

1. Russian arms exports

The key indicators used to quantify Russian arms exports include:

- value of deliveries made over the reported year (i.e. the worth of the arms and military equipment already delivered);
- revenue (money received under arms contracts);
- accumulated value of arms contracts signed during the year; and
- accumulated portfolio of contracts by the year's end.

The headline figure for arms exports is usually the value of deliveries made. But in any event, a distinction must be made between the four key indicators listed above, as they are sometimes confused by journalists, who unwittingly misinterpret the source figures and draw the wrong conclusions.

Starting from 2007, Rosoboronexport, a state-owned company, has been the only Russian entity that holds the full license to export arms and military equipment. Previously, similar licenses were also held by RSK MiG aircraft corporation (Moscow), KBP instrument design bureau (Tula), KBM machine-building design bureau (Kolomna, Moscow region) and NPOmash research and production company (Reutov, Moscow region). Now defense companies (only 21 of them) can export only spare parts and components for weapons systems exported via Rosoboronexport.

It is therefore useful to make a distinction between:

- total Russian arms exports;
- exports via Rosoboronexport (ROE); and
- exports of independent spare parts suppliers.

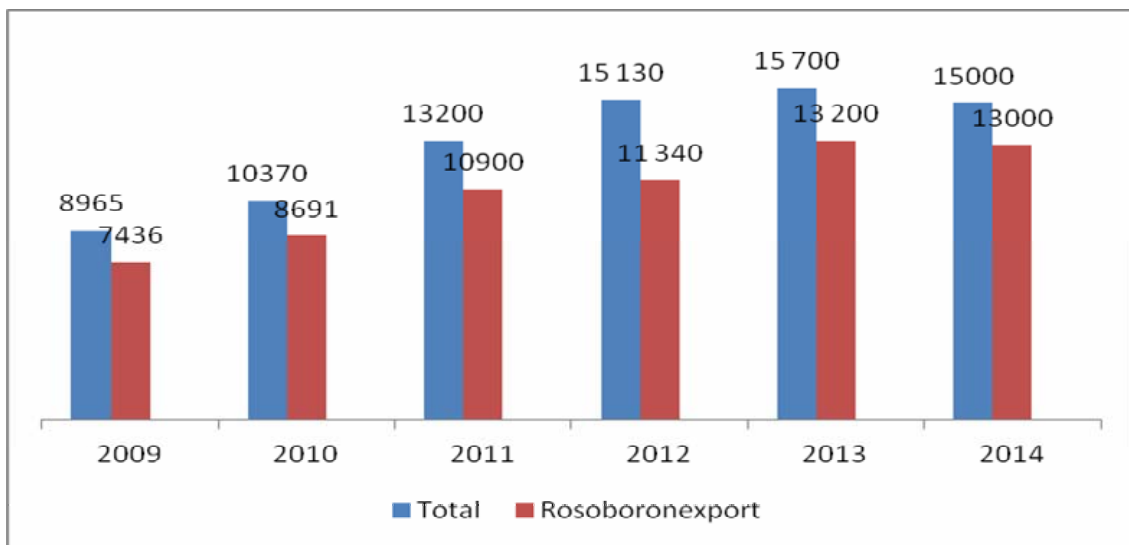
It must be taken into account that total exports do not equal ROE exports plus direct spare parts contracts signed by independent suppliers. The difference is made of deliveries still being made under weapons system contracts signed by MiG, KBP, KBM and NPOmash prior to 2007, when ROE became the sole authorized Russian arms exporter. Also, as far as we know, NPOmash has the right to extend previously signed supply contracts with India under the BrahMos Aerospace, a 50-50 joint venture between Russia and India. Essentially that means that NPOmash has partially retained its status as an independent arms exporter¹.

¹ BrahMos is NPOmash's main export project. The joint venture develops and manufactures various versions of the eponymous anti-ship missile.

