# Slouching Towards Utopia? An Economic History of the Long Twentieth Century

## VI. Imperialism & Colonized: 1870-1914

# J. Bradford DeLong U.C. Berkeley, NBER, WCEG

<a href="https://www.icloud.com/pages/0wHtZYr\_7xIktErq-Dj4ZwY7A">https://www.icloud.com/pages/0wHtZYr\_7xIktErq-Dj4ZwY7A</a>

1870 saw the greatest empire the world has ever seen—the British Empire—approaching its peak. And this empire had both "formal" and "informal" aspects.

1945 saw the supersession of Britain by the United States as the leading industrial and commercial and imperial power. It sees the creation of an American empire that is definitely not "formal" but rather "informal"—but that is a story of the 1930s and thereafter, not of the years before 1914.

## 6.1. Formal Empires

#### 6.1.1. Before 1870

Europe—or, rather, Spain and Portugal—started building empires in the 1500s. It was not that they had unique technological or organizational powers to do so. What made the European empires different, however, was that they had interlocking rationales. They made political-military, ideological-religious, and economic sense. Spain's conquistadores set out to serve the king, to spread the word of God, and to get rich.

Other adventurers and imperialists did not have this triple reinforcing dynamic. When the Portuguese arrived in what is now Malaysia in the 1500s, they met political-military opposition from local rulers, ideological-religious opposition from Islamic communities, and economic opposition from Chinese traders who did

not want to be displaced. But Chinese merchants had no political backing from Ming rulers, who regarded them as out-of-control. Local sultans could not summon religious-ideological energy for crusades to expel the Portuguese from their bases. And Islamic communities' well-being was not profitable enough to far-away allies to generate sustained intervention. For European adventurers, kings and guns, God and congregations, and money and trade reinforced one another. And so the European overseas empires of the 1500s and thereafter grew.

These early empires were, however, limited. Outside of the Americas, the sea became European but the land did not. Sea control, however, did mean a great deal. In the 1500s and 1600s control over the high-value low-weight luxury goods of East Asia, or over the precious metals of Latin America, made individuals' fortunes, while also providing healthy boosts to early modern European royal treasuries, places for potentially disruptive young males, and ways for accompanying missionaries to believe they pleased their God. In the 1600s and 1700s the tobacco and slave trades plus the sugar-growing islands of the Caribbean boosted mercantile prosperity and government treasuries. West Indian empires become a focus of high politics, and a driver of then-slow economic growth. Plus the slave trade devastated Africa, and plausibly created the conditions that today keep Africa the poorest continent.

But by 1870 the logic of empire appeared to be ebbing. There was little in the way of luxuries that could not be made more cheaply in the industrial core. Plus the odds were that it would be more expensive to conquer and then extract than to trade: domination by politicians oceans away would rarely be durably popular: save for Canada and Guyana.

#### 6.1.2. The Power Gradient

Yet after 1870 empires grew. The power gradient—technological, organizational, political—had become immense. The improvements in transport and communications made war and conquest and occupation vastly easier. There was no part of the world in which western Europeans could not—if they wished—impose their will by armed force at moderate cost. And proconsuls were rarely focused on just what resources would flow back to the imperial metropolis from this extension of empire, and whether it might not be cheaper in the long run to simply trade and pay for them.

At the battle of Omdurman in the Sudan in 1898, 10,000 soldiers of the Mahdist

Sudanese regime died. Only 48 British and Egyptian soldiers died. The difference was not entirely due to superior European military technology. The Mahdist regime did have proto-machine-guns, telegraphs, and mines—all bought from European suppliers. What it did not the have was the organizational capacity and discipline to make effective use of them.

The outcome all across the globe was integration into the European dominated world economy, political submission—either formal or informal—to rule by European proconsuls, and the spread of European languages and European views of life around the globe. Missionaries brought European religions. Proconsuls interested in uplift brought European-style schools. Europe-originated culture, methods of administration, science, and technology began to percolate down. Members of future peripheral elites were taught as part of a civilizing mission—in French—how "our ancestors the Gauls" had fought the Romans in the first century B.C. Harbors, railroads, factories, and plantations sprung up from Bali in what is now Indonesia to Accra in what is now Ghana.

And everywhere peoples were taught that they were dirt under the feet of their European rulers.

Still, very different things were happening in different corners of the world: the only constant of formal empire was that there was nothing constant. As Arthur Lewis put it in his *Growth and Fluctuations*, 1870-1913:

The imperialists tell us... good government. The anti-imperialists argue... that empire... outlived its time... was irrelevant to development... held back development... de-developed.... Colonies were governed very differently.... One could nominate at least one country to fit each of these categories, from best to worst...

But by and large the anti-colonialists seem to me to have the better of the argument. Successful and rapid economic development in the nineteenth century required a government to build railroads, port, and urban infrastructure; a government to establish schools; a government to create a legal framework for banking, and then for banks to pool the savings of the people and distribute them to what were for the time large-scale capital-hungry enterprises. And it required tariffs to keep nascent and infant industrial sectors from being squashed by foreign factory imports and so provide room for businesses and engineers to learn how to run factories by doing, and so for communities of engineering expertise to develop and grow. Colonial governments were somewhat interested in ports. But they were

rarely if ever interested in the rest. Independent governments might well not find themselves following growth-promoting industrial polices. But they had a chance of doing so.

