

University of New Mexico

UNM Digital Repository

Himalayan Research Papers Archive

Nepal Study Center

2022

An Anatomy of Nepal's Remarkable Export Decline

Rishi Sharma
rsharma1@colgate.edu

Follow this and additional works at: https://digitalrepository.unm.edu/nsc_research



Part of the [Asian Studies Commons](#), [Growth and Development Commons](#), and the [International Economics Commons](#)

Recommended Citation

Sharma, Rishi. "An Anatomy of Nepal's Remarkable Export Decline." (2022).
https://digitalrepository.unm.edu/nsc_research/97

This Article is brought to you for free and open access by the Nepal Study Center at UNM Digital Repository. It has been accepted for inclusion in Himalayan Research Papers Archive by an authorized administrator of UNM Digital Repository. For more information, please contact disc@unm.edu.

An Anatomy of Nepal's Remarkable Export Decline

Rishi R. Sharma
Department of Economics
Colgate University*

July 9, 2022

Abstract

This paper documents and breaks down a remarkable decline in Nepal's exports over the 2000-2019 period. This decline is due to a collapse in the country's top export products and is largely uniform across destinations and products. Furthermore, it is not on account of the poor global performance of the sectors Nepal was specialized in but is something more specific to Nepal. Industry-level statistics show that gross output increased in major exporting industries while value-added grew slower or declined. The increase in gross output together with the decline in exports implies a movement towards producing for domestic consumption using more imported inputs. These patterns are consistent with the expected effects of the surge in remittances Nepal experienced over this time period. Remittances would cause the economy to transition towards domestic consumption and re-orient domestic production accordingly.

JEL: F13, F14, F24, O24, O25, O53

Keywords: Nepal, Exports, Remittances

*Email: rsharma1@colgate.edu. I am very grateful to Ramesh Sharma for many comments and discussion on this work. I thank participants at the Himalayan Applied Economics and Policy Association (HAEPA) Brown Bag for helpful suggestions.

1 Introduction

There is substantial concern about Nepal’s remarkably low level of exports. At about 3% in 2019, Nepal’s level of merchandise exports as a share of GDP is 7th from the bottom with only Grenada, Aruba, Macao, Sint Maarten, Turks and Caicos and Palestine being lower (Table 1). This low level of exports is commonly blamed on structural factors that reduce Nepal’s export competitiveness such as its landlocked geography and poor infrastructure. Less noted, however, is the fact that the current low level of exports is the product of an unusual decline over the past two decades. As Figure 1 shows, Nepal’s merchandise exports as a share of GDP was almost 15% in 2000 and subsequently dropped sharply to the current level. Even more remarkably, the *level* of real exports declined by almost a third despite other commonly correlated metrics such as GDP growing substantially over this time period.

This paper uses trade data complemented by industrial statistics to provide an anatomy of Nepal’s export decline. I use other low- and middle-income countries in South and East Asia as comparators to help distinguish between more general trends and the ways in which what is happening in Nepal is unique. I start by examining this decline using a decomposition of export growth into an intensive margin and extensive margins both at the product and destination level. This analysis reveals that both in an absolute sense and in comparison to other countries, Nepal’s existing products and product-destinations have done especially poorly. Comparison with other countries shows that this pattern is quite atypical. Furthermore, this is not due to an unfavorable composition of existing exporting products: a constant share analysis shows that the exports of the products Nepal exported in 2000 did grow rapidly in other countries.

Digging into the performance of existing products further reveals a breathtaking decline in the export of top products. Of the top 25 products in 2000, 24 see a decline and the average growth rate among these products is -87%. 17 out of 25 products decline by more than 90% and 9 are completely wiped out. Only a *single* top product in 2000 exhibits positive growth. This pattern is pronounced largely across a wide range of different types of products and is not related to any specific industry. It is also not destination specific: among the top 40 product-destination combinations, only 4 see an increase.

To obtain more insight into these patterns, I complement this analysis with industry-level statistics for manufacturing. These statistics show an anomalous pattern: while exports have declined, gross output has tended to increase substantially in major exporting industries. Value-added has either shrunk or grown by less than gross output. These patterns suggest that Nepalese manufacturing industries have shifted from exporting towards serving domestic consumption, and they have done so by moving into more downstream parts of the value chain. Consistent with this, imports of intermediate inputs have soared over 200% during this time period, which is again in remarkable contrast to the decline in exports. These industry-level patterns are also atypical: both the relationship between exports and gross output and gross output and value-added are fairly unique to Nepal relative to the comparator countries.

What would explain these trends? The shift towards domestic consumption is most naturally explained by the defining feature of Nepal’s economy over this time period: a massive increase in remittances as a share of the economy. It is widely noted that increased remittances have led to increased imports of consumption goods. These results suggest that even domestic manufacturing industries are increasingly serving this domestic market, with greater reliance on imported inputs. These results highlight the fact that the Nepalese economy’s dependence on imports (and ultimately remittances) runs deeper than typically understood. One might think that a collapse in remittances

may lead to reduced imports and increased import-substitution activity, with domestic firms making up for some of the reduced imports. However, if domestic firms are increasingly using imported inputs to serve domestic consumption needs, they would have more limited ability to provide this type of shock absorption.