Deliveries

Information about Russia's total arms exports and exports via ROE are almost always available from open sources. This data is regularly announced by Russian officials, although no official annual report on Russian arms exports is published at this time. However, information about results of independent spare parts exporters (a total of [23 companies](#)) seldom appears in the media (Figure 1.1).

Figure 1.1. Russian arms deliveries under export contracts, million USD in current prices



| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-----------------|------|--------|--------|--------|--------|--------|
| Total | 8965 | 10 370 | 13 200 | 15 130 | 15 700 | 15 000 |
| Rosoboronexport | 7436 | 8691 | 10 900 | 11 340 | 13 200 | 13 000 |

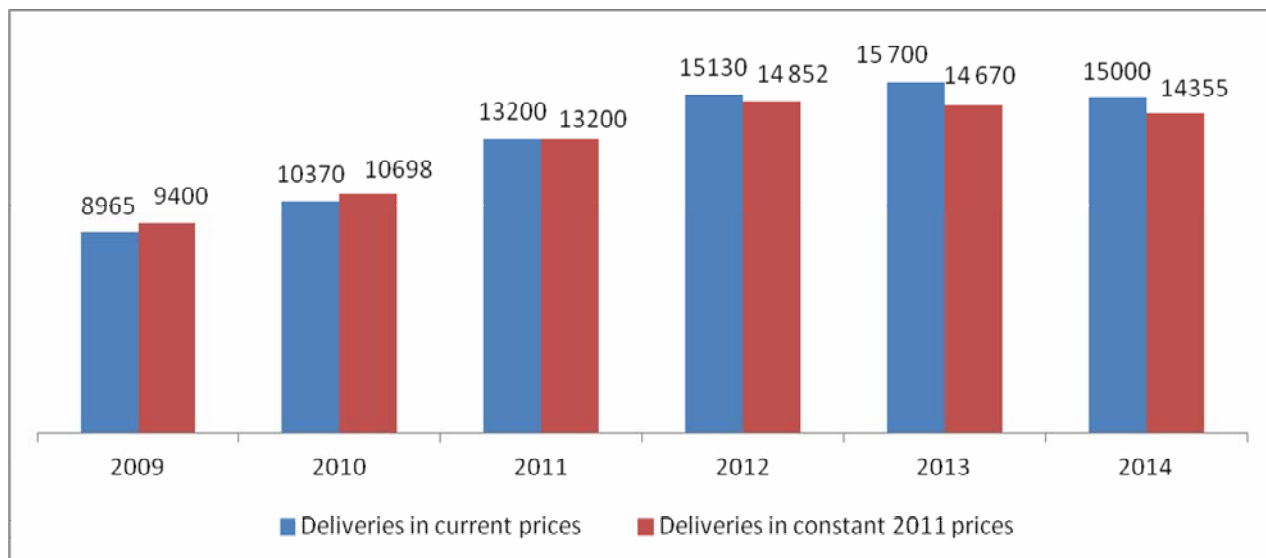
* - CAST estimates.

Sources: Russian Federal Service for Military and Technical Cooperation, Rosoboronexport, CAST estimates.

Nominal and real growth of arms exports

Let's count Russian arms deliveries in constant prices. This will allow us to evaluate the real (inflation-adjusted) growth of Russian arms exports. As Figure 1.2 shows, in real terms Russian arms deliveries grow slower than officials used to say.

Figure 1.2. Nominal and real annual growth of Russian arms deliveries, billion USD



| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------------------------------|----------|-------------|-------------|-------------|-------------|--------------|
| Deliveries in current prices | 8965 | 10 370 | 13 200 | 15 130 | 15 700 | 15 000 |
| Nominal growth, % | 0 | 15,7 | 27,2 | 14,6 | -1 | -4,5 |
| Inflation/deflation in the US, % | 0,34 | 1,64 | 3,16 | 1,8 | 1,2 | 1,3 |
| Deliveries in constant 2011 prices | 9400 | 10 698 | 13 200 | 14 852 | 14 670 | 14 355 |
| Real growth, % | 0 | 13,8 | 24 | 12,8 | -2,2 | -2,15 |