Plus there were abattoirs like the Belgian Congo, with King Leopold's ghost yelling in hell for his hand-maimed host.

#### 6.1.3. The Scramble

#### 6.1.3.1. India

As the power gradient increased, the scramble accelerated. But the scramble had already begun well before 1870.

In early 1756 the newly-installed Nawab of Bengal, Mîrza Mohammad Siraj ud-Dowla, wished to show the British in Calcutta who was master of Bengal. He borrowed some gunners and artillery pieces from the French and attacked and captured Calcutta and its Ft. St. William. He expected negotiations, and that the subsequent peace would see gratitude toward him on behalf of the French, much higher taxes paid him by trading Europeans, and much less tax evasion via smuggling by British who understood their place.

#### Big mistake.

The British sent 3,000 soldiers—800 British, 2200 Indian—north by sea from Madras to Calcutta. Siraj ud-Dowla mobilized for the battle. British commander Robert Clive bribed the Nawab's three subordinates. The British East India Company acquired the taste for conquering, ruling, and taxing India rather than merely trading with it.

By 1765 the British East India Company had successfully petitioned the Moghul Emperor in Delhi to be his tax collector for Bengal and Bihar.

By 1772 Calcutta was the capital of British India. Warren Hastings was its first Governor-General. The British East India Company had entered the sweepstakes in the succession wars over the territories of the Mogul empire.

The conquests with British-trained Indian-recruited armies that made the British the dominant power in India in the eighteenth century were carried out on a shoestring. Yet they soon became mopping-up operations: small wars against

Indian powers that had no chance of assembling the resources to match the British-controlled forces in India. Each generation saw formerly independent principalities become subservient allies. Each generation saw former allies become puppets. And each generation saw former puppets become territories ruled by London. Nearly a century after Clive and Siraj ud-Dowla came the great the 1857 Sepoy Mutiny/Indian Mutiny/Sipahi Rebellion/Great Rebellion of 1857. It was defeated. And on May 1, 1876, the British government proclaimed Queen Victoria I Hanover to be *Kaiser-i-Hind:* Empress of India.

Karl Marx back in 1853 had taken a look at the Future Results of British Rule in India. He then prophesied that the British imperial conquest of India was India's greatest short-run curse and would be its greatest long-run blessing:

England has to fulfill a double mission in India: one destructive, the other... laying the material foundations of Western society in Asia.... The political unity of India... imposed by the British sword, will now be strengthened and perpetuated by the electric telegraph. The native army, organized and trained by the British drill-sergeant, [will be] the sine qua non of Indian self-emancipation.... The free press... private property in land... Indian natives, reluctantly and sparingly educated... a fresh class.... The millocracy... intend now drawing a net of railroads over India... with the exclusive view of extracting... [will] lay down the material premises.... Has the bourgeoisie ever done more? Has it ever effected a progress without dragging individuals and people through blood and dirt, through misery and degradation?...

Yet as of 1913 the great economic and social changes that Karl Marx had confidently predicted sixty years before had not advanced far. The drawing of a net of railways over India? Check. The introduction to India of those industries necessary to support the railroads? Check. The spread of other branches of modern industry across India? Not so much. The spread of modern education across India? Not so much. Improvements in agricultural productivity resulting from the creation of effective private property in land? Not at all. Overthrow of the caste system? Not at all. The overthrow of British colonialism, the restoration of self-government, and the creation of subcontinental political unity by virtue of a revolt by the British-trained army? They had come close, but only close, in1857.

The failure of the British Raj to transform India or perhaps to transform India faster poses an enormous problem for all of us economists. We are all, even the Marxists (back when there were Marxist economists), the intellectual children of the Adam Smith who wrote:

Little else is requisite to carry a state to the highest degree of opulence from the lowest barbarism, but peace, easy taxes, and a tolerable administration of justice: all the rest being brought about by the natural course of things...

Under the British Raj in the late nineteenth and early twentieth centuries India had a remarkable degree of internal and external peace, a tolerable administration of justice, and easy taxes. Yet no sign of progress "to the highest degree of opulence" had occurred

#### 6.1.3.2. Egypt

Muhammed Ali (1769-1849), an Albanian orphan, son of a shipping merchant Ibrahim Agha and his wife Zeynep, was bored being a tax collector in the Ottoman-ruled Greek port of Kavala. In 1801 he enlisted as a mercenary in the Ottoman army sent to occupy Egypt. By 1803 he commanded a regiment of his ethnically Albanian fellow-countrymen.

The Ottoman governor of Egypt could not afford to pay. He dismissed his Albanian troops. They mutinied, took over the government, and collected their pay. But Albanian commander Tahir Pasha then had no money to pay the Turkish janissaries.

Somehow Muhammed Ali wound up on top.

