Putin 2000 – 2014, Midterm Interim Results: Diversification, Modernization and the Role of the State in Russia’s economy

A Wittgensteinian look at the Russian economy

by Jon Hellevig
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"The results of philosophy are the uncovering of one or another piece of plain nonsense and bumps that the understanding has got by running its head against the limits of language."

*Wittgenstein*

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5. Russian exports have grown fivefold.

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![Export growth in %, 2000 to 2012](Image)

Source: WTO

8. Oil & gas does not count for over 50% of state revenues as it has been claimed, but only 27.4%. Top revenue bringer is instead payroll taxes.

![Structure of Russia state revenue, 2013](Image)

Source: Adapted from Vedomosti

9. Russia’s total tax rate at 29.5% is among lowest of developed countries, non-oil & gas total tax rate is half that of the Western countries.

![Total tax rate, % of GDP](Image)

Source: 2014 Index of Economic Freedom, Heritage Foundation

10. Public sector employment in Russia is not high in a global comparison.

![Employment in general government as a percentage of the labour force](Image)

Source: International Labour Organization (ILO), LABOSTA (database), OECD Labour Force Statistics (database), Data for Korea were provided by government officials

11. Russia’s GDP has grown more than tenfold from 1999 to 2012.

![Russia, Nominal GDP, 1999 - 2012](Image)

Source: Awara Group

12. Russia’s labor productivity is not 40% of the Western standards as it is frequently claimed, but rather on the level of 80%.


13. Far from “relying” on oil & gas, the Russian government is engaged in massive investments in all sectors of the economy, biggest investments going to aviation, shipbuilding, manufacturing of high-value machinery and technological equipment.
INTRODUCTION

Why is the coverage of the Russian economy so skewed and misguided?

This study takes aim at disapproving the continuously repeated claims that Russia has supposedly not diversified and modernized its economy. Our report shows that it is especially false to claim that the Russian government has not done anything in this vein, that it would be “relying” on oil & gas rents and lacks an understanding that more must be done. Quite the opposite, the Russian state under Putin’s leadership has devoted all its spare resources to address this problem; the early results are impressive and a lot of effort and strategic initiatives are currently being implemented.

We are not implying that Russia’s economy is in anyway in an ideal state - it clearly is not (then again, there is the question, the economy of which country would you characterize as ideal?). What we want to say is that the Russian economy has reached an initial maturity, which provides a solid platform for taking the next leap to further industrialization and development of a strong manufacturing industry utilizing the highest levels of technology. This is why we are confident that Russia will be able to make the “true industrial breakthrough” that President Putin recently announced.

Putin envisions the creating of strong national champions in machinery and processing industries that will become major exporters of manufactured goods that are competitive on the global markets. Putin promises that this will also entail renewed investment in applied science and R&D in the fields of machine building and machine tool and instrument production.

We strongly believe that everyone benefits from knowing the true state of Russia’s economy, its real track record over the past decade, and its true potential. Having knowledge of the actual state of affairs is equally useful for the friends and foes of Russia, for investors, for the Russian population – and indeed for its government, which has not been very vocal in telling about the real progress. I think there is a great need for accurate data on Russia, especially among the leaders of its geopolitical foes. Correct data will help investors to make a profit. And correct data will help political leaders to maintain peace. Knowing that Russia is not the economic basket case that it is portrayed to be would help to stave off the foes from the collision course with Russia they have embarked on.

In this report, we offer facts that should convince any reader who is interested in the truth that Russia has during the past decade achieved impressive results in lifting, restructuring, diversifying and modernizing the economy. In view of this data, it is easy to believe that an industrial breakthrough will happen during the next 10 years.

We are constantly being told that Russia supposedly “relies” on oil & gas rents

It is continuously argued that during the Putin era, from 2000 to the present, Russia has done nothing to diversify and modernize its economy, which supposedly only relies on oil & gas rents. This contention is ceaselessly repeated in economic analyses to the extent that it resembles propaganda more than analysis, as is the case, for example, with this article in The Telegraph.
These kinds of ridiculous claims figure high in any Western business or political commentary on Russia. Such reporting passes for economic analysis for example in the writings of the tireless Putin critic Anders Aslund. Lately the narrative has been taken up even by leaders of rival countries. For example, Barack Obama, the president of the United States of America, who in view of the country's vast intelligence and analytical resources should be best informed about major trends in the world, permits himself to blurt that "Russia doesn't make anything. Immigrants aren't rushing to Moscow in search of opportunity. The population is shrinking," Obama is wrong on each count. We will here delve into the first, the question of Russia's industrial production and economic diversification. Former U.S. Secretary of State Hillary Clinton also thinks she knows that "Russia has not diversified its economy. It is still largely dependent upon natural resources, principally gas and oil." Lesser leaders around the Western hemisphere are parroting these same lines. Even Alexander Stubb, the prime minister of Finland, Russia's tiny neighbor, has got it in his head to spread these allegations about the supposed dismal and hopeless state of Russia's economy.

We should wonder where they get these ideas.

Regaining lost Time

The most frustrating thing about the constant unfair criticism about Russia's economy – indeed of all its social and political practices – is the total ignorance about the time factor. There is no attempt to relate the state of Russia's economy and its progress to the time it has had to develop. In our opinion, the proper starting point from which we should count is the early 2000's and perhaps even as late as 2004. By this we mean the point of time when Russia first reached the minimum political and social stability which enabled the successive governments under Putin's leadership to start thinking about such mundane things as economic strategy and industrialization. Prior to that, since Putin took over the presidency in 2000, it had been a question of basic survival and establishing the elementary structures and reach of government throughout the entire country. The first few years of Putin's presidency can be characterized as having nurtured Russia in emergency care, reeling from the knock-out effects of the destruction of the Soviet economy, which had severely declined in the late 1980's and the ensuing anarchy and robber capitalism of the 1990's. As soon as the first opportunities emerged to work on positive development, Putin seized them. And after that, Putin has achieved phenomenal results in developing the economy and society at large.

Ignoring the time factor and the chaos at the starting point, the self-styled Russia experts seem to want to compare Russia with the major Western countries that have developed in a market economy for hundreds of years. But even that is not enough; they don't only ignore the time factor, they also skew the comparative figures for Russia. We will show how.
MAIN FINDINGS IN SUMMARY

Wittgenstein: "What we are destroying is nothing but houses of cards and we are clearing up the ground of language on which they stood."

1. You cannot intelligently limit the story about Russia’s economy – as the misguided analysts do – to the question about the share of oil & gas in exports without looking at all the other aspects of it. After all, the oil & gas industry does in no way squeeze resources from the rest of the economy. On the contrary, it takes up only 3% of the workforce and subsidizes the rest of the economy with the export revenues and high taxes. Contrary to what we are told, there is no risk whatsoever of the “Dutch disease” here.

2. According to World Bank data the share of natural resources rents in GDP (the sum of oil rents, natural gas rents, coal rents, mineral rents, and forest rents) more than halved between 2000 to 2012 from 44.5% to 18.7%. The actual share of oil and gas (net of other natural resources rents) was 16%.

3. The thesis that Russia’s economy is a failure rests almost entirely on one single contention, the thesis – repeated ad nauseum - that “70% of Russia’s exports are made up of oil & gas”. This export figure is in itself true, but is by no means the end of the story. In this connection, the critics want to totally ignore the discussion of the impressive development of the domestic industry, the whole economy and the social structures. Exports are far from the only measure of how diversified an economy is. In any historic development of a national economy the process of satisfying domestic needs naturally comes first. This is what the misguided “Russia experts” fail to understand. They don't want to see that Russia has in 10 years totally modernizing its economy and industry and filled the vacuum in supply after the fall of the Soviet Union. It is only natural that in the first 10 years of economic restructuring you first supply the home market and move on to export markets only after you have satiated domestic demand. In these 10 years, Russia has indeed filled the vacuum on the domestic market with an impressive rise of 50% in industrial production.

Because companies as economic actors do not strive to satisfy the whims of economic analysts but to make a profit, companies on the Russian market have during the reindustrialization of the country first supplied the home market. Very few enterprises could possibly afford to employ such a fool as a CEO who would refuse to sell on the domestic market and instead start with exports only to satisfy the demand to “diversify Russia's economy”, as required by the Western and quasi-liberal analysts. No, corporations don’t work for these analysts; they work with a profit motive for their shareholders, selling where they can make the best profit.

4. But even that is not the end of the story. If the analyst would examine the figures beneath the surface veil of “oil & gas making up 70%...”, then he’d realize the that total exports have risen fivefold over 2000 to 2013 from $103 billion to $526 billion, and therefore exports of non-oil & gas products also grew by a whopping 250%. If this is not enough for 12 years, then what were they possibly expecting? A doubling every two years! More details here.

5. Besides this, the critics fail to notice that within exports of oil & gas proper there is an interesting diversification trend in that Russia has made a remarkable switch from exports of crude oil to exports of value-added refined products. More details here.
Exports of refined oil products increased by 900% from $10.9 billion to $109 billion. The share of value-added oil products has risen relative to crude oil in total oil exports from 30.6% to 38.6%.

6. While the accusation is constantly being made that Russia has failed to develop strong exports of manufactured goods, it is ignored that very few countries in the world have been able to develop such exports. I invite the reader to list 10 countries, in addition to China, that have been able to do it during the last 20 years. The same countries that dominated such exports continue to do it, albeit with falling volumes (except for Germany). Commodities prevail, as with Russia, in exports of two of the G7 countries, Australia and Canada. More details here.

7. Russia’s food production doubled from 2000 to 2013, at the same time that exports of food skyrocketed from almost nil to $16 billion.

8. We don't discuss in this report the growth of retail, but want to point out what all real experts should know - that the Russian retail sector over these years has undergone a total restructuring and modernization. Serious domestic and foreign retail chains have entered the market. Gone are the once ubiquitous shadow economy outdoor markets and rag fairs, having been replaced by modern malls, retail space and logistics centers. Naturally, retail had to come before production, and production before exports.

9. We are also puzzled as to the meaning of the claim that “Russia has not diversified its economy”. Perhaps this is just another nonsensical statement that does not mean anything.

One must understand that Russia is a market economy, and therefore the whole criticism that Russia has not diversified is wrong. For in this connection there is no “Russia”, there are only a multitude of corporations that make their own business decisions. And for all we know they have made the right decisions in investing in Russia and satisfying the domestic market.

By “Russia” then they can mean only the government. And here the question would be, whether the government (read, Putin) has not done enough to create the conditions for economic development, diversification and modernization. Our report provides the resounding answer that indeed he has. It would not be reasonable to expect any more impressive results for the first 14 years of this work.

In addition to providing the conditions for enterprises to thrive, the state may also take a more active role in the economy. Have the Russian governments under Putin not done so? Yes, they have. It has been done by targeted, successfully implemented, strategic programs for developing various sectors of the economy and industry.

Finally there is the question of direct state ownership in enterprises and investments in industry. Have the governments under Putin not done enough in this respect? No! – But wait a minute, isn’t that what the critics want? “No government investment in industry” is their war cry. These critics want to have their cake and eat it, too. No diversification of the economy has happened, they falsely shout. But at the same time they scorn all of Putin’s initiatives to invest in industry. Well, fortunately their looney criticism is increasingly falling on deaf ears as Russia has established a solid platform for the future - moving on to the next stage of development of the economy with Putin's program to effect an industrial breakthrough. More details here.
10. Public sector. It is argued that the public sector of Russia is disproportionate. We will show that this argument as well is false and baseless. Russia’s public sector is among the lowest among developed economies when measured on three key indicators.

While Russia’s total tax rate was 29.5%, the countries with developed Eurosocialism, like Finland, Sweden and France, had a total tax rate at the level of 45%. This means that the Russian government imposes significantly less taxes on its citizen and corporations than the Western countries.

The size of the public sector may also be measured in terms of government spending as a percentage of GDP. On this figure, Russia also ranks significantly lower than most of the Western countries, being about 2/5 lower than the Northern European countries.

Public sector share of employment in Russia is not high in a comparison with developed economies. State officials make up 17.7% of Russia’s total work force, which situates it in the middle of the comparison with global economies. More details here.

11. Oil & gas revenue does not make up 50% of Russia's budget revenue as is commonly claimed, but only 27.4%. It is not even the biggest source of state revenue, which position is held by payroll taxes at 28.8%. More details here.

But, notwithstanding that the share of oil & gas taxes is not as big as is commonly claimed, the oil & gas industry is heavily taxed. And this is not detrimental to the economy, as critics want us to think. Quite the contrary, the rather severe taxation of the oil & gas industry in fact means that it subsidizes the rest of the economy, which enjoys some of the lowest taxes of all developed nations. Russia's total tax rate net of oil & gas taxes is only 24.1% (2012).

