Has Generalized System of Preferences Scheme Influenced Nepalese Exports to the United States? An Empirical Analysis

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Abstract

This paper attempts to evaluate the impact of generalized System of Preferences (GSP) scheme on exports of Nepal to the United States (US). Nepal-US trade is very crucial because the US is still the second largest export destination of Nepal. Thus, it is pertinent to study exports of Nepal to the US under GSP scheme. Empirical results show that impact of GSP scheme is very minimal and negative. Other factors than liberal policy viz. GSP determines exports of Nepal to the US. Weakening exports capacity and declining trade transaction of Nepal to the US is of major concern. In this regard, to sustain the export of existing but declining exportable items like garment, carpet, pashmina and handicrafts and development and promotion of GSP eligible new products and services will only be the resolution of this obstruction.

Key words: *Generalized system of references, international trade, exports, imports, trade balance*

INTRODUCTION

Generalized System of Preferences (GSP) is a set of trade preferences granted on a non-reciprocal basis by developed countries to developing countries. It is a preferential tariff system as the obligation of the World Trade Organization (WTO) that secures a system of exemption in imports to the developed countries from the developing countries. It involves reduced MFN tariffs or duty-free entry of eligible products exported by beneficiary countries to the markets of donor countries. The main objectives of granting trade preferences to developing countries are a) to enhance export earnings, b) to promote industrialization, and c) to encourage economic development.

GSP is important component of modern trade. It was discussed during the GATT ministerial meeting in 1963 and proposed by the United Nations Conference for Trade and Development (UNCTAD) in 1964 to encourage developing country's exports and investment. The first major scheme implemented by the EEC was in July 1971.

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There are many limitations to all GSP programs. Not all developing countries are included (Baldwin, 1977). Programs typically exclude products where developing countries have the greatest comparative advantage (Devault, 1996). Export eligibility ceilings are often binding (Macphee & Rosenbaum, 1989). The programs impose strict rules of origin requirements (UNCTAD, 2001) and do not remove non-tariff barriers (Clark & Zarrilli, 1992) and up to 42 countries have been temporarily dropped or permanently "graduated" by the US at some time since 1976 (Ozden & Reinhardt, 2002). The US has allowed the GSP to lapse on occasions, including one period in excess of a year, increasing uncertainty for exporters. The generosity of the programs has also been eroded as a result of reductions in the general level of tariff protection, although Baldwin and Murray (1977) and Grossman (1982) argue that this last effect is small. Despite these limitations, the largest GSP schemes granted tariff preferences to almost $100 billion of developing country exports in 1997 (UNCTAD, 1999).

The Congress first authorized the US Generalized System of Preferences scheme in Title V of the Trade Act of 1974 (P.L. 93-618), as amended (Jones, 2014). P.L. 93-618 authorizes the President to grant duty-free treatment under the GSP for any eligible product from any beneficiary developing country (BDC) or least-developed beneficiary developing country (LDBDC). Section 502 of the 1974 Trade Act deals with the notion of a beneficiary developing country however, all the developing countries have been beneficiaries of the US GSP (Sapir & Lundberg, 1984).

The aspect of GSP in the United States is simple. All products that are eligible for preferential treatment enter entirely free of duty. According to the US Customs and Borders, for an import to qualify for duty-free treatment under the GSP, it must meet the following three requirements: (a) It must be from a designated beneficiary country; (b) It must be eligible for GSP treatment; and (c) It must meet the GSP rules of origin. To be eligible in designated beneficiary, the country may not be a Communist country, unless such country receives Normal Trade Relations (NTR) treatment, is a WTO member and a member of the IMF and not dominated by international communism.

Articles eligible for duty-free treatment are defined at the eight-digit level of the Harmonized Tariff Schedule of the United States (HTSUS). The products eligible for GSP treatment include most dutiable manufactures and semi-manufactures, as well as selected agricultural, fishery and primary industrial products that are not otherwise duty-free. The rules of origin provide that an article must be shipped directly from the beneficiary country to the United States without passing through the territory of any

other country or, if shipped through the territory of another country, the merchandise must not have entered the commerce of that country en route to the United States. In all cases, the invoices must show the United States as the final destination.

