law enforcement functions. This is true even for expenditures associated with the State Defence Order. For example, type code 223 represents "Food supply within the framework of the State Defence Order" and can be found in budget items associated with the Ministry of Defence (level 1) and the National Guard (level 3 and 5), but also with the Federal Penitentiary Service, which is included here in level 10. It is therefore necessary to correlate expenditures in level 10 with the manager category to get a more complete description of the nature of these expenditures. A summary is provided in Table 4 in the main text.</p> <p>In 2014, the purpose code system was reformed. Until 2013, the seven-digit purpose code had different structure: the last four digits represented various "programmes" (<i>programmny</i>), but not all expenditures were associated with any programme. A challenge thus arises because it is not clear from a given purpose code if it represents a standalone, seven-digit purpose code, or if it is a generic purpose code combined with a four-digit programme code. For example, the purpose code 214 00 00 represents a category called "Realization of government functions related to ensuring the national defence", as defined in section 3.2.2. of MinFin (2010, Part III); since it ends with four zeros, we should expect it to be combined with some programme code to form a complete purpose code. There is only one budget item on this form in the actual budget data, namely 214 67 00, where 67 00 represents a programme category called "Functioning of the Armed Forces, authorities in the sphere of national security and law enforcement activity, troops and other military formations" as defined in section 3.2.4 of MinFin (2010, Part III). In contrast, the purpose code 214 01 00 does indeed appear on a standalone basis and represents a category called "Activities in the field of national defence" as defined in section 3.2.2 of the same source, and the last four digits do not hold any additional information. The reformed code structure starting from 2014 eliminates this ambiguity by letting the first digits of the purpose code represent the programme code for all items, regardless of whether a specific item belongs to any programme or not (if not, it will be represented by a non-programme expenditure category, <i>neprogrammnoye napravleniye raskhodov</i>).</p> <p><b>Type codes in 2011:</b></p> <p>014 Functioning of the authorities in the sphere of national security, law enforcement activity and defence. <i>Note: the source (MinFin 2010, Part III, section 3.3.2.) further specifies that this includes: personnel maintenance of authorities, troops, military formations and provision of all types of allowances; functioning of military formations; expenditures associated with federal target programmes; purchases and repairs of other weapons, military equipment and property within the framework of the State Defence Order; expenditures on special programmes; and transportation of citizens to initial military registration. This code seems to, at least partly, have been split into groups 210 and 220 starting from 2012.</i></p>

**Type codes from 2012 (subgroup and element codes):**

- 220 Purchases of goods, works and services for ensuring the supplies of special fuel and lubricants, material and food supply for the authorities within the sphere of national security, law enforcement and defence.
- 221 Supplies of special fuel and lubricants within the framework of the State Defence Order. *Note: This code replaced purpose (programme) code xxx 68 01 that was used until 2011.*
- 223 Food supply within the framework of the State Defence Order. *Note: This code replaced purpose (programme) code xxx 71 01 that was used until 2011.*
- 224 Food supply outside the framework of the State Defence Order.
- 225 Material supply within the framework of the State Defence Order.
- 226 Material supply outside the framework of the State Defence Order.

**Type codes from 2014:**

- 131 Salaries to military personnel and employees with special ranks. *Note: This code appears to have replaced purpose (programme) code xxx 58 01 listed above.*
- 133 Expenditures on payments to military personnel and employees with special ranks dependent on the salary amount.
- 134 Other payments to military personnel and employees with special ranks.

