RESEARCH ARTICLE

Russia as a great power: from 1815 to the present day Part II

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Abstract

This article is Part II of a survey of Russia's position as one of the great powers and how it has evolved from 1815 to the present day. Part 1 ended on the eve of the Great Patriotic War (1941-1945), and Part II begins where Part 1 left off, with some data on the Great Patriotic War and its influence on the USSR's position as a great power. It deals with post-war reconstruction and then considers the Cold War and post-Soviet Russia (1992-2022). Attention is paid to Soviet economic policies, the reasons for the long-run decline in Soviet economic growth, and the state collapse of 1991. Explanatory theories used include List's economic recommendations for medium-developed countries, Wintrobe's political economy of dictatorship, and Tilly's analysis of the war-state relationship. It is concluded that a relatively poor country can become a great power and maintain that position for long periods if it has institutions that enable it to squeeze its population for military purposes.

Key words: Great power; Russia; war **JEL Codes:** F51; H56; N40

Successful natural states often capitalize on their ability to produce a larger [than open access orders] social surplus and to mobilize resources for the use of the state, such as financing military expansion at the expense of their neighbours.

North et al. (2013: 40)

1. The Great Patriotic War (1941-45)

The German invasion began on 22 June 1941, and the USSR suffered very severely in the first months of the war. It lost huge territories and large numbers of soldiers (captured, killed or injured). By October 1941 Leningrad was besieged, German tanks were 30 kilometres from the centre of Moscow, and there was panic and looting in Moscow (Barber, 1995). Foreign embassies and some government institutions were evacuated to Kuibyshev (now Samara), a thousand kilometres south-east of Moscow. Preparations were made to evacuate Stalin. However, a vigorous defence and subsequent counter-attacks saved Moscow. Prior to this, officials in London and Washington were inclined to think that the USSR would go the way of Poland and France. They were ignorant of the extent of the pre-war Soviet military build-up and too impressed by the purge of the Soviet officer corps in 1937-41 (mainly in 1937-38) and the poor performance of the Red Army in the 1939-40 winter war with Finland. About two-thirds of the senior officers of the Red Army were arrested in 1937-41

© The Author(s), 2022. Published by Cambridge University Press on behalf of Millennium Economics Ltd. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited. and most of them were shot, including two of the five Marshals of the Soviet Union (Suvenirov, 1998: 315). The Soviet attack on Finland was poorly executed and the USSR failed to acquire it (as it did Estonia, Latvia and Lithuania). But it did make some territorial gains at Finland's expense.

The reasons for the ultimate Soviet victory in the war are many and varied. They include the Japanese failure to attack the USSR in 1941, the German lack of preparedness for a long war under Russian conditions, and the Lend-Lease assistance the USSR received. In the autumn and winter of 1941 the Japanese failure to help its ally Germany enabled the USSR to transfer troops from the Far East to the Moscow Front where they played an important role. The USSR did not have to fight a war on two fronts (unlike Germany in 1944-45). Japan's refusal to attack partly reflected the good performance of the Red Army in its 1939 clash with the Japanese army at Khalkin Gol on the Mongolian border, and partly reflected the greater attraction of the natural resources of South-East Asia. Another positive development for the USSR was the German failure in the winter of 1941-42 to supply all of its front-line troops with winter clothing and boots that were adequate for the Russian winter and its vehicles with fuel and engines that were suitable for the climate. According to the careful estimates of Harrison (1996), Western assistance (mainly US Lend-Lease) provided about 10% of the total resources available to the Soviet economy in 1943 and 1944. It took the form of food, vehicles, locomotives, high octane aeroplane fuel, communications equipment and a variety of other things. This assistance, together with Western ground and aerial attacks on Germany and its occupied territories (Italy, France, Belgium, the Netherlands) illustrated Modelski's (1996: 336) stress on cooperation as a factor in global political evolution.

Since Overy (1995), the main stress in explaining the Soviet victory has been placed on the production achievements of the USSR (Ellman, 2014: 120):

During the war the USSR heavily out-produced Germany in the main categories of armaments. Furthermore, it increased its output of armaments faster than Germany, so that its production superiority was greatest early in the war. Whereas already in 1940 it out-produced Germany by 30% in both tanks and self-propelled guns, and in combat aircraft, by 1942 it produced four times as many tanks and self-propelled guns as Germany and 90 per cent more combat aircraft (Harrison, 2000: 100). This was an extraordinary achievement for a country that had been invaded, and had lost a large part of its population, territory and industrial resources.

How was this achieved? Partly it was a result of the prolonged war preparations – the dual-purpose factories, the large size of the armed forces on the outbreak of war,¹ the weapons that had been designed before the war and the role of mobilization planning² in preparing factories and cities for the switch to war conditions. A major factor was the introduction of mass production methods in Soviet industry during the 1930s (Ellman, 2014: 120):

In the First Five-Year Plan, American engineers and firms, and the practice of copying from the USA, played important roles in the design and development of new plants.³ In addition, both collectivisation and the Stakhanov movement were instrumental in breaking craft traditions. By concentrating on a relatively small number of weapons, produced in very large numbers, the USSR was able to out-produce the more variegated high-quality German output. World War II was an industrial war with huge quantities of industrial products being used by all the major participants. Hence, the two main victors of World War II were the homeland of mass production (the USA) and its most successful imitator (the USSR).

¹At the outbreak of the war, the USSR had only about half the number of soldiers on its western frontier that Germany and its allies had, but more than three times as many tanks and twice as many warplanes. It also had large numbers of soldiers elsewhere, e.g. in the interior and in the Far East.

²For an explanation of Soviet mobilization planning, see Ellman (2014: 105-108).

³Some information on this can be found in Melnikova-Raich (2010, 2011). (Footnote added.)