Nepal is listed as an independent and least developed country in the US GSP program. More than 5,000 products from Nepal are eligible to enter the United States duty-free under the GSP program. Of these, approximately 3,500 of these products are duty-free to all countries in the GSP-program and the remaining 1,500 are duty-free only for least-developed beneficiary developing countries. However, exports of Nepal to the US are deteriorating over the period. Though declining, the US is still the *third largest export destination* [1] that comprises 7.43% of Nepal's total exports in FY 2012/13 after India 66.95% and the European Union 10.02%. For LDCs like Nepal, international trade plays a vital role for economic wellbeing and prosperity. In this context, exports to the US are key to strengthen economic growth. Thus, the vital problem of exports of Nepal to the US is declining trade transactions and weakening export capacity although GSP has been initiated.

Thus, the results of this secondary data-based study would be useful to the researchers, policymakers, and other agencies/institutions involving in the field of Nepal-US trade. And, it has attempted to analyze the impact of GSP scheme on exports of Nepal to the US.

OBJECTIVES OF THE STUDY

The general objective of this study is to identify and analyze the impact of GSP on exports to the US from Nepal with statistical analysis. The specific objectives are:

i. To analyze exports trend of Nepal to the US after accreditation of GSP scheme.

ii. To examine the impact of GSP on exports of Nepal to the US.

PREVIOUS LITERATURE

This literature is closely related to exports pattern of Nepal to the US after accreditation of GSP scheme. However, main conclusion of this paper is that exports to the US are decreasing after the expiration of quota regime though GSP provides lower trade barriers. Ojha (2010) draws two inferences regarding foreign trade of Nepal after

[1] The USA is the third largest export destination of Nepal after India and the European Union. Note that European Union is considered in term of region basis. However, United States is the second largest export destination of Nepal in term of country basis after India.

1996: one imports from India is increasing at a faster pace and secondly, exports to third country is decreasing. Auboin and Ruta (2011) find positive correlation between exchange rate and international trade, however, empirical testing of Devkota (2000) shows that change in exchange rate does not affect trade balance of Nepal. Sachs and Warner (1995) find that growth is positively related to an openness indicator based on a number of policies that affect international economic integration. In a study Edwards (1993) estimated total factor productivity growth on a range of pre-existing indicators of openness to trade, and found that most indicators are strongly positively correlated with productivity growth. Greenaway et al. (2002) performs a similar analysis for GDP growth rates in developing countries, and finds that growth responds with a lag to trade liberalization. Sharma and Bhandari (2005) conclude that exports growth leads to economic growth of Nepal. Acharya (2012) finds the determinants of foreign trade of Nepal using gravity model approach. Bista (2013) analyzes Generalized System of Preferences in Nepalese perspective descriptively examining its consequences in a brief. Hate et al. (2005) discusses the consequences of expiration of MFA in South Asia. Ernst, Ferrer and Zult (2005) examine the impact of expiration of MFA on trade and employment. Khatiwada and Sharma (2002) argue that external Sector of Nepal is historically weak with perpetually increasing trade deficit. Kafle (2006) conducts a study to identify the effectiveness of existing trade policy on foreign trade of Nepal that concludes that Nepal's external sector policy should focus on rapid development in infrastructure establishment of industries that utilizes local resources and fulfill local needs as well as can have production surplus to export, creation of tourism friendly environment and massive promotional activities of tourism etc. The study of Basyal (2011) submits that the wide gap between exports and imports should be sustainably narrowed. Toward these ends, excessive consumption and unnecessary imports should be discouraged.

This paper has one major difference to these papers. It neither examines export-import trend of Nepal, nor implication of exports in economic growth. However, this study examines the impact of GSP scheme on exports of Nepal to the US.

The study of Ojha (2010) analyzes Nepal US trade but his paper lacks empirical testing. Studies of Auboin and Ruta (2011) and Devkota (2000) show impact of exchange rate in foreign trade but they short implication of GSP. Paper of Sachs and Warner (1995) lacks documentary evidence of Nepal. Sharma and Bhandari (2005) conclude that exports growth leads to economic growth of Nepal however they do not examine the impact of GSP in exports. Bista (2013) analyzes GSPs in Nepalese perspective but his

study is descriptive. Khanal et al. (2005) discuss the consequences of expiration of MFA, however the study is made shortly after the expiration of MFA. But to date, no one has empirically examined the simple question: Has GSP scheme influenced exports of Nepal to the US?

