Imports: Blessing In Disguise To Nepal Government

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ABSTRACT

Trade has played an influencing factor for the economy to achieve its economic growth. For that, economies are highly engaged on expanding their exports while wanted to minimize imports. However, for developing countries like Nepal, imports have also been an integral part for the collection of government revenue. This article tries to study the relationship between government revenue and imports in context to Nepal following bivariate timeseries analysis along with some empirical analysis. Data are retrieved from economic survey and macroeconomic indicators from the fiscal year 2001/02 to 2021/22. The result shows huge rate of dependence of government revenue on imports and has became a disguised blessing.

Key words: trade, import, exports, integral, disguise, timeseries

1. Background

Trade has been an integral part of an economic system and it refers to the exchange of goods and services between two parties. Similarly, international trade is the exchange of capital, goods, and services across international borders or territories. Basically, it refers to the purchase of goods and services by the citizens of one country from the citizens of another country. In different words, it is understood as the transaction and trade of goods and services between nations among the residents of different countries of the world, and it represents a significant share of gross domestic product (GDP). In this way, foreign trade or international trade is simply the exchange of goods, capital and services in several countries. Foreign trade is studied in two components viz. imports and exports. Exports refers to the sale of domestic products into the international market while reverse replicates imports.

2. Statement of the Problem

Economies around the globe has advocated on exporting goods and services. Despite such advocacy, developing countries like Nepal, Sri Lanka, middle east and north African countries etc. are not able to increase their exports. On the contrary side, they cannot reduce the imports as well. An article ‘Fixing Sri Lanka’s Revenue Problem is
A Priority’ stated that, in case of Sri Lanka, taxes imposed only on imports account nearly around 20 per cent of total tax revenue (Publicfinance.lk, 2017). A news published on ‘Banks to Discourage Letter of Credit for Luxury Goods’ revealed the measure taken by government to reduce huge imports in order to minimize current account deficit (Prasain K., 2022). On the contrary, another news on The Kathmandu Post entitled ‘Development Projects Suffer from Funds Crunch as Government Revenue Takes Hit’ exposed the inadequate amount of revenue collection of government of Nepal to fund its development projects amid the ban on the import of vehicles, liquors and high-end mobile phones done to control high trade deficit (Shrestha, 2023). This study aims to seek answer to following research questions.

i. What is the trend of imports and government revenue of Nepal since 2001 AD?
ii. Is there any relationship between government revenue and imports of Nepal?

3. Objectives of the Study

Despite, lots of efforts are done to minimize imports, it seems that import has also played an important role in the generation of public revenue to the respective government. So, the main objectives of the study are;

i. To study the trends of imports and government revenue of Nepal since 2001 AD
ii. To study relationship between import and government revenue in context to Nepal.

4. Research Methodology

This paper is quantitative in nature, based on some descriptive as well as time series analysis. It is written with the help of data from secondary sources taken from, governmental sites, research paper etc. So, data taken for the research are taken from economic survey (Ministry of Finance), macroeconomic indicators (Nepal Rastra Bank) etc. for the analytical purposes. Similarly, other related information are gathered from scholar articles, websites, newspapers, reports, portion of interviews etc. For the analysis purpose, a time series model is developed as;

\[ GR = \alpha + \beta M + U \] ….. (1)

Where,

- \( GR \) represents government revenue of Nepal
- \( \alpha \) is an intercept
- \( \beta \) is coefficient of imports of Nepal
- \( M \) refers to imports of Nepal
- \( U \) represents error term.

And for the analytical purpose, data of government revenue and imports of Nepal from fiscal year 2001/02 AD to 2021/22 AD are taken.

5. Review of Literature

As trade has been an integral part, thousands of researches have been done around the globe regarding the importance of trade and its impact on economy. International trade includes imports and exports between or among the citizens of different countries. Smith (1776) in his book ‘An Inquiry into the Nature and Causes of Wealth of Nation’ focused on enhancing economic condition of individuals and nation via the division of labor. “Almost all countries exchange with one another, partly native and partly foreign goods. That country, however, in whose cargoes there is greatest proportion of native, and the least proportion of foreign goods, will be the principal gainer” (Smith, 1776). Similarly, another article by McDonald (2019) on International Monetary Fund (IMF) argued that, “Nations are always better off when they buy and sell from one another”.