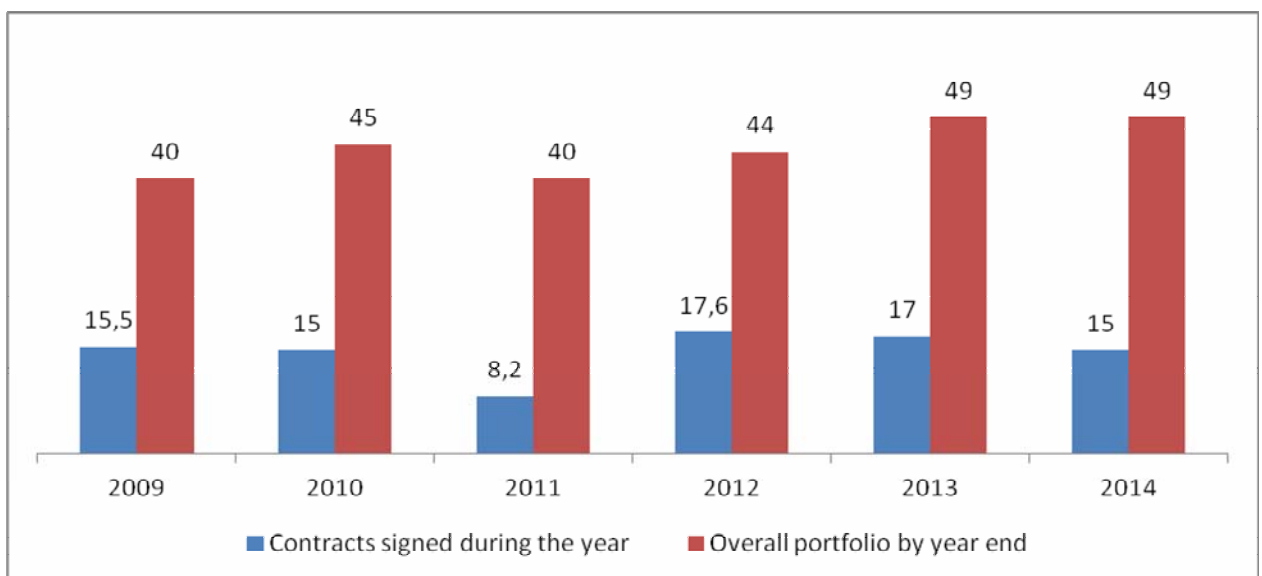
* - CAST estimates.

Sources: Russian Federal Service for Military and Technical Cooperation, www.inflationdata.com, CAST calculations.

Value of contracts signed

Information about the value of arms exports contracts signed during the year appears quite seldom. But it can be calculated with a certain degree of precision based on the worth of the overall arms exports portfolio (that information is published much more frequently in the media) and the worth of the deliveries made during the reported year. To illustrate, the worth of the contracts signed in 2010 equals the overall arms exports portfolio as of the end of 2010 minus the 2009 portfolio plus the 2010 deliveries.

Figure 1.3. Russian arms exports portfolio, billion USD in current prices



| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------------------------|-------|-------|------|------|------|------|
| Contracts signed during the year | 15,5* | 15,0* | 8,2* | 17,6 | 17 | 15 |
| Overall portfolio by year end | 40,0 | 45,0 | 40 | 44 | 49 | 49 |

