

Slouching Towards Utopia?: An Economic History of the Long Twentieth Century, 1870-2016

XXI. Structural Changes at the Century's End

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21.1. The Fall of Really Existing Socialism

21.1.1. The Crisis of Bureaucratic Central Planning

One person who saw this most clearly what was to come from the Soviet Union and really-existing socialism the German classical liberal Max Weber.:

History shows that wherever bureaucracy gained the upper hand, as in China, Egypt it did not disappear. A progressive elimination of private capitalism is theoretically conceivable. What would be the practical result? The destruction of the [dehumanizing] steel frame of modern industrial work? No! [S]imply that also the top management of the socialized enterprises would become bureaucratic. [T]here is even less freedom, since every power struggle with a state bureaucracy is hopeless. State bureaucracy would rule alone if private capitalism were eliminated. The private and public bureaucracies, which now check one another to a degree, would be merged into a single hierarchy. This would be similar to the situation in ancient Egypt, but it would occur in a much more rational[ized]-and hence unbreakable-form. [Bureaucracy] together with the machine is busy fabricating the shell of bondage which men will perhaps be forced to inhabit as powerless as the fellahs of ancient Egypt. Who would want to deny that such a potentiality lies in the womb of the future?

This was written in 1917.

Weber was right. From the perspective of 1990 there is little to add. One slogan of the turn of the century American labor movements was “one big union”. The slogan of twentieth century socialism might as well have been “one big bureaucracy”.

Weber had no inkling of the periodic waves of mass terror required to preserve Communist Party power in the face of the enormous gap between the party's official ideology and its actual practice. In fact, socialism turned out in the direction that but much worse than Weber had anticipated beforehand. For that we have to turn to Rosa Luxemburg—Red Rosa, murdered by the German social democratic government in 1919:

Without general elections, without unrestricted freedom of press and assembly, without a free struggle of opinion, life dies out in every public institution.... Only the bureaucracy remains.... A few dozen party leaders of inexhaustible energy and boundless experience direct and rule.... An elite of the working class is invited from time to time to meetings where they are to applaud the speeches of the leaders, and to approve proposed resolutions unanimously—at bottom, then, a clique affair.... Such conditions must inevitably cause a brutalization of public life: attempted assassinations, shooting of hostages, etc....

Neither saw the inefficiency. Weber thought really-existing socialism would be regimented and organized—but efficient. Luxemburg thought it would be brutal and dictatorial—but efficient. Neither saw the waste, the lines, the irrationality of economic organization and the degree to which things would run off of corruption, influence, and networks: *blat*.

21.1.2. Outside Images of the USSR

21.1.2.1. Images in the 1920s and 1930s

The reality of the Soviet Union in the 1930s was in strong contrast to the image that many outside had of it. Outsiders focused on three things. First, the Soviet Union had eliminated unemployment—in a decade in which unemployment was bitter and pervasive outside of Russia. Second, Soviet production was expanding rapidly—in a decade in which production stagnated elsewhere in the world. Third, shortcomings in the Soviet Union could be blamed on the past: the country's backwardness, the heritage of the Czars, the necessity of doing everything as fast as possible to strengthen the country and catchup to the advanced industrial powers. “You can't make an omelette without breaking eggs.”

The Soviet Union seemed to many to exhibit in extreme trends that were being found all over the industrialized world. Had not the years leading up to 1929 seen the increased monopolization and concentration of the economy? Were not the largest firms in 1929 bigger than whole economies had been half a century earlier? Did not major investment banking firms like J.P. Morgan and Company (in the U.S.), the Deutsche Bank (in Germany), or the Yasuda zaibatsu (in Japan) exercise a remarkable amount of command and control over the economy's large-scale investment decisions? As Vladimir Lenin had written during World War I:

When a large enterprise... on the basis of exact computation of mass data, organizes according to plan the supply of primary raw materials to the extent of two-thirds or three-fourths of all that is necessary for tens of millions of people; when the raw materials are transported to the most suitable place of production, sometimes hundreds or thousands of miles away, in a systematic and organized manner; when a single center directs all the successive stages of work... then it becomes evident that we have socialization of production... that private economic relations and private property relations constitute a shell which is no longer suitable for its contents... [and] which will inevitably be removed...

