

Prof. John H. Munro
Department of Economics
University of Toronto

munro5@chass.utoronto.ca
john.munro@utoronto.ca
<http://www.economics.utoronto.ca/munro5/>

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ECONOMICS 303Y1

The Economic History of Modern Europe to 1914

Prof. John Munro

Lecture Topic No. 25:

VI. RUSSIA: THE BEGINNINGS OF INDUSTRIALIZATION TO 1914

A. Barriers to Economic Growth

B. Russian Agriculture: the Emancipation of the Serfs and Agrarian Changes, 1861 - 1914

VI. RUSSIA: THE BEGINNINGS OF INDUSTRIALIZATION TO 1914

A. BARRIERS TO ECONOMIC GROWTH

1. Russia's Advantages: Land and People

a) **Natural resource endowments: Russia had vast amounts of some of the major resources required for modern industrialization:**

(1) coal, iron, petroleum, timber, water-power,

(2) and many very rich agricultural lands: especially in Poland, Ukraine, and the Volga river valley.

b) **Population:**

i) **Russia also had a large and fairly rapidly growing population,**

(1) which should have provided both market expansion and an expanding labour force;

(2) and thus consider the contrast with the slow demographic growth of 19th-century France.

ii) **As the table on the screen shows,**

(1) Russia's population well more than tripled during the 19th century:

- from 35.5 million in 1800 to 132.9 million in 1900,

- an overall expansion of 274% [or a 3.74 fold expansion;]

(2) and it reached 160.7 million by 1910, i.e., 352.7% greater than in 1800.

The Populations of Selected European Countries in Millions, in decennial intervals, 1800-1910

Year	Great Britain	Belgium	France	Germany	Russia
1800	10.7	3.1	27.3	n.a.	35.5
1810	12.0	n.a.	n.a.	n.a.	n.a.
1820	14.1	n.a.	30.5	25.0	48.6
1830	16.3	4.1	32.6	28.2	56.1
1840	18.5	4.1	34.2	31.4	62.4
1850	20.8	4.3	35.8	34.0	68.5
1860	23.2	4.5	37.4	36.2	74.1
1870	26.0	4.8	36.1 ^a	40.8 ^b	84.5
1880	29.7	5.3	37.7	45.2	97.7
1890	33.0	6.1	38.3	49.4	117.8
1900	37.0	6.6	39.0	56.4	132.9

Year	Great Britain	Belgium	France	Germany	Russia
1910	40.9	7.4	39.6	64.9	160.7

^a Excluding Alsace-Lorraine.

^b Including Alsace-Lorraine.

Sources: B.R. Mitchell and P. Deane, *Abstract of British Historical Statistics* (Cambridge, 1962), pp. 8-10; Carlo Cipolla, ed., *Fontana Economic History of Europe*, Vol. IV:2, pp. 747-48.

c) The advantage of being a ‘late-starter’:

i) **that Russia as a late starter did have the advantage of borrowing from the West:** in terms of both of the following:

(1) borrowing the already well developed and up-to-date industrial technology and industrial organisation of Western industrial countries; and

(2) borrowing as well the capital to finance the application of that technology:

ii) **Technology and Machinery:**

(1) Russia could import the necessary machinery and capital goods in the late 19th century when

- they had been better perfected and, furthermore,
- their prices had fallen substantially.

(2) Indeed post 1880s Russian industry was characterized by being generally more advanced and larger scale than western ones;

(3) and thus Russia avoided the problem of having an excess stock of obsolescent capital stock.

iii) **Financial Capital:**

(1) Secondly, Russia could and did borrow vast amounts of foreign capital, from the French, British, Belgians, and Germans especially.

(2) Much of this capital was directly funnelled into heavy industry by investment banks and/or through branch firms: very important in allowing Russian industry to begin large scale and fully modernized.

2. Russia’s Disadvantages:

a) **Advantages vs. Disadvantages: Did Russia become a great industrial power Before WWI?**

i) **If, however, resource endowment, a growing population, and borrowed capital (technology and capital financing) were such key assets for industrialization,** then Russia should have become a major industrial power by the end of the 19th century

ii) **Clearly it did not: despite all her industrial achievements**, and some were considerable, as we shall see,

(1) we cannot possibly argue that by 1914, with the outbreak of World War I, Russia had become truly a major industrial power,

(2) certainly not on the scale of Germany, France, Britain, Belgium, the Netherlands, or even Italy.

iii) **Thus we have to look at the disadvantages:** and draw up a balance sheet to explain at the outset why Russia did not become that major an industrial power.

b) Distances and Transport:

i) Russia's geography in terms of vast distances certainly did offset her vast riches:

(1) the fact that these resources were widely scattered and,

(2) initially, far distant from major towns and settlements, with virtually no transport facilities to link them up.

(3) Thus it is a mistake to assume that natural resource endowment is necessarily a major key to economic growth and industrialization.

ii) Transport:

(1) Needless to say, the transportation facilities -- in terms of roads, rivers, and canals -- were even worse, and so much inferior to those found in Germany in the early 19th century,

(2) though not so much disrupted by taxes and tolls as were the German rivers.

(3) So in sum, even more than Germany, Russia was dependent upon the establishment of railroads for her economic development and industrialization:

(4) i.e., to link up these resources, her coal and iron resources especially, before she could even begin modern industrialization.

c) Disadvantage of a Late-Starter as a capital importer:

i) **Unbalanced economic development:** in creating regional dual economies that seriously distorted Russian economic development:

ii) **i.e., with small islands of foreign owned, technically advanced heavy industry**, within a vast feudal agrarian sea

iii) **bringing us to perhaps the most important barrier of all:** that Russia was facing in seeking to industrialize, namely:

d) The Barriers of Feudal Agriculture and Serfdom:

i) **For many and perhaps most economic historians, the principal barrier to Russian economic development in the 19th century lay in her agricultural sector,**

(1) certainly before the abolition of serfdom in 1861 --

(2) and virtually at the very same time that slavery was abolished in the US,

- In 1863, President Lincoln issued the Emancipation Proclamation
- but it applied only to the rebellious Confederate States
- until almost the end of the Civil War:
- thus, in January 1865, Congress approved the 13th Amendment to the US constitution to abolish slavery everywhere in the U.S., and forever.¹

ii) **Many will also argue that even after the abolition of serfdom**, in Russia, a primitive agricultural sector continued to provide a major barrier to economic growth, until well into the 20th century, or indeed even unto the present day.

iii) **But this topic, perhaps the most crucial one in our study of Russian industrialization**, will be treated separately as our first major topic only after completing our survey of 'economic backwardness in historical perspective,' to cite the phrase of Alexander Gerschenkron, the most famous economic historian of 19th century Russia, who wrote about the economics of late-starters.

3. **The Gerschenkron Model: The Late- Starter and the National State.**²

a) **The Role of the State for Industrial Late-Starters: Gerschenkron**

i) **Question:** Was the state, the national state government, a positive or negative force in the economic development of Russia as a late-starter?

ii) **The Gerschenkron Thesis:** [We discussed this thesis earlier: for Germany]

(1) Alexander Gerschenkron (1904-1978), whose importance I discussed in the previous topic on Germany, was, to repeat, a Russian-born, Austrian-trained Harvard economist who, more than anybody since the Second World War, deeply influenced the study of 19th-century eastern European and especially Russian economic history.

(2) His special interest was the problems of economic backwardness (today a 'politically incorrect' term) and

(3) how countries considered to be economically backward or undeveloped or late-starters finally did undergo the processes of modern industrialization,

(4) and how they imitated or diverged from the model posed by pioneering industrial countries.

¹ The House of Representatives approved the amendment, by the required 2/3 majority, on 31 January 1865 (after the Senate had approved it on 8 April 1864). After 27 of 36 states had ratified it (including many of the former Confederate states), Secretary of State William Seward proclaimed its formal ratification on 6 December 1865 (and thus well after Lincoln's assassination): 'Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction.'

² For an illuminating study of Gerschenkron, as an economic historian, see Deirdre N. McCloskey, *If You're So Smart: The Narrative of Economic Expertise* (Chicago: University of Chicago Press, 1990), pp. 70-82.

(5) To repeat our previous observations (for Germany), on this thesis. Gerschenkron contended that all such late-starters, if they seek to catch up in a relatively short time to the industrial pioneers,

- cannot depend upon natural market forces -- not when the market economy is so undeveloped and so imperfect –
- but must instead rely upon the active, interventionist role of the national state government, in concert with investment banks (for reasons already noted).

(6) Such late-developing industrializers also had to rely, as just suggested, upon importing foreign technology and foreign capital, especially through these investment banks.

(7) Finally, he argued, such countries must use the state, investment banks, and this imported capital to create large-scale, heavily mechanized industries to overcome one of the most basic problems of economic backwardness: namely the scarcity of skilled, mobile labour.

b) The Russian Case in the Gerschenkron model:

i) **The true Russian pioneer had been the Czar Peter the Great (1682-1725)**, according to many economic historians: Czar Peter had actively sought to modernize Russia by importing western artisans, technicians, and technology;

ii) **but subsequent Russian Czars in the 18th and early 19th centuries did not favour such policies of economic modernization**, and especially opposed Westernization, for fear of undermining the social and feudal bases of their own imperial power.

iii) **According to Gerschenkron, the decisive turning point came in the 1850s:**

(1) the crucial and traumatic historical event was Russian military defeat in the Crimean War of the 1850s (1853-56), at the hands of Britain, France, and Turkey, ending Russian domination in SE Europe;³

(2) for that defeat that made clear how much Russian defence and military security would depend upon economic modernization and industrial growth.

iv) **Such modernization began and had to begin with state-sponsored agrarian reform**, with the abolition of serfdom, which will be our first major topic.

v) **In Gerschenkron's strongly argued opinion:**

(1) the state badly blundered in engineering agrarian reform;

(2) and in failing to remove this chief barrier to economic growth,

- and indeed in unconsciously worsening or augmenting features of this agrarian barrier,
- the state must be held responsible for impeding potential industrial growth in Russia.

³ Crimea, a peninsula in the northern Black Sea, had been conquered by the Ottoman Turks in 1475, remaining Turkish until its acquisition by Empress Catherine II of Russia, in 1783. In 1921, after the Bolshevik Revolution and civil war, Crimea became a Russian republic; but in 1954, the Soviet government transferred Crimea to the Republic of Ukraine as an *oblast* or province, and it remains part of Ukraine to this day (though most of the population speaks Russian).

- c) **The following lectures will necessarily consider and examine the Gerschenkron model**
- (i) but will necessarily end up by considering recent criticisms of the Gerschenkron model;
 - (ii) and then try to strike a fair balance between the views of Gerschenkron and his various critics.