**Purpose codes 2011–2013:**

*Note: In the following list, purpose codes where a generic code is combined with a programme code are listed after the generic code; e.g. 202 58 01 is listed after 202 00 00, but before 202 09 00.*

- 202 00 00 Military formations (authorities, units) (*Voinskiye formirovaniya [organy, podrazdeleniya]*). *Note: This code comes with a rather lengthy comment in the source document (MinFin 2010, Part III, sections 3.2.2) which specifies the types of expenditures represented by this category. It includes, for example, expenditures related to upholding permanent combat readiness and exercises. Many of the subcategories to this category are entirely captured by level 2 and therefore not listed here.*

*It is also noteworthy that the term 'military formation' was discontinued as a budget category in the updated budget framework launched in 2014; at the same time, new type codes were introduced for representing expenditures on "military personnel and employees with special ranks" (see heading "Type codes from 2014 above").*

*The code does not appear on a standalone basis but is combined four-digit programme codes to form complete purpose codes; in the following list, the definitions given refer to the programme category represented by the last four digits:*

- 202 58 01 Salaries to military personnel and employees of law enforcement agencies. *Note: Some items in this category are captured by levels 1, 2 and 3. Items not captured by those levels include, for example, expenditures associated with the Federal Service for Drug Control. There is a parent category 202 58 00 representing 'military personnel' (voyenny personal), but it does not appear on a standalone basis.*
- 202 58 02 Additional monetary stimulation for military personnel of the Defence Ministry and employees of the Interior Ministry. *Cf. note to 202 58 01.*
- 202 58 03 Compensation dependent on the salary amount. *Cf. note to 202 58 01.*
- 202 60 00 Monthly payments for housing, heating and lighting to medical and pharmaceutical workers of federal state-financed organizations subordinate to federal executive authorities.
- 202 65 00 Special activities.
- 202 67 00 Functioning of the Armed Forces, authorities in the sphere of national security and law enforcement activity, troops and other military formations.
- 202 68 01 Payments and storage for fuel and lubricants within the framework of the State Defence Order.
- 202 68 02 Payments and storage for fuel and lubricants outside the framework of the State Defence Order.

202 70 00 Cash payments to military personnel, employees of federal executive bodies to reimburse the transportation cost for sending their children to recreational organizations duly established on the territory of the Russian Federation.

202 71 00 Reimbursement to state-financed institutions of state and municipal health care systems for the costs of providing medical assistance to military personnel, citizens called up for military training, employees of the internal affairs bodies of the Russian Federation, of the State Fire Service, of customs authorities and persons in command positions of the State Courier Service. *Note: This code was used only in 2012 and 2013.*

202 71 01 Food supplies within the framework of the State Defence Order. *Note. This code was not used after 2011. Cf. 202 71 00.*

202 71 02 Food supplies outside the framework of the State Defence Order. *Note. This code was not used after 2011. Cf. 202 71 00.*

202 10 00 Obligatory life and health insurance provided by the state for military personnel, citizens called up for military training, ordinary and senior officers of the internal affairs bodies of the Russian Federation, the State Fire Service, drug and psychotropic substances control authorities, customs officials, employees of state-financed organizations and authorities of the penal system and bailiffs.

212 00 00 Mortgage system for ensuring housing of military personnel. *Note: This is a parent category that does not appear on a standalone basis; however, the only subcategory has the same definition as the parent category:*

212 01 00 Mortgage system for ensuring housing of military personnel. *Note: Partly captured by levels 1, 2 and 3; items not captured by those levels are associated with the EMERCOM.*

#### **Programme codes 2011–2013:**

The following purpose codes can be related to military expenditures based on the *programme code* represented by the last four digits (not to be confused with the *direction code* in the reformed system starting from 2014).

xxx 58 00 Military personnel. *Note: 'xxx' indicates that this is a programme code and that it should be combined with a generic purpose code to form a complete purpose code. This is a parent category that does not appear on a standalone basis; see subcategories below. It seems to have been replaced by type codes on subgroup 130 starting from 2014.*

xxx 58 01 Salaries to military personnel and employees of law enforcement agencies. *Note: Note: 'xxx' indicates that this is a programme code (in the pre-2014 framework) and that it should be combined with a generic purpose code to form a complete purpose code. All codes with this pattern are included in this level, with the exception of 100 58 01, which is a federal target programme unrelated to the programme code 58 01. This code appears to have been replaced by type code 131 from 2014. See also comment to 202 58 01 above.*

