Industrialization, input duties and revenue concerns in Nepal

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Paras Kharel*

Abstract

This paper seeks to contribute to the discourse on industrialization in Nepal. It shows that it would be premature to write off manufacturing-powered industrialization. It emphasizes that the debate over whether protecting domestic industry from import competition as part of an industrialization strategy works or not is far from settled. It discusses Nepal's muddled input-tariff policy for exports, and examines whether there are valid revenue loss concerns behind the anti-export bias of the tariff policy. While existing research on Nepal suggests revenue loss is not significant if tariff elimination is targeted at inputs used by a few key export products, the paper suggests further extensions and lines of inquiry, taking into account alternative scenarios. Finally, it highlights some questions, trade-offs and issues in tariff setting for the Government of Nepal to ponder.

Key words: Manufacturing, structural transformation, infant industry, liberalization, deindustrialization, industrial policy, trade policy, tariff, revenue loss

JEL classification: F130, L520, L600.

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1. Introduction

Industrialization eludes Nepal, even though this has been an aspiration formalized into periodic development plans and multiple industrial policies over the last 65 years.\(^1\) Figure 1 depicts the evolution of the share of manufacturing value added in GDP, which peaked around 9 percent during 1996-2001 before falling secularly to reach 5 percent in 2019, a feature that some would consider to be symptomatic of "premature deindustrialization".\(^2\) The country's export performance is also extremely poor, with exports of goods and services as a percentage of GDP on a downward trend, falling from a peak of 26 percent in 1997 to 8.7 percent in 2019 (Figure 1). The ever-surging trade deficit prompted the Government of Nepal (GoN) in the first quarter of 2019 to unveil an action plan for reducing the trade deficit.

Figure 1. Manufacturing and export performance of Nepal

![Graph showing manufacturing and export performance](data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAAOEAAADhCAYAAAAw977AAAgAElEQVR42mOBCQAAAABJRU5ErkJggg==)

Source: Data from the World Bank's World Development Indicators.

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\(^1\) See, for example, Nepal's first development plan, introduced in 1956, and subsequent plans, available at [https://www.npc.gov.np](https://www.npc.gov.np).

\(^2\) Premature de-industrialization is the peaking of manufacturing's share in economic output and employment at lower levels of per capita income. See Rodrik (2016). This will be discussed in detail later in the paper.
This paper seeks to contribute to the discourse on industrialization in Nepal. First, it shows that it would be premature to write off manufacturing-powered industrialization, and argues that premature deindustrialization is not a fait accompli; rather, the focus must be on uncovering factors, including policies, which contributed to it. Second, it emphasizes that the debate over whether protecting domestic industry from import competition as part of an industrialization strategy works or not is far from settled. It cautions against jumping to the conclusion that tariffs are nothing but a source of inefficiency based on empirical results guided by standard trade models, which have no room for the infant industry argument. Third, the paper discusses Nepal’s muddled input-tariff policy for exports. Even though there is no apparent intellectual and ideological contestation over the idea of waiving or reimbursing tariffs on inputs to support the export sector’s competitiveness, there are non-trivial tariffs on important inputs used in export-oriented production while the implementation of a duty drawback scheme for exporters has been ineffectual. Fourth, the paper examines whether there are valid revenue loss concerns behind the anti-export bias of the tariff policy. Simulations done by the World Bank indicate that revenue loss is not significant if tariff elimination is targeted at inputs used by three major export products. The paper suggests further extensions and lines of inquiry, taking into account alternative scenarios, which can be pursued by GoN or the newly formulated Revenue Advisory Board. Finally, the paper highlights some questions, trade-offs and issues in tariff setting for GoN to ponder.

