Thursday, April 22nd

Why Europe and not India?

Last time we considered China

- Recall how last time we observed that China was relatively advanced technologically and organizationally in the centuries between 1000 and 1500.
- A Martian descending to earth would presumably have picked this large, technologically advanced economy as a more plausible candidate for modern economic growth over a small, windswept island off the northeast coast of the European continent.

- If there was an obstacle to China gathering the momentum needed to break out of the traditional economy and move to modern industrial growth, I argued, it was inadequate government support for the development and operation of the market.
  - To be sure, written contracts were ubiquitous.
  - But these tended to be enforced privately, not by government-created courts.
    - Merchants associations were used to resolve contract disputes, but they were an imperfect substitute for rule of law imposed by government.
- Administrators were thin on the ground.
- And the government had a voracious appetite for revenues, often for conspicuous consumption, leading to arbitrary and often confiscatory taxation.

- Eric Jones, recall, argues that Europe's state system, grounded in its geography, provided just the right mix of competition and cooperation.
- Competition disciplined policy: a state had to foster a stable economic environment or risk losing its valued workers and entrepreneurs to its neighbors. There was also a productive "biodiversity" of state systems.
- At the same time these states were able to cooperate in extremis (for example, to fend off external threats from, inter alia, the Ottoman Empire).
- In China, in contrast, geography was conducive to centralized government (fewer sheltered river valleys, fewer high mountains to provide protection, more severe problems of drought and flood control, need for a great wall as protection against Mongol invaders).
- Hence, when the Mings or Qings adopted a mistaken policy (closing the economy to foreign trade or investment), there was nothing to force them to recognize their mistake. There was no threat of a "talent exodus" to force a course correction and no neighboring government to threaten to take power from them.

In addition, China suffered:

- Deindustrialization as Europe pushed ahead and flooded its market with cheap manufactures.
- Incursions and disruptions by foreign powers, especially in the 19^{th} and early 20^{th} centuries.

Can similar arguments be made for India?

- Yes, one can make similar arguments about the difficulties created by 19^{th} century deindustrialization.
  - Yes, one can argue that foreign disruptions and colonial control had corrosive effects on the prospects for economic development.
  - With some difficulty, perhaps, one can argue that even before the period of British colonial control there was inadequate state support for economic activity, as in China.

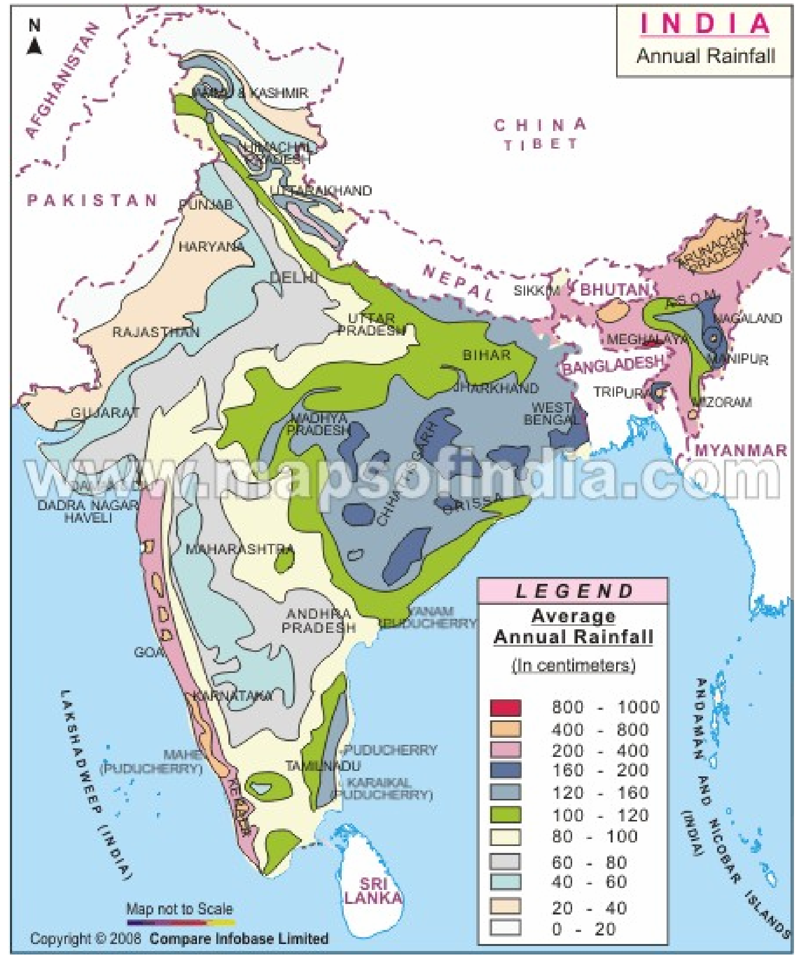
Like China, India did not obviously lack the critical prerequisites for economic growth