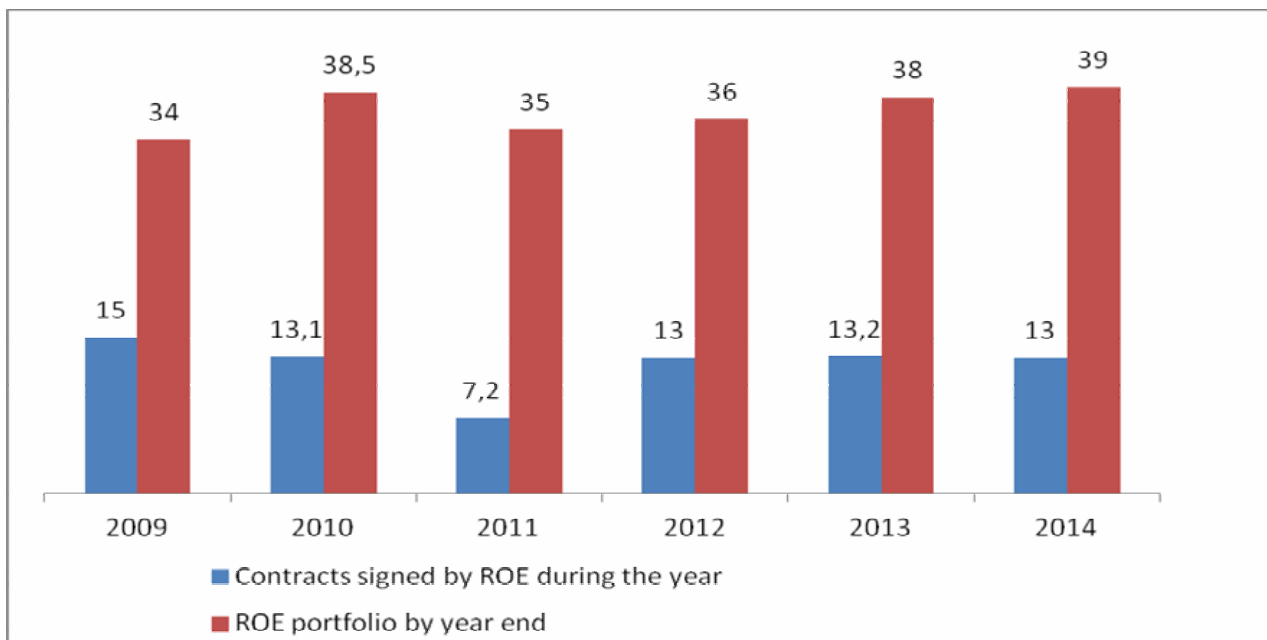
* - CAST estimates. Rosoboronexport official data is also used in these estimates (see below).

Sources: Russian Federal Service for Military and Technical Cooperation, Rosoboronexport, CAST estimates.

In any discussion about the contracts, a distinction must be made between Russia's overall arms exports portfolio and the ROE portfolio (as well as between overall contracts signed and ROE contracts signed during the reported period). The ROE figures are, of course, lower than the overall exports. The difference is made of contracts signed prior to 2007 bypassing ROE (MiG, KBP, KBM and NPOMash), deliveries on which still continue in some cases, contracts signed by BrahMos

Aerospace joint venture, and the spare parts contracts signed by independent supplies.

Figure 1.4. Rosoboronexport portfolio, billion USD in current prices



| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|------|-------|------|------|------|------|
| Contracts signed by ROE during the year | 15,0 | 13,1* | 7,2* | 13 | 13,2 | 13 |
| ROE portfolio by year end | 34,0 | 38,5 | 35 | 36 | 38 | 39 |

