

Version 1.0 | Last updated 08 January 2017

Organization of War Economies (Russian Empire)

By Peter Gatrell

The multiple demands of protracted warfare subjected the entire economic system of the Russian Empire to immense and ultimately intolerable strain. Nevertheless, the war witnessed the emergence of new sectors of industry, and aggregate economic decline set in only after 1916. The war effort exposed shortcomings in the traditional system of military production and procurement, which new war industry committees sought to exploit on behalf of the private sector. Rural consumers suffered shortages of basic goods, with knock-on effects in the supply of foodstuffs to the urban sector. Mobilisation also raised questions about demobilisation, allowing civil servants and technical specialists to articulate a non-market, technocratic vision of economic development.

Table of Contents

- 1 Introduction
- 2 On the Eve of War
- 3 Economic Policy and Industrial Mobilisation
- 4 Industrial Production and Organisation
- 5 War Industry Committees
- 6 Agriculture and Food Supply
- 7 Economic Demobilisation and Post-war Prospects
- 8 Conclusion

Notes

Selected Bibliography

Citation

Introduction

Russia's economic performance and organisation during the First World War attracted a modest amount of interest in the immediate aftermath of war. The informative studies prepared during the 1920s by émigré scholars under the aegis of the Carnegie Endowment for International Peace still retain their value. ^[1] In spite of a prevailing lack of serious scholarly interest in the war in general, post-Stalinist historiography included important studies of wartime decision-making dominated by the work of the Soviet historian Arkadii Sidorov (1900-1966) and his pupils. Economic historians have lately embarked on a reconsideration of aggregate economic activity. On the whole, however, Russia's wartime economic history has remained a relatively untrodden field. This short article outlines its chief features.

On the Eve of War

There was an impressive surge in Russia's economic growth before 1914 that came as a result of an expanding international economy and buoyant domestic demand (itself resulting from a combination of rearmament and mass purchasing power), and financed by foreign and home investment. However, this could not disguise significant structural weaknesses in the Tsarist economy. Key branches of manufacturing, such as machine tools, chemical engineering and optics, remained in their infancy. The internal organisation of leading factories combined sophisticated machinery used by highly skilled craftsmen with sections that relied on brute strength. A similar mix of backwardness and modernity characterised Russian agriculture, where regional differences in productivity were also very marked. [2]

Yet the eminent economist Mikhail Tugan-Baranovskii (1865-1919) was not alone in arguing that economic backwardness did not necessarily confer a disadvantage on his homeland. In his view, although Russia would find it difficult to mobilise financial resources, it would suffer less disruption than other belligerents by virtue of its large agricultural sector. Six months into the war he maintained that, unlike in Germany, the war had scarcely affected the Russian economy. Events quickly rendered this assessment highly optimistic.^[3]

Economic Policy and Industrial Mobilisation

Russia lacked a coordinated and coherent government economic policy, because each minister reported directly to the Tsar without discussing programmes and policies in cabinet. Disagreements and turf wars were commonplace. [4] Financial policy remained the preserve of the Ministry of Finances, which met the costs of the war largely through a mixture of domestic and foreign borrowing and currency emission. By 1916 the inflationary consequences of war became plain for all to see. Although taxation contributed little to the financial war effort, important – if belated –initiatives included the levy of a war profits tax and the introduction of an income tax. [5]

In general, economic policy was driven by the need to mobilise resources for the war effort (see below). The government introduced tight controls over foreign trade, in order to reserve scarce foreign currency to pay for imported rifles, machine guns, optical equipment and other vital items. Other key policy decisions were determined by the need to evacuate industrial equipment and even entire factories from the western borderlands after the debacle of the "great retreat" in 1915. This inevitably imposed an additional burden on the already overstretched railway system.^[6]