- Hindu and Muhgal India had banks that provided credit for trade and other activities.
- The economy was monetized; there was widespread use of silver coinage.
- There was an active class of traders.
- There was a shipbuilding, and exports were carried long distances.
- There was a large artisanal class (spinners, weavers, metal workers).

- So it was not obvious that India lacked these prerequisites for industrialization.

So why might government support have been inadequate?

- The problem was not excessive centralization, as in China. India, like Europe – and unlike China – was decentralized. It was split into a large number of separate states (lots of “small medieval kingdoms”).
- But there was little competition for resources and talent.
- These nuclear areas were separated by wide belts of desert, hills or jungle.
- These areas were impossible to subdue – they were characterized by the absence of a state.
- (One thinks of the “Badlands” of North Dakota or the border between Afganistan and Pakistan today…).
- In addition, a paucity of navigable rivers, compared to both Europe and China, made internal communication and movement difficult.
- So the different nuclear areas were isolated.
- Their governments didn’t have to compete for skilled workers.



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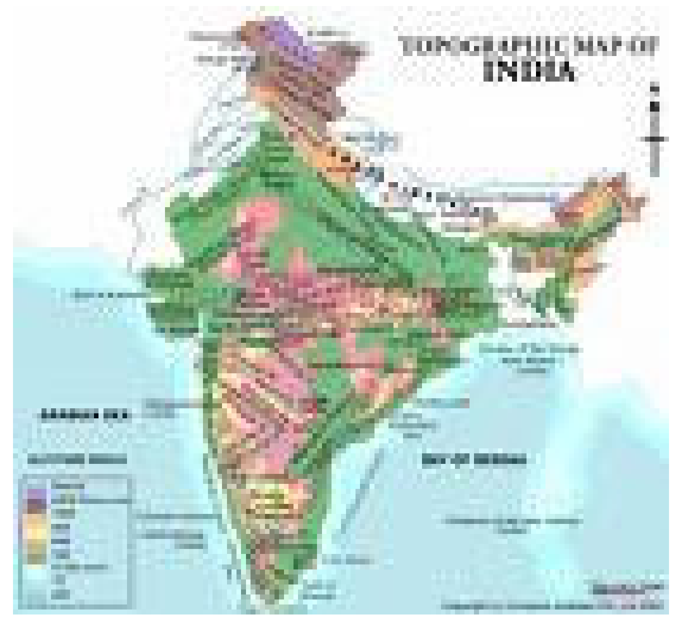