12. Foreign direct investments. Critics constantly argue that Russia has not been successful in attracting foreign direct investments in its economy. This claim is also wrong, just like most of their supposed analysis. In fact, Russia has during the last three years attracted the third largest foreign direct investment flows of all countries in the world, right after the USA and China. When measuring the inflow of FDI as a percentage of a respective country's GDP, then Russia, followed by Poland, turns out to be the absolute leader for the years 2011 to 2013.

Following the tax reforms and other major reforms of Russian society by Putin, such as strengthening the judiciary system and rule-of-law and public administration, the Russian gross domestic product (GDP) in dollar terms has increased tenfold since Vladimir Putin first took office in 2000. At end of 1999, the Russian nominal GDP was in US dollar terms 196 billion. By the end of 2012 the nominal GDP had risen to $2,015 billion. This represents a growth of more than 1000% in 12 years. More details here.

13. Russia’s labor productivity is not at the level of 40% compared with developed economies, as critics claim. Rather, the whole method by which the measurement of labor productivity is supposedly derived using the GDP figures is wrong at best, and most probably outright nonsensical. The same applies to the method of comparing cross global labor productivity of companies by comparing sales revenue to workforce. More details here.
14. Critics habitually deny Putin any credit in the remarkable growth of the Russian economy since he took charge of the country. All is supposedly merely due to windfall revenues following sharp rises in the price of crude oil on world markets coinciding with his tenure. But, these same critics also hold against Putin the act of jailing the oligarch Mikhail Khodorkovsky. And yet, it was precisely the fact that Putin reined in the robber oligarchs and Khodorkovsky in particular that made all the difference. Only then was Putin able to pass legislation that ensured that Russia’s vast oil assets were taxed for the benefit of the national economy and its people. More details here.

"It is not a matter of discovering new facts, but of finding a way of expressing what we have known all along."

Wittgenstein’s method

Russian retail in 1990s...

...and same in 2009
Indeed, we are profoundly bewildered as to the unprofessionalism of the economic analysts and political pundits who pronounce on the Russian economy. How is it possible that they constantly miss the essentials? Not only do they fail in the analysis of the fundamental trends of the economy, but frequently they even get the facts totally wrong. In our great perplexity in this regard, we have been trying to let ourselves be guided by the old adage: Never ascribe to malice that which is adequately explained by incompetence. – But don’t rule out malice, for to that extent is the analysis intellectually feeble.

The economic and political observers who speak disparagingly about the Russian economy often claim that Russia (read Putin) “relies” exclusively on oil & gas revenues. As one analyst writes: “As much of the rest of the world struggles to cope with the fragmentation of manufacturing value chains and strives to move up the value-added ladder, Russia continues to rely on a largely commodity-based growth model”. The gist of that argument is that President Putin is a reckless leader who does not understand or care about economic realities and future prospects, being dominated by short-sighted illusions that oil & gas rents would carry Russia from here to eternity. They portray Putin as a happy-go-lucky kind of a chap who spends oil & gas revenues without caring for developing the overall economy. Not surprisingly, our analysis shows that that is a lot of bilge as well. Totally contrary to the idea that Russia was wallowing in an oil & gas binge, it has in fact been using the oil & gas revenues to subsidize the development of all the other sectors of the economy.

Another example of the “Russia relies on oil & gas” argument is provided by Dmitry Trenin from Carnegie Moscow Center. Trenin writes that Russia “lacks real economic strength” (we wonder what the definition is, in view of the data presented in this report) and rhetorically states: “unless it deals with this massive deficiency,” Russia will be doomed. The implication is that Putin has not realized that the economy must be strengthened; nothing has been supposedly done and nothing achieved. Trenin says that, “Russia should work to…” – but he has not noticed any work, even though it is his job to monitor these issues – “…advance in qualitative terms: labor productivity; science and technology power; and the general quality of life of its people.” And in the absence of that, Russia will “slide even deeper.” We can well understand that Trenin may miss the points on science and technology when the approach seems to be so superficial (probably relying on the Economist and other such sources), but the failure by Dmitry Trenin as a Russian living in Russia to detect any improvement in “the general quality of life” of the Russian people we must unfortunately attribute to the malice factor.

The charge that “Russia has not diversified” is also peculiar, not only because it is false, but also because the people that make the charge are usually either Western adherents of the free market theory or Russian domestic quasi-liberals. One may ask, who is this “Russia” that in their view has failed in this activity? They seem to be referring to the state and in particular Putin and his governments. But if so, then they are being very illogical according to their own ideology. We mean that they are the ones that claim that the state should stay out of the economy and not interfere in it. This being the case, how do they then think that the state has failed in the diversification? What should the state have done? Invest more in businesses? But wasn’t that precisely what they oppose? It becomes evident from this report that the state has done a lot for diversification in all aspects: providing a favorable tax regime, improving the business climate, supporting
companies and entire sectors of the economy to diversify, modernizing the economy. And quite recently Putin has announced that he will make these wishes of the critics come true with renewed heavy state investments in industry to create new strong national champions. But will that satisfy the critics, when their dream comes true? No, it won’t, because nothing will. They are in fact preciously little concerned about the economy. Their motto is: “It’s not the economy, stupid! Our business is Putin-bashing.”
Exports not only oil & gas

We are being reminded constantly that oil & gas make up 70% of Russia’s exports. We are then fed the conclusion that Russia has not done anything to diversify its exports. True, the oil & gas sector counts for approximately 70% of the exports. But at the same time total exports have risen fivefold from 2000 to 2013, from $103 billion to $526 billion. Strikingly, these analysts have failed to notice that beneath the surface of “70% of oil & gas” there hides a staggering 250% growth of exports of goods other than oil & gas. In 2000, non-oil & gas exports were worth $50.4 billion but as of 2013 they had grown to $176 billion. (Chart 1).

Looking at these amazing figures we remain utterly perplexed when we encounter the claim that Russia has not done anything to diversify its economy. The critics are not satisfied with the pace of doubling the non-oil & gas export volumes every five years. Then what did they expect? A doubling every second year!


Source: Rosstat, The Central Bank of Russia
Refined oil products on the rise

Furthermore, the critics fail to notice that within oil & gas proper there is an interesting diversification trend in that Russia has made a remarkable switch from exports of crude oil to exports of value-added refined products. Exports of refined oil products increased by 900% from $10.9 billion to $109 billion. The share of value-added oil products has risen relative to crude oil in total oil exports from 30.6% to 38.6%. If we net the exports of refined oil products (which in fact is manufacturing) from the figures, then we see that actually the share of crude oil & gas has remained almost the same in the overall export structure from 2000 to 2013. (Chart 2). Here we propose to take into consideration also the fact that the statistics from the beginning of the 2000’s might not give an entirely truthful picture of the relative share of oil exports as the figures might well be underestimated. This is due to the widespread tax evasion schemes that the oil exporters at that time engaged in. We will return to this matter below in connection with discussing the Russian tax reforms and the shady dealings of Mr. Khodorkovsky.

![Chart 2. Export Share of Russian Energy, 2000-2014](image)

**Source:** NordeaMarkets, Macrobond

Russia excels in global comparison

A major deficiency in the discussion about the Russian economy is the absence of a comparative approach. For us it seems very odd indeed, that you would pronounce on the results of someone or something without relating those results to what others have achieved. Only such a comparison would tell you what is to be considered as the norm and thus feasible. In medicine, you would not make a diagnosis without comparing the results of your patient to what the medical norms are.
We have made such a comparison. Chart 3 illustrates how impressive Russia’s growth has been in comparison to the major Western powers. From 2000 to 2012, Russia evidenced export growth of 398%, leaving Australia behind with 296% growth. The growth of the European powerhouse Germany with 163% pales in comparison with Russia. And the rest were far behind. We remind that Russia’s non-oil & gas exports grew by 250%, so even with this figure Russia is comparable Australia. But the “Russia experts” keep saying that there is no diversification and “Putin only relies on oil & gas rents” (sic!).

![Chart 3. Export growth in %, 2000 to 2012](source: WTO)

It is interesting to compare the structure of Russia's exports with that of Australia, Chart 4. We can see that minerals, oil products and commodities prevail with Australia similarly as with Russia although Australia is a mature economy that has had the possibility to develop its industry as a market economy for hundreds of years compared with Russia's a decade or so.

![Chart 4. Structure of Australian exports, 2013](source: WTO)
The structure of exports

Within the structure of exports (Chart 5) we may here mention a few sectors separately:

**Export of machinery and equipment.** Exports of machinery and equipment increased in the years surveyed from $9 billion to $28 billion, a 210% growth. Exports of machinery and equipment net of arms trade increased alone by 370%.

**Export of arms.** Russia now shares with the USA the position of number one exporter of arms with an annual volume valued at approximately $13 billion.

**Export of agriculture and food products** has skyrocketed during the years under review from almost nil to $16 billion (Chart 6). In grain exports Russia is now among world's top five exporting countries with exports of 22 million tons in 2012 (Chart 7). The volume of Russia's food exports is now bigger than its arms exports.

In export of services (which was not included in the above figures which represent export of goods), Russia's recent success in exports of software and programming work stands out. In just a few years the volumes have gone from half a billion of USD in 2003 to 5.2 billion in 2013. (Chart 8). Russia now counts as the world's third largest software exporter after India and China.

![Chart 5. Structure of Russian exports, 2000-2013](chart.png)

*Source: Rosstat, Central Bank of Russia*
Russian imports

The figures on imports together with those on foreign direct investments confirm that there have been massive investments into modernization of the Russian industry.

It is also worth noting how the export order portfolio of Russian state nuclear corporation Rosatom is expected to double in 2014 and reached $100 billion compared with $50 billion two years ago. I would think this is a truly hi-tech industry.
Chart 9 shows that within imports there has been a clear growth of machinery and equipment needed for industry.

![Chart 9. Structure of Russian imports, 2000-2013](image)

Critics constantly argue that Russia has not been successful in attracting foreign direct investments into its economy. This claim is also wrong, just like most of their supposed analyses. In fact, Russia has during the last three years attracted the third largest foreign direct investment flows of all countries in the world, right after the USA and China (Chart 10). When measuring the inflow of FDI as a percentage of the respective country's GDP, then Russia, followed by Poland, turns out to be the absolute leader for years 2011 to 2013 (Chart 11).

These foreign direct investments have precisely been attracted to diversify and modernize the economy.

Chart 10. FDI flows, 2011-2013

Source: UNCTADstat

Chart 11. FDI flows (in % of GDP), 2011-2013

Source: UNCTADstat
INDUSTRIAL PRODUCTION

Growth of 50% and total modernization of industrial production

The “Russia experts” start and stop their analysis with a reference to the 70% share of oil & gas in Russia’s exports. Full stop. It is as if, in their illusionary world, no other facts existed, as if an economy only consisted of exports. The much bigger domestic market they shrug off with the absurd pretension that “Russia does not produce anything, has not diversified and has not modernized” and “unless Russia does something about it, then...”. As if nothing had been done and nothing was underway. We have already seen a lot of facts that show the baselessness - and baseness of these arguments. Let’s now review a bit more in detail what the situation actually is in Russian industry.

For those who are accustomed to hearing that Russia presumably does not produce anything and who believe the legend that nothing has been done about developing and diversifying the economy, it might come as a surprise to learn that Russia’s industrial production has grown by at least half from 2000 to 2013. Chart 12 shows the growth of industrial production (volume indices) for different countries. Of the surveyed countries, Poland showed the most impressive growth, having practically doubled its production in the years under survey. Russia, with its more than 50% growth, was second. The other countries experienced at best a 10% growth (Germany), while the indicator was altogether negative for the UK and France. Naturally, we do not, by the sample of countries, pretend to show that Russia is among world leaders in growth of industrial production; rather the aim was to compare Russia with the leading Western countries. The wider database is available at this link.

![Chart 12: Index of Industrial Production in % to 2005 year (2005 = 100%), 2000-2013](image)

Source: UNECE Statistical Database, compiled from national and international (CIS, EUROSTAT, IMF, OECD)*
It is worth noting that this index is in volume terms, and thus is not dependent on price increases. What’s more, it should be recognized that in parallel with this growth in absolute volumes, there has been a total modernization of Russia’s industry, it having undergone a total revamp in terms of quality and desirability. Russia no longer produces low quality goods that are not attractive on the market, as was the case with the late USSR. Products that Russia produces today are quite competitive with imports in the given price segments. We would challenge anybody who disagrees with us to identify endemic low quality goods that have been upgraded in the modern economy. In view of this, the growth as such does not tell the whole story of renewal and modernization of the economy, as it hides the effect on restructuring the old production lines and improving quality of production. This tells much about the modernization that has happened in leaps and bounds, but is which is so difficult to measure.

The next stage of development will then be to increase exports of Russian manufactured goods. But this is not only a question of production, as there are many obstructions in the way. These include trade barriers that are raised due to geopolitical reasons and, very importantly, questions of brands.