2. The continued relevance of manufacturing

It is standard to associate industrialization with a powerful performance of the manufacturing sector. This is the approach taken by this paper, although government documents typically place under the umbrella of industry the construction sector and the electricity, gas and water sector as well. Manufacturing has traditionally underpinned sustained (high) economic growth, accompanied by robust job creation. Greater prospects of economies of scale, productivity growth (coupled with high labour intensity), learning by doing, positive externalities, backward and forward linkages, and unconditional convergence are some of the features that make manufacturing special.³

With the explosion in the growth of services the world over, along with the increasing tradability of services thanks to advances in information and communications technology (ICT), an alternative view

³ See, for example, Hirschman (1958), Rodrik (2013), related discussions in UNCTAD (2016), and Andreoni and Gregory (2013).
challenges the notion of the specialness of manufacturing, arguing that services can be as much an enabler of growth-enhancing structural transformation as manufacturing since they exhibit the same features that have traditionally been associated with manufacturing (see, for example, Helble and Shepherd, 2019). One concern is the ability of services sectors with high productivity and with dynamic growth potential to absorb low-skilled labour in huge numbers. To be sure, India's renowned ICT-enabled services sector, a major source of export earnings, does create decent jobs, but its ability to generate jobs on a scale that manufacturing traditionally has elsewhere has been questioned (see Ghosh, 2004; Ghosh, 2016; Chandrasekhar and Ghosh, 2018).

Hauge and Chang (2019) acknowledge the importance of high-value services sectors in breaking the "middle-income trap", but argue that, barring isolated cases characterized by small populations and idiosyncratic economic structures, no country has been able to transform its economy from low to high income without industrialization. They also point out that the "existence of services is largely dependent on a manufacturing core", rather than vice versa (Hauge and Chang, 2019: 24). A middle ground in the industrialization debate would be that ultimately it is not a question of manufacturing versus services, but harnessing the potential of both, individually as well as the linkages between the two.

Chatterjee and Subramanian (2020) argue that India enjoys large export opportunities in low-skilled manufacturing exports, especially in labour-intensive sectors such as clothing and footwear, and, given its small share of manufacturing exports globally, it can afford to increase its exports of labour-intensive goods substantially, without upsetting the world. If India is deemed to have large unexploited export opportunities in low-skilled, labour-intensive manufacturing, with a significant import content, that stand to power overall economic growth, then it would be premature to write off the potential of export-oriented manufacturing, including that reliant on imported inputs, to become a significant source of output and job growth in Nepal, a much smaller country.

But what of premature deindustrialization? Rodrik (2016) shows, using cross-country data, that over time the shares of manufacturing in employment and value added, even among developing economies, have been peaking at lower levels of per capita income, and that the peak shares have also declined. This is

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4 See Hauge and Chang (2019) and Andreoni and Gregory (2013) for various arguments for the continued relevance of manufacturing.
termed premature deindustrialization, implying "countries are running out of industrialization opportunities sooner and at much lower levels of income compared to the experience of early industrializers" (Rodrik, 2016, p 1). The shares of manufacturing in employment and value added are estimated to have peaked, on average, at per capita GDP of $11,048 and $47,099 (1990 international dollars), respectively, in the pre-1990 period. The corresponding threshold income levels were $4,273 and $20,537, respectively, in the post-1990 period. The peak shares have also declined over time: from 21.5 percent to 18.9 percent for share in employment, and from 27.9 percent to 24.1 percent for share in value added.

Consistent time series data on share of manufacturing in value added in Nepal are available, but the same is not the case with manufacturing's share in employment. So let's focus on the former. Manufacturing value added as a share of GDP in Nepal has been on a downhill since 2001 or thereabouts, after reaching close to 9 percent. In 2019, it was close to 5 percent. So Nepal's experience appears to fit the deindustrialization story. In interpreting "premature deindustrialization", however, one must remember to look at country-specific factors that have contributed to the decline in the share of manufacturing. Deindustrialization in Nepal is a reality that researchers and policymakers in Nepal would have had to grapple with even if Dani Rodrik had not found global evidence of the hump-shaped relationship between industrialization and incomes shifting downwards and moving closer to the origin. Premature deindustrialization is not an inevitability, and neither does Rodrik make that claim. Rodrik identifies import competition as a driver of premature deindustrialization in developing economies. A rising real exchange rate, with remittance inflows contributing to it (Portugal and Zildzovic, 2016), could be another factor in the Nepali context. A rapid expansion of tradable services has not accompanied the decline in manufacturing, which makes the deindustrialization in Nepal worrying.

