

INSTITUTE OF ECONOMIC
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Macroeconomic Effects of Defense Spending in Russia: Retrospective Analysis and Forecast

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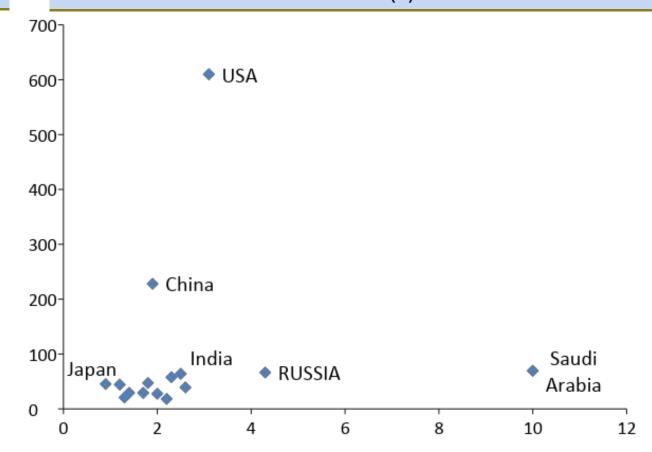
WORLD DEFENSE EXPENDUTERES

World defense expenditures by countries, bln. USD

USA China Saudi Arabia Russia 342.7 India France 610 18.2 UK 20.6 Japan 27.5 29.2 29.3 Germany Korea 39.2 44.3 Brazil ■Italy 228 Australia 69.4 Canada Turkey

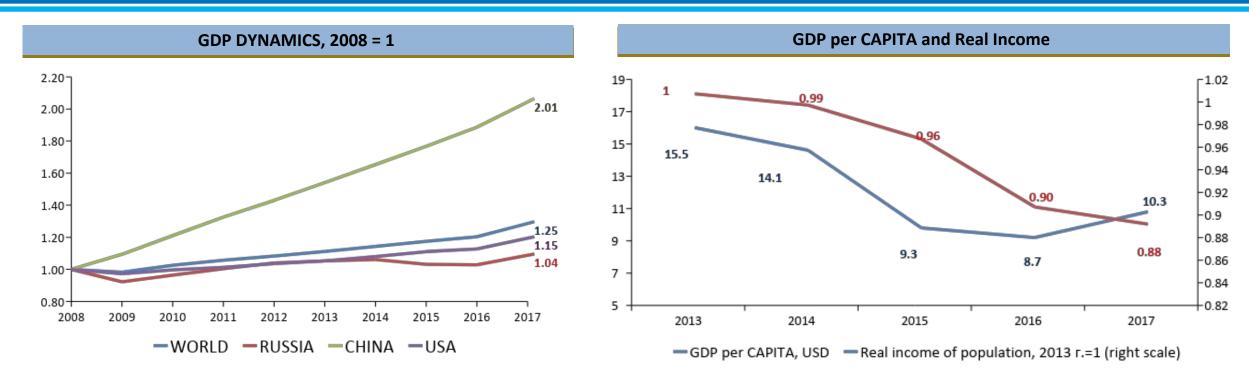
Other

World defense expenditures by countries, in bln. USD (Y) and as % of GDP (X)





10 YEARS OF STAGNATION



- •Over the past 8 years, the Russian economy has grown by 4%, the world economy by 25%. Only in order to overcome this gap for 10 years it will be necessary to grow at an average rate not less than 5%!
- •For the first time since the crisis of the 1990s, we have a situation of long-term decline in the income of the population, which not only generates social tension, but also worsens our position in the competition for highly skilled workers, stimulates the "Brain drain".