Yes, the Soviet Union exerted a definite attraction on leftists and non-leftists alike. Those like writer Lincoln Steffens returned from Stalin's Russia saying: "I have seen the future, and it works."

And consider, once again, John Maynard Keynes, effete intellectual upper-class snob. He had many reasons to dislike Leninism and the Soviet Union:

brought up in a free air... Red Russia holds too much which is detestable... a creed that does not care how much it destroys the liberty and security of everyday life, which uses deliberately the weapons of persecution, destruction, and international strife... spending millions to suborn spies in every group and family at home...

He was especially annoyed by its use of Marxism:

How can I accept a doctrine which sets up as its bible, above and beyond criticism, an obsolete economic textbook [Marx's *Capital*] which I know to be not only scientifically erroneous but without interest or application for the modern world?...

Yet even he could also write: “I should like to give Russia her chance; to help and not to hinder. For how much rather... if I were a Russian, would I contribute my quota of activity to Soviet Russia than to Tsarist Russia!” It was tyrannical and detestable, but “eyes were turned towards, and no longer away from, the possibilities of things...”

21.1.2.2. The Image in the 1940s and 1950s

Lenin—and many others—had seen socialism already fully built in the large organizations of vertically-integrated manufacturing firms and in the loose financial empires of bankers: the new economy in the womb of the old. Laissez-faire advocates had promised that the market economy could deliver. And in the 1930s it had not. It was time for socialism. And by 1945 there was a socialism up and running in the USSR. Lenin and Stalin’s brand of socialism had turned a country of peasants, animal-powered small farms, and craftsmen into a country of industrial workers, machine-powered collective firms, and factories. They had—they claimed—done in one generation the economic transformation that had taken five generations in Britain. And it was they, not the Johnny-come-latelies who has only dared put troops into northwest Europe in the final year before the Nazi collapse, who had won World War II.

Many outside the USSR—take left-wing economist Paul Sweezy, fired from Stanford for being a communist during the McCarthy era even as the establishment pontificated about the importance of maintaining academic freedom for one—would confidently predict that Leninist socialism and government planning would deliver a more efficient allocation of productive forces and a faster rate of economic growth than any alternative system. And many who feared Leninist socialism as destructive of human liberty, happiness, and high mass consumption agreed that the USSR and its satellites were likely to forge ahead in total and per capita production.

And even if centrally-planned economies of scale did not outweigh inefficiencies from abandoning market coordination, a centrally-planned economy would have no difficulty in attaining a high rate of investment. Paul Samuelson—no Leninist he—had the leading post-World War II American economics textbook. Up until the late 1960s its forecasts showed the USSR surpassing the American economy in production per head well before 2000. That the Soviet Union might produce superior production and equality, if not prosperity, even if inferior with freedom and choice, seemed a live possibility even into the 1960s.

21.1.3. Expectations of Soviet Productive Dominance

Indeed, many thought the Soviet Union was ultimately going to win the battle of production with the United States. It would be much less free. It would be a dictatorship. It would be detestable: destroying liberty and security in everyday life, using persecution, destruction, and international strife, and suborning spies in every group and family. Plus it was post-truth: telling lies that everyone knew were lies was a way of enforcing dominance: *cf. Nineteen Eighty Four*, by George Orwell. But it would be able to outproduce the capitalist industrial west. One person who held this view was journalist I.F. Stone, who wrote in 1956:

This is not a good society and it is not led by honest men. No society is good in which men fear to think—much less speak—freely. I don't care how many tons of steel the Russians produce.... This society is a paradise only for a rather stupid type of Communist party member...

Why was it thought more likely to be more productive? Think of it this way: The level of technological and organizational capabilities in the Soviet Union is lower than in the United States--centrally planned economies are inefficient. As my teacher Rick Ericson wrote, the Soviet economy had to be inefficient: Prices... [were] used for measurement, accounting, and control purposes”, that is, expressly not to provide incentives. But inevitably, prices do drive people’s incentives: they thus provide information, information that is inevitably acted on, that are “irrelevant or incorrect... about relative values and scarcities”. As a result, the traditional Soviet economic system is very good at mobilizing scarce resources and concentrating on a few clear, well-defined objectives. It can succeed as long as these objectives could be expressed in measurable, quantitative, and communicable terms. It could succeed as long as plan success or plan failure produced large and very observable outcomes. It could not succeed otherwise.