Russia’s industrial potential is also evidenced by a comparison of the number of people employed in manufacturing industries in various countries. Chart 13 shows the percentages of the labor force of various countries employed by manufacturing. Of Russia’s total working age population, 14.8% were employed in manufacturing, which is significantly higher than the 10.1% for the USA. This global comparison is hardly indicative of Russia lacking manufacturing industries. We are inclined to consider that Russia indeed has a less productive manufacturing industry, in general, and therefore may employ more people than global efficiency standards would call for. But we would estimate that difference at a maximum of 20%.

![Chart 13. Employment in Manufacturing (% of total employment), 2012](chart.png)

**Source:** Bureau of labour Statistics, Rosstat
Chart 14 shows how the share of the working age population employed in industry (manufacturing, mining, and construction) has fallen across the globe.

**Chart 14. Employment shares by sector in %**

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Source: Bureau of labour Statistics, International labour comparison
Production of cars

Russia has almost doubled automotive production (private cars, trucks and buses) from 2003 when it produced 1,279,000 cars, to 2013 with production of 2,175,000 cars. In addition, some 900,000 cars were imported into Russia.

This represents not only a quantitative growth of cars produced but a total revamp of the sector. Gone are all the classic Soviet models as Russian producers have also updated their models and production processes to meet the high international standards. Russia has been successful in renewing its automotive industry by attracting major international car producers to manufacture in Russia. Over half of the domestically produced cars in Russia are foreign brands manufactured by Russian- and foreign-owned plants. The number of domestically assembled foreign cars sold in Russia increased from 290,000 (vs. 750,000 imported cars) in 2007 to 1,220,000 (970,000 imported) in 2012 (source: Association of European Businesses).

Naturally, in the initial stage the production of foreign brands in Russia has meant assembling the cars from foreign-produced parts. And this is, of course, what the critics want to maintain. In reality, the Russian government has been able to impose conditions that have served to encourage localizing of the production in Russia along the value chain securing the influx of foreign technology. The contracts with foreign manufacturers signed between 2005 and 2007 required that up to 30 percent of the production had to be localized. But, in later years the localization requirements have grown to 60 percent. Thirty percent of foreign car brands produced in Russia are also to be equipped with Russian-produced engines and gearboxes.

Following this successful industrialization policy in the automotive industry, the domestic car industry is estimated at over $40 billion (2013).

Isn’t this enough for ten years, or did the “Russia experts” expect Russia to become a major cars exporter within ten years as well?
Global car production and exports

In researching the Russian automotive market we came across very interesting data on the global market of car production and exports and therefore will shortly digress into that. We refer to Chart 15. From this we see the shocking figures of the change in car production in various countries, and the growth of the share of cars produced in the emerging markets, that is, non-Western countries. Production of cars in China has exploded in 10 years from 4.4 million in 2003 to 22 million in 2013. Big gains were made also by India, Brazil, Mexico, Thailand, Russia and Turkey.

Chart 15. Motor vehicle production by country, 2003 and 2013

China and most of the emerging car-producing countries have so far not become major exporters of their cars. But imagine what will happen when they do! Here the question is exactly the same as with Russia's exports; you satisfy home markets first and then expand to export markets. This should be of great concern to the Western world as car production is the single most important manufacturing industry in several of the major Western countries and cars is the number one top export of many of them, in particular: Germany, United States, Japan, United Kingdom, Canada, Spain, Czech Republic, Hungary, Slovakia, and Romania.
**Chart 16** illustrates the export and import of cars of the major players in international trade of cars. (EU presented as one block, and trade between the EU countries eliminated). There are a few striking conclusions to draw from this. We can see that Japan is very much dependent on the export of cars, as is Germany, which is the major exporter by far within EU. The imports are mainly absorbed by USA and China. What will happen to the EU when the USA and China stop buying German cars? And when China stops buying them and instead starts exporting its own? This is a real danger, especially as cars are by technological standards and quality fast approaching a commodity status and Chinese quality is growing. I would pose the question is the Western economic model centering on selling cars to each other a viable way for the future?

![Chart 16. Global export and Import of Car, 2010](image)

Source: Eurostat

**Agriculture and food production**

As examples of some of Russia's successful strategic programs on sectorial development of the economy we may mention the programs concerning the agriculture and food sectors. This was evident from the impressive figures, reported above, on food production and exports. The growth in total food production has been even more impressive. We see from **Chart 17** that food production has doubled from 2000 to 2013.

![Chart 17a. Index of food production in Russia, 1991-2013](image)

Source: Rosstat
If further evidence of the success of raising the domestic food industry was needed, then that is provided by the response of the Russian government to the hostile anti-Russian sanctions by imposing bans on food imports from EU and other Western countries. Although critics of Russia have been touting year after year how Russia does not produce anything and is totally dependent on the West for feeding the country, the import ban which came into effect overnight did not lead to any detectable deficiencies in food supplies, save a relatively slight increase in food prices, which is natural considering interruptions in the logistic chains and the ruble devaluation which coincided with it.

![Chart 17b. Production of livestock and poultry, 2000-2013](source: Rosstat)
PUBLIC SECTOR

Oil & gas and other natural resources rents, share in GDP

The flawed narrative of critics claims that Russia is a renter state living exclusively out of windfall profits from oil & gas extraction. This claim is being backed up by the much trumpeted reference to the oil & gas exports figure, but the critics are hard-pressed to come up with any other arguments to sustain their claim. Contrary to the widespread legend, the share of oil & gas and other natural resources (natural resources rents) in the Russian economy has actually dramatically decreased over the years from 2000 to 2012. According to World Bank data the share of natural resources rents in GDP (the sum of oil rents, natural gas rents, coal rents, mineral rents, and forest rents) more than halved between 2000 to 2012 from 44.5% to 18.7%. The actual share of oil & gas (net of other natural resources rents) was 16%. – This sure looks like diversification to us.

Russia's total tax rate as % of GDP is among developed economies

The contention that Russia runs a bloated state sector is disproved by the fact that Russia's total tax rate (the sum total of all taxes collected measured as a percentage of the GDP) is exceptionally low compared with other developed countries (Chart 18). While Russia’s total tax rate was 29.5%, the countries with developed Eurosocialism, like Finland, Sweden and France, had a total tax rate of 45%. This means that the Russian government imposes significantly less taxes on its citizen and corporations than the Western countries. It is our firm opinion that this is the most important parameter for considering economic freedom and the extent of state involvement in the economy. This is especially true for Russia considering its record low 13% flat tax on personal income, which leaves the discretionary power over spending with the individuals.

Chart 18. Total tax rate, % of GDP

Source: 2014 Index of Economic Freedom, Heritage Foundation
Comment to chart. Due to misconceived marketing purposes, The Heritage Foundation has chosen to call its rating 2014 Index of Economic Freedom, although all the data refer to earlier years. The foundation does not disclose which is the actual year for the data for the total tax rates. We assume that it is 2012.

Russia's total tax rate net of oil & gas rents

The comparison is even more favorable to Russia when we net out the share of oil & gas taxes. The total tax rate net of oil & gas taxes is as low as 24.1% (2012) (above Chart 18). The total oil & gas taxes equal a mere 9.9% of the GDP (2013). What this in fact means is that the oil & gas industry is effectively exploited by the Russian government to subsidize the rest of the economy and the living standards of the population. We have thus turned the question around. Contrary to the Russia-critics who complain about the state budget being dominated by oil & gas revenue – which, by way of implication, is deemed detrimental for the economy - we have shown that the oil & gas revenue actually is used for allowing exceptionally low taxes on the general economy and thus functions as a driver of economic development and diversification.

The conclusion that we must draw is that Russia is subsidizing the general economy and manufacturing industries – and personal freedom - at the expense of the oil & gas sector. This runs totally contrary to the standard claim that Russia “relies” on oil & gas rents and is not doing anything to diversify its economy.

World Bank gets it wrong

Unfortunately the World Bank is distributing from year to year totally faulty data concerning Russia’s total tax rate. This happens in connection with their annual report on a global comparison of tax systems called Paying Taxes 2014 by produced by the World Bank, IFC and PWC. The study forms part of a bigger project known as World Bank’s Ease of Doing Business Index. This bigger survey measures regulations affecting 11 areas of business activity, among them the regulations concerning taxation, which is done in the context of the Paying Taxes survey. The tax survey attempts to measure both the compliance burden on tax administration (number of tax filings and the time it takes to perform them) and the cost of all taxes borne (the total tax rate).

The methodology of the survey in respect of the total tax rate (and payroll taxes) is not only insufficient but outright skewed. As a result, the survey awards Russia a dismal position in the ranking, which does not correspond to reality. Russia, which actually has one of the lowest total tax rates in the world, as we saw above, places in the World Bank survey 178th out of 189 countries in this parameter (in the 2013 edition of the survey, which the World Bank’s marketing team decided to call 2014 edition). Following the misguided criteria used in the study, Russia’s total tax rate was 50.7 %, when it in fact it was 29.5% (2012).

The World Bank survey is methodologically flawed as it is based on a phony hypothetical case study which is wrong not only in its theoretical framework, but also makes use of incorrect assumptions that the survey is based on. The point is that the World Bank with PWC has not actually studied any real data and instead bases its survey on what would in a fictitious world be the fictitious taxation of a hypothetical company. They determine certain parameters for this fictive company and then ask representatives of various countries to opine what would be the tax burden if such a company under such and such assumptions would operate in the given country.
The business of this hypothetical company is defined as the production of ceramic flowerpots which it sells at retail. At the same time it is assumed that the company operates in the economy's largest business city, which in the case of Russia would be Moscow, or in case of UK - London, in Sweden - Stockholm. Thus, to start with the premises of the survey are totally flawed. It is a very unreasonable assumption that such a business would be conducted in these kinds of European metropolises. There is also an assumption that the model company would employ the same amount of management and staff in each country, namely: 4 managers, 8 assistants, and 48 workers. There then is the question of how to define the salaries of the employees. This has been resolved in the fictitious survey by determining that the managers receive an annual salary defined as '2.25*income per capita', the assistants '1.25* income per capita,' and workers '1*income per capita.' By 'income per capita' the World Bank apparently refers to GDP per capita. But it is a strange assumption to determine salaries in such a way. GDP has very little, if anything, to do with salaries. It is even stranger that this survey, which refers to data of 2012 (and is called the 2014 survey) uses the GDP data of 2005 to determine the fictive salaries for year 2012. The GDP per capita for Russia in year 2012 was 14,037 USD according to the World Bank, but in the survey they used the 2005 figure of USD 5,337, thus completely distorting any possibility to a real comparison.

It therefore seems to me that instead of attempting such a quasi-scientific survey, the World Bank should measure the tax burden not in relation to such a model company fraught with such numerous defects in underlying assumptions and instead just refer to the figures on total tax rate measured as a percentage of the GDP, as we have done above.

Our criticism of this World Bank study can be read in full here.

**Government spending as a share of GDP in Russia among lowest among developed nations**

The size of the public sector may also be measured in terms of government spending as a percentage of GDP. On this figure, Russia also ranks significantly lower than most of the Western countries, being about 2/5 lower than the Northern European countries with a developed level of Eurosocialism. *(Chart 19)*.
“Philosophical problems are caused by posing the wrong questions and the problems disappear with turning the investigation around”.

Adapted from Wittgenstein

Public sector employment

The above reported figures on total tax rate and government spending are significant measures of the level of the public sector of a country and thus state control. We saw that Russia ranks very favorably on these measures. Another important measure is the number of public sector employees as compared with those employed in the private sector.

We commonly hear from the dubious “Russia experts” how oversized the Russian public sector allegedly is. The number of “bureaucrats” in Putin’s Russia is swelling at such and such a rate from year to year, we are told. But with a bit of digging beneath the surface we will pop this inflated claim, just the way we’ve done with all the other preposterous arguments lined up in order to support the narrative of the oil & gas curse.

An actual comparison among developed nations shows that Russia does not by any means count among the countries with the highest number of state officials. According to OECD statistics, Russia places in the middle among developed countries by the number of all state officials as evidenced by Chart 20. The data shows that the percentage of Russians employed by the state actually dropped from 20% in 2001 to 17.7% in 2011 (percentage of total labor force).

Chart 20. Employment in general government as a percentage of the labour force (2001 and 2011)
We have not seen any authoritative figures on how many state officials there would actually be, but if we take the above mentioned 17.7% from OECD and the number on total labor force of Russia as reported by Rosstat (75.8 million), then we may conclude that there are about 13 million state employees in Russia.