Another important factor in the Soviet victory was the ability of the Soviet government to mobilize all the resources of the country for war. Four days after the war broke out, the working week was increased to 66 hours (six 11-hour days), which was an increase of 37.5%, and holidays were cancelled. This was a much more intensive use of the labour force than in Germany. In the USSR, two and three-shift working became common. In addition, very large numbers of Soviet women worked in military industry, and some served in the armed forces.⁴ Furthermore, more than a million teenagers worked in Soviet industry during the war. The economic institutions that had been created in the 1930s, although not very good at providing food and other consumer goods without queuing, were very effective in allocating resources to the defence sector and organizing mass production there.

Moreover, the total labour resources at the disposal of the Soviet state were greater than those in Germany, even including the labourers imported from occupied countries. In each of the war years (other than 1942) the Soviet labour force (including collective farmers) substantially exceeded that in Germany (Nigmatulin, 2015: 120). Another advantage of the USSR was that it had more cannon fodder than Germany. The USSR had a substantially larger population than Germany, and 34.5 million people served in its armed forces during the war. The corresponding German figure was 'only' 21.1 million (Nigmatulin, 2015: 16).

It was poor food supply in the capital and the army, resulting in bread riots in the capital during a prolonged war and the refusal of military units to use force against them,⁵ that precipitated the down-fall of the Tsarist empire. The USSR avoided this. After the outbreak of war it closed its retail food shops, introduced a rationing system and also encouraged urban inhabitants to grow their own food on allotments and industrial enterprises to create subsidiary farms. Most workers received a large part of their nourishment in factory canteens. Nevertheless, food was scarce (on the legal collective farm markets in the towns prices rose to very high levels). There was a famine in besieged Leningrad in which civilian deaths are generally estimated at between 700,000 and 1 million; and also famines in occupied Kyiv and Kharkiv, and an estimated total of about 4.1 million deaths in the occupied areas from a combination of genocide, starvation, infectious disease and lack of medical care (Filimoshin, 1995:127). In addition, there were also starvation deaths among civilians in unoccupied parts of the USSR (Vyltsan, 1995), even among male industrial workers (Filtzer, 2015).⁶ The failure of bread riots to materialize in the unoccupied areas was partly a result of the fact that, on average, sufficient food for survival was available, partly a result of patriotic feelings and the view that the country was fighting a deadly enemy and food shortages were unavoidable.

It was also partly a result of the harsh discipline enforced in the country during the war. In 1941-45, 7,700,000 sentences were handed down by courts and military tribunals for breaches of labour discipline (Papkov, 2012: 420). In 1941-42, when defeatism was strongest, the courts sentenced 8,000 people to death (Vert and Mironenko, 2004: 616). In addition to judicial repression, extra-judicial repression by the all-pervasive state security organizations, with their multitude of informers,

⁴Women comprised a significant share (about a quarter) of the German industrial labour force in 1939 and that share increased during the war. But it always remained much below the Soviet level. For example, the share of women in the German industrial labour force in 1944 was only 31.4%, whereas in the USSR it was 50.7% (Nigmatulin, 2015: 124). However, Overy (1994: 305) pointed out that excluding agriculture gives a one-sided impression. The participation rate of German women aged 15–60 was already 52% in 1939. The proportion of women in the German native civilian labour force rose from 37.3% in May 1939 to 51.0% in May 1944. This was consistently above the UK or US levels. The women who worked in agriculture were not producing weapons, but without food there would have been no weapons.

⁵This refusal was not just a result of poor army food in the preceding months, but also of an unwillingness to shoot Russian civilians, especially women, which had been shown by mutinous soldiers and reluctant officers in 1905-6 (see Part 1, Section 7, 'The end of the Empire').

⁶The total number of civilian excess deaths during the war in the unoccupied part of the USSR, from starvation (including the Leningrad famine), poor living and working conditions, long hours of work and increased infant mortality, has been estimated by Nigmatulin (2015: 195) at 4.2 million. Nevertheless, a combination of Soviet institutions, such as rationing, allotments, subsidiary farms, collective and state farms and their private plots, factory canteens and urban collective-farm markets (plus Lend-Lease) did provide the overwhelming majority of the civilian population in the unoccupied part of the USSR with enough food to survive.

was an ever-present risk. In total, 31,000 people were recorded as having been shot by the security agencies in 1941-42 (Vert and Mironenko, 2004: 608). In total, 410,000 people were sent by state security to prisons or camps in 1941-1945,⁷ and about a million people died in them in 1941-45.⁸ They also deported 2,100,000 people in 1941-45 (Polyan, 2001: 246-248).⁹ These actions made expression of discontent very dangerous. Successful anti-government activity in a police state fighting a total war was impossible, as German experience also showed. (By comparison, the Tsarist Empire suffered from being too liberal.) However, in 1941-42, there was substantial defeatist sentiment among collective farmers who hoped to privatize the property of the collective farms, and among dissatisfied workers (Harrison, 2008: 23). It was also possible for the Germans to recruit substantial numbers of military and civilian collaborators in the occupied territories and amongst prisoners of war (although most of them probably only collaborated to enable their survival).

After four years of fighting, the USSR emerged victorious. In 1945 it was one of the three great powers (USA, USSR, UK). It had earned that position by the large part it played in the defeat of Germany. (In 1945 it also attacked Japan, thus becoming a major power in the Far East as well.) Its armies had conquered Berlin and occupied much of Central and Eastern Europe and Manchuria. Soviet institutions, such as the Communist Party, national economic planning, the state security service and discipline imposed by fear, despite being brutal and the cause of millions of deaths, had demonstrated their ability to extract sufficient resources from the Soviet population for war and to make a major contribution to the destruction of the Nazis.

2. Post-war reconstruction and the first stage of the cold war (1945-1953)

At the end of the war a large part of the USSR was devastated as a result of the fighting. There were huge losses to housing and other buildings, utilities, industrial enterprises and farms. There were also millions of displaced persons (prisoners of war, Soviet citizens compelled to work in Germany and Soviet citizens evacuated from their homes). The victory had been bought at huge material and human cost. One estimate of the material destruction suffered by the USSR and some other countries is set out in Table 1.

More important than the material losses from the war were the human losses. The best available estimate of excess deaths in the USSR during the war is 26-27 million (Ellman and Maksudov, 1994; Harrison, 2019).¹⁰ In addition there were many wounded and disabled.