B. RUSSIAN AGRICULTURE: THE EMANCIPATION OF THE SERFS AND AGRARIAN CHANGES, 1861 - 1914

1. Introduction: The basic question to be posed:

a) The Gerschenkron thesis, and the basic question:

- i) did Russian industrialization from the 1860s occur because of or despite her agrarian changes?**
- ii) Was Gerschenkron correct in asserting that Russia, and more particularly its government, failed to overcome this the most crucial barrier to economic development?**

b) Again, as with France and Germany, the major theme of agrarian reform is peasant emancipation and its consequences:

- i) peasant emancipation from above, as in the German model,**
- ii) but one with mixed consequences, resembling both the German and French models,**
- iii) though, for the greater part of the vast Russian Empire, including Russia itself,**
 - (1) at least according to Gerschenkron, if not to some of his critics
 - (2) the end result was more like the French than the German

2. The Problem of Serfdom in the Nineteenth Century

a) The Problem of Serfdom in Eastern Europe:

- i) Several times earlier, and most recently in discussing the agrarian changes in eastern Germany, I have referred to the so-called ‘second serfdom’ that spread through eastern Europe from the later 15th, 16th, and 17th centuries.⁴**

ii) The term ‘second serfdom’ refers to the fact much earlier, during the High Middle Ages,

- (1) much of the peasantry in eastern Europe had remained free,
 - especially on the colonized lands that Germanic peoples had colonized from the late 12th century, at the invitation of Slavic landlords and the Church,
 - while much of the peasantry in western Europe suffered the burdens of serfdom;
- (2) That relative freedom in the East had been a major force in attracting western colonists.

iii) But then, while serfdom was slowly disappearing or eroding in later-medieval western Europe, and was virtually gone by early-modern times,

- (1) the formerly free peasant villages of eastern Europe -- beginning in Prussia and Poland -- were increasingly absorbed into large feudal estates,

⁴ Please refer to the earlier lecture, no. 22, on German agriculture, given in mid-February: to be found at this URL: <http://www.economics.utoronto.ca/munro5/22geragr.pdf>

(2) and subjected to a serfdom generally much worse than that experienced in the West.

iv) **The further east one travelled**, the harsher and more widespread became the serfdom.

v) **The historical significance of the Second Serfdom should be obvious:**

(1) the fact that eastern Europe was subjected to a growing spreading serfdom at the very time when the peasantry of western Europe was becoming freer and freer.

(2) that difference was an important factor in widening the economic gulf between east and west, especially in terms of agricultural productivity.

c) **Russian serfdom in the 19th Century:**

i) **Certainly serfdom had become indeed very widespread in Russia by the 17th or early 18th centuries;**

- and indeed nowhere else in 18th and 19th century Europe was it so widespread,
- so deeply entrenched, and so harsh as in Russia -- verging on slavery in places.

ii) **But conditions varied enormously:** and while over half the population was servile, 53%, it is thus worth noting that almost half was free in the 19th century.

c) **Why serfdom was a barrier to agrarian and economic development?:**

i) **A course in medieval economic history would make clear the basic reasons**, in analysing medieval Feudalism and Manorialism;

ii) **We have already examined in some detail the origins**, nature, and consequences of serfdom, known as the Second Serfdom, in eastern Germany (principally Prussia), so that for Russia I need only provide a very brief summary .

iii) **Please refer to the lecture on German agriculture and serfdom** (no. 22):

(1) in order to understand the economics of the rise and expansion of the Second Serfdom, pay close attention to my analyses of the shift in manorial economies:

(2) the shift from *Grundherrschaft* to *Gutsherrschaft*: that is,

- a shift from a manorial economy based largely on rents from free peasant tenants to
- a manorial economy based largely on profits from commercial operation of the lord's demesne (including profits of justice), worked by servile labour.⁵

(3) Servile tenancies: held by unfree peasants, servile by hereditary tenure ('blood taint') who paid the landlord rents in both labour service and in kind, with perhaps some small cash payments

iv) **The institution of serfdom**, while it varied by time and place, generally meant four basic conditions:

(1) As suggested earlier, that the peasant's servile status was involuntary and arbitrary.

(2) That the serf, who inherited his or her status, was bound to his or her holding by the same blood taint of inheritance: bound either to the estate or to the landlord.

⁵ Those economics can be readily seen in Table 1, in the Appendix, replicated from lecture 22 on German agriculture.

(3) If the serf was indeed the personal property of the landlord, he or she could be bought or sold as a mere chattel of the estate.

(4) That the serf was subject to the landlord's arbitrary exactions, both:

- in the form of rentals on his holding
- and also in labour duties on the lord's domain lands.

v) **The economic consequences of serfdom:**

(1) **highly inelastic labour supply, with very low mobility of serfs:**

- from being physically tied to the estate.
- serfs could not leave or even marry outside the estate without the lord's permission, which meant purchasing that permission.

(2) **very low productivity:** in that serfs had little incentive to work hard and produce, except the incentive of the whip, since the landlord expropriated so much of his output.

(3) Indeed, any rational serf would seek to shirk his labour obligations

- while working on the landlord's demesne lands,
- in order to conserve his energies for the remaining days of the week to work his own tenancy lands,
- which were usually scattered, dispersed plough strips in the arable open fields.

vi) **the mere abolition of serfdom would not have solved any of these problems:**

(1) The real burden of serfdom would have remained, in view of the terrible conditions of degradation, brutality, and illiteracy in which the serfs had been engulfed for centuries.

(2) The overwhelming majority of peasants did not really want the freedom to move, but the freedom to own and work their own plots of land without that degradation and oppression.

vii) **Thus scarcity of labour:** in the Gerschenkron model, continued to be the real heritage of serfdom long after its abolition:

(1) especially a scarcity of educated, skilled labour for urban industry.

(2) I have just noted, and it is worth repeating, Gerschenkron's view that in a backward servile economy like that of 19th century Russia the input in scarcest supply is not capital but skilled labour.

c) **The following table on agricultural outputs does not entirely support these views on labour productivity:**

i) **not if you compare the Russian statistics with those for continental western Europe:** at least for grain outputs, though the livestock product outputs (measured in terms of cattle) are low, as one would fully expect.

ii) **On the other hand,** it is difficult to believe that these data have firm statistical foundations -- can we really trust them?

iii) **Note that the data for Russia are for 1870,** while the others are for about 1850; but I doubt that the Russian figures for 1870 would be much different from those for 1850.

Output Per Agricultural Workers ca. 1850

COUNTRY	Grain in bushels *	Livestock Outputs **	Net Output: U.S. = 1	Net Output measured in calories (Britain = 1)
USA (North)	297	8.54	1.00	0.99
Great Britain	223	5.66	0.95	1.00
Netherlands	74	3.49	0.48	0.46
France	98	2.84	0.59	0.48
Germany	86	3.00	0.47	0.45
Austria	72	2.66	0.39	0.25
Hungary	114	2.00	0.40	0.25
European Russia (1870)	108	1.89	0.36	0.26

* **Grain index:** the total bushels of grain (rye, wheat, barley, oats, peas, beans, maize) harvested per worker.

** **Livestock index:** cows and cattle = 1.0; sheep = 0.1; pigs = 0.3

Sources: Gregory Clark, 'Productivity Growth without Technical Change in European Agriculture', *Journal of Economic History*, 49 (1989), 980; Paul Bairoch, 'Les trois révolutions agricoles du monde développé: rendements et productivité de 1800 à 1985', *Annales: Économies, sociétés, civilisations*, 44 (1989), 329.

iv) **These data may be compared with some earlier estimates of European agricultural productivity,**

(1) including those for Russia, prepared by Paul Bairoch;

(2) note that the data for Russia indicate a low level of productivity that does not rise until well after the Emancipation of 1861;

(3) and indeed, seems to fall between 1860 and 1880, then rising sharply in the 1890s.

Table 2. Indices of European and American Agricultural Productivity from 1810 to 1910

**Annual net output per agricultural worker (male)
measured in million of calories**

COUNTRY	1810	1840	1860	1880	1900	1910
Britain	14.0	17.5	20.0	23.5	22.5	23.5
France	7.0	11.5	14.5	14.0	15.5	17.0
Germany		7.5	10.5	14.5	22.0	25.0
Russia		7.0	7.5	7.0	9.0	11.0
USA		21.5	22.5	29.0	31.0	42.0

Source: Paul Bairoch, 'Niveaux de développement économique de 1810 à 1910,' *Annales: Économies, sociétés, civilisations*, 20 (1965), 1096, Table 1.

3. The Abolition of Serfdom in 1861, and Its Aftermath

a) **In Russia, the abolition of serfdom came much later than elsewhere in Europe:**

i) **On 3 March 1861**, by imperial decree of Czar Alexander II. ⁶

ii) **Note that in Russia, the peasantry comprised about 40 percent of the population:** 23.1 million out of 62.5 million.⁷

iii) **Note again that this was two years before the U.S. fully abolished its own serfdom or slavery**, i.e., the slaves of West African origin, imported over the previous two centuries

(1) As noted earlier: the first stage of Lincoln's abolition was applied only to the rebellious southern Confederate states (where it had no effect, of course!)

(2) Complete American abolition was completed only towards end of the Civil War (but not after the Union Victory):

⁶ By the Russian Julian calendar, the Emancipation date was 19 February 1861.

⁷ From Answers.com: In Russia, by the mid-19th century, the peasants composed a majority of the population, and according to the census of 1857 the number of private serfs was 23.1 million out of 62.5 million Russians. By comparison, the United States had approximately 4 million slaves by 1860, the British Empire had 776,000 slaves when it abolished slavery in 1834, and Brazil had a slave population of roughly 750,000 by the time slavery was abolished in 1888. The exact numbers in Russia, according to official data, were: entire population 60,909,309; peasantry of all classes 49,486,665; state peasants 23,138,191; peasants on the lands of proprietors 23,022,390; peasants of the appanages and other departments 3,326,084. State peasants were considered personally free, but their freedom of movement was restricted. In the Russian Baltic provinces (Courland, Estonia, Livonia) serfdom, however, was abolished at the beginning of 19th century.

(3) by the 13th amendment to the US constitution: ratified by Congress on 31 January 1865, and by 75% of the states, by 6 December 1865.

b) In Tsarist Russia, this was peasant emancipation from above, by the state, to avoid social revolution from below.

i) **It will be interesting to compare the Russian case:** with the preceding German and French models;

ii) **but we must see that the form and results of emancipation were in so many respects peculiarly Russian, with very mixed consequences:**

(1) positive in Ukraine and parts of southern Russia, especially the Volga River valley;

(2) but quite negative elsewhere.

c) The Form and Conditions of Emancipation:

i) **As in Germany, so in Russia, the state, strongly influenced by current liberal economics,** fully agreed that it had a moral, if not a legal, obligation to respect the rights of private property

ii) **Rights of Eminent Domain:** at the same time, all governments – then and now – contended that, through the legal concept of ‘eminent domain’,

(1) it had the right to expropriate private property for the public good.

(2) but it also could not be arbitrary and had to accord fully with principles of compensation

(3) That is, the state had the moral and legal obligation to compensate landowners for any loss of land and labour power through the abolition of serfdom.

iii) **Originally emancipation was to be voluntary, by agreement between landlord and his servile tenants.**

iv) **The state would help to finance emancipation or redemption for 80% of the assessed value, as follows:**

(1) The state issued the landowner Redemption Bonds:

- usually for 80% of the assessed value of the servile lands freed.
- an amount that was generally higher than the real market value.
- Generally the larger the peasant landholding claimed, the higher was the assessment and redemption value.

(2) These redemption bonds bore interest at 5%, later raised to 6%.

(3) The serf who purchased his personal freedom and landholding had to borrow the funds for the remaining 20% of the assessed value: had to borrow from village moneylenders or merchant bankers.

(4) The serfs then had to pay the state annual redemption payments called *obrok*, which were reckoned at 6% of the redemption bonds.

(5) This lasted for 49 years, up to 1910, thus = 294% of the original value.

