

# Performance of Handicraft Sector in Bhutan with fluctuating Foreign Exchange rates

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## Abstract

*The exchange rate is the domestic price of a unit of foreign currency. There has always been a consistent fluctuation in the exchange rate of Bhutanese currency against major currencies. These fluctuations in exchange rates obstruct businesses involved in international trade. Micro-Small and Medium Enterprises such as the handicraft sector are one of the major exporters in Bhutan and helps in the generation of the scarce foreign reserve for the economy. This study explains the movement of import and export figures of the handicraft sector with fluctuation of the exchange rate. The annual export and import figures and the annual average exchange rate between the US dollar and Ngultrum (the Bhutanese currency) from 2013 to 2019 have been used for analysis. The study shows how the import and export of handicrafts move when the Bhutanese currency appreciates and depreciates with USD. Further, the study finds that there is a positive correlation between export-import and exchange rate, but this is high for imports.*

**Keywords:** International Trade, Export, Import, Exchange rate, Balance of Trade

## Introduction

The handicraft industry provides a suitable setting to study networks and entrepreneurship. Entrepreneurs use archaic hand-operated looms to produce traditional cloth items. The Bhutanese handicraft industry primarily produces material for traditional garments for men and women, antique pieces, contemporary hand-woven Bhutanese fabrics, and so on. Handloom workers are the key drivers of competitiveness and innovation in many economic sectors. The handicraft sector comes under Cottage, Small and Medium Industry (CSMI). Whereas in Bhutan, the traditional arts are known as zorigchusum (zo = the ability to make; rig = science or craft; chusum = thirteen). The thirteen traditional arts are based on papermaking, stonework, blacksmithing, clay arts, painting, bronze casting, wood, slate, and stone carving, wood turning, woodworking, weaving, silver, and goldsmithing, cane and bamboo work, and finally the needlework.

However, the attention paid to traditional handicraft and folkloric products by the government, and some individuals started late in the 1970s due to political factors and poor public awareness about the significance of handicrafts and their relationship with the local identity and heritage (Mahadin 2007).

In the era of globalization and currency volatility in the international market, changes in exchange rates have a substantial influence on the operations and profitability of firms. Exchange rate volatility affects not just multinationals and large corporations, but small and medium-sized enterprises as well as those who only operate in their home country. The Bhutanese currency is not independent. The exchange rate for major currencies against Bhutanese currency depends upon the Indian currency. If the fluctuation of the foreign currency is erratic and thus it will influence the trade activities.

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Karma Galey (2005) has shown that the Bhutanese currency has no independent exchange rate with other major currencies of the world. The Ngultrum's exchange rate in relation to some prominent currencies such as the USD or Euro is replicated from the Rupee's rate against these currencies. Thus because of lack of independence whatever changes happen in India immediate change occurs in Bhutanese currency. When the Indian currency depreciates with respect to major currency, Bhutanese currency also depreciates and vice versa.

## Literature review

There has always been a consistent fluctuation in the exchange rate be it in terms of smaller or bigger figures. The fluctuation of major currency exchange rates has been a great concern for the RMA, financial institutions, traders, and the tourism industry as they are the main fatality of this cause. Many theoretical and empirical studies have been undertaken to assess the foreign exchange rate determination. Before exploring the impact of the exchange rate on export and import, it is necessary to look into various aspects already studied. Thus, we briefly review few studies which are relevant to the objective of the present study.

Grewal (2013) in his study found out that depreciation of the Rupee reduces the inflow of foreign capital, rises the external debt pressure, and also results in high subsidy bills. Therefore, the low value of a currency not only affects the image of a nation but also affects a lot of economic growth indicators. The export trade of the country determines the economic development of the country. Similarly, it is known that the higher the exchange rate, the poorer will be the condition of the importing country and vice versa. In such a case, there is no doubt to say that the exchange rate has a direct impact on the economic growth of any country (Rizzo, 1998).

However, Zang and Joseph (2006) in their study, they have found out that an increase in exchange rate variability of 1% led to a short-run decrease in the export quantity of 0.3%-0.4% and a short-run decrease in export price of 0.1%. The effects were low significant for specific export destinations or individual products. Thus, exchange rate volatility may not be a major policy issue for exporting products.