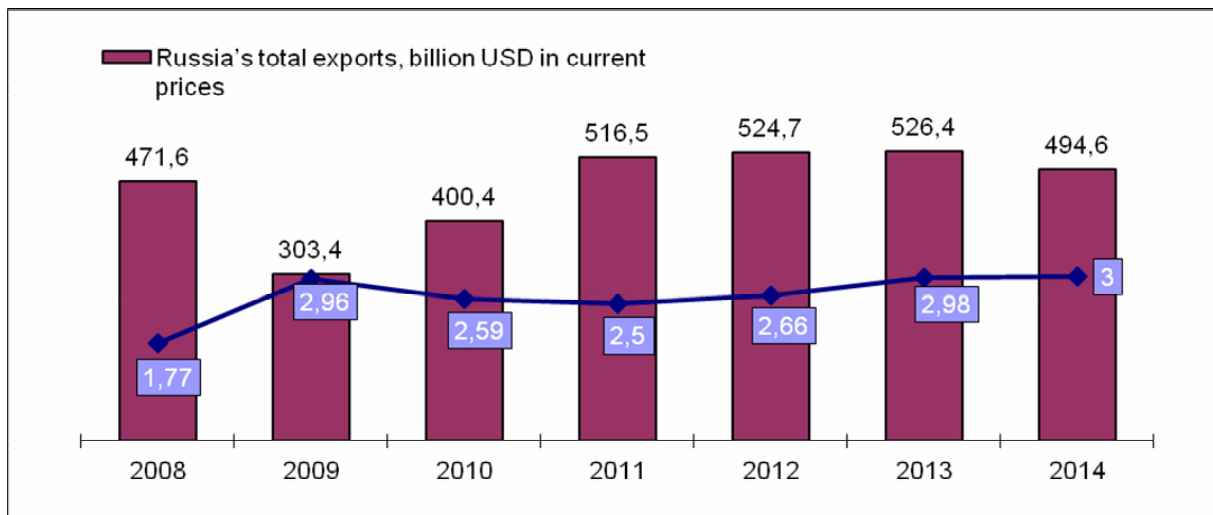
* - CAST estimates.

Sources: Rosoboronexport, CAST estimates.

Arms exports and total Russian exports

Figure 1.5 illustrates that the share of arms sales in the overall Russian exports is quite small.

Figure 1.5. Russia's total exports and share of arms exports



| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|-------|-------|-------|-------|-------|-------|
| Russia's total exports, billion USD in current prices | 471,6 | 303,4 | 400,4 | 516,5 | 524,7 | 526,4 |
| Share of arms exports, % | 1,77 | 2,96 | 2,59 | 2,5 | 2,66 | 2,98 |

Sources: Russian Federal State Statistics Service, CAST calculations.