The low level of exports relative to GDP also casts doubt on the ability of merchandise export growth to very substantially affect welfare and income in Nepal in the near future. Even extremely rapid growth of exports would be on a very small base relative to GDP. Adding to this low base, there are broader global questions about the viability of manufacturing growth as a source of economic development in the future given increased automation and digitization (e.g. Hallward-Driemeier and Nayyar, 2017; Baldwin and Forslid, 2020). All this perhaps highlights the need to focus more on cultivating non-manufacturing industries.

To my knowledge, this paper is the first to document and explore systematically Nepal’s export decline over the past two decades. Kharel (2014) explores structural change in Nepal from 1980-2010 primarily through the lens of export data. Most other existing work on Nepalese exports tends to focus on the effects of more specific factors or policies on Nepalese trade patterns. Defever et al. (2020) examine the effect of an export subsidy program, the Cash Incentive Scheme for Exports (CISE), and find a very limited effect of this policy on overall export levels, especially in relation to its fiscal costs. Basnett and Pandey (2014) discuss the potential desirability of industrial policy in Nepal, particularly in the context of global value chains. Sapkota (2013) discusses the role of remittances in Nepal’s economy more broadly, touching on some of the trade-related issues emphasized in the current paper. Also connected to remittances, Pant and Panta (2009) and Paudel and Burke (2015) find evidence of real exchange rate appreciation hurting Nepalese exports. Kharel and Dahal (2021) examine the constraints faced by small and medium-sized enterprises in exporting and participating in global value chains more broadly.

The rest of this paper is organized as follows. Section 2 examines a decomposition of exports into intensive and extensive margins. Section 3 directly examines the performance of the product and product-destinations that accounted for the greatest exports in 2000. Section 4 discusses the results from a constant-share analysis. Section 5 focuses on industry-level statistics. Section 6 concludes.

2 Intensive and Extensive Margins Decomposition

As noted in the introduction, Nepal’s exports declined by about 37% between 2000-2019. A common methodology in the international trade literature is to use trade data at the product-destination level to break down export growth (including potentially negative growth) into an intensive margin and product- and destination-level extensive margins (e.g. Evenett and Venables, 2002; Hummels and Klenow, 2005; Felbermayr and Kohler, 2006). This methodology allows us to quantify the contribution to export growth of new or lost products, new or lost destinations as well as existing product-destinations.

To implement this methodology, I use HS 6 data from UN COMTRADE. I use the version of this database from CEPII, which corrects for potential errors and applies a methodology to reconcile exporter- and importer-reported data. As documented in Gaullier and Zignago (2010), the CEPII version of UNCOMTRADE uses an algorithm to assess the reliability of each reporting country and weighs exporter- and importer-reported data on the basis of this estimated reliability. Since these data are available for all countries, it is natural to compare results for Nepal to results from other comparable countries. I take as comparator countries the other countries in South and East Asia,

excluding high-income countries. The CEPII data is provided in current US dollars and I use GDP deflators from the Penn World Tables 10.0 when computing real exports.

We can decompose an exporting country's export growth between two periods of time (i.e. 2000-2019) into three components: an intensive margin, a destination-level extensive margin, and a product-level extensive margin. The intensive margin is the growth in product-destinations with positive exports in 2000. The destination margin is the growth from exporting existing products to new destinations. The product margin is the growth from exporting new products that were not exported to any destination in 2000.

Table 2 shows the results from the three-part decomposition for Nepal as well as the comparator countries. The first column shows the simple growth rate of real exports between 2000-2019. We see that Nepal is the only country with a negative growth rate and that this decline is very substantial at over 37%. The growth rate for each country is then decomposed into the intensive margin, destination margin and product margin. The sum of the last three columns add up to the first column.

We see that the intensive margin accounts for the bulk of Nepal's export decline over this period. This means that the exports of existing products to existing destinations declined substantially. This is in contrast to all other countries, with the exception of Fiji and Laos, who also have a negative intensive margin term. The third column shows that the destination margin is also negative for Nepal, implying that the loss of export destinations for existing products also accounted for over 10% of the 37% decline in exports. The only other country that saw a negative destination margin is Maldives. In contrast, the product margin (fourth column) is modestly positive and broadly in line with other countries.