By the middle of 1915, difficulties in the supply of raw materials and fuel (which remained a weak link) led the government to give priority to firms working for the war effort. These regulatory measures were supported by some members who worked for voluntary organisations, for example, the war industry committees (see below) and by Zemgor. Regulatory measures were opposed by provincial merchants who disputed the charges about speculation and profiteering that were levelled against them, and who sympathised with peasant food producers who were doubly disadvantaged by fixed grain procurement prices on the one hand, and the inflation in the price of consumer goods on the other (see below).^[7]

The most comprehensive and still unsurpassed analysis of the theoretical basis of economic regulation during the war belonged to lakov Bukshpan (1887-1939). Bukshpan identified the chief features of government intervention and was attracted to the possibilities that might be realised by centralised planning after the war. Other commentators argued that Germany had adopted an effective wartime economic policy by controlling the supply of inputs (including imports, and labour) and coordinating outputs, including the rapid conversion of civilian industry to defence production).

Industrial Production and Organisation

Following an initial downturn caused by the conscription of workers and business uncertainty, Russian industrial production steadily expanded in response to insatiable military demand for small arms, artillery pieces, ammunition and explosives. Factories also turned out substantial quantities of locomotives and wagons, and the production of machine tools exceeded all expectations. Output increased in light industry too: textile factories produced uniforms and blankets, and leather producers supplied footwear, belts and ammunition pouches. Output of ferrous and non-ferrous metals, chemicals, and munitions grew rapidly in 1915 and 1916. The engineering industry in and around Petrograd was one of the main beneficiaries, but the iron and steel industries in south Russia (i.e. modern-day Ukraine) and in the Urals also developed rapidly during the war. At the same time, industrial capacity in Russian Poland and much of the Baltic region, was devastated by war and occupation. Investment in the railways led to the construction of more double-track lines and the building of new routes, such as between Petrozavodsk and Murmansk in the far north of the country.

From the outset, the main procurement agencies preferred to call upon state-owned arsenals and a small network of private conglomerates. State enterprises were hastily re-equipped and new factories were built in 1915 and 1916, that subsequently made a vital contribution to armaments

production. Orders were also placed with foreign suppliers, but progress was slow: shipments were frequently delayed and it took time to impose systematic oversight of the entire process. Gradually, the circle of domestic suppliers widened in response to insatiable military demand; small and medium-sized enterprises jumped on the bandwagon (see below). Still, in the struggle for supremacy, the traditional sources of supply mostly came out on top, as the government and big business hoped they would.^[10]

The war stimulated innovation in production and factory organisation. A notable example of industrial strategy was credited to Bulgarian-born General Semen Nikolaevich Vankov (1858-1937), who reorganised existing capacity and created new factories to manufacture three-inch artillery shells that had been one of the weak spots in military supply in 1914-1915. He was praised for cutting through red-tape, but criticised in some quarters for causing factories to neglect the manufacturing of agricultural machinery in favour of profitable defence contracts. Whatever the truth of this charge, Vankov's initiative encouraged other factories to embark on the reorganisation of production. His leading role in disseminating mass production methods attracted plaudits during and after the war. A technical specialist with close ties to Vankov made particular mention of the introduction of continuous flow methods, which "will have favourable consequences on a wider scale. Russian industry will be mobilised for the future struggle for the domestic market and for standing on its own feet."[11]

The supply of goods for civilian mass consumption told a much grimmer story. Manufacturing capacity was stretched to the limit. Firms producing basic consumer items struggled to obtain raw materials, fuel and labour. By 1917 the production of non-military output was less than two-thirds of the pre-war total. The result was that rural demand for manufactured goods went largely unsatisfied, causing immense problems for trade between town and country.

War Industry Committees

The Ninth Congress of the Association of Industry and Trade, meeting in late May 1915, resolved to maximise the "power of Russian industry" in order to boost supplies to the Russian army. Key figures such as the Moscow merchants Pavel Riabushinskii (1871-1924) and Aleksandr Konovalov (1875-1949), spoke of the need to harness the capacity of enterprises that had been overlooked by officials in the main procurement agencies. Many small and medium-sized enterprises that would otherwise have struggled to fill their order books now sought to contribute to defence production. The decision to create war industry committees (*Voenno-promyshlennye komitety*, or VPKs) appeared to provide them with this opportunity. The VPKs first met as an organised group on 25 July 1915, and agreed to appoint the ambitious politician Aleksandr Guchkov (1862-1936) as the chair, with Konovalov as his deputy.