DATA AND METHODOLOGY

This study relies on publically available time series data of Nepal-US trade published by Trade and Export Promotion Center, Nepal Rastra Bank, US Department of Commerce, US International Trade Commission, etc. The study covers the trade statistics of 2003/004-2012/013. For the analysis, a one-tailed hypothesis is adopted. They are: a) Null Hypothesis (H_0): $\mu <$ critical value, i.e., impact of GSP scheme on exports of Nepal to the US is significant. b) Alternative Hypothesis (H_1): $\mu \geq 0$; i.e., impact of GSP scheme on exports of Nepal to the US is insignificant. The decision rules involves reject H_0 if $\mu <$ critical value (Gujarati, 2005).

The research design is mixed methods approach, incorporating both qualitative and quantitative techniques. Data are primarily taken from secondary sources. Statistics on trade between Nepal and US is derived from sources of the government of Nepal (GON) non-governmental organizations, publication of Nepal Rastra bank (NRB), World Trade Organization (WTO), US Department of Commerce, UNCTAD, etc. Due to the data deficiency of exports of Nepal to the US under GSP scheme, mirror data is used for the analysis.

The analysis is made by using econometric model which is estimated by the ordinary least square method. The equation is specified as

$$Y = \alpha + \beta X_i + U_i \qquad (1)$$

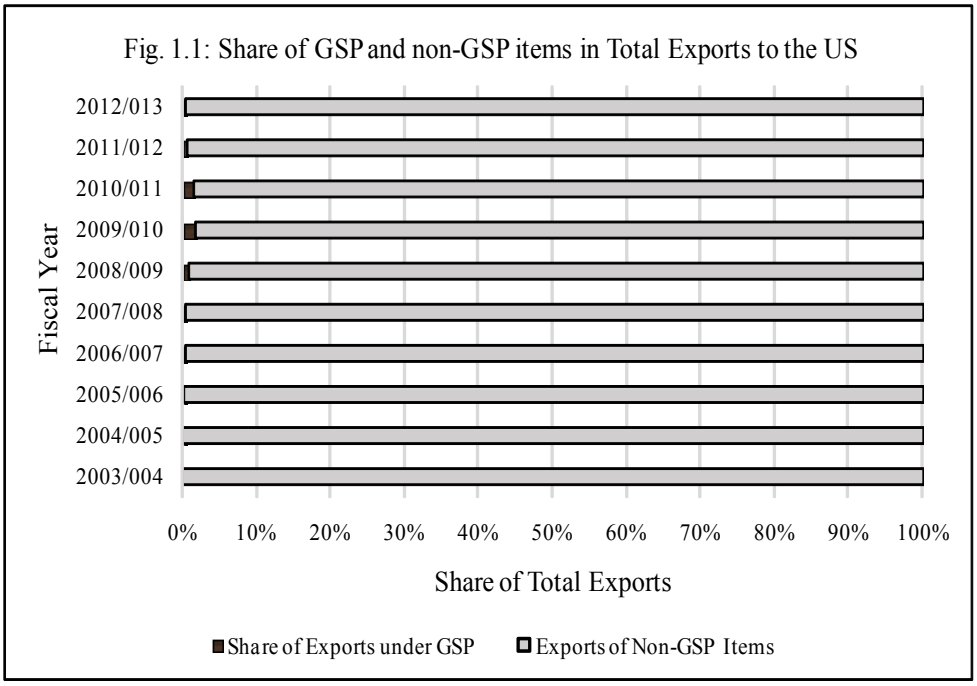
where, Y = exports of Nepal to the US, X_i = exports to the US under GSP scheme (only one variable is taken into consideration); α = intercept of the Nepal-US trade trend line; β = coefficient of GSP, U_i = error term , and i= 1, 2,3,…,n.

Adjusting with logarithm, the model becomes

$$\log Y = \alpha + \beta \log X_i + \varepsilon_i \qquad (2)$$

where, logY and logX_i are adjusted values of Y and X_i on log base 10.