**Turns out “bureaucrats” are not bureaucrats**

Let’s see what kind of people these state officials or “bureaucrats” are, which is the pejorative concept that the biased analysts use for state employees when referring to Russia, while for other countries they are just “state officials”. For many it may come as a surprise that these state officials, contrary to the image conveyed when talking about “Putin's army of bureaucrats”, are in fact not bureaucrats at all, that is, if you are not in the habit of referring to a teacher, nurse or traffic police as a bureaucrat. They are not the faceless Kafkaesque bureaucrats stamping documents and circulating them from one pile to another while expecting the citizens to kneel in front of them begging for mercy. Actually, the bulk of state officials in Russia is made up of teachers, doctors, nurses and other health care staff. These categories of people make up the absolute majority of state employees in Russia. Of the 13 million state officials teachers (education sector) make up around 5 million and health care workers (doctors, nurses and others) account for about 4.5 million. Other categories of state officials include: tax inspectors, customs officers, judges and court employees, police and officials of related structures, and permanent military personnel.

Here we should stop to draw attention to the fact that the number of Russia’s state officials are thus not directly comparable with countries such as the USA, which offer considerably less state sponsored health care and education services while having the corresponding categories of staff on the payroll of private hospitals, clinics and schools.
By number of actual bureaucrats Russia is far behind the Eurosocialist countries and on par with the USA and Japan

Russia repeatedly receives bad press about this indicator, most recently in a study published by RBC news portal. The RBC study offers a good starting point for the analysis. Beyond the headlines and the tendentious reporting it also offers, in fine print, some facts which actually contradict the main contention, that Russia supposedly runs a bloated public sector as measured by the number of employees. Hidden in the text of the report, we find the startling conclusion that according to the authors the number of “bureaucrats” in Russia is far from the top in a global comparison. We read on: “in the Scandinavian countries and Canada the number of state officials measured as state officials per capita is about two to three times bigger than in Russia”. In Germany, USA, Japan, Spain and Israel the number of state officials is, according to the authors of the RBC study, on the same level as in Russia or 100 to 110 per every 10,000 inhabitant. These figures refers to a category that RBC calls “actual bureaucrats” (“konkretno chinovniki”). The actual figure for this category of state officials is given by RBC as 1.45 million, which thus is about 11% of the total 13 million state employees. This figure is merely 1.9% of Russia’s total labor force. In this category, RBC counts such state officials who work in state administrative and control funcons as well as law enforcement (including courts), as opposed to the bulk of the people we listed above as working in education, health care, etc.

Of these 1.45 million, 217,000 are employed by the tax and customs services and 150,000 in courts (according to the RBC figures, which might not be entirely correct). Although the RBC admitted, in fine print, that the figure is not high in an international comparison, the RBC could not resist the taunt to claim that by this number today’s Russia employed even more bureaucrats than the Soviet Union. But by turning the question around a bit we will see the force of this argument also evaporating. Firstly, if true, then we would have to draw the striking conclusion that in all the countries in which, as the RBC earlier mentioned, the number of bureaucrats was higher or equal to that of Russia (the Scandinavian countries, Canada, Germany, USA, Japan, Spain and Israel), the bureaucracy also outnumbered that of the Soviet Union. Then what would that tell about the efficiency of the Soviet bureaucracy compared with say that of the USA? Especially so considering that the USSR existed largely in a pre-Internet and pre-automatization world. Secondly, the comparison here is between apples and oranges. The functions of the state in the Soviet planned economy were cardinally different from the open market economy of today’s Russia. In particular, the Soviet state did not run a system of taxation as the allocation of resources was made according to the state plan. Also the customs services were of minor importance compared to the market economy Russia with its open foreign trade with an unlimited number of actors. The same can largely be said for the system of courts and several other state functions. According to the RBC figures, 217,000 of the 1.45 million “bureaucrats” were employed by the tax and customs services and 151,000 by courts. We can therefore see that whatever increase there has been has been fully motivated by the functions of a democratic market economy.

There is yet another aspect to this. RBC writes that 248 thousand of above mentioned 1.45 million state officials were employed by the central federal government and 246 thousand by the regional governments. This means that Russia has in the conditions of a democratic form of government decentralized government functions. Decentralization, while laudable in every aspect, we would think, inevitably leads to an increase of the total number of state officials. Our conclusion in this respect is supported by the OECD statistics, which show separately the portion of state officials employed by the central government as opposed to the regional governments. We see from Chart 21 that in an international comparison the share of Russia’s central government indeed is low.
Chart 21. Distribution of general government employment across levels of government (2011)

Source: International Labour Organization (ILO), LABOSTA (database)
TAXATION AND GDP

Spectacular growth of Russia's GDP following Putin's Tax Reforms

The reduction of the share of the oil & gas sector of the Russian economy has come on the tail of the most spectacular growth that any economy in the world has ever achieved.

It was only after Vladimir Putin first became president in 2000 that Russia's great tax reform took wind in sails and dramatically transformed the business climate for the better and eventually led to explosive increases in state tax revenue and GDP. The tax reform was implemented through a gradual adoption of the Russian Tax Code Parts I and II, setting lower tax rates and clearer rules concerning each of the different types of taxes. Tax Code Part I, containing the legal and administrative principles regulating taxation, was first enacted in 1998. Gradually over the years, much aided by court practice and the precedents developed by the Constitutional Court and Supreme Commercial Court (“Supreme Arbitration Court”), the principles of Russian taxation and tax administration have developed to represent the best area of Russian state administration. Today the tax reform stands out as a prime example of Russia's success during the 14 years of reforms. At the heart of the reforms lies the classical liberal tax theory, according to which lower taxes translates into increased tax revenues. Therefore, it is an interesting historic irony that Russia, a country where the socialist creed reigned strong until very recently, has now been converted into the international showcase of economic liberalism. In America Ronald Reagan and like-minded politicians were known for campaigning for such tax policies, but it is only in Putin's Russia that they were implemented. Reagan could hardly have even dreamt of such measures as Putin's 13% flat tax on income. It is fair to say that never before has there been such a dramatic and speedy shift from socialist tax policies to classical liberalism, and the results could hardly have been more impressive.

The tax reform spearheaded by Putin has given Russia Europe's most liberal system of taxation. Today in Russia there are in place transparent tax laws and internationally low tax rates, which provide good incentives for hard work. The corporate profit tax rate is 20% and in taxation of personal income residents of Russia enjoy a record low 13% flat tax rate for all income brackets.

Read more on the Putin's tax reform here.

Source: Russian Ministry of Financy


Source: Russian Ministry of Financy
Here it is of particular importance to point out that Putin’s great tax reform and its implementation came precisely thanks to the president’s will, courage and commitment to challenge the oligarchs and in particular Mikhail Khodorkovsky, who had been opposing fair taxation of oil and other natural resources. Read more.

**Putin’s Millennium Challenge**

As this report summarizes, in discussing the impressive GDP growth and other economic achievements since 2000 when Putin first became president of Russia, it is appropriate to make reference to a remarkable document that set the course for Russia's economic transformation in general, and the tax reform in particular. This is a prophetic article titled "Russia at the turn of the millennium", originally published on the government web site and republished in print. It was a program article by then Prime Minister Vladimir Putin, published on December 30, 1999, a day before Boris Yeltsin resigned. (Putin, as the prime minister, became acting president upon Yeltsin's resignation, in accordance with the Constitution). This was in essence Putin’s manifesto on how to tackle Russia’s dire woes prevailing at the time and a vision of how to lead Russia into a better future. It is a stunning document that served as the basis for a vision come true. The article was written in another world and in a completely different reality, yet it remains fresh, as if it had been written only recently. Based on my observations, I think that the author would not have written it much differently, even having access to all the experience gained over the next twelve years— he has been able to address and remedy the problems identified back then, and he has converted Russia into a country that has metamorphosed into a modern country that is now in the vanguard of the new millennium, just as he would have wished it.

The reader may then conclude for himself which portion of the bad press Russia has received on its supposed failure to diversify is attributable to incompetence and which to malice.

By all this, I do not by any means want to claim that the Russian economy is in an ideal state. On the contrary, serious work and engagement is needed to continue the work on diversification and modernization. But, what I am saying is that the progress in these respects during the early years of the Putin era from 2000 until now has been impressive. The work is developing in the right direction. It should be especially noted that these results have been reached in a Russia that was torn and in a deep crisis after the fall of the USSR and the anarchy that followed it in the 1990's economically, politically, socially and geopolitically. At the same time, when the governments under Putin have had the task of recovering elementary standards of living there have been impressive structural and qualitative improvements in the economy. This does indeed instill hope that during the next ten years of Putin’s governments Russia will progress even further and become one of the leading industrial innovative economies.

The article touched all aspects of life and society, identified the problems and outlined the remedies. In essence, it spelled out the strategy for Russia, the strategy that this man as the CEO of Russia meticulously implemented. For those that are interested in how one brings vision into action at the highest level of organization, at the level of an entire country, which in this case is the largest country in the world by territory and ninth largest by population, I recommend reading Putin’s millennium challenge article in full: Russia at the Turn of the Millennium. The Russian original is available here.

Well, there's a man turning vision into action!
Low flat tax leads to surge in tax revenue

Russia’s liberal tax reforms have yielded precisely the results a liberal theory would predict: with lower tax rates and simplified procedures, the tax intake has surged - this when at the same time the economy has grown by leaps and bounds. We will show below, with reference to several figures, how tax revenue has skyrocketed from the onset of the tax reforms in the first year of Putin’s presidency in 2000. In order to make all figures comparable and to remove distortions caused by inflation and devaluation, we present all figures in US dollars. Chart 23 shows the overall increase in state revenue from 1999 to 2012. The figures include tax revenue and all other state revenue, such as customs duties and employer’s social contributions. In 1999, the year before Putin became president and prior to the onset of the tax reform, Russia's total state revenue was equal to USD 49 billion. By year 2012, this figure had snowballed into 756 billion. This represents an increase of more than 15 times in 13 years. Read more on impressive growth of Russian tax revenue 'following Putins tax reforms here.

Russia has the lowest taxes on labor among major countries

The total real tax on labor costs in Russia is among the lowest in the world. To determine what is the real tax rate on labor (payroll taxes), one must consider not only the personal income tax but also all the other statutory charges for health insurance, pension and other social security benefits that are charged both to the employee and the employer (social security contributions). In Russia no social security charges are levied on the employee (the employer bearing the entire burden), whereas in most countries globally the employee is also liable for social security charges. The employer’s social contributions are charged on a regressive scale at a rate of 30% for the first RUB 624,000 of annual salary, after which the rest is charged at a rate of 10%. (The limit was 568,000 in 2013). In addition, there is only the mandatory workplace accident insurance with rates that vary according to the activities of the firm. The rate would be 0.2% for the typical office worker.
Awara concluded a global survey of payroll taxes published earlier in 2014. The survey showed that the take-home salary across the globe was highest in Russia. This means that the after-tax portion of all the money that an employer spent on salaries was among the biggest in Russia. Hereby the study considered all taxes and similar charges both those that were imposed on the employer and the employee.

This means that in Russia an employee would, from a gross salary of EUR 5,000 per month receive a net salary of EUR 4,350 and the total monthly cost for an employer would be EUR 5,720, whereas an employee in Belgium would be left with EUR 2,670 from a salary of EUR 5,000 and the total payroll cost for the employer would be EUR 6,700.

Chart 24 shows what part of the total salary costs are eaten up by taxes in various countries under the scenarios of a EUR 24,000 and EUR 60,000 annual salary.
The Russian economic miracle - Tenfold increase of GDP

Following the tax reforms and other major reforms of Russian society by Putin, such as strengthening the judiciary system and rule-of-law and public administration, the Russian gross domestic product (GDP) in dollar terms has increased tenfold since he first took office in 2000. At the end of 1999 the Russian nominal GDP was in US dollar terms 196 billion. By the end of 2012 the nominal GDP had risen to 2,015 billion. This represents a growth of more than 1000% in 12 years. You can read more about the growth of Russia's GDP during the first 13 years of Putin's reforms in [here](#).

![Chart 25. Russia, Nominal GDP, 1999-2012](source: Awara Group)

When attempting a comparison of GDP between countries, the nominal GDP figures may be misleading as they do not account for the different price levels in the countries. For this purpose, economists calculate GDP estimations at PPP or purchasing power parity. If we report the figures in USD then the PPP calculations indicate what the size of the economy would be (the sum value of all goods and services produced in that country) valued at prices prevailing in the United States. This is the comparison of how much one dollar buys in various countries. Expressing the GDP in PPP, the Russian economy has grown from USD 870 billion in 1999 to 3,373 in 2012. By this measure, Russia became in 2012 Europe’s largest economy and the 5th largest economy in the world after USA, China, India and Japan. The dynamics of the PPP and nominal measure are given in Chart 26.