THE PROBLEM OF DEFENSE SPENDING PRODUCTIVITY

Some conclusions from available empirical studies :

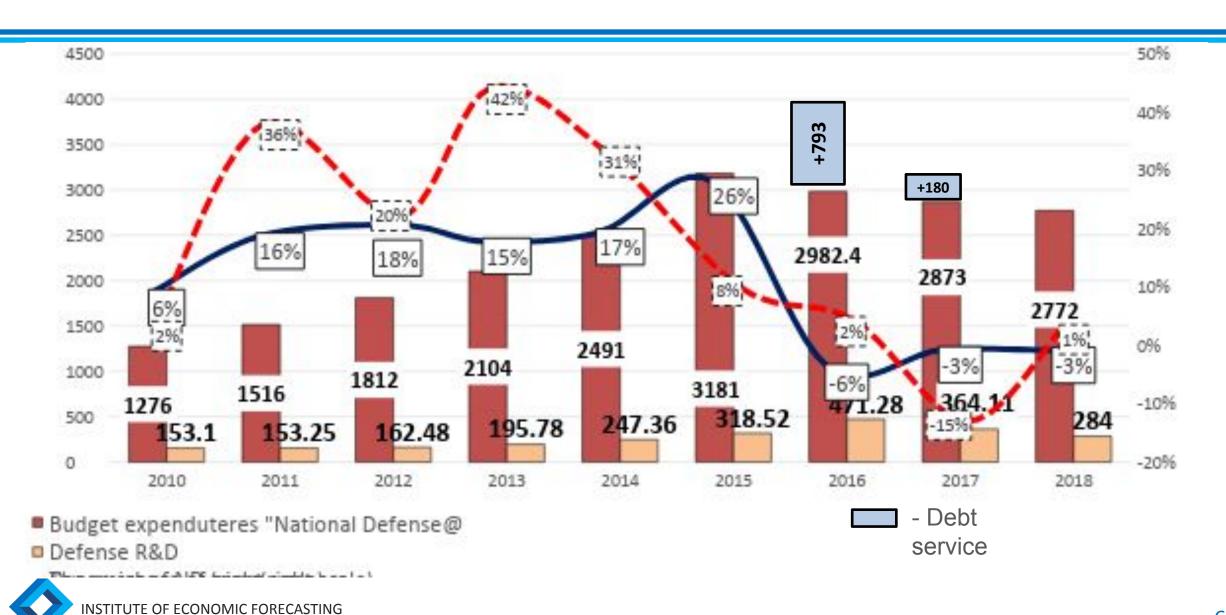
- —expenditures on national defense at least do not refer to expenditures that slow down long-term economic growth;
- —there is positive impact of human capital and infrastructure construction spending on long-term economic growth due to the reduction in the share of social expenditures (including pensions);
- —in general, empirical studies show that an increase in the share of investment in public consumption accelerates economic growth in the long run and the state redistribution of a part of the GDP in favor of household consumption leads to a slowdown in long-term economic growth.

Feature of Russian Defense Industry

- The sector is oriented not only on domestic consumption but also on export. In fact, it precipitates in a competition on the world market of Hi-tech production
- The sector needs in results of domestic R&D
- The security reasons require low share of import in intermediate consumption

THE PROBLEM OF DEFENSE SPENDING PRODUCTIVITY

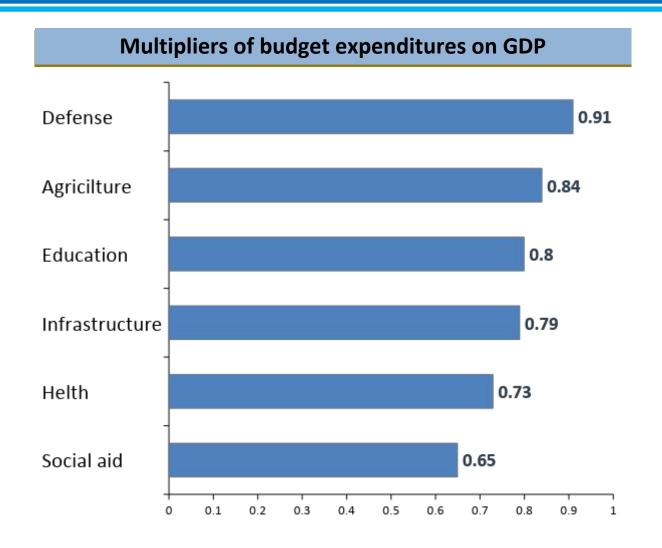
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Multipliers of Defense expenditures

