

De-Industrialization and Underdevelopment: A Comparative Assessment of U.P. (1900-1920)

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In one of the latest workshop at Harvard on Economic History in December 2004 the issues of de-industrialization in Indian Economy during colonial era was debated at length. Few authors measured the issue on new scales that de-industrialization and underdevelopment are two separate issues. This argument rests on the thesis that most of the de-industrialization historiography has been written by nationalists, and they have been quick to point to European productivity advance, world transport revolutions and lack of tariff autonomy as the de-industrial villains. Perhaps, but the transport revolutions didn't have the same impact everywhere, demand conditions for the periphery's key commodity exports weren't the same everywhere, and the local supply side environments weren't the same everywhere. The second shortcoming of the de-industrialization literature is that when it is quantitative, it relies almost entirely on output and employment evidence, while it rarely exploits price and wage data.

The historiography of Indian de-industrialization under British rule owes its longevity both to the powerful images of skilled artisans thrown back on the soil and to the possibility that it offers an explanation for persistent Indian poverty. The first official report of Indian de-industrialization seems to have come from Sir William Bentinck, Governor-General of India from 1833 to 1835, who's powerful and enduring image of the effect of British mill cloth on the Indian cotton industry was quoted by Karl Marx in *Das Kapital*: "The misery hardly finds a parallel in the history of commerce. The bones of the cotton-weavers are bleaching the plains of India" (1977[1867], vol. 1: 558). Conventional wisdom attributes India's de-industrialization to Britain's productivity gains in textiles and a world transport revolution. Improved British productivity, first in cottage production and then in factory goods, led to a declining world textile price and made production in India increasingly noncompetitive (Roy 2002). These forces were reinforced by declining sea freight rates which served to foster trade and specialization for both Britain and India. As a result, Britain first won over India's export market and eventually took over its domestic market as well. This explanation for de-industrialization was a potent weapon in the critique of colonial rule, which often notes that Britain kept tariffs in India low and thereby exposed Indian handloom producers fully to declining prices (Dutt 1906/1960, Nehru 1947).

But conventional de-industrialization literature tends to ignore another possible explanation for India's economic malaise, namely, the 18th century collapse of the Mughal Empire, which caused severe supply side problems for Indian manufacturing. Given that India's colonial historiography was forged in the crucible of nationalist politics, it is not surprising that it looks to British productivity advance, transport revolutions, and tariff policy to explain Indian de-industrialization and ignores the

De-Industrialization and Underdevelopment: A Comparative Assessment of U.P. (1900-1920)

Dr. Nidhi Chaturvedi

role played by the decline of the Mughals.¹

How do we define de-industrialization? The authors like David Clinging Smith and Jefferey G Williamson argue on three factor model useful to develop some initial intuition, be expanded. Suppose an economy produces two commodities: agricultural goods, which are exported, and manufactured goods, which are imported. Suppose it uses three factors of production: labor, which is mobile between the two sectors; land, which is used only in agriculture; and capital, which is used only in manufacturing. Further suppose that this economy is what trade economists call a "small country" that takes its terms of trade as exogenous, dictated by world markets. Given these assumptions, deindustrialization can be defined as the movement of labor out of manufacturing and in to agriculture, either measured in absolute numbers (call it weak de-industrialization), or as a share of total employment (call it strong de-industrialization). While de-industrialization is easy enough to define in this simple 2x3 model, an assessment of its short and long run impact on living standards and GDP growth is more contentious and hinges on the root causes of de-industrialization.

