Colonial Industrialisation, 1840s-1960s

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Dependency theorists suggest that the law of comparative advantage is a confidence trick, perpetrated and enforced by 'core' countries to prevent 'peripheral' countries from industrialising. Leaving aside the fetishisation of manufacturing implicit in this approach, this paper seeks to demonstrate that there was more industrial growth than is generally realised in the age of high imperialism, even in areas under formal colonial rule. Industrialisation is defined as the application of non-human energy and the factory system to the production of goods.

The impact of modern colonial policies was mixed, mainly positive to 1914, and mainly negative thereafter. As long as free trade predominated, the tropical world benefited from a roughly level playing field, with the additional advantage that security costs were met in large part by metropolitan taxpayers. A neo-mercantilist cycle followed from 1914. Protectionism was eroded after 1945, but only gradually, leaving today's world less free trading and globalised than it was in 1914.

The periodisation adopted here runs directly counter to the one that is generally accepted. The 'normal' story is one of muscular free trade sweeping away existing 'industries', that is artisanal handicrafts, and preventing modern ones from emerging. The later phases of imperialism are credited with some timid progress, albeit too little too late. It is argued here that this traditional way of looking at the problem stems from an obsessive and unwarranted attention given to the production of consumer goods for the internal market. When one embraces a wider view of manufacturing, the period before 1914 emerges in a much more favourable light.

The nature of colonial manufacturing

Discussions usually rush headlong into a consideration of cotton textiles, whereas the heart of colonial industry actually consisted of an early form of Export Substitution Industrialisation (ESI). This was a matter of adding value to agricultural and mineral products prior to export. The scale of the process has been obscured by sloppy statistical aggregation, not to say manipulation, for example by failing to distinguish between ores and refined metals. Export categories which appear to reveal an unchanging concentration on raw materials often conceal steadily rising value added, achieved through modern manufacturing techniques.

These processing industries respected economic realities in poor countries. In terms of relative factor endowments, they relied as much as possible on cheap raw materials, land, water and energy. Conversely, they minimised inputs of expensive capital and technology. Labour too was expensive, contrary to a tenacious myth, as low productivity more than outweighed low remuneration. This problem was most acute at the skilled end of the range, reinforcing the bias towards appropriate technology and low capital intensity. Nevertheless, such industries were able to benefit from economies of scale, as they exported either to a large empire or to the whole world. They also saved on crucial shipping costs by reducing bulk, sometimes dramatically, as with ores converted to semi-refined metals, logs sawn into planks, or groundnuts (peanuts) reduced to oil.

ESI contributed to a wider growth of manufacturing, notably in the form of Import Substitution Industrialisation (ISI) of intermediate goods. Bulky products benefited from natural protection, and simple ones were easily made from local raw materials. Cement and planks underpinned construction, sacks helped to move many agricultural goods, and rails and sleepers were essential for the 'iron horse.' In the case of small Southeast Asian and African countries in particular, manufacturers often developed a regional export market for such intermediate goods.

ISI for consumer goods usually kicked in later, concentrating mainly on clothing and food. The most successful industries were either technologically elementary, as with soap, or enjoyed a huge margin of natural protection, as with beer, particularly costly to transport in relation to its intrinsic value. Problems arose, however, when manufacturers garnered rents of political origin, notably protectionist tariffs and quotas. These led to industries that were poorly located geographically, and tended to adopt an unsustainable mix of factors of production, notably by exaggerating their recourse to capital and skilled labour. Typically, they were not competitive on local or regional markets, even after the 'infant industry' phase.

Light engineering ultimately gave rise to the most advanced forms of manufacturing. Repair and maintenance workshops sprang up to cater to the needs of plantations, export-import firms, manufacturing for both internal and external markets, construction, transport, irrigation, energy, and the armed forces. Railways tended to overshadow other consumers, until the rise of the internal-combustion engine. The latter also stimulated a new activity, the assembling of imported knock-down kits, especially for cars, buses and lorries. Over time, however, engineering firms began to manufacture components, with occasional backward linkages to iron foundries, as in India.