2. Defense budget and procurement

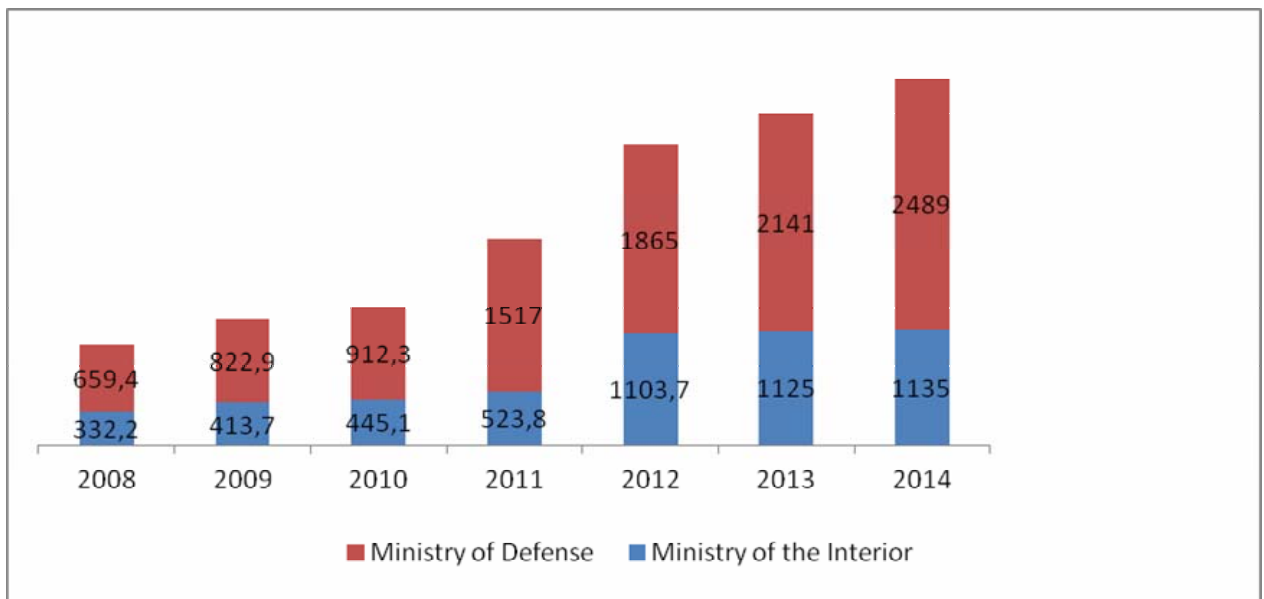
Defense budget

Defense budget is the part of the national budget channeled into defense-related activities.

There is no official definition of the term in the Russian national budget. The moneys spent on the Russian military are accounted for under numerous articles of the national budget, and the names of these articles are not always obviously defense-related. Calculating the real size of the Russian defense budget is therefore an impossible task for an outsider.

The official figure than can be used as a guideline is the combined spending of the Ministry of Defense and the Ministry of the Interior, the two main Russian agencies in charge of national security (Figure 2.1).

Figure 2.1. Official guideline figure of Russian defense budget, billion RUR in current prices



| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|--------------------------|-------|--------|--------|-------|--------|------|------|
| Ministry of the Interior | 332,2 | 413,7 | 445,1 | 523,8 | 1103,7 | 1125 | 1135 |
| Ministry of Defense | 659,4 | 822,9 | 912,3 | 1517 | 1865 | 2141 | 2489 |
| Total | 991,7 | 1236,6 | 1357,4 | 2040 | 2968,7 | 3266 | 3624 |

Sources: Russian Ministry of Finance, Russian Media, CAST calculations.

To emphasize, these are just guideline figures that only give an overall idea of Russian defense budget. Russian defense programs have sources of funding other than the Defense Ministry or Interior Ministry spending (that is especially true of defense R&D)¹.

We therefore believe that a more useful and accurate source of information is the various statements about the size of the country's defense budget made by Russian officials. Obviously, some of those officials can be misinformed - but once the dubious figures are weeded out (using, among other things, the MoD/Interior Ministry spending figures as a guideline), the aggregate of the remaining ones can be a fairly accurate estimate of Russian defense budget

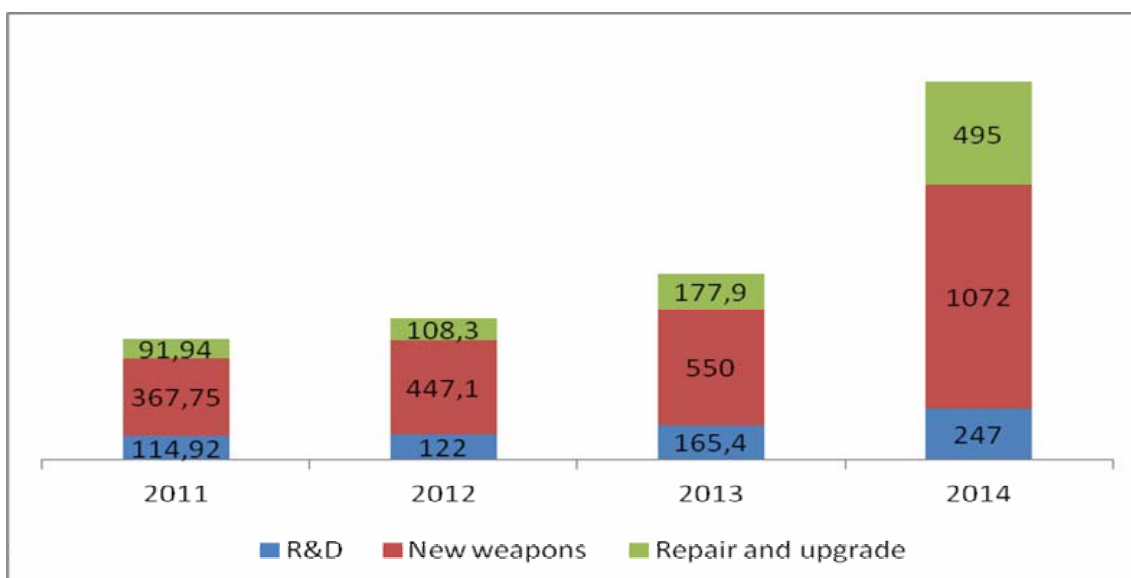
¹ It is known, for example, that R&D for the fifth-generation fighter project was funded from the budget of the Russian Ministry of Industry and Trade (Ministry of Industry and Energy before May 2008).