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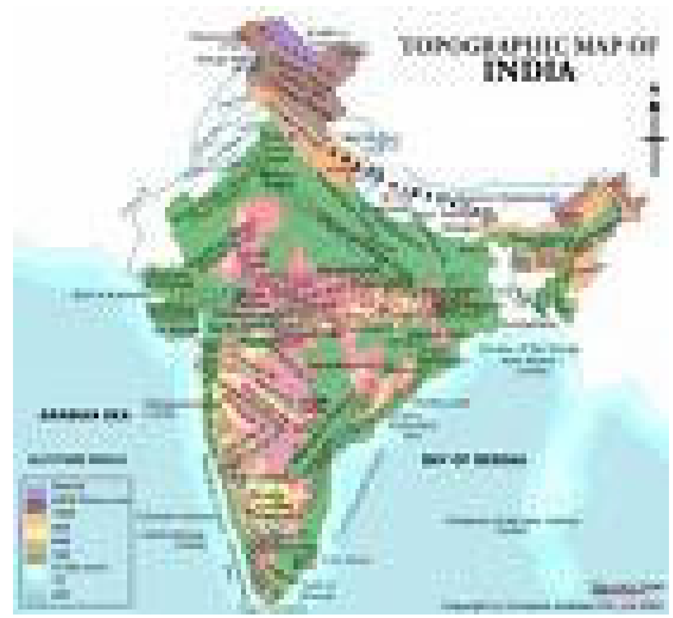


- Moreover, these nucleated states – even more isolated than in Europe – were unable to cooperate in resisting outside threats, such as the Mughals, who invaded through the country's Northwest passes and gained control of much of the subcontinent (it's nuclear areas, anyway) in the 16th century.
  - "Muhgal is the Persian word for Mongol and is generally used to refer to the Central Asians who claimed descent from the Mongol warriors of Genghis Khan."
- The Mughals had superior military technology (they had trained and bred horses more successfully and hence had a more mobile cavalry; later they also had effective field artillery). The Mughals were an important imperial power between the 16th and 19th century and at their height around 1700 controlled much of the Indian subcontinent.
  - Contrast this with Europe's success at resisting the incursions of the Ottoman Empire (the Ottomans reached Vienna at one point but no further).
- This led after 1700 to a more centralized state under the Great Mughal Emperor, but still a state with little inclination or capacity to provide reliable contract enforcement, secure property rights etc.
  - Post 1700 India thus resembled China in this respect.

- The result was undisciplined government heavy on conspicuous consumption.
- As Eric Jones writes in *The European Miracle*:
  - "Mughal and native princes luxuriated in castles and water gardens, harems, magnificent wardrobes, vast menageries, warfare as sport. [a famous example of this ostentation is at right]…they had absolute uninvolvement with production. An oppressed peasantry did all the work…The owners of property declined to as much as clean their ditches or repair their houses for fear of confiscation."
- A famous example of this ostentation is at right.

- Contemporary estimates suggested that as much as 10 per cent of the population worked for princes simply extracting resources from the peasantry. (And *we* complain about the IRS!)
- There was no written legal code, no system of contract enforcement.
- There were no constitutional checks, a la England, on the rapaciousness of the ruler.
- Almost nothing was spent on providing infrastructure.
  - The few public irrigation projects that were undertaken affected only perhaps 5 per cent of the land.
  - And even many of these had fallen into decay and disuse when the British took power in the 19th century.
- Taxation was known as "eating" – Governors were "eaters of provinces."