xxx 58 02 Additional monetary stimulation for military personnel of the Defence Ministry and employees of the Interior Ministry. *Note: 'xxx' indicates that this is a programme code and that it should be combined with a generic purpose code to form a complete purpose code. All codes with this pattern are included in this level, with the exception of 100 58 02, which is a federal target programme unrelated to the programme code 58 02. This code appears to have been replaced by type code 134 from 2014.*

xxx 58 03 Compensation dependent on the salary amount. *Note: 'xxx' indicates that this is a programme code and that it should be combined with a generic purpose code to form a complete purpose code. This code appears to have been replaced by type code 133 from 2014.*

xxx 68 01 Payments and storage for fuel and lubricants within the framework of the State Defence Order. *Note: 'xxx' indicates that this is a programme code (in the pre-2014 framework) and that it should be combined with a generic purpose code to form a complete purpose code. This category was discontinued after 2011 and appears to have been replaced by type code 221.*

xxx 71 00 Food supplies to military personnel and persons of equal status according to Russian legislation. *Note: 'xxx' indicates that this is a programme code (in the pre-2014 framework) and that it should be combined with a generic purpose code to form a complete purpose code.*

	<p><i>This is a parent category that does not appear on a standalone basis; there are two subcategories:</i></p> <p>xxx 71 01 Food supply within the framework of the State Defence Order. <i>Note: 'xxx' indicates that this is a programme code and that it should be combined with a generic purpose code to form a complete purpose code.</i></p> <p>xxx 72 01 Material supply within the framework of the State Defence Order. <i>Note: 'xxx' indicates that this is a programme code and that it should be combined with a generic purpose code to form a complete purpose code.</i></p> <p><b>Purpose codes 2014–2015:</b></p> <p>xx x 0049 Expenditures in support of the functioning of the Armed Forces, authorities within the field of national security and law enforcement activities, troops and other military formations. <i>Note: 'xx x' indicates that this is a direction code that should be combined with a programme code to form a complete purpose code. The term "troops and other military formations" is not further specified, but it is consistent with the generic term used in reference to the National Guard troops and the military rescue formations of the EMERCOM in the law "On military duty and military service"; cf. footnote 17.</i></p> <p><b>Purpose codes from 2016:</b></p> <p>xx x xx 90049 Expenditures in support of the functioning of the Armed Forces, authorities within the field of national Security and law enforcement activities, troops and other military formations. <i>Note: Note: 'xx x xx' indicates that this is a direction code that should be combined with a programme code to form a complete purpose code. This definition is identical to the definition of code xx x 0049 used before 2016.</i></p> <p>Sources: MinFin (2010), Part III, sections 3.2.2. and 3.2.4. MinFin (2013), Part III, sections 4.2.1–4.2.4, section 5.2 and appendix 10; MinFin (2018a), Part III, section 4(1).2.5(1) and section 5(1).2 (until 2018); MinFin (2018b), Part III, sections 51.1.3. and 51.2.2. (from 2019).</p>
Level 11	<p>Level 10 + Space-related expenditures that have not been included in previous levels.</p> <p><b>Comments:</b></p> <p>SIPRI's estimates includes only a small subset of this measure, namely subsidies to support the spaceport of Baikonur. Since some of the items listed above are explicitly related to "peaceful purposes" they could arguably be excluded from military expenditures but are included here due to their dual-use character and for the sake of completeness. It is also noteworthy that some items in state programme 21 0 00 00000, for example some expenditures related to the GLONASS system, belong to subchapter 0209 <i>Other questions within the field of national defence</i>, and are therefore included in level 2 (and not level 11). From 2014 onwards, the definition of this level includes all of subchapter 0403 <i>Space exploration and utilization</i>.</p> <p><b>Purpose codes 2011–2013:</b></p> <p>100 34 00 Federal space programme of Russia in the period 2006–2015. <i>Note: In 2011, this generic code was used to represent all expenses in the space programme, but in 2012 and 2013, it was further subdivided into fifteen subcategories in the range 100 34 01–100 34 14 and also 100 34 99.</i></p> <p>100 57 00 Federal target programme "Development of Russian spaceports in the period 2006–2015".</p> <p>249 00 00 Activities in the field of research and usage of space for peaceful purposes</p> <p>517 04 00 Maintenance of infrastructure objects of the city of Baikonur connected with the leasing of the Baikonur spaceport.</p> <p><b>Purpose codes 2014–2015:</b></p> <p>All purpose codes on the form 21 x xxxx (over 30 items). Compare with ten-digit purpose codes from 2016 below.</p>