Defense procurement

Defense procurement is defined as total government spending on repair and upgrade of the existing military hardware, purchase of new arms and equipment, and R&D conducted in the interests of the armed forces and law-enforcement agencies.

There is no official definition of defense procurement in the Russian national budget. In any event, many procurement programs are classified. The only source of figures on Russian defense procurement is therefore statements made by Russian officials. We are focusing on procurement programs of the Russian armed forces (as opposed to the Ministry of the Interior, the Emergency Control Ministry, etc), so our figures are based on statements made only by the Russian Ministry of Defense representatives (Figure 2.2).

Figure 2.2. Russian armed forces defense procurement, billion RUR in current prices



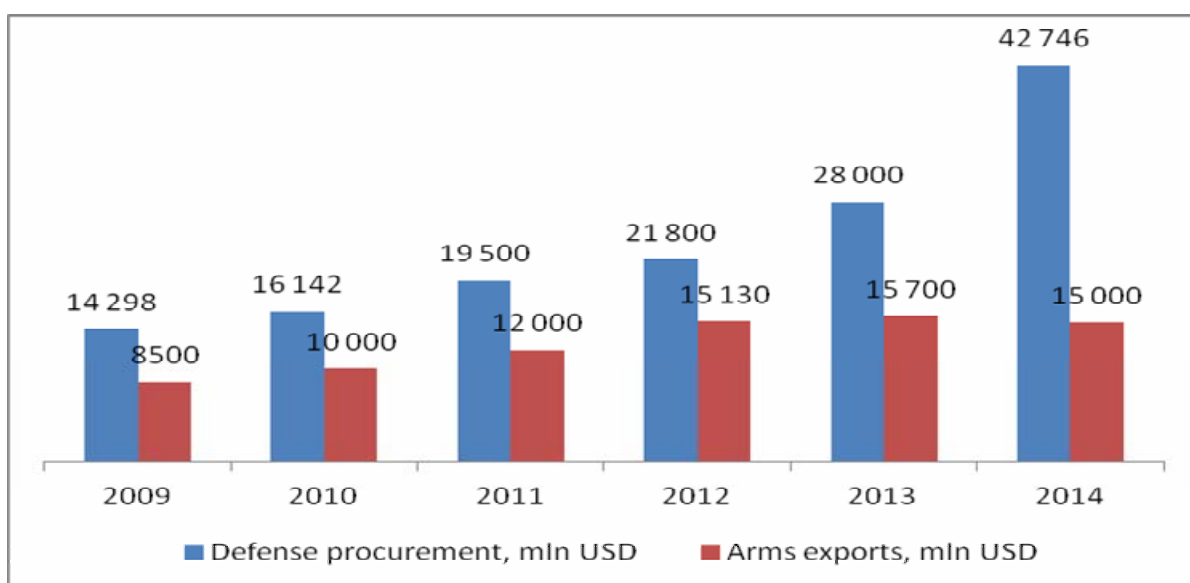
| | 2011 | 2012 | 2013 | 2014 |
|--------------------|--------|-------|-------|------|
| Total | 574,61 | 677,4 | 894 | 1650 |
| R&D | 114,92 | 122 | 165,4 | 247 |
| New weapons | 367,75 | 447,1 | 550 | 1072 |
| Repair and upgrade | 91,94 | 108,3 | 177,9 | 495 |

Sources: Russian Media, CAST calculations.