(6) We could also consider this as a 6% land rent on lands effectively owned by the state.

v) **As in Germany, Russian serfs were also able to bargain to reduce their financial obligations by surrendering some part of their holdings outright to the landlord:**

(1) a Russian serf was allowed to avoid all financial payments altogether by giving up three-quarters of his holdings to the landlord,

(2) and many serfs did indeed do (willingly or not), to gain both land and freedom.

vi) **If the landlord demanded immediate redemption without securing an agreement from his servile tenants,** then the landlord was entitled to receive only the redemption bonds for 80% of the assessed value.

vii) **If the landlord himself refused to negotiate or reach an agreement on redemption,** the serfs could request arbitration from the state.

(1) The state could compel the landlord to give the serf at least his farmstead, hut and gardens, at rates arbitrated by the state;

(2) but the serfs would have had to finance redemption without state assistance.

(3) The state could not compel the landlord to surrender allotments in the open fields to the serfs.

viii) **What happened: how many of the peasantry were affected, from 1861 to 1881?**

(1) **Within 20 years, about 85% of the peasantry had obtained redemption rights.**

(2) **Thus most landlords had agreed to emancipation,**

- and most on the basic conditions,

- since so many were, by and large, very indebted and thus were hungry for ready cash.

(3) **In 1881, the state finally made redemption obligatory:** to include the remaining 15% of the Russian peasantry.

d) **Poland:** a special case of land reform.

i) **Poland had once been an important, independent kingdom;**

(1) but in the late 18th century, it was conquered – in piecemeal fashion

(2) and divided amongst Austria, Prussia, and Russia, with the eastern third subjected to Russian rule.

(3) Poland was totally dismembered by the three successive partitions of 1772, 1793, and 1795.

ii) **The Napoleonic French conquests:**

(1) In 1807, just twelve years after the final partition of the former Poland (1795), Napoleon captured much of that former kingdom on his eastward march through Germany towards Russia;

(2) from these conquests (from Prussia, Austria, and Russia), he created the Grand Duchy of Warsaw, as a puppet state, and

(3) he immediately proceeded to liberate all the serfs now under French jurisdiction.

iii) **In 1815, after Napoleon's defeat, the victors at the Congress of Vienna created a new kingdom of Poland (though not quite embracing all its former boundaries).**

(1) Poland's new king was, in fact, the Russian czar [aka: tsar];

(2) subsequently, in 1831, this fictitious Polish kingdom was fully integrated into the Russian Empire.

iv) **The Russians, however, did not restore serfdom where it had been abolished by Napoleon**, though the Russians did restore the other ownership rights of the landed nobility.

v) **In May 1861, by special imperial decree accompanying the general abolition decree**, Czar Alexander II abolished :

(1) any remnants of serfdom in all the Polish territories and

(2) also all feudal obligations, with fixed rates of compensation awarded to the landlords (in compensation for lost lands and labour services).

vi) **Shortly after, in 1863, responding to social and political unrest in Poland, unrest chiefly fomented by the disadvantaged Polish nobility**, the Czar's government decided to appease the peasantry –and to oppose a rebellious nobility

(1) and made further changes to draw support from the peasantry

(2) at the direct expense of the Polish nobility, but also of the Russian monarchy itself

vii) **In March 1864, all lands worked by the peasants were given to them outright**,

(1) as freehold property, without any redemption payments;

(2) and the state then compensated the landlords out of special government funds.

viii) **Furthermore**, some 130,000 peasant landholdings were carved out of government or imperial estates and given to landless peasants.

ix) **Thus in eastern Poland**, the peasantry obtained their lands and personal freedom on conditions far better than those granted the East German or Russian peasants.

e) **Results of Peasant Emancipation in Russia:** in terms of overall land transfers (to the peasantry and to the landowners).

i) **For the entire Russian empire**, the peasantry appear to have lost just 4% of their landholdings.

ii) **but if we set apart Poland**, where the peasantry clearly made major gains, we find for the rest of the Russian empire that the peasantry lost about 13% of their landholdings.

iii) **In Ukraine:** with its rich 'black belt' agricultural lands that railways would turn into Europe's major granary and breadbasket, we find that a far larger proportion of peasant lands were transferred to the landowners: about 23%.

iv) **in the neighbouring provinces of Saratov and Samara (Kuibyshev) on the Volga River:**⁸

⁸ Samara, on the Volga, was known as Kuibyshev from 1935 to 1991, when the name reverted to Samara. Saratov was the home of the former Volga Germans, most of whom were sent into exile during World War II, by Stalin (and few ever returned). Saratov lies between Samara, to the north, and Volgograd to the south. Volgograd was formerly (in the Soviet era) Stalingrad, and in Imperial times known as Tsaritsyn – the Tsar's city, obviously a name that could not be restored (as was St. Petersburg, previously Leningrad). The Volga river flows into the Caspian Sea, at the port of Astrakhan.

(1) the peasant land losses rise to 41%, almost half.

(2) One thus suspects that in those areas that proved most profitable for commercial farming and grain exports, landlord coercion helps to explain these land transfer statistics.

v) **Question: why were peasant land transfers to landlords often so large?**

(1) as noted, just as in the Prussian emancipation laws, so with the Russian land reforms,

- many or indeed most peasants were required to cede some land to the landlords,
- in order to obtain both personal freedom and their own lands – and to finance the redemption processes

(2) also, as in eastern Germany, many peasants, after having ceded so much land, found that the holdings that remained were no longer economically viable – and thus they sold out, chiefly to landlords.

(3) other case, landlords made attractive offers to purchase peasant tenancy holdings

vi) **Noble Landholdings:** Nevertheless, we also find over the next decades, from the 1870s to 1905,

(1) that the aggregate of noble landholdings fall by over a quarter: by 27.2% (from 197.37 million acres in 1877 to 143.64 million acres in 1905).⁹

(2) Who bought these lands? The evidence is far from clear, but presumably they were sold to:

- gentry landowners (i.e., upper class or rich landlords, not having noble titles)
- wealthier peasants: those whom Stalin would later call ‘kulaks’¹⁰
- but also many urban merchants and financiers who wanted to emulate the traditional rural nobility.

(3) That loss of noble landholdings reflects high level of indebtedness of much of the Russian nobility;

(3) but it also reflected the general fall in grain prices, from the 1870s: with the flood of much cheaper overseas grains (thanks to the Transportation Revolution).

(4) and thus, as noted, their desperate need for cash, realized by selling off lands (especially with rising grain and land prices from the 1890s).

(5) We find that some 10,000 peasants had acquired large farms.

(6) So at least one beneficial result of Emancipation was to create a very active commercial land market.

⁹ From 73.1 million *dessiatines* in 1877 to 53.2 million *dessiatines* in 1905. *Dessiatine*: A Russian unit of land = 2.7 acres

¹⁰ From Answers.com: A prosperous landed peasant in czarist Russia, characterized by the Communists during the October Revolution as an exploiter. [Russian, fist, kulak, probably of Turkic origin.]. In official Soviet parlance, the kulak was a rich peasant who exploited private labour. He was designated for ‘liquidation as a class’ by Stalin during collectivization in the 1930s. In practice, however, the kulak was frequently the best farmer, whose destruction irrevocably harmed Soviet agriculture.

4. Russian Agriculture after Emancipation: the Mir-Obshchina System ¹¹

a) Three important qualifications to begin with:

i) **The following discussion pertains strictly and only to Russian peasant agriculture, and indeed to only parts of Russian agriculture:**

- (1) not to the large commercial estates, especially those in Ukraine and the Volga River valley;
- (2) and not to Poland, the Baltic provinces, and many of the recently acquired Central Asian territories (the modern day Kazakh, Kirghiz, Uzbek, Tadzhik, Turkmen Republics), which were special cases.

ii) **Secondly, the peasant village institutions about to be discussed were not in any way the result of peasant emancipation: for instead,** they had been part of the traditional communal, open-field system of feudal agriculture in Russia for some considerable time, from perhaps the late 17th or early 18th century (especially from the poll tax of 1722).

iii) **The model, qualified and limited though it be, is essentially the Gerschenkron model,** whose further and often serious limitations I will discuss later, when I give you the views of his critics.

iv) **The aftermath of emancipation, in sum, according to Gerschenkron was this:** simply the more solid entrenchment of these old customary institutions in the peasant villages, under more direct state supervision.

b) **The Peasant Village Institutions: Obshchina and Mir**

i) **The Obshchina:** was the peasant village itself, comprising and organizing the communal open fields, usually on a two or three-field crop rotation system.

ii) **The Mir:** ¹²

¹¹ For a recent, Russian-authored study on Russian social and economic history in the 18th and 19th centuries, see Boris N. Mironov, *A Social History of Imperial Russia, 1700-1917* (New York: Westview Press, 2000).

¹² From Answers.com, taken from the *Russian History Encyclopedia*: The word mir in Russian has several meanings. In addition to "community" and "assembly," it also means "world" and "peace." These seemingly diverse meanings had a common historical origin. The village community formed the world for the peasants, where they tried to keep a peaceful society. Thus mir was, in all probability, a peasant-given name for a spontaneously generated peasant organization in early Kievan or pre-Kievan times. It was mentioned in the eleventh century in the first codification of Russian law, *Pravda Russkaya*, as a body of liability in cases of criminal offense. Over time, the meaning of mir changed, depending on the political structure of the empire, and came to mean different things to different people. For peasants and others, mir presumably was always a generic term for peasant village-type communities with a variety of structures and functions. The term also denoted those members of a peasant community who were eligible to discuss and decide on communal affairs. At the top of a mir stood an elected elder. Contrary to the belief of the Slavophiles, communal land redistribution had no long tradition as a function of the mir. Until the end of the seventeenth century, individual land ownership was common among Russian peasants, and only special land holdings were used jointly. All modern characteristics, such as egalitarian landholding and land redistribution, developed only as results of changes in taxation, as the poll tax was introduced in 1722 and forced upon the

- (1) a Russian word meaning 'respect', 'community', or even 'world', but also 'peace';
- (2) In terms of Russian peasant agriculture, it was the council of village elders or village leaders which actually organized the village agricultural life, the crop rotations, communal livestock grazing, etc.: the village institution to which was owed respect.

iii) In the past, the mir had handled relations between the landowner and the peasant:

- (1) in particular the mir had been responsible for rendering the village *obrok* to the landlord;
- (2) i.e., for collecting all servile payments that the village peasants had owed to the landlord.

iv) After emancipation the state, in effect, became the new landlord:

- (1) the state strengthened the role of the mir, making it responsible for the collective village payments:
- (2) payments of both redemption *obrok* and taxes.

v) Note that the Emancipation rules in effect gave or transferred lands to the peasant commune,

- (1) i.e., to the mir-obshchina, and not to the individual peasant family itself -- though for each estate the emancipation provisions indicated what how much land each family would gain, as its share, in terms of the scattered tenancy strips in the Open Fields [see later];
- (2) those rules also forbade any peasant from leaving the commune without paying off all his financial obligations first.

peasants by the landowners, who sought to distribute the allotments more equally and thus get more return from their serfs. In the nineteenth century, mir referred to any and all of the following: a peasant village group as the cooperative owner of communal land property; the gathering of all peasant households of a village or a volost to distribute responsibility for taxes and to redistribute land; a peasant community as the smallest cell of the state's administration; and, most importantly, the entire system of a peasant community with communal property and land tenure subject to repartitioning. The peasant land was referred to as *mirskaya zemlia*. Only at the end of the 1830s did a second term, *obshchina*, come into use for the village community. Unlike the old folk word *mir*, the term *obshchina* was invented by the Slavophiles with the special myth of the commune in mind. This term specifically designated the part of the mir's land that was cultivated individually but that was also redistributable. The relation between both terms is that an *obshchina* thus coincided with some aspects of a mir but did not encompass all of the mir's functions. The land of an *obshchina* either coincided with that of a mir or comprised a part of mir holdings. Every *obshchina* was perforce related to a mir, but not every mir was connected with an *obshchina*, because some peasants held their land in hereditary household tenure and did not redistribute it. With increasing confusion between both terms, most educated Russians probably equated mir and *obshchina* from the 1860s onward. *Obshchina* was also used for peasant groups lacking repartitional land.