RESULTS AND INTERPRETATION



Source: Author's calculation based on Trade and Export Promotion Centre, 2013; Nepal Rastra Bank, 2013 and US International Trade Commission, 2014.

Nepal is enjoying GSP scheme in the US only after Nepal becomes eligible for the US GSP, to be a designated beneficiary country since 2004 after the accession to the WTO. Figure 1.1 presents the share of exports under GSP scheme in total exports of Nepal to the US.

Exports of Nepal to the US under GSP are of worth Rs. 0.4 million out of Rs.9.69 billion in FY 2003/004, merely 0.004 percent of total exports to the US (Annex 1). Similarly, exports under the GSP scheme is Rs.0.47 million and Rs. 4.11 million throughout total exports Rs. 7.57 billion and Rs. 6.99 billion in FY 2004/005 and 2005/006 respectively consisting 0.006 percent and 0.059 percent in total exports to the US. It reveals that after accreditation of the US GSP, exports to the US started to downfall. However, items under the GSP scheme is grown to Rs. 20.61 million in FY 2006/007 and reached its' peak in FY 2009/010 for which exports under GSP is equivalent to Rs. 70.14 million, 0.37 and 1.81 percent in total exports Rs. 5.57 billion and Rs. 3.86 billion for the respective fiscal years. Later on, exports under GSP scheme are slowed down to Rs.60.79 million, Rs. 33.87 million in FY 2010/011 and 2011/12 respectively. Further,

impact of GSP is worsening in FY 2012/13 for which exports under GSP is equivalent to Rs. 23.89 million, only 0.41 percent in total exports to the US. On the other hand, total exports to the US geared up to Rs. 4.39 billion, Rs. 5.55 billion and Rs. 5.75 billion in FY 2010/11, 2011/12 and 2012/13 respectively. From the statistics above, it can be said that there exists inverse relationship between exports under GSP scheme and total exports to the US.

The graph shows that export base of Nepal to the US under GSP scheme is very weak. It is due to the fact that exports of Nepal to the US largely depend on exports of textiles and apparel products. Exclusion of duty free access to those products in the US market hampered both total exports and exports under GSP scheme to the US. Though, more than two third of total exports to the US for the study period comprises textiles and apparel products, exclusion of GSP scheme to these products leads exports capacity of Nepal to the US from bad to worse.

The data on Nepal's exports to the US (Y) and exports under GSP scheme (X_1) from the fiscal year 2003/004 to 2012/013 are processed. In this case, hypotheses are tested with F-test and T-test and regression model is run as specified in the methodology section. The hypotheses are observed at critical levels. The empirical results are given in Table 1.The sample period is 2003/04-2012/13 and dependent variable is total exports to USA (Y).

Table 1: Empirical Results from OLS Estimates

	Coefficient	*Std. Error*	*t-ratio*	*p-value*
Constant(α)	24.6617	0.32077	76.8829	<0.00001
X_1	-0.135433	0.0196123	-6.9055	0.00012

Mean dependent var	22.46000	S.D. dependent var	0.276606
Sum squared resid	0.098926	S.E. of regression	0.111201
R-squared	0.856337	Adjusted R-squared	0.838380
F(1, 8)	47.68604	P-value(F)	0.000124
Log-likelihood	8.890454	Akaike criterion	-13.78091
Schwarz criterion	-13.17574	Hannan-Quinn	-14.44478
Rho	-0.118360	Durbin-Watson	2.027969

Source: Author's presentation based on the statistics of Annex 1, taking log values on base 10.

From the empirical analysis, it is obvious that there exists strong negative correlation between exports under GSP and total exports to the US. As the correlation coefficient (not reported in the table) is (-0.926), this reveals that there exists 92.6 percent negative correlation between Y and X_1. That means as total exports to the US increases, exports

under the GSP scheme decreases and vice versa. R^2 is 0.857, which shows the regression line is 85.7 percent fit.

The analysis of variance (ANOVA) (result not shown here) shows that calculated value of F is 47.68 and critical value of F at 5% level of significance for (1, 8) is 5.32. Since, F_{cal} (47.68) is greater than $F_{tab.\ (0.05)}$ with degree of freedom (1, 8) 5.32, H_0 is rejected. Hence, H_1 is accepted. That means impact of GSP scheme on total exports to the US is insignificant and significance of GSP exists at a very low 0.012 percent.