What are the likely causes of de-industrialization? One possible cause is that a country deindustrializes because its comparative advantage in the agricultural export sector has been strengthened by, first, productivity advance on the land, or, second, by increasing openness in the world economy, or both. In the first case, and still retaining the small country assumption, nothing happens to the terms of trade. However, if the small country assumption is violated, then the country suffers a terms of trade deterioration, in that it has to share part of the productivity increase in the agricultural export sector with its trading partners. In the second case, the country enjoys an unambiguous terms of trade improvement as declining world trade barriers raise export prices and lower import prices in every home market. Whether real wages also increase depends on the direction of the terms of trade change and whether the agricultural good dominates workers' budgets. Whether GDP increases in the long run depends on whether industry generates accumulation and productivity externalities that agriculture does not. If industrialization is a carrier of growth-as most growth theories imply then de-industrialization could lead to a growth slowdown and low- income equilibrium. The second possible cause is that a country de industrializes due to deterioration in home manufacturing productivity and/or competitiveness. In this case, and still retaining the small country assumption, nothing happens to the terms of trade, but real wages and living standards will deteriorate, and so will GDP. The economic impact of de-industrialization from this source is unambiguous. The third possible cause is that, external price shocks induced by events in world markets lower the relative price of manufactures. Such favorable terms of trade shocks clearly raise the primary- product-exporting country's GDP in the short run. Whether it also raises it in the long run depends on its de-industrialization impact.

In order to make this theoretical framework flexible enough to handle these three potential causes of de-industrialization, one have to replace two-sector thinking with three-sector thinking by adding a non tradable grain sector. The three sectors considered are: agricultural commodity exports, which are tradable on world markets and include industrial intermediates such as raw cotton and jute, plus exotic consumer goods such as opium and tea; manufactures, which are primarily textiles and metal products and are also tradable; and grains, which are non-tradable and include rice, wheat

De-Industrialization and Underdevelopment: A Comparative Assessment of U.P. (1900-1920)

Dr. Nidhi Chaturvedi

and other food staples.

What follows is a brief review of existing attempts to measure India's de-industrialization, followed by a theoretical narrative that accounts for it. A simple Ricardian general equilibrium model of de-industrialization is then presented to formalize our predictions about relative prices. Having done so, we will explore: three price series commodity agricultural exports (p_C), manufactured textiles (p_T) and non-tradable grains (p_G); three intrasectoral terms of trade series p_C/p_T , p_C/p_G and p_T/p_G ; three wage series the grain wage, the own-wage in the import competing sector, and the own-wage in the export sector; and the external terms of trade. This evidence is then compared with the theoretical narrative.

Furthermore, the relative price experience of India is compared with its main competitor, England. Part 1 concludes by comparing India's de-industrializing terms-of-trade shocks with those from other parts of the periphery.² However, Our narrative account of India's de-industrialization owes much to Joseph Inikori and Irfan Habib. It embraces the three contending de-industrialization hypotheses in the literature, and traces the roots of de-industrialization well back into the 18th century. They begin with the decline of the Mughal empire, which stretched over a long period. The most popular de-industrialization hypotheses being considered here is the one associated with what economists now call globalization shocks. Jawaharlal Nehru's classic *Discovery of India* argued that India became progressively ruralized in the 19th century owing to the destruction of artisan employment in the face of British factory-made goods. Furthermore, he thought that the appalling poverty of the Indian people was of recent origin and that it could be blamed on anti-industrial colonial policy. Similar arguments can be found in the work of pioneering Indian economic historian R. C. Dutt and others. The economic logic underlying this hypothesis is that rapid productivity advance in European manufacturing lowered the relative price of textiles, metal products and other manufactures in world markets. After the French Wars, British factory-made yarn and cloth took away India's local market from her own producers, and India experienced de-industrialization over the half century following 1810 as the terms of trade moved in its favor. This relative price movement is illustrated best by trends in Britain's terms of trade which fell by 40 percent over the four decades between 1801-1810 Indian de-industrialization between 1750 and 1913 forms three distinct epochs. The first epoch, approximately 1750- 1810, was one during which India lost its significant share of world textile markets to Britain. What was an important export sector in India at the beginning of the epoch became an important import-competing sector at the end. While that result can be explained by increasing cost competitiveness favoring Britain, superior factory technology was not yet the main force at work. Instead, it looks like it was the demise of the Mughal empire that mattered most, a force which lowered agricultural productivity in India, raised grain prices there, and thus in a relatively stable real wage subsistence economy-pushed up nominal wages economy wide. Hence, the own-wage rose in both tradable sectors, damaging cost competitiveness in both textiles and commodity production.⁴ Textiles would experience weak de-industrialization. To the extent that the price of textiles relative to commodities fell, the effect of reduced agricultural productivity would have fallen more heavily on textiles than commodities, leading to strong de-Industrialization.