**Purpose codes since 2016**

21 0 00 00000 State programme “Russia’s Space Activities in the years 2013–2020.” *Note: this includes the following subprogrammes:*

- 21 1 00 00000 Subprogramme “Prioritized innovation projects in the space rocket industry”
- 21 2 00 00000 Subprogramme “Support for the implementation of State Programme ‘Space activity of Russia in the period 2013–2020’” *Note: this includes main activity 21 2 02 0000 which relates to selection and training of cosmonauts.*
- 21 3 00 00000 Federal space programme of Russia in the period 2006–2015.
- 21 4 00 00000 Federal target programme “Maintenance, development and use of the GLONASS system in the period 2012–2020”
- 21 5 00 00000 Federal target programme “Development of Russian spaceports in the period 2006–2015”
- 21 6 00 00000 Federal target programme “Development of spaceports in the period 2017–2025 in support of Russia’s space activities”
- 21 7 00 00000 Federal space programme of Russia in the period 2016–2025.

Sources: MinFin (2010) and MinFin (2011), Part III, section 3.2.2. MinFin (2013), Part III, section 4.2.2.21. Sources: MinFin (2018a), Part III, section 4(1).2.2(1).20 (until 2018). MinFin (2018b), Appendix 6 (from 2019).

## **Appendix 2: Russia's Budget System**

This appendix provides a comprehensive summary of how budget secrecy is defined in Russian legislation and is provided for the sake of completeness and transparency; the details provided herein support the reproducibility of our results.

### ***Legislative basis for the budget process***

The preparation of the draft budget is regulated by chapter 20 in the Budget Code (BC), and the legislative process for reviewing the draft and enacting the annual law on the federal budget is regulated by chapters 21–23. The government must submit a draft budget to the lower house of parliament, the Duma, no later than 1 October, where it undergoes three readings during the course of a 60-day period.

Budget expenditures are classified according to five categories: budgetary manager, chapter, subchapter, expenditure purpose and expenditure type (*glavnyy rasporyaditel' byudzhetykh sredstv, razdel, podrazdel, tselavaya stat'ya raskhodov and vid raskhodov*) (BC article 21). The first reading in the Duma is devoted to deciding the main parameters of the budget, such as overall revenue and expenditure, forecasts for GDP and so forth. The second reading determines allocations between chapters, subchapters, expenditure purposes and types, within the limits approved in the first reading. Finally, the third reading determines the distribution of expenditures among government departments in accordance with the allocations approved in the second reading (BC articles 199, 201, 205 and 207). The final budget law contains no less than three different sets of the approved expenditures: two lists from the second reading and one from the third reading, all of which are included as appendices to the budget law. The grand total is equal in these three lists; the difference is that they group the expenditures by different budget categories. The second reading approves one list where expenditures are grouped according to chapter, subchapter, purpose and type, and another where the order is reversed. The result of the third reading is the so-called departmental

structure of expenditures (*vedomstvennaya struktura raskhodov*), which also includes the category budgetary manager in addition to the other categories.

Importantly for our purposes, the total amount of budget expenditures reported in these three lists is always less than the total amount approved in the first reading. The reason is that secret budget items are excluded. Each of the two lists of expenditures from the second reading is divided into an open and a secret (*sekretno*) appendix to the budget law, while the departmental structure is divided into an open, a secret and a top secret (*sovershenno sekretno*) appendix.<sup>20</sup> Limiting our focus to the open appendices, we note that they contain budget items clearly grouped according to all budget categories, so that we can take the sum of all items pertaining to, for example, subchapter *0201 The Armed Forces* to get the sum of open expenditure in that category and treat the residual as the secret share.