The peace settlement at the end of the war, as agreed at big three conferences in Teheran (1943), Yalta (1944) and Potsdam (1945), and the bilateral Anglo-Soviet 'percentages agreement' of October 1944, greatly increased the international standing of the USSR. It became one of the five permanent members of the Security Council of the newly created United Nations, had three votes in the General Assembly of the UN (USSR, Ukraine and Belorussia) and reincorporated Estonia, Latvia and Lithuania in the USSR. It also acquired part of East Prussia, part of Finland, southern Sakhalin and the Kurile islands, and Tuva on the Mongolian border, occupied part of Germany (subsequently the German Democratic Republic) and part of Austria, acquired military bases in Finland and China, and controlled, via its military presence and/or local Communist parties, Poland, Czechoslovakia, Hungary, Romania, Bulgaria, Albania and Mongolia, and initially also Yugoslavia. It also provided limited help to China's Communist party to win the civil war in that country and emerge as a major ally of the USSR in 1949, when it won control of all China (except for Taiwan and, for a short time, Tibet) and created the People's Republic of China. The fact that the entry of Soviet troops led to

⁷This figure is derived from the Pavlov report, drawn up in the Ministry of Internal Affairs in December 1953 and published several times (e.g. Artizov *et al.*, 2000: 76-77; Vert and Mironenko, 2004: 608-609).

⁸This figure is the estimate of Zemskov (1995) and is derived from Gulag documents.

⁹There is some overlap between these figures. For example, some of those who died in prisons or camps in 1941–1945 had been sent to prisons or camps in 1941–45. As a result they should not simply be added up to get 'the total number of victims of repression'. However, the figures for mortality *in* the camps understate mortality *caused* by the camps.

¹⁰This range includes net emigration before the end of 1945, but excludes deaths after 1945 from war injuries.

	Amount	% of total
USSR	128.0	49.2
Germany	48.0	18.5
France	21.5	8.3
Poland	20.0	7.7
UK	6.8	2.6
Other European countries	35.7	13.7
Total	260.0	100.0

Table 1. Estimated costs of war-time destruction in the USSR and some European countries (billion 1938 US dollars)

Source: Nigmatulin (2015): 187. Nigmatulin derived these figures from the work of the French economist A. Claude (due to double transliteration this name may be misspelled).

the political and socio-economic transformation of the countries concerned was not a matter of chance. As Stalin put it in conversation in 1945 (Djilas, 1963: 90): 'This war is not as in the past; whoever occupies a territory also imposes on it his own social system. Everyone imposes his own system as far as his army has power to do so. It cannot be otherwise.'

Soviet control over Central and Eastern Europe, and influence over North Korea and China, in the late Stalin period, was a combination of two factors. They were, first, the hard power resulting from the victories of its armies, the presence of its armed forces as occupiers or 'allies', and the activities of its security agencies (which organized Soviet-style show trials in some countries, and arrested, deported and shot numerous actual and potential 'enemies'). Secondly, they were the soft power the USSR exercised as a country, perceived as building socialism, moving towards the classless society and having an efficient economic system (planning).

The USSR made rapid progress in restoring a war-ravaged country, especially industry in general and military industry in particular. Khanin (2008: 71) argued that: 'The rapid post-war restoration of the economy was a very important economic success.' Food rationing was ended together with the successful monetary reform of December 1947¹¹ (and earlier than rationing was ended in the UK). However, there was a famine in 1946-47, persistent widespread shortages and poor quality of food, an acute housing shortage and generally low living standards. To achieve this limited success the USSR used not only its own resources but also reparations from its defeated war-time enemies. Unlike the reparation payments France and the UK imposed on Germany after World War I, these reparations took the form not of money but of goods. The USSR removed machinery from its occupation zone of Germany, and from defeated Hungary and Romania. According to Khanin (1991: 186), reparation deliveries accounted for about 50% of the machines installed in Soviet industrial investment projects in 1946-50.

As Wiles (1968: 488) pointed out:

Stalin showed himself a vastly more efficient extractor and recipient of direct tribute in 1945-52 than France and Britain in 1919-31. Indeed, since Mercantilism there has been nothing like it. The very notion that there was some difficulty in absorbing tribute would have seemed utterly astonishing to him: an example of the 'internal contradictions of capitalism' too comical to be true. His own problems, although they were grave and caused terrible waste, affected only his procurement machinery. Once he had reformed that, reparations paid off handsomely.

¹¹However the ending of rationing was not without problems. In some areas there were initially shortages of food, particularly bread. In addition there were often long queues. In some places bread purchases per person were initially restricted to amounts less than the previous ration (*Denezhnaya*, 2010: 614, 617, 664).

Besides reparations from its former enemies in Central, Eastern and Northern (Finland) Europe, the USSR also benefitted from the labour of Prisoners of War (POWs) and of people arrested in the Soviet Zone of Germany. German prisoners contributed both manual labour and engineering-scientific expertise to Soviet weapons programmes. According to Khanin (2008: 70), till the end of the 1940s about two million POWs worked in the USSR.¹² A substantial number of German POWs were still being used as workers also in the first half of the 1950s. For a detailed account of the role of the foreign input into the Soviet atom bomb project, resulting from espionage; the import of machinery, equipment and uranium from Germany; and the work of German engineers and scientists in the USSR, see Artemov and Voloshin (2016).

Stalin (1952) argued that the main economic consequence of the World War II was the disintegration of the single world market and the formation of two rival world markets, the socialist one and the capitalist one. For an analysis of the former, and how it evolved over time, see Ellman (2014: 334-354). In 1945-53 there existed what is known as socialist imperialism.¹³

The USSR substantially reduced the size of its armed forces after the end of the World War II. However, it launched large and expensive military research and development programmes, particularly in the two top priority fields, nuclear weapons and rockets. The USSR tested its first atom bomb already in 1949, a year ahead of US expectations. It subsequently built a stock of atom bombs and developed hydrogen bombs (first tested in 1953, just one year after the USA). Its rocket programme also made good progress and in 1957 made possible the world's first artificial earth satellite (Sputnik 1). In 1961 this rocket programme made it possible for the first human to orbit the globe in an artificial satellite (Yuri GagarIn). Other important R&D areas were anti-aircraft defence and biological warfare. The Korean War (1950-53) led to an increase in Soviet war preparations.