The second epoch, approximately 1810-1860, was one during which India lost much of its

De-Industrialization and Underdevelopment: A Comparative Assessment of U.P. (1900-1920)

Dr. Nidhi Chaturvedi

domestic textile market to Britain. This result can be explained by the combined influence of relatively rapid factory-based productivity advance in Britain and by increased world market integration, the latter driven by declining transport costs between the two trading partners, and by a free trade commitment (although as the colony, India had little choice in the matter). The effects of the demise of the Mughal empire were pretty much only a memory, and the induced decline in Indian grain productivity had about ceased.

After about 1860, a third epoch evolved during which the rate of de-industrialization slowed down and eventually turned around to become re-industrialization. This result could be explained by a slow down in the rate of unbalanced productivity advance favoring European manufacturing, in a slow down in the growth in the derived demand for intermediates, in the cessation in the decline in sea borne freight rates, or in rising protection in the core. The terms of trade no longer moved in India's favor and thus no longer served to penalize import competing manufacturing. Furthermore, it was argued that, Indian historians may complain the most about their contribution to de-industrialization, but domestic supply side conditions must have played a far more important role in accounting for de-industrialization there than elsewhere. Furthermore, it can hardly be a coincidence that re-industrialization started in much of the periphery after the 1860s when the secular rise in their terms of trade slowed down, stopped, and then fell. There is plenty of evidence of manufacturing booms after the 1860s. Of course, Japan was land and resource scarce, and exported labor-intensive manufactures after it opened up. Thus, the massive post-1858 price shock served to stimulate industrialization, not suppress it.

II

Judging by the above argument of the scholarly view one has to restart the argument that till the inception of First World War the English government followed the policy of free trade in India. According to Morris D Morris the British officials basically adopted a non active policy in context to Indian industries on the contrary they also do not agree to the fact that due to English policies the industrial growth of India was hampered². Vera Anstey also holds the same opinion that the meaning of inactivity on the part of government of India cannot be termed as a factor to hold back India's industrial development.⁴ However, on the contrary it can well be argued on the basis of facts that the British government was far from neutral but dishonest to the extent of protecting the British interests this fact can be augmented from the statement of Helen Lamb, "The British completely destroyed the Indian industry with the object of making India a dumping ground for British goods and only encouraged agriculture as a sustainable means of Indian economy."⁵ Bipan Chandra holds the view that the English government never supported industrialization due to fear of loss to British capital.⁶

Whatever industrial development started in India was from the beginning of the twentieth century and this is credited to the policies of Lord Curzon. It was he who for the first time sincerely took to the policy of science and technology as a basic pre-requisite for any sort of industrial development. As per the issue of industries was concerned, it was urged in 1880 by the Famine Commission that there is a strict need to lessen the burden on agriculture which can only be done by shifting the agrarian load to industry. But till 1922 the Government of India was unable to form a

concrete policy in respect to Indian industries. In 1905 the department of commerce and industry was established with the purpose to organize and develop the Indian industry He in fact was the first viceroy who brought the agenda of industrialization as one of the basic features of official policy⁶. Due to his efforts the commerce and industrial department started functioning in March 1905 under Sir J.P. Hewett.⁷ Curzon was in favour of inviting English capital for Indian industrial growth but powerful nationalist opinion was against this. During the same time Indian industrilist J.R.D.Tata proposed for an industrial research institute but the same could not come into existence till 1911.