He retained the loyalty of his Albanians and managing to suppress both Turkish janissaries and Egyptain Mamluks. He then received at least the temporary blessing of Ottoman Sultan Selim III the Reformer (before he was deposed, imprisoned, and murdered by his own janissaries). Muhammed Ali looked northwest at Europe and east to India. He noted Egypt's role as crossroads between Africa and Asia, and between the Atlantic-Mediterranean Sea and the Red Sea-Indian Ocean. He ruled a prosperous kingdom—but he saw that Europeans might do to his or his children's kingdom what Europeans had done to prosperous kingdoms in India.

So Muhammed Ali strove to make Egypt great: new crops, land reform, a modern military, a focus on cotton as an export, and the construction of state-owned textile factories to jump-start Egyptian industry. He understood that unless he could keep the machines working, his great-grandchildren would become the puppets of French bankers and British proconsuls.

But in Egypt in the first half of the 1800s, the machines could not be kept working.

In 1863, six years before the completion of the Suez Canal, the relatively young Khedive Ismail took the throne of Egypt.

Ismail had been educated in France: he was open to European influences, eager to modernize his country, and eager to play the role of the open-handed Eastern ruler. He became ruler of Egypt in 1863, in the middle of the "cotton famine" created by the American Civil War and the consequent temporary disappearance of the U.S. South from the world's cotton supply. The consequence was a cotton boom everywhere else in the world: the factories of the industrial revolution needed cotton to run on, and they were willing to pay almost any price for it. Egypt grew cotton. And so for a few years it seemed as though Egypt's economic resources and wealth were growing rapidly and were inexhaustible.

In 1876 the Egyptian government declared bankruptcy,. The creditors of the Khedive became the rulers of the country. Ismail abdicated. Two financial controllers—one British, one French—were appointed with substantial control over taxes and expenditures. Their task was to make sure that Egypt was governed by Ismail's son to keep up revenue and pay off the debt. The Egyptians wondered why they were being highly-taxed to pay off debts run up by their extravagant ex-Khedive. British troops restored order in 1882. Thereafter the Khedive was a British puppet: the strategic importance of the Suez Canal for communications with India meant that British troops were to stay in Egypt on varying pretexts and for various reasons until 1956.

Muhammed Ali's great-grandchildren were indeed the puppets of French bankers and British proconsuls

#### 6.1.3.3. China

**6.1.3.3.1.** In the Shadow of Imperialism: Where the European proconsuls did not rule, the fact that they might do so at any moment was a dominant factor in politics. Consider imperial China, poor and disorganized in 1870: a country where the government and the economy were in crisis. The ethnically Manchu Qing Dynasty could not rally the country behind a slogan like "revere the emperor and resist the foreign barbarians" because the emperor and his relatives identified themselves as foreigners. Moreover, they were regarded by the Han elite as barbarians

Over more than two centuries of rule the Qing government of China had trained its Confucian landlord-bureaucrat-scholar aristocracy to be incapable of taking effective action. Effective action might be directed against the Central Government Security Perimeter (which is, perhaps, how we ought to translate what was back then translated as "Forbidden City").

Many western China specialists see and can almost touch an alternative history—one in which late-nineteenth century China stood up economically, politically, and organizationally. Japan, after all, won its short victorious war against Russia in 1905, negotiated as an equal with Britain and the U.S. over warship construction in 1921, and was perhaps the eighth industrial power in the world by 1929.

We economists are much more skeptical. We note that while things like the Qing Imperial Maritime Customs Service built up in the 1860s under Robert Hart, Hart allowed no Chinese officials in it primarily because he feared he would be unable to control their corruption, given the powerful protectors in the Qing imperial court such officials would acquire. We note the corrupt and incompetent bureaucracies that failed to manage the Yellow River dikes and the Grand Canal. We note that the Qing could not get their local officials to collect the salt tax. We note that when in the mid-1880s the Qing Dynasty, having bought foreign metal-working machinery and built a navy, arsenals, and docks, thought it was strong enough to oppose the French conquest of Vietnam its fleet was destroyed in an hour: the Chinese navy lost 572 dead, while the French lost five. In 1895 the Qing Dynasty thought it was strong enough to oppose the Japanese extension of their sphere of influence to Korea. It was wrong. The Treaty of Shimonoseki added Taiwan, Korea, and southern Manchuria to Japan's sphere of influence.

In 1929 China produced 20K tons of steel—less than two ounces per person per year. It produced 400K tons of iron—that's 1.6 pounds per person per year. It mined 27M tons of coal—that's 100 pounds per person per year. Compare this to America's 700 pounds of steel per capita in 1929 or 200 pounds in 1900, or to America's 8000 pounds of coal per capita in 1929 or 5000 pounds of coal per capita in 1900.

We economists do not find it satisfactory to attribute China's stagnation through the first decade of the 1900s to poor choice of ministers by the "Dragon Lady", the Dowager Empress Cixi.

**6.1.3.3.2.** The Kaiping Coal Mine: Consider the story of the Kaiping coal mine.

Li Hongzhang was the bureaucratic prime mover behind that and such other "self-strengthening efforts" as the 1878 cotton mills in Shanghai, the Tianjin arsenal, the telegraph between Tianjin and Peking, and more. Individual governors-general like Li Hongzhang who made economic development a top priority could make some things happen—elsewhere things did not happen outside of the foreign concessions and treaty ports like Qingdao, Tientsin, Shanghai, Guangdong, and Hong Kong.