However, this mode of failure would not grow in relative importance over time. The economy would be inefficient. But there would be no strong tendency for the proportional gap in technological and organizational capabilities to grow.

The Soviet Union would remain a totalitarian state. It would thus remain very good at squashing consumption, and in thus channelling extra savings into boosting the capital stock. Thus in the long run the USSR would have a higher capital stock per worker but a lower efficiency of labor. And as time passed while Soviet consumption remained depressed, it would have a much higher capital intensity,

which would make it more productive—even though its people would still be very likely to lead poor and impoverished lives.

This turned out to be wrong: inefficiency in consumer goods allocation turned out to be generated by forces that also produced gross inefficiency in investment allocation as well.

21.1.4. Soviet Successes

Now the Soviet Union did have successes. Robert Allen moves the goalposts, and points out that if one compares growth from 1917 to 1990 in the Soviet Union to growth in Latin America rather than to growth in Europe, the Soviet Union does relatively well. The problem with this, however, is that such a yardstick is not terribly natural: the Soviet Union's neighbors closest to the overwhelming bulk of its population were Finland and Sweden, Poland and Germany, Czechoslovakia and Roumania, and Turkey. The Soviet Union had successes—at enormous cost—during World War II. Nobody but Stalin would have built a heavy industrial complex at Magnitogorsk, far, far from Germany. Alexei Kosygin and his team's massive move of Soviet industry to the east out of the way of onrushing panzers is a remarkable story. But a Red Army whose competent tank officer cadres had not been killed by Stalin would have done much better, as would a régime whose bloody trajectory had near-completely alienated Ukrainians and Poles.

Plus there was Sputnik, and the development of the hydrogen bomb.

By 1960 the Soviet Union had by and large attained a global north level of health, education, and life expectancy. It was still poor in consumer goods. It appeared to have a military as strong as the United States—but it did so by devoting 30% of national income rather than 8% of national income to it, and questions of quality of machinery and organizations remain unanswered to this day. And its income distribution was relatively equal. Or was it?

Was Russia saved from India's fate by a rapid demographic transition fueled primarily by the large scale emancipation of women?

Could it have been reformed?: Tony Judt: “Moreover, Marx's other youthful intuition—that the proletariat has a privileged insight into the final purposes of History thanks to its special role as an exploited class whose own liberation will signal the liberation of all humankind—is intimately attached to the ultimate Communist outcome, thanks to the subordination of proletarian interests to a

dictatorial party claiming to incarnate them. The strength of these logical chains binding Marxist analysis to Communist tyranny may be judged from the many observers and critics—from Mikhail Bakunin to Rosa Luxemburg—who anticipated communism's totalitarian outcome, and warned against it, long before Lenin got anywhere near the Finland Station. Of course Marxism might have gone in other directions: it might also have gone nowhere. But 'the Leninist version of Marxism, though not the only possible one, was quite plausible'...

21.2. Larger and Greater Failures of the U.S.S.R.

21.2.1. The Narrow Focus of Soviet Growth

The increased output achieved under the Communists was limited to steel, machinery, and military equipment. Surely the welfare of the working class would have been better served by capitalism? The collectivization of agriculture was a particularly vicious example: we do not know how many died. We think it was in the mid seven figures. It might have been eight figures. And the Soviet growth rate was not impressively high when seen in a world context. Even before 1917, the Russian economy had taken off.

There is an argument, made by economic historian Robert Allen, that the Soviet road was the only road open to Russia. As he puts it:

[In Britain] private property and... representative government... was the basis of civil society independent of the state.... [In Russia] the "rule of law" was a tool by which the tsar and nobles exploited the peasants rather than an impartial umpire.... Tsarist Russia [thus] lacked the social, legal and economic institutions that theorists of economic growth have argued are prerequisites for capitalist development. Indeed, much of the rest of the world lacked--and still lacks--this as well.... Two responses are possible... create the missing prerequisites... create substitutes.... Russia's path to industrial society was based on the state's creating policies and institutions to substitute.... In the absence of the communist revolution and the Five-Year Plans, Russia would have remained as backward as much of Latin America or, indeed, South Asia. That fate was avoided by Stalin's economic institutions...