From shortly after the end of World War II down to the late 1980s, the USSR was engaged in the Cold War. This was a worldwide conflict between the USSR and USA. It was fought on all continents (except Antarctica). It was fought by military means (e.g. the Korean and Vietnam wars); political means (support for local Communist parties by the USSR, support for local anti-Communists by the USA and its allies); economic warfare (support for strikes in capitalist countries *versus* trade embargoes); and ideological means (socialism versus capitalism; comparative consumption levels in the two systems; printed propaganda; radio programmes), and rival soft power (Marks & Spencer and pop culture *versus* socialism and the classless society).

The main beneficiaries of the Cold War were Western Europe and Japan (that recovered under the US security umbrella), and China (whose post-Maoist economic miracle was initially facilitated by the USA because the USA regarded it as a useful ally in the struggle with the USSR). The main losers were the USSR (which lost the Afghanistan war, bore the burden of structural militarization and ultimately disintegrated) and the USA (which lost the Vietnam War and for decades bore the burden of what Eisenhower termed 'the military-industrial complex').¹⁴

Stalin died in 1953. On the one hand, in 1930-1953 he had transformed an overwhelmingly agricultural country into a largely industrial one. Education had greatly increased. Infant mortality had fallen sharply and life expectancy at birth had increased significantly. The birth rate had fallen. The USSR had become one of the two great powers (the UK gradually ceased to be a great power) and

¹²Besides German POWs, there were also about 600,000 Japanese POWs who were put to work. Their repatriation began at the end of 1946, and the peak year for their repatriation was 1947, but their repatriation was only completed in 1956 (Kuznetsov, 1997).

¹³Sometimes known as Soviet imperialism.

¹⁴In the 1990s it seemed that the USA, which was temporarily the world's only great power, had emerged victorious from the Cold War. In 2022, looking at the situation in a longer perspective, the global scene seems very different. However, military spending is not only a burden for the USA. Some of the expenditure is used to stimulate technical progress which has important civilian spin-offs. In addition, it plays a Keynesian role in maintaining the level of demand in a demandconstrained economy prone to periodic recessions and depressions. The positive effects of military spending in the Russian case were endorsed by Putin (2012) when he stated: 'The defence sector has always served as the locomotive which pulls the other sectors of the economy behind it.'

the head of a Eurasian bloc of countries which included about a third of the world's population. On the other hand, the USSR was an extreme dictatorship. When Stalin died the population of the Gulag was about 2.5 million,¹⁵ and the number of 'special settlers' (i.e. deported peasants and deported victims of ethnic cleansing) was about 2.8 million (Dugin, 1999: 58). Living standards were low. He had won one war (the Great Patriotic war), although at great cost, was fighting the Cold War, supporting North Korea in the Korean War and was preparing for another major war. For an interpretation of Stalinism using Tilly's historical sociology, see Markwick (2021).

Stalin bequeathed to his successors an economy marked by high military and security expenditures (in the last years of Stalin's life estimated by Simonov (1996: 329) at about a quarter of the national income) and by 'structural militarization'. This is a term coined by the former Soviet military intelligence officer Vitaly Shlykov (Ellman, 2014: 124):

It referred to the combination of large armed forces; a high share of the national income devoted to military and defence-industry activities; the high priority of the military and defence-industry sectors; the system of mobilisation planning with its subordination of current civilian production to military needs and the accumulation of large stocks of goods needed in wartime; the accumulation of stocks of weapons far in excess of real military requirements; the maintenance of these phenomena for decades; the failure of the economy to respond as expected to market reforms; and the long-run subordination of the whole society to the needs of the military and defence industry.

Did this huge military effort reflect expansionism and inherent aggressiveness or was it a result of a fear of external attack and the need to defend the country against it? Hanson has argued that (Hanson, 2014: 31): '... the Soviet leadership's stance towards the rest of the world was characteristically fearful, defensive and risk averse. The word 'defence' is not a euphemism'.

This is only partially true. Where the opportunity presented itself, as in Eastern Europe in 1945-49, Korea in 1950, Hungary in 1956, Czechoslovakia in 1968, Cuba under Castro, Africa in the 1970s and Afghanistan in 1979, the USSR took advantage of the situation to expand its influence.

3. Soviet progress and decline (1953–84)

In this period the USSR made great progress, especially in raising living standards. In the late 1950s a large-scale housing programme was launched, and from that time single-family flats (as opposed to communal flats and hostels/barracks) gradually became common. In the 1960s, 1970s and 1980s many households bought televisions and refrigerators. In the 1970s and 1980s some households acquired their own cars. Minimum wages and pensions were increased in amount and coverage. Famines disappeared (the 1947 famine was the last one). The USSR remained one of the two great powers. In the 1970s the USSR reached military parity with the USA. By then both countries possessed more than enough nuclear weapons and ballistic missiles to destroy the other. The USSR maintained its position in Central and Eastern Europe (with a very limited military intervention in East Germany in 1953, and bigger ones in Hungary in 1956 and Czechoslovakia in 1968). However, its alliance with China came to an end in the 1960s. China under Mao Zedong pursued its own path. This was partly compensated for by the Cuban revolution and growing Soviet influence in African countries such as Ethiopia, Angola and Mozambique. The USSR retained its soft power in Cuba, Africa, India and

¹⁵This figure is for both camps and colonies (Bezborodov and Khrustalev, 2004: 129). The latter included about 200,000 prisoners. A major difference between camps and colonies is that the latter were for prisoners sentenced for only up to three years. Also, the colonies did not play a role in the major investment projects of the Gulag (Ertz, 2005: 94-95). Acemoglu and Robinson (2013: 131) state that Stalin sent 2.5 million to the Gulag. This is an enormous understatement which confuses stocks and flows. The number sentenced to the Gulag in 1934-53 was about 20 million (Ellman, 2008: 117). Since there were deaths and releases, the stock of prisoners at any time was much less. The *stock* at the end of Stalin's life was about 2.5 million.