In 1877 he commissioned experienced, wealthy, Hong Kong treaty-port comprador-merchant Tang Tingshu to build a modern, industrial, large-scale coal mine in Kaiping. They faced unusual forms of opposition. A British telegraph cable of 1882 stating that mining work had been stopped because Chi Shihchang, a vice-president of the Board of Civil Offices, had declared that: "mining methods angered the earth dragon... [and so] the late empress could not rest quietly in her grave..." Li Hongzhang was this given the choice between abandoning his project for a modern coal mine to fuel steam engines or accepting blame for any death or disease that might strike the imperial family. Given the size of the imperial family and mortality in the late nineteenth century, it would be a brave bureaucrat indeed who certify that there was no geomantic danger to the grave of the late empress from the earth dragon.

#### Li Hongzhang was brave.

Production began in 1881. By 1889, 3000 workers in three shifts were producing 700 tons of coal a day using steam lifts underground coal cars on rails, and pneumatic drills. By 1900, 9000 workers were producing 200 tons a coal a day, with average pay 6 per month and with at least some Chinese-born technical employees making 60. The miners were producing 1/4 of what was expected of miners in America or Australia.

But the rate of production was still only six pounds a year for every person in China. And there was still no railway to Tientsin. In 1888 a railway had been built down to Taku, but Chief Engineer Claude Kinder reported: "high officials who detested the railway... foster[ed] trouble with the junk people.... So great was the clamor... that the Viceroy... gave the order for the nearly completed bridge [over the Peiho River to Tientsin] to be destroyed, although hundreds of the largest junks had already safely passed through..."

#### **6.1.3.3.3.** Chang Yenmao: The mine was both a public governmental project and a

private capitalist enterprise. The mine director was both an employee of the company's Hong Kong shareholders and an official of the Qing administrative bureaucracy. Thus when mine director-general Tang Tingshu died in 1892 his replacement, Chang Yenmao, was neither a merchant nor an industrialist nor an engineer. Chang Yenmao was a political fixer for the Empress Dowager Cixi. By 1900 Chang Yenmao was perhaps the wealthiest men in Tientsin.

In 1901 Herbert Hoover took over the mine. He found that the 9000-worker payroll had been padded by 6000 names, and that the director of personnel doing the padding and collecting the wages had paid Chang Yenmao £10000—50,000—for the post. Under Chang Yenmao' the company paid £20000—100000 dollars—a year in dividends. Hoover was able to pay out £150,000—750,000 dollars—a year in dividends.

**6.1.3.3.4. And Herbert Hoover**: "Herbert Hoover took over"? you say. Yes. Herbert Hoover at the time was a 26 year-old expatriate mining engineer on the make. Herbert Hoover arrived in Tientsin in 1900 just in time to be besieged in the city by the Boxer—a better translation would be the "Fighters United for Justice"—Rebellion. Mine director-general Chang Yenmao had fled to inside Tientsin. He feared, rightly, that the Boxers would execute him as a corrupt puppet of the European. Inside Tientsin he found that the besieged Europeans wanted to execute him for passing intelligence to the Boxers.

Somehow Hoover got Chang released from prison. Somehow Chang gave Hoover a power of attorney to reincorporate the Kaiping mine as a British-flag enterprise in London ,controlled completely by Herbert Hoover as the representative on the spot of the London-based majority shareholders. The new company also had a Europeans-only club. The local British charge d'affaires on the spot was disgusted at how Hoover and company had: "made a pretty pile at the expense of the Chinese.... legally the Board of Directors were unassailable... but... morally they were in the wrong.... [Britain should not] give its countenance to a financial transaction which had fleeced Chinese shareholders... lined the pockets of an Anglo-Belgian gang..." And Chang Yenmao and his associates were "wild... [because] they thought themselves rather smarter... and got themselves fairly had by a Yankee man of straw..." named Herbert Hoover.

We can try to read Herbert Hoover's mind: Perhaps Herbert Hoover thought that the old shareholders should be grateful that Hoover and his partners had only charged them only 62.5% of the company because:

- The alternative was for the Russians to have confiscated the entire mine as war reparations, leaving old shareholders with zero.
- Chang Yenmao was a corrupt thief, untouchable because of his status in the Qing court. He was stealing from the company by padding the payroll with 6000 extra workers at \$50 a year. That's \$300,000 a year stolen. We got that back for the shareholders.
- Hoover would make the mine run productively and profitably. Chang Yenmao, neither a mining engineer nor a merchant, could not
- The old shareholders' 37.5% of the post-Hoover \$750,000 a year in dividends is about 270,000 dollars—that is nearly three times the 100,000 dollars a year in dividends the old company had paid: Hoover had thus nearly tripled the value of the old stockholders' shares.