Nepal's per capita GDP in 2016 in 1990 international dollars was 1,577, compared to 825 in 1990 (Feenstra et al., 2015), while the share of manufacturing value added in Nepal's GDP in 2016 was 5.4 percent. Both are considerably far off the average turning point and peak in the post-1990 period ($20,537 and 24.1 percent), implying the existence of considerable scope for industrialization even if the estimates in Rodrik (2016) are to be taken as set in stone. Although the trend of deindustrialization kicking in sooner may not be contested, it would be erroneous to accept the declining share of manufacturing in the Nepali economy as an unavoidable fate of an economy in the 21st century and prescribe that the focus should now be squarely on services, or industry without "smokestacks". The fact that the share of manufacturing in value
added peaked in Nepal circa 2000 does not mean reclaiming a higher peak is now impossible. Even an effective implementation of as simple policy as waiving or refunding import duties on raw materials and other inputs embedded in manufacturing exports could stimulate such exports.

3. Protect to industrialize: Unsettled debate

Once we agree that manufacturing still offers significant opportunities for growth and employment creation, the next question is how to foster it. Alleviating supply-side constraints is one pillar, although admittedly too broad. This would include everything from provision of training to workers and credit to producers/entrepreneurs to infrastructure development (including that related to standards) to trade facilitation. An implication of the toy model that Rodrik (2016) employs to show that import competition—say, resulting from tariff liberalization—is driving premature deindustrialization in developing economies is that some form of industrial policy offering protection to the manufacturing sector is warranted. Development of productive capacity involves learning by doing; some restrictions on imports provide an incubatory environment of sorts (see, for example, Chang, 2002).

Sheltering domestic producers from import competition could give rise to inefficiencies. This is emphasized by dominant theories. The infant-industry argument in favour of protection is jettisoned partly because its complexities are not quite amenable to mathematical modelling. Empirically, the role of protection afforded to domestic firms in fostering industrialization and overall growth—or more broadly, the role of interventionist state policies—is still an unsettled issue. The jury is still out on whether the East Asian miracle happened with the helping hand of an active industrial policy, featuring protectionism and other forms of state interventionism, or despite it. The World Bank's report *The East Asian Miracle* (World Bank, 1993) is far from the final word on the topic (see, for example, Amsden, 1994). An economist or a policy maker with an open mind and not beholden to any particular ideology is likely to conclude that the successful late industrializers employed a mix of policies that can be billed as import substitution or export promotion, interventionist/protectionist or liberal. In fact, it is hard—actually, misleading—to pigeon-hole the successful policies along ideological lines.

The argument that trade liberalization may not necessarily benefit an economy could be puzzling in the face of a vast amount of empirical evidence—churned out ad infinitum by computable general equilibrium (CGE) modelling exercises—that when a relatively small country eliminates tariffs, it stands to record a
net welfare gain, especially when it does not discriminate between trade partners. Unable to influence world prices, a small country does not have to worry about terms-of-trade changes and so the change in welfare would only be a function of efficiency gains, which are always positive. Neoclassical trade theories are hardwired into a CGE model, with no room at all for the infant industry argument, imputing only inefficiencies to tariffs and other forms of protection. Therefore, it should not be surprising that you can predict the results of most trade liberalization scenarios even before you run a CGE model—at least the direction of change in welfare, which is almost always positive! This is not an indictment of CGE models. They are a powerful tool for ex ante analysis, taking into account general equilibrium linkages. The point: their results are not a final word on the impact of trade liberalization on even overall economic gains, that is, the size of the pie. This point is different from the argument (and fact) that trade creates both winners and losers—which has long been recognized in neoclassical trade theories, and is partly picked up by CGE modelling exercises.