Generally speaking, however, heavy industry was conspicuous by its absence. Some therefore claim that colonialism only promoted a weak and 'dependent' form of industrialisation, which left countries locked into the world market in an position of inferiority. Whether heavy industry was ever an economic 'necessity' is a dubious proposition, however, and one closely related to a more general fetishisation of manufacturing. Wherever the state was in a position to interfere to obtain iron and steel plants, or chemical complexes, the results left much to be desired, as in Japan or Australia.

The positive impact of modern colonialism to 1914

Free trade was achieved in Britain by the end of the 1840s, and even Spain and Russia were to some degree sucked into this brave new world by the 1870s, with the United States trailing along behind. The net effect of these favourable conditions was not to strangle manufacturing at birth in the colonies, as Dependency Theory would have it, but to stimulate a process of industrialisation centred on export substitution and the service sector.

As prices of transport and Western consumer manufactures fell much faster than those of tropical raw materials, which actually rose substantially from the 1840s to the 1870s, terms of trade favoured not only raw materials exports, but also the adding of value to such exports through ESI. Technology transfers were no longer subject to protectionism, and second-hand machinery was cheap. A world currency was also achieved by the 1870s, lowering the costs and risks associated with both trade and investment. Specialised trade exchanges emerged, allowing for hedging through futures contracts.

Another much neglected contribution of colonialism was peace and associated investment and migration. Conquest was achieved quickly in most cases, through a spectacular demonstration of overwhelming might, as the military technological gap between 'the West and the rest' reached its peak. This had the advantage of destroying little of the existing economic infrastructure, and securing order for several decades. In turn, this favoured investment in expensive, risky and lumpy fixed capital assets. Peace simultaneously stimulated labour migration, notably from China and India, lowering costs dramatically in some cases.

It is often forgotten that workers were not the only ones to move in this period of unprecedented mobility. There was also explosive growth in the migration of specialised business communities, who played a vital role in early manufacturing. Among the most significant for the rise of industry were Chinese from the southeast, Japanese, Tamil Chettiars and Muslims, Gujaratis and Sindis of many origins, Baghdadi Jews, Hadhrami and 'Syrian' Arabs, Armenians, Greeks, Corsicans, Catalans, Basques, Minhotos, Scots, and Lithuanian Jews. These varied diasporas brought capital, entrepreneurship, a knowledge of markets, and skilled labour. They were generally much better at fomenting manufacturing than large firms established in colonial metropoles.

Even consumer goods ISI might benefit in this benign environment, notably the Indian cotton textile industry, despite some breaches of free trading principles engineered by Lancashire manufacturers. Mainly Indian owned and financed, Gujarati cotton mills not only contained cloth imports to a low proportion of the internal Indian market, but also largely eased British yarn out of Indian Ocean and China Sea markets.

The negative impact of modern colonialism since 1914

The First World War ripped this effective world economy apart, with consequences that are still felt to this day. Neither the movement of peoples, nor the system of world payments, have yet recovered from this cataclysmic event. Nowhere did neo-mercantilist protectionism become more acute than in the colonial sphere, for interest groups were able shamefully to exploit the lack of political representation of colonised peoples.

Trade unions in metropolitan countries were probably the lobby most opposed to colonial industries. Workers sought to guarantee jobs at home, as structural unemployment became the norm. This form of 'working class imperialism' has hardly been studied at all, and yet it would repay further study. One example was the opening of a tin smelter in Aarnhem in the 1930s, taking away jobs from Southeast Asia. Sugar refining in Liverpool, rather than in the Caribbean, was another example.

Metropolitan manufacturers were divided over colonial industrialisation. Those in inefficient and declining sectors were more likely to seek to keep sheltered colonial markets, and to prevent colonial manufactures from penetrating metropolitan markets. In contrast, entrepreneurs in dynamic sectors were often keen to set up branches or subsidiaries in the colonies. One group of French manufacturers even dreamed of turning Vietnam into a 'new Japan'.

Among local lobbies pressing for colonial factories, White settlers were probably the earliest and most successful. Wherever there was a danger of 'Poor Whites' endangering the racial stratification of colonial society, notably in the 1920s and 1930s, demands reached a crescendo. However, this gave rise to particularly inefficient industries, as in South Africa, where the colour bar added further to shoddy working practices.