The "growth" through each extensive margin could be positive or negative. By separating the positive and negative parts, we can further decompose these three terms to obtain a five-part decomposition. For example, the product margin could be decomposed into a positive component that accounts for new products that are gained and a negative component that accounts for existing products that are lost. The destination margin could similarly be decomposed into new destinations that are gained vs. lost for existing products.¹

The results from the five-part decomposition are shown in Table 3. We see that Nepal sees a relatively large loss of both destinations and products (fourth and sixth columns). The expansion of destinations for existing products (third column) is also especially modest relative to other countries. On the other hand, the growth from new products is relatively larger in comparison and explains why the overall product margin is slightly positive. Taken together, these decomposition results paint a picture of especially poor performance by existing products, whether on the intensive margin or in terms of losses of destinations or of the product as a whole.

Overall, this seems to suggest that the most significant problems are in retaining and growing existing product-destinations and to a lesser extent, retaining and growing new destinations for existing products. The new product margin does not stand out as an area of weakness and in that sense is somewhat of a bright spot in an otherwise bleak overall picture.

¹The intensive margin could also technically be split into a positive and negative component but this exercise would not have an especially intuitive interpretation and so has been omitted.

3 Top Products and Product-Destinations

The results in the previous section show that Nepal’s existing export products performed very poorly over the sample period. To provide further insight into these trends, we can examine directly the performance of Nepal’s top export products. Table 4 shows the growth in 2000-2019 of the top 25 products by 2000 export value. While Nepal exported 1,371 HS6 products in 2000, the top 25 products collectively account for almost two thirds of the total value of exports.²

The results are very stark. Almost all the top 25 exports decline very substantially or are entirely wiped out. Only a *single* product – 740811, jute bags used for packing – showed positive growth. Out of the 25 products, 17 products decline by more the 90% and 9 are completely wiped out. This paints a picture of a complete collapse of Nepal’s top exporting products during this time period. While Nepal’s top exports tend to be especially concentrated in textiles, we see that the collapse is clearly across the board and does not exhibit any discernible sectoral pattern.

To get some sense of whether these results may be associated with specific destinations, we can also examine the top product-destinations. Table 5 shows the top 40 product-destinations, which again collectively account for about about two thirds of the total value of all exports in 2000. These results are just as stark as the product-level results. The median growth rate is -0.99, showing again that the top production-destinations in 2000 were largely wiped out by 2019. Only four of these product-destinations showed positive growth.

These product-destination results show that the collapse in exports is not specific to a particular destination such as India. A potential explanation for Nepal’s export collapse might have been that Nepal’s exports were disproportionately exploiting trade policy arbitrage opportunities to India that were subsequently closed, perhaps related to changes in the India-Nepal trade arrangements (e.g. Mukherji 2010; Taneja et al., 2020). Table 5 shows this is clearly not the case and the export collapse is consistent across destinations. If anything, the only four product-destinations on this list with positive export growth were all to India.

It is natural to wonder whether this effective wipe out of the top export products is special to Nepal or whether a high turnover in top exports is a common phenomenon. Table 6 compares the performance of the products that were top 25 in 2000 across the comparator countries. We see that Nepal’s case is again unique. The 87.2 % decline in the top 25 products – close to a wipe out – is in contrast to most other countries where the top 25 products showed positive growth or a substantially more modest decline.

4 Constant Share Analysis

A potential explanation for this export decline is that the products Nepal exported in 2001 were ones that did poorly in other countries as well. In other words, was Nepal unlucky in terms of the composition of its initial exports? We can address this question by calculating a predicted growth rate for each country under the assumption that each existing product grew at the median growth rate for that product among countries in this sample. This can then be directly compared to the actual growth rate of all existing products in the country. This exercise is similar in spirit to a shift-share analysis of exports (Markusen et al., 1991; Hayward and Erickson, 1995, Cheptea et al., 2005).

²This type of “hyper-specialization” where the top products account for a large share of a country’s exports is common across the world and is discussed in prominent existing work (e.g. Hausman and Rodrik, 2006; Easterly et al., 2009).

The results from this exercise are shown in Table 7. The first column of Table 7 shows us the actual growth rate of existing products. This is different from the growth rates in Table 2 and 3 which would include growth due to extensive margin changes but is more directly comparable to the predicted growth rate under the constant share assumption. The second column shows us the predicted growth rate. We see that if Nepal’s exports in each product had grown at the median rate for that product, given the composition of exports in 2000, Nepal’s exports should have increased by about 150% vs. an actual decline of almost 60% in these products. Hence, Nepal was not “unlucky” in terms of the products it exported. A notable comparison here is to Bangladesh, where the predicted growth rate is rather low at around 4% whereas Bangladesh’s actual growth rate is over 300%. This means that Bangladesh did vastly better than the median growth rate for its export products.

The third column of Table 7 repeats this exercise but keeping constant shares at the product-destination level. This allows us to test for the possibility that Nepal may have exported to destinations that saw weaker demand or weaker demand for the specific products that Nepal exported. We see again that Nepal’s predicted export growth under this scenario is very high, at almost 200%. So this rules out the possibility that there was something unlucky about the composition of Nepal’s exporting destinations either.