By the end of 1915, some thirty-two regional and 220 local committees had come into being. Having concluded contracts with government procurement agencies, the VPKs received substantial lines of

credit. In practice, bigger businesses predominated whilst smaller firms struggled to cope with complex orders. Government officials did not hesitate to use these difficulties as a stick with which to beat the committees. Although their rapid ascent was marked by their inclusion in the Special Council for State Defence, the VPKs never managed to secure a position on the crucially important Anglo-Russian Purchasing Committee, which would have given them direct access to foreign credit.^[12]

A great deal of ink has been spilled over the war industry committees, and this reflects the publicity drive that they mounted. The political sub-text found expression in speeches about patriotic duty and loyalty, which was infused with ideas of mis-management and corruption, characterised by officials' preference for a charmed circle of contractors. The VPKs also called for the return of skilled workers from the army and the greater use of prisoners-of-war.^[13] One noteworthy aspect of the VPKs was their flirtation with "workers' sections", but most regional industrialists and merchants resisted the idea of making the concessions that working-class leaders demanded in relation to wages and conditions of work. Here, too, the committees were ultimately something of a side-show.

In general, the war industry committees did not amount to much in terms of defence production and procurement. Their political pretensions were another matter. Anti-capitalist opinion tarred them with the brush of profiteering. For their part, the big players in Russian heavy industry regarded them with disdain, arguing that they had little to show for the generous advances they pocketed. The VPKs therefore had a hard job defending themselves against the rival claims of big business on the one hand, and anti-capitalist critics on the other, as well as carving a niche for themselves amidst the other leading public organisation, Zemgor.

Like Zemgor, the VPKs included a significant presence from the technical and scientific intelligentsia, such as the renowned metallurgist Aleksandr A. Baikov (1870-1946). A technocratic agenda emerged in ideas about statistical surveys of productive capacity and reserves of fuel and raw materials. These engineers were less interested in securing the future of small and medium-sized enterprises, and looked instead to the rationalisation of industry and central economic planning. Their missionary zeal extended to trumpeting the virtues of manufacturing, in the belief that public opinion had been much too ready to embrace agriculture as the cornerstone of Russian economic life. Industry was too important to be left to private enterprise, which is why planning held considerable appeal. [14]

Agriculture and Food Supply

Agriculture dominated the Russian national economy. To put matters simply, this could be construed as strength and weakness: strength, because Russia could not be starved into submission (since Russia exported 10 percent of its annual grain harvest, there was sufficient to cushion the country against a decline in output and to feed the army and industrial labour force); weakness, because of regular fluctuations in the grain harvest and concerns about the productivity of land and labour.

In the first phase of war, total output held up well, notwithstanding the conscription of millions of peasants. The front line received plentiful supplies of food and fodder, a remarkable achievement given the size of the armed forces. Apart from feeding the army (and the army's horses), government ministers held their chief priority to be the control of food prices. To this end, the government imposed an embargo on the export of food from provinces close to the front and entrusted the procurement of grain to special commissioners who were empowered to buy grain at controlled prices and, if need be, to requisition stocks. In late 1915, the newly-created Special Council for Food Supply imposed fixed prices for government purchases of the major foodstuffs, arguing that this was the best means of "protecting the consumer from extortionate prices". Other transactions took place without such regulation. [15]