The Budget Code has a special provision for how to handle secret budget items, which stipulates that those items must be reviewed at a closed session of both houses of parliament and that only the speakers of the houses and members of the responsible committees are allowed access to the documentation concerning those budget items. Furthermore, the Budget Code also stipulates that the adoption of “special secret programmes” (*spetsial’nyye sekretnyye programmy*) and their inclusion in “one or another” (*te ili iniye*) expenditure category is carried out on the proposal of the president. Only the president has the authority to decide how such expenditures should be implemented and which government authority that should assume responsibility for controlling those expenditures (BC articles 209 and 241, ninth paragraph). These provisions give the president, and the president only, a legal basis for making decisions about budget secrecy. The term ‘special programme’ is noteworthy because there is a federal agency headed by the president called the Main Directorate for Special Programmes of the

---

<sup>20</sup> There are also other secret appendices than the ones mentioned here. Interestingly, Zatsëpin (2008) notes that the total number of secret appendices increased fourfold in the federal budget for 2008.



President (GUSP, *Glavnoye upravleniye spetsial'nykh programm Prezidenta*). This agency carries responsibilities in the field of special constructions and mobilization, but it remains unclear if it has any special role in the budget process (GUSP 2019).<sup>21</sup>

The Budget Code contains a transparency principle (*printsip prozrachnosti*), which states that secret budget items may be approved only as part of the federal budget (BC article 36, seventh paragraph). The Budget Code can be said to operationalize more general principles concerning secrecy laid down in other legislation. The constitution stipulates that the list of information items that constitute state secrets must be established by federal law (article 29, item 4). This, in turn, is operationalized in the federal law “On state secrets,” in which the fifth paragraph lists items that constitute state secrets grouped into the following four fields: 1) defence, 2) economy, research and technology, 3) foreign policy and international finance, 4) intelligence, counterintelligence and security.<sup>22</sup> The fourth article of the same law lists certain privileges of the president concerning state secrets, including the right to appoint members to the Intergovernmental Commission for Protection of State Secrets (*mezhhvedomstvennaya kommissiya po zashchite gosudarstvennoy tayny*) and the right to define what constitutes a state secret.<sup>23</sup> Following the general definitions set out in the law “On state secrets” the president

---

<sup>21</sup> It is known that GUSP is involved in the construction of special objects such as bunkers and the not-so-secret separate metro system in Moscow. Cooper (2016b) provides an extended discussion, including estimates of its budget and personnel strength, and suggests (p. 33) that it is the most secret of all Russian government agencies.

<sup>22</sup> Full reference: Federal law No. 5485-I of 21 July 1993 “On state secrets” (*federal'nyy zakon N 5485-I ot 21 iyulya 1993 g. “O gosudarstvennoy tayne”*).

<sup>23</sup> The mandate of the president in issues concerning state secrets is also partly repeated in chapter 2, article 8, item 7a of federal law No. 390-FZ of 28 December 2010 “On security” (*federal'nyy zakon ot 28 dekabrya 2010 g. N 390-FZ “O bezopasnosti”*).

regularly updates a decree that further specifies what constitutes a state secret, including which government body that is in charge of secrets in each respective field.<sup>24</sup>

The discussion so far makes it clear that the information contained in the actual law on each year's federal budget is not sufficient to calculate an accurate figure of Russia's military expenditure, or most other budget categories for that matter, since some items are secret. However, there is supplementary information provided in other documents accompanying the budget that makes it possible to circumvent this apparent obstacle. Specifically, this documentation contains a complete and entirely open list of expenditures grouped only by chapter and subchapter and excluding the other categories. In fact, the Budget Code requires that such a presentation be provided for every budget, although it does not necessarily have to be included in an appendix to the actual budget law but can instead be included as an appendix to the so-called explanatory note (*poyasnitel'naya zapiska*) that must accompany the budget law (BC article 184.1, item 3, fourth paragraph; article 184.2, last paragraph). However, the explanatory note concerns the draft budget proposal that is submitted by the government to the Duma as the first step of the legislative process; since 2008, there is no corresponding document in the official documentation with comments on the final version of the budget law. In previous budgets up until 2007, such an appendix was indeed included in the final budget law (appendix 8 in the case of the budget for 2007). On the other hand, the chapter-subchapter summary can be found in other sources, including media reports or in the so-called citizens' budget mentioned earlier. Aggregate information is also presented alongside the budget execution reports, as discussed below. After a budget year has expired, the aggregate