5 Industry-Level Analysis

In order to obtain further insight into what may underlie this export decline, it is useful to turn to industry-level data. I use 2-digit industry-level data from the United Nations Industrial Development Organization (UNIDO), which provides an industry panel for a large number of countries. Due to data availability reasons for Nepal, I consider 2001 and 2018 instead of 2000 and 2019 as in the trade data. This database focuses specifically on manufacturing industries.³

Table 8 shows the growth in exports, value-added and gross output for the top 5 exporting industries in 2001.⁴ These industries collectively account for over 90% of Nepal’s total manufacturing exports. Even at this level of aggregation, we can see the substantial decline in exports of most of these industries, with the exception of the food and beverages industry.

Remarkably, while exports have tended to decline, gross output has *increased* in most of these industries, apart from apparel. An increase in gross output together with a decrease in exports implies that firms are selling more domestically. At the same time, value-added either decreased or grew substantially more slowly than gross output. This suggests that industries have not only moved towards selling more domestically but they have shifted towards downstream activities that rely more on purchased intermediate inputs.

Again, it is instructive to compare Nepal to the comparator countries to see to what extent these are more general international trends. Table 9 shows these results for the top 5 exporting industries. We see that once again, the trends in Nepal are very distinctive. Value-added and gross output growth tend to be much closer to each other for most other countries and there is no clear pattern across the board in terms of which grew faster. The enormous contrast between export growth (-0.51%) and gross output growth (1.65%) in Nepal is also especially notable relative to the comparator countries.

³While the UNIDO’s industry-level data is also available at the 4-digit level, the data transitions from Revision 3 to Revision 4 over this time period and it was not possible to match the 4-digit product codes over time without making more speculative assumptions.

⁴The export data is still from UN COMTRADE and concorded from HS to ISIC.

These trends would suggest a substantial increase in the import of intermediate inputs in Nepal. We can confirm this directly by using trade data on imports. The results for Nepal and comparator countries are reported in Table 10. We see that in contrast to exports, imports as a whole have increased by about 296% over this time period. The surge in imports in Nepal during this period is relatively well-known and generally connected to increased household consumption and indeed we see from the fourth column an increase in the imports of consumption goods of over 400%.⁵

Table 10 also shows that in addition to consumption goods, intermediate input imports grew by over 200% and capital goods imports grew by over 400%. Since these are inputs used in production, it is in especially stark contrast to the substantial decline in exports. Together with the industry-level statistics discussed above, these trends confirm that the Nepalese economy has moved towards domestically oriented production that depends increasingly on the import of intermediate goods.

Putting together the pieces, what we see in both the trade and industry data here is consistent with the expected effects of the increased reliance of the Nepalese economy on migrant remittances. Remittances would lead to increased domestic consumption, fuelling both increased imports of consumption directly (Table 10) and an increase in industrial gross output beyond exports (Tables 8 and 9). The decline in exports can then be explained on account of domestic producers switching from exporting to the remittance-fueled domestic market.⁶ The latter, especially in Nepal's context, may not just be due to the remittance flows per se but also due to labor shortages due to the migration of working age individuals. These factors can finally also account for the increased imports of both intermediate and capital goods to ultimately serve domestic consumption needs.

6 Conclusion

This paper documents a remarkable decline in Nepal's exports over the 2000-2019 period. This decline is due to a collapse in the country's top export products. This collapse is consistent across destinations and product-types. Furthermore, it is not on account of poor global performance of the sectors Nepal was specialized in but is something more specific to Nepal. Industry-level statistics show that gross output increased in major exporting industries while value-added grew slower or declined. The increase in gross output together with the decline in exports implies a movement towards producing for domestic consumption using more imported inputs. These patterns are consistent with the expected effects of the surge in remittances Nepal experienced over this time period. Remittances would cause the economy to transition towards domestic consumption and re-orient domestic production accordingly.

While the dependence of the Nepalese economy on remittances is well-known, these results suggest that this dependence may run even deeper than merely fuelling consumption. Even domestic manufacturing industries are increasingly geared towards domestic consumption based on imported inputs. This means that domestic industries would have a more limited ability to act as a shock absorber in case of a substantial disruption or decline in remittances.

These results also suggest that even rapid export growth may have a limited ability to act as an engine for economic growth in the near future because of the very low level of exports relative to GDP. Combined with the unclear prospects for manufacturing globally due to automation and digitization, Nepal could potentially benefit from emphasizing policies focused on alternative

⁵I classify goods into capital, intermediate and consumption goods after concurring the HS codes to the UN's Broad Economic Categories.

⁶Since this analysis does not use firm-level data, it would not be possible to say to what extent existing firms are switching their activities vs. a turnover at the firm level. This would be a natural avenue for future work.

sources of international sales such as service exports (including tourism and electricity) and perhaps agricultural exports, which are more directly connected to livelihood for a still predominantly rural population.

