Lessons of the USSR. Essays on Economic History (extract).

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A LESSON TO START WITH

The post-imperial nostalgia that, word has it, is preying on Russian minds these days is not a Russian invention. History has seen it many times. The Soviet Union was not the first empire to break apart in the 20th century. It was the last. No nation that used to style itself an empire at the start of the 20th century survived to its end. I must add here that, in many critical respects, Russia was not like traditional empires ruling their overseas possessions. The argument over whether or not it was an empire in the Roman tradition could go on interminably. Nor will there be an end to writings trying to show that Russia was unique in its own way, that ethnic Russians under the tsars and Bolsheviks were left with the role of donors for the state's outlying areas; that the Russian heartland provided the livelihood and sustained the viability of the fringe areas Russia had overrun, rather than the other way round. That could probably be the reason why the Russian empire fell decades after other empires had gone.

The country's elite in the tsarist centuries regarded Russia as an empire. And they called it that. Today, too, the "imperialists" are evoking a heritage traced from Russia under Peter the Great through decades of Soviet history to the present day.

When Peter the Great invested himself with the title of Russia's Emperor, he sent a signal to the rest of the world that Russia had become a great European power. Greatness and imperial grandeur were synonyms in his time.

For all the abuse of the term "empire" in political bickering going on around, you will not find an accepted definition that makes sense in today's context.

I will venture then a self-made definition that is, in my understanding, the nearest thing to what we now have.

In this Outline, Empire is a formidable poly-ethnic state structure in which supreme powers are held by the central authorities, without a single democratic institution (if any ever existed, at least such as voting rights) active across its territory.

The 20th century brought out the differences in challenges facing the two different types of empire: overseas empires[1] (Great Britain, the Netherlands, and Portugal, for example) and territorially integrated empires (Austria-Hungary, Germany, and Russia, above all). Colonies were not separated by sea in the second group. Rather, the ruling and ruled ethnic groups lived side by side in close cooperation.

The lesson of the 20th century was that all empires fall apart, sooner or later. Memories of grandeur live on. Post-imperial nostalgia is a political reality of democratic countries with universal suffrage. "Restoring the empire for the benefit of the people" is a catchphrase that can win a measure of popularity even. The trouble is you cannot reassemble an empire that has crumbled to dust.

Rather an exception than the rule was restoration of the Russian Empire in a different, almost unrecognizable form under the communists in 1917 to 1921. So different indeed was its form that a true scholar would only use "restoration" with reservation. The U.S.S.R. arose from the fratricidal civil war, terror the world had never known, and the death of millions.

Restoration of empires is unfeasible for reasons deriving from long-term trends in socioeconomic development. Policymakers, though, continue to think (and act) differently long afterward. Here lies the explanation for the former ruling nations' unrealistic, indeed erroneous, moves in their relations with countries they used to control.

The unexpected speed with which seemingly impregnable empires collapse gives a sense of unreality to anything going on around.[2] Unreality is akin to irrationality where wonders are bound to happen. Little effort is required to convince society (waiting to be persuaded) that a state that has expired for uncertain reasons can arise from the ashes just as inexplicably. This is an illusion, and a dangerous one at that. Rivers of blood spilt during the Second World War were the price humanity paid for it.

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The Soviet Union was, in fact, a territorially integrated empire, one of the world's superpowers. The possibility that it could come down in the space of three years, 1988 to 1991, was dismissed by almost everybody just a few years before it happened. Following the demise of the U.S.S.R., over 20 million ethnic Russians found themselves stranded beyond Russia's borders. The elites in a majority of countries where the Russian expatriates now lived, lacked the tact and commonsense to deal adequately with the problems facing those people, now ethnic minorities in countries they had called their home. This fact, too, adds force to the post-imperial syndrome, one of the hardest problems plaguing Russia these days.[3] This is a very dangerous malaise. Russia is actually going over its crest. Surgeons know that a man lives on long with pain in the leg they have amputated. They call it phantom limb pain. Post-imperial sensations fall into this category, too,

The death of the U.S.S.R. is very real. Reality and social anguish inflicted by the separation of families, adversities experienced by compatriots abroad, and nostalgic memories of recent grandeur and the familiar geography of the homeland, lopped off brutally at the margins to a size and shape difficult to accept. It takes little effort to earn political capital on this anguish.

This is a powerful, and very dangerous, political weapon. It is used rarely because people who turn to it are known to end badly. Leaders who pick it up lead their nations to disaster. It is Pandora's box that has, regrettably, been pried open in Russia in recent years. Stoking post-imperial nostalgia, nationalism, xenophobia, with anti-Americanism long a staple here, and even newfound anti-Europeanism are now in vogue, with all the makings of a norm.

I would not waste my breath to write it all up had I not realized the danger of the post-imperial syndrome being played up in Russian politics, or seen the obvious, striking analogies between the rhetoric capitalizing on post-imperial analogy in this country and the propagandistic approaches that the National Socialists applied in late-Weimar Germany.

Many draw parallels between Russia and the Weimar Republic. Not so many, however, appreciate their significance. Few seem to be aware, for example, that imperial symbols were dusted off and returned to their place in Germany in 1926, eight years after the empire's collapse,[4] and in Russia in 2000, nine years after they were overthrown. Who knows that the Nazis' loudest economic battle cry was their promise to give the bank deposits the German middle class lost to hyperinflation in 1922 and 1923 back to their owners.[5]

The role of the Nazis' economic demagoguery following their installation in power in 1933 is difficult to underestimate. Anti-Semitism, radical nationalism, and xenophobia were natural elements in the groupthink of the leaders of Germany's National Socialist Party. And yet, they exercised caution, not putting those elements to work until 1937.[6] Stirring up the feelings of burghers who lost their savings during the 1923 hyperinflation was by far a more effective political weapon.

Promises to repay savings devalued in the wake of the Soviet Union's financial meltdown are reminiscent, word for word, of Goebbels's bluster in the early 1930s.

Contrary to this author's apprehensions, the post-imperialist syndrome leavened with radical nationalism in Russia came a pretty long while after the disintegration of the U.S.S.R., rather than on its heels. My colleagues and I, who launched Russia on reforms, realized that pushing Russia toward that free market, adjusting it to its new role in the world, and reconciling it with the existence of new independent nations would be a bumpy ride. We expected, though, that as the country emerged from its recession brought on by transformation, economic growth picked up, and the population's real incomes started to climb, the delusive dreams of the empire born again would give way to concerns about personal welfare. We were wrong.

Now we know that, with the country struggling in a profound economic crisis and everybody's mind preoccupied with the thought of earning enough to support the family till next payday, if it came at all, unless you were given the boot, most people had imperial grandeur at the back of their minds. When, however, things started looking up and the threat of unemployment receded (unless you happen to live in a depressed area), when everybody saw life improving and falling back into its concrete mould, the hankering for old songs intensified.

Falling back on the symbols and signs of former grandeur is a mighty trick to manipulate politics. Attempting to make Russia an empire again is putting its existence out on a limb. Disregarding this gruesome prospect, certain political forces are trying to herd this country exactly in this direction.

The legend of a prosperous and powerful nation gradually hacked down by its conspiring enemies is not a sweet romantic tale; rather, it is a hollow political myth that holds many hazards for this country. Showing how far this myth is removed from reality is, in fact, the purpose of this paper.

THE "CURSE OF OIL"

In 1985 and 1986, world prices of oil tumbled to their lowest point ever. And yet, the U.S.S.R. did not fold up because of its bearish play on the oil market.

I could not find a better, or more concise explanation, than this short verse that Russian bard Bulat Okujava recited at his last one-man show in Paris on June 23, 1995:

History tells us kingdoms fall,
Not because people live in thrall…
Kingdoms only break apart
'Cause no one for them has a heart.

The crisis in the Soviet economy that ultimately erupted in the breakdown of the U.S.S.R., the how, the when and the form in which it was played out, was closely bound up with developments unfolding in the oil marker.

How, then, did it actually come about?

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A LESSON IN CONSPIRACY

The simplest explanations that were offered put the crash down to conspiracy. Living in the U.S. at the time, I saw with my own eyes what an improbable "surprise" the Soviet Union's collapse was for the American authorities, and how shaken they were by the news, and I don't accept one bit of the conspiracy theories.

If we assume that the "malicious design" theory was right, the picture looks even grimmer. It speaks of the low intellectual standards, irresponsibility, and betrayal of national interests by several generations of Soviet leaders who made the country's economy and survival hostage to decisions made in the U.S., which they saw as their main potential adversary.

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The U.S.S.R. was neither the first, nor the only country rich in natural resources to stumble into a major crisis precipitated by unpredictable fluctuations in prices for their key commodities.

To gain a better perspective of what happened in the Soviet Union in the late 1980s and early 1990s, it will be useful to dig into problems caused by commodity price fluctuations to see how they affect the economies of exporting countries. We will have to go a long way back into history to find an answer….

SPANISH LESSON

The first, and best-studied, example of the effect of heavy cash flows from natural resources on a country's economy was provided by Spain in the 16th and 17th centuries. The discovery of America, the operation of gold and silver mines, new, efficient mining technologies – the best possible at the time – cleared the way for an unprecedented increase in the influx of gold and silver into Europe.