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Table 2	USSR annu	al average gro	wth rates	of industrial	production,	1928-1980	(% p.a.)
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Period	Average growth rate
1928–1941	10.9
1951–1955	8.7
1956–1960	8.3
1961–1965	7.0
1966–1970	4.5
1971–1975	4.5
1976-1980	3.0

Source: Khanin (1991: 146).

1955-60 5.4 1960-65 4.8	
1960-65 4.8	6.8 ^a
	5.4
1965–70 4.8	4.8
	4.8
1970–75 2.9	2.9 ^b
1975-80 1.8	1.8 ^b
1980-85	1.7
1985-90 1.3	1.3

Table 3. USSR GDP growth 1928-90 (% p.a.)

Notes: ^aThis is for Russia (not the whole USSR but by far the largest part of it).

^bThese figures suggest that Acemoglu and Robinson (2013: 94) exaggerated when they wrote that Soviet growth stopped in the 1970s.

However, it certainly slowed down then. Hence the statement by Acemoglu and Robinson (2013: 128) that 'By the 1970s economic growth had all but stopped' is more accurate for the second half of the 1970s.

Source: For 1955–90 Hanson (2014: 249). The underlying source is Maddison (1995). For 1928–40 Kuboniwa, Shida and Tabata (2019: 377).

elsewhere, resulting from its self-proclaimed socialism, its perceived non-capitalist, recession-free, full employment, planned economy and economic growth. It also benefitted from its ability to provide armaments¹⁶ and economic assistance to client countries.

However, in this period the rate of growth of the Soviet economy steadily declined. Soviet official macroeconomic statistics are unreliable, so use must be made of outsider estimates to get a realistic understanding of the situation. Two of these are shown in Tables 2 and 3.

Although Tables 2 and 3 measure different things (the growth of industrial production and the growth of GDP) and use different methodologies, they both show the same phenomenon. Soviet economic growth slowed down continuously from the 1930s. What caused this long-run decline? A variety of explanations have been offered, ranging from a fall in the growth of the labour force and of investment, and a reduced availability of cheap natural resources, via a lack of domestic innovation, to the lessening in discipline resulting from gradual de-Stalinization.

Soviet growth did not depend on the profit motive and competition, but on orders from the dictator and their rigorous enforcement. For example (Kumanev, 2005: 596), in 1942 Stalin summoned Baibakov (then Deputy People's Commissar for the oil industry) to his office. He explained that German troops were moving in the direction of the Baku oil fields. In view of this he gave Baibakov instructions to fly to the oil-rich region to implement a two-part order. This was: first, to

¹⁶In some years in the 1960s-80s the USSR was the world's largest weapons exporter, in the remaining years the second largest.

ensure that in the event that Germany captured any oil wells they would be unable to obtain any oil from them since Baibakov would have arranged their destruction. Secondly, it was to ensure that no oil wells would be destroyed in areas that the Germans did not conquer so as not to deprive the USSR of their oil. Stalin indicated to him that, if he failed in either of these tasks, he would be killed. Baibakov was aware that this was not an empty threat. Stalin was quite prepared to order the killing of officials who failed to implement his orders. Baibakov successfully implemented the order.

Although this way of motivating people would not be recommended by the Human Relations (HR) department in a market economy firm, it seems to have been effective in the USSR in the Stalin period. Harsh discipline is traditionally the way to maintain effective armies and navies, and the Soviet economy was, in the words of the Polish economist Lange (1962), 'a *sui generis* war economy'. As the British Sovietologist Alec Nove observed in the pre-perestroika period (personal communication), Soviet society then was like an army in the field that has paused and is waiting for the next orders. Without firm orders firmly enforced, it was confused and could not move ahead.

Acemoglu and Robinson (2013) give the impression that the only economic incentives are market economy incentives. Actually, fear of punishment can be an important incentive to carry out orders. This is often used to incentivize good behaviour in children at home and in school. Criminal law and its implementation are partially intended to provide incentives to avoid criminal activities. The positive influence of harsh patriarchal discipline on the behaviour of sons was pointed out in the New Testament by the author of *Hebrews* 12: 9-11. Stalinist terror incentivised people such as Baibakov to carry out orders from the boss so as to avoid arrest and preserve their lives. In the USSR there were also the usual bureaucratic incentives to carry out orders successfully so as to keep one's job and possibly be promoted. As Boettke (2020: 196) sensibly observed: 'The [Soviet] system had its own internal logic and functioned according to these operating principles in a predictable manner.'

In the post-Stalin period the harsh, military-style, discipline gradually faded. This was a result of Khrushchev's de-Stalinization and Brezhnev's policy of 'stability of cadres' (i.e. leaving officials in their jobs for years and not dismissing them for breaching plan discipline). In the Brezhnev period, when the situation as the year-end approached showed that an enterprise or ministry was likely to miss its annual plan target, instead of arresting or dismissing the enterprise director/minister responsible, the plan would often be reduced. That was no way to squeeze the maximum effort out of managers and their subordinates. Hence, Hanson (2014: 253) suggested that: 'a gradual weakening of discipline, that is of the power credibly to threaten punishment, played a part, along with [other factors] ... in the slow-down'. The other factors included: the decline in the rate of growth of labour and capital inputs; increased costs of exploiting natural resources (such as oil and gas fields which were depleted or located in increasingly inhospitable places); the end of the gain from transferring workers from low productivity agriculture to higher productivity industry; and the end of reparations, the labour of POWs and of the willingness of US firms (so important in the First Five-Year Plan) and of the US government (during World War II) to transfer technology to the USSR. (However, some technology transfer from the West continued as a result of use of the open literature, espionage and trade.)