Nationalist movements, steadily becoming more influential, also wanted industrialisation. Unfortunately, many leaders saw it essentially as a matter of pride, a badge of development and equality with the First and Second Worlds. As socialists became more influential, manufacturing also came to be seen as the key to creating a class structure that they believed would act in their favour.

Conversely, colonial officials feared the social and political consequences of proletarianisation and urbanisation, especially after the unexpected Bolshevik triumph in 1917. However, only the Fascist regime of Salazar in Portugal actually banned colonial industrialisation, and that prohibition was so full of loopholes that it was breached almost before the ink had had time to dry on the document. However, colonial manufactures were at times excluded from metropolitan markets.

Many other colonial policies indirectly hindered expansion. Measures were taken to keep peasants on the land, for example by protecting them from expropriation through debt. This choked off the flow of labour to towns, and the resulting rural stagnation restricted spending power. Officials sought rigidly balanced budgets and low or non-existent public debt, limiting the supply of services in transport, health and education, and further depressing demand. The authorities also hampered the activities of expatriate entrepreneurial minorities, often citing negative stereotypes modelled on anti-Semitism.

Colonial governments after 1914 tended to overvalue exchange rates, as the gold standard evaporated never to return. This was both to avoid inflation, and to secure the value of remittances and metropolitan investments. An overvalued rupee was probably the single most important reason that India lost her substantial export markets for cotton yarn to Japanese rivals.

Although colonial officials remained uninterested, even hostile to consumer goods ISI per se, they did react to short-term crises, such as upsurges in unemployment. They sought to prevent inflation due to a lack of basic products, caused by shipping shortages, or by falling export revenues with which to buy imports. The worry was that riots or worse would break out, the kiss of death for a promising colonial career. The downside was that the cost of living was raised over the longer term, pushing up wage costs and worsening the trap of expensive Third World labour.

Protection was also unplanned and incoherent. There were few connections between industrial sectors, especially between small and large industries. Moreover, a 'beggar my neighbour' attitude developed in individual colonies or empires. Thus, the excessive protection of Indian sugar in the 1930s both hindered the modernisation of local industry, and drove many highly capitalised Javanese factories to bankruptcy. The industrial sectors which emerged were thus poorly integrated, dependent on the crutches of state aid, and quite uncompetitive in exporting.

Conclusion

Even if colonial manufacturing grew considerably less than it might have done, many lessons can be learned from the successes and failures of this unduly neglected story. All too often, independent countries have either drifted along in a kind of path dependency, or stubbornly reinvented the wheel. A good example of the former trajectory is India's intensification of the fumbling British industrial protection of the 1930s, rather than reverting to the more successful free trade period before 1914.

Contrasting and evolving styles of colonial policy remain to be properly assessed. Democratic and liberal imperialists went through cycles of attitudes to industrialisation, which need to be better researched. Fascist and Communist imperialists, another legacy of 1914, were prone to foster colonial industry, with 1930s Japan in the forefront. This may have been related to the ability of such regimes to repress Trade Unions, despite varying claims to 'socialism.'

Ignoring the growth of colonial manufacturing makes it harder to understand disasters after independence. De-industrialisation, in countries as diverse as North Korea, Burma and the Congo, has frequently been ignored, or attributed to neo-colonial conspiracies, whereas inept policies and poor governance were to blame. There is particularly striking contrast between the 'appropriate technology' of most colonial ventures, and economically debilitating 'white elephants' that proliferated after independence.

Where industrialisation has surged ahead, especially in parts of East and Southeast Asia, it has often been built on earlier colonial successes. Unfortunately, however, there is a politically motivated reluctance to acknowledge this fact, perhaps most pronounced in the former Japanese colonies of South Korea and Taiwan. Similarly, many of Singapore's current problems spring from unduly statist policies, contrasting with the free trade and laissez-faire colonial environment in

Raffles' ideal city, which left the field open to great Chinese, Indian, Arab, Armenian, Jewish and Scottish entrepreneurial dynasties.

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