---

<sup>24</sup> Full reference: presidential decree No. 1203 of 30 November 1995 "On the approval of the list of information that constitutes state secrets" (*ukaz prezidenta RF ot 30 noyabrya 1995 g. N 1203 "Ob utverzhdenii perechnya svedeniy, otnesennykh k godudarstvennoy tayne"*), with amendments through 14 January 2019.

information at the chapter-subchapter level will eventually also be available in the federal laws on the approval of the budget execution for each year. The chapter-subchapter summary contains significantly less details than the lists in the various appendices to the actual budget law: the departmental structure approved in the third reading approaches 3,000 items, but the chapter-subchapter summary only runs to a little over 100 items, one for each chapter and subchapter.

Secrecy, in other words, has a precise meaning in the context of the Russian budget, namely that an item is missing from the open appendices with approved expenditures, and, consequently, that details are concealed about how those items are allocated among government departments, purposes (including state programmes) and expenditure types. This interpretation is consistent with the definition given in the federal law “On state secrets” referenced above which stipulates that secrecy is assigned based on the information’s “departmental or programme-purpose affiliation” (article 9). It also follows that by comparing the data from the non-secret part of the departmental structure of expenditures on the one hand, and from the chapter-subchapter summary on the other, it becomes possible to calculate the residual share of secret expenditures for each chapter and subchapter.

So far, we have only discussed the process of drafting and approving the federal budget. Once the budget is approved, there are other provisions regulating budget execution and auditing. Responsibility for budget execution is largely delegated to the Federal Treasury (*Federal’noye Kaznacheystvo*), also known by the acronym *Roskazna*, a government agency subordinated to the Finance Ministry. *Roskazna* is obliged to provide reports to the Finance Ministry on the execution of the budget. Next, the Accounts Chamber (*Shchetnaya palata*) is responsible for auditing the federal budget. In the final stage a law is enacted by parliament to approve the execution of the budget (BC articles 264.4, 264.7 and 264.11).

There is an intermediate step between the budget and its execution in the form of the so-called ‘consolidated budgetary list’ (*svodnaya byudzhethnaya rospis’*), which is a document

produced by the competent financial authority for the purpose of allocating resources according to the approved budget within its domain of competence (BC article 6). In the case of the federal budget, the Finance Ministry is the competent financial authority responsible for the consolidated budgetary list (BC article 165). It turns out that this document can be significant for the allocation of military resources since there are provisions in the budget code that allow the Finance Ministry to deviate by up to ten percent from the amount approved in the budget concerning expenditures related to internal or external security (BC article 217 item 7.2).

### ***Budget classification codes***

A detailed reading of the budget requires an understanding of how budget classification codes (*kody byudzhetnoy klassifikatsii*) are assigned to specific budget items.<sup>25</sup> The normative provisions for budget classification (i.e. categorization) are set out in chapter 4 of the Budget Code, articles 18–23, with article 21 presenting the classification of expenditures. However, the Budget Code delegates the responsibilities for how those provisions should be implemented in terms of structure, accounting principles and terminology to the Finance Ministry (BC articles 18, 21 and 165). The Finance Ministry regularly issues instructions on how budget classification codes should be assigned to budget items. Producing and maintaining these instructions is a significant bureaucratic undertaking: they run to thousands of pages and are typically amended almost on a monthly basis. The instructions governing the budgets from 2014 to 2018 are given in an order from 2013 (MinFin 2018a) while a new but similar order regulates the budget classification starting from 2019 (MinFin 2018b). Several revisions to the classification system have been made and this ongoing evolution creates a research challenge

---

<sup>25</sup> 'Classification' is a translation of '*klassifikatsiya*'. Unlike its English counterpart, *klassifikatsiya* only pertains to the notion of categorization in general terms, not the level of secrecy. To avoid confusion throughout this article we only use 'classification' in accordance with the Russian term and reserve the term 'secret' for the other usage.

since codes change their meaning, thereby creating discontinuities in the budget structure.