The vital question of technical education, which provides sound basis for industries, also remained unsettled in the beginning of the twentieth century. In 1903 the Provincial Governments were not very responsive on the query from Center regarding allocation of certain budget for technical education. This led to a belief that demand for technical education in India was not on high priority.⁸ However, most notable measure for commerce and trade was taken by Curzon in the form of uniform boundary tariffs and the noteworthy progress was made only in the Province of Madras in the field of Industrialization.⁹

There was no encouraging departure on the question of protection to native industries during Lord Minto's time. Though Minto was basically in favour of limited protection to Indian industries not bec's of nationalist demand only, but he believed that for smooth growth a Canadian model of tariff protection is must for India. He also argued that Curzon's policy of non protection was an unpractical approach to any kind of industrial development in India which already was in its infancy.¹⁰ However, Secretary of State for India was not in favour of Minto's Proposals thus he opposed tariff protection. During the same time the Swadeshi fervor and demands in Legislative Assembly were in total favour of protection.

Start of the First World War once again led to the discussions on the issue of Industrialization. In 1915 the Government of India asked for the permission to form a Commission for industries in India. In 1916 such Commission was set up in 1916 under the chairmanship of Sir Thomas Holland with a purpose to work out future agenda for India's industrial growth.¹¹ The Commission urged for protection to industries and for the first time Indian Cotton textile and Sugar were major beneficiaries of the new protective policy. During the war a special War Board looked after the industries and the same was incorporated into Industries Directorate in 1920. Further same body was converted into Board of Industries and Munitions in 1921.¹² Hence it is necessary to understand that till the end of First World War there was no independent body in India to look after the issue of industries which is sufficient to negate the argument of any de theory in context to Indian industries.

III

The Government of India Act 1919 transferred the issue of Industries to the provinces. Due to the inception of this policy, industrial program support policy, technical education and other related issues were now under transferred subject of the province. This could be termed as a turning point for the positive development of industries at provincial level and only after this measure a clear

picture of industrial development emerges in the province of U.P. But one should have no confusion on one important issue that till 1922 the Government of India did not had any clear laid down policy for the 'industrial development in India', to which province of U.P. was no exception. In 1907 for the first time decision was taken for extensive survey of the province to work out suitability for industries. An Indian ICS officer A.C. Chatterjee was deputed for the purpose. On the basis of his recommendations further outline was drawn up at a conference in Nainatal.¹³

For detail industrial program a conference was a industrial conference was organized at Nainital from 19 August, 1907 to 31 August, 1907 by Sir John Hewett. The resolutions passed at Nainital can be grouped into three folds. In the first, a demand for separate portfolio holder for industries in U.P. with a first hand technical and geographical know how. An immediate need was put forth for those industries in the province which were totally absent. For this everyone was convinced that Government must provide direct help for such industries.¹⁴ Secondly, an immediate need for technical and vocal education was felt unranimously. Thus, a need for technical institute was put forth strongly. However, such technical institute could come up only in 1920 at Kanpur. Thirdly, handicrafts were considered as non machine industry so it was not taken up as a serious industry.¹⁵

These resolutions were sent to the Government of India for considerations. Most of the resolutions were accepted by different departments but the finance department raised objections due to which the Government did not gave clearance to policy adopted at Nainital.¹⁶

After this disaster, during the First World War, few individual English officers of the province tried to gave support to the industries in the province. But these efforts were not under a banner of some concrete policy. Thus, it never provided an opportunity to attract capital.

On 20 August, 1917 the British Government came out with a declaration on the directive principles of industries and commercial interests and for its experiment U.P. was chosen as an experimentation ground.¹⁷ It was now laid down that the Provincial Government can support any industry with a prior approval of the Viceroy. But still there was no clear directives on the principles of any policy. As per the basic need for a separate department for industries was concerned, it was established in 1910 and W.R. Wilson was its first Director. A Board for industries in U.P. was established in 1914 and the same was reconstituted in 1918.¹⁸ However, due to absence of any clarity in vision no substantive growth can be recorded.