Growth in the supply of gold and silver to the slowly growing European economies led to sharp price spikes.[7] Prices were rising faster in Spain, where the precious metals made their first landfall, than in other European countries.[8] High prices for Spanish farming produce put that country's farmers at a disadvantage in competition with producers in other European countries.[9] Castile, Spain's core region, became a major importer of foodstuffs for many decades. Spanish weavers were in the grip of a crisis as well, because of abnormally high prices for textiles kept up by a heavy influx of precious metals from America.[10] Gonzalez de Cellyrigo, who explored Castile's economic woes in 1600, linked them to the after-effects of the discovery of America; he wrote that the impact of inflows of gold and silver paralyzed the growth in investment, and the development of manufacturing, agriculture and commerce. He showed that the discovery of America was a stroke of ill luck for Spain.[11]

The role of unearned income from precious metals in the Spanish crown's budget, still modest in the mid-16th century, was steadily growing. Outside the control of the Cortes, (the country's parliament), those revenues gave more freedom of action to the government in expending its finances. Besides, American gold and silver looked attractive as security for the loans that international banks were only too eager to provide.

By the standards of the age, over a half of budget revenues in agricultural societies was spent on military needs. American gold and silver provided the wherewithal for proactive foreign policies to uphold Catholicism and enforce Spain's domination in Europe by funding a succession of costly wars.

In the late 16th century, the influx of precious metals from America thinned out. By 1600, it was obviously clear that the rich silver mines in Spain had been depleted. In real terms, Spain's budget revenue takings were undercut by prices that had gone up significantly since the start of gold and silver mining in America.

Notwithstanding, the crown assumed huge commitments on loans, far in excess of annual additions to its coffers. A long succession of bankruptcies, a scourge of Spanish finances from1557 to 1636, followed.

As often happens, the authorities' response to erratic earnings from natural resources was hysterical and ill-considered. Spanish students were forbidden to go to foreign universities, monopolies were enforced to curb trade, taxes were raised on wool exports, which started slipping in world markets, and customs duties were levied at provincial border crossings; all weakening the Spanish economy's capacity to finance military actions as a way of fulfilling the government's foreign policy ambitions.[12] On top of it all, imperial commitments were easier to undertake than to abandon, even in the face of inevitable default.

The history of Spain in the 16th and 17th centuries was the story of a world power that crashed without being defeated on the battlefield, buckling under the weight of its excessive ambitions resting on nothing more solid than revenues from American gold and silver.

A LESSON NATURAL WEALTH CAN GIVE

It has long been almost an axiom that rich natural resources, including the minerals a country needs to press on with industrialization, and vast expanses of fertile lands were an important, favourable factor for advance. We know now from the experiences the world has gone through in the 20th century that this linkage is, unfortunately, more complex and more dramatic.

Between 1965 and 1998, GDP per capita in mineral-rich countries such as Iran and Venezuela was contracting at an annual rate of 1%. It was 2% in Libya, 3% in Kuwait, and 6% in Qatar (in 1970-1995). Overall, GDP per capita in OPEC members was falling at 1.3% a year in the period 1965 to 1998, against the average annual growth rate of 2.2% in countries with low and medium showings of GDP per capita.[13]

The last few decades have seen publication of a spate of studies into the effect of mineral wealth on economic growth.[14] They all illustrate a statistically significant negative correlation between long-term economic growth rates and mineral wealth.[15] To put it in simple words, availability of natural wealth is not a ticket to an affluent future – rather, it turns going there into a rough ride.

A LESSON FROM NIGERIA AND UFA

Nigeria offers a textbook example in this long succession of sorry failures. Large oil fields there went into production in 1965. In the 35 years that followed, the aggregate revenues, less incomes repatriated by international oil corporations, reached nearly $350 billion in 1995 prices. In 1965, oil generated $33 in income per capita, for $245 in GDP per capita. By 2000, oil produced $325 in earnings per capita, while GDP per capita remained frozen at the 1965 level – the revenues had no effect on the standard of living.[16]

There is a standard selection of risks related to rich natural wealth. Natural resources and related opportunities to derive unearned income, allow the authorities of a country blessed with the godsend to multiply budget revenues, caring little about raising general taxes[17] (see: Table 1).

Table 1
Oil revenues as a share of total budget takings in Venezuela, Mexico, and Saudi Arabia in 1971–1995. Five-year averages, %

Country	YEARS 1971–75	1976–80	1981–85	1986–90	1991–95
Venezuela	67.0	61.7	54.7	60.4	…
Mexico	14.9	19.0	42.7	32.6	…
Saudi Arabia	…	89.1	74.4	61.0	74.5

Sources: Calculated from Auty R.M. (ed.). Resource Abundance and Economic Development. Oxford: Oxford University Press, 2004 (Mexico and Saudi Arabia); Salazar-Carrillo J. Oil and Development in Venezuela during the Twentieth Century. Praeger Publishers, Westport, CT, 1994 (Venezuela).

These figures only mean that the authorities see no need to entering into a long-term dialogue with society – taxpayers and their representatives. The historic dialogue (leading to compromise) that alone clears the way to a system of institutions that put constraints on the authorities and enforce safeguards for civil rights and liberties. No matter how hard, this kind of dialogue lays down the rules of the game that foster modern-day economic growth.[18]

On the whole, the chances of developing a system of checks and balances (extremely popular during Yeltsin's tenure and lately fallen out of fashion) and reliable institutions curtailing corruption and restraining injustices committed by the authorities and officialdom are always slimmer for the populations of countries with a glut of natural resources than in those that have been passed over by fate.[19] They have a different atmosphere. And a different climate, too.

The Russian 19th century writer, Saltykov-Shchedrin, gave a classical description of such an atmosphere:

"When the bureaucrats were carving up western provinces first, and then proceeded to Ufa, we witnessed truly amazing scenes. NOTHING, IT SEEMED, COULD BE SIMPLER: SNATCH YOUR PIECE OF THE FREE PIE AND SCARPER! No, though, it was right there that a catfight broke out, hatreds were stirred up, mockery and all manner of shame-faced farce played out, all targeted on – alas! – the giving hand that was put on the carve-up expressly to placate the gentlemen office holders and, understandably, to lay the foundations for a corporation of the content."[20]

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A LESSON IN CORRUPTION, OR A CORPORATION OF THE CONTENT

There are plenty of indexes and estimates from international economic organizations that measure the quality of national institutions. They all share a common flaw, or rather a common characteristic – they are all biased.

And yet, they are not without a value: they show that there is a strong negative feedback between political liberties, civil rights, quality of the bureaucratic machinery, and practical law enforcement, on one hand, and a country's resources, on the other.[21]

The revenues generated in the economies of re-source-rich countries are distributed at the authorities' whim.[22] If this is a way to stimulate competition, it is not a race between producers to manufacture more goods of better quality at the lowest reasonable cost; instead, they are competing in hand greasing skills and lobbying for their interest. Put another way, they are contributing to the growth in what A. Krueger called administrative income in her matchless study.[23]

A wealth of resources elevates, unavoidably, the risks of political instability associated with the infighting for its reallocation.[24] (No wealth no cause to fight?)

No count is possible of nontransparent, uncontrolled, and wasteful pork-barrel projects and transactions initiated by state companies to pursue economically nonsensical but politically lucrative projects in Indonesia, Mexico, Venezuela, and many other countries rich in natural resources. This is a well-documented truth. It was also true that the government was forced to repay the foreign loans raised to finance those projects from its budget, sooner or later.[25]

World experience indicates that it is more difficult to create democratic institutions in countries where natural resource income is a major factor than in countries free from it.

A LESSON IN DUTCH DISEASE

A problem deriving from natural wealth is that unearned incomes in the natural resource sector complicate growth in other economic sectors. It is described in detail with reference to the effect the discovery of large gas fields in the 1960s had on manufacturing industries in the Netherlands, and even got the nickname of Dutch Disease.[26] In fact, the Netherlands dealt with the disease more successfully than a majority of other resource-rich countries. The disease has long been ravaging other countries, but the original name remains. It could well be named after Venezuela, Nigeria, Indonesia, or, more recently, Russia.[27] If we remember commodities other than oil, we could call it Zambian or Zairean disease (because of the copper they depend on), or Colombian disease (because of coffee).

In essence, Dutch Disease sets in when unearned incomes originating in commodity producing industries stimulate demand for goods and services produced in other industries that are not confronted with international competition. As a result, wages and costs grow in the resource sector and in other industries. Average prices in a national economy depend on GDP per capita. The more developed a country is the higher average prices are. With this factor counted in, the statistical dependence of national prices on resource wealth has been upheld convincingly.[28]

Industries facing international competition are forced to raise wages, losing a portion of their profits in the domestic and foreign markets.[29] Hence the risks of running an economy that is only lightly diversified and increasingly depends on fluctuations of prices for natural resources.

The authorities in all resource-rich countries are notorious for their scant attention to public education. The reason is difficult to identify, but many researchers attribute it to the quality of labour required by mining companies.[30]

Or, perhaps, the reason lies in the psychology of elites cropping up in those countries, the kind Syltykov-Shchedrin called fly-by-nights who give no thought to the future, or to education, which is investment in the future.

CRACKS IN THE FOUNDATION. THE SOVIET UNION IN THE 1980s

STABLE INEFFICIENCY

Toward the end of Leonid Brezhnev's tenure, an overwhelming majority of Western observers (and leading Soviet experts), who interpreted trends they spotted in the U.S.S.R., were certain that the Soviet economic and socio-political system was inefficient and losing momentum, but was stable and sustainable.

The Brezhnev age was a period of social stability. The incidence of public riots, which the authorities quelled by armed force, declined. Between 1963 and 1967, there was recurrence of social unrest, which forced the authorities to use troops against rioters in Sumgait in 1963, and in Chenghen, Frunze, and Stepanakert in

1967. As the Brezhnev age came into its own, the authorities learned to minimize the risk posed by anti-government protests. Seven of the nine mass protests were staged in the years of Brezhnev's rule, and none was registered between 1969 and 1977.