Furthermore, Gupta (2007) added that several structural factors like per capita GDP, share of agriculture in GDP, trade openness and foreign aid are the significant determinants of government revenue.

According to Kim et al., 2013; Shahbaz, 2012 & Dong, 2014, had claimed that, due to the ability of international trade in increase efficiency and productivity, internationally active countries tend to be more productive in long run as cited by (Shubati & Warrad, 2018). Trade openness facilitate economic growth by facilitating economies of scale, reduce the obligatory constraint to allow increases in the imports of capital goods enhancing the efficiency through increased efficiency (Kakar & Khilji, 2011).

Neog and Gaur (2020), emphasized on the impact of trade openness on the revenue generation in India. On a contrary situation, economies have also tried to restrict imports to balance economic condition. “In 2018, USTR imposed tariffs on about $370 billion on US imports from China, while China countered with tariffs on $110 billion of US products” (Congressional Research Service, 2022).

A journal article through empirical analysis by Shubati & Warrad (2018) argued that there is negative impact on developing countries resulting from openness to international trade. They added that, heavy rely of those middle east and north African countries on import tariff taxes lead to potential loss in government revenue of those coun-
A study done by Bhoosal & Byanjankar (2022) found that main determinants of government revenue in Nepal are GDP per capita, followed by imports in the short run. Similarly, they added exchange rate as well as the long run determinants.

Another study by Tandan and Kafle (2021) claimed that imports of advanced technologies, materials and other resources have some impact on economic growth, however, ruled out its short run and long run impact unlike exports and technologies.

6. **Analysis of Data**

For the analysis of data, data of imports and government revenue from fiscal year (FY) 2001/02 to 2021/22 are retrieved from economic survey, 2012 & 2023 and macroeconomic indicators, 2023 published by Ministry of Finance and Nepal Rastra Bank respectively. The import contains value for both goods and services while government revenue includes only tax and non-tax revenue. The unit of data expressed are in Rs. ten million (Crore in Hindu Arabic Numeric System).

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Imports (Rs. In Ten Million)</th>
<th>Government Revenue (Rs. In Ten Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001/02</td>
<td>13091.2</td>
<td>5044.55</td>
</tr>
<tr>
<td>2002/03</td>
<td>14052.2</td>
<td>5622.98</td>
</tr>
<tr>
<td>2003/04</td>
<td>15815.1</td>
<td>6233.1</td>
</tr>
<tr>
<td>2004/05</td>
<td>17375.4</td>
<td>7012.27</td>
</tr>
<tr>
<td>2005/06</td>
<td>20482.8</td>
<td>7228.21</td>
</tr>
<tr>
<td>2006/07</td>
<td>23089.3</td>
<td>8771.21</td>
</tr>
<tr>
<td>2007/08</td>
<td>27129.1</td>
<td>10762.25</td>
</tr>
<tr>
<td>2008/09</td>
<td>34253.6</td>
<td>14347.75</td>
</tr>
<tr>
<td>2009/10</td>
<td>43420</td>
<td>17794.58</td>
</tr>
<tr>
<td>2010/11</td>
<td>45006</td>
<td>19837.63</td>
</tr>
<tr>
<td>2011/12</td>
<td>51295</td>
<td>24437.4</td>
</tr>
<tr>
<td>2012/13</td>
<td>63489.9</td>
<td>29602.11</td>
</tr>
<tr>
<td>2013/14</td>
<td>80055.2</td>
<td>35662.07</td>
</tr>
<tr>
<td>2014/15</td>
<td>88344</td>
<td>40586.64</td>
</tr>
<tr>
<td>2015/16</td>
<td>88511</td>
<td>48196.16</td>
</tr>
<tr>
<td>2016/17</td>
<td>113332</td>
<td>60917.99</td>
</tr>
<tr>
<td>2017/18</td>
<td>140421</td>
<td>72671.75</td>
</tr>
<tr>
<td>2018/19</td>
<td>160028</td>
<td>82963.37</td>
</tr>
<tr>
<td>2019/20</td>
<td>132658.0</td>
<td>79374.66</td>
</tr>
<tr>
<td>2020/21</td>
<td>165112.0</td>
<td>93588.79</td>
</tr>
<tr>
<td>2021/22</td>
<td>210364.0</td>
<td>106634.65</td>
</tr>
</tbody>
</table>