Sarkar and Banerjee (2007) have pointed out in their study that South and East Asian countries such as Pakistan, Bangladesh, Nepal, Bhutan, Vietnam, etc. have a strong presence of handicrafts clusters. More than a million people are engaged in household-level manufacturing units including weaving, bamboo and cane products, jute products, pottery, etc. in Bangladesh. Thus, handicrafts are one of the major sectors that brings growth to the economy of a country.

The 11th RMA Annual Meeting with the Financial Institutions (2017) has stated that nevertheless, impending exchange rate fluctuations do not pose major risks for Bhutan's exports as hydropower exports to India constitute close to a third of overall commodity exports and are sold at renegotiated fixed rates; the potential downside to a sustained depreciation would be a worsening in the external balance via increased expenditure on other country imports.

According to Koirala (2011) export of handmade goods has been playing a vital role in the Nepalese economy. This sector is providing employment opportunities and is also the source of foreign currency earnings. Increasing inflows of tourists in Bhutan in the last several years are expected to bring positive results for handicraft and handloom industries resulting in the economic development of the landlocked country. Likewise, according to Diagnostic Trade Integration Study (2017) and the National Export Strategy (2018), handicrafts and textiles were identified as priority areas for job creation to improve the income of local producers and artisans in Bhutan. The government of Japan had allocated US\$ 348,840 for 2016-17 under a UNDP project 'Scaling up of income generation through traditional crafts and textiles production and marketing' to Bhutan.

Mehmood (2002) found that the exchange rate fluctuation harms exports in both long-run and short-run periods. Similarly, Dincer and Kandil (2008) pointed out that a positive shock to the exchange rate of the domestic currency, an unexpected appreciation, will make exports more expensive and imports less expensive. The competition from foreign markets will decrease the demand for domestic products and it will decrease domestic output and price. Yarmukhamedov (2007) finds that the most commonly held belief is that greater exchange rate volatility generates uncertainty thereby

increasing the level of riskiness of trading activity and this will eventually depress trade.

Small-scale industries play a significant role in boosting the overall economic growth of an economy which includes handicrafts and handlooms. In another research, by Sonia and Kansal (2011), the Indian Textiles Industry has an overwhelming presence in the economic growth of the country. Apart from providing one of the necessities of life, it contributes about 14% to industrial production, 4% to the GDP, and 11% to the country's export earnings. It provides direct employment to over 45 million people. On supporting the above points Shanmugasundaram and Panchanatham (2013), pointed out that India's Apparel export is the single largest foreign exchange earner for the country. It contributes towards 6% of the Gross Domestic Product (GDP) of the country and earns 18% of the foreign exchange, through the export of all commodities. Thus, the growth and all-round development of this industry have a direct bearing on the improvement of the economy of the nation.

Pushpanathan (2014) has shown, Micro, Small and Medium Enterprise (MSME) is considered as one of the most important sectors in Sri Lanka which crafts greater contribution to the growth and social development of the country, and the SME sector has grown rapidly over the years about 79,304 establishments. The Small and Medium Enterprise (SME) sector has gained consideration in almost all the countries as the backbone of the economy.

## Research Methodology

To study the impact of foreign exchange fluctuation on the handicraft industry the paper will analyze the trend of import and export for seven years from the year 2013 to 2019 and aims to find an association, if any, with the exchange rate of Ngultrum with other currency especially with the Indian Rupee. As Handicraft and cottage industry in Bhutan contribute to one of the highest exports and is the largest employment provider so this sector has been

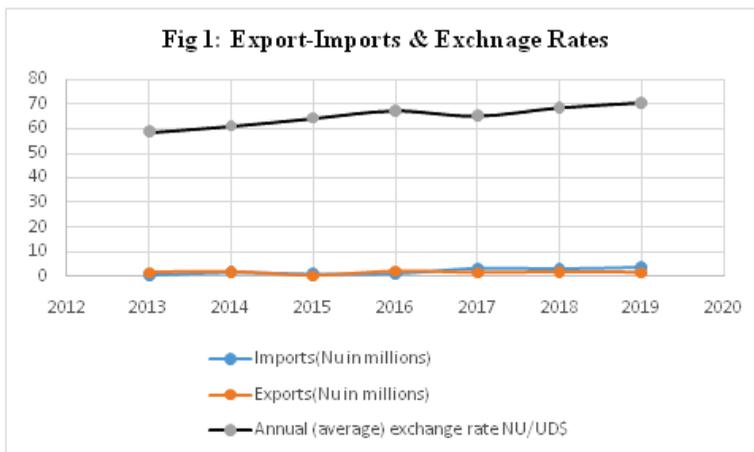
taken for study. From the total export from Bhutan, the data for export to India has been removed. Similarly, import data exclude imports from India. This was done so Ngultrum (Bhutanese Currency) has also been kept at par with Indian Rupee and both the currencies are freely exchangeable at par. Furthermore, settlement of trades can be done in either currency at par. The data of the annual average exchange rate has been taken from the Annual report of RMA (Royal Monetary Authority, the Central Bank of Bhutan) from 2013-2019. We will analyze the trend of export-import and exchange rates and use correlation analysis to find an association between these two variables.