Although the mir was an ancient form of peasant self-administration, it was also the lowest link in a chain of authorities extending from the individual peasant to the highest levels of state control. It was responsible to the state and later to the landowners for providing taxes, military recruits, and services. The mir preserved order in the village, regulated the use of communal arable lands and pastures, and until 1903 was collectively responsible for paying government taxes. Physically, the mir usually coincided with one particular settlement or village. However, in some cases it might comprise part of a village or more than one village. As its meaning no longer differed from *obshchina*, the term *mir* came out of use at the beginning of the twentieth century.

vi) **The state furthermore strengthened the authority of the mir:** because it wanted to ensure peasant stability in the villages.

c) **The Economics and Mechanics of Mir-directed peasant farming after emancipation:**

i) **As indeed before emancipation, the mir ruled peasant farming by very rigid, conservative rules,** making it very difficult, almost impossible to introduce any new farming techniques; and that certainly rendered any individual peasant farming impossible.

ii) **Land Redistribution or Repartition:**

(1) Every 10 or 12 years, in many obshchinas, the governing mir would redistribute the village lands to the peasant families, according to family size, in order to ensure that each family received enough arable and grazing lands to meet its needs.

(2) Such land redistribution or repartition was by no means new;

(3) but it had not been all that widespread before Emancipation, and became much more so after.

(4) Thus, in the 1870s, only 35% of peasant villages had practised land redistributions (repartitions);

(5) but by the 1890s, 87% -- almost 9/10ths -- were doing so.

iii) **This village land redistribution supposedly had four negative consequences, according to Gerschenkron:**

(1) **Rural overpopulation and diminishing returns:** Periodic land redistribution worked like a family allowance system with a vengeance:

- one that obviously encouraged a very rapid population growth, as each family sought to acquire more land for itself.
- The collective result in rural Russia was, according to Gerschenkron, overpopulation, and thus disguised unemployment on the land, i.e., with so much redundant labour.
- Note from the two tables on the screen that Russia's population more than doubled between 1860 and 1910,
- growing by 117%, while total grain production grew by only 42% in this same period.
- These may be outdated figures, but unfortunately I do not have modern ones on demography and physical volumes of output to replace them;
- But I will present other agrarian data later that do not entirely support the conclusions to be drawn from these data.

(2) **Peasant immobility:** peasant families would obviously have discouraged or prevent their children from leaving the family holdings, to prevent losing land in the next redistribution.

(3) **Discouraged any individual initiative and productivity in farming (any that remained):** since the family holdings were not permanent; and thus the obvious fear that one's gains would go to some other family

after the next redistribution.

(4) **Increased social tensions in the villages:** as some families ended up with less land than before.

(5) **Gerschenkron's verdict:** 'Nothing was more revealing of the irrational way in which the village commune functioned than the fact that the individual household had to retain the abundant factor (labor) as a precondition for obtaining the scarce factor (land)'.

(6) **But Repartition was not really irrational from the point of view of the Russian government,** and that of the village government, the *mir*,

- the *mir*, as already noted, acted as the rental and tax collection agency for the government
- the *mir* also had or enjoyed sole responsibility for undertaking the periodic repartition of or redistribution of the peasant holdings in the village
- Thus 'repartition' gave the *mir*, the village officials, enormous powers over the village community
- peasant families would obviously have feared that if they antagonized the *mir*, and did not fully and promptly pay their obrok and taxes, they would suffer in the next repartition, of peasant tenancy holdings.
- even if the guiding principle was family size: for who could have accurately measured the changes in landholdings to ensure that that principle was the only factor in the repartitions?

d) **Peasant Immobility:** was the great curse of this obshchina system, according to Gerschenkron.

In order for a peasant to leave the land, if he did not like the system: Gerschenkron model:

i) **The peasant first had to secure permission from the head of his family:**

(1) for similar, obvious reasons, most such peasant fathers were reluctant to allow their sons to leave

(2) because their departure would injure the family's chance of gaining or even holding their lands in the next village redistribution.

ii) **the peasant next had to secure permission from the village mir in order to leave:**

(1) such permission was normally granted only if the peasant could pay off his share of the redemption payments and all the taxes, including the poll tax.

(2) that was necessary because the *mir* was collectively responsible for all such payments to the state.

iii) **Finally, the peasant who wanted to leave had to give up all claims to his holdings:**

(1) He was not allowed to sell any of his lands;

(2) and so, unlike the Prussian or English peasant smallholder, he was unable to start life anew somewhere with capital – very few, if any, had any such capital.

e) **General Peasant Grievances after Emancipation:**

i) dissatisfaction with the consequences of land redistributions

ii) resentment at having to pay for lands that the peasants had long considered to be their own.

iii) resentment at loss of communal grazing lands when estate lands were enclosed.

iv) loss of some lands that had been illegally acquired before Emancipation.

v) **bitter resentment at forced grain requisitions in obrok, in order:**

(1) to pay for Redemption Loans

(2) to produce grain exports to earn gold and foreign exchange

6. Subsequent Changes in Peasant Agriculture and Land Tenure

a) **Abolition of the Poll Tax in 1885:** a factor that had tied many peasants to the obshchina.

b) **Changes in Obshchina Land Redistributions, in 1897:** the Russian government recognized finally the dangers of the land redistribution scheme, and decreed the following changes:

i) **any further repartition or redistribution of obshchina lands:** required consent from two-thirds of the villagers.

ii) **redistribution of obshchina lands was henceforth limited:** to just once every 12 years.

c) **The Russian Revolution of 1905:** an abortive revolution (following Russia's disastrous defeat in the Russo-Japanese War), involving the peasantry in a great deal of unrest, which led to:

d) **The Stolypin Land Reforms:** of 1906, 1907, and 1910: ¹³

¹³ Pyotr Arkadievich Stolypin: from Answers.com: (b. Dresden, 14 Apr. 1862; d. Kiev, 18 Sept. 1911) Russian; Minister of the Interior and Prime Minister 1906 – 11 A member of the provincial landowning nobility, Stolypin served as Governor of Grodno (1902) and Saratov (1903), where he attracted the Tsar's attention by his combination of understanding and firmness in dealing with peasant revolts. Made Interior Minister in May 1906, he became in addition Prime Minister in July at the early age of 44. An energetic, impressive man and a good orator, he appealed to the Tsar and to moderate conservatives. His moral prestige was enhanced by an attack on his home in August 1906, after which he instituted a series of summary trials of terrorists. Failing to secure the co-operation of the deputies for his reforms he dissolved the Second Duma in June 1907 on the excuse of an alleged plot by Social Democrat deputies. He proceeded to drastically restrict the franchise, quite unconstitutionally, but the resultant Third Duma, though dominated by the centre-right, was not much more amenable. His arrogance and indifference to constitutionality were revealed again in March 1911. The Council of State (Upper Chamber) rejected a proposal to extend the Zemstva (local councils) to the Polish-Russian borderlands. Stolypin forced the Tsar, by threatening to resign, to prorogue both houses of the Duma for three days in order to pass his measure by emergency decree, while at the same time removing from the capital the measure's main opponents. This high-handed action brought Stolypin the hostility of the Duma and caused deep offence to the Tsar. Stolypin would probably soon have been dismissed, but was mortally wounded by a Socialist-Revolutionary terrorist at a theatre in Kiev in September 1911. Although somewhat idealized by some contemporary Russians as the man who might have saved Russia from Bolshevism by his combination of reform and strong leadership, Stolypin was a highly contradictory character. His greatest achievements were in agricultural reform. He aimed at a "wager on the strong", i.e. the creation of an independent peasantry which would become a bulwark for the reformed autocracy. He made it possible for ex-serfs to buy themselves out of the peasant commune and for small strips to be consolidated into capitalist farms, aided by loans from the Peasant Land Bank. About two million households (about one-eighth of the total) took advantage of these arrangements before 1916, many moving

- i) **These agrarian form measures, named after the Russian prime minister of the day**, finally abolished the redemption payments, giving the peasants full title to their lands.
- ii) **They also permitted the breakup of the obshchina:** by a 2/3 majority vote.
- iii) **Note that Stolypin was assassinated in 1911:** and thus did not live to complete his reforms.
- iii) **By 1914, and outbreak of World War I**, about 22% of peasant families, accounting for 16% of the land, had withdrawn from the obshchina-mir system.
- iv) **But these Stolypin Land Reforms were obviously too little and too late:**
 - (1) World War I broke out just a few years later, throwing Russia into economic and political chaos;
 - (2) That was followed by military defeat at hands of the Germans, and then in 1917 by Revolution.

7. Consequences of Agrarian Reform for Russian Industrialization: the Gerschenkron Model

a) **Gerschenkron's Verdict: a negative model based on his analysis of the mir-obshchina system**

i) **The role of the state:** in exploiting Russian agriculture after Emancipation:

(1) **Gerschenkron established the now traditional negative verdict:** 'hunger exports'

- that the government forcibly extracted a surplus from the agrarian sector in the form of redemption payment and taxes,
- at the direct expense of peasant living standards (hence his term: 'hunger exports')

(2) Furthermore, he contended that the state actively promoted and forced large exports of grain, especially from both the Ukraine and the Volga river valley regions:

- as a means of earning badly needed foreign exchange

into the less populated Siberia and Central Asia. But the policy was not a panacea.

From another entry in Answers.com: An intelligent and well-educated man, Stolypin pondered for some time the poor condition of the Russian villages and concluded that the low level of rural economy was due to the fact that the land did not belong to the peasants. He realized also that Russia could not become a strong power until the majority of the Russian population - the peasants - became interested in the preservation of individual property. The Revolution of 1905 with its agrarian excesses only strengthened Stolypin's conviction on this point. He came to believe finally that the primary need of Russia was the creation of a class of well-to-do landowners. Under Stolypin's agrarian reform law peasants made remarkable progress in obtaining private land ownership. Stolypin spared no money in order to consolidate and to increase the peasantry. He encouraged the practice of granting the peasants small credits; he maintained an army of land experts, land surveyors, and agronomists; and he spent large sums of money on public education. Stolypin's creative efforts in the work of the state were not always within the limits of the constitutional order at which he aimed. The introduction of local assemblies in the western province aroused the entire Russian people against him. The left wing and the center were indignant at such a flagrant violation of the constitution, and the right wing was indignant at his treatment of its leaders in the State Council. Stolypin was killed in Kiev on Sept. 18, 1911. His assassin was a double agent whose motives remain cloudy to this day. The only full-length study of Stolypin in English is by his daughter Maria Bock, *Reminiscences of My Father, Peter A. Stolypin* (trans. 1970).