Armed force was used to suppress eight out of the 11 riots that occurred during the years of Khrushchev's rule, 1957 to 1964, while under Brezhnev, the authorities sent troops against the protesters on three out of nine occasions. Beginning in 1968 right up to Brezhnev's death in 1982, armed force was not used even once to quell unrest. The regime learned to pass up violence and quash dissent without a bullet being fired.[31]

The country's transformation was, apart from anything else, a force that pushed the authorities to improve the efficiency of their political control. The information environment changed radically between the early 1950s and the mid-1980s. A mere 2% of Soviet citizens had shortwave radios in 1950. By 1980, up to a half of the country's population had gained access to shortwave broadcasting. The Soviet leaders took every step possible to make domestic radio manufacturers turn out receivers that blocked reception of Western programmeming and ordered jamming of Western broadcasts.[32] By the early 1980s, however, the world of fully managed information had become a thing of the past. Information-hungry Soviet citizens could obtain information about the world around them from sources other than state-controlled channels.

Tape-recorders came into wide use, and video was making its first steps.

The authorities realized that "Western radio propaganda is the most critical among all other factors. … An analysis of available materials reveals interest toward foreign broadcasts spreading among young people." According to a survey of "Western radio audiences in Moscow" conducted by the applied social research department of the Academy of Sciences' Institute of Contemporary History, 80% of university students and around 90% of senior class students of secondary, vocational, and technical schools listened to Western radio broadcasts more or less frequently. Listening to foreign radio broadcasts developed into a regular habit (32% of university and 59.2% of high school students listened to foreign radio broadcasts at least once or twice a week).

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In the 1930s through the 1950s, economic growth was achieved in the U.S.S.R. by drawing off resources from agriculture into manufacturing. The rural areas supplied most of the labour needed at manufacturing enterprises either under construction or in operation. The share of capital outlays in GDP was inordinately high. Proceeds from exports of farming produce in the 1930s were used to import large quantities of packaged industrial equipment. In the late 1940s through the 1950s, the existing industrial potential, and strained relations with the West, stimulated a rise in the share of domestically produced equipment for new manufacturing enterprises.

In its development model, the socialist system focused on continuous construction of more and more large enterprises. The shortage of free hands reduced their efficiency considerably. The influx of labour into manufacturing diminished significantly in the 1960s. It was not easy to step up investment to make up for needed labour in the socialist system. Fine-tuning investments to improve the use of existing manufacturing capacities was not among its strongest sides. Toward the late 1960s, this truth had dawned on people writing speeches and reports for top party officials.[33]

Realization of growing problems caused by the inefficiency of the Soviet economy induced the country's leaders in the mid-1960s to attempt economic reforms. The joint resolution adopted by the ruling party's Central Committee and the nation's government on October 4, 1965, purported to give enterprises broader de-cision-making powers, increase the share of funds they could retain to develop production and pay incentives to employees. It aimed to introduce a remuneration system in which wages were linked to personal inputs and performance of enterprises as a whole; to promote direct ties between producers and consumers on the basis of direct financial liability, and to give a greater role to profit in employee stimulation.[34]

This programme was more cautious than its counterpart already completed in Yugoslavia, or one under way in Hungary, or that undertaken in China in years ahead. And yet, it was the last serious attempt to be undertaken to change the management system in the Soviet economy and clear the way for free-market mechanisms dismantled at the turn of the 1930s, before the socialist system started sliding into a deep crisis. It is hard to tell for certain whether or not those reformist efforts were behind the high economic growth rates in the five years, 1966 to 1970, the fastest scored in the remaining two decades of the U.S.S.R.

Examples of how inefficient the Soviet economy was are well known. The Soviet Union mined eight times as much iron ore as did the U.S., which it cast into three times as much pig iron, which was processed into twice as much steel. In gross value, it produced about as much machinery from that metal as did the U.S. The U.S.S.R. used 1.6 and 2.1 times as much raw materials and electric power to produce a unit of end output as did the U.S. It took more than ten years to build an industrial enterprise in the U.S.S.R., compared to less than two years in the U.S.[35] In terms of a unit of end output, the U.S.S.R. used 1.8 times as much steel in 1980 as did the U.S., 2.3 times as much cement, 7.6 times as much mineral fertilizer, and 1.5 times as much timber.[36] The U.S.S.R. manufactured 16 times as many grain harvesters as did the U.S., but garnered significantly less grain and depended on grain imports.[37]

Soviet leaders had frequent brain waves to carry through giant, ambitious, and economically dubious projects. When the country started importing foreign grain in 1963, Khrushchev urged for a return to the abandoned project to build a road from Komsomolsk to Sakhalin Island.[38] Many projects that were completed at considerable investment proved inefficient or made no sense at all. Land improvement was a typical example, which pulled in more investment than the textile and leather industry. Between 1986 and 1996, 35,000 digging machines, 32,000 bulldozers, 10,000 heavy wheeled tractors, 4,400 tractor-trailers in the 10-ton class or larger, 22,000 scrapers, 6,300 truck-mounted cranes, and much else were to be manufactured for use on land improvement projects.

All newspaper boards, radio and television stations, filmmakers, and writers "were instructed to cover the progress of land improvement projects and the efficiency of land improvement and their role in fulfilling the Food Programmeme of the U.S.S.R."[39] This cyclopean effort produced only modest results. Over time, the areas of irrigated and drained land going out of cultivation came to be nearly equal to those brought in. After the decision to divert water from north-flowing and Siberian rivers was reversed and ongoing projects discontinued, the enormous costs incurred on related research and development were to be written off.[40] In formal terms, all those costs contributed their share to Soviet GDP.

The directive system that finally took shape in the 1930s through 1950s was effective as long as it was backed by all-pervasive fear and threat of tough repression that ran deep through society as a whole. After 1953, when the fear of repression gripping society started to fade, the efficacy of socialist management techniques took a dip. Workplace discipline fell as a result. Speaking at meeting of the Central Committee's ruling Presidium on August 24, 1956, Khrushchev remarked curtly: "Stealing all coming their way."[41]

Overwhelming alcohol abuse, which led to stagnation in the early 1960s and ultimately to a decline in the average life expectancy for men, combined the worst drinking traditions in town and country. In the course of two decades, alcohol consumption per capita rose 2.2-fold, the number of offences under the effect of alcohol, by a factor of 5.7, and the number of confirmed alcoholics, 7-fold.[42] Almost 90% of instances of absenteeism were related to hard drinking.[43] In 1986, four million people in the U.S.S.R. were officially registered as alcoholics. Almost nine million more people received medical treatment for alcohol abuse every year.[44]

Adherence to plan became slack. Whenever an industry or enterprise failed to meet its planned targets, the bar was taken down a few pegs. If general fear of the regime, the core that holds an economic system intact, is removed, the system begins to sputter.

Gradually, beginning in the late 1950s and early 1960s, the economic system was transformed into what V. Naishul called "alignment economics."[45] This author has a different name for it, "hierarchic bargaining economics."[46] Production benchmarks and resource allocation were no longer set by directives going from the top all the way down, but rather through hierarchic alignment. Resources and possible sanctions against subordinates were the chips in the superior authority's hands, and ranged against them was the subordinates' knowledge about the real production problems and their ability to deal with snags.

Declassified documents from the 1930s proved that at that time, too, the system was not entirely "doas-I-tell-you," and had elements of bargaining between hierarchic levels.[47] It was not a matter of differences in quality, but of gradual evolution to a point where the capacity of overlying government levels to impose their will on those under them was trimmed down. A greater role the underlying management echelons wheedled out through hierarchic bargaining did nothing to improve performance of the socialist system, or resolve problems stemming from the absence of free-market instruments.

Attempts to improve the efficiency of the Soviet economy by tinkering with management approaches led to nothing. The plan ceased to be the bible. Labour influx thinned out, and labour shortages could not be offset by stepping up investment.[48] S. Fisher and W. Easterly nailed down the failure of the existing system to compensate for labour shortages by throwing in more money as the chief reason for the collapse of the Soviet economy.[49] Those were real problems, stretched out over decades. Extrapolating a similar trend helps predict a slowdown of economic growth, even torpor, but not an immediate meltdown.

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Economic growth rates decelerated by about a percentage point a year over a decade.[50] But that did not hold threat over the existing economic and political groundwork. Estimates made within the framework of research conducted in the U.S.S.R. into long-term forecasting of the Soviet Union's economic growth suggested that those trends were to hold into the future. It was taking a risk to show forecasts of slowing growth rates in the final version of the document prepared for the eyes of the country's top leaders. The community of economic professionals saw the picture in exactly these colours. A majority of Western researchers who studied the Soviet economy put it in approximately the same perspective. If those trends were any guide, there were between 20 and 30 years before economic growth in the U.S.S.R. would grind to a halt.

D. Sutter, a Financial Times correspondent who gave a synopsis of the views of informed Western observers watching developments in the Soviet Union, wrote in 1982: The Soviet Union claims to have created a new man, and I think, regrettably, that it is right in its claim: (…) he combines animal awe of the authorities and deep-seated fear.[51]

Meanwhile, the effectiveness of communist ideology had been eroded. The country's leaders embraced habitual ideological clichés and watchwords as an inherited ritual they were bound to go through. Society either ignored them, or played them up in kitchen jokes.