By 1916 it became clear that there was a serious shortage of grain throughout the country. Why the shortages had arisen caused endless debate. Was it because of a decline in production? Although the military draft took men out of agriculture, this affected larger estates rather than peasant farms. In any case, the labour of prisoners of war, refugees, and children, and young adults helped offset these losses. Or was it because of a decline in marketing, and if so, did this reflect a reluctance on the part of peasants to part with their grain? This explanation carried more conviction. Peasants marketed less of their surplus produce, preferring to distil it or feed it to livestock. They calculated that the cash they received for selling grain could not be exchanged for manufactured goods – even if the goods reached the countryside, they increased in price at a rate that outstripped increases in food procurement prices. Inflation progressively rendered the cash worthless. As one peasant observer put it: "the richness caused by the money is like the money itself: it is of paper, and has no weight, and good only to be counted. It goes like water, and leaves no trace." [16]

At stake, therefore, was not just the organisation of production – so long a matter of debate amongst Russian politicians, civil servants and economists – but the arrangements for securing supplies of grain and other items. Officials in the ministry of agriculture regarded the vicissitudes of war as an opportunity to clip the wings of Russian middlemen and to forge direct links between official procurement agencies and food producers. [17] Against this backdrop, civil servants considered tighter regulation of the grain market, including measures to determine the total needs of the state and to impose compulsory delivery quotas on food producers. Far from being a Bolshevik initiative, these measures were drawn up in late 1916 by the minister of agriculture, A.A. Rittikh (1868-1930), who hoped that provincial governors and zemstvos would work together. [18] After February 1917, the confused programme of the first Provisional Government made matters worse, by encouraging grain merchants to hold back their reserves in anticipation of a further rise in "fixed" grain prices in the autumn or the cancellation of price controls altogether. [19]

Economic Demobilisation and Post-war Prospects

Like mobilisation, demobilisation became a political and not just an economic struggle over the

direction and management of policy. Predictably, Konovalov spoke in September 1916 of demobilisation as a task for the war industry committees, which alone could prevent "anarchy". [20] He and his colleagues entertained a brighter future for Russia that included industrial growth and import substitution, a surge in railway construction, and (here their Slavophile orientation came to the fore) a more cautious policy towards foreign direct investment. The eminent economist and member of the State Council, Ivan Ozerov (1869-1942) published a series of essays arguing for a new direction in government economic policy, a reformed and greatly enlarged educational system and a commitment on the part of its population (including women and young people) to self-discipline and hard work. Russians had to become strong-willed, better organised, less quiescent and more creative — to encourage the "big man" (bol'shoi chelovek) rather than tolerate people who favoured a quiet life. Like Konovalov, Ozerov favoured much greater investment in industry and transport, in other words the development of Russia's productive forces to sustain an export drive. [21]

This theme was taken up by the director of the Moscow Technical School Vasilii Grinevetskii (1871-1919) in his book on the "post-war prospects of Russian industry". Grinevetskii emphasised that the war prioritised the quantity and speed of production over questions of cost and economising on inputs. Whilst this was an understandable response to wartime exigencies, the demobilisation of industry would require an alteration in attitudes and practice on the part of producers and consumers. [22]

Meanwhile other observers believed that some wartime initiatives should be retained, such as the work done by the Commission for the Study of Russia's Natural Resources, led by V. I. Vernadskii (1863-1945) and A.E. Fersman (1883-1945), which comprised of more than a hundred leading scientists, who adopted a "patriotic" stance that included finding ways to reduce the country's dependence on imported raw materials. [23] Petr Pal'chinskii (1875-1929), argued that Russia should draw on wartime experience to train engineers as concerned, responsible citizens and not just technical experts. [24] V.G. Groman (1874-1932) argued that economic regulation in Russia (like "state capitalism" in other countries) provided a route towards socialism. [25]

Conclusion

Did the war amount to a disastrous interlude that interrupted a long-term growth trend? This question exercised contemporary observers as well as modern scholars. Contemporary estimates of Russia's national income suggested that the wartime surge in total output came to an end in 1917, and was quickly followed by a catastrophic decline. These findings have subsequently been refined by historians but in essence they have not altered the big picture with which contemporaries were familiar. To be sure, there were some warning signs before the old regime collapsed in February 1917, but the precipitous drop in aggregate economic activity took place subsequently. [26]