- chiefly in order to finance imports of foreign machinery and technology;
- (3) and he contended that fully 70% of all Russia's export earnings came from these grain exports.

(4) Thus the state was responsible for reducing peasant living standards:

- both through taxation in general and
- its grain-export policy

ii) The Negative Consequences of the state-directed Mir-Obshchina structure, especially through the repartition system:

(1) in promoting excessive population growth within peasant agriculture,

(2) which in turn led to diminishing returns, indeed to disguised unemployment with negative marginal products.

(3) As noted earlier, in discussing the consequences of periodic Repartition – i.e. the periodic reallocations of peasant tenancy strips according to family size,

- the Russian population (European zone only) grew by 117%, between 1860 and 1910,
- while total grain production grew by only 42%, indicating a sharp fall in overall per capita outputs: at least according to the table provided by Carlo Cipolla [Table 4 in the Appendix]
- but as I also noted, I will shortly consider other agrarian data that present a far more favourable picture of agricultural productivity.

(4) Such overpopulation within each village obviously would obviously (by the Gershenkron model)

- also have hindered the mechanization of peasant agriculture:
- for why use machinery with excess labour and a shortage of savings to purchase machinery?

(5) according to Gershenkron, the bulk of peasant farming was marked by the general absence of any advanced agricultural technology: advanced crop rotations, or convertible husbandry, machinery, modern chemical fertilizers, etc.

iii) The overall economic consequences for Russian agriculture: therefore was

(1) falling and low productivity and low incomes in the rural sector,

(2) peasant immobility, which in turn

(3) inhibited potential industrialization through consequences seen as logical deductions:

b) The Negative Consequences for Russian Industrialization: by the Gershenkron Model on peasant immobility and low peasant productivity

i) low level of savings and capital investments:

(1) from the agrarian sector as a whole, for capital investments

(2) and landowners who did acquire substantial rents or profits from commercial farming (economic rents) were not socially predisposed to invest productively in industry and trade.

ii) **insufficient supply of foodstuffs and industrial raw materials,**

(1) and that included including foodstuffs, for urban industrialization

(2) the grain surpluses produced in Ukraine, etc., were exported to provide Russia with foreign exchange (or so Gerschenkron contended; more on that later).

iii) **inelastic labour supply:** and thus a serious scarcity of labour for industrialization

iv) **uneducated and unskilled labour supply:**

(1) lack of education, skills, and incentives

(2) the servile peasantry in general was not and for long would not be culturally acclimatized to serve as a factory labour force, according to Gerschenkron.

v) **inadequate demand for industrial goods:** because of low incomes, from low productivity:

(1) Thus low productivity meant low incomes which meant low demand for industrial goods

(2) According to Rondo Cameron: per capita income in Russia was only half the French or German, and just a third of the American or British, in 1914.

vi) **low (inadequate) levels of urbanization:** with a very small proportion of total population living in towns and cities

vii) **The previously cited statistics for population and grain production:** in Russia as a whole (including Ukraine): seem to provide a confirmation of the Gerschenkron thesis, with evidence coming from sources not used by Gerschenkron.

(1) as just noted, according to one table shows (Table 4: from Cipolla), grain production in quintals (100 kg) rose 42% from 1860 to 1914: i.e., from about 380 million quintals to 540 million quintals

(2) but population rose by a far greater degree: by 117% –[no guarantees on statistical accuracies].

(3) Therefore, from these statistics, we must assume that

- *per capita* grain production fell
- and per capita consumption would have fallen even more, if considerable quantities of grain had been exported abroad.

(3) however, another statistical table – by Paul Gregory, to be shown later – indicates that the real value of grain production (expressed in 1913 gold rubles) grew by 124.4%:

- from 1,183.00 million rubles in 1885
- to 2,654.33 million rubles in 1913
- i.e., it well more than doubled: rising by 124% (or 2.24 fold)

(4) Also, according to his statistics: the value of total farm output grew by 96.6%: almost doubling from 3,015.00 million rubles to 5,947.67 million rubles

vii) **The Situation Portrayed for 1913:**

(1) agriculture accounted for over 2/3 of the total labour force in the economy, while producing only 50% of the Net National Income

(2) Only 15% of Russia's population ca. 1910 was urbanized.

(3) The agricultural sector, with the exception of a few modernized islands or zones of advanced agriculture, was still very primitive and subject to diminishing returns:

(4) And thus Russian agriculture, in the Gerschenkron view, was more of an impediment than a stimulus to modern industrialization.

viii) **The Dual-Sector Economy Thesis:**

(1) Hence as well Gerschenkron's implied thesis of a 'dual economy' in late 19th-century Russia.

(2) The thesis was actually set forth by the 1979 Nobel- Prize winning economist Sir Arthur Lewis (1915-1991):¹⁴

(3) This model describes an economy with two sectors:

- a traditional sector, with a nearly infinite supply of labour, and thus low wages
- and a modern industrial sector, where the bulk of the capital resides.
- The traditional sector's labour migrates to the modern capitalist sector, attracted by the initially higher wages.
- Competition forces the wages of workers in the modern sector down to the levels of those in the agricultural sector.
- This leads to high profits in the modern sector, which finances its further expansion.
- This model thus provides an explanation as to why so often in developing nations, wages remain low and profits & rents high, even as development continues apace.

7. **Recent Criticisms of the Gerschenkron Model:**

a) **In recent years, Paul Gregory is the economic historian who has led the most fervent assault on the**

¹⁴ Arthur Lewis was born in 1915 in Saint Lucia, then still a British territory in the Caribbean. After gaining his BSc. in 1937 and PhD in 1940 at the London School of Economics, Lewis lectured at the University of Manchester before being appointed Vice Chancellor of the University of the West Indies in 1959. In 1963 he was both knighted and appointed a lecturer at Princeton University (a position in which he would remain until his retirement in 1983) and in 1970 became director of the Caribbean Development Bank. In 1979, he won the Nobel Prize in Economics (along with Theodore Schultz, US), 'for their pioneering research into economic development, with particular consideration of the problems of developing countries'. He died on 15 June 1991 in Bridgetown, Barbados and was buried in the grounds of the St Lucian community college named in his honour.

Gerschenkron model:¹⁵

b) **The chief criticism:** by Gregory – and also by many others (me included), is that the Gerschenkron Model ignores important regional variations across the vast 19th century Russian Empire.

i) **in painting one overall bleak picture**, the Gerschenkron model fails to stress the importance of the obviously productive zones:

(1) especially those of Ukraine, the Volga and lower Don basins in Russia, Finland, the Baltic provinces (i.e., Estonia, Latvia, and Lithuania), and perhaps some other regions within European Russia as well.

(2) and also in the far vaster, recently acquired regions in Central Asia, across the Urals and east of the Caspian Sea: e.g., in Kazakhstan, Turkmenistan, Uzbekistan, Tadjikistan, Kirghizstan, and much of Siberia in the north.

ii) **In Ukraine and in the Russian Don-Volga regions, there was considerable growth in agricultural outputs from large enclosed farming estates:**

(1) **here agricultural output certainly increased very markedly**, especially with railway development.

(2) **As was the case in eastern Germany, large landlord estates benefited from:**

- A clear separation of peasant communal lands, in open fields, from the landlord's domain
- thus to permit enclosures, and the adoption of the techniques of modern agriculture (convertible husbandry, multiple-crop rotations, machinery, chemical fertilizers, etc.)
- The very significant transfer of peasant lands to landlords, as the price paid for both freedom and land, in the Redemption processes:

(3) **As noted earlier, about peasant land transfers:**

- **In Ukraine:** peasant land transfers to landlords amounted to 23%.
- **On the Volga River: provinces of Saratov and Samara (Kuibyshev) :** the peasant land transfer rose to 41%, almost half.

(4) **In these regions of advanced farming**, enclosed estates engaged in multiple crop rotations cultivating leguminous crops, root crops (sugar beets and potatoes), etc.; and flax for linen.

iii) **Central Asia:**

(1) especially modern-day Turkmenistan, Uzbekistan, Tajikistan, and part of Kazakhstan,

(2) became a very-important cotton producing and cotton-exporting zone

(3) though evidently not Kirghizstan,

(4) but, unfortunately, I lack adequate statistics on this.

¹⁵ See Paul R. Gregory, *An Economic History of Russia from Emancipation to the First-Five Year Plan* (Princeton: Princeton University Press, 1994).

b) The Special Case of Finland:

i) Finland, which had once been part of the Swedish Empire:

(1) In 1809: it was annexed by Russia, during the Napoleonic Wars, or rather after another and separate war between Russia and Sweden

(2) It remained, however, a separate administrative unit: the Grand Duchy of Finland, with considerable autonomy.

(3) As an Appendix to this lecture, and in a separate online file (in both PDF and Word), I have provided a brief history of Finland, from the 16th century to the Russian Revolutions of 1917.

ii) The pre-eminent role of agriculture and the primary sector:

(1) In 1860, primary production, chiefly in agriculture, accounted for 80% of the labour force and

(2) agriculture accounted for about 60% of Finland's GDP

iii) **In the 1880s**, that share of the labour force engaged in the primary sector had fallen somewhat, but to just 75%— and it was still about 70% in 1910 (vs. a European average of 46%)

iv) **By 2000, the share of the GDP accounted for by the primary sector had fallen to 1.5%:** and the share of the labour force to about 4.0%

v) **Modern Finland, today, is of course:** was one of the world's most progressive and economically advanced countries, with one of the world's highest standards of living

vi) **problems of geography:** with a far northern climate, only about 180 days for the growing season in the south and only 120 days in the north.

vii) Finland had experienced very little estate farming – far less than elsewhere:

(1) small scale family farms rose in importance during the later 19th century

(2) and large scale farming using wage labour virtually disappeared by the mid 20th century

(3) partly a function of a cold northern climate again: because it always took much more time to take care of livestock in Finland than in western Europe – over twice as long as even in France.

viii) Finland's socio-economic structure (according to Answers.com): no serfdom

(1) By the late 18th century, 90% of the population are typically classified as 'peasants', most being free taxed yeomen.

(2) Society was divided into the four Estates:

- peasants (free taxed yeomen),
- the clergy (or: clerics): chiefly Lutherans
- nobility and
- burghers (i.e., townsmen, or urban inhabitants).

(3) A minority, mostly cottagers, were estateless, and had no political representation.

(4) Answers.com: ‘the Finnish peasantry remained free (unlike their Russian counterparts) as the old Swedish law remained effective (including the relevant parts from Gustav III's Constitution of 1772).’