The policy of culling intellectuals from the ranks of communist leaders, pushed for decades, crystallized in a gerontocratic Political Bureau (Politburo) overhanging the party's Central Committee, too old to make sensible decision. It does not require a party leader to be a highbrow to be pulled along by inertia and play by the old rules.

In his own summary of CIA reports on the situation in the Soviet Economy, Senator W. Proxmire said in 1982: There are three key points in these reports: first, Soviet economic growth is slowing down, and yet, the economy will continue to grow in the near term; second, economic results have been unsatisfactory, and the economy's efficiency is low, but this does not mean that the Soviet economy has ceased to be viable or dynamic; and third, even though a gap exists between Soviet economic performance and plans, collapse of the Soviet economy is not even a remote possibility.[52]

In the 1960s and 1970s, though, relations between the U.S.S.R. and the rest of the world underwent a radical change (overlooked by a majority of observers).

TO BE A PART OF THE WORLD ECONOMY

At the time, the Soviet Union's economy, while remaining formally closed, was deeply integrated into the international trade system and exposed to seesawing world markets (see: Table 2). This fact is generally noted by grain and oil market researchers only. A majority of analysts studying the socialist system thought it stood on a rock-firm foundation.[53]

Table 2
Trade between the U.S.S.R. and OECD Countries, 1950-1989

Year	m. of nom. roubles		$ million.		$ million, 2000	
	Export	*Import*	*Export*	*Import*	*Export*	*Import*
1950	236	204	262	*227*	1586	1371
1960	913	1004	1014	1116	4822	5302
1965	1347	1469	1497	1632	6640	7241
1970	2154	2540	2393	2822	8694	10251
1975	6140	9704	8535	13489	22459	35496
1976	7834	10824	10419	14396	25918	35811
1977	8817	9925	11815	13300	27637	31110
1978	8701	10979	12703	16029	27761	35029
1979	12506	13248	19009	20137	38364	40640
1980	15862	15721	24427	24210	45203	44801
1981	17247	18112	23973	25176	40550	42584
1982	18849	18892	26012	26071	41466	41561
1983	19653	18719	26532	25271	40686	38753
1984	21349	19574	26259	24076	38816	35589
1985	18581	19294	22297	23153	31986	33213
1986	13109	15853	18615	22511	26126	31595
1987	14186	13873	22414	21919	30620	29944
1988	14666	16321	24199	26930	31971	35579
1989	16392	20497	25899	32385	32968	41224

Note: Roubles were converted to dollars at the official exchange rate of the U.S.S.R. State Bank, and the GDP deflator (IMF GFS 2005) was used to arrive at 2000 prices. Source: Statistical yearbooks Foreign Trade of the U.S.S.R. for different years, Statistics, Moscow.

Papers discussing risk factors capable of wrecking the stability of the existing Soviet regime did come out, but they had a limited effect.[54] It took a great effort of imagination to suggest that the Soviet Union, its ruling communist party, and the Soviet economic system would in no more than six years be out.

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The surprisingly fast collapse of a political and economic structure that existed for many decades raises brows and casts a shadow on the reputation of experts in Soviet economics and politics. Critics blame the U.S. Central Intelligence Agency for its failure to see the looming crisis and downfall of the U.S.S.R., and rate it as the Agency's greatest embarrassment. Many Sovietologists responded in self-defence – we erred because we could not predict an economic crisis in the U.S.S.R. The idea of subjective underpinnings of the collapse and explanations for it to be found in errors made by the Soviet leadership after 1985 gained significant currency among this group of experts.[55]

This view is close to the hearts of people who see an international conspiracy behind the Soviet Union's crash. It is best propounded in Russia by writers who believe in a worldwide scheme against Russia. If you accept their standpoint, you will have no trouble explaining the turn events in this country took at the watershed between the 1980s and 1990s. Particularly, if you share the Russians' long-standing traditions to offload the blame for their own failures on foreigners.

Decades back, the philosopher I.A. Ilyin wrote, as a warning, that our people have "ancient religious foes who have lost their peace of mind because the Russian people persist in their 'schism' or 'heresy,' rather than accept 'truth' and 'humility,' and do not succumb to absorption by the Church. Since, however, you cannot mount crusades against them or burn them at the stake, it only remains to throw them into a destructive turmoil, degradation, and distress, which will become for them either a 'cleansing purgatory' or an 'iron broom' sweeping the Orthodoxy to the garbage dump of history." He also wrote that Russia's enemies of another stripe "will not cool off until they have overwhelmed the Russian people by imperceptible infiltration of their soul, and will to implant in them godlessness in the guise of 'tolerance,' and, in the garb of 'republic,' subservience to backdoor machinations, and national defacement masquerading as 'federation.' Those are backstage ill-wishers plying their trade on the quiet."[56]

Another fashionable occupation in Moscow is gossiping about the CIA's demoniacal powers, a fad that stands in contrast to the feeling running high in Washington that the CIA bungled clumsily its job of following developments in the U.S.S.R., and in Russia, too, at the turn of the 1990s.

Another explanation for the underlying causes of the breakdown of the Soviet economy relates it to the arms race that was whipped up with the installation of the Reagan administration, and to the growing financial burden the U.S.S.R. had to bear, and overreached itself, to keep pace with the extravagant U.S. military expenditure.[57] To see whether this explanation for the Soviet Union's break-up is right or wrong, it is appropriate to look into defence budget decision-making and the scale of defence procurements in the U.S.S.R. in the late 1970s and early 1980s.

THE U.S.S.R. GIRDED ITSELF FOR AN OFFENSIVE WAR?

Along with assistance to foreign socialist countries,[58] defence spending was a key priority for the Soviet leadership. The size of defence spending in the U.S.S.R., or its share of GDP was unknown even to the country's top political and military brass. We find clear evidence of confusion in the contradictory figures provided by Mikhail Gorbachev, the last President of the U.S.S.R., and V. Lobov, chief of the General Staff of the U.S.S.R.[59] Trying to give an accurate estimate of either is a self-defeating task. Defence spending was shown in many different budget lines, which do not tally on balance. Neither is there a plausible consensus on how closely military hardware prices matched economic facts. What is obvious beyond a doubt is that the share of defence spending in GDP was high by any international standards. A country with an economy only a quarter as large as that of the U.S. managed to maintain a military parity with the U.S. and its allies and find resources to keep 40 army divisions on its border with China must have been a heavy spender, common sense suggests. Defence spending was a drag on the civilian sector of the country's economy. By 1980, inputs in the economy had been yielding low returns, even without the defence burden.

Arguments that the Soviet Union started boosting its defence spending after it was forced to scramble for leadership in an accelerating arms race with the U.S. in the early 1980s hold little water. Characteristically, inertia was the hallmark of the Soviet military-industrial complex. Arms production was adjusted to keep existing capacities busy, rather than to meet the armed forces' demand. Where a technological possibility to manufacture an advanced weapon or system presented itself, a pretext was always found to update existing inventories. When Gorbachev's aide Shakhnazarov asked the country's chief of the General Staff. Akhromeyev, "Why produce so many weapons?", the General Staff chief's reply was: "We have built first-class arms plants, not a bit worse than the Americans have, at a price of enormous sacrifices. Do you want them to stop making weapons and switch to pots and pans? No, it's a utopia."[60]

The history of Soviet tank making is a good illustration of how decisions were made on how many tanks the U.S.S.R. needed.

In the 1970s, the U.S.S.R. turned out 20 times as many tanks as the U.S. did. When, in the wake of the Arab-Israeli war, Israel found it needed huge quantities of modern tanks to replace its aged armour, tank production in the U.S. rose, in a matter of a few years, to about a quarter of tank production figures in the

U.S.S.R. At the time, the Soviet army had over 60,000 tanks in service, many times more than the U.S. and its allies had between them.

SEEING IT FROM A STRATEGIC VIEWPOINT …

It you care to take a strategic view of things happening in defence in the 1970s through the early 1980s, you would certainly arrive at the only natural conclusion, as also could Western experts watching the speed at which the Soviet Union was building up its armoured forces, that the U.S.S.R. was bracing for an aggressive push across Western Europe to the Bay of Biscay. Things were different in reality, though. As we know now from declassified information, the chief argument in support of continuing tank production on a scale unprecedented in peacetime was the belief in the top echelons of power here that the U.S. had a greater potential to step up production of armour in wartime. Soviet General Staff analysts prevailed on their superiors that the Soviet army's losses in armour could be very high in the early months of war. Their suggestion was having as many tanks as possible in peacetime.[61] No one listened to arguments that the U.S. and its allies could not rush production of these combat vehicles in a setting that had changed in the decades after the war. Rather than military considerations, the factor figuring high in debates over the issue in the U.S.S.R. was that the tank plants were there already, with jobs giving a livelihood to thousands of families, a strong enough reason to keep them in production.

Deployment of Soviet SS-20 medium-range missiles followed a similar scenario. A good missile was designed, and technologies were put in place to produce it in quantities. The Soviet leadership resolved to deploy a new nuclear-capable system. No consideration was given to the possibility of its new missiles provoking NATO into deploying its own medium-range missiles in Western Europe and exposing the U.S.S.R. to greater risks of shorter approach time of its potential adversary's missiles. Second thoughts came a while after piles of money had been blown on missile deployment.