In any case, pre-war growth did not alter the fact that Russia remained relatively backward in

economic terms. The most up-to-date scholarship tends to concur that policy-makers in poorer countries had fewer resources with which to juggle. Put simply, the options were much narrower in Russia than in most other belligerents.^[27]

At a disaggregated level, Russian economic performance, perhaps not surprisingly, presents a mixed picture. Productivity in war-related industry increased markedly as defence enterprises embarked on new methods of manufacturing to cope with the huge additional demand from the military. New branches of manufacturing emerged and there is some evidence of technological and organisational innovation beyond the defence industries. The transport system worked intensively, and new railway lines were constructed in order to cater for substantial additional traffic. On the other hand, agriculture remained Russia's Achilles heel, as it had been for generations. However, the problem was less one of aggregate availability than of distribution: by diminishing the supply of consumer goods, the war progressively weakened the incentives for peasant farmers to sell their output to urban households. Finally, wartime inflation hardened social divisions in a way that the revolutionary upheavals of 1917 illustrated graphically.

Peter Gatrell, University of Manchester

Section Editors: Boris Kolonitskii; Nikolaus Katzer

Notes

- 1. † Florinsky, Michael T.: The End of the Russian Empire, New Haven 1931 is the summary volume in the Russian Series.
- 2. ↑ Gatrell, Peter: The Tsarist Economy, 1850-1917, London 1986. The path-breaking works on pre-revolutionary Russian economic history pass over the war in silence. See Crisp, Olga: Studies in the Russian Economy before 1914, London 1976; Gerschenkron, Alexander: Economic Backwardness in Historical Perspective, Cambridge 1962.
- 3. † Tugan-Baranovskii, M.I.: 'Vliianie voiny na narodnoe khoziaistvo Rossii. Anglii i Germanii' [The influence of the war on the national economy of Russia, England and Germany], in: Baranovskii, M.I.(ed.): Voprosy mirovoi voiny [Questions of the World War], Moscow 1915, pp. 269-324, online: http://books.e-heritage.ru/book/10071241 (retrieved: 2 December 2014).
- 4. † Rieber, Alfred J.: Merchants and Entrepreneurs in Imperial Russia, Chapel Hill 1982, p. 371.
- 5. † Sidorov, A.L.: Finansovoe polozhenie Rossii v gody pervoi mirovoi voiny [The financial situation of Russia during the First World War], Moscow 1960; Beliaev, S.G.: P.L.Bark, i finansovaia politika Rossii 1914-1917 gg., [P.L. Bark and the financial policy of Russia, 1914-1917] St. Petersburg 2002; Gatrell, Peter: Russia's First World War: a Social and Economic History, London 2005, pp. 135-138.