Figure 1: Nepal's Merchandise Exports Over Time

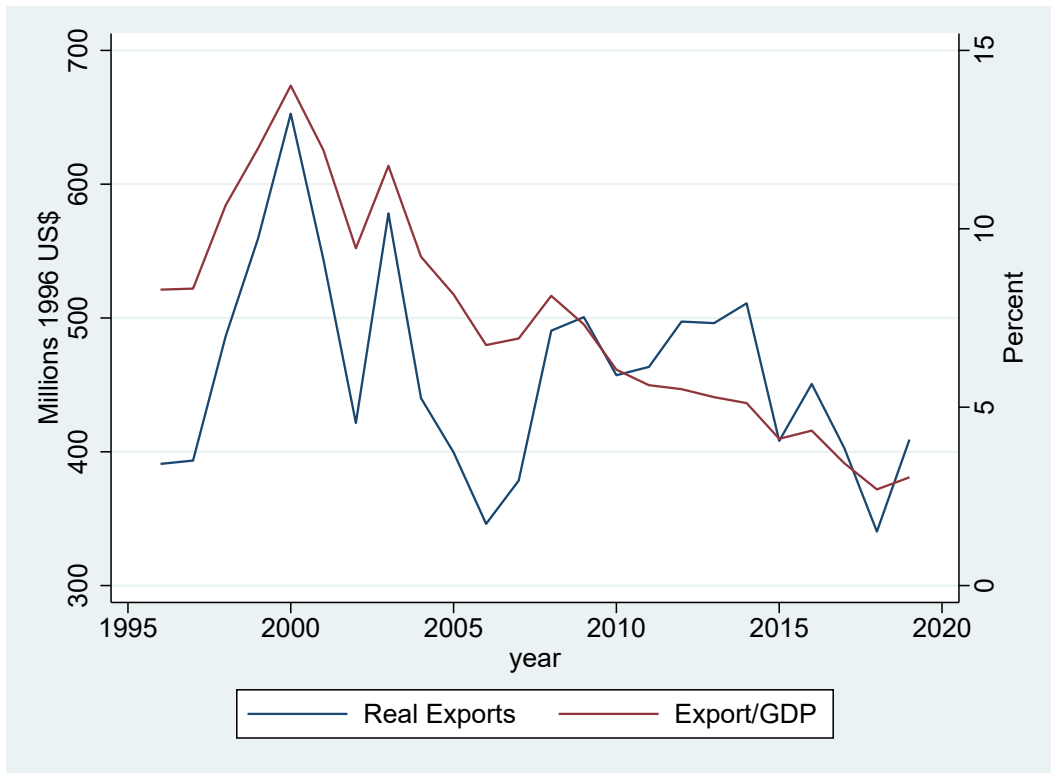


Table 1: Export/GDP Ratios: Bottom 10 Countries and South Asian Countries (2019)

Country	Export/GDP Rank	Export/GDP
Palestine	182	0.008
Turks and Caicos	181	0.011
Sint Maarten	180	0.019
Macao	179	0.024
Aruba	178	0.024
Grenada	177	0.030
Nepal	176	0.030
Syria	175	0.031
Ethiopia	174	0.034
Central African Republic	173	0.036
Maldives	170	0.045
Bhutan	149	0.098
Pakistan	146	0.103
India	141	0.114
Sri Lanka	129	0.139
Bangladesh	124	0.157

Table 2: Three-Part Decomposition

Country	Growth	Intensive	Destination	Product
NPL	-0.373	-0.278	-0.106	0.011
PHL	0.099	0.200	0.008	-0.108
MDV	0.231	0.467	-0.146	-0.090
LKA	0.438	0.356	0.080	0.001
FJI	0.471	-0.126	0.396	0.201
IDN	0.607	0.412	0.197	-0.002
MYS	0.737	0.762	0.047	-0.072
THA	1.010	0.892	0.163	-0.045
CHN	1.608	1.455	0.185	-0.033
PAK	1.669	0.771	0.772	0.127
BGD	3.181	2.613	0.538	0.029
IND	3.660	2.790	0.865	0.005
BTN	5.953	3.290	0.254	2.409
MNG	6.126	2.426	0.782	2.919
MMR	6.260	2.215	2.524	1.521
KHM	6.413	2.830	2.194	1.389
VNM	6.550	3.193	3.144	0.213
LAO	8.923	-0.168	1.633	7.458