![Chart 26. Russia, GDP PPP, 1999-2012](source: Awara Group)
As we have said, the critics want us to believe that President Putin has no hand in this outstanding growth in Russia’s GDP, and that all is just a result of the oil & gas price boom on the global market. When confronted with this argument we like to throw in this chart that compares Russia’s GDP growth with three other oil exporting countries, Saudi Arabia, Norway and Venezuela. (Chart 27). Do these critics ever ask themselves why the oil price boom translated into such a disproportionate growth in Russia compared with the other countries that enjoyed the same boom?

Chart 27. GDP growth of Russia, compared with other oil exporting countries, 1999-2013


Tax on oil & gas in Russia

As further “evidence” of the alleged failure to diversify its economy, the critics charge that such and such percentage of the state revenue consists of oil & gas rents (taxes). With this figure – no surprises here - the “Russia experts” are also far off the mark reporting that more than 50% of state budget revenues come from the oil & gas industry. But contrary to this widespread legend, revenue from oil & gas does not dominate the Russian budget.

This claim is utterly wrong. In reality, the correct figure for the share of oil & gas taxes (including customs duties) in the state budget is 27.4% (2013). This is evident from a review of the actual consolidated state budget revenues for year 2013 in Chart 28 taken from the financial journal Vedomosti. And that’s not all. There is other bad news in store for the critics: the oil & gas revenue does not even constitute the top revenue source. The top position now belongs to payroll taxes, personal income tax and social security contributions. The payroll taxes made up 28.8% of the state revenue (consisting of 10.4% personal income tax and 18.4% social security contributions), leaving behind also corporate income tax with 8.6%. This should really baffle people. First, we say that the payroll taxes in Russia are the lowest of developed countries, including a flat 13% income tax, and next we say that this category of revenue is number one. Even before the dreaded oil & gas revenues!
For the record, the Russian oil & gas sector employed only about 3% of the country’s total labor force, which should quell any temptation to assign the payroll taxes back to the oil & gas industry. Thus, the personal income tax collection cannot be seen as a derivative of the oil & gas sector.

The total oil & gas taxes equal a 9.9% share of the GDP (2013).

Unfortunately, one of the sources for this erroneous data on the share of the oil & gas in state revenue can be traced down to Russia's Federal Treasury which gives that data on its web site. The error is due to restricting the comparison to the share of oil & gas in the federal budget. But the federal budget is only one of three components of the Russian state revenue system. Part of the taxes goes to the regional budgets: all of personal income tax and approximately 2/5 of corporate profit tax as well as all the social statutory social contributions go to the social funds. These are all commonly consolidated in what amounts to the Consolidated Budget of the Russian Federation, which the Federal Treasury itself also publishes. There have been over the years frequent changes in the distribution of the revenue between these tax receivers depending on shifting preferences in public administration policies. Thus, there is no good reason why the comparison should be restricted to the federal budget. Considering this, we are perplexed as to the motives of the Federal Treasury giving wings to such an unsound claim about the share of oil & gas revenue by restricting the comparison to only one part of the equation. All these things affect Russia’s credit ratings and investor decisions, as well as political moods.

The oil & gas industry subsidizes the development of the general economy

Although the oil & gas taxes do not make up for the majority and not even the biggest part of Russia’s tax revenue, they are still significant. And contrary to the conventional logic that the oil & gas sector would lay like a burden over the general economy the severe taxation of this sector actually subsidizes the development and diversification of the rest of the economy.
There are not available any official data on the actual efficient tax rate on the oil industry but we may estimate it as being around 70% of the total revenue stream. (Some observers have even expressed higher estimates). We may motivate our estimation by the below analysis.

The special taxes that apply to the oil & gas industry are mainly the minerals extraction tax and export duties. Some revenue is also received from production sharing agreements and excise taxes. The rates of the specific oil industry taxes are pegged to the market price of oil and can therefore be expressed only by way of example to a given market price level.

A study from 2008 calculated the distribution of the so-called oil rents as per Chart 29. The calculations were done at the then prevailing average market price of oil of USD 105.32 (Urals, average price for first half of 2008). According to this study, the share of the minerals extraction tax was 19% of the total revenue derived from the oil industry, whereas tax in the form of customs duties was 44%. These specific taxes would thus amount to 63% of the total revenue from oil. In addition to these, there would be corporate income tax which – deriving from the study – would be 2.8% (with the then prevailing corporate profit tax rate of 24% on the 10% which was the corporate profit).

Chart 29. Oil industry revenue distribution

According to another source the specific oil taxes would bring USD 55 with the price of oil at USD80, that is, 69%. We would therefore estimate that the total tax rate on the oil industry could be at a level of 70-75% given an approximate oil price of USD 100 per barrel.

The critics habitually deny Putin any credit in the remarkable growth of the Russian economy since he took charge of the country. All is supposedly merely due to windfall revenues following sharp rises of the price of crude oil on world markets coinciding with his tenure. But these same critics also hold against Putin the act of jailing of the oligarch Mikhail Khodorkovsky. And yet, it was precisely the fact that Putin reined in the robber oligarchs and Khodorkovsky in particular that made all the difference. Only then was Putin able to pass legislation that ensured that Russia's vast oil assets were taxed for the benefit of the national economy and its people.
Prior to curbing the oligarchs the share of oil & gas in state revenue was less than 4% (compared with today's 27.4%). One analyst who claimed the oil & gas revenue made up more than 50% of the state revenue wanted to take this as evidence of the “increase in dependence of oil & gas exports” compared with the “rosier days” of the 1990’s, when oil revenue made up only about 4% of the total tax revenue (1997).

In reality, the question is about the oligarchs' increased dependence on the law. The amazingly low share of oil & gas in state revenue in the 1990's and early 2000's before Putin's measures took effect is simply explained by tax evasion. The thing is that the exporters of natural resources were running elaborate schemes to avoid taxation in Russia by channeling their commodities through offshore structures in their own control. Khodorkovsky was especially apt in the game of selling oil at extraction cost to offshore companies in his control which then re-sold the oil at market prices to the actual buyers. Through such schemes Khodorkovsky avoided paying any income tax in Russia as formally in the cooked books no profit was made. About this problem you can read here in English and here in Russian.

There is an interesting article by Eric Kraus titled Through Western Eyes – Russia Misconstrued in the book Putin’s New Russia, which gives a credible account of Khodorkovsky's crimes and shady dealings.

Khodorkovsky had been the leader of the lobby that fiercely rejected any increase of taxes on oil and other natural resources. Khodorkovsky had also secured control by way of bribery and intimidation of the Russian parliament, the Duma, which rejected all Putin's proposals on tax hikes. It is said, he had bought control of as many as 100 seats in the Duma and he had been plotting an outright hostile takeover of the Duma in the elections of 2003 by bribing several party leaders to place his people high in the party lists that were to determine who gets seats in the Duma. Khodorkovsky was also to finance the campaigns of these parties with a staggering USD 100 million. In particular, he had been able to head off attempts by the Duma to increase taxes on petroleum producers in 2001 and 2002. Khodorkovsky's oil lobby was aided by the propaganda influence the oligarchs exerted on the population through the Russian media that was in their control. An articulate discussion of these events is given in an article by Marshall Goldman titled “Putin and the Oligarchs” that appeared in Foreign Affairs in the November/December issue of year 2004.

This account of Khodorkovsky's activities are corroborated by an article in Businessweek, hardly a source sympathetic to Putin. Businessweek wrote: “But many in Moscow say the real reason for the Kremlin's attack was the tycoon’s campaign last summer to stymie all efforts to raise taxes on the oil industry, which was raking in billions of extra profits as the price of crude rose. Each time a bill came up, the Duma voted down the amendments spelling out the terms of the new taxes. The chairman of the subcommittee on taxation was an ex-Yukos executive and major Yukos shareholder. Even Communist deputies voted against the amendments.” Further in the article: “Later, candidates linked to Yukos started appearing on the electoral lists of various political parties for parliamentary elections later that year. Rumors began circulating of the huge sums Khodorkovsky was willing to spend to bolster his political influence in the Parliament.”

Further insight to these events can be gleaned from Michael Hudson’s article “Reforming the Reformers” from February 2004. From Hudson’s article we note that at that time even the New York Times admitted that “The nation’s largest businesses, from oil giants to banks to manufacturers, have not only poured money into the parliamentary elections to be held on Sunday, but have also filled party tickets with dozens of their own executives. . . . The [Yabloko] party has candidates from prominent companies controlled by other oligarchs.”
As we reported above, the refusal of the oligarchs to share the oil rents with the state was not only a question of the tax rates, rather they also resorted to direct tax evasion. This has also been well documented by Michael Hudson. Here is a link to a corresponding article in Russian.

Thus, it is clear beyond any doubt that the economic miracle, which has been resulted in a huge surge of tax revenue from the oil & gas sector, occurred precisely due to the fact that Putin could muster the enormous courage and strength to go after the robber oligarchs. Only this ensured that the yield of Russia’s rich wealth of natural resources was for the first time in history used for the benefit of its people and the national economy.
"Whereof one cannot speak, thereof one must be silent."

Wittgenstein.

LABOR PRODUCTIVITY

Labor productivity – What is actually being measured?

Labor productivity on a macroeconomic level is a by and large misconceived measure if not outright nonsensical. That kind of labor productivity in reality measures nothing. At best it is just another – skewed -way of presenting GDP per capita data. ‘GDP per capita’ is received by dividing the country’s GDP by the number of its population, while ‘labor productivity’ does the same merely replacing the whole population with the country’s working age population (total workforce). Naturally one may argue that the more efficiently labor is organized, the more productive the labor is, the bigger the output and the higher the GDP. But many other things affect GDP, too. To start with there is the question of the relative price level in the countries under comparison, which is measured as the purchasing power parity (PPP). That in itself is very much open for conventions and assessments, but certainly labor productivity would better be measured by the PPP adjusted GDP figure and not the nominal GDP. But a lot of other macroeconomic actions and events affect the GDP, such as taxes that push up the general price level, and hence GDP, in high-tax countries. Borrowing at all levels of the national economy, government, corporations, and households also increase GDP and therefore the base for calculating the labor productivity without any real improvement in actual labor productivity. The more leveraged an economy is, the better the labor productivity looks, when it is measured in that faulty way. Even Central Bank financing in the form of so-called quantitative easing increases the GDP, leading to imaginary improvement in labor productivity. The natural resources assets a country possesses or its climate and scenery may serve as sources of wealth which are independent of any real efficiency in labor productivity. Finally, a country’s business model designed to attract financial flows, even if they would be illicit, that is, the service of money laundering, would result in relatively higher labor productivity in the way this measure is defined as a circular derivative from the GDP. In fact, Luxembourg, the wealth of which is derived from offering a safe haven for money figures highest among countries in the labor productivity rankings that are based on this nonsensical method. Surely, Luxembourg is not doing anything more efficiently in this respect; it just makes use of the opportunity to function as a tax haven. Or take Norway, with its enormous per capita oil wealth - what is so particularly labor efficient in this? A typical list of countries rated by labor productivity can be gleaned from here. So what conclusions are we supposed to draw from these silly macroeconomic labor productivity measures? If the measure were real, then all countries in the world should be able to find an equal amount of Norway’s oil wealth on their territory if they only took the correct steps to improve labor productivity.

Are they actually measuring waste?

In fact, it might well turn out that far from measuring efficiency, labor productivity calculated as such a derivative of GDP might actually measure waste. The thing is that national economies don’t account for profit.
In corporate terms Gross Domestic Product (GDP) could be compared with gross sales revenue but there is no measure which would give the Gross Domestic Profit, that is, a figure which would show the difference between the GDP and the cost that went into producing it. This means that when we say that the GDP of country has gone up we can only know that the sales of the country have gone up, but we do not know if that has been profitable sales. As national economies do not keep double entry accounts with a balance sheet, we will never know for sure what are their profits. One measure that could give an indication of the profit, or loss, of a national economy is the growth of its debt relative to growth of the GDP. If the debt grows faster than the GDP, then we may assume that the difference is a loss. This has in fact been the case in Western economies in the last decade or so as an earlier study of ours revealed: Awara Group Study on Real GDP Growth Net-of-Debt. And indeed, countries have the tendency of going bankrupt when their debts pile up relative to GDP. – It is an interesting thought that, by measuring labor productivity this way, we could in fact be crediting losses to productivity. This looks like déjà vu from the Communist planned economies.

It is therefore our firm opinion that labor productivity on the level of the whole national economy measures nothing. Yet, if you are to refer to this measure anyway, then it would again show, contrary to what the “Russia experts” claim, that Russia has had the most impressive increase in labor productivity of all developed countries by this measurement. We must bear in mind that the Russian GDP has grown tenfold from 2000 to 2013, while the total labor force has increased only slightly from 61% of the population to 64%. So, Russia has had a tenfold increase in GDP during the same period. What more could one possibly expect?