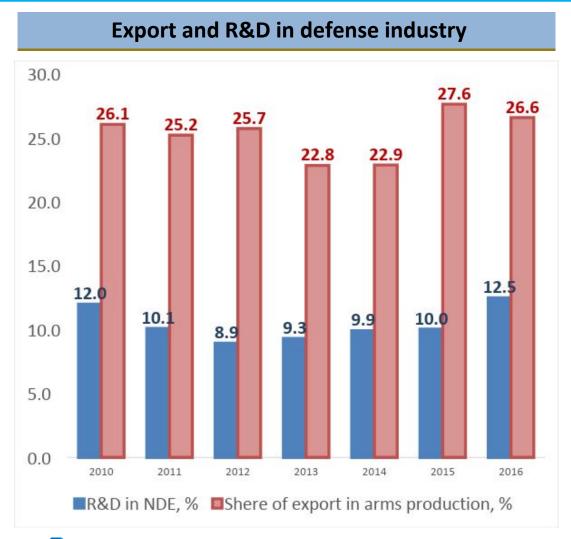
Multipliers of defense industry sectors on GDP , space and ship building 95 1.4 achinery and equipment 92 1.4 ectric equipment 92 1.3 lecommunication equipment 78 1.6 tomotive industry **72** 1.4 ectronic equipment 0.2 0.4 0.6 0.8

■Multiplier without import adjustment ■Current multiplier





Export of arms as an element of productivity

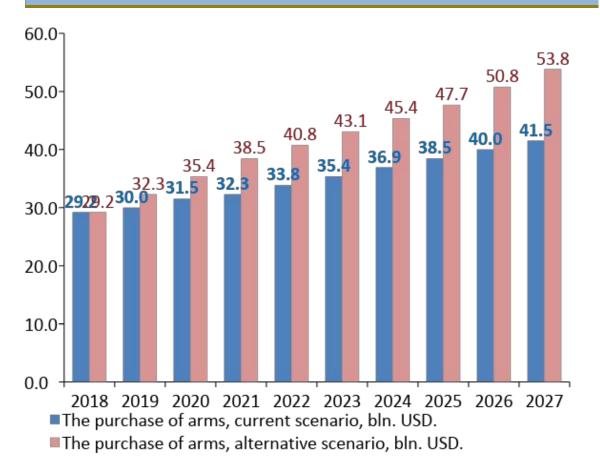


Export adjusted estimation of defense expenditures 6 5 2.3 2010 2013 2015 2011 2012 2014 2016 ■Total defense expendet expenditu **★**TDE export-adjusted res **★**TDE with export and multiplier adjasted adjusted