Table 3: Five-Part Decomposition

Country	Growth	Intensive	Dest, pos	Dest, neg	Prod, pos	Prod, neg
NPL	-0.373	-0.278	0.050	-0.156	0.216	-0.205
PHL	0.099	0.200	0.120	-0.112	0.022	-0.130
MDV	0.231	0.467	0.398	-0.544	0.183	-0.273
LKA	0.438	0.356	0.217	-0.137	0.037	-0.036
FJI	0.471	-0.126	0.693	-0.297	0.228	-0.027
IDN	0.607	0.412	0.302	-0.104	0.028	-0.030
MYS	0.737	0.762	0.165	-0.118	0.006	-0.078
THA	1.010	0.892	0.238	-0.074	0.007	-0.052
CHN	1.608	1.455	0.216	-0.031	0.000	-0.033
PAK	1.669	0.771	0.841	-0.069	0.139	-0.013
BGD	3.181	2.613	0.562	-0.024	0.054	-0.025
IND	3.660	2.790	0.932	-0.068	0.023	-0.018
BTN	5.953	3.290	0.311	-0.057	2.680	-0.271
MNG	6.126	2.426	1.041	-0.259	3.050	-0.132
MMR	6.260	2.215	2.626	-0.102	1.528	-0.006
KHM	6.413	2.830	2.368	-0.174	1.421	-0.032
VNM	6.550	3.193	3.221	-0.077	0.225	-0.012
LAO	8.923	-0.168	1.919	-0.285	7.464	-0.006

Table 4: Growth of Top 25 Products by 2000 Export Value

HS 6 code	Product Description	Share (2000)	Growth
570110	Carpets and other textile floor coverings, of w	0.180	-0.79
151800	Animal or vegetable fats and oils... chemically	0.061	-1.00
621420	Shawls, scarves, mufflers, mantillas, veils, et	0.060	-0.82
40510	Butter	0.048	-1.00
330610	Dentifrices	0.041	-0.88
620520	Men's or boys' shirts of cotton	0.038	-0.96
620342	Men's or boys' trousers, breeches, etc, of cott	0.023	-0.96
620462	Women's or girls' trousers, breeches, etc, of c	0.020	-0.93
340111	Soap and organic surface-active products in bar	0.018	-1.00
71340	Dried lentils, shelled	0.017	-0.99
621050	Women's or girls' garments made up of fabrics o	0.017	-0.99
620630	Women's or girls' blouses, shirts, etc, of cott	0.016	-0.94
620452	Skirts and divided skirts of cotton	0.015	-0.97
300390	Other medicaments with $i=2$ constituents, not fo	0.012	-0.59
540220	High tenacity yarn of polyesters, nprs	0.010	-1.00
611020	Jerseys, pullovers, etc, of cotton, knitted or	0.009	-0.92
970600	Antiques of an age exceeding one hundred years	0.009	-0.83
540249	Single synthetic yarn, nes, with ≈ 50 turns/m, n	0.009	-1.00
740811	Wire of refined copper of which the max cross s	0.008	-1.00
630510	Sacks and bags, used for packing goods, of jute	0.008	1.00
620442	Dresses of cotton	0.007	-0.74
540269	Multiple or cabled yarn, nes, nprs	0.007	-1.00
740819	Wire of refined copper of which the max cross s	0.007	-1.00
621410	Shawls, scarves, mufflers, mantillas, veils, et	0.007	-0.83
620412	Women's or girls' suits of cotton	0.006	-1.00