In the early 1980s, the U.S. Congress set up a commission to verify CIA assessments of the Soviet military effort. After a review of Soviet arms production figures, the commission found no sensible explanation, in terms of military or political logic, for the quantities produced other than the suggestion that the U.S.S.R. was preparing to launch an offensive war.[62]

According to available documents, no one in the Soviet leadership at the time was dashing to do a lifeand-death battle on world imperialism. Large quantities of arms were churned out and delivered to the army and navy for the trivial reason that the existing plants were expected to operate at capacity. In the early 1980s, the Soviet military-industrial complex was unable to draw on extra resources allocated to arms production, because it was operating almost beyond capacity. It was a heavy, if normal, burden on the Soviet economy.

The weight of defence spending explains many hardships and privations the Soviet Union went through in the decades from the 1960s to the early 1980s, but it had no part in the economic disaster that hit it in 1985 to 1991.

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The experience gained in the 20th century, after Marx and Engels discoursed on the laws of history, is enough to argue that life follows less rigid laws than it appeared to the founders of Marxism. The choice of strategy for decades ahead depends on factors impossible to predict. And individuals play a greater role in history than the two thinkers believed.

The Soviet leadership's decisions had a no minor part in channelling the crisis in the country's economic and political system in the direction it took in the late 1980s and early 1990s. Much, but far from all, depended on the will of the country's leaders. It would not be a futile exercise to turn this around – they didn't decide all, but had a final word on much. A close scrutiny of the situation in which the Soviet Union found itself in the mid-1980s leads us to the conclusion that the leaders' desire to carry on the policies they inherited from the preceding decade (briefly, cementing the existing economic and political systems without attempting to change anything), against the background of realities of the late 1980s, sealed the regime's fate.

ECONOMICS OF SHORTAGES

It has long been a proven truth that socialism is an economy of shortages.[63] It is a waste of time trying to explain how it worked to people without first-hand experience. Facts such as how useful it was to be closer to the top of the socialist hierarchy of access to anything in short supply, how good it was for your family to have an acquaintance as a salesclerk, or best a section manager, at a food store, or any store, or how normal people travelled once a month 200 miles or more from their small provincial towns to the nearest big cities blessed with more plentiful supplies, to wait hours in a line snaking around the store, and grab as much as was legally allowed, are not for anyone spared living in a socialist society, and buying as much as they feel they need now, to grasp.

All sociological studies, that is, those that were permitted, rang the alarm bell about growing shortages in the consumer market since the late 1960s.

Proliferation of the usual shortages of the late 1970s and early 1980s into a food crisis, and the authorities' default on their commitment to deliver enough supplies under their rational distribution programme-me was the basic economic explanation for the loss of consumer confidence in the regime and its collapse at the turn of the 1990s.

Supplying enough foodstuffs to large cities was the main economic and political challenge facing the tsarist government during the First World War. It did not rise to the challenge, and fell in the turmoil of the 1917 revolution. Food supplies were a pivotal issue during the civil war of 1918-1921. By requisitioning foodstuff from farmers and shedding rivers of blood along the way, the Bolsheviks demonstrated to society their own way of mustering food resources.

Midway between 1928 and 1929, the crisis in food deliveries to cities was back in the focus of an acrimonious economic and political debate. Stalin's choice of response – ruining wealthy farmers, corralling the rural population into collective farms, and resurrecting food requisitioning raids – laid the course for the country's development in decades ahead.

Contrary to the famous Marxian dictum that history repeats itself, first as a tragedy and then as a farce,[64] events in the U.S.S.R. were a demonstration that history may repeat itself more than once and be anything but farce every next time. Food deliveries to large cities came again to the top of economic policies in the second half of the 1980s. This time, however, the country's future hung on the kind of solution to be found. Before we retrace the history of the new crisis, we will look into its root causes.

A process preceding accelerated industrial growth in countries that launched their industrialization drive some time between the late 18th and early 19th centuries has since been known as the "agrarian revolution." Growth rates are lower in agriculture than they are in manufacturing, but, projected on the time scale, they are high and stable. They had never stayed like that so long in any other previous period.

The state played only a limited role in funding industrialization in countries that propelled themselves into modern growth economies. Governments in those countries never went to overtaxing farmers to raise funds they could invest into state-owned industries.

A farmer's eldest son kept the farm and went on farming, and his junior brothers set out to look for a job in town. Massive emigration from Europe across the ocean, instigated by the growing population and, in a large measure, desire to support the farming class and farmers, reluctant to switch from farm to factory shop floor, is a striking illustration of the appreciation farm labour gained during the early years of industrialization.

Things were different in countries pursuing "catchup" industrialization. Their governments have a greater part in boosting industrial development. Funds are needed to feed government investment. Where the bulk of economic activities is centred on the countryside, farmers offer an ideal target to collect taxes from in order to carry through government investment projects.

THE FARMING CLASS: THE STATE'S MILCH COW

History writers have argued for years attempting to find out how much excessive taxes on farmers slowed down Russia's agricultural growth in the period between 1870 and 1913. There is, however, an obvious connection between the survival of the peasant commune for decades after the abolition of serfdom and fiscal considerations, in particular joint and several liability as a tool to keep funds flowing into government coffers to finance construction of railroads.

The "catch-up" industrialization model spawned political risks, which were much in evidence in Russia in the early 20th century. The tsarist government's policy did not, at that time either, trigger a deep agrarian crisis, with industrial output growing at the expense of contracting farming output. Average decade-to-decade grain harvests were growing, allowing Russia to remain the world's largest grain exporter (see: Tables 3 and 4).

Table 3
Average Annual Grain Harvests in Russia

Period	Harvest, m. of tonnes
1891–1900	47.7
1901–1910	55.6
1911–1913	74.6

Source: Liashchenko, P.I. A History of the Russian Economy. State Publishers, Moscow-Leningrad, 1930.

Table 4
Average Annual Grain Exports by Period, 1896-1913, m. of tonnes

Country	1896–1900	1901–1905	1906–1910	1911–1913
Russia	5.21	6.81	7.54	6.76
U.S.A.	2.88	2.45	1.77	1.70
Canada	0.35	0.71	1.24	2.76
Argentina	0.98	1.68	2.19	2.58

Source: Liashchenko, P.I. A History of the Russian Economy. State Publishers, Moscow-Leningrad, 1930.

The socialist industrialization model that took shape in the U.S.S.R. between the late 1920s and the early 1930s was, at first sight, a sequel to the Russian tradition of the late 19th and early 20th centuries, with the state initiating a "catch-up" industrialization from funds raised in the countryside. With a difference, though, as expropriation of resources from farmers was immeasurably more thorough and more sweeping. In fact, it was a different kind of development.

Farmers dragooned into collective farms and deprived of the freedom of movement or choice of job, or place of residence, and forced to drudge for free, carving out time to toil on their small backyard plots to earn a living for their families, and, finally, beginning in the late 1940s, having to pay heavy taxes on their plots in kind and in cash, was the nearest thing to serfdom born again. The only difference between old and new serfdoms was that this time the government was the sole landowner, rather than one of many. Given modern tools of control and compulsion, absence of moral constraints, and the authorities' conviction that whatever outrages were committed in the countryside was of little importance next to the growth of investment in manufacturing, and without the restraints typical of agrarian societies, that would draw a line under expropriations from farmers, the size of resources siphoned off from country to town was unprecedented in world history.

Forced labour on a collective farm as a variety of serfdom, the way farming was organized and run, too familiar to generations of Russian farmers, was an unavoidable throwback to the standards of work ethic in Russia before the 1861 reform that abolished serfdom, descriptions of which we find in Russian literature.

The early 1930s set the stage for an erosion of the work ethic foundations laid in Russia between the early 1860s and the late 1920s. It was embraced by stout farmers who realized that they were working for their own and their families' benefit, who saw the difference between working for themselves and sweating for the landowner, who learned to be rich in the commune, too, and who understood that they had to work hard, to give their children an education, and adopt new farming practices. Destruction of that farming middle class was a blow to farm work ethic unknown in history.

The farmers' social standing was poignantly downgraded and humiliating, far beyond comparison with that of industrial workers. Collective farmers who were the biggest segment of the population in the country in the 1930s and 1940s were a class openly discriminated against.

Beginning in the late 1940s, heavy taxes in cash and in kind were imposed on backyard farms to force their owners to work on collective farms. Farmers responded by slaughtering their cows and axing their fruit trees. In 1950, 40% of farm families kept neither milk cows nor goats.[65]

While the positions of farmers and industrial workers in countries at the leading edge of economic advance differed in lifestyles and nature of work, but not in average incomes, the gap between them was enormous in the U.S.S.R. This laid a special imprint on migration to towns and differences between migrants in the U.S.S.R. and leading countries.

The choice of farming as a way of life was not related to inaptitude, lack of diligence or adaptability in countries setting the pace for modern economic advance. As a rule, elder sons, who stayed behind and took over the running of their fathers' farms, were raised in the same family. The choice of job was dictated by the circumstances of birth. Traditional work ethic was not offended in the countryside. Farming continued unbroken. Many cutting-edge countries are among the biggest net exporters of foodstuffs today, just as they were decades back.

With all escape routes blocked or restricted, migration from country to town always continued in the U.S.S.R. The stayers and leavers were different types in the U.S.S.R. than those in countries that never experienced socialist industrialization. The socialist development model encouraged the more educated and vigorous children of farmers to look for ways to migrate to towns.

Beginning in the late 1940s, the exodus of farmers from their villages intensified. The law passed in 1932 to forbid farmers to leave their villages without proper authorization was still in force, but there were many ways to evade bans. Industrial and construction projects were short of labour, and they could only draw on it in the countryside.

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In 1953, when Stalin died, Soviet agriculture was the weakest spot of the Soviet economy. This truth was clear to all the top party leaders. They were at one in the view that more funds were needed to promote agriculture. What differences they had centred on spending priorities. They faced two options – pouring funds into traditional agricultural areas or launching a large-scale programme to develop virgin and fallow lands. They gave the nod to the second option.