4. The collapse of the USSR (1985–1991)

The causes of the collapse of the USSR have been much debated. Opinion is divided between adherents of structural and contingent explanations. Those who support structural explanations stress its fragile political system, and/or multinational character, and/or the long-run decline in economic growth, and/or the inherent inefficiency of a non-market economy, and/or the burden of structural militarization.

Those who focus on contingent events stress the alleged role of traitors in the top leadership, or the unexpected consequences of the political and economic reforms introduced by Team-Gorbachev combined with Yeltsin's separatism (Zubok, 2021), or threats from the USA (SDI,¹⁷ trade embargoes,

¹⁷Strategic Defence Initiative, the Reagan administration's missile defence/'star wars' programme.

hostile rhetoric), or the success of the decollectivization of agriculture in China, or the adverse shift in the terms of trade resulting from the decline in world prices for oil and natural gas (the USSR's main exports), or some combination of these factors.

I consider that the cause was a combination of structural and contingent factors, with the structural factors explaining why the country and its system were vulnerable, and the contingent ones explaining why it collapsed in 1991 (rather than, say, 2001). (That history is determined by a combination of structural and contingent factors is one of the themes of Acemoglu and Robinson (2013).) The multinational character of the USSR and its division into national republics did make it vulnerable to disintegration and the transformation of those republics into sovereign states. The decline in growth rates and the failure to overcome the technology gap with the USA and Western Europe were indeed major issues undermining the self-confidence of the Soviet elite and stimulating the desire of Team-Gorbachev for radical change. Military expenditures were clearly a heavy burden. Military expenditures have been estimated at 14-16% of GNP at the end of the Soviet period (Cooper, 2013: 99). This is a very high figure by international standards for a country at peace and excludes the costs of prioritization of the defence sector and of mobilization planning (Cooper, 2013: 99-100; Ellman, 2014: 105-108). The bureaucratic-command system definitely did create system-specific inefficiencies. Soviet agriculture was notoriously inefficient and its civilian manufacturing industry uncompetitive.

The threat from the USA did lead to Soviet agreement to some arms control measures. The success of decollectivization in China did suggest to the Soviet leaders that marketization of the economy could increase output and overcome food shortages. The decline in revenue from the sale of oil and natural gas did worsen the state budget. However, the crucial role among the contingent factors was played by the well-meaning but counter-productive economic and political reforms introduced by Team-Gorbachev. These led to the loss of monetary control, and the combination of a worsening economic situation with political liberalization. That combination led to the emergence of anti-Communist movements in the non-Russian republics and in Russia itself. The result was not the much-discussed reform of the USSR, but its collapse. Acemoglu and Robinson (2013: 93) argue that it was the absence of political reforms that explains the Soviet economic collapse in the 1980s and 1990s. This ignores the role of the political reforms of the perstroika period in undermining the Soviet economy and *contributing* to its collapse. This accords with the observation of Tilly (1992: 21), based on European experience in the second millennium, that: 'When ... the emperor lost the ability to deploy massive coercion, empires often disintegrated.'

The Soviet economy's unexpected response to political reform in the perestroika period was because the USSR'S socio-economic system was one in which Party control of the economy and society, an official ideology and repression of non-conformists were indispensable parts, and hence their ending led to system collapse (Ellman and Kontorovich, 1998: 22-23). This was followed by state collapse. Not only did the bureaucratic-command system collapse, but at the end of 1991 three of the republics that had signed the 1922 treaty creating the USSR terminated it. The USSR broke up into numerous successor states (Russia, Ukraine, Belarus, Estonia, Latvia, Lithuania, Moldova, Georgia, Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Uzbekistan, Turkmenistan, Tajikstan), of which Russia was the largest and most important.

The collapse of the USSR is sometimes seen as the end of an empire, analogous to the end of the Austro-Hungarian and Ottoman empires after World War I and West European empires after World War II. This was the view of the former Russian acting Prime Minister Gaidar. He argued (Gaidar, 2006) that it was the collapse of an empire that had inevitably collapsed in 1917 but was unfortunately reanimated, in a somewhat different, yet in the long-run equally unviable, form by the Communists in 1918–22. Putin, on the other hand, stated in 2005 that the collapse of the USSR was the greatest geopolitical catastrophe of the 20th century. The attempt to partially reverse this 'catastrophe' was part of the motivation for the annexation of the Crimea in 2014 and the 2022 invasion of Ukraine. These territories had been acquired by the Russian Empire in the 18th century (and partly in the 17th century) and were seen by some as part of the USSR from beginning to end (although western Ukraine was

mainly part of Poland - and partly of Czechoslovakia - in the interwar period and large parts of Ukraine were occupied by Germany during the Great Patriotic War).

The political economy of the USSR and the reasons for its collapse have been analysed by Wintrobe (2000). His analysis uses rational choice theory and applies a model based on it. Rational choice theory is controversial (Hodgson, 2012), and many people prefer to use what we have learned from behavioural economics and experimental psychology about how people actually behave and not rely on *a priori* assumptions. Furthermore, as Wintrobe himself points out, the application of rational choice theory to specific circumstances requires knowledge of those circumstances.

Wintrobe's book has the disadvantage that it was written too early to take account of the archival revolution in the study of the USSR. For example, the idea that Stalin was primarily concerned with maximizing his power is a repetition of an argument in Leonard Schapiro's well- known book (Schapiro, 1971). However, we now have a much better informed literature about Stalin, e.g. a very good evidence-based biography of Stalin (Khlevniuk, 2015). It is now clear that, although Stalin was certainly concerned about his own position, he was also concerned with the USSR's real economic and international problems. The collectivization of agriculture did enlarge Stalin's power, but it also solved the immediate grain problem of the Soviet state and enabled industrialization to go ahead. Wintrobe acknowledges the high rate of economic growth in the Stalin era, but fails to acknowledge the contribution that collectivization made to that. It was not possible to employ millions of people on construction sites and in factories without bread to feed them and grain to export in exchange for foreign technology. Similarly, Stalin was aware of the threat that Nazi Germany and potentially Japan posed to the USSR and from 1936 was engaged in an arms race with Nazi Germany. The pre-war military build-up was not just aimed at saving his own life. Looking at Stalin's actions and words, without the blinkers of rational choice theory, one might well deduce that his maximand was war preparation and if necessary fighting - to ensure the survival of the USSR and possibly its expansion. This was in the tradition of the German World War I war economy (Lange, 1962, 1970) and tsars such as Ivan the Terrible.¹⁸ As four specialists on the USSR have concluded (Davies et al., 2018: 343):

The greater goal [than rewarding or punishing particular groups] was to build the military and industrial capabilities of the Soviet state, making it secure and powerful at home and abroad. This was the objective that Stalin and his colleagues pursued at all costs.