Table 5: Growth of Top 40 Product-Destinations by 2000 Export Value

HS6 code	Product Description	Importer	Share (2000)	Growth
570110	Carpets and other textile floor coverings, of w	DEU	0.113	-0.97
151800	Animal or vegetable fats and oils... chemically	IND	0.061	-1.00
40510	Butter	IND	0.048	-1.00
330610	Dentifrices	IND	0.041	-0.88
620520	Men's or boys' shirts of cotton	USA	0.036	-0.98
570110	Carpets and other textile floor coverings, of w	USA	0.029	-0.39
620342	Men's or boys' trousers, breeches, etc, of cott	USA	0.021	-1.00
340111	Soap and organic surface-active products in bar	IND	0.018	-1.00
620462	Women's or girls' trousers, breeches, etc, of c	USA	0.018	-0.99
621420	Shawls, scarves, mufflers, mantillas, veils, et	USA	0.017	-0.94
71340	Dried lentils, shelled	IND	0.016	-1.00
621050	Women's or girls' garments made up of fabrics o	USA	0.016	-1.00
620630	Women's or girls' blouses, shirts, etc, of cott	USA	0.014	-0.98
621420	Shawls, scarves, mufflers, mantillas, veils, et	JPN	0.012	-0.94
620452	Skirts and divided skirts of cotton	USA	0.012	-1.00
300390	Other medicaments with ≥ 2 constituents, not fo	IND	0.012	-0.58
570110	Carpets and other textile floor coverings, of w	BEL	0.010	-0.92
540220	High tenacity yarn of polyesters, nprs	IND	0.010	-1.00
621420	Shawls, scarves, mufflers, mantillas, veils, et	GBR	0.009	-0.95
540249	Single synthetic yarn, nes, with ≥ 50 turns/m, n	IND	0.009	-1.00
611020	Jerseys, pullovers, etc, of cotton, knitted or	USA	0.008	-1.00
740811	Wire of refined copper of which the max cross s	IND	0.008	-1.00
630510	Sacks and bags, used for packing goods, of jute	IND	0.008	1.01
540269	Multiple or cabled yarn, nes, nprs	IND	0.007	-1.00
620442	Dresses of cotton	USA	0.007	-0.98
970600	Antiques of an age exceeding one hundred years	CHE	0.006	-0.96
570110	Carpets and other textile floor coverings, of w	CHE	0.006	-0.83
620412	Women's or girls' suits of cotton	USA	0.006	-1.00
740819	Wire of refined copper of which the max cross s	IND	0.006	-1.00
300490	Other medicaments of mixed or unmixed products,	IND	0.006	-1.00
630291	Toilet linen and kitchen linen of cotton, nes	USA	0.005	-1.00
340119	Soap and organic surface-active products in bar	IND	0.005	-1.00
570110	Carpets and other textile floor coverings, of w	GBR	0.005	-0.27
711319	Art. of jewellery and pts thereof of/o prec mtl	USA	0.005	-0.72
151620	Vegetable fats and oils and their fractions, hy	IND	0.004	-1.00
90830	Cardamoms	IND	0.004	3.03
620530	Men's or boys' shirts of man-made fibres	USA	0.004	-0.97
340600	Candles, tapers and the like	IND	0.004	-1.00
610510	Men's or boys' shirts of cotton, knitted or cro	USA	0.004	-1.00
610910	T-shirts, singlets and other vests, of cotton,	USA	0.004	-0.98
621040	Men's or boys' garments made up of fabrics of 5	USA	0.004	-1.00
620920	Babies' garments and clothing accessories of co	USA	0.004	-1.00
621420	Shawls, scarves, mufflers, mantillas, veils, et	FRA	0.004	-0.65
511300	Woven fabrics of coarse animal hair or of horse	USA	0.004	-1.00
630710	Floor-cloths, dish-cloths, dusters and similar	USA	0.003	-1.00
320300	Colouring matter of vegetable or animal origin,	IND	0.003	0.34
230690	Oil-cake and residues, of other vegetable fats	IND	0.003	1.57
570110	Carpets and other textile floor coverings, of w	AUT	0.003	-0.83
230990	Other preparations of a kind used in animal fee	IND	0.003	-0.33
540243	Single yarn of polyesters, nes, with ≥ 50 turns/	IND	0.003	-1.00

Table 6: Growth Rate (2000-2019) of Top 25 Products in 2000

Country	Growth rate
NPL	-0.872
FJI	-0.436
MDV	-0.221
PHL	-0.136
LAO	-0.078
IDN	0.060
THA	0.195
LKA	0.209
MYS	0.363
PAK	0.933
VNM	1.129
CHN	1.159
KHM	1.911
MNG	2.402
BGD	2.619
MMR	2.827
BTN	3.143
IND	3.344

Table 7: Predicted Exports/Constant Share Analysis

Country	Growth	Growth (existing)	Predicted 1	Predicted 2
NPL	-0.373	-0.589	1.486	1.996
MDV	0.231	0.048	0.959	0.189
PHL	0.099	0.078	2.311	28.341
FJI	0.471	0.243	2.677	1.220
LKA	0.438	0.401	0.802	0.697
IDN	0.607	0.579	2.174	3.961
MYS	0.737	0.731	1.631	10.367
THA	1.010	1.004	1.777	9.345
LAO	8.923	1.460	-0.011	-0.251
PAK	1.669	1.530	0.373	1.395
CHN	1.608	1.608	6.745	26.744
MNG	6.126	3.076	2.292	90.410
BGD	3.181	3.127	0.042	0.375
BTN	5.953	3.273	0.588	4.023
IND	3.660	3.637	2.326	20.593
MMR	6.260	4.733	0.942	1.540
KHM	6.413	4.992	0.493	0.740
VNM	6.550	6.325	1.239	3.338

Table 8: Growth in Industry Variables (2001-2018) for Top 5 Exporting Industries for Nepal

ISIC	Desc	Exp Shr (2001)	Exports	VA	Output	Estab	Emp
17	Textiles	0.28	-0.19	-0.48	0.37	3.36	-0.11
18	Apparel	0.24	-0.76	-0.89	-0.76	314.37	3.20
24	Chemicals	0.22	-0.86	-0.13	0.71	3.28	1.18
27	Metals	0.09	-0.56	2.14	5.50	2.86	2.37
15	Food	0.08	0.15	0.24	2.09	34.27	2.15