## Data Analysis and Interpretation

In the following tables, 1 & 2 and Figure 1 the imports and exports of the goods & services and exchange rate along with the percentage change in these variables from the year 2013 to 2019 is shown. GDP of Bhutan in 2018 was USD 2 billion and export to and from India constituted more than fifty percent. Bhutan and India have an open trade agreement and in the Agreement on Trade, Commerce and Transit between India and Bhutan, under Article I, it has been specified that "there shall, as heretofore, be free trade and commerce between the territories of the Royal Government of Bhutan and the Government of the Republic of India". India remains the key and top trading partner of Bhutan both in terms of exports and imports. In the trade statistics of 2018, it was seen that the value of imports from India stood at around 47 billion in Ngultrum and the exports stood at around 21 billion. The highest traded commodity (in terms of value) with India is electricity and it generates the most returns for Bhutan (MoF, 2018). Trade statistics of 2018 show that the overall trade deficit of Bhutan increased from Nu. 9.76 billion in 2009 to Nu. 21.30 billion in 2018. With India alone, Bhutan's trade deficit stood at Nu. 16.05 billion (MoF, 2018). Export-Import to other countries are significantly low and these have been fluctuating in last several years.

**Table 1: Imports and exports to countries other than India**

Year	Imports(Nu in millions)	Exports(Nu in millions)	Annual (average) exchange rate NU/UD\$
2013	0.5	1.7	58.51
2014	1.6	1.9	61.01
2015	0.9	0.3	64.12
2016	1.1	2.1	67.18
2017	3.3	1.5	65.11
2018	3.1	1.8	68.41
2019	3.7	1.6	70.39

**Table 2: Percentage change in the export, import and exchange rate**

Years	Imports(Nu in millions)	% Change	Exports(Nu in millions)	% Change	Annual (average) exchange rate NU/UD\$	% Change
2013	0.5	-	1.7	-	58.51	-
2014	1.6	220.0	1.9	11.8	61.01	4.3
2015	0.9	-43.8	0.3	-84.2	64.12	5.1
2016	1.1	22.2	2.1	600.0	67.18	4.8
2017	3.3	200.0	1.5	-28.6	65.11	-3.1
2018	3.1	-6.1	1.8	20.0	68.41	5.1
2019	3.7	19.4	1.6	-11.1	70.39	2.9

It can also be observed from the data obtained that imports have fallen during the years when currency rates hardened for example from 2016 to 2017 it has risen 200 percent with the average rate of currency moved from Nu

67.18 to 65.11. Similarly, exports have increased in 2016 and 2018 when the currency depreciated. Also, due to the fluctuation of the exchange rate, handicraft sector had unfavorable balance of trade in Bhutan.

**Table 3: Correlation between Exchange rate, Imports and Exports**

Correlation:	Between Import & Exchange Rate	Between Export & Exchange Rate
	0.717147	0.07118

In the above data the correlation between the exchange rate and imports from countries other than India indicates strong positive correlation of 0.717. This is due to the fact that most of the input for handicraft exports are imported in Bhutan. The correlation between the exports and exchange rate is weakly positive which indicates that export increases by a smaller portion with increase in exchange rate.

## Conclusion

According to the secondary data that had been collected through RMA reports, majority of the exports and imports of the Bhutan are made to countries other than India. Through this research, it is clear that the exchange rate affects export and import of Bhutan concluding that there is a positive correlation between the exchange rate and trade of the country. The exports of handicrafts made by the Bhutan is most of the time low because of less production, lack of advance technology, resources, and manpower. After the analysis of the data, result obtained is not up to the expectation of the researcher. Bhutan had been importing the resources of the handicrafts when the exchange rate was high which had led to outflow of large sum of Bhutanese currency to other countries and exported when the exchange rate was low.

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