A NEW COVENANT BETWEEN GOVERNMENT AND SOCIETY

The previous forms of regime legitimization were replaced with a new covenant the rulers made with the ruled. Nobody saw or signed it on paper, of course. But its message was clear: You, the government, promise us, the people, to make life liveable, and keep in place the social programmemes you passed and retail prices for consumer essentials stable. In return, society will tolerate you (the government) and will take you as an inevitable evil.

What a breach of covenant could bring about was demonstrated by riots in Novocherkassk in 1962, in the wake of a moderate hike, barely enough to correct accumulating imbalances, of retail prices for basic consumer essentials. "Prices of meat and meat products were raised, as of June 1, 1962, by an average 30%. Between May and June 1962 consumption of meat and meat products fell by 15% in worker families earning up to 35 roubles a month per family member, and by 8% in families making between 50 and 75 roubles a month per family member."[66]

Mass rioting that followed in the wake of price increases in Poland in 1970, 1976, and 1980 confirmed the Soviet leaders in their belief that prices were off limits under any circumstances.[67] Prime Minister Andrei Kosygin, the most competent of the Soviet leaders in the 1960s and 1970s, retorted to a suggestion for retail prices to be raised. "Don't ever tell me that. You can do it only once in a lifetime." He was referring to the price increases in the summer of 1962.

Against this background, the monetary system was beleaguered by multiplying problems.[68]

The Soviet Union's political leaders were caught in a trap so firmly shut that they had difficulty getting out. They knew they could not step up agricultural production at a rate needed to meet rising demand. Nor could they bring demand for farm products in balance with supply without having to raise prices. Raising prices would be a breach of the implied covenant with the people. The rift between rising procurement prices of farm produce and retail prices was widening, and the budget was under pressure as a result. The unintended growth in the share of agriculture in total investment cut into funds devoted to encouraging the growth of high technologies.

By tradition, the Soviet authorities responded to unrest in their East European vassals by using armed force, followed up by more economic aid.[69] In the 1950s and early 1960s, they assisted East European socialist countries and propped up their communist regimes by grain deliveries. Grain shipments were pared down in the shadow of the looming crisis in Soviet agriculture, but still continued in reduced quantities until the early 1960s.

THE OIL OF WEST SIBERIA: AN ILLUSION OF SALVATION

Hope for a solution of these problems came with the discovery of oil fields in West Siberia, from which, once they were developed, oil could be pumped to industrial capitalist countries and export receipts used to pay for huge imports.

The Soviet Union started exporting oil in significant quantities in the 1950s. Oil production, in the first place, in the middle Volga area, rose rapidly in the decade between 1950 and 1960. Oil was largely shipped to socialist countries in Europe, and was exported for hard currency in token quantities only.

The first gusher was struck in West Siberia in 1953. Large geological discoveries came later, between 1961 and 1965, beginning with Megion and Ust-Balyk in 1961, Fedorovskoye in 1963, and Mamontovskoye and Samotlor in 1965. The new oil fields had high well outputs, typically over 100 tonnes of oil per well a day, and reasonable depths of 1.8 to 2.5 kilometers.[70] Within a decade, 1972 to 1981, oil production in the West Siberian oil and gas province rose 5.3-fold to 334.3 million tonnes, from 62.7 million tonnes.

Oil production in the U.S.S.R. in those years was rising at the fastest pace in the industry's history. Many of the new oil fields merited unique ratings by international standards because of the very large outputs of their wells.

Year	Oil output	Year	Oil output
1960	147.9	1981	608.8
1965	242.9	1982	612.6
1970	353.0	1983	616.3
1975	490.8	1984	612.7
1980	603.2	1985	595.0

Table 11
Oil production in the U.S.S.R., 1960–-1985, m. of tonnes

Source: Statistical yearbooks The National Economy of the U.S.S.R. for different years.

The Soviet Union was rapidly building up its oil exports to developed capitalist countries. Its hunger for hard currency pushed it into using oil production techniques that yielded desired results fast, but carried risks of production rates falling within years. Over the years spanning the late 1970s and early 1980s, inconclusive skirmishing continued between bureaucrats responsible for the overall performance of the Soviet economy and technocrats developing the West Siberian oil and gas province over how far oil production rates could be raised without damaging long-term oil field development prospects. At times, light skirmishing developed into tough confrontation. V. Shashin, then oil minister, badgered Gosplan bureaucrats and party functionaries about their overestimates of oil fields having a capacity to increase output indefinitely without giving a thought to the side effects of their delusions.[71]

Gathering food problems were pushing the Soviet leaders to opt for rapid development of the oil fields. Prime Minister Andrei Kosygin pestered V.I. Muravlenko, chief of the Tyumen oil and gas authority, for more oil, above plan in dispatches approximately like this: "Grain a headache again. Please pump 3 million tonnes more."[72]

Between 1974 and 1984, the costs of recovering an extra ton of oil rose by 70%. Overall, oil pumping costs doubled between the early 1970s and the early 1980s.[73]

Hurried oil production growth required efforts to be focused on major projects. Well operation techniques used to rapidly increase oil output created unpredictable risks and made continuation of current oil output dependent on the development of a few more unique oil fields.[74]

The foreign trade balance, the balance of payments, food supplies, and continuing political stability were increasingly becoming captive to the weather on the virgin lands and on oil output. Not much for a world superpower to claim as a basis for its economic and political stability.

Apart from the discovery of giant oil and gas fields, stability of the Soviet economy in the 1970s benefited enormously from an unprecedented increase in oil prices in 1973 and 1974, and another price leap in 1979 through 1981. As more oil was exported for hard currency, hard currency receipts were, beginning in 1973, to grow at increasingly faster rates never recorded before.

The influx of petro-money helped to halt the threatening food crisis in cities and to step up imports of industrial equipment and consumer goods. It also provided the funds to whip up the arms race and achieve nuclear parity with the U.S. The money glut lured the country's leaders into a series of political adventures abroad, including the Afghan war.[75]

OBSESSION

Even though oil production was rising fast, and more oil was exported to take advantage of high oil prices in the mid-1970s and early 1980s, the Soviet leadership could not, as it had not before, make up its mind to start building up hard currency reserves or invest its export receipts in liquid financial instruments to be used in emergencies such as oil market downturn. It did neither of these two things, although it knew that the country's economy and socio-political stability hinged on its record-high imports of grain. The Soviet Union's hard currency reserves were, as previously, no larger than was needed to back up the country's current foreign trade.

The only plausible explanation for this policy was the Soviet leaders' conviction that oil prices, which reached historical highs in the late 1970s, would hold in the future, and avoided thinking about the moves they were to take if prices started sliding back.[76]

Although oil prices remained high in 1979 to 1981, the U.S.S.R. had difficulty closing the deficit of its current balance of payments. As many times before, agriculture was to blame – three bad back-to-back harvests that led to larger grain imports.

Oil and gas contributed 67% to the Soviet Union's exports to OECD countries in 1980. Still high, oil prices stopped climbing. In the early 1980s, shortages of consumer goods grew worse, more banknotes were printed, and farm market prices rose. Budget spending came increasingly to depend on personal bank deposits. The economy tipping into a greater imbalance, finances alarmingly messed up, and shortages in the consumer market encouraged attempts to make up for short supply of foodstuffs by lowering their quality, such as raising the content of water and starch in sausages. Beginning in the mid-1970s, about half of growth in sales in food retailing was achieved by quality adulteration and price increases. Gosplan, the country's top planning agency, prepared a report on the situation in food production and distribution and circulated it to the vice premiers. The following day, the circulated report copies were collected and destroyed.[77] All those things were happening against the worsening background of economic crime and corruption.[78]

The Soviet leadership always, from generation to generation, regarded foreign trade and allocation of hard currency as its political tool. The Soviet Union's foreign trade closely combined economic and political objectives focused on supporting its sympathizers and admirers in other countries and stabilizing its vassals in Eastern Europe. The U.S.S.R. used its political leverage frequently, and with some success, to pull strings on key political decision-making in developed democratic countries.

A Polish party and government delegation arrived in Moscow for talks with their Soviet counterparts on March 1 and 2, 1982. The delegation head, prime minister Wojciech Jaruzelski, spoke about the difficulties facing the Polish economy, industrial plants operating at 60% capacity, the threat of unemployment for 400,000 industrial workers and 200,000 construction workers. The Poles thanked the Soviet Union for nearly 4 billion COMECON roubles, including about $3 billion, in emergency economic aid to their country in 1980 and 1981. The negotiators reached an agreement on a loan of 2.7 billion roubles to be made to Poland in 1982 and 1983. Besides this, the Polish delegation requested more extensive economic aid. The costs of engaging in politics abroad and preserving the empire were growing as time went by.

OIL AND POLITICS

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Between 1981 and 1984, the Soviet government had no other tool than expanding oil shipments to deal with growing foreign trade difficulties. Oil exports, which stood at 93.1 million tonnes in 1975, rose to 119 million tonnes in 1980, and on to 130 million tonnes in 1983.[79] Oil production growth rates, mean while, slumped toward the late 1970s, however, and continued on at a snail's pace beginning in 1980.

The Soviet leaders must have been aware that the situation in the oil market was exposed to economic and political influences, because they had dabbled in pulling some sensitive strings.