In later days, depending on his mood, Herbert Hoover would either say that he had done the shareholders a great favor by taking the mine away from that thief Chang Yenmao, or that he had dealt straight with Chang Yenmao but had then been double-crossed by the Belgian financiers back in Europe. Either story on its own might have been credible. But the combination of the two was awkward.

**6.1.3.3.5. China's Descent**: The upshot was that what Li Hongzhang and his successor in the Qing government Yuan Shihkai had thought was a strategic imperial government enterprise was now the property of a British-Belgian investors' syndicate, with no interest in building China's engineering capacity or supporting its foreign policy strategy.

A social-economic structure that could not find and promote executives but instead replaced them with corrupt political fixers, a political-ritual culture that required that a modernizing governor focus his attention constantly on the enterprise and run interference to protect it from anti-modernizers, and an educational system that continued to turn out literati instead of engineers and thus required foreign technical personnel for everything—outside the charmed circles created by the extraterritorial foreign concessions, and to a slight degree the immediate span of control of the few modernizing governors, modern industries did not develop and modern technologies were simply not applied in late imperial China.

Visionary reforming politician Sun Yatsen had offered his services to Li Hongzhang in 1894, but Li sent him away. Sun Yatsen built up a financial and propaganda network among Chinese emigrants beyond the reach of the

government. Military politicians like Yuan Shihkai came to the conclusion that working with the Manchu court was useless. At the beginning of 1912 Sun Yatsen launched his rebellion, and the Qing dynasty fell. Yuan Shihkai and his peers refused to suppress the rebellion, and thought their chances would be better without the Manchu Dynasty.

The six-year-old emperor abdicated. The new Chinese republic's president turned out to be not Sun Yatsen military politician Yuan Shihkai. But Yuan Shihkai's authority over his peers and near peers—army commanders, provincial governors, and other would-be warlords—was nil.

China descended into near-anarchy.

We could tell many, many more stories of Europe's late-1800s empires and how the colonized and the nearly-colonized tried to respond. But we have no space. So leave it there, with three: One was formally annexed, with Queen Victory of the Hanoverian Dynasty taking the title *Kaiser-i-Hind*—"Caesar of India". (A title laid down only in 1947, to my knowledge the last time in history a ruler has called him or herself a "Caesar". The historical shadow of the Divine Julius was indeed long.) One was informally annexed, with a strong British garrison. And one was always under the hammer of European and Japanese threat.

#### 6.2. Informal Empire

The power gradient that generated the likelihood and ever-present threat of formal empires and the wealth gradient from the centralized location of modern industry in the North Atlantic meant that the start of the long 20th century would see a world in which those who were not formally colonized would nevertheless be dominated by informal empire—overwhelmingly a British informal empire. Again and again, others would find themselves in situations in which offers were being made to them that could not, realistically and prudently, be refused: under "hegemony".

Perhaps the offers could not be refused because the consequences of accepting them are so good.

Perhaps the offers could not be refused because the consequences of not accepting them are so bad.

Perhaps the bad consequences would be military, or political, or economic. Perhaps the bad consequences would simply be exclusion. As mid-1900s socialist economist Joan Robinson liked to say, the only thing worse than being exploited by the capitalists was not being exploited by the capitalists—being ignored, and placed outside the circuits of production and exchange.

Plus there is the question of: consequences for whom? For a ruling elite, for the country's current citizens, or for its current citizens' descendants?

#### **6.2.1. Economic Hegemony**

The hegemony exercised by the informal mode of the British Empire—and to a lesser extent of other European empires—in the first decades of the Long Twentieth Century had four important aspects: free trade, concentrated industry, free migration, and freedom of investment. These were the offers made that those outside of western Europe could not refuse. They agreed to play by the rules of the international economic game set by Britain for, broadly, three reasons:

- 1. Playing by those rules was what Britain was doing, and clearly-successful Britain was worth emulating. The hope was that adopting the policies of a successful economy would make your economy successful.
- 2. Trying to play by other rules—say, protecting your hand-made textile sector—was very expensive: Britain and company could supply commodity industrial goods cheap and could supply luxuries unattainable elsewhere. And Britain and company would pay handsomely for primary-product exports
- 3. Even if you—the government—sought to play by other rules, your span of control over what was going on in your country was very limited. And there was a great deal of money to be made by flouting your authority. Better not to fight the tide.

Playing by these rules had consequences for each of the four aspects.

The first aspect was globalization and free trade: the coming of the steamship and the railroad—and of the European gunboat and maxim gun that, if you were a peripheral economy, would make your trade free through threat or conquest will-you, nill-you. Steam-driven machinery provided a competitive advantage that handicrafts could not match, no matter how low were wages. And—Japan and isolated pockets of India apart—steam-driven machinery worked reliably only in the Global North. Thus manufacturing declined outside the industrial core, peripheral labor was shifted into agriculture and other primary products. And so the

global periphery was "underdeveloped": gaining in the short run from advantageous terms of trade, but unable to build communities of engineering practice that might provide a path to greater, industrial riches.