(5) Forty-five percent of the male population were enfranchised with full political representation in the legislature

- although clerics, nobles and townsfolk had their own chambers in the parliament,
- boosting their political influence and excluding the peasantry on matters of foreign policy.

ix) **Finnish agricultural development from the 1850s:**

(1) From the mid-19th century, the area devoted to agriculture increased by clearing and parcelling out forests from state-owned lands: to free peasants

(2) But thereafter, the average size of family farms fell with population growth and subdivisions by inheritance

x) **After the abortive 1905 Revolution, the Finnish assembly, in 1906,**

(1) passed the Land Acquisitions Act and the Leaseholders’ Act

(2) It led to an increase in the number of small family farms: in allowing crofters to buy lands that they had previously rented.

xi) **The following statistics:** indicate a fairly remarkable rate of agricultural and demographic growth in Finland from the 1850s: but again consider that there was no barrier of serfdom in Finland

Agricultural Statistics for Finland, 1754 - 2000

Year	Total Population	Total Labour Force	Total Agricultural Population	Total Agricultural Labour Force	Percent of Population in Agriculture	Agricultural labour force as percent of total labour force
1754	450,000	180,000	350,000		77	
1805	898,000	359,000	702,000		78	
1820	1,178,000	521,000		448,000		86
1850	1,637,000	694,000		589,000		85
1880	2,061,000	639,000	1,545,000	502,000	75	73
1900	2,656,000	832,000	1,845,000	566,000	69	68
1920	3,148,000	1,499,000	2,057,000	1,051,000	65	70
1950	4,030,000	1,984,000	1,674,000	912,000	42	46

Year	Total Population	Total Labour Force	Total Agricultural Population	Total Agricultural Labour Force	Percent of Population in Agriculture	Agricultural labour force as percent of total labour force
2000	5,181,000	2,589,000	1,674,000	142,000	2	4

Source: Jari Ojala and Ilkka Nummela, 'Feeding Economic Growth: Agriculture', in Jari Ojala, Jari Eloranta, and Jukka Jalava, eds., *The Road to Prosperity: An Economic History of Finland* (Helsinki: Suomalaisen Kirjallisuuden Seura, 2006), Table 3.1, p. 68.

c) Other Criticisms of the Gerschenkron model: especially from Paul Gregory

i) Gerschenkron based too much of his evidence on areas that were suffering from long-term decline (though including regions of Ukraine), for reasons independent of peasant emancipation:

(1) he thus ignored, to repeat the key point, the evidence from the much more productive zones on Russia's periphery, including some vast areas in Asian Russia.

(2) According to Paul Gregory, 'agricultural growth on the periphery [of the Russian empire] exceeded growth in the fifty European provinces, thereby pulling up total agricultural output'.

ii) The Gerschenkron model focused too much on Russian peasant communal agriculture while ignoring both the great landlord estates and the individual holdings of the lesser landowners, and indeed those of wealthy, land-acquiring peasants:

(1) including evidently those who had risen from peasant ranks, i.e., those who operated farms outside of peasant communal agriculture.

(2) The model wrongly ignores the extent of and the continued growth of private property rights in Russian agriculture.

iii) For Russian peasant agriculture itself, Gerschenkron's key faults:

(1) Gerschenkron's model ignores the fact that even at the time of emancipation only about one half -- 53% of the peasantry -- were then subjected to the thralldom of serfdom,

(2) and yet he portrays an agrarian society that was largely servile.

iv) Gerschenkron assumed that all the state-imposed conditions of peasant emancipation were fully carried out and obeyed;

(1) and that in peasant communal agriculture the *obshchina* and the *mir* always acted in the manner that he and I (to explain his model) have just described:

- especially in imposing and collecting *obrok*

- and in preventing any peasant mobility.

(2) In many regions of the Russian Empire, however, according to Paul Gregory,

- peasants were able to adjust their annual tax payments according to their harvests, with the willing compliance of their own mir governments,
- and thus that these mir governments imposed taxes and other payments according to ability to pay.

v) **Gerschenkron overlooked the fact that many, many peasants were dispossessed:**

- and thus did become a more mobile labour force,
- as we have already seen in the case of the Prussian (East German) land reforms.

vi) **Gerschenkron overlooked the strong evidence for the growth of peasant land markets**, both inside and outside the traditional peasant obshchina-mir communes.

vii) **Perhaps the biggest defect of the Gerschenkron model is to ignore that very important and quite large scale transfer of lands**, good agricultural lands, from the nobility to the peasantry:

(1) For Poland, as noted earlier, the Imperial government facilitated the creation of about 130,000 peasant farms, chiefly from state land holdings.

(2) For the European heartland of the Russian Empire, itself, as also noted earlier,

- the Russian nobility and gentry ended up selling about a quarter of their lands to the more prosperous kulak-style peasants and smallholders, but also urban merchants
- so that noble landholdings (as noted earlier) fell 27%: from 197.37 million acres in 1877 to 143.64 million acres in 1905.¹⁶

viii) **Gerschenkron curiously regarded evidence of rising land prices and rising rents as further marks of peasant oppression, while ignoring a more obvious conclusion:**

(1) that rising prices (presumably real prices) more likely reflected consequences of commercialization of agriculture and agricultural growth,

(2) and thus also reflected increased demand for market-oriented agricultural lands.¹⁷

ix) **Gerschenkron produced no reliable evidence for his thesis of ‘hunger exports’:**

(1) no evidence that the state had the power to expropriate grain in payment for taxes.

(2) In Gregory’s view, as already noted, peasants paid *obrok* and taxes when harvests were good, and paid less when they were not.

¹⁶ See n. 9 above.

¹⁷ Gregory: ‘Rising land prices and rising land rents, as rent theory would suggest, are more suggestive of rising marginal revenue product than of agricultural stagnation. Rising marketings are more a sign of market integration and of rising peasant prosperity than of oppressive taxes’ (Gregory 1987).

d) **An Alternative Positive View of Post-Emancipation Russian Agriculture according to more recent research:**¹⁸

i) **That peasant mobility was much greater than Gerschenkron had assumed**, even within mir-dominated communal agriculture;

ii) **that the ‘mir’ village governments were far from being universally oppressive and restrictive**, as he had so vividly portrayed.

iii) **That Russia achieved thereby an impressive growth in its urban industrial labour force:** (1) to quote Gregory once more, though a quote that seems to me to be a bit exaggerated:

(2) that the growth of that labour force ‘in the 1880s was equal to or exceeded that of the United States during its period of most rapid expansion’.

iv) **That from the 1880s Russian agriculture achieved relative productivity advances comparable to those of western Europe**, though obviously from a far lower base;

v) **and similarly, contend these revisionists, peasant living standards rose accordingly.** According to these studies, the gains in the more productive zones more than compensated for declining productivity in the declining zones.

vi) **The accompanying Table 6 provides Gregory’s most recent data**, which presents agricultural outputs in terms of the value of the annual product estimated in rubles with 1913 constant values:

Agriculture and National Income Statistics, 1885 - 1913
in millions of rubles of 1913 values
in quinquennial means

Years	Grain	Livestock	Other	Total Farm	Personal	Agri as % of per
				output	Consumption	capita consumption
1885	1,183.00	437.00	1,405.00	3,025.00	6,661.00	45.41
1886-90	1,098.80	464.60	1,482.00	3,045.40	7,225.20	42.12

¹⁸ The confusion that such revisionism has wrought can be found in the widely used textbook by Rondo Cameron, *A Concise Economic History of the World from Paleolithic Times to the Present*, 1st edn (Oxford, 1989). First he states:

(1) on p. 266: agricultural productivity was ‘abysmally low, hampered as it was by a primitive technology and scarcity of capital. The institutional constraint of legalized serfdom ... weighed heavily against the possibilities of growth in productivity even after Emancipation’. Subsequently he argues the contrary:

(2) on p. 306: ‘It was formerly believed that the export surpluses came at the expense of the peasants through heavy taxation (‘hunger exports’); but the results of recent research suggest that agricultural productivity and rural living standards were rising, at least after 1885’.

Years	Grain	Livestock	Other	Total Farm output	Personal Consumption	Agri as % of per capita consumption
1891-95	1,369.20	474.40	1,623.40	3,467.00	8,135.60	42.40
1896-00	1,648.00	560.00	1,954.20	4,162.20	10,470.00	39.81
1901-05	1,372.00	499.67	1,686.53	3,558.20	8,610.27	41.44
1906-10	2,033.40	614.80	2,256.00	4,904.20	12,524.60	39.05
1911-13	2,654.33	700.00	2,593.33	5,947.67	15,273.33	38.77

Source: Paul R. Gregory, *Before Command: An Economic History of Russia from Emancipation to the First Five-Year Plan* (Princeton, 1994), Table A.1, pp. 140-44.

(1) as noted before, estimated mean total value of farming output in 1911-1913 is 96.6 % higher than in 1885, almost double, which does not indicate any serious fall in per capita outputs.

(2) The 1913 value (6,726 million rubles) is more than double: 122.35%

(3) Note in particular that from 1885 to 1900, the value of grain outputs rose by 59.3% [from 1,183.0 million rubles to 1,885.0 million rubles: in single year comparison];

(4) and then rose another 71.2% by 1914 [to 3,228.0 million rubles], for an overall increase of 172.9%, from 1885 to 1913.

(5) Since these are in constant 1913-values, they are not influenced by the international deflation of 1873 to 1896 nor by the subsequent inflation up to World War I;

(6) on the other hand, the relative price or value of grains on international markets were rising from the mid-1890s.

vii) **Note also the level of aggregate personal consumption:** it 129.3 percent higher in 1913 than it had been in 1885 – i.e., it had more than doubled over these years.¹⁹

viii) **Note another significant feature of this table:** the data for the years (quinquennium) 1901-1905

(1) These are the years leading up and to including two decisive and very negative events in early 20th-century

¹⁹ Sources: Paul Gregory, 'Grain Marketings and Peasant Consumption: Russia, 1885-1913,' *Explorations in Economic History*, 17:2 (1980), 135-64; Paul Gregory, *Russian National Income, 1885-1913* (1982); Paul Gregory, 'The Russian Agrarian Crisis Revisited,' in R.C. Stuart, ed., *The Soviet Rural Economy* (1984); Paul R. Gregory, *An Economic History of Russia from Emancipation to the First-Five Year Plan* (Princeton: Princeton University Press, 1994); Peter Gatrell, *The Tsarist Economy, 1850-1917* (1986); Raymond Goldsmith, 'The Economic Growth of Tsarist Russia, 1860-1913,' *Economic Development and Cultural Change*, 9:3 (April 1961).

Russian history:

- Russia's humiliating defeat in the Russo-Japanese war of 1905
- the consequent and abortive Revolution of 1905

(2) Note in particular the singular and abrupt declines in agricultural output, and also the related rise in agricultural goods as a proportion of consumption, in these years.

(3) one may take these very negative, and highly unusual data, as indicators of both causes (along with the Russo-Japanese war) of the abortive 1905 Revolution.²⁰

ix) **Gregory also presents the following table**, based on prior publications of Raymond Goldsmith, and his revisions of Goldsmith's table, to show that both agricultural productivity and rural living standards were rising, not falling, after at least 1870:

Indices of Agricultural Production, Factory Outputs, and Population in European Russia (50 Provinces), 1870 - 1904: Mean of 1870-4 = 100

Period	Arable Crops	Factory Output	Population	Rural Population
1870-74	100	100	100	100
1883-87	117	217	120	117
1900-04	185	588	156	151

Source: Raymond W. Goldsmith, 'The Economic Development of Tsarist Russia, 1860-1914', *Economic Development and Cultural Change*, 9 (1961), 441- 75.

The following table presents Gregory's revisions of Goldsmith's estimates, to include non-European Russia, and also to account for a decline in the seed-output ratio.