Defense procurement and arms exports

Let compare Russian defense procurement and arms exports. Economic stability of Russian defense companies was fully depended on export contracts in 1990s. In recent times the situation has changed dramatically. As Figure 2.3 shows, now the defense procurement is the main support for Russian defense Industry, exceeding the national arms exports in one-and-half times.

Figure 2.3. Russian defense procurement and arms exports, mln USD in current prices



| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------------------|--------|--------|--------|--------|--------|--------|
| Defense procurement, mln USD | 14 298 | 16 142 | 19 500 | 21 800 | 28 000 | 42 746 |
| Arms exports, mln USD | 8 500 | 10 000 | 12 000 | 15 130 | 15 700 | 15 000 |
| Exchange rates, roubles / USD | 31,76 | 30,38 | 29,39 | 31,07 | 31,91 | 38,60 |

Sources: State Duma's Defense Committee, Russian Federal Service for Military and Technical Cooperation, Russian Central Bank, Russian Media, CAST calculations.

3. Key* current contracts for Russian arms exports (as of July 2015)

| Contract | No of units. | Year signed | Deliveries time frame | Value, million USD | Comments |
|--|--------------|-------------|-----------------------|--------------------|--|
| India | | | | | |
| Su-30MKI kits for licensed assembly | 140 | 2000 | 2004–2015 | 3300 | |
| MiG-29K/KUB ship-based fighters | 29 | 2010 | 2012–2015 | 1500 | To be based on the <i>Vikramaditya</i> aircraft carrier (the former <i>Admiral Gorshkov</i>). Option to 2004 contract |
| Upgrade of MiG-29 fighters to MiG-29UPG mod. | 63 | 2008 | 2012–? | 964 | Six of the planes are to be upgraded in Russia, the rest in India. They will be fitted with Zhuk-ME radars and new RD-33 Series 3 engines. |
| Mi-17V-5 transport helicopters | 80 | 2008 | 2011–2015 | 1345 | The deal includes a 400m USD offset program to be financed by Russia |
| 3BM42 «Mango» APC rounds | 66000 | 2014 | n/a | 419 | |
| Bangladesh | | | | | |
| YaK-130 training aircraft | 24 | 2013 | 2015 - ? | 800 | Acquisition is made via Russian state loan |
| Vietnam | | | | | |
| Project 11661E frigates | 2 | 2013 | 2016, 2017 | 700 | |
| Project 06361 diesel-electric submarines | 6 | 2009 | 2013–2018** | 3200 | Contract also includes the buildup of land infrastructure |

| Contract | No of units. | Year signed | Deliveries time frame | Value, million USD | Comments |
|--|--------------|-------------|-----------------------|--------------------|----------|
| Su-30MK2 fighters | 12 | 2013 | 2014-2015 | 600 | |
| Azerbaijan | | | | | |
| Mi-17-1V helicopters | 40 | 2010 | 2011-2015 | 450 | |
| BMP-3 AFV | 100 | 2011 | 2013-? | n/a | |
| Algeria | | | | | |
| Project 06361 diesel-electric submarines | 2 | 2014 | n/a | 1200 | |
| T-90SA tanks | 200 | 2014 | n/a | 1000 | |
| Egypt | | | | | |
| MiG-29 fighters | 46 | 2015 | n/a | 2000 | |
| China | | | | | |
| S-400 SAM | 3 regiments | 2014 | n/a | 3000 | |
| Iraq | | | | | |
| Mi-28NE attack helicopters | 15 | 2013 | 2014 - ? | n/a | |
| Mi-35M attack helicopters | 28 | 2013 | 2013-2014 | 1200 | |

Sources: Russian media, CAST estimates.