Second was, as noted, that the steam-driven machinery worked reliably and profitably only in the Global North. The "reliably" part required three things: a community of engineering practice, a literate labor force that could be trained up to use industrial technology, and sufficient economic depth to provide the maintenance, repair, and support services. As Robert Allen writes: "Industrial technology, however, was not cost-effective... [even though] wages were lower.... Asian producers either had to hope that the British would improve spinning machines sufficiently to make them cost-effective in Asia (which eventually did happen) or redesign the machines to adapt them to their own circumstances (which is what Japan did).... [Moreover], widespread literacy and numeracy have been necessary (if not sufficient) conditions for economic success..."

Third was, as noted, the largely-free migration (save for Asians seeking to migrate to temperate zone economies) pattern of the early years of the long twentieth century.

Free trade, free capital flows, and free migration made possible by Europe's informal imperial domination helped greatly enrich the world in the generations before World War I.

#### 6.2.2. Free Flows of Capital

The fourth was freedom of investment. You could lend to whoever you wished. You could borrow from whoever you wished. But, before World War I, it was understood that you would at least try to pay it back. Certainly those economies that received inflows of capital before World War I benefitted enormously *if they had the human, the skill, the capital, and the organizational resources to take advantage of them*. For the U.S., Canada, Australia, for Argentina, and perhaps for others like India, the availability of large amounts of capital—largely British-financed capital—to speed development of industry and infrastructure was a godsend. It allowed for earlier construction of railroads and other infrastructure. It allowed for the more rapid development of industry.

It is not so clear that the free flow of capital was beneficial to those in the capital-exporting countries. France subsidized the pre-World War I industrialization of Czarist Russia (and the pre-World War I luxury of the court and expansion of the

military) by making investments in Russian government and railroad bonds a test of one's French patriotism. A constant of French pre-World War I politics was that someday there would be another war with Germany, during which France would conquer and re- annex the provinces of Alsace and Lorraine that Germany had annexed as part of the settlement of the Franco-Prussian War of 1870-71. (And that France had taken from the feeble and oddly-named Holy Roman Empire of the German Nation as part of the settlements of the Thirty Years' War of 1618-48 and the Wars of Louis XIV of 1667-1715.) French military strategy depended on a large, active, allied Russian army in Poland threatening Berlin and forcing Germany to divide its armies while the French marched to the Rhine. Hence boosting the power of the Czar by buying Russian bonds became a test of French patriotism.

But after World War I there was no Czar ruling from Moscow. There was Lenin ruling from Petrograd—subsequently renamed Leningrad—subsequently returned to its original name of St. Petersburg. And Lenin had no interest at all in repaying creditors from whom money had been borrowed by the Czar.

#### 6.2.3. Emulation

In addition to setting out the framework within which other countries' governments and economies had to operate, there was one additional important facet of informal empire: the western Europeans—above all Britain—provided to the rest of the world an example to emulate. British institutions and practices appeared to be—had been—stunningly successful. Whatever they had done was worth emulating, at least on a trial basis, whether it was wearing business suits and dressing for dinner, translating Latin verse in school, establishing strong property rights, or investing in railroads and ports. Most of the institutional-practical package was of substantial use elsewhere in the world. But some was not. And many governments and economies were to find themselves, after World War I, wrestling with institutional practices that seemed to fit their circumstances in the mid- and late-1900s much worse than they had fit British circumstances in the mid-1800s.

#### 6.3. Meiji Japan

Only one non-European place in the world before 1913 managed to deal with the imperialists, prosper, industrialize, and join them: Japan. Japan alone managed to fight the current of informal empire, and to do something other than sit in its

assigned peripheral place.

#### 6.3.1. The Tokugawa

In the early seventeenth century *daimyo* warrior prince Tokugawa Ieyasu petitioned the—secluded—Priest-Emperor to grant him the title of Shogun, the Priest-Emperor's viceroy in all civil and military matters. His son Hidetaka and grandson Iemitsu consolidated the new régime. From its capital, Edo—later renamed, now called Tokyo—the Tokugawa Shogunate ruled Japan for two and a half centuries.

At its very start the Tokugawa Shogunate took a look to the south, at the Philippines. Only a century before, the Philippines had been independent kingdoms. Then the Europeans landed. Merchants had been followed by missionaries. Converts had proved an effective base of popular support for European influence. Missionaries had been followed by soldiers. And by 1600 Spain ruled the Philippines.

The Tokugawa Shogunate was confident that it could control its potential rivals and subjects in Japan. It was not confident that it could resist the technology, military, and religious power of the Europeans. The country was closed: trade restricted to a very small number of ships allowed access to the port of Nagasaki only, Japanese subjects returning from abroad were executed, foreigners discovered outside of their restricted zone were executed, and Christianity was suppressed. The Tokugawa Shoguns did adopt one more foreign practice: crucifixion—which they saw as a fitting punishment for those who refused to abjure the foreign religion of Christianity.