Allen's belief is that the Soviet Union brought resource mobilization and birth control—via its early introduction of much of feminism. Growth from resource mobilization is not the not productivity-frontier post-industrial market capitalist development from higher productivity that has marked the twentieth century. But it

is resource mobilization. And an early demographic transition greatly reduces the burden of population growth on an economy. The counterfactual image would then be not something like the Czech Republic, but rather something like India, as what Russia would have become had it followed a non-really-existing socialist and more “normal” road in the twentieth century.

Perhaps. But unlikely.

Nikita Sergeyevich Khrushchev seized preeminence in the Soviet Union after the death of Stalin. He was the last Soviet General Secretary who believed that his country was on the road to utopia. He pushed for accumulation as fast as possible, and for as much copying of successful models from abroad as could be done. Khrushchev’s successors Brezhnev and Kosygin, however, were just going through the motions. The growth slowdown after 1970 showed their system’s ultimate weakness. Central planning could function in a mediocre way to build smokestack industries. But it was incapable of the sustained technological advance required for the postindustrial age.

21.2.2. Grain and Oil

The late Yegor Gaidar liked to tell the story of the failure of Soviet industrialization through the lenses of grain and oil. In his view, the decisive turning point was the “scissors crisis” debate of 1928-29. As Gaidar put it: “Bukharin and Rykov essentially told Stalin: ‘In a peasant country, it is impossible to extract grain by force. There will be civil war’. Stalin answered, ‘I will do it nonetheless’. As of the 1950s, Khrushchev was dealing with the consequences of the backward, enserfed agricultural sector Stalin had created. As of 1950, he wrote: “In the last fifteen years, we have not increased the collection of grain. Meanwhile, we are experiencing a radical increase of urban population. How can we resolve this problem?” The decision made, implemented under Khrushchev’s rule, was to throw resources at the problem: large projects and a tremendous extension of land put under grain cultivation. It did not work. In 1963 the USSR informed its allies that it would no longer be able to ship them grain, and began to buy grain on the world market.

After the 1960s, grain fluctuation in the Soviet Union was stagnant: year-to-year fluctuations around 65 million tons per year in the harvest. Russia before World War I had been the world’s largest grain exporter, and Odessa the world’s largest grain export port. The post-1970 Soviet Union became the world’s largest grain importer.

How to pay for food imports? Russian military hardware could not be sold to grain exporting nations, even had they wanted. And other Russian industrial production was of too low quality to be attractive to buyers abroad in Canada and the United States. So the USSR had to pay for its grain by selling oil and gas.

It may be that the collapse of the Soviet economy and the Soviet model was delayed for a decade by the more-than-tripling of world real oil prices during the OPEC decade of the 1970s, for the post-1970 Soviet economy's ability to feed its people with staple wheat and rye hinged on its ability to earn hard currency by exporting oil and gas. And the western Siberian oil and gas fields came through—although the Soviet Union could not calculate whether its concentration of resources on their exploitation was economically profitable.

Gaidar traced the collapse of the Soviet Union to the Saudi decision at the end of 1985 to resume pumping oil at capacity, and thus to crash the price of oil, largely to curb the ambitions of Iran's theocrats. How was the Soviet Union to respond? Stop supplying its eastern European satellites with hydrocarbons? Cut domestic grain rations and supplies substantially? Shift industrial production from the military to export manufactures? The Soviet Union had no competence to do the third. Its leaders did not believe it could, politically, survive the second. And the first meant total ideological defeat: giving up the prizes won from the sacrifices of World War II.

As Gaidar assessed the situation, the Soviet Union started to borrow in 1986. But by 1989, when "the Soviet Union tried to create a consortium of 300 banks to provide a large loan... [it] was informed that only five of them would participate... received a final warning from the Deutsche Bank and from its international partners that the funds would never come from commercial sources. Instead... it would have to start negotiations directly with Western governments about so-called politically motivated credits."