How the clarity of vision, will, policy and above all the positive attitude hampered the growth of industry in U.P. can be judged from a brief account of industrial scenario in U.P. during the first two decades of twentieth century. Kanpur was the chief hub of activity in terms of modern industry. To fulfill the needs of Army leather industry was first to develop here. This was followed by textile and Elgin Mill was the first modern textile mill of the province followed by Muir Mills. Thus, by 1900 Kanpur was the only town in U.P. to boast of some industries.¹⁹ Later on Tannery and Textile developed in Agra. Interestingly the Indian capital was invested in cotton textile at Hathras. Kanpur and Agra witnessed the growth through foreign capital where as Hathras, Muradabad and Lucknow industries had major capital invested by Indians. In the twentieth century next important industry in the province was Sugar industry. But this too developed on support of foreign support. As a result of

the First World War Indian capital investment can be witnessed in the province. In the seventh provincial conference of U.P. Industrialists, held at Fyzaid in 1914, a United Provinces Chamber of Commerce was established. Rai Bahadur Narayan Bhargawa was chosen as its first Chairman.²⁰ After this voices were raised for protection and end of discrimination as well as inflow of local capital started. This capital investment was most prominent in Sugar Mills but only after 1920.

In the province of U.P. most organized sector was in the form of textile industry. This too was centralized at Kanpur, where the Indian capital was minimum. For example in the whole province there were fifteen modern textile mills with a capital of Rs. 17,27,25,000/. Majority of this capital was invested in Kanpur, and that was foreign capital. In the Kanpur textile business Indian capital started flowing only after 1918. Other major industry to come up in the province was Sugar Mill. By 1921 there were sixteen Sugar Mills in the province with a working force of 3,348 workers, but the real impetus occurred after 1920. Rest then this the only two other major factories could be witnessed in the form of Tannery and Paper mills, but the later could not compete the foreign inflow.

It is believed that industrial development is based on three factors- impetus occurred after 1920. Rest then this the only two other major factories could be witnessed in the form of Tannery and Paper mills, but the later could not compete the foreign inflow. it is believed that industrial development is based on three factors- capital, industriousness and technical know how. There are various school of thoughts regarding the priority of each. The nationalists are of the opinion that native capital was not encouraged due to government's policies and on the contrary the Colonial Government attracted foreign capitalists not the foreign capital, for the benefit of whom?²¹ If one presumes that nationalist argument is biased and foreign capitalist invested for the good of India's industry then it is interesting to find out the nature of foreign investment in Indian. industry. According to Sir John Pische, by 1909, the British capital invested in India and Srilanka was 3660 lakh pounds. Out of which 268 lakh pounds was invested in industry and commerce. Out of this 268 lakh pounds 242 lakh pounds was invested in Estates and rest 26 lakh pounds in commerce and industry. This shows the real picture of industrial investment in India.²² As per the issue of 'will' is concerned, it is obvious that any region in its infancy would like to have a support policy to stand on its feet's, which was not there till the end of the First World War and this 'protection' measure was the most raised affair since 1900.

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Notes and References

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De-Industrialization and Underdevelopment: A Comparative Assessment of U.P. (1900-1920)

Dr. Nidhi Chaturvedi

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16. See, Speech of Lord Minto to the Asiatic Society London, 17 may, 1911. of. Rider, T.D. "The Tariff Policy of Government of India and its Development Strategies-1894-1924 (Unpublished Thesis) p.10
17. Resolution No.3403 "Commerce and Industry", 19 May 1915. cf. Rider, *op.cit* p102.
18. Rider, *op.cit.* pp.255-256.
19. Government of India, Home (Education-A) Feb. 1907
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21. For details of Nainital Resolutions, See- GOI, Home (Education -A)
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