Every budget item is assigned a unique designation in the form of a budget classification code. Starting from 2016 this code consists of 20 alphanumeric characters ordered into five groups designating the five main categories for budget expenditure already mentioned: budgetary manager, chapter, subchapter, expenditure purpose, and expenditure type.<sup>26</sup> The budgetary manager is designated by the first three characters while the next two represent the chapter and combine with the following two characters to also represent the subchapter. The remaining thirteen characters are used to designate the purpose and type codes. For example, a budget code that begins with the sequence '1870201' designates the *Ministry of Defence* as the budgetary manager (187), *National Defence* as the chapter (02), and *Armed Forces* as the subchapter (0201). This observation is the key to comparing the numbers in the departmental structure of expenditures with those in the chapter-subchapter summary: in order to calculate the residual share of secret expenditures in subchapter 0201 *Armed Forces* we would have to single out all items in the departmental structure which contain the subchapter code '0201' in positions four through seven, take their sum and compare it to the number in the chapter-subchapter summary. The difference would represent the residual share of secret expenditures pertaining to 0201 *Armed Forces*. Finally, it is worth noting that, starting with the instructions issued in 2013, the Finance Ministry no longer only provides lists detailing the technicalities of the classification codes, but also include a preamble describing the principles for assigning budget classification codes. One of these is the 'principle of openness in assigning codes' (*printsip otkrytosti naznacheniya kodov*), which states that all legal acts regulating

---

<sup>26</sup> Before 2016, the structure of the budget code was slightly different: the purpose code was shorter and there was a sixth category, the so-called KOSGU code, short for Classification of Government Management Sector Operations (*Klassifikatsiya operatsiy sektora gosudarstvennogo upravleniya*). This does not affect the treatment of the chapter and subchapter codes which are our main focus here but needs to be considered in the empirical analysis.

budget classification are public and must be published on the Internet by the competent authority. Furthermore, it is explicitly forbidden to mark such documents with stamps limiting access or indicating a level of secrecy. When it comes to classification codes for expenditure items that contain secret information, these are assigned by the Finance Ministry on the basis of a petition by the government authority responsible for declaring that information secret. The principle prohibits the use of descriptions “not containing economic information, such as ‘Subprogramme 1’, ‘Expenditure Direction 2’ and so forth” (MinFin 2018a, section 2.3), a practice that was used in the Soviet era (Kontorovich 2009).

### ***Understanding the data in budget execution reports***

The budget execution reports from Roskazna are available on their website as compressed zip files containing Microsoft Excel documents which in turn contain all the relevant budget data, including budget classification codes and the budget figures in rouble terms (Roskazna 2019a). Each of these reports is contained in a form that is adapted for printing in A4 format, and each form has a unique designation according to the so-called *OKUD* framework, which is an acronym for ‘National Management Documentation Classifier’ (*Obshcherossiyskiy klassifikator upravlencheskoy dokumentatsii*), a standard for all economic entities in Russia that has been in place since 1993. Roskazna’s annual and quarterly reports on federal budget execution are designated ‘0507011’, and this reference will typically be a component of the name of the relevant Excel file.