**Global cross-corporate labor productivity measurements are not any better**

While we recognize that a real measure of labor productivity could be a useful tool for comparing growth of efficiency within one firm from one period to another (or for measuring companies within the same industry with industry specific comparatives), we think it is even less suitable for comparing productivity between various firms than was the case for measuring productivity between different countries. We would have to take into consideration all the same external factors as were outlined above, but additionally other difficulties would come in, most fundamentally the nature of various kinds of businesses that do not lend themselves to comparisons.
The problem with measuring sales instead of profit becomes even more absurd in connection with comparing labor productivity between commercial entities, because in this case we could in principle review the profit figures and actually measure efficiency by amounts of (pretax) profit. But this is not what economists do. A particularly misconceived attempt to measure labor productivity across a sample of global corporations is offered by Fortune magazine in its annual ranking of Fortune 500 Global companies. What Fortune does is simply divide the revenue figure of each corporation by the number of its employees. There is no attempt being made to adjust the revenue to the relative price level and therefore corporations in high-price countries will look more profitable. Let’s look at an example. Suppose there are two barbershops both employing 10 people, one in London which offers a men’s haircut for the equivalent of 20 dollars and another in Voronezh, Russia, offering a haircut for 5 dollars. Both perform 100 similar haircuts per day working 30 minutes on each client. We would then normally conclude that the labor productivity of both establishments is equal. But according to the method Fortune uses the London shop would come out as 4 times more efficient in view of the 4 times more expensive price. It would by no means be clear which of the firms was more profitable. Perhaps, with the level of London rents, salaries and other costs the Voronezh firm would be the more profitable one after all.

Fortune has not even attempted to adjust the sales revenue across the different countries to the purchasing power parity, not to mention that they totally ignore the more real efficiency measure which would be profit per employee (instead of sales per employee). Profit would surely be a more accurate measure but also subject to a lot of things that cannot be properly compared between different industries and countries.

There are many other issues that affect the equation. Consider, for example, the purchasing power of the potential customers. It does not make much difference how efficient your business is if the potential customers in your country do not possess enough purchasing power. These kinds of flawed measures, which purport to measure labor productivity by sales revenue, will contain that bias.

The questions is, shouldn’t we calculate productivity and efficiency from the point of view of the shareholder, the state, how much tax and dividends the state and shareholders collect, respectively?

It should be clear by now that such measures of labor productivity are nonsensical and at best a form of economic and political entertainment. Nevertheless, the Fortune study and others modeled in the same vein get a lot of serious attention. For this reason we may read in The Moscow Times this dire prediction in reference to the Russian Expert Rating Agency that benchmarks its own study to Fortune using the same flawed method: “The Russian economy will stagnate if companies do not increase their labor productivity, which currently averages at 40 percent of that of the Fortune 500 Global companies, according to an annual ranking that Expert Rating Agency presented Wednesday.”
The flawed measures of labor productivity give credit to natural resources extraction companies

Considering all the above flaws in the method (the attempt to measure the unmeasurable), it is therefore no surprise that the Expert Rating Agency found in its study of labor productivity among companies from the CIS that oil & gas and other energy businesses dominate the rating, taking up 32 of the 50 top ranks. These results, of course, reflect nothing but the delusions of the method. Even the anti-darling of “Russia experts”, Gazprom, came out as the 25th most labor productive company in Russia using this method.

How labor productivity actually can be measured

As we have criticized those methods we deem flawed, we would also like to illustrate what would be the real methods of assessing labor productivity by way of these examples. These are charts that show the increase in labor productivity in some areas of food production in Russia. As such, they are quite impressive.

Source: Rosstat
What in reality affects labor productivity

But again, we are by no means implying that there would be no need for a productivity increase in Russian corporations. On the contrary, according to our experience much will have to be done. What we are saying is that these things cannot be measured the way it is usually done, and perhaps they cannot be measured at all in a comprehensive manner. What is for sure is that the labor productivity in Russia is not 60% off the global level, which is implied by the Fortune study and its imitators. Our educated guess is that the real gap in labor productivity could be at the level of 20%. The reasons for this can be divided into 5 categories: 1) Low starting point after the Soviet economy and the years of anarchy in the 1990's; 2) technology gap; 3) bureaucratic regulations and practices at the state level; 4) poor management and corporate culture at the level of corporations; 5) underdeveloped transport infrastructure.

By low starting point we refer to all the economic conditions that existed in Russia at the beginning of the 2000's when the market reforms started. One aspect of this was the low dangling fruit effect, that is, any business could make a profit without paying attention to all the issues that go into the equation of labor productivity. At that time, more decisive was the access to “administrative resources”, that is, cozy relations to the powers that be. There was a huge demand to be met and in doing so quality and efficiency were not the foremost concerns. Gradually, but rapidly, conditions changed and labor productivity was therefore boosted. This is a process, which is automatic in any pure market economy like Russia and is nothing that economists or politicians need to worry about. There have been fantastic results in this respect in the past 10 years and there is no reason to doubt that there will be a corresponding improvement in the next 10 as well. The race to close the technology gap has followed and will follow a similar trajectory as that described above for productivity increase, and is in fact an aspect of it.

Real progress on further improvement of the business climate should spell enhanced labor productivity

The next issue, that of bureaucratic regulations and practices at the state level, is for the government to tackle. And it sure is working on this. Putin announced in 2012 that one of his priorities would be to commit serious efforts to improving the business climate by removing administrative barriers. The work on improving the business climate and debureaucratization is a tedious and time-consuming process involving expert work and legislative initiatives on how to optimize administrative processes and remove barriers in hundreds of fields of business activity. The various initiatives will mature little by little over the years. Therefore, this program will not provide for staggering headlines for the business press, but in fact, it constitutes a major reform project, which ranks high in Putin’s priorities.

Putin explicitly announced that these efforts would be benchmarked against the World Bank’s “Ease of Doing Business” index, stating that it is his goal to lift Russia to the top 20 countries in this ranking by 2018. The results in the first two years have already been truly amazing. Last year Russia moved up 19 places to 92nd among 189 countries. There was a further significant improvement this year with Russia leaping 30 places up to 62nd.

In the Global Competitiveness Report published by the World Economic Forum, famous for hosting the annual Davos Economic Forum, Russia gained 11 points and was awarded 53rd place among 142 nations surveyed.
A Western reader may be unaware of these improvements as it is typical that the Western media have not given publicity to these improvements. We remember the glee with which, in the bad old times year after year, they used to announce an inferior placing of Russia in these and similar rankings. But this time around the news has been met with complete media silence. However, at the same time they have not forgotten the mantra about “Russia/Putin relying on oil & gas renting and not doing anything to modernize and diversify”. The government is also continuously running programs on increasing productivity with mass restructuring programs among state officials and in state owned companies. We already reported above that the number of state officials had decreased by approximately 2.5% thanks to the restructuring program. Below, we will further note how such programs on increasing efficiency and productivity have been initiated at state corporations such as Rosneft, Sberbank and VTB.

**Corporations must do more to modernize corporate cultures and management styles**

But modernizing the business environment is not only a task for government, corporations must also modernize their management styles and corporate cultures. We have earlier in our research published in *Employee Engagement in Russia* concluded that Russia definitely lags behind on these parameters.

The management practices are still too much informed by the Soviet administrative command system.

**Transport infrastructure bottleneck on labor productivity**

What we may fairly criticize is the lack of sufficient investments in transport infrastructure, especially roads. Fortunately, there have been improvement in this respect in the last few years. St. Petersburg, Moscow and Nizhny Novgorod were linked with the high speed train Sapsan in December 2009. The Trans-Siberian Highway, spanning the width of Russia from the Baltic Sea of the Atlantic Ocean to the Pacific, has been completed. The first parts of the new controlled-access highway between Moscow and St. Petersburg will be opened by the end of this year and the whole highway is to be completed by 2018. Construction of the new superhighway Central Ring Road, a 525 kilometer long ring road around the perimeter of Moscow, was begun in the fall of 2014. Russia plans to complete the new two thousand kilometers long silk road connecting Moscow with Western China by 2018. There are railways investments: the modernization of the Trans-Siberian Railway, which runs between Moscow and Vladivostok in the Far East; the construction of a 500-mile high-speed rail line between Moscow and Kazan, the capital of the Tatarstan region.

![Sapsan, high speed train](image)
Time is what is needed

In a market economy no magic tricks are needed – nor are they feasible - for raising labor productivity. In the case of Russia, it is purely a question of time - time to recover from the bankruptcy of the Soviet economy and the ensuing anarchy of the 1990's. We can date the start of recovery, the initial stabilization and road to normalization, to the early 2000's, perhaps around 2003-2004. Impressive results have been achieved since then in the short time up till now. And more will follow in due course. Simple market factors and constraints will ensure increased labor productivity. On the one hand, there is the question of the economy, corporations, entrepreneurs and quality of rule-of-law having reached maturity, which automatically pushes the economic actors to a new level of sophistication and hence labor productivity. On the other hand, there is the question of the demographic constraints and level of unemployment. Russia is presently short of about 1 million young adults entering the job market every year as compared to the situation a few years ago, as has been reported in this article. This is, of course, partially compensated by immigration, but coupled with a low level of unemployment the situation on the job market will keep putting pressure on wages. At the same time, the low dangling fruit has been picked in the Russian economy, resulting in lower levels of sales and profit growths. In this situation, companies must – and will – speed up their efforts to increase labor productivity in their respective businesses. It is only normal that this stage of further improvement of business efficiency follows ten years of firmly grounding one's business on the market. Contrary to the general criticism directed against Russia, we cannot detect that this process has in the past been in any way retarded by a supposed reliance on oil & gas revenue.
Wittgenstein: "We need to realize that what presents itself to us as the first expression of a difficulty, or its solution, may as yet not be correctly expressed at all."

THE STATE SECTOR AND GOVERNMENT'S INDUSTRIAL STRATEGY

State ownership is actually beneficial for the economy

The argument made against Russia's state sector is wrong both factually and, as we argue, materially. By the factual falsity, we mean that a global comparison simply does not point to Russia having a particularly large state sector. By material falsity, we refer to the conclusions usually drawn about the supposed harmful effects of state investments in the economy. The criticism of state ownership of assets in Russia proceeds from the premises that it would supposedly be an established fact that state ownership is necessarily detrimental to an economy. We disagree on this point. Not all enterprises must be in private ownership as long as the general economy remains a market economy. In fact, we consider that it is beneficial for a national economy and the people that some kinds of enterprises and assets remain state controlled or in direct state ownership. An analysis of Russia's economy provides ground for illustrating this idea.

Only state investments can challenge the existing global dominopoly

The same economists that oppose state investments and ownership of the economy also hold it against Russia and personally Putin that Russia, supposedly, has not diversified its economy and is not doing anything in that regard. As is evident from the present report, those claims are grossly false; a lot has been done and a lot is being done. The position vehemently opposing state investments in the economy is illogical and uninformed about economic realities prevailing in today's world. The truth is that in today's world only state investments can possibly create new industrial heavyweights in capital-intensive industrial segments, in anything else than light industries. The fact is that the world markets have achieved a relative technological saturation. The markets have been carved up during the last 50 years and are now dominated by large, mostly Western, conglomerates that have reached such sizes that it has become impossible for newcomers to enter the market. They have cemented their positions since the beginning of the 20th century and again after the postwar rebuilding starting in the 1950’s (no doubt a goal conceived by the WTO). In heavy machinery and capital-intensive industries it is virtually impossible for newcomers to emerge purely based on private capital. Apart from the fields of information and communication technologies, which emerged in a unique historical vacuum, no newcomers financed by private capital have been able to penetrate the global markets in heavy and capital-intensive industries. We could call the situation a dominopoly, meaning a market condition when capital-intensive industries are dominated by large, well-established corporations. (There is also a dominopoly established by branding strategies and the connected control of distribution channels, but if the present world order starts to shift, these will be quite vulnerable). However, the highly successful Chinese economy has shown that state sponsored companies can penetrate this segment... Only the state can muster the needed risk capital, cluster resources and markets for finished products. In most cases the investments would be of the nature that would not promise the short-term yields that private capital requires.
Thus, if we wish for Russia to diversify to these capital-intensive manufacturing industries, then we must welcome state investments into them. But we are by no means sure that the critics of Russia’s economic performance in reality wish for such an industrial breakthrough. Perhaps they merely want to sabotage that strategy in order for Russia to remain a resource base for Western corporations and take the Polish road of becoming a big assembly line for them.

How big is the Russian state sector actually?

Usually the discussion of state ownership in Russian businesses centers on the question of the state owning a number of the largest corporations. In this regard, critics give out much inflated figures and among other things refer deceptively to figures of total tax rate and public sector employment, which have nothing to do with the question, and in fact would prove the opposite, if correctly quoted. In a study of state ownership in the Russian economy Carsten Sprenger wrote: “Ideally, one would like to measure the weight of state owned corporations in the economy by the fraction of GDP that they produce. Unfortunately, such data is not available in Russia.” Some critics have estimated that share as being 40%. However, Mr. Sprenger’s study showed that only 24% of the combined fixed assets in the Russian economy was state owned versus 76% being in private hands. By 2012, the share of fixed assets in state ownership had further decreased to 18% versus 82% for the private sector (source: Rosstat).