- 6. ↑ Sidorov, A.L.: Ekonomicheskoe polozhenie Rossii v gody pervoi mirovoi voiny [The economic situation of Russia during the First World War], Moscow 1973, pp. 213-251; Neilson, Keith: Strategy and Supply. the Anglo-Russian Alliance, 1914-1917, London 1984; Heywood, Anthony: Spark of revolution? Railway disorganisation, freight traffic and Tsarist Russia's war effort, July 1914-March 1917, in: Europe-Asia Studies 65/4 (2013) pp. 753-72.
- 7. ↑ Rieber, Merchants and Entrepreneurs 1982, pp. 384-387.
- 8. ↑ Bukshpan, Ia. M.: Voenno-khoziaistvennaia politika: formy i organy regulirovaniia narodnogo khoziaistva za vremia mirovoi voiny 1914-1918 gg. [Military-Economic Policy: the forms and organs for the regulation of the national economy during the world war, 1914-1918], Moscow-Leningrad 1929, online: http://elib.shpl.ru/ru/nodes/10827-bukshpan-ya-m-voenno-hozyaystvennaya-politika-formy-i-organy-regulirovaniya-narodnogo-hozyaystva-za-vremya-mirovoy-voyny-1914-1918-gg-m-l-1929-ekonomicheskaya-biblioteka#page/1/mode/grid/zoom/1 (retrieved: 2 December 2014). Bukshpan, a distinguished teacher and administrator, was arrested in 1930, released, and re-arrested in 1938 before being executed in 1939. During the war he edited the Izvestiia (news bulletin) of the Special Council for Food Supply and the Special Council for Fuel Supply.
- 9. ↑ Nol'de, B.E.: Organizatsiia narodnogo khoziaistva voiuiushchei Germanii [The organisation of the national economy of Germany], Petrograd 1916.
- 10. ↑ Sidorov, Ekonomicheskoe polozhenie Rossii [The economic situation of Russia] 1973, pp. 424-449; Gatrell, Russia's First World War 2005, pp. 119-124.
- 11. † Istoriia organizatsii upolnomochennogo Glavnym artilleriiskim upravleniem po zagotovleniiu snariadov po frantsuzskomu obraztsu general-maiora S.N.Vankova 1915-1918 gg. [The history of the organisation of the plenipotentiary of the Main Artillery Administration for the manufacture of shell according to the French model under the auspices of General S.N. Vankov, 1915-1918], Moscow 1918. The quotation is from A.V. Pankin in Gatrell, Russia's First World War 2005, p. 126.
- 12. ↑ Sidorov, Ekonomicheskoe polozhenie Rossii [The economic situation of Russia] 1973, pp. 193-194, 199-201, 206-207.
- 13. † Sidorov, Ekonomicheskoe polozhenie Rossii [The economic situation of Russia] 1973, pp. 191-212; Siegelbaum, Lewis H.: The Politics of Industrial Mobilization in Russia. a Study of the War-Industries Committees, London 1983.
- 14. ↑ Sergeeva, S.L.: Voenno-promyshlennye komitety v gody pervoi mirovoi voiny [War Industry Committees during the First World War], Moscow 1996.
- ↑ Gatrell, Russia's First World War 2005, pp. 154-75; Antsiferov, A.N./Bilimovich,
 A.D./Batshev, M.O./Ivantsov, D.N.: Russian Agriculture during the War, New Haven 1930.
- 16. ↑ Quoted in Kayden, E.M./Antsiferov, A.N.: The Co-operative Movement in Russia during the War, New Haven 1929, p. 282.
- 17. ↑ Holquist, Peter: Making War, Forging Revolution. Russia's Continuum of Crisis, 1914-1921, Cambridge MA 2002.
- 18. † Kondrat'ev, N.D.: Rynok khlebov i ego regulirovanie vo vremia voiny i revoliutsii [The grain market and its regulation during the war and revolution], Moscow 1991; Lih, Lars: Bread and Authority in Russia, 1914-1920, Berkeley 1990, pp. 50-56; Struve, Peter B. et al.: Food Supply in Russia during the War, New Haven 1930. Rittikh was a noted advocate of land reform before the war.