As of 1868 Kyoto, Osaka, and Tokyo together had 2 million people: one in six of the population was truly urban. Half of adult men were literate: there were more than 600 bookshops in Tokyo. Literacy and urbanization laid the groundwork for technological competence. Robert Allen tells the story of the Lord of Nagasaki, Nabeshima Naomasa, and his cannon foundry. His workers acquired and then translated a Dutch description of a foundry in Leyden, and set out to copy it: "In 1850, they succeeded in building a reverberatory furnace, and three years later were casting cannon. In 1854, the Nagasaki group imported state-of-the-art, breech-loading Armstrong guns from Britain and manufactured copies. By 1868, Japan had eleven furnaces casting iron…"

#### 6.3.2. The Meiji Restoration

The Tokugawa era came to an end with the Meiji Restoration in 1868.

Theoretically the Priest-Emperor resumed the direct rule that his ancestors had turned over to the first Shoguns more than a thousand years before—hence "restoration":

The Emperor of Japan announces... that permission has been granted to the Shōgun Tokugawa Yoshinobu to return the governing power in accordance with his own request. We shall henceforward exercise supreme authority in all the internal and external affairs of the country. Consequently, the title of Emperor must be substituted for that of Taikun, in which the treaties have been made. Officers are being appointed by us to the conduct of foreign affairs. It is desirable that the representatives of the treaty powers recognize this announcement...

Rule was grasped by a shifting coalition of notables—most prominently at first the "Meiji Six": Mori Arinori, Ōkubo Toshimichi, Saigō Takamori, Itō Hirobumi, Yamagata Aritomo, and Kido Takayoshi—interested in absorbing European technology while maintaining Japanese civilization and independence: "western learning with Japanese spirit" in the interest of creating a "rich country with a strong army."

There followed the rapid adoption of western organization: prefects, bureaucratic jobs, newspapers, language standardization on Tokyo samurai dialect, an education ministry, compulsory school attendance, military conscription, railways built by the government, the abolition of internal customs barriers to a national market, fixed-length hours of the day, and the Gregorian calendar were all in place by 1873. Representative local government was in place by 1879. A bicameral parliament (with a newly-created peerage) and a constitutional monarchy were in place by 1889. By 1890 80% of school-age children were at least enrolled.

#### 6.3.3. Itō Hirobumi

Li Hongzhang in China had been one of the few able to swim against the institutional and cultural tide to push modernization and industrialization forward. In Japan there were many who successfully did swim with the tide. One of the "Meiji Six" was the man who, adopted, became Itō Hirobumi. In 1863 the Choshu clan elders decided that they desperately needed to learn more about European organization and technology, and so—illegally—smuggled five or their promising young potential students out of Japan to travel to and study in Europe.

Itō Hirobumi worked 130 days as a deckhand on the sailing ship Pegasus before arriving in England, where he then studied at University College in London. He cut short his studies after only six months however, and returned to Choshu to argue stridently against a policy of confrontation: Japan was too weak, and the organizational and technological gap too large. That he would, at the age of 22, deviate from the plan imposed on him by Choshu and return to argue against Choshu Domain policy tells us something: about how important he thought the issue was, about how confident he was of his place, and about how well-regarded he was by the Choshu clan and its elders.

1870 found him in the United States studying money and banking. Early 1871 found him back in Japan writing the regulations for the commutation of feudal dues and their replacement by a general system of national taxation. Late 1871 finds him embarking on the two-year round the world Iwakura Mission. 1873 found him Minister of Industry, tasked with reverse engineering as much European technology as possible and with building telegraph lines, street lights, textile mills, railroads, shipyards, lighthouses, mines, steel foundries, glassworks, the Imperial College of Engineering, and more. 1881 found him muscling his contemporary Ōkuma Shigenobu out of the government and becoming the informal prime minister of Japan. 1885 saw him become he first formal prime minister of Japan under a constitution he had written based on the 1850 Prussian model

1895 saw him launch the First Sino-Japanese War. With 11 European-built and two Japanese-build major warships, and with an army trained by Prussian Major Jakob Meckel, the war was short. The major Chinese base and fort of Dalian in Shandong —Port Arthur—fell to a frontal Japanese assault in one day. Korea and Taiwan were grabbed as Japanese protectorates.

Japan allied with Britain, seeking the role of Britain's viceroy in the North Pacific, in 1902. Disputes with Russia over spheres of influence in Manchuria led to the Russo-Japanese War in 1905. The Japanese were eager to escalate to test their armed forces; the Russians were eager to escalate as well, Czarist ministers believing that a "short victorious war" would solidify support for the Czar. The Japanese won decisively, bringing Manchuria into their sphere of influence.

In 1909 Itō Hirobumi was assassinated by Korean nationalist An Jung-geun. The response was formal annexation of Korea in 1910.

## 6.3.4. Could Others Have Followed the Japanese Road Back Then?

Economic historian Robert Allen believes that those economies that successfully developed industrial societies before 1900 focused government power on creating four and only four institutional prerequisites: railways and ports, education, banks, and a shielding tariff on those industries where you could see from the richer countries your future comparative advantage would lie—if you could get there.

Meiji Japan was prohibited by unequal treaties from imposing tariffs on imports greater than 5%. Bu the government was willing to substitute. The government did not so much "pick winners" as recognize winners—successfl exporters—and subsidize them. When the Ministry of Industry established Japan's railway and telegraph systems, it also established its school to train Japanese engineers as fast as it could, and it relied as much as possible on domestic suppliers. Meiji Japan did not have large-scale banks. But it did have some very wealthy and open merchant clans willing to move into industry: Mitsui, Mitsubishi, Sumitomo, Yasuda.