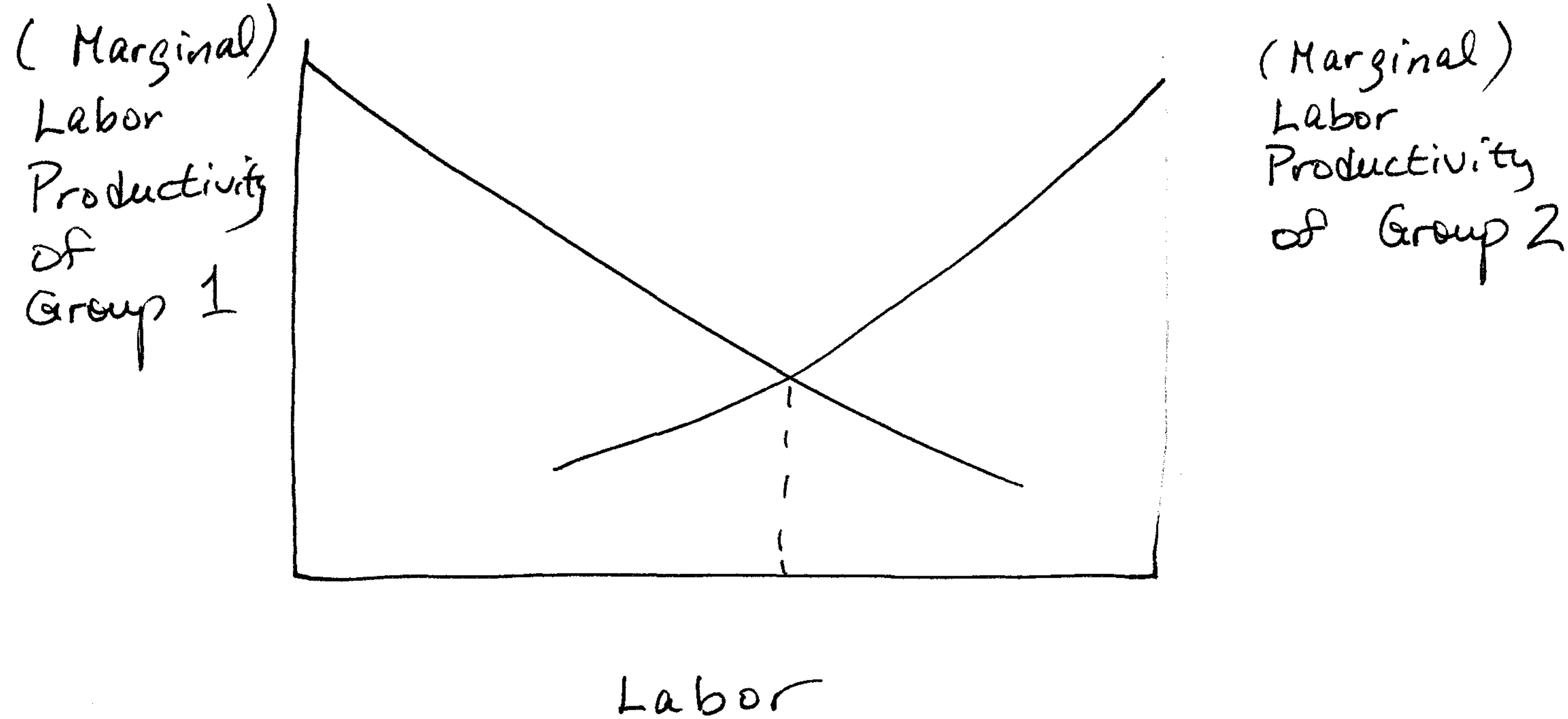
And then there was the caste system

- A set of conventions derived from the sacred Hindu scriptures that categorized people in Indian society based heavily on their occupation.
- Established occupational communities based on hereditary status and limited mobility between them.
- Simple economic analysis suggests that the caste system is an obstacle to economic growth.
- It was enforced by all sorts of arbitrary restrictions: for example, untouchables were not permitted to build brick houses for themselves.
- Artisans and craftsmen couldn’t become merchants, utilizing the expertise they had gained as producers to trade, because there were separate trading castes.
- There were endless arbitrary restrictions of this sort.

- In both Europe and China, we have seen, social mobility was an important contributor to economic dynamism.
- It was part of what provided incentives.
- People who worked hard and figured out how to build a better mousetrap could move up the economic and social scale.
- People who failed to do so were threatened with moving down.
- There was limited scope for this under the caste system.
- The upper castes were protected from competition from the lower castes.
- The lower castes faced a glass ceiling.

- More generally, it prevented labor from moving between tasks.
- So-called untouchables who did undesirable, unsanitary tasks were prevented from moving into other activities (and vice versa).
- A simple economic analysis would suggest that this is inefficient
  - Of course, the caste system was fluid to some degree.
  - What were sanitary and unsanitary tasks, for example, underwent gradual redefinition in response to changing circumstances.
  - But these changes took time – often generations – allowing inefficiencies to persist.