Chief of the State Security Committee (KGB) Yuri Andropov wrote, in part, in his letter of April 23, 1974, to Leonid Brezhnev, General Secretary of the Soviet Communist Party's Central Committee: "Beginning in 1960, the State Security Committee has maintained secret business contacts with Wadia Haddad, member of the Executive Committee of the Palestine Liberation Organization (PLO) and PLO foreign operations chief. Meeting a KGB station chief in Lebanon last April, Wadia Haddad told the station chief, in confidence, about the PLO's long-term programmeme of subversive and terrorist operations, which briefly is as follows. The chief purpose of the PLO's special operations is enhancing the efficiency of the Palestine resistance movement in its fight against Israel, Zionism, and U.S. imperialism. Accordingly, the main objectives of the organization's subversive and terrorist operations are: continuing special 'oil war' actions by Arab countries against imperialist forces supporting Israel; launching actions against American and Israeli nationals in third countries with the aim of obtaining authentic information about U.S. and Israeli plans and intentions; conducting subversive and terrorist operations in Israeli territory; and pursuing subversive actions against the diamond concern, in which Israeli, British, Belgian, and West German companies hold major stakes. In line with these objectives, the PLO is planning a series of special operations, including strikes against major oil fields in various regions of the world (Saudi Arabia, the Persian Gulf, Hong Kong, and so on), destruction of oil tankers and supertankers, action against American and Israeli representatives in Iran, Greece, Ethiopia, and Kenya, attacks on the Diamond Centre building in Tel-Aviv, and so on. W. Haddad asked us to help his organization obtain certain types of specialized equipment they need to carry out certain subversive operations. […] In view of the above, it would be reasonable to give a positive response to Wadia Haddad's request at the next meeting for assistance to the Palestine Liberation Organization with specialized equipment."[80]

The invasion of Afghanistan, which Persian Gulf countries saw as a potential threat to Saudi Arabia, in the first place, was a factor that swayed their attitudes toward the U.S. They needed that superpower's potential military support. America wanted lower oil prices. The possibility of tying up these two objectives was first discussed at a high level in April 1981 when CIA Director William Casey paid a visit to Saudi Arabia.

In autumn 1981, the Soviet Union, confronted with serious balance of payments problems, had no choice but to inform East European socialist countries of a 10% cutback in annual oil shipments to them and to use the tonnages released to increase exports to OECD countries. At that time, too, it could not ignore political considerations either. When, in 1985, oil production started falling off for the first time in Soviet economic history, shipments to developed capitalist countries took a deep plunge. The Soviet leadership had apprehensions about reducing oil exports to COMECON countries any further.[81]

Richard Pipes sent a memorandum to the American authorities in the early 1980s, advising them to exploit the Soviet economy's dependence on oil market prices to destabilize the communist regime. William Casey, who was appointed CIA director by President Reagan, had experience in analyzing and deriving benefits from an adversary's weaknesses. He cut his teeth in this craft during the Second World War, when he worked to maximize the economic damage the Allies could inflict on Nazi Germany. Early into his presidency, on March 26, 1981, Ronald Reagan made an entry in his personal diary on the briefing he had received on the situation in the Soviet economy, its problems, and its dependence on Western loans. In November 1982,

President Reagan signed a national security directive (NSDT-66) calling for efforts to cause damage to the Soviet economy.[82] Its purpose was, of course, to weaken the Soviet Union economically and politically. No one in the American administration of the period indulged in dreams of imploding the U.S.S.R. by exploiting its economic vulnerability.

If all this is true, it only, much as we regret it, speaks volumes about the intellectual powers of the Soviet leadership of the early 1980s vintage. It must have taken a long time to pack the country's ruling bodies with a bunch of least capable individuals only to expose the world superpower's economy and politics to the fancies of a potential adversary (the U.S.) and a main rival in the oil market (Saudi Arabia), and wait until they conspire against it.

Elsewhere, the financial conditions in socialist countries kept deteriorating.

A circular of the U.S.S.R. State Bank's Finance and Economics Department said, in part: "The socialist countries started borrowing extensively from Western banks in the early 1970s, at the height of détente, when trade between East and West expanded significantly, the world economy posted high growth rates, and prices for energy resources and raw materials rose. In 1981, though, world economic growth faltered, and the socialist countries' total outstanding debt reached $127 billion, a record for that time, and their solvency hit near bottom."[83]

THE MELTDOWN

In 1985, rising costs of bringing new oil wells on stream and keeping existing ones in profitable operation, combined with the shortage of funds, caused oil production in the U.S.S.R. to fall by 12 million tonnes. To top it off, the slow climb-down of real oil prices in 1981 through 1984 changed to a stampede never seen before. In 1985 and 1986, the prices, on which the Soviet Union's budget was built, on which depended its foreign trade balance, the stability of its consumer market, its ability to buy many million tons of grain a year, service its foreign debt, and keep up its armed forces and the military-industrial complex, tumbled by scores of percentage points.

But that was not the cause of the collapse of the socialist system.

The real cause lay elsewhere. It was in the institutions put in place at the end of the 1920s and early 1930s, which were too rigid to allow the country to take on the world development challenges of the late 20th century. The legacy of socialist industrialization, the severe crisis of agriculture, and uncompetitive manufacturing industries made the collapse of the U.S.S.R. inevitable. In the 1970s and early 1980s, those problems could be managed by capitalizing on very high oil prices. It was too shaky a foundation for the world's last empire to survive.

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By 1985, the groundwork had been laid for a sharp economic crisis in the U.S.S.R., which could only be managed by tough, accurate, and responsible decisions, a grasp on its origins, and a selection of steps that could, and had to, be taken to minimize its damage, without accelerating the crash of the economy. The Soviet bureaucrats responsible for foreign trade still firmly believed in the stability of the Soviet Union's economic and financial position.[84]

A new political leader brought forth by a new generation of political elite came to power. His election was a demonstration of the forced renunciation of the power of the gerontocrats, who had ruled the country over the preceding decades.[85] He had only a superficial knowledge of the real situation in the country, and the scale of problems he was called on to unravel. He was unaware of the real economic situation in the country and did not realize how critical the situation was. We will never know whether or not the U.S.S.R. could be salvaged by energetic and pointed moves without making a single mistake in that situation. For the chances of success to be more than zero, there had to be a clear realization of the scale and nature of the challenges facing the country. The new crop of leaders took over three years to get a grip, if only a weak one, on the ills of the Soviet economy. Much too long in a crisis that wouldn't wait.

REFERENCES AND NOTES

* This article is a journal version of chapters of a book due out later this summer.

[1] It is more appropriate to call them empires consisting of a mother country and overseas territories. The term has stuck, however. It will be used in this sense further in the text.

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[3] For more on the risk of radical nationalism bred by the post-imperial syndrome, and the stability of democratic institutions, see: Gerschenkron A. Bread and Democracy in Germany. Los Angeles: University of California Press, 1943. For more on the connection between pro-imperial policies and authoritarian trends in modern-day Russia, see also: Overcoming the Post-Imperial Syndrome. Shorthand records of the discussion held on April 21, 2005, within the framework of the After the Empire project of the Liberal Mission Foundation. http://www.liberal.ru/sitan.asp?Num=549.

[4] In May 1926, President Paul von Hindenburg ordered German diplomatic missions abroad to fly Republican and Imperial flags side by side.

[5] For more on the manipulation by Nazi propaganda of the demand for compensation of savings lost during hyperinflation in 1923, see: Delmer S. Weimar Germany: Democracy on Trial. N. Y.: Macdonald and Co., 1972. For more on the effect German hyperinflation in 1922 and 1923 had on disorganization of the middle class, see also: Weisbrod B. The Crisis of Bourgeois Society in Interwar Germany // R Bessel. (ed.). Fascist Italy and Nazi Germany. Comparisons and Contrasts. Cambridge: Cambridge University Press, 1972. P. 30.

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[7] Martin D. Aspilcueta, an economist associated with the University of Salamanca, was, probably, the first scholar in Europe of the period to spot the connection between rising prices and the influx of gold and silver from America. See: Grice-Hutchinson M. The School of Salamanca. Readings in Spanish Monetary Theory, 15441605. Oxford: Clarendon Press, 1952. pp. 91-96. A classical study on the effect the influx of American gold had on Spain's economy was penned by E.J. Hamilton. Hamilton E.J. American Treasure and the Price Revolution in Spain, 1501-1650. Cambridge: Harvard University Press, 1934. As is frequently the case with similar complex issues of economic history, it suffered much criticism from his followers. See, for example: Nadal J.O. La Revolucion de los Precios Espanoles en el Siglo XVI // Hispania. 1959. Vol. XIX. pp. 503-529. Researchers in later periods demonstrated that the price revolution in the 16th and early 17th centuries was caused by several other factors in addition to the influx of gold and silver from America. Beginning at about the 1460s or 1470s, Portugal started exporting much Sudanese gold to Europe. The total exports between 1470 and 1500 ran up to 17 tons. See: Wilks I. Wangara, Akan, and the Portuguese in the Fifteenth and Sixteenth Centuries / I. Wilks (ed.). Forests of Gold: Essays on the Akan and the Kingdom of Asante. Athens: Ohio, 1993. pp. 1-39. A role of some significance was played by silver mined in Southern German, starting with the late 15th century, which pushed up the supply of silver in Europe. See: Munro J. The Monetary Origins of the "Price Revolution": South German Silver Mining, Merchant-Banking, and Venetian Commerce, 1470-1540. Department of Economics and University of Toronto. Working Paper No. 8. June, 1999; Outhwaite R.B. Inflation in Tudor and Early Stuart England. Studies in Economic and Social History Series. London: Macmillan, 1969; Burke P. (ed.). Economy and Society in Early Modern Europe: Essays from Annales. L.: Routledge & Kegan Paul, 1972. John Nef puts silver production in Southern Germany, Austria, Bohemia, Slovakia, and Hungary in 1526 to 1535 at between 80 and 90 tons a year. See: Nef J. Silver Production in Central Europe, 1450-1618 // Journal of Political Economy. 1941. Vol. 49. Pp. 575-591. Still, all these facts, an interesting subject for discussion of economic history, cannot obscure the main point – connection between price increases in Europe in the 16th and 17th centuries and the growing supply of precious metals. See:Marjorie Grice-Hutchinson. The School of Salamanca: Readings in Spanish Monetary Theory, 1544-1605. Oxford: Clarendon Press, 1952. P. 95.