Mr. Sprenger also demonstrated that the number of employees in state owned firms had dramatically decreased from 1990 to 2008, going down from 82.6% to 31.4%. The percentage of employees in corporations with mixed state and private ownership was 6.3%. In the same period, the share of employment in privately owned businesses was 61.8%, of which 4.5% were employed by foreign owned firms or joint ventures between Russian and foreign firms. By 2013, the share of people employed by the state had further decreased to 28.4%, whereas the share of private enterprises had grown to 65.2% (source: Rosstat).

Another way to confuse the picture is to refer to indicators as the share of state owned firms among the country’s top ten firms, by which measure Russia, according to one report, placed third after China and United Arab Emirates. – Looking at China’s amazing development, the question is, why should this be considered as something detrimental and not a measure of success? And, indeed, the data on Russian GDP growth corroborates this.

Again, we must look beyond the superficial and try to understand what these state owned corporations in Russia are involved in. Such an analysis shows that they are involved in certain strategically important fields of businesses. Some of them are such that, given Russia’s size and differences in purchasing power parity between its various regions, it would be a logical impossibility to operate that business solely relying on private ownership. This is particularly true for the Russian railways. The railway system is clearly an area of the economy where it is only beneficial in every aspect that the state controls the business. Naturally, this also holds true for the defense industry. The same can be said for the banking sector, given that there is, in Russia as elsewhere, a mix of state and private banks. The fact is that in today’s world, especially in the West, the USA and the EU, banks are totally dependent on central bank financing, policies and allocation of resources. The central banks have become virtual central planners of the economy and the banking systems serve as the extended arms of the centrally planned system. Never mind that they don’t try to regulate the price and production of each and every resource like the Soviet central planners strived to do, these central...
planners at the Western central banks do regulate the price and allocation of the most important product of all – interest rates and allocation of money (thereby grossly distorting risk premiums). In such a situation there is no harm, probably on the contrary it is beneficial that the state owns major banks. The banking sector serves also as a case in point in proving how important it is from the point of view of national security that some major banks are state owned. When we let go of the illusion that there is a free market in the West, we understand it cannot be totally free in Russia, either. This is something Russia has been slow to recognize.

There is also no harm in the state owning corporations that exploit the country's natural resources. It is a myth that privately held natural resources corporations would yield a better result for the national economy than state owned. For sure, the market capitalization at a stock exchange and the dividends pocketed by a few owners might create the illusion of such a benefit. But market capitalization of such a company carries no tangible value for the national economy, at least not in terms of fair distribution of its profits. One would have to consider the whole chain of benefits that a state owned oil, gas and other corporation in the natural resources sector gives. These benefits range from tax revenues, investments in strategically important sectors of the economy, and prevention of oligarchic interference in the political system. The last point has been clearly illustrated by the Ukrainian crisis, where local oligarchs in collusion with foreign powers effected a coup with ensuing civil war, chaos and economic decline.

Control of media assets is another illustrious point that proves the benefit of having a strong state sector. Again, we have been able to observe the total catastrophe created by the vicious propaganda that the Ukrainian oligarch-controlled media fueled in the run up to the coup and cover up of the various crimes against humanity committed in the aftermath of it. Western media is no different. Those who have been able to analyze the true nature of the Western media coverage of Russia, Putin, Ukraine crisis, etc., have been forced to acknowledge that the Western media is not a free press but a massive propaganda machine which serves the interests of instigating hatred against Russia and Putin with the aim of weakening the country and its eventual subjugation by means of war, if necessary.

There is nothing to prove that in these natural resources sectors such as oil & gas, privately held companies would, even by direct business performance indicators, necessarily be more efficient. The question is really about governance, which is dependent on democratic control. If there is a will from the side of political leadership to improve governance and efficiency, results can be achieved. In the last few years state owned banks Sberbank and VTB have made impressive efforts in increasing efficiency in this respect and state owned oil corporation Rosneft has just embarked on an ambitious restructuring program aimed at achieving further efficiency and labor productivity.

Most importantly one should understand that Russian state owned corporations are not active in such fields of businesses that would hamper private capital initiatives. On the contrary, they are in such fields where they serve as facilitators for private businesses - increasingly so in the fields in which the government now plans to invest. In a comparison of the Russian state owned business sector with that of Western countries, one would also do well to remember that by many indicators Russia cannot be compared, because Russia's state owned corporations cover fields that do not exist in any meaningful volumes in the countries being examined. For example, none of these countries have such a proportionally large and crucially important railways sector. The same is true for oil & gas. If we net such corporations out of the comparison, and acknowledge that the banks in the West do not function in market conditions either, then it would be shown that Russia does not run a comparatively large state sector in businesses. Having said that, we need to remember, that we do not consider that there exists any need to minimize the state sector, rather it should be optimized, as Russia is doing. It is important that state owned corporations stay out of those fields of the economy where they do not naturally belong, and that is certainly true for Russia.
It is worth noting that the Russian state owned firms are not Soviet behemoths but modern corporations tightly linked with all the mechanisms of a market economy. The greater part of them are listed on stock exchanges and thus subject to continuous scrutiny from investors, regulators and analysts. These corporations make use of private and public project financing mechanisms, a prime example of which is the emerging national technology champion, Rostec.

Just as important for the economy as state ownership and investment are the numerous sectorial programs aimed at diversification and modernization of the economy. (To be discussed below).

This report has already shown that Russia already has a diversified economy and that the trend towards further diversification is evident. Indeed, it would seem that Russia is in this respect as diversified as the free market alone can possibly carry it. By this we foremost mean that the relatively less capital intensive industries and services have been developed and foreign manufacturers have penetrated the market in the segments from low to medium capital intensive production serving mostly domestic needs in production of food and other consumer goods, construction materials, cars and such segments. This has happened largely by means of private sector investment, domestic and foreign owned, but have been facilitated by the government, which is especially evident in the automotive industry. Given global competition and the abundance of cheap labor in many emerging countries, and Russia's population constraints, it is not feasible – or desirable - that Russia become a location where Western conglomerates produce these goods for export, as has been the case with the Central and Eastern European countries within EU. And this is, of course, also a question of national sovereignty, which in fact carries an economic value for the country's population and affects its living standards. Some of those countries, like Poland, have evidenced impressive growth in industrial production and exports. But when you look at the reality behind the figures you will notice that the Polish industry consists of assembly lines and subcontractors to the established European and American manufacturing conglomerates. The bottom line is that such an economic model does not create value or intellectual capital. We may call this the colonial model of diversification. In this connection it is interesting to compare the growth of average salaries of Poland and Russia. Poland has had an impressive growth of industrial production. (Chart 12, above) The same data showed that Russia showed the second best growth in industrial production among the countries surveyed. However, when we look at growth of average salaries the picture is quite different. Although both countries enjoyed strong growth in this in a global comparison, Russia has now all but caught up with Poland in the level of salaries. This notwithstanding the fact that the Polish average salary was as recently as 2000 a staggering 6.5 times higher than Russia's. (Chart 32).
How the Russian government influences the economy

In Russia, the state participates directly in business operations in the following ways:

1. By having created a favorable taxation regime
2. By having created a favorable business climate and taking steps to further improve it
3. By ownership of corporations that are crucially important for the national economy and the country’s security
4. By investing in development of strategically important industries
5. By strategic programs on developing various sectors of the economy

The creation of a favorable taxation regime and work on the business climate are, of course, the most important aspects of developing the economy in market conditions. According to market theory, businesses will thrive given the proper conditions. And in fact, as this study shows, that has happened, never mind the critics who do not want to acknowledge it. Our study on the Russian taxation system show the indubitable success of the Russian tax reforms under Putin. And as we reported above, there has been impressive – still continuing – efforts and results in improving the business climate (as evident already from the World Bank Ease of Doing Business study we referred to).

We must try to understand what the Western economists have in mind (if anything) when they call for Russia to diversify its economy. In general, they seem to mean that Russia should produce anything but oil & gas. But that cannot be a reasonable position to take. Certainly you must match the diversification strategy with your strengths and competitive advantages. For sure, Russia cannot compete with the Asian countries and other emerging markets on producing labor intensive low cost products. But Russia has the world’s most educated people. And Russia has the world’s largest territory and the biggest diversified portfolio of natural resources. These considerations already determine a lot about the directions of diversification. Make no bones about it - as the Western sanctions should have made clear by now - geopolitics and security must also figure high in the considerations of an industrial strategy.

And notwithstanding all stories about Russian brain drain, one should not forget that Russia is still in first place in the world by the number of researchers and developers per thousand citizens and in third place by the number of scientists and engineers per million persons, considerably ahead of India and China. (Frost & Sullivan). Russia is also in first place in the world by the share of students acquiring technical qualifications (UNESCO, Federal Stastic Office of Germany).

Considering all of the above, Russia's choice in further industrial development and diversification - in addition to providing favorable conditions for free market enterprises and foreign investors - can therefore only be that of developing heavy capital intensive and high-technology national champions in the fields where Russia has a natural competitive edge or national security concern (which two often match). Such manufacturing industry sectors, for example, are: all those connected with transport: aviation & space, shipbuilding, railways, vehicles; defense industry; energy: oil drilling and mining technology; engineering: turbines and engines; information technology, programming and equipment.

Strategic programs on developing the economy

The Russian governments have since 2004 introduced national programs concerning the development and modernization of various sectors of the economy and also social development. These programs have
undergone qualitative improvements over the years and 2009 can be seen as a watershed in bringing them to a new level of importance and elaboration.

Within the economic block five priority programs were identified in 2009, these were:

- Energy efficiency and new fuels
- Medical technologies and pharmaceuticals
- Nuclear power engineering
- Information technologies
- Space and telecommunications

Other priority development areas have been the agriculture and food sectors, aviation and shipbuilding. We already reported above on the impressive results in the agriculture and food sectors, as well as in the automotive industry.

There are in total 17 industrial sectors for which a special government development program has been adopted.

In addition to the sectorial programs, Russia also runs regional development programs, most importantly the programs on the development of Russia's Far East region and the Baikal region.

Information technologies

In information technologies, the program involved development of ICT technologies and internet based services, both public and private. It foresaw, among other things, the creation of a common space for domestically produced high-performance supercomputers on the basis of grid computing. Such supercomputers are important in the fields of nuclear technology, the aircraft industry and other fields requiring high-performance computing. The program also envisioned a breakthrough in internet services in education, social and health services, as well as interactions with government. The latter included a program of a gradual movement towards e-government, the provision of interaction with the state and access to state services via Internet and other communication technologies. This drive has already been highly successful as evidenced by Russia's surge from 59th to the 27th place in the world rating of the E-Government Survey conducted by the United Nations (2012).
According to data provided by Russian Software Developers Association, Russoft, further proof of successful modernization in the ITC sectors comes with the Russian Internet sector having become the largest in Europe. In 2012, Russia took first place by the number of Internet users in Europe (according to comScore). Of all the Internet users in the world, 3.6% are in Russia, although Russia’s population is less than 2% of the total global population. By the number of broadband Internet users, Russia has also climbed to 6th place in the world (according to J’son & Partners Consulting, and 7th according to Broadband-Forum.org). By the average data downloading speed in 2011 Russia took place among 224 countries (Pando Networks). By Internet connectivity, Moscow and St. Petersburg already match the level of the leading countries with over 80% of households covered by the Internet, while other Russian regions still lag a bit. However, the Internet access rate in the regions grew by a staggering 4.4 times in 2012.

According to a Yandex report on the development of Internet in Russia there are now (Spring, 2014) 66.5 million adults (age 18 and more) who use the Internet. Chart 33 illustrates the growth in this segment.

![Chart 33. Number of Internet users in Russia, 2004-2013](Wikipedia data)

Presently the mobile phone penetration has reached 98% of the Russian population.

### Investments in high technology and innovation

The Russian government has entered into some high profile projects aimed at jump-starting the hi-tech and innovation sectors of the economy. These initiatives include the Rusnano nanotechnology investor, the Skolkovo Innovation Center, and the Russian Venture Company.

Rusnano is a joint-stock company created and owned by the government of Russia and is aimed at commercializing developments in nanotechnology. Rusnano’s task is to create a nano-industry in the country that will make marketable products. By 2013 Rusnano had made investments in 49 companies with combined sales worth RUB 95 billion ($3 billion).

The Skolkovo Innovation Center is a techno park in Moscow set up to foster the Russian innovations economy with cooperation between scientists and technology companies.