Here’s a labor market without restrictions on mobility



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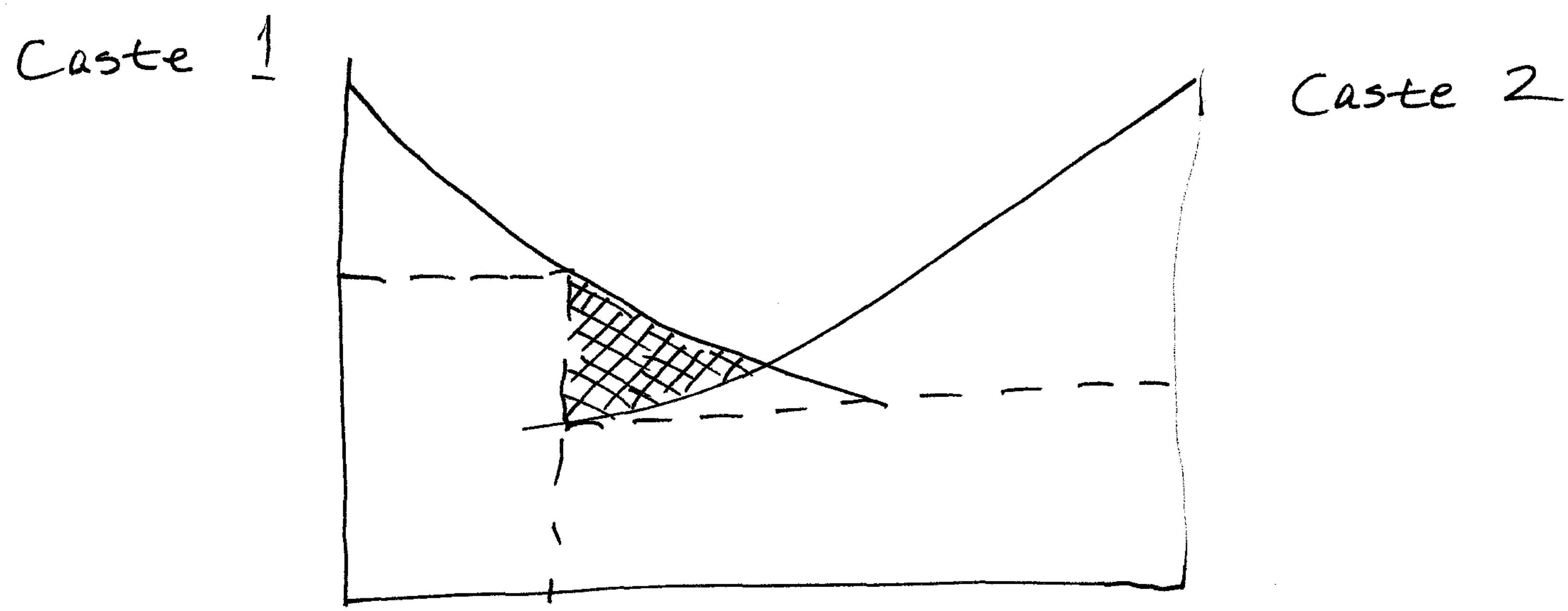


Finally there was the impact of British colonial rule

- The British East India Company was established in 1600. A private company, it obtained and fortified outposts along the Bengal coast. It employed a private militia (an efficient infantry) to defend its property andinterests.
- The company went to war against the Grand Mughal in 1686 to get more land, but was defeated.
- But the Mughals were in decline, and the East India Company, while small, evolved into a highly efficient bureaucracy.
- In 1765, the Great Mughal took offense at new British fortifications at Calcutta and bombarded them. The company's private army counterattacked and defeated him. The East India company thus gained control of Bengal and its tax revenues in the settlement.
- The company acquired various other territories. Those bits and pieces that it couldn't control or that were not attractive economically remained princely states under the control of various Mughal and non-Mughal rulers..
- The British East India Company and various local rulers thus effectively shared control before 1857 (with the Mughals in decline), and the British dethroning the last Mughal emperor and taking formal colonial control in response to a "mutiny" of Indian soldiers in 1857.
  - Map of "British India" at right.