On the tariff front, a government can protect industry by raising tariffs on final products or lowering tariffs on inputs or both. Leaving aside the efficiency question, both those who advocate tariff liberalization as the route to growth and those who see some value in protection would agree on input tariff reductions as being helpful to industrialization. The latter group may put forth the condition that domestic production of the input in question must not be feasible at the moment without excessive levels of protection; otherwise, some tariff protection for inputs may also be warranted. If the final product in question is to be exported, then the proposition to reduce tariffs on inputs would be even less objectionable: imposing non-trivial tariffs on imported inputs that form a non-trivial chunk of the cost of the final (or even intermediate) product being exported and still expecting the latter to be competitive in global markets would generally be considered contradictory. There is a substantial body of firm-level evidence of input-tariff liberalization increasing productivity, raising the probability of exporting and increasing exports (e.g., Amiti & Konings, 2007; Topalova & Khandelwal, 2011; Bas, 2012; Chevassus-Lozza et al., 2013).

5 If you are a purist in the neoclassical mould, then tariffs should be zero or low and uniform across products, so that distortions in the economy are minimized. We will not be considering this argument in this paper.
4. Nepal's muddled input-tariff policy for exports

Even in the area of aiding the export sector by reducing the cost of imported inputs, where there is apparently little or no intellectual and ideological contestation, Nepal has been constrained by ineffectual policy and/or weak policy implementation. The country's Industrial Enterprises Act (IEA) has exempted exports from customs tariffs on imported raw materials and auxiliary raw materials used in the production of the exportable products—mainly through a duty drawback scheme. Studies suggest that non-trivial tariffs are imposed on key inputs imported by the export sector, including those used in the production of goods listed as priority exports by the Nepal Trade Integration Strategy 2016, and that the duty drawback scheme for exporters has not been effective (e.g., Arenas, 2016; Narain and Varela, 2017; Kharel and Dahal, 2020). The private sector routinely points out that the implementation of the duty drawback scheme for exporters has not been effective—for example, making it effective was one of the suggestions made the Federation of Nepalese Chambers of Commerce and Industry (FNCCI) to GoN ahead of the federal budget for FY 2020/21 (FNCCI, 2020).

Fear of running afoul of World Trade Organization (WTO) rules is not a logical reason for the ineffective implementation of the duty drawback facility. This is because removing or eliminating tariffs and any other taxes on imported inputs when they are used in production for exports is considered an elimination of a distortion for good, and is hence allowed under WTO rules (see UNCTAD, 2019, p 174). If anything, it amounts to providing preferential treatment to imported over domestic goods, or at least creating a level playing field for both. Dual use should not be a concern either, as the facility is conditional on exports, which can be verified. The existing duty drawback provision is confined to customs tariff duties whereas IEA 1992 covered other indirect taxes, too. Furthermore, currently, production for the purpose of selling to export (promotion) houses cannot avail itself of the duty drawback facility, and such sales are subject to indirect taxes, in contrast to IEA 1992 that treated such sales as exports (Kharel and Dahal, 2020). IEA 2020 allows refund of customs tariffs paid on imported inputs by the manufacturer of intermediate goods used in the production of goods that are exported. This is weaker than an earlier provision which stipulated that the intermediate goods manufacturer should be reimbursed for all indirect taxes levied on its production materials and all indirect taxes levied on the production of its goods, based on the quantity of subsequent exports (Kharel and Dahal, 2020). Treating sales of goods in the domestic market that earn foreign currencies as exports for purposes of input and output taxation was another provision in IEA 1992 that was repealed.
Restoration of the extensive and deeper duty drawback provisions that existed in IEA 1992 has been demanded by the private sector (e.g., FNCCI, 2020). While any wish list of the private sector must be critically appraised, clearly, reducing the cost of inputs used by exporters, of which duty drawback is one avenue, is the least a government can do to make exports competitive, unless there are compelling reasons behind narrowing the scope of the drawback facility and rendering its implementation ineffectual. The reasons could be concerns about revenue loss, fear of fiscal leakage through fraudulent claims, and a tension between the goals of reducing the input cost of exporters and protecting domestic producers of like inputs. Among these possible reasons, we will not dwell on the second one since duty drawback is contingent upon exporting and, if exports are misreported, other countries' experiences in implementing such schemes should provide pointers to plugging leakage resulting from overstated exports. Investigating other countries' experiences in this regard is beyond the scope of this paper.