To combine utility maximization and the goal of military might, Kontorovich and Wein (2009: 1583) distinguish between levels of objectives, with lower-level ones being a means to achieve the higher level ones.

In economics, every actor is assumed to maximise his personal utility function, which we can call the first-level objective. For the firm owners, under certain conditions, maximising profit – a second-level objective – also guarantees maximum utility … The former objective also turns out to be more helpful in explaining the behaviour of firms than the latter.

Kontorovich and Wein (2009: 1594) argue that the main second-level objective of the Soviet rulers in 1928–88 was to run the economy in pursuit of military might. It was this that enables outsiders to understand their institutions and the motives for their policies. Utility maximization is not very help-ful in this respect.¹⁹

¹⁸For Stalin's view of Ivan the Terrible, a relevant document is the much quoted account of a conversation between Stalin and the actor who played Ivan the Terrible in Eisenstein's film about him (Cherkasov 1953: 308). For an academic discussion, see Van Ree (1999).

¹⁹However, Kontorovich and Wein (2009: 1587) do point out that Soviet rulers, like rulers in other countries and periods, may well have derived utility (i.e. satisfaction) from maintaining and expanding their power both at home and abroad.

Wintrobe assumes that the Soviet economy was a demonetized system and this is the basis for his picture of it as a bureaucratic system. This assumption is based on the pre-archival revolution Western view. However, the archival revolution has changed this description of the Soviet economy. As was pointed out in this journal more than a decade ago (Ellman, 2008: 107-108): 'A striking finding of the archival revolution is that, despite the stress on physical indicators, on fulfilling the plan for specific items of production, money was actually very important for Soviet enterprises.' As Gregory and Harrison (2005: 745) have noted, 'A major surprise from the archives is that money played a much larger role than we expected.' This was so at all levels. 'The Politburo gave much more time and energy to how these roubles would be spent than to consideration of the "control figures" for output in physical units.' Similarly, enterprise plans were in roubles. Furthermore, extra roubles were very useful for enterprise management. They enabled enterprise management to buy additional goods intended for the retail market. Harrison and Kim (2006: 19) have argued that this siphoning off of goods intended for consumers meant that extra cash was useful to relieve effort. It enabled managers 'to fulfill the plan with less effort, less hidden inflation, and more real output than would have been possible otherwise.' Wintrobe's analysis of the demonetized bureaucratic economy is obviously less relevant to the USSR now that we know more about the role of money in the Soviet economy. Similarly, his analysis of the state terror of 1937-38 is out of date because it concentrates on the notorious Moscow trials and the nomenklatura purge, and ignores the 'mass operations'20 which produced the majority of the victims but which were unknown before the archival revolution.

Wintrobe (2000: 237 and 243) argues that economic reform was necessary in the USSR to replace an inefficient system that had abandoned repression to implement its goals and was undermined by the decline in loyalty to the Party and the increase in loyalty to horizontal groups. However, the steps taken failed, largely because of the loss of the Party control necessary for smooth management of the reform process. The attempt at simultaneous economic and political liberalization was a mistake. The latter part of this diagnosis of the cause of the economic collapse is similar to that of Russian economists such as Yasin (1998) and Russian sociologists such as Kuznetsov (1998). It explains the collapse of the Soviet economic system, but not of the USSR. Zubok (2021) has argued that the cause of the USSR's collapse was a combination of the unintended consequences of Gorbachev's reforms and Yeltsin's separatism. The wish of the Union republics, especially Russia, to break away from the USSR, does not seem to play any role in Wintrobe's analysis despite its importance. Yeltsin is mentioned twice but neither time in connection with the causes of the collapse of the USSR.

5. Post-soviet developments (1992-2022)

Initially, the new Russia experienced state collapse, an economic depression, a financial crisis and had little international influence. However, despite volatility, in the Putin era world oil and natural gas prices increased (oil and natural gas were its main exports);²¹ the state was rebuilt; and the economy slowly recovered from the depression. Despite its adverse location (with most of its production a long way from ports and the world market), its military-related and raw-materials sectors did well on the world market. It became the world's largest exporter of both nuclear power stations and wheat, the world's second largest arms exporter, and an important exporter of raw materials such as oil and natural gas, coal and various metals. On the other hand, its civilian manufacturing and knowledge-intensive sectors remained largely uncompetitive, although it did export computer software.

As in the past, so under Putin, Russia adhered to List's advice to prioritize power over wealth. It pursued a rearmament policy which enabled it to resume its generally accepted but controversial position as a great power.²² It created and dominated the Collective Security Treaty Organization (CSTO)

²⁰A 'mass operation' was the arrest of large numbers of people, not because they had committed an offence, but because they belonged to a suspect social or national group.

 $^{^{21}}$ The share of oil and gas in the GDP rose from an annual average of 13.3% in 1995-98 to 20.8% in 2000-2008 (Kuboniwa, 2019: 430).

²²According to data on the SIPRI (the Swedish International Peace Research Institute) website (https://www.sipri.org), between 2000 (Putin became President at the very end of 1999) and 2020 Russian military expenditures almost trebled

of which the current members are Russia, Belarus, Kazakhstan, Armenia, Kyrgystan and Tajikstan. Russia also created and dominated the Eurasian Economic Union (EAEU, current members Russia, Belarus, Kazakhstan, Kyrgystan and Armenia; with Moldova (for a time), Uzbekistan and Cuba as observers). The CSTO and EAEU go part of the way to recreating the USSR, but without the Communist Party, Marxism-Leninism, the three Baltic states and – up till now – Ukraine. They were also a response to the expansion of the EU and NATO.