The British impact was mixed

- The British unified what had previously been a fragmented economy, which presumably enhanced efficiency.
- They built a relatively extensive railway network linking the different regions of the country.
- They did so using non-Indian capital; thus, British control, which eliminated *sovereign risk*, gave India free access to foreign finance, which it utilized extensively for infrastructure development.
- They imported British administrators and modern administrative methods.
- They imported British machinery (locomotives for the railways).
- They imported British managers to run those railways (and other businesses).

  – All these things were arguably positives from the viewpoint of economic development.

- In the short run, however, their policies deindustrialized India.
- There had been a modest, small-scale textile industry before.
- Now, under British control, all tariff barriers on textile imports were eliminated.
- And Indian handicraft producers could not compete with the “high tech” producers of Lancashire.
- (Note that this was in contrast to the United States, France, and Germany, all of which retained tariff autonomy and all of which used tariffs to protect and foster their infant textile industries.)

- Where all over Europe (and in the U.S.) the share of the labor force engaged in industry rose in the course of the 19th century, in India historians estimate that it fell from 15 to 10 per cent.
- (The British conducted censuses in 1881 and 1911, and historians then engaged in our now-familiar technique of back projection.)
- This was much like the impact of machinery on the handloom weavers (Luddites) in Britain.
- Machine production took root only to a very limited extent.
  - Perhaps for the reasons enumerated above.
  - Perhaps for other reasons pointed to by Clark.

In addition, one can detect other lingering effects of British rule

- Trade with the British East India Company had ultimately led to former British colonialism (in 1857).
- This link led India’s first generation of post-Independence leaders after 1948 to be hostile to international trade, encouraging them to adopt policies that economists believed held back the growth of the country for two generations.
  - We will return to this next week.
- Similarly, the British colonial system of land taxation had long-lived effects on Indian development (where the British made large landlords responsible for collecting taxes – something they did only in certain provinces – a greater concentration of wealth developed. In those regions agricultural investment and productivity is lower even today, more than half a century after independence (and after the disappearance of this system of tax administration).

  - Strong historical path dependence…

Conclusion

- So we have argued – for China, for India, and for other parts of the world – that the Great Divergence was fueled, in part, by a combination of Western technology and imperialism.
- The technological breakthroughs of the first Industrial Revolution created a productivity advantage for the West with which other regions could not compete.
- A critical mass of mechanized production in one place rendered European industry many times more productive than Asian industry, as Clark documents.
- (Transportation and communication costs were not yet so low that it was equally economical to fragment production further and “outsource” parts of the production process to other parts of the world.
- And this imbalance in productive capacity led to an imbalance in political power.
- The result was formal colonial conquest (India) or informal empire (China).
- India and China thus lacked the autonomy to shut out foreign competition and protect themselves from industrialization.

- This argument is straightforward enough.
- But it is quite incompatible with the modern conventional wisdom.
  - It is incompatible with the “Washington Consensus.”
  - It is incompatible with the advice that the multilaterals give developing countries today.
- Indeed, there is deep skepticism not just among the “experts” but also in developing countries themselves about protection (“import substitution”) as a development strategy.
- Why?

Answer:

- Because it has often failed where tried (Latin America after World War II, Africa after independence).
- Because it is seen, in consequence of this experience, as an engine of corruption/rent seeking.
- Because protection in and of itself is not enough to promote economic growth.

- And yet:
  - Protection against British exports ("import substitution") was widely used by the successful industrializers in the 18th and 19th centuries:
    - Germany (Friedrich List)
    - France (before the Cobden-Chevalier treaty of 1860)
    - United States (advocated by Alexander Hamilton)

      - In effect, the experts are telling developing countries today: don't do as we did, do as we say.