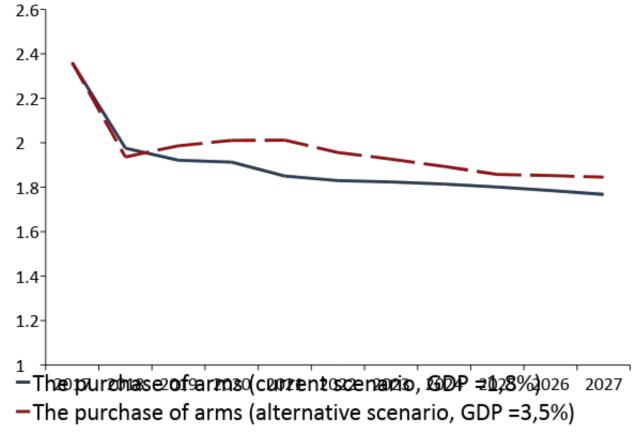


Scenarios of government consumption for arms

Scenarios for the public order of arms, bln. USD

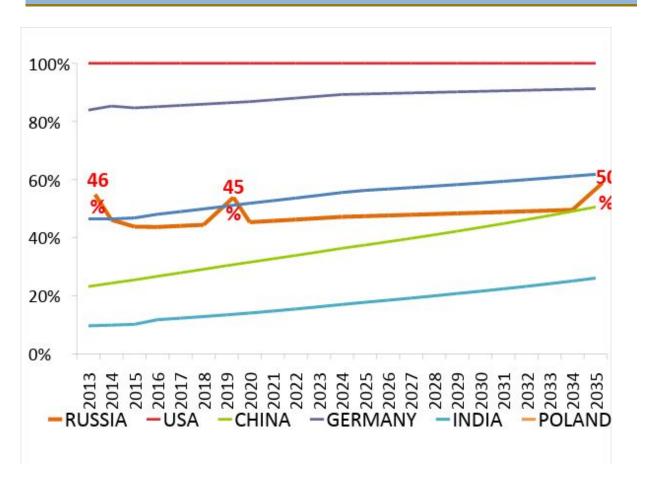


Scenarios for the public order of arms, %of GDP

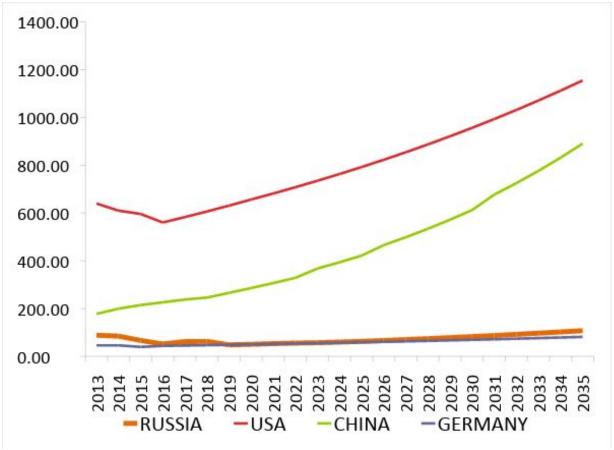


GDP DYNAMIC AND QUALITY OF DEFENSE SPENDING

GDP (PPP) per capita, USA=100%, Russia av.g. -2.0%



Nominal defense exp., bln. USD, current prices





Conclusions

- 1. In recent years, the defense industry complex has been one of the leading sectors of the Russian economy, which has ensured the growth of production and exports based on the modernization of capacities and investments in research and development, as well as has a high multiplier effect.
- 2. A long period of low economic growth produces irrational actions in the field of budgetary policy. The reduction of expenditures on state defense orders does not solve the problem of balancing. In addition, this redistribution does not contribute to accelerating economic growth in the short and medium term, not to mention the risk of weakening national security.
- 3. The volume of military expenditures in 2018– 2020 in real prices will be lower than the level of the peak of 2015; however, it will be greater than the expenditures in 2014, which will retain the positive pace of rearmament of the RF Army, albeit at a slower pace than in 2015–2017.
- 4. The policy of squeezing military expenditures causes the Ministry of Defense of the Russian Federation to underestimate the cost of WME models, and is one of the most difficult issues in the relationship between state customers and defense enterprises.
- 5. An accelerated reduction in R&D expenditures in defense spending reduces the potential for the defense industry to influence on the development of the national economy and worsens its competitiveness.
- 6. It will be necessary to increase the planned level of expenditures in the state defense order by 20–25% to ensure the necessary pace of renewing armaments in the next 10 years. However, when solving the problem of increasing the growth rate of the Russian economy to the world average, this increase in costs will not lead to an increase in the defense burden on the economy.
- 7. As Russian historical experience has shown, the excessive reduction in spending on arms can produced not only negatively effects on the defense industry but also create significant negative impact on the production chain in another industries, reducing the overall potential for economic growth.