5. How valid are revenue loss concerns?

Taxation of imports is a key source of GoN's revenue. Taxes and levies on imports (VAT, customs tariffs and excise duties) accounted for about 41 percent of total government revenue in fiscal year 2018/19, as computed from data in GoN (2020). Imports accounted for a significant share of revenues from VAT (63 percent) and excise duty (39 percent) (ibid.). Consumer goods, intermediate goods and capital goods accounted for 43 percent, 27 percent and 25 percent of import revenue, respectively, in 2016 (Nairan and Varela, 2017).

In view of the anti-export bias of tariffs, the ineffective implementation of the duty drawback system, and the importance of import-based taxes for government revenue in Nepal, a World Bank study (Narain and Varela, 2017) simulates the possible revenue losses for GoN if input tariffs were eliminated under a range of scenarios. The study uses a partial equilibrium simulation tool (see p 51 in Narain and Varela, 2017 for methodological details). It uses trade value and import duty and revenue data for FY2015/16. Some of the results are reproduced in Table 1.
Table 1. Impact of input-tariff liberalization on revenue

<table>
<thead>
<tr>
<th>Elimination of tariffs for:</th>
<th>Raw materials</th>
<th>Intermediate goods</th>
<th>Cotton fabrics</th>
<th>Intermediate goods for apparel</th>
<th>Textile for apparel (HS 50-60)</th>
<th>Inputs for pashmina, carpet and apparel</th>
</tr>
</thead>
<tbody>
<tr>
<td>% change in tariff revenue</td>
<td>-6.6%</td>
<td>-27%</td>
<td>-0.6%</td>
<td>-1.4%</td>
<td>-2.5%</td>
<td>-1.2%</td>
</tr>
<tr>
<td>% change in total import-based revenue</td>
<td>-2.6% to -2.8%</td>
<td>-9.9% to -10.5%</td>
<td>-0.2% to -0.3%</td>
<td>-0.5% to -0.6%</td>
<td>-0.9% to -1%</td>
<td>-0.5%</td>
</tr>
</tbody>
</table>

Source: Tables 8 and 9 in Narain and Varela (2017, pp. 50-51).
Note: HS is Harmonized Commodity Description and Coding System.

Removing tariffs on all raw materials leads to a 6.6 percent fall in tariff revenue and a 2.6-2.8 percent fall in total import-based revenue. The muted effect on total import-based revenue is due to the fact that the simulation allows for an increase in VAT and excise duty collection arising from an increased demand spurred by the tariff elimination. If tariffs on intermediate goods were eliminated, tariff revenue and total import-based revenue would fall by 27 percent and 9.9-10.5 percent, respectively. However, a more targeted tariff liberalization wherein tariffs on key inputs used in three major exportable products—pashmina, carpet and apparel—are eliminated would result in a significantly lower loss of total import-based revenue, of at most 1 percent. Using import-based revenue of 2018/19, the revenue loss would amount to a maximum of NPR 3.4 billion. This exercise does not consider eliminating any VAT and excise duty imposed on imported inputs. If it had, revenue losses would have been higher—not only because of an additional loss of revenue from imports but also due to a loss of revenue from domestic production of inputs as it would only be fair to extend such duty elimination to like domestic products.

On the other hand, because the simulations consider elimination of tariffs on inputs straightaway, without being made contingent on exporting, the estimated revenue loss would be lower in practice if the concession was confined to exports. And that is a clear advantage of a duty drawback mode. Further, as also pointed out in the study, another reason the estimates could be a lower bound for revenue loss is that the simulations do not consider revenue gains that could arise due to increases in firm productivity,
a decline in import misreporting and other revenue-enhancing channels. These alternative scenarios and additional considerations should be interesting and useful lines of investigation for the newly constituted Revenue Advisory Board, one of whose mandates is to conduct research to inform revenue policy.