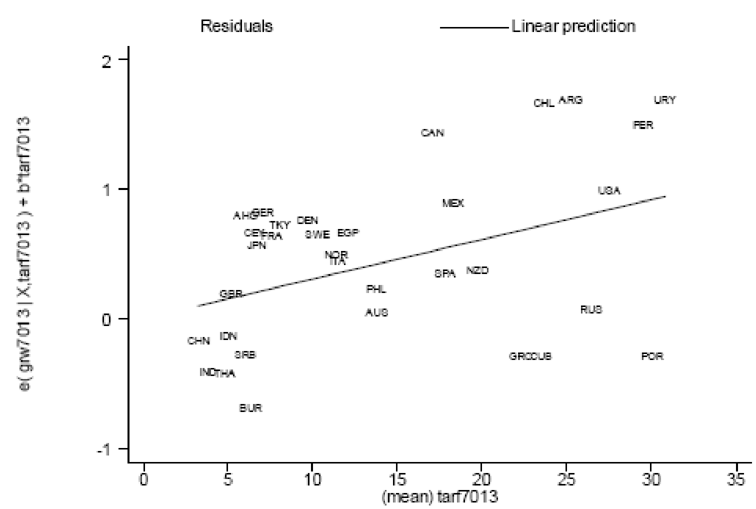
Business Seeks Aid from the Nation

A cartoon from Harper's in May 1894 depicting representatives from "infant industries" lining up on the steps of the U.S. Congress. Note the tinplate representative at the far left.

This strategy seemed to work when applied in the 19th century

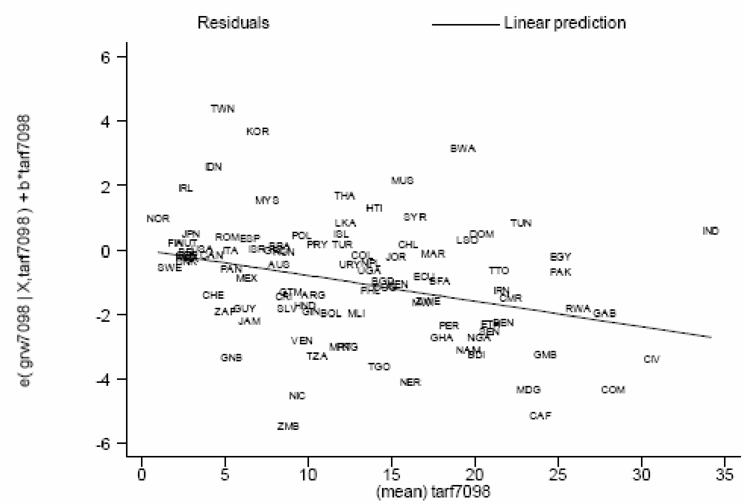
- We can see this if we juxtapose countries' tariff levels with their rates of economic growth between 1870 and 1913….
- Notice who some of these low-income countries are: countries lacking tariff autonomy (China, India, Egypt) and early industrializers (Britain).

Figure 4. The partial residual scatterplot of Table 1, column 1.



- In the 20th century, in contrast, tariff protection as a development strategy seems to have worked less successfully.

Figure 5. The partial residual scatterplot of Table 1, column 6.



So why was a strategy that was successful before 1913 unsuccessful after 1970?

- Ideas?

So why was a strategy that was successful before 1913 unsuccessful after 1970?

- Obvious candidate explanations include:
  - Prior development
  - Domestic market size
  - Capture
  - Absence of other prerequisites for growth

First answer: prior development

- The idea is that you protect your cotton textile industry (or steel industry, or engineering industry, or whatever) from import competition to give it space to acquire, assimilate (learn to productively utilize) technology imported from abroad.
- But the other prerequisites for successful acquisition and assimilation (a numerate and literate labor force, an adequate population of ‘tinkerers,” secure property rights) have to be in place for this to work.
- Otherwise, all you do is to shut out imports, inflate the domestic cost of living, and weaken the chill winds of competition without succeeding in promoting economic development.

Prior development may also be needed for policy autonomy

- Maybe import substitution simply requires enough prior development for an economy to be able to maintain its political and policy autonomy.
- France, Germany and the U.S. were rich and powerful enough in the 19th century to maintain their policy autonomy. They became no one's colonies.
- Britain acquired formal colonial control of India and forced open its market.
- The western powers, through the Opium Wars, forced open China's market.
- Thus, import substitution was not a political option for these countries.
- So prior development matters for convergence.
- But it matters for reasons emphasized by political scientists, not economists: because it has implications for political and policy autonomy.