Table 9: Growth in Industry Variables (2001-2018) for Top 5 Exporting Industries

Country	Exports	VA	Output	Estab	Emp
NPL	-0.51	-0.01	1.65	43.41	1.52
LAO	-0.13	3.54	0.85		0.70
FJI	0.23	-0.08	0.26	0.50	-0.05
PHL	0.31	0.27	0.43	0.05	0.18
LKA	0.42	2.48	3.15	-0.09	2.26
MYS	0.58	0.73	0.77		0.50
MNG	0.73	5.16	4.34	0.60	0.27
IDN	0.84	4.16	2.88	0.64	0.57
THA	0.98	1.45	1.05		0.61
CHN	1.34	5.03	5.51	1.43	1.13
MMR	3.38	-0.90	-0.90	0.21	0.01
VNM	3.57	3.85	4.88	4.18	2.83

Table 10: Import Growth by Category

Importer	All	Capital	Intermediates	Consumption
PHL	0.70	1.14	0.42	3.28
LKA	0.76	0.55	0.48	1.06
MYS	0.86	0.64	0.94	2.72
THA	1.07	1.27	1.06	3.10
IDN	1.64	2.10	1.46	2.80
MDV	1.92	2.08	1.10	2.11
CHN	2.00	0.94	2.18	4.56
FJI	2.28	6.90	1.40	2.19
NPL	2.96	4.20	2.13	4.44
MNG	3.60	4.70	2.74	2.44
BGD	3.69	3.93	3.63	3.21
LAO	5.24	6.66	6.22	3.01
MMR	5.38	6.14	4.60	6.48
PAK	5.45	4.44	5.60	3.90
IND	5.68	5.34	5.76	5.84
KHM	5.71	7.98	6.07	5.24
VNM	6.14	5.78	6.75	6.14
BTN	17.68	6.33	27.53	25.72

References

- Richard Baldwin and Rikard Forslid. Globotics and development: When manufacturing is jobless and services are tradable. Technical report, National Bureau of Economic Research, 2020.
- Yurendra Basnett and Posh Raj Pandey. Industrialization and global value chain participation: An examination of constraints faced by the private sector in Nepal. *Asian Development Bank Economics Working Paper Series*, (410), 2014.
- Angela Cheptea, Guillaume Gaulier, and Soledad Zignago. World trade competitiveness: A disaggregated view by shift-share analysis. 2005.
- Fabrice Defever, José-Daniel Reyes, Alejandro Riaño, and Gonzalo Varela. All these worlds are yours, except India: The effectiveness of cash subsidies to export in Nepal. *European Economic Review*, 128:103494, 2020.
- William Easterly, Ariell Reshef, and Julia M Schwenkenberg. The power of exports. *World Bank Policy Research Working Paper*, (5081), 2009.
- Simon J Evenett and Anthony J Venables. Export growth in developing countries: Market entry and bilateral trade flows. Technical report, mimeo, 2002.
- Gabriel J Felbermayr and Wilhelm Kohler. Exploring the intensive and extensive margins of world trade. *Review of World Economics*, 142(4):642–674, 2006.
- Guillaume Gaulier and Soledad Zignago. BACI: international trade database at the product-level (the 1994-2007 version). 2010.
- Mary Hallward-Driemeier and Gaurav Nayyar. *Trouble in the making?: The future of manufacturing-led development*. World Bank Publications, 2017.
- Ricardo Hausmann and Dani Rodrik. Doomed to choose: industrial policy as predicament. *John F. Kennedy School of Government, Harvard University*, 9, 2006.
- David J Hayward and Rodney A Erickson. The North American trade of US states: A comparative analysis of industrial shipments, 1983-91. *International Regional Science Review*, 18(1):1–31, 1995.
- David Hummels and Peter J Klenow. The variety and quality of a nation’s exports. *American Economic Review*, 95(3):704–723, 2005.
- Paras Kharel. Structural transformation and trade policy: Case of Nepal. *Trade performance and competitiveness: Selected issues relevant for Asian developing economies*, pages 1–73, 2014.
- Paras Kharel and Kshitiz Dahal. SMEs in Nepal: Examining constraints on exporting. *Enhancing SME Participation in Global Value Chains*, page 367, 2021.
- Ann R Markusen, Helzi Noponen, and Karl Driessen. International trade, productivity, and US regional job growth: A shift-share interpretation. *International Regional Science Review*, 14(1): 15–39, 1991.

- Indra Nath Mukherji et al. Revision of India-Nepal treaty of trade and its implications for strengthening bilateral trade and investment linkages. *RIS Discussion Papers*, (161), 2010.
- Bhubanesh Pant, Rajan Krishna Pant, et al. Export diversification and competitiveness: Nepal's experiences. *NRB Economic Review*, 21:52–78, 2009.
- Ramesh C Paudel and Paul J Burke. Exchange rate policy and export performance in a landlocked developing country: The case of Nepal. *Journal of Asian Economics*, 38:55–63, 2015.
- Chandan Sapkota. Remittances in Nepal: boon or bane? *The Journal of Development Studies*, 49 (10):1316–1331, 2013.
- Nisha Taneja and Samridhi Bimal. Informal trade in the SAARC region. In *Trade and Regional Integration in South Asia*, pages 267–277. Springer, 2020.