That was the ultimate revelation of the industrial bankruptcy of the Soviet Union: in a time of low oil prices, the regime could only feed its people by bargaining away political concessions in returns for concessionary loans with which to purchase wheat from abroad. The underlying rigidity and poverty of the system are there revealed.

21.2. The Decline of North Atlantic Industrial Dominance

21.2.1. Globalization and Income Distribution

In the last thirty year of the twentieth century, the demand for lesser-skilled workers fell sharply in advanced industrial countries. In western Europe that decline in demand showed itself as a rise in unemployment. In the United States this fall in demand showed up as falling real wages for lesser-skilled men. Both the left and the right blamed increasing world trade for this fall in demand for the work of the lesser skilled--and especially increasing imports from developing economies. This was a striking turnaround from earlier positions: in the 1960s and 1970s developing countries had feared "unequal exchange" and immiserization from trade.

The argument was that the increase in income inequality had come about at the same time as a sharp rise in world trade. In the United States imports were six percent of GDP in 1970 (and exports six percent as well), but were twelve percent of GDP in 1990 (and exports were ten percent, as Americans borrowed some two percent of GDP from foreigners to finance investment). Imports from low-wage countries were, it was argued, destroying the jobs of Americans.

Never mind that if imports destroy then exports create, and foreign-financed investments create jobs--and the fact that imports must by arithmetic equal exports plus net foreign-financed investment creates a strong presumption that the net employment effect of trade is zero. But the fact on which critics of trade rested their case turned out not to be a fact at all: manufacturing imports were not increasing as a share of the American economy.

In 1975, the average non-oil import came from a country where the manufacturing wage was 60% of the U.S. level. By the early 1990s the average non-oil import came from a country where the manufacturing wage was 75% of the U.S. level.

How could this be? Consider: In 1975 Japan was a low-wage economy: its manufacturing wage was less than half of the U.S. manufacturing wage level. Think of it: Japan and Italy in as economies that had enormous labor cost advantages vis-a-vis the U.S. Today Japan is a high-wage economy: its manufacturing wage is higher than the U.S. In 1975 Taiwan, Singapore, and Korea were very low-wage economies with wage levels one-twentieth that of the United

States. Today their manufacturing wage levels are about a third of the American standard. Because our trading partners are growing richer faster than new low-wage trading partners are appearing, the average wage in countries trading with the U.S. is increasing rapidly.

Doesn't this mean that international trade was placing more downward pressure on American wages in 1975 than it was in 2000? Doesn't this mean that the changing international economy has on net exerted *upward* pressure on American wages over the quarter century from 1975-2000? it would seem so.

Nor was there reason to believe that the reduction in the share of Americans who held blue-collar jobs was the result of expanded imports from the developing world. Blue-collar jobs as a share of total non-agricultural jobs had been falling steadily since 1945. Even more, blue-collar manufacturing jobs were being destroyed at a furious rate. But before the 1970s the lost jobs in one region and sector were generally being replaced—in absolute terms, if not as a share of the labor force—by new jobs in another region or sector.

Consider the career of my grandfather, William Walcott Lord, who was born in New England early in the twentieth century. In 1933, his Lord Brothers Shoe Company in Brockton, Massachusetts, was facing imminent bankruptcy. So he relocated his operations to South Paris, Maine, where wages were lower. The Brockton workers were devastated by this move, and by the widespread destruction of relatively high-paying blue-collar factory jobs across Southern New England. But in the aggregate statistics, their loss was offset by a bonanza for the rural workers of South Paris, who went from slaving away in near-subsistence agriculture to holding a seemingly steady job in a shoe factory.

The South Paris workers' good fortune lasted for just 14 years. After World War II, the Lord brothers feared that depression could return, so they liquidated their enterprise and split up. One of the three brothers moved to York, Maine; another moved to Boston. My grandfather went to Lakeland, Florida – halfway between Tampa Bay and Orlando – where he speculated in real estate and pursued non-residential construction. Again, the aggregate statistics didn't change much. There were fewer workers making boots and shoes, but more workers manufacturing chemicals, constructing buildings, and operating the turnkey at the Wellman-Lord Construction Company's Florida-based phosphate-processing plants and other factories. In terms of domestic employment, the Wellman-Lord Construction Company had the same net factor impact as Lord Brothers in Brockton. The

workers were different people in different places, but their level of education and training was the same.