Russian Venture Company (RVC) is a government fund of funds and a development institute with the mission to encourage Russia’s own venture capital industry and boost the capital of venture capital funds. RVC’s role is that of a government fund of venture capital funds channeling public incentives to venture capital and financial support to the hi-tech sector, and of a Russian VC industry development institute.

Russoft reports that in a rating of the world’s most innovative economies included in Bloomberg’s Global Innovation Index, Russia took 14th place, having outstripped Canada, the UK, Australia and 50 countries altogether. Credence was given to the following seven factors: R&D intensity, productivity, hi-tech density, researcher concentration, manufacturing capability, tertiary efficiency and patent activity. (The information was provided by the World Bank, the World Intellectual Property Organization, the Conference Board organization, the Organization for Economic Cooperation and Development and UNESCO).

Examples of sectors of that have benefited from state programs

The automotive sector we discussed above is a prime example of early success in the Russian government’s drive to diversify and modernize the economy. Below we will report on some of the other sectors of the economy where the government has successfully intervened.

Aviation industry

In the transport equipment section a turnaround has also occurred in the aviation industry. Even though the volumes are not yet as impressive as in the automotive industry, some key breakthroughs have taken place. Russia was able to retain a high level of production and development of military aircraft after the demise of the USSR. Now, alongside military aircraft, the fly-by-wire Sukhoi Superjet 100 regional passenger jet with 108 seats (VIP version with 8 seats) has been successfully launched to revive the civil aviation industry with a maiden flight in 2011. This year saw the completely renewed Il-476 military transport aircraft get off the ground. Although primarily developed as a military aircraft, the Il-476 will also be available for civil commercial flights. In 2014, Russia also finally announced the start of development of a new wide-body long-haul passenger aircraft, the MS-21 which, with its capacity to carry around 200 passengers, will compete with Airbus (A320) and Boeing (737). The new plane is scheduled to hit the market sometime in 2016, and will be sold in three different versions with various flight ranges and passenger loads. It is reported that the MS-21 already has 150 orders, 50 which come from Russia’s flagship carrier Aeroflot, according to Deputy Prime Minister Dmitry Rogozin, who oversees the aerospace industry.
The planes will not only be assembled in Russia, but will actually rely on Russian technology and material as more than half of the components used in the aircraft are produced in Russia and even the engines will be of Russian technology. (The first few planes will have to rely on foreign engines.)

According to the development program published in November, 2014, Russia is to spend over $20 billion on building aircraft in the next 10 years, from 2015 to 2025. The program provides for the construction of about 3,300 airplanes, including, among others, 1,500 civil aircraft, primarily Sukhoi Superjet-100 and MS-21 planes. The program also foresees the construction of 5,600 helicopters, including 2,300 civil rotorcraft. These will be sold both domestically and for export. The financing will come from the state and defense-sector enterprises. With these initiatives Russia's massive state-owned United Aircraft Corporation (UAC) hopes to become the world's third largest producer of military and civilian aircraft by 2025.

Want China Times reported that China could join in this development program, which would surely guarantee its commercial success. The same source also reported that China and Russia will team up to produce the Sukhoi Superjet-100 and the Chinese twin-engine regional airliner ARJ-21, as well as narrow-body jet airliners such as Russia's MS-21 and China's C919. Want China Times sees great prospects for this cooperation: “China will benefit from the cooperation deal since the JSC United Aircraft Corporation is experienced in manufacturing various types of aircraft and Russia is the world's largest titanium producer. An alloy of the metal is widely used in manufacturing aircraft, ships, spaceships and missiles. Russian state-run VSMPO-AVISMA Corporation, the world's largest titanium producer, has signed a deal with China to supply titanium parts for China's C919. The collaboration could mean the two countries will export aircraft to countries such as Iran which are also under sanctions from the West.”

It was further reported that among Russia's plans is a joint project with China to develop a long-haul wide-bodied aircraft that can stand in for the Boeing 777 and Airbus A330 aircraft that dominate transcontinental and transoceanic routes.

Shipbuilding

The Russian government is presently ramping up investments in its hitherto neglected civilian shipbuilding sector. While military shipbuilding has already been booming for some years, the civilian sector is now in line to take a quantum leap, promising to become one of Russia's leading industries and a driver of several connected sectors of industry with a significant high-technology component. The development of shipbuilding is expected to stimulate the growth of related industries and suppliers, such as machine-building, metallurgy and applied scientific research.
One of the state programs for overhaul of industrial production is the strategic program to develop the shipbuilding industry, which was adopted at the end of October 2006. The program foresaw the concentration of Russia's shipyards (19) and repair yards in the newly-founded United Shipbuilding Corporation and establishment of a scientific center at the Krylov Institute, two engineering centers and three shipbuilding centers, the Western, Northern and Far Eastern Centers. The United Shipbuilding Corporation was operational by 2010. The initial planned state investments in 2007 amounted to the equivalent of some $5 billion.

According to a study by Discovery Research Group the initial results of the project are promising. The amount of built ships almost doubled from 2011 (47-53 ships) to 2012 (71-87 ships). The growth trend continued in 2013 with 91 ships built during the first 8 months of the year. Prior to 2005 the domestic orders of new ships amounted to a mere 4% of the total orders Russian ship owners placed globally. Discovery Research estimated that Russia in 2013 still placed orders abroad for $1 billion. The shipbuilding industry promises to become one of the drivers of Russian industry; as the research group points out Russia must soon renew 80% of its 2760 seagoing vessels and 22,000 river vessels.

At a working conference in Vladivostok this November 2014, Putin announced plans to speed up the development of Russia's shipbuilding industry.

In particular, the President announced plans to develop a modern shipbuilding cluster in the Far East for building and servicing vessels of various classes. The primary target is to serve the domestic market, which presently loses billions of dollars in orders to foreign shipyards. But there is little doubt that as the domestic market is satisfied, eyes will turn to exports – this is how a market economy operates - by first taking care of domestic demand. The first stage of a new mega shipyard with full-cycle shipbuilding facility in Bolshoi Kamen, not far to the east of Vladivostok, is to be completed by the end of 2016. Rosneft and a number of other Russian corporations are co-owners of the new shipyard and are already placing orders for the construction of oil platforms and supply vessels.

Russia's leading oil & gas companies are in great need of new vessels in connection with their continuing plans to develop oil & gas fields in the Far East and on the Arctic shelf. The significance of the Northern Sea Route is also adding demand for ships. On top of that, Russia’s existing civilian fleet is in dire need of an upgrade as well. Of special importance in connection with the Western sanctions is the production of drilling platforms, geological survey vessels, supply ships and ice-class vessels.
In this regard, it is interesting that Putin quite correctly highlighted the need not only of investments in fixed assets but also in modern corporate culture and project management methods. Foreign specialists will be needed to help modernize Russia's shipbuilding production and management processes.

**Rostec – investment in development of Russian hi-tech manufacturing industries**

Rostec is a Russian state corporation launched in late 2007 to promote development, production and export of hi-tech industrial products for civil and defense sectors. It encompasses 663 production entities within 14 holding companies. Nine of the holdings operate in the military industry and five of them in civilian industry sectors. In addition, there are 21 enterprises under direct management of central Rostec.

Rostec has been successful in its strategy to form joint ventures with leading foreign manufacturers to develop the industry sectors represented by its companies.

The initial portfolio of companies handed over to Rostec consisted of 437 severely distressed corporations. The combined losses of the companies was about RUB 630 billion ($20 billion) at the time of the hand over. Thirty percent of the companies were practically bankrupt and some had already ceased operations. By 2012, a remarkable turnaround had been effected, with the companies under Rostec reaching combined sales of RUB 931 billion ($30 billion), and a profit of RUB 38.5 billion ($1 billion). Sales reached RUB 1 trillion in 2013.

An interesting example from Rostec's portfolio is United Motorbuilding Corporation, which is tasked to lift the crucial industry of producing turbines and engines for all sectors of Russian industry, military and civilian aircraft, automotive, shipbuilding, and other sectors. **Chart 34** evidences the impressive growth of sales in the first few years of its operations.

<table>
<thead>
<tr>
<th>Year</th>
<th>Income</th>
</tr>
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<tbody>
<tr>
<td>2008</td>
<td>61</td>
</tr>
<tr>
<td>2009</td>
<td>74</td>
</tr>
<tr>
<td>2010</td>
<td>90</td>
</tr>
<tr>
<td>2011</td>
<td>95</td>
</tr>
<tr>
<td>2012</td>
<td>130</td>
</tr>
</tbody>
</table>

**Chart 34. United Motorbuilding Corporation, growth of sales 2008-2012**

Sources: United Motorbuilding
Pharmaceutical industry

Of particular importance is the program on revival of the pharmaceutical industry and production of medical equipment. Some very impressive early results are coming from this initiative. The goal was set for Russia to produce domestically up to 50 percent of the country’s pharmaceuticals by 2020 and 90% of the most important medicines by 2018. And indeed, pharmaceutical production in Russia has doubled over the last three years and it is expected that Russia’s pharmaceutical market will grow a further 9% this year. Together with the agriculture, food and defense industries, development of the pharmaceutical industry addresses the most important concerns of the country. With the overhanging risk that the unpredictable West will impose restrictions on the sale of medicaments to Russia – as has been the case vis-à-vis Iran – this is of course a most timely initiative. Indeed, following the sanctions the Russian government has speeded up the program and wants to meet the important targets already by 2017.

The government also wants to grow exports of pharmaceuticals to more than RUB 100 billion ($2.7 billion) by 2020 from RUB 19 billion ($495 million) last year.

Domestic Tourism

One more sector of the industry in which Russia has invested is tourism. Most notably there was the investment in Sochi spurred by the Winter Olympic Games 2014. Naturally, our “Russia experts” were only full of scorn about these massive investments in the diversification of the Russian economy and modernization of its tourism industry. They could see nothing good about it and only mounted a campaign of defamation against the whole initiative. What followed was a veritable media crusade against Sochi. The Sochi experience just serves to show that there is no way to please the critics of Russia. The dogs are barking but the caravan moves on. The investment in Sochi has proven an enormous success. In the first post-Olympics summer season, Sochi boasted a 22% increase in the number of visitors, the full year figure reaching 5 million. The new capacity built in connection with the Olympics still allows for a 30% increase next summer. These figures come at the same time it is reported that Russia's domestic tourism has increased overall by 25-30% this year. It is also reported that the number of Russians who take a vacation trip increased from 52% of the population to 63%.

Russia has a policy of dedicating major sports events to projects of upgrading the transport and travel infrastructure of the cities where events are held. This strategy was earlier successfully implemented in Kazan in connection with the Summer Universiade of 2013. Presently, similar efforts are underway in 11 cities in preparation for the FIFA Football World Cup 2018.

Don’t say this is not diversification and modernization.
Social programs

Major strategic social programs were initiated in 2006. In the sphere of health care services this involved the upgrading of the technological level together with health care facilities and hospitals. The program also stipulated that the salaries of doctors and nurses would have to be radically increased – something that the quasi-liberal analysts are particularly upset with. Chart 35 illustrates the significant rises of the salaries for some categories of state officials including those in health care.

![Chart 35. Average wages, 2000-2013](image)

Sources: Rosstat

A similar project was enacted in the sphere of education. In 2013, reform of the education sector and Russian sciences culminated in the much-needed overhaul of the Russian Academy of Sciences. No modernization going on, they say.

A third strategic program within the sector of social and public life was the national program in housing, with the aim to improve housing conditions by renovation, improvement of communal services and housing maintenance governance, increase of construction of affordable housing and financing. The success of the program is evident from Chart 36, which shows the growth in new housing starts.

![Chart 36. Housing starts, Russia, 2003-2012](image)

Sources: Rosstat
CONCLUSIONS

This study has proven wrong the carefully crafted narrative about the development and nature of the Russian economy. Contrary to the claims that Russia “does not produce anything” and is blissfully “relying” on oil & gas revenue while “neglecting” the needs to diversify and modernize, it has now become evident that there is a quite vibrant economy with a lot of impressive results. We should be extremely satisfied with the results that have been achieved in such a short time as just a decade. But this does not mean that Russia would have an opportunity to lay on its laurels. We are not implying that Russia’s economy is ideal, it clearly is not (then again, there is the question, the economy of which country is ideal?). What we want to say is that the Russian economy has reached an initial maturity, which provides a solid platform for taking the next leap to further industrialization and development of a strong manufacturing industry utilizing the highest levels of technology. This is why we are confident that Russia will be able to make the “true industrial breakthrough” that President Putin has recently announced. Putin envisions the creating of strong national champions in machinery and processing industries that will become major exporters of manufactured goods that are competitive on the global markets. Putin promises that this will also entail renewed investment in applied science and R&D in the fields of machine building, machine tool and instrument making. – Based on the results so far, we certainly think this is doable.
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