- 19. † Rieber, Merchants and Entrepreneurs 1982, pp. 387. The economic policy of the Provisional Government is detailed in Volobuev, P.V.: Ekonomicheskaia politika Vremennogo praviteľstva [The economic policy of the Provisional Government], Moscow 1962.
- 20. † Quoted in Siegelbaum, The Politics of Industrial Mobilization in Russia 1983, p. 189.
- 21. † Ozerov, I. Kh.: Novaia Rossiia [New Russia], Petrograd 1916. Ozerov survived persecution and arrest during the Great Terror, only to die during the blockade of Leningrad.
- 22. † Grinevetskii, V.I.: Poslevoennye perspektivy russkoi promyshlennosti, Khar'kov [Post-war perspectives of Russian Industry]: Vserossiiskii Tsentral'nyi soiuz potrebitel'nykh obshchestv [The All-Russian Central Union of Consumer Cooperatives], 1919, online: http://elib.shpl.ru/ru/nodes/10634-grinevetskiy-v-i-poslevoennye-perspektivy-russkoy-promyshlennosti-harkov-1919#page/1/mode/grid/zoom/1 (retrieved: 2 December 2014). Grinevetskii died of typhus during the civil war.
- 23. † Kol'tsov, A.V.: Sozdanie i deiatel'nost' Komissii po izuchaniiu estestvennykh proizvoditel'nykh sil Rossii, 1915-1930 gg [The formation and activities of the Commission for the Study of Russia's Productive Forces], St.Petersburg 1999, pp. 12-39.
- 24. † Graham, Loren R.: The Ghost of the Executed Engineer. Technology and the Fall of the Soviet Union, Cambridge MA 1993. Pal'chinskii served as a deputy minister of trade and industry in the Provisional Government, and afterwards joined Gosplan, where he eventually fell foul of Stalin.
- 25. † Jasny, Naum: Soviet Economists of the Twenties. Names to be Remembered, Cambridge 1972. Pal'chinskii believed that the fledgling command economy should nevertheless take account of local conditions and needs.
- 26. † Prokopovich, S.N.: Voina i narodnoe khoziaistvo,[War and the national economy] Moscow 1918, online: http://elib.shpl.ru/ru/nodes/14146-prokopovich-s-n-voyna-i-narodnoe-hozyaystvo-m-1918#page/1/mode/grid/zoom/1 (retrieved: 2 December 2014); Markevich, Andrei/Harrison, Mark: Great War, Civil War, and recovery. Russia's national income, 1913 to 1928, Journal of Economic History 71/3 (2011) pp. 672-703, online: http://www2.warwick.ac.uk/fac/soc/economics/staff/mharrison/public/jeh2011_postprint.pdf (retrieved: 2 December 2014).
- 27. † Broadberry, Stephen/Harrison, Mark: The economics of World War 1, in: Broadberry/Harrison(eds.): The Economics of World War 1 2005, pp. 3-40.

Selected Bibliography

Broadberry, Stephen N. / Harrison, Mark (eds.): **The economics of World War I**, Cambridge; New York 2005: Cambridge University Press.

Gatrell, Peter: **Russia's First World War. A social and economic history**, Harlow 2005: Pearson/Longman.

Pamuk, Şevket: **The Ottoman economy in World War I**, in: Broadberry, Stephen N. / Harrison, Mark (eds.): The economics of World War I, Cambridge; New York 2005: Cambridge University Press, pp. 112-136.

Sidorov, Arkadii Lavrovich: **Ekonomicheskoe polozhenie Rossii v gody pervoi mirovoi voiny (The economy of Russia in the years of the First World War)**, Moscow 1973: Nauka.

Sidorov, Arkadii Lavrovich: **Finansovoe polozhenie Rossii v gody Pervoi Mirovoi voiny, 1914-1917 (The Russian financial situation during the First World War, 1914-1917)**, Moscow 1960.

Siegelbaum, Lewis H.: The politics of industrial mobilization in Russia, 1914-17. A study of the war-industries committees, New York 1983: St. Martin's Press.

Struve, Petr Berngardovich / Demostenov, S. S. / Dolinskii, N. V. et al.: **Food supply in Russia during the world war**, New Haven 1930: Yale University Press.

Citation

Gatrell, Peter: Organization of War Economies (Russian Empire), in: 1914-1918-online. International Encyclopedia of the First World War, ed. by Ute Daniel, Peter Gatrell, Oliver Janz, Heather Jones, Jennifer Keene, Alan Kramer, and Bill Nasson, issued by Freie Universität Berlin, Berlin 2014-10-08. **DOI**: 10.15463/ie1418.10513.

License

This text is licensed under: CC by-NC-ND 3.0 Germany - Attribution, Non-commercial, No Derivative Works.