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[9] Since the times of the Reconquista, the idea that crop farming was a lowly pursuit, while nomadic

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[67] For more on the problems confronting the Soviet leadership, beginning with Khrushchev, that stemmed from the policy of maintaining stable prices for consumer goods, especially food products, see: Millar J.R. An Economic Overview / J.Cracraft (ed.). The Soviet Union Today: An Interpretive Guide. Chicago: University Chicago Press, 1983. pp. 173-186.

[68] "Between 1961 and 1985, money supply (M2) was rising at an annual rate of around 10%. In the early 1960s, the nominal GDP growth rates were falling behind the money supply growth rates by a factor of approximately 1.5 to 2 in the second half of the 1960s, and particularly in the 1970s, and by a factor of 3 in the first half of the 1980s. The economy was rapidly soaking up cash, contributing to a fast growth in the M2 money supply relative to GDP. In particular, M2 took up 22.8% of GDP in 1961, 29.5% in 1970, 44.2% in 1980, reaching 52.6% in 1984. By 1980, farm market prices had grown to 2.57 times government procurement prices for similar goods." See: Illarionov A. Attempts at Financial Stabilization in the U.S.S.R. and in Russia. 1995 r. www.budgetrf.ru.

[69] An except from Minutes No. 28 of the CPSU Central Committee's Presidium meeting on July 9 and 12, 1956, on economic aid to Poland: "Supply it [Poland] with everything they need – jute, wool, and all that. If they want bullion, it will also be supplied." See: RGANI, Folio 3. List 12. File 1005. Pages 1-2 ob. Quoted in: Presidium of the CPSU Central Committee. 1954-1964. Draft Records of Meetings. Shorthand Records. Resolutions. Vol. 1. 2nd ed. / Chief Editor A.A. Fursenko. Moscow: ROSSPEN, 2004. p. 148.

[70] Slavkina M.V. Triumph and Tragedy: Development of the Oil and Gas Complex of the U.S.S.R. in the 1960s to the 1980s. Moscow: Nauka, 2002. pp. 45 and 70.

[71] According to N. Bronin: "He could say to a ranking official's face: 'You are an adventurist. Do you know where you are leading the country? Do you think of the consequences of what you are doing?" See: V.D. Sashin's 85th Birthday. Materials of the Anniversary Conference. Moscow, July 22, 2001. Moscow, 2002. pp. 38 and 39.

[72] Interview with V.I. Graifer. Quoted in: Slavkina M.V. Triumph and Tragedy: Development of the Oil and Gas Complex of the U.S.S.R. in the 1960s to the 1980s. Moscow: Nauka, 2002. P. 143.

[73] Kudrov V.M. The Soviet Economy in Retrospect. Moscow: Nauka, 2003. p. 31.

[74] In 1977, the CIA made public a report in which it predicted an impending fall of oil production

in the Soviet Union in the 1980s. See: The International Energy Situation: Outlook to 1985. Central Intelligence Agency. April 1977; Prospects for Soviet Oil Production. Central Intelligence Agency. Washington, D.C.: April 1977.

[75] The Politburo's meeting of March 17, 1979, was summed up by N. Kosygin: "We all are at one – we will not let go of Afghanistan." Following a conversation with N. Taraki, who bluntly demanded that Soviet forces be sent to Afghanistan immediately, the mood changed. It was clear now that it was not just military, or technical, or economic aid; it was committing Soviet forces. A. Gromyko then said: "I fully support comrade Andropov's proposal to rule out a measure such as introduction of our troops into Afghanistan. The army is unreliable there. Our army then will be the aggressor if it goes to Afghanistan. Who will it be fighting there? Yes, the Afghan people, and they will have to be fired at." Yu. Andropov: "I think, we must hold off sending our troops in. Sending our troops there will be fighting the people, crushing them under our tank tracks, and firing at people. We will be seen as aggressors, and we cannot do that." See: RGANI. Folio 89. List 25. File 2. Pages 10, 15, and 24. All this was true, of course, but this did not prevent the Politburo, in December 1979, from sending four divisions and four brigades 150,000 strong into Afghanistan and killing its President Amin. See: Bukovsky V. The Moscow Trial. Paris-Moscow: Russian Thought Publishers, MIK, 1996. http://www.belousenko.com/wr_Bukovsky.htm. Part 2. p. 49. The final decision was made at a meeting called by L. Brezhnev on December 26, 1979. See: RGANI. Folio 89. List 14. File 31. Pages 1 and 2. After the Soviet forces entered Afghanistan, the Politburo meeting on January 8, 1980, decided to increase the manpower ceiling of the USSR Armed Forces by 50,000 troops. See: Resolution of the CPSU Central Committee and the U.S.S.R. Council of Ministers of January 2, 1980, to Increase the Numerical Strength of the USSR Armed Forces. Excerpt from Minutes No. 177 of the meeting of the CPSU Central Committee's Politburo of January 2, 1980, No. P177\239. http://www.2nt1.com/archive/pdfs/afgh/177–80–2.pdf.

[76] Experts were well aware, as early as the mid-1980s, of the risks arising from the Soviet Union's continued dependence on the play of oil market forces to finance imports of grain and spare parts for its manufacturing industries. See: Chadwick M., Long D., Nissanke M. Soviet Oil Exports: Trade Adjustments, Refining Constraints and Market Behaviour. Oxford: Oxford Institute for Energy Studies, 1987.

[77] Baibakov N.K. Forty Years in Government. Moscow: Respublika, 1993. pp. 129-134. "The old financing scheme being no longer fit for us, we were forced to resort to new, 'unconventional,' ways, such as personal deposits with savings banks and funds in businesses' accounts that we started using, if only in part, to cover budget spending." Ibid, p. 134.

[78] Crossman G. Roots of Gorbachev's Problems: Private Income and Outlay in the Late 1970s. /Gorbachev's Economic Plans. Study Papers Joint Economic Committee, US Congress. Vol. 1. Washington, November 23, 1987. pp. 213-229.

[79] The data have been taken from the statistical yearbooks The National Economy of the U.S.S.R. for different years. Moscow: Goskomstat. There is no certainty about the accuracy of these data. In so sensitive an area, Soviet official statistics might be tampered with. Still, they convey a general picture of events and the rapid growth in oil exports.

[80] Memorandum of Yu. Andropov (Chairman of the State Security Committee under the U.S.S.R. Council of Ministers) to L. Brezhnev, General Secretary of the CPSU Central Committee, on the secret meeting between the KGB station chief in Lebanon with W. Haddad. April 23, 1974, No. 1071-A/OB. http://www.2nt1.com/archive/pdfs/ terr-wd/plo75a.pdf. In another circular to L. Brezhnev concerning deliveries of arms to the Palestine Liberation Organization, Yu. Andropov called W. Haddad a trusted KGB informant. See: Memorandum of Yu. Andropov (Chairman of the State Security Committee under the U.S.S.R. Council of Ministers) to L. Brezhnev, General Secretary of the CPSU Central Committee, on the transfer of a shipment of foreign-made arms and ammunition to W. Haddad. May 16, 1975. No. 1218-A/OB. http://www.2nt1.com/ archive/pdfs/terr-wd/plo75d.pdf.

[81] Chadwick M., Long D., Nissanke M. Soviet Oil Exports: Trade Adjustments, Refining Constraints and Market Behaviour. Oxford: Oxford Institute for Energy Studies, 1987. p. 136.

[82] Schweizer P. Victory: The Reagan Administration's secret strategy that hastened the collapse of the Soviet Union. N.Y.: Atlantic Monthly Press, 1994. pp. XXVI, 6-12, and 26-32; Strayer R. Why Did the Soviet Union Collapse? Understanding Historical Change. N.Y.-L.: M.E. Sharpe, 1998. P. 127.

[83] For more on the socialist countries' finances and hard currency reserves (as at mid-year 1988),

see: pp No. 4013 of February 24, 1988). RGAE. Folio 2324. List 33. File 696. Pages 4 and 5.

[84] See. Memorandum from Yu.A. Ivanov (Board Chairman of the U.S.S.R. Vneshtorgbank) to Comrade N.V. Talyzin (Chairman of the Council for Mutual Economic Assistance Commission of the Presidium, U.S.S.R. Council of Ministers). Information on hard currency transactions entered into by Bulgaria, Cuba, and Czechoslovakia with capitalist countries and banks, and on other issues raised during the briefing at the U.S.S.R. Vneshtogbank. April 28, 1984. GARF. Folio 5446. List 144. File 79. Pages 36 and 37.

[85] The average age of Politburo members was 55 years at the time of Stalin's death, March 1953, and was past 70 in 1980. See: Boffa J. From the U.S.S.R. to Russia. A History of the Ongoing Crisis. Moscow: International Relations, 1996. p. 110.