Growth of Russian National Income, 1883 - 1913:

Annual Growth Rates in percentages

²⁰ In 1957, the eminent Russian composer Dmitri Shostakovich issued his Symphony no. Eleven: 'The Year 1905', purportedly about this Russian revolution, indeed with graphic depictions of it; but many think that Shostakovich was alluding instead to the abortive and anti-Soviet Hungarian Revolution of the previous year, 1956.

Period	Agriculture	Industry	Trade/Services	National Income
1883/7 to 1897/1901	2.55	5.45	2.50	3.40
1897/1901 to 1909/13	3.00	3.60	2.80	3.10

Source: Paul Gregory, *Before Command: An Economic History of Russia from Emancipation to the First Five-Year Plan* (Princeton University Press, 1994), pp. 43-5.

e) **Some other statistical evidence:**

i) **From Paul Bairoch's table comparing agricultural productivity in various countries (with likely overly optimistic estimates), we find for Russia a 57% increase in overall productivity from 1880 to 1910: a rise in annual output per worker from 7 to 11 million calories:**

**Indices of European and American Agricultural Productivity
from 1810 to 1910**

**Annual net output per agricultural worker (male)
measured in million of calories**

COUNTRY	1810	1840	1860	1880	1900	1910
Britain	14.0	17.5	20.0	23.5	22.5	23.5
France	7.0	11.5	14.5	14.0	15.5	17.0
Germany		7.5	10.5	14.5	22.0	25.0
Russia		7.0	7.5	7.0	9.0	11.0
USA		21.5	22.5	29.0	31.0	42.0

ii) **Note, however, how very much lower is the Russian agricultural productivity:** than for any other

country listed in the table.

iii) **Whether Bairoch's Russian estimate is based on supposedly national aggregates for the entire Russian empire**, or just for the productive exporting zones just mentioned is far from clear.

iv) **Elsewhere**: outside these productive zones, if we are to adhere to the logic of the Gerschenkron model, agricultural productivity may well have fallen with the rapidly growing population.

(1) That still might have meant, as he argued, disguised unemployment on the land and diminishing returns, possibly negative returns;

(2) but again you must compare the data used by Gerschenkron with more modern statistical surveys and estimates, as presented by Paul Gregory.

f) **Did Government Policies protect communal agriculture or promote enclosures?**

i) **A conclusive answer is difficult to provide:**

(1) Certainly Gerschenkron led us to believe that the state protected and promoted communal agriculture;

(2) but it is difficult to supply evidence that the government ever deliberately sought to protect or promote communal agriculture and thus to impede land consolidation and enclosures.

ii) **The question is an important one, in the context of the Gerschenkron-Gregory debate:**

(1) First, to repeat: Since Gerschenkron focuses exclusively on Post-Emancipation peasant agriculture under traditional communal farming, within the obshchina-mir system, he certainly gives the reader the impression that the government had sought to protect and promote this system, if for fiscal and administrative reasons, to be considered later.

(2) On the other hand the statistics that Paul Gregory provides make sense – and they do make sense – only if a significant proportion of agricultural production, after 1880, took place outside the regime of communal agriculture.

(3) though we should also reflect that historically communal agriculture elsewhere had not prevented agricultural growth.

iii) **What government emancipation policies did to promote enclosures, even if unintentionally:**

(1) **Government compensation in the form of redemption bonds for only 80% of assessed value**, of the land plus capital in the form of servile labour, meant that the serf seeking both personal redemption (liberation) and secure property rights, had two choices:

- to borrow or some other way acquire the remaining 20% of the capitalized value to secure both land and liberty, or
- yield to the landlord anywhere from 35% to 75% of his tenancy lands (i.e., in the form of those interspersed and scattered plough strips in the great open fields.

(2) **As we saw earlier, peasant transfers to landlords of such Open Field tenancy lands:**

- amounted to 13% of agricultural lands in the Russian Empire, minus Poland (where the peasantry clearly had made very substantial gains.
- such transfers to enclosing landlords was 23% in Ukraine
- and were as high as 41% in the Volga region: from Saratov to Samara (Kuibyshev)
- clearly indicting (at least, to me) that where the prospects for commercialized agriculture were high, and where land productivity was higher, the landlords engaging in Emancipation (with Redemption bonds) had much stronger incentives to encourage or force servile tenants to cede lands to them

(3) The question of intermixing demesne (domain) and peasant tenancy strips:

- As I also argued – though admittedly without conclusive evidence – one effect of Peasant Emancipation under the Redemption Laws was to free landlord demesne lands from peasant communal lands.
- As I have argued for Germany, east and west, and indeed also the rest of western Europe, including England, by later medieval times, many landlords, in selling off or leasing out parts of the demesne, had allowed the remaining demesne strips under their control to become intermixed with communal peasant tenancies in the great Open Fields
- why, or what benefit to the landlord: to have their own demesne lands ploughed communally, by the entire peasant labour force: who did so, in effect, as part of their rental payments
- that also allowed the peasants to graze their own livestock on these lands during the communal fallow season
- But so long as those lands were intermixed – in the form of plough strips – the landlord could not engage in enclosures: i.e., could not segregate his lands for his exclusive use
- Thus peasant emancipation, as in the case of East Germany, really emancipated the landlords: to achieve a complete separation of their landlord lands from peasant lands, thus allowing them to enclose.
- and thus engage in the now well known techniques of modern husbandry, including convertible husbandry, chemical fertilizers, mechanization of agriculture

(4) Furthermore: we saw that an active land market did develop (a factor Gerschenkron virtually ignored):

- with a consequence, for a reverse flow, by which presumably richer, kulak-style independent peasants or other small holders acquired almost 20 million dessiatines of land from the nobility and gentry;
- or conversely that noble landholdings fell 27% from 1877 to 1905, as noted earlier (twice, now)
- Though it cannot be proved, I would suggest that such significant land transfers took place within

the context of compact, enclosed holdings, and not in terms of interspersed strips scattered among common fields.

(5) We also saw that Russian government legislation did lead to some breakdown of communal agriculture, in the Stolypin Land Reforms of 1906-10:

- which permitted the break-up of the *obshchina*, on a 2/3 majority vote of peasants
- We are told that 22% of peasant families, accounting for 16% of the land, had withdrawn from the *obshchina-mir* system.

iv) The Russian government and the communal-obshchina mir:

(1) For the Russian government, the chief concern in dealing with the peasantry and all those agricultural lands that remained under traditional forms of communal, open-field farming was to secure, at the lowest possible cost, the flow of *obrok*, as the combination of taxes and (in effect) rent imposed on the peasants' lands.

(2) The transaction costs involved in trying to collect *obrok* directly from each peasant household would have been far too high – perhaps physically and administratively impossible

(3) Therefore that task was delegated to the governing councils of each village *obshchina*, namely to the *mir*:

- the government annually collected the total amount of *obrok* that was due from each village
- the *mir* then collected the *obrok* from each peasant household in the village
- consequently the state had to ensure that the *mir* in each village had increased economic, judicial, and enforcement powers to achieve these obligations

(4) In that respect the state seemed to be entrenching and solidifying communal agriculture: but it did so only to ensure the flow of *obrok* income to the state (which, of course, was exacting and collecting taxes from enclosed, landlord or kulak lands.

iv) the question of periodic redistributions of tenancy lands:

(1) Although this was not a new system, and not a creation of the Russian state government, nevertheless we may ask why the proportion of tenancy lands subject to repartitions rose from 35% in the early 1880s to 87% in the late 1890s?

(2) There is no reason to suppose that the Russian government itself had any rational reason to promote such an expansion of this repartition system.

(3) the mir, however, did have a dual and strong incentive to expand this system:

- Since the *mir* was responsible for organising the periodic repartitions and for administering the redistributions of land, it could thereby exercise enormous power over the village community: if only by threatening and harming those who opposed its rule and rewarding those who supported and facilitated its rule.

- At the same time, we must expect strong elements of greed and corruption, so that members of the mir could ensure that their own families would be enriched when those periodic repartitions or redistributions took place.

(4) Otherwise, other than favouring forces that would increase the power of the mir, the state probably had no direct interest in promoting this system.

v) **To repeat earlier observations about Russia on eve of World War I:**

(1) agriculture accounted for over 2/3 of the total labour force in the economy, while producing only 50% of the Net National Income.

(2) Only 15% of Russia's population ca. 1910 was urbanized.

(3) But still, the proportion of Russians living in towns had more than doubled: from 6% to 15%

GERSCHENKRON: COSTS OF THE MIR-OBSHCHINA SYSTEM OF RUSSIAN PEASANT FARMING, AFTER THE 1861 EMANCIPATION:

PERIODIC LAND REPARTITIONS: from 35% of villages in 1870s to 87% in 1890s

- peasant tenancy strips redistributed every 10 - 12 years according to family size
- rural overpopulation and diminishing returns, as each family sought to increase number of children in order to gain more land (or retain own holdings)
- land improvements discouraged for fear of losing them with next repartition
- result: disguised unemployment on crowded lands, with zero MP

PEASANT IMMOBILITY: the major curse

- young peasants could not leave the land without father's consent: who would obviously object that the sons' departure would worsen the family's holdings in next repartition
- young peasants also could not leave without permission of the Mir council: who would agree only in the departing peasant paid off his share of obrok (rent) and taxes
- The Mir was responsible for collective payment of the obshchina's obrok and taxes
- departing peasant was not allowed to sell any of his holdings, and thus had to depart without the capital available to departing German and Polish peasant

PEASANT GRIEVANCES concerning:

- allotted lands under repartitions
- loss of communal grazing lands and even holdings held before Emancipation
- loss of lands to obtain both personal freedom and property rights
- excessive payments of obrok and taxes (in eyes of many peasants)

**THE GERSCHENKRON MODEL ON POST ABOLITION
RUSSIAN AGRICULTURE**

**A. THE ABOLITION OF SERFDOM FOR RUSSIAN COMMUNAL AGRICULTURE:
THE NEGATIVE RESULTS FOR ECONOMIC DEVELOPMENT**

- (1) PEASANT IMMOBILITY AND FALLING PEASANT PRODUCTIVITY**
- (2) TENANCY REPARTITIONS: DISGUISED UNEMPLOYMENT, WITH
FURTHER DECLINES IN PRODUCTIVITY**

**B. ECONOMIC CONSEQUENCES OF PEASANT IMMOBILITY AND FALLING
PRODUCTIVITY:**

- (1) INELASTIC LABOUR SUPPLY - meant scarcity of labour for urban
industrialization**
- (2) LABOUR SUPPLY UNEDUCATED AND UNSKILLED FOR MODERN
INDUSTRY**
- (3) INADEQUATE DOMESTIC DEMAND FOR INDUSTRIAL GOODS: because low
productivity meant low incomes**
- (4) LOW LEVEL OF SAVINGS AND THUS OF DOMESTIC INVESTMENTS**
- (5) INSUFFICIENT DOMESTIC SUPPLY OF FOODSTUFFS AND RAW
MATERIALS FOR URBAN INDUSTRIALIZATION**
- (6) THUS, LOW LEVELS OF INDUSTRIAL URBANIZATION — Russian society
remained chiefly rural and agrarian, and poor**

Table 1: Composition of the Capitalized Market Value of the Stavenow Manorial Estates in Brandenburg (East Germany) in 1601

ASSETS	Value in Gulden	Percent Subtotal	Value in Gulden	Percent of Total
Manor: House and Demesne Farm Buildings			5,813	8.66%
Manorial Forest: Income from Demesne Production			15,552	23.16%
Grain Sales: income from	12,104	45.44%		
Livestock Production: income from sales	10,917	40.99%		
Fisheries and Gardens: income from	3,615	13.57%		
Sub-total of Demesne incomes	26,636	100.00%	26,636	39.66%
Manorial Jurisdictions and Properties				
Manorial Courts and Jurisdictional Fees	4,400	72.74%		
Manorial Mills: rental incomes	1,649	27.26%		
Sub-total of Manorial Jurisdictions	6,049	100.00%	6,049	9.01%
Peasant Rents: Servile Tenancies				
Labour Services	8,454	79.06%		
Rents in kind: in grain	1,375	12.86%		
Rents in cash: money payments	864	8.08%		
Sub-total of Peasant Rents	10,693	100.00%	10,693	15.92%
Foreign Peasants': Short Term Rents				
Labour Services	1,609	66.68%		
Rents in kind: in grain	804	33.32%		
Sub-total of 'Foreign Peasants' Rents	2,413	100.00%	2,413	3.59%
TOTAL VALUES			67,156	100.00%

Source: William Hagen, 'How Mighty the Junkers? Peasant Rents and Seigneurial Profits in Sixteenth-Century Brandenburg', *Past & Present*, no. 108 (August 1985), p. 100.