The contents of the actual Excel files have varied slightly over the years but have kept the same overall structure. In recent years they include eight spreadsheets with one table each, organized into three groups covering revenue (Tables 1.1 and 1.2), expenditure (2.1, 2.2, 2.3 and 2.4) and deficit financing (3.1 and 3.2). The four tables with expenditure data correspond to four different formats for presenting budget expenditures (refer to Appendix 2 for details): Table 2.1 contains the departmental structure of expenditures, while Tables 2.2 and 2.3 have

the same structure as the budget approved in the second reading. The information in those appendices is actually a subset of the departmental structure of expenditures, so we can limit our focus to Table 2.1. Finally, Table 2.4 represents the chapter-subchapter summary.<sup>27</sup> Therefore, Tables 2.1 and 2.4 from Roskazna's budget execution reports contain all the data needed to complete the residual analysis.

There are two minor technical challenges to consider. First, Roskazna's Table 2.1 contains all individual budget items listed together with running subtotals, meaning that more than half the rows in the data set contain subtotals at various levels of aggregation. In other words, we need to filter out those subtotal rows in order to perform calculations on the data. The key to overcoming this issue is to make use of the budget classification codes, which are described in more detail in Appendix 2. Each row in the table comes with its own unique alphanumeric code of 20 characters, but the rows representing subtotals will have truncated codes with fewer than 20 characters. We can therefore filter only on rows with 20 characters in the budget code. Secondly, budget execution data in the third column actually represents one more level of detail compared to the approved budget allocations in the first and second columns. So even if we filter on rows with 20 characters in the budget code, we still have running subtotals included in the third column. We therefore need a method to filter either only on budget execution data in the third column, or on the approved allocation in the first and second columns of the report. The key is to note that the final three digits of the budget code, which represent expenditure type, make precisely this distinction. This category is divided into three subcategories: group, subgroup and element (*gruppa*, *podgruppa* and *element*; see MinFin [2018a], Part III, sections 1 and 5). Each subcategory is represented by one of the three digits in the type code. However, the budget law only approves expenditures down to the group

---

<sup>27</sup> Before 2014, this table was designated 'FKR', presumably an acronym for 'functional expenditure classification' (*'funktional'naya klassifikatsiya raskhodov.'*)

level; expenditures at the subgroup and element level are not approved by the budget law, but rather determined at the time of execution by the responsible budgetary manager. This means that all budget codes for budget items approved in the budget, i.e. those rows that are not empty in the first column of Roskazna's report, end with the sequence '00', signifying that the subgroup and element are not determined.<sup>28</sup> The practical meaning of all this is that if we are interested in the allocations in the budget law, we need to look at rows with 20 characters in the budget code where the budget code ends with the sequence '00'; if instead we are interested in actual execution we look only at rows with 20 characters in the budget code where the budget code does *not* end with the sequence '00'. In both cases this leaves us with a list of all budget items at the most detailed level in each case, without any running subtotals; the sum of all items will be equal to the grand total at the top of the table. From this list we can filter for a given subchapter, add all resulting budget items together and thus obtain the total non-secret expenditures in that subchapter.<sup>29</sup> Our choice to limit the analysis to 2011 and later years is

---

<sup>28</sup> The subgroup level is typically not included in Roskazna's report but given implicitly by the element code.

<sup>29</sup> Strictly speaking, the structure of the data described here only pertains to the budgets for 2016 and later. Earlier, only 17 of the characters in the budget code were included in Roskazna's tables, excluding the KOSGU category mentioned in Appendix 2. Furthermore, the subgroup level was explicitly included for every item and for some items the most detailed level was the subgroup, while for others it was the element, thus making it impossible to filter only on one or the other. The only way to deal with this is to manually inspect the data and identify those subgroup codes that do not have any subordinated element codes. Before 2012, the type code had a different structure that did not distinguish between group, subgroup and element. For those years it is actually easier to filter on the necessary rows, since it is enough to simply exclude all rows that are empty in the type code column.



motivated by the fact that the chapter structure of the budget was revised between 2010 and 2011, with the number of chapters increased from 11 to 14.<sup>30</sup>

---

<sup>30</sup> Furthermore, Roskazna's budget execution reports for 2008–2010 do not contain aggregate data at the chapter-subchapter level. To extend the analysis to those years it would be necessary to use data from the annual laws on budget execution; see Appendix 2.