Prior development may also matter for market size

- Maybe import substitution requires a large domestic market.
- Otherwise you cannot reap the relevant *agglomeration economies* even if you shut out imports.
- (Notice that the countries that pursued ISI successfully in the 19th century – France, Germany and the U.S. – had relatively large domestic markets.)
- Thus, the strategy is more difficult to pursue in small countries.

- This may be a way of understanding why it was that economies like South Korea, Taiwan, Singapore and Hong Kong (which came to be known as the *Newly Industrializing Economies of Southeast Asia*, or NIEs) opted – successfully – for *export promotion* starting in the 1960s.
- Rather than using tariffs to attempt to grow industries that competed with imports – which proved to be a losing battle – they used export subsidies, cheap credit and other government interventions to grow industries that competed with the rich countries' exports to third markets (and to rich-country markets themselves).
- With a big world market out there, it was possible to reap scale and agglomeration economies even if the domestic market was small (as it remained for some time).

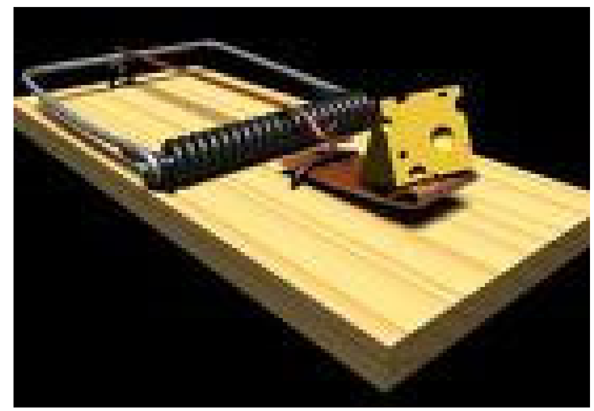
- This is also what China has done since the 1980s (when, given low living standards, its own home market was small).
- And China's strategy of export-led growth has clearly produced favorable results.
    - It is now argued that this strategy has other corollary advantages.
    - It makes it easy to monitor performance of firms receiving preferential treatment.
    - Effectiveness of government intervention is thereby enhanced.

- But this strategy would work only in a favorable global environment.
- The country adopting this strategy has to be able to export.
- There has to be an open and liberal global trade regime.
- In the late 19th and early 20th centuries, Europe and the United States – economies that had already embarked on modern economic growth, maintained high tariffs, as we have seen.
- The sheltered their markets from imports from competitors.
- Poor countries seeking to pursue strategies of export-led growth consequently lacked the market access in the high-income world to do so successfully.

- This has changed since WWII with the *General Agreement on Tariffs and Trade (GATT)* and now the *World Trade Organization (WTO)*.
- Why?
  - Precisely because the United States and its allies were concerned to promote economic development in the Third World to foster alliance building (to keep developing countries out of the Communist bloc).
  - (Is there similar pressure now, or has the geopolitical incentive for the high-income economies to maintain open markets receded?)
- Note that many contributors to the debate over development assistance to poor countries today similarly argue that the best thing the high-income world can do for the developing world is to open its markets (for, inter alia, agricultural goods and textiles).
- This is the “trade rather than aid” school.

Second answer: capture

- Maybe policies of import substitution are more susceptible to “capture” today.
- The idea is that *infant-industry protection* should be temporary (until the “infant” grows up).
- But once protective tariffs are imposed, their retention is strongly advocated by the beneficiaries (think of “temporary” tax cuts in the United States).
- Tariffs were supposed to protect users of modern machinery (until they got up and running), not producers of modern machinery.
- It would be perverse to tax imports of modern technology.
- But actual and potential producers of capital goods can lobby for protection too.
- This was not such a problem in the 19th century, when extent of the franchise was limited, but it has been a serious problem in many developing countries more recently.
- You see the consequences in countries like Argentina, where it is the products of industries using sophisticated (imported) capital equipment that enjoy tariff protection but the sophisticated capital equipment itself that sees its price elevated by import restraints



The deep question, then, is why some countries manage to put them in place but not others

- This is where we will pick up next time…