Table 2.

Output per Agricultural Workers ca 1850
in Europe and USA

COUNTRY	Grain in bushels *	Livestock Outputs **	Net Output: US = 1	Net Output measured in calories (Britain = 1)
USA (North)	297	8.54	1.00	0.99
Great Britain	223	5.66	0.95	1.00
Netherlands	74	3.49	0.48	0.46
France	98	2.84	0.59	0.48
Germany	86	3.00	0.47	0.45
Austria	72	2.66	0.39	0.25
Hungary	114	2.00	0.40	0.25
European Russia (1870)	108	1.89	0.36	0.26

* **Grain index:** the total bushels of grain (rye, wheat, barley, oats, peas, beans, maize) harvested per worker.

** **Livestock index:** cows and cattle = 1.0; sheep = 0.1; pigs = 0.3

Sources: Gregory Clark, 'Productivity Growth without Technical Change in European Agriculture', *Journal of Economic History*, 49 (1989), 980; Paul Bairoch, 'Les trois révolutions agricoles du monde développé: rendements et productivité de 1800 à 1985,' *Annales: Économies, sociétés, civilisations*, 44 (1989), 329.

Table 3. Indices of European and American Agricultural Productivity from 1810 to 1910

**Annual net output per agricultural worker (male)
measured in million of calories**

COUNTRY	1810	1840	1860	1880	1900	1910
Britain	14.0	17.5	20.0	23.5	22.5	23.5
France	7.0	11.5	14.5	14.0	15.5	17.0
Germany		7.5	10.5	14.5	22.0	25.0
Russia		7.0	7.5	7.0	9.0	11.0
USA		21.5	22.5	29.0	31.0	42.0

Source: Paul Bairoch, 'Niveaux de développement économique de 1810 à 1910,' *Annales: Économies, sociétés, civilisations*, 20 (1965), 1096, Table 1.

Table 4. Output of Principal Grain Crops of Selected European Countries, in millions of quintals, in decennial averages, 1871-90 to 1905-14

Decade	Great Britain	France	Germany	Russia
1781-90	35.0	85.3		
1800-13	43.0	94.5		268.6
1815-24	49.5	104.0		n.a.
1825-34	n.a.	116.3		n.a.
1835-44	n.a.	131.4		310.1
1845-54	64.0	146.6	122.6	363.3
1855-64	68.0	158.5	153.7	381.2
1865-74	70.0	160.1	204.8	410.1
1875-84	n.a.	161.8	248.4	451.0
1885-94	56.9	160.1	304.6	515.4
1895-1904	52.5	172.1	391.0	479.3
1905-14	51.7	171.9	457.9	543.1

1 quintal = 100 kilograms = 0.10 metric ton = 220.46 lb.

Source: Carlo Cipolla, ed., *Fontana Economic History of Europe*, Vol. IV:2, pp. 752-53.

**Table 5. The Populations of Selected European Countries in millions,
in decennial intervals, 1800-1910**

Year	Great Britain	Belgium	France	Germany	Russia
1800	10.7	3.1	27.3	n.a.	35.5
1810	12.0	n.a.	n.a.	n.a.	n.a.
1820	14.1	n.a.	30.5	25.0	48.6
1830	16.3	4.1	32.6	28.2	56.1
1840	18.5	4.1	34.2	31.4	62.4
1850	20.8	4.3	35.8	34.0	68.5
1860	23.2	4.5	37.4	36.2	74.1
1870	26.0	4.8	36.1 ^a	40.8 ^b	84.5
1880	29.7	5.3	37.7	45.2	97.7
1890	33.0	6.1	38.3	49.4	117.8
1900	37.0	6.6	39.0	56.4	132.9
1910	40.9	7.4	39.6	64.9	160.7

^a Excluding Alsace-Lorraine.

^b Including Alsace-Lorraine.

Sources: B.R. Mitchell and P. Deane, *Abstract of British Historical Statistics* (Cambridge, 1962), pp. 8-10; Carlo Cipolla, ed., *Fontana Economic History of Europe*, Vol. IV:2, pp. 747-48.

Table 6a. Agriculture and National Income Statistics, 1885 - 1913
in millions of rubles of 1913 values

Year	Grain	Livestock	Other	Total Farm	Personal Consumption	Agri as % of Per Capita Consumption
1885	1,183	437	1,405	3,025	6,661	45.41
1886	1,058	438	1,368	2,864	6,753	42.41
1887	1,322	439	1,538	3,299	7,604	43.39
1888	1,198	479	1,546	3,223	7,460	43.20
1889	842	480	1,455	2,777	6,916	40.15
1890	1,074	487	1,503	3,064	7,393	41.44
1891	669	471	1,338	2,478	6,705	36.96
1892	1,183	459	1,500	3,142	7,335	42.84
1893	1,680	462	1,692	3,834	8,309	46.14
1894	1,758	490	1,721	3,969	8,922	44.49
1895	1,556	490	1,866	3,912	9,407	41.59
1896	1,591	545	1,960	4,096	9,834	41.65
1897	1,307	555	1,840	3,702	9,535	38.83
1898	1,588	555	1,972	4,115	10,069	40.87
1899	1,869	569	2,016	4,454	11,583	38.45
1900	1,885	576	1,983	4,444	11,329	39.23
1901	1,588	567	1,903	4,058	11,118	36.50
1902	2,143	579	2,135	4,857	12,005	40.46
1903	2,079	578	2,047	4,704	12,201	38.55
1904	2,437	569	2,252	5,258	12,791	41.11
1905	1,979	603	2,093	4,675	12,443	37.57

Year	Grain	Livestock	Other	Total Farm	Personal Consumption	Agri as % of Per Capita Consumption
1906	1,517	587	1,992	4,096	11,531	35.52
1907	1,830	572	2,092	4,494	11,778	38.16
1908	2,014	570	2,297	4,881	12,171	40.10
1909	2,327	657	2,408	5,392	13,090	41.19
1910	2,479	688	2,491	5,658	14,053	40.26
1911	1,914	701	2,293	4,908	13,793	35.58
1912	2,821	679	2,709	6,209	15,721	39.49
1913	3,228	720	2,778	6,726	16,306	41.25

Source: Paul R. Gregory, *Before Command: An Economic History of Russia from Emancipation to the First Five-Year Plan* (Princeton, 1994), Table A.1, pp. 140-44.

Table 6b. Agriculture and National Income Statistics, 1885 - 1913
in millions of rubles of 1913 values
in quinquennial means

Years	Grain	Livestock	Other	Total Farm output	Personal Consumption	Agri as % of per capita consumption
1885	1,183.00	437.00	1,405.00	3,025.00	6,661.00	45.41
1886-90	1,098.80	464.60	1,482.00	3,045.40	7,225.20	42.12
1891-95	1,369.20	474.40	1,623.40	3,467.00	8,135.60	42.40
1896-00	1,648.00	560.00	1,954.20	4,162.20	10,470.00	39.81
1901-05	1,372.00	499.67	1,686.53	3,558.20	8,610.27	41.44
1906-10	2,033.40	614.80	2,256.00	4,904.20	12,524.60	39.05
1911-13	2,654.33	700.00	2,593.33	5,947.67	15,273.33	38.77

Source: Paul R. Gregory, *Before Command: An Economic History of Russia from Emancipation to the First Five-Year Plan* (Princeton, 1994), calculated from Table A.1, pp. 140-44.

Table 7.**Indices of Agricultural Production, Factory Outputs, and Population in European Russia (50 Provinces), 1870 - 1904: Mean of 1870-4 = 100**

Period	Arable Crops	Factory Output	Population	Rural Population
1870-74	100	100	100	100
1883-87	117	217	120	117
1900-04	185	588	156	151

Source: Raymond W. Goldsmith, 'The Economic Development of Tsarist Russia, 1860-1914,' *Economic Development and Cultural Change*, 9 (1961), 441-75.

The following table presents Gregory's revisions of Goldsmith's estimates, to include non-European Russia, and also to account for a decline in the seed-output ratio.

Table 8. Growth of Russian National Income, 1883 - 1913 (Annual Growth Rates)

Period	Agriculture	Industry	Trade/Services	National Income
1883/7 to 1897/1901	2.55	5.45	2.50	3.40
1897/1901 to 1909/13	3.00	3.60	2.80	3.10

Source: Paul Gregory, *Before Command: An Economic History of Russia from Emancipation to the First Five-Year Plan* (Princeton University Press, 1994), pp. 43-5.

Table 9.

Agricultural Statistics for Finland, 1754 - 2000

Year	Total Population	Total Labour Force	Total Agricultural Population	Total Agricultural Labour Force	Percent of Population in Agriculture	Agricultural labour force as percent of total labour force
1754	450,000	180,000	350,000		77	
1805	898,000	359,000	702,000		78	
1820	1,178,000	521,000	n.a.	448,000	n.a.	86
1850	1,637,000	694,000	n.a.	589,000	n.a.	85
1880	2,061,000	639,000	1,545,000	502,000	75	73
1900	2,656,000	832,000	1,845,000	566,000	69	68
1920	3,148,000	1,499,000	2,057,000	1,051,000	65	70
1950	4,030,000	1,984,000	1,674,000	912,000	42	46
2000	5,181,000	2,589,000	1,674,000	142,000	2	4

Source:

Jari Ojala and Ilkka Nummela, 'Feeding Economic Growth: Agriculture', in Jari Ojala, Jari Eloranta, and Jukka Jalava, eds., *The Road to Prosperity: An Economic History of Finland* (Helsinki: Suomalaisen Kirjallisuuden Seura, 2006), Table 3.1, p. 68.

Table 10.**RUSSIA: Population and Urbanization, 1800 - 1913**

Year	Total Population in Millions	Index 1860 = 100	European Russia: Population	Urban Population	Index 1860 - 100	Urban Population as % of European Russia's Pop.
1800	36.5	48				
1860	74.1	100	61.2	6.1	100	6.6%
1885			81.7	10.0	164	12.2%
1897	126.4	171	93.4	12.1	198	12.9%
1913	170.1	230	121.8	18.6	305	15.3%