Russia was a major actor in Tajikstan and Syria; and used its military forces to acquire parts of other post-Soviet countries (Crimea from Ukraine, South Ossetia from Georgia). It also supported the breakaway regions of Moldova (Transdniestria), Ukraine (Donetsk and Luhansk) and Georgia (Abkhazia). These policies were intended to reverse what many Russians see (despite the role of Russia itself in the destruction of the USSR) as the injustice done to Russia in 1991–1992 by the breakaway of its former dependencies. Its 2014 seizure of Crimea and Ukraine's decision to strive for membership of the EU and NATO rather than the EAEU and CSTO were the precursors of its 2022 invasion of Ukraine.

Although life expectancy increased, and its fiscal and balance of payment positions remained relatively strong (prior to the 2022 war), it failed to become an economic success.²³ There was no economic miracle of the German, Japanese, South Korean or Chinese types. China overtook Russia economically and in worldwide economic and political influence. However, Putinism, a rejection of Western values and their replacement by an amalgam of nationalism (known in Russia as patriotism but corresponding to Tilly's (1992: 116) second sense of the term), authoritarianism, religion and family values, provided – before the 2022 invasion of Ukraine – some soft power in countries such as Hungary and Italy.

Modelski and Thompson's expectation (Modelski and Thompson, 1999: 128) that the present century will be marked by a worldwide transition to democracy currently seems an over-optimistic exercise in US self-satisfaction. This optimism is similar to Wintrobe's (2000: 242) view that in modern Russia 'democratic politics is progressing'.²⁴ Modelski and Thompson's (1999: 128) assumption that, in the long-run, 'the world system is likely to be democratic, and hence also likely to be free of major war' seems illusory. A few pages later Modelski and Thompson (1999: 133) do recognize that a major struggle for world leadership, e.g. between the USA and its allies and China and its allies, is possible. They also recognize that 'A conjunction of unfavorable circumstances might ... ignite a global war' (Modelski and Thompson, 1999: 135).

6. Conclusion

Russia was one of the great powers for much of the 18th, all of the 19th and almost all of the 20th centuries. Its victorious armies entered Berlin in the 18th century, Paris in the 19th century and

²³According to Khanin (2019: 211), in 1991-2015 its GDP fell by 10% and its labour productivity by 30%. The official statistics (which are used by international agencies such as the IMF and World Bank) are much more optimistic, but their accuracy is doubtful. Kuboniwa *et al.* (2019: 404-405) have calculated that, if account is taken of the informal sector, then Russian GDP only recovered to its 1990 level around 2007-2008, and that after the global financial crisis Russian GDP in 2009 and 2010 once again fell below its 1990 level.

²⁴This was written when Yeltsin was still in office.

⁽measured in constant price US dollars). As a share of GDP the SIPRI data show an increase from 3.3% in 2000 to 4.3% in 2020, with a peak of 5.4% in 2016. There are, however, differences in the definition of precisely what constitutes 'military expenditures', and, by widening the definition, a figure for 2016 as high as 7.5% can be derived. Despite this increase in military spending, O'Brien (2022) has denied Putin's Russia the status of a great power on the grounds that its economy and political system are too underdeveloped for it to be a great power. He considers (writing in June–July 2022) that the unexpected course of the Russia-Ukraine war has confirmed this. O'Brien's denial of great power status to contemporary Russia is partly a matter of definition. He uses economic and political criteria to evaluate whether or not a country is a great power. Traditionally, however, military criteria have been decisive. Russia was not recognized as a great power at the Congress of Vienna because of its advanced economic and political systems but because of the role its armies had played in the defeat of Napoleon. Similarly, the USSR's position as a permanent member of the UN Security Council was because of the role its armies had played in the defeat of Hitler. Its generally accepted current recognition as a great power is partly a result of its nuclear weapons.

Berlin again in the 20th century. Modelski (1996: 336) has pointed to the role of war as a selection mechanism in international politics. This is illustrated by the Russian victories over Napoleon and Hitler and its resulting recognition as a great power. Russia is generally considered to have re-emerged as a great power in the 21st century, although this is controversial.

Russia's trajectory has been country-specific, with two state-collapses, each producing numerous successor states; periods of catching-up economic growth based on importing technology; and economic policies that were more influenced by Friedrich List²⁵ than by Adam Smith. Despite invasions by Tatars, Swedes, France and Germany, Russia has survived and remains the largest country in the world. It is a country created by successful expansion from a small principality in a far corner of north-east Europe to one stretching from Kaliningrad to Kamchatka and from the Arctic Ocean to the Black Sea. It grew by acquiring contiguous territories rather than overseas ones. Tilly (1992: 96-99) drew attention to the importance for a state's survival of resource extraction from its subjects. Russian experience shows that a poor country, with institutions that enable it to squeeze its people for military purposes,²⁶ can, given appropriate policies, extract from them sufficient resources to survive, and to expand at the expense of its neighbours.

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²⁵The Communists (like Witte) fully accepted List's rejection of free trade and his advocacy of industrialization. Also their state monopoly of foreign trade implemented the protection that List had advocated. However, they implemented industrialization by two policies that List did not advocate, namely: import-led growth in industry, and the use of state control and force to obtain domestic agricultural products. However, List (1841/1909: 179-180) did recognize the importance of import-led growth in agriculture, e.g. via the import of superior breeds of animals or seeds/eggs of new species, such as trees, plants and silkworms. In addition, List (1841/1909: 248-249) also recognized the importance of import-led growth in industry under some circumstances, e.g. as in France after the end of the Napoleonic wars. Nevertheless, it played a much less important role in his arguments than protection. Furthermore, List, unlike the Communists, considered that freedom was necessary for economic development.

²⁶As Wintrobe (2000: 120) observed: ' ... dictatorship by its nature tends to have a comparative advantage (relative to democracy) at building a strong military, because of the dictator's capacity to repress civilian opposition to the required sacrifice for military goods.'

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