6. Points to ponder

In lieu of a conclusion, based on the preceding discussions, we now enumerate some questions, trade-offs and issues in tariff setting that GoN—in particular, the Ministry of Finance—would do well to chew the cud over.

i. Is it that GoN sees the future growth of Nepali exports as being propelled mostly or wholly by products based on domestic raw materials and with a very high domestic content (say, 90 percent or more of the factory-gate value), catering to niche markets, that tariffs and other duties on imported inputs are not deemed to be a determining factor in competitiveness? If, as is likely the case, the answer is no and that export growth is to come from, realistically, products intensively using domestic materials as well as those heavily reliant on foreign materials, then the anti-export bias of tariffs is of grave concern.

ii. Is it that imported inputs—especially those used in exports—can be and/or are being produced domestically with some protection, and hence the objective of fostering backward linkages from the export sector motivates GoN's tariff policy vis-à-vis inputs used by the export sector? If the answer is yes, an action plan with targets and milestones as well as sunset clauses, backed by a monitoring and evaluation mechanism, is called for. This should be preceded by a detailed study of the existing import duty structure in terms of its ability to serve the government's goals of industrialization, export expansion, and revenue generation (as expressed in, *inter alia*, the Industrial Policy, the Trade Policy and annual budget speeches).

iii. If the answers to the questions put forth in the above two points are in the negative, what else could be the reason(s) for the ineffective implementation of the tariff duty drawback facility for exports, not to mention the repealing of much wider duty drawback provisions that sought to reduce input cost for exporters? In principle, duty drawback provisions mean the government wants to exempt exports from tariffs on imported inputs. Is ineffective implementation just related to complicated processes instituted without any hidden intent? Or do revenue concerns reign supreme?
iv. If revenue concerns are paramount, the government should be upfront about its concerns; otherwise, the drawback provision becomes a subterfuge. Simulations done by the World Bank, discussed earlier, indicate that the elimination of tariffs on inputs used by three key export products—pashmina, apparel and carpet—would not trigger a huge revenue loss. Extending and refining the exercise to incorporate alternative and additional scenarios and to cover other major export products, taking into account alternative channels of the impact on revenue, should not be an impossible task for the Ministry of Finance, which has been a leading recipient of "capacity building" largesse of development partners. Or, it can avail itself of the services of the newly formed Revenue Advisory Board for such a study as well as a series of studies that will help the ministry come up with a plan to make the tariff structure conducive to export expansion and industrialization without causing any unmanageable revenue loss. This requires close consultation with relevant line ministries such as the Ministry of Industry, Commerce and Supplies (MoICS), and the Ministry of Agriculture and Livestock Development (MoALD). It is reasonable to assume that the latter two ministries have an understanding of the industrial and agriculture sectors, respectively, which is in addition to, and contributes to, the understanding of the Ministry of Finance.

The importance of inter-ministerial coordination cannot be overstated. The record so far leaves much to be desired. An example of poor coordination is the removal of cereals and most other primary agricultural products from Nepal's sensitive list under the second phase of tariff liberalization, circa 2012, under the Agreement on South Asian Free Trade Area (SAFTA). The reasoning for that decision seems to be that imports of these products from India, the predominant source of such imports, were already getting tariff-free access, thanks to the bilateral trade treaty. This despite the widespread view that Nepali farmers, most of whom are smallholders with precarious livelihoods, have been reeling from the onslaught of import competition—a view that MoALD almost surely holds. Of late, however, Nepal-India trade talks have seen GoN, represented by MoICS, pressing for exempting Nepal from having to provide tariff-free access to primary agricultural products from India. Even if the request is granted, there still remains the task of having to negotiate with SAFTA members (India and seven other countries) to bring those products back into Nepal's sensitive list. Otherwise, imports of these products from India will likely be routed utilizing SAFTA preferences—a development that has a
parallel in the exportation, until recently, of palm oil from Nepal to India utilizing the product-specific rule of origin under SAFTA which is less onerous than the one in the bilateral treaty.

A sensible tariff policy, whether it concerns inputs used by exporters or any imports, boils down to having clear and realistic objectives, and an informed appreciation of the trade-offs involved. When imports are a major source of government revenue, tariff liberalization—even an otherwise relatively uncontroversial move such as elimination of tariffs on inputs for exports—requires a certain level of confidence on the part of the government. The confidence is about being able to generate enough revenue from the economic growth it expects liberalization to deliver.

References