Empirical analysis shows that the constant coefficient (α) is 24.66; which is the slope of regression line. The magnitude of GSP scheme is (-0.135) which reveals that as total exports to the US increases by one unit, exports to the US under GSP scheme diminishes by 0.135 units. Analyzing the result from coefficients, the t-statistics for X_1 is 6.905 (negative). Since, t_{cal} (6.905) for X_1 is greater than critical value of $t_{tab\ (0.05)}$ with degree of freedom (10-1 = 9) is 1.833, H_0 is rejected. Hence, H_1 is accepted. It also draws the same result as F-test, i.e., impact of GSP scheme on total exports is insignificant.

CONCLUSION

The United States of America is the second largest export destination of Nepal. Though exports of Nepal to the US are declined tremendously after the accreditation of the US GSP, importance of Nepal-US trade is not minimized. From empirical analysis it can be said that accreditation of GSP is insignificant in exports trade of Nepal to the US and the nominal impact exists inversely.

During the study period of this paper, total exports of Nepal increases by 1.43 folds accounting Rs.53.94 billion in FY 2003/04 and Rs.77.35 billion in 2012/13. Total increase in exports in monetary units for the period is Rs.23.40 billion. However, exports to the US for the same period decreases by Rs. 3.94 billion, almost by 40.70 percent. This shows weak exports potentiality of Nepal to the US.

The empirical analysis of past 10 years reveals that exports to the US depend on exports of textiles and apparel products. Textiles and apparel products constitute more than two third of total exports to the US after Nepal qualifies for the US GSP scheme. After Nepal's eligibility for the US GSP, exports of Nepal experiences adverse effect due to expiration of Multi Fiber Agreement.

Export trade is globally accepted as a means of economic development and prosperity. Realizing the fact, GON has taken various initiatives towards export promotion including policy and institutional reforms. However, those initiatives are minimal

to promote export trade in comparison to mountainous imports. In this context, it is naturally desirous to expand Nepal's trade and economic relations with potential countries, including the USA through development of appropriate bilateral instruments and mechanism of consultation in the areas of trade in goods, services, IPR, investment, and technical assistance for enhancing the trade related capacity of Nepal. In case of Nepal's exports to the USA which is declining over the period, is to sustain the export of existing but declining exportable items like garment, carpet, pashmina and handicrafts and development and promotion of GSP eligible new products and services. This will require developing the national capacity to produce more goods and services, improvement in the quality and overall productivity of the economy through technological advancement, and coherence between trade policy and sector-wise policies. Thus, fresh trade negotiations along with expansion of trade potentiality of government of Nepal (GON) will provide resolution to this obstruction.

Annex 1

Fiscal Year	Total Exports to the US (in Rs.'000)	Exports to the US under GSP scheme* (in US$)	Annual Average Exchange Rate of 1 US dollar in NC	Exports to the US under GSP scheme** (in Rs. '000)
2003/04	9,695,977	5,500	Rs. 73.60	404.80
2004/05	7,570,742	6,500	Rs. 72.27	469.76
2005/06	6,993,442	57,000	Rs. 72.06	4,107.42
2006/07	5,571,274	285,000	Rs. 72.32	20,611.20
2007/08	4,598,900	321,000	Rs. 65.04	20,877.84
2008/09	4,878,573	451,000	Rs. 76.88	34,672.88
2009/10	3,867,223	941,000	Rs. 74.54	70,142.14
2010/11	4,392,600	840,000	Rs. 72.37	60,790.80
2011/12	5,551,916	418,000	Rs. 81.02	33,866.36
2012/13	5,750,120	271,500	Rs. 87.99	23,889.29

Note: *To derive the value in FY 2003/004 form, exports of base and upcoming year are accumulated together and divided by 2, the number of years accumulation.

** The values in Rs. reflect (mirror) value of exports to the US under GSP as per the US International Trade Commission, 2014. They are derived by multiplying the value of goods exported to the US under GSP and the average annual exchange rate of 1 US dollar in Nepalese Currency

Source: Nepal Rastra Bank and Trade and Export Promotion Centre, 2013; the US Department of Commerce & the US International Trade Commission, 2014.

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