In these substitutes for the missing parts of the "Standard Model" of early industrialization, the "strong army" part of the slogan was more important than the "rich country" part. Meiji military politicians were focused on preparing the logistical tail to defend Japan and conquer an empire in the age of steel and steam. As Kozo Yamamura writes: "In the early 1880s, when the cotton textile industry had yet to make its presence felt… arsenals, shipyards, and their satellite plants together employed about 10,000 workers…"

The establishment, using imported machinery, of state-owned mines and factories could have been a disaster. But the Japanese government quickly swerved away, privatizing industrial establishments to businesses that had demonstrated managerial competence in the 1880s. However, structural change was low. Manufacturing was still only one-fifth of GDP in 1910. Japan in the decade of the 1900s was only a semi-industrial civilization. And it was a low-wage semi-industrial civilization. Consider female textile workers, the "birds in a cage" with 12-hour workdays and only two days off each month, bound to their mills for three- to five-year indentures.

Japan had, however, accomplished something unique: transferring enough industrial technology outside of the charmed circles of the North Atlantic and the temperate-climate European settler economies.

#### 6.4. Empire and War

Empires, formal and informal, both accelerated and retarded economic growth and development. But the business of empire was not economic development. The business of empire was... empire.

The conservative view was that empires were ordained by God—or at least morally required or desirable, for European powers had a civilizing mission. Let us give the mic to Rudyard Kipling:

Take up the White Man's burden—Send forth the best ye breed—Go send your sons to exile
To serve your captives' need
To wait in heavy harness
On fluttered folk and wild—
Your new-caught, sullen peoples/
Half devil and half child...

In short: the Europeans were lucky enough to be the grownups, and it was the obligation of the grownups to civilize the world. Those being civilized might not like it: "sullen", "captives". Those being civilized were definitely not your equals: "half devil", "half-child", "fluttered", "wild". It was not a fun thing to do: "exile", "heavy harness". But still, for some reason, you needed to do it.

But perhaps civilization is best spread by newspapers and books and merchants and engineers, rather than by alien proconsuls? Just a thought.

The enlightened liberal belief in the early 1900s was that this made little sense, The enlightened liberal belief was that the then-existing empires were little but confidence games, and on their last legs.

Austrian economist Joseph Schumpeter thought the people were being conned—diverted to cheering for victories so that they do not notice that the landlord-aristocratic political-deference power structure makes no rational sense. Joseph Schumpeter thought the landlord-aristocrats were being conned too: sent to die of dysentery, wound-caused infection, or shot and shell when they could, instead, be happily drinking cappucinos with whipped cream at the Cafe Central at Herrengasse 14 in Vienna.

Imperialism was thus the last gasp of military status aristocracy. Sir Whatsit and Lord Whoever and Colonel Whichway were like today's professional athletes. Empire served as the equivalent of a sports team, winning victories—as in the immense Mafeking Night party in Britain when good news about the progress of British arms in the South African Boer War arrived. The military aristocracy loved to play, and the people loved to watch.

Schumpeter hated this. And he thought that it was on the way out—that as people became richer and more prosperous, the bourgeois virtues would win out, and the drive for empire will die. Schumpeter expected the con to end, and a peaceful, less aristocratic, less imperial, less bloodthirsty twentieth century.

He was wrong.

British activist John Hobson thought it was a con. He thought that having the government spend money and spend it putting people to work building weapons and then using the weapons to conquer colonies that could be forced to buy exports was a greatly suboptimal way of avoiding mass unemployment.

Hobson saw empire not as an attempt to plunder but as an attempt to sell, and also to produce. Hobson saw the major economic problem as the business cycle, caused by the maldistribution of income, that causes mass unemployment. A government needs to keep its people working and prosperous and happy. In this empire serves two goals: Equipping the military needed to maintain the empire puts people to work. And an empire is a good source of consumers for the products of domestic factories. European governments that pursued empire, Hobson thought, were less likely to face economic distress and so more likely to continue in office. The solution to empire, Hobson thought, would be more equality at home: then there would be smaller business cycles, less unemployment, and no need for empire.

And, Hobson thought, a pro-democratic pro-equality political shift was coming, and in its aftermath war and empire would lose their purpose. So he too expected a peaceful, more egalitarian, more democratic, less imperial, less bloodthirsty twentieth century.

He too was wrong.

British public intellectual Norman Angell thought that empire and war—except perhaps for wars of national liberation to give peoples self-government—were already completely pointless and obsolete. The idea that war could be in any sense

rational or that there would be major twentieth-century wars was a Great Illusion. And surely governments could not be so inept or so shortsighted not to realize that, could they?

He too was wrong.

The same forces that propelled European powers to empire would also propel them to destructive industrial war, and in 1914 turn Europe into truly a dark continent. For the history of the long 20th century took a very sharp turn—a turn that appeared to negate all the progress in world civilization since 1870 and before and all the hopes built open them, with the start of World War I in 1914.