So, during the supposedly stable post-war period, manufacturing (and construction) jobs actually moved en masse from the Northeast and Midwest to the Sun Belt. Those job losses were as painful for New Englanders and Midwesterners then as the more recent job losses are for workers today.

Likewise, during the 2000s, American blue-collar jobs were churned more than they were destroyed.

In 1943, 38% of America's nonfarm labor force was in manufacturing, owing to high demand for bombs and tanks at the time. After the war, the normal share of nonfarm workers in manufacturing was around 30%. Had the US been a normal post-war industrial powerhouse like Germany or Japan, technological innovation would have brought that share down from 30% to around 12%. Instead, it has declined to 8.6%. Much of the decline, to 9.2%, is attributable to dysfunctional macroeconomic policies, which, since Ronald Reagan's presidency, have turned the US into a savings-deficit country, rather than a savings-surplus country.

As a rich country, the US should be financing industrialization and development around the world, so that emerging countries can purchase US manufacturing exports. Instead, the US has assumed various unproductive roles, becoming the world's money launderer, political-risk insurer, and money-holder of last resort. For developing countries, large dollar assets mean never having to call for a lifeline from the International Monetary Fund.

It is not.

From 2000-2019, the relative wage of the country from which the average non-oil import came to America fell sharply. China stood up, and China contributed a huge share of manufactured imports. Yes, there was a decline in the share of manufacturing jobs in America from 9.2% to 8.6% from the rise of China. (The North American Free Trade Agreement, contrary to what US President Donald Trump has claimed, contributed almost nothing to manufacturing's decline.) Yet the pace at which the share of Americans holding blue-collar jobs declined did not accelerate. Yes, goods imports from China crowded out American manufacturing jobs. But investment in America from China funded construction jobs. What devastated the standard of living of blue-collar Americans in the years after 2000 was not imports from China, but the financial crisis and the Great Recession.

And yet globalization—increasing international trade—continues to receive the lion’s share of the blame for economic distress, even in the world’s richer economies. Why is this? Harvard University economist Dani Rodrik frequently points out that as trade barriers decline, the net benefits from further reductions decline while the redistributions induced remain about the same in scale. The redistributions thus become very large relative to the net gains—and, in the limit, what we have is simply a near-zero sum redistribution, and a redistribution away from those who held some social power, or else they would not have been able to benefit from the trade barriers in the first place.

And there are different dimensions along which any country is divided. The shift in US employment from assembly-line manufacturing to construction, services, and caretaking had very little impact on the overall distribution of income in terms either of social class or of the shape of the income distribution curve. But it did have a large effect not the distribution by gender: the jobs closing down were traditionally not just blue-collar but male, and always remained overwhelmingly male. The jobs opening up were very different.

But there have been other factors at work. First and foremost, it is easy for politicians to pin the blame for a country’s problems on foreigners and immigrants who do not vote. Back in 1890, when politicians in the Habsburg Empire routinely blamed Jews for various socioeconomic ills, the Austrian dissident Ferdinand Kronawetter famously observed that “Der Antisemitismus ist der Sozialismus der dummen Kerle”: anti-Semitism is the socialism of fools. The same could be said of anti-globalization today. Second, more than a generation of inequitable and slower-than-expected economic growth in the global North created a strong political and psychological need for scapegoats. People want a simple narrative. They will find one.

Third, China’s economic rise coincided with a period in which the global North was struggling to reach full employment. Successful economic readjustments do not happen when bankruptcies force labor and capital out of low-productivity, low-demand industries, but rather when booms pull labor and capital into high-productivity, high-demand industries. That the “China shock” hit a shaky economy made it much more likely that it would be perceived as, and that it would be, substantially destructive.

It is a fact that successful market adjustment via creative destruction does not just require open and competitive markets, global change, and price stability. It also

depends on full employment and near-permanent booms, just as economist John Maynard Keynes had warned in the 1920s and 1930s. But the neoliberal order failed to prioritize—and even more so failed to deliver—consistent full employment. But when the economy was booming in the 1990s, complaints about NAFTA were very small and very limited: it was only after unemployment rose that it could be ginned up to be an issue in U.S. politics again.

21.2.2. Globalization and Growth

So if "globalization" did not impoverish the workers of major industrial economies, what has "globalization" done? The question is sharpened by thinking back to the pre-WWI *Belle Epoque*, which was as "globalized" as today. In pre-WWI Britain, in industry by industry British producers decried their losses of export share to German and American producers. My wheat-farming great grandparents in Illinois, whose prices hinged on European demand for grain would have been astonished to have been told that they were not part of an integrated economy.

So what is the difference? Are financial flows stronger and more important today? Probably not. *Net* capital flows as shares of world product are surely smaller than they used to be before WWI (although *gross* trading volumes are higher).

Is trade stronger and more important? Maybe: world trade as a share of world product is a bit larger. But the net embodied factor content of trade as a share of world product appears smaller, and the net embodied factor content is presumably what matters most for trade's effect on, say, the unskilled workers' wages.

How about labor? Is international migration more important? Certainly not: between 1850 and 1920 one in every ten people in the world *moved continents*. Post-WWII, post-1973, or even post-1990 world population flows are a far smaller share of world populations than in the old days.

So what is different? Why has "globalization" become such a powerful banner in the past decade? One possibility: back before the Belle Epoque, what you could transfer across national boundaries was limited--pretty much limited to the *commodity*, or the *security*. As long as you could pack it in a crate or an envelope, and send it across the sea (or over the telegraph lines), you could transfer it. If not, not. Call this "low bandwidth" trade. International transactions and linkages that required more in the form of cross-border linkage were very hard to accomplish.

Think of Ford's early post-WWI attempts to transfer its assembly-line productivity

to Britain; of British and Japanese attempts to use Lancashire-manufactured textile machinery to achieve high productivity in factories in India or China; or of the frantic attempts of British investors--who had never imagined how easily Jay Gould would be able to buy the courts of New York--to extract bond coupons and dividends from the Erie Railroad that they "owned".

Today we have "high-bandwidth" trade and investment. The breadth of cross-national links has vastly increased. Back then you could not exercise corporate control across national borders. Now you can. Back then you could not transfer forms of organization to achieve home-country productivity in foreign production operations. Now you can. Back then you could not integrate design and specification in one country with production in another. Now you can.

There are counterforces: trans- or multi-national corporations are going to be a good candidate for someone to blame. We are beginning to see denunciations of "rootless cosmopolitans", of "Goldman-Sachsonomics", that somehow seem to me reminiscent of the old-style European contrast between good engineers and bad financiers. Where that will end up I do not know...

And this shift to "higher bandwidth" in international economic links is still hard to see in its impact on the aggregate numbers--yet. The modal service export from the United States in the 1990s was not a computer program written by a symbolic analyst in an office tower to program NC machine tools oiled by someone in Malaysia, but was in travel and tourism--the modal service export was someone making a bed for a Japanese tourist outside of Yellowstone.

But perhaps all that critics of those who trace first-world income distribution to third-world exports are saying was *not yet*. That the vision found in, say, Robert Reich's *Work of Nations*--one in which the division of labor becomes global at a very finely-grained level, and God help those citizens of rich countries who find themselves among the unskilled--was *not yet* a powerful force, at least as far as the U.S. economy was concerned. Think back to 1700, and note that then the "rich" countries had perhaps twice the material standard of living of the "poor", and that this relative gap has been widening since. By 1900 the industrialized "rich" had perhaps six times the material standard of living of the world's "poor" countries. And today? 20 times?

In the long run our descendants will probably not live in a world in which relative international differences in material standards of living are as large as today. And if by 2050 the gap between "rich" and "poor" has shrunk back to a factor of 6, I pray

that it will have been by levelling up--by granting software programmers in Bangalore three-bedroom houses like those in Los Gatos, and by giving auto workers in Hermosillos high enough purchasing power to buy the cars that they make.