*Source: Economic Survey, 2012 &2023; Macroeconomic Indicators, 2023*

Given table shows the data of imports and government revenue of Nepal for the period of twenty years. It shows that the value of imports was just Rs.13091.2 crores in FY 2001/02 which increases in substantial amount to Rs. 210364 crores in FY 2021/22. Similarly, government revenue in FY 2001/02 was just Rs. 5044.55 crores which increases to Rs. 106634.65 crores in FY 2021/22.
The graphical trendline of these imports and government revenue are presented in graph below.

**Figure 2: Imports and Government Revenue from FY 2001/02 to 2021/22 (Rs. In Ten Million)**

![Graph of Imports and Government Revenue from FY 2001/02 to 2021/22](image)

Source: Economic Survey, 2012 & 2023; Macroeconomic Indicators, 2023

Given figure shows that, in FY 2001/02 there is not much huge differences between both imports and government revenue. After FY 2001/02 both increases till FY 2013/14. However, the increment in imports is larger than in government revenue. Meanwhile, in FY 2015/16 import plunges down in small value, however, government revenue grows continuously. Later, after FY 2016/17 both of these indicators experienced upward growth till FY 2018/19. Thereafter, there is huge decline in import while minimal decline is experienced by government revenue in FY 2019/20. After, FY 2020/21 both start to increase again. So, from the graphical analysis, both imports and government revenue experienced similar movements in these periods of twenty years.

**Case i: Relationship between imports and government revenue (From FY 2001/02 to FY 2021/22)**

In order to find out the relationship between government revenue and imports, a lag model is developed with difference of one year using SPSS analytical tool. The analysis done through SPSS provide following results.

**Table 2: Model Fit between Imports and Government Revenue from FY 2001/02 to FY 2021/22**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-Squared</th>
<th>MAPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Revenue</td>
<td>0.991</td>
<td>0.983</td>
<td>8.140</td>
</tr>
</tbody>
</table>

Source: SPSS Analytical Tool

So, the data revealed that the correlation coefficient (R) is equal to 0.991 while R-squared is equal to 0.983. While, Mean Absolute Percentage Error (MAPE) is equal to 8.140. This predicted model is tested in graph to check whether it fits the model or not. It gives the graph as shown below.
Case ii: When FY 2019/20 is omitted

Karki (2020) in his article on ‘The Diplomat’ revealed the extension of lock down until 15th of April 2020. The lock down decision was initially taken on March 24, 2020 amid the rapid spreading of covid-19. As the economy suffered in that year, FY 2019/20 is omitted due to abnormal impact of covid-19 on smooth functioning of an economy. So, after excluding FY 2019/20 from our analysis, we get new results as shown in table below.

Table 3:

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-Squared</th>
<th>MAPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Revenue</td>
<td>0.998</td>
<td>0.997</td>
<td>5.438</td>
</tr>
</tbody>
</table>

So, the data further revealed that the correlation coefficient (R) is equal to 0.998 while R-squared is equal to 0.997. so, it explains 99.7 percent variation in government revenue is explained by change in imports. While, Mean Absolute Percentage Error (MAPE) is equal to 5.438. Now, this new predicted model is tested and it shows the graph as shown below.
In above figure 4, model-fit between imports and government revenue is shown when FY 2019/20 (2019) is omitted for the special purpose. It is clearly observed that, the predicted values by our time series model almost fit with the observed values of government revenue for the mentioned years.

7. Conclusion and Discussion

This study concludes that, Nepal government is heavily dependent on import for government revenue. This result is quite similar to the analysis done by Bhoosal and Byanjankar (2021), who claimed 10 percent increase in imports increase government revenue by 5.4 percent in long run through ARDL analysis. The result even correlated with the fact that government revenue plunged sharply and government was forced to downsize the budget in mid-term review for lack of cash (Prasain & Prasain, 2023). The imports of goods are associated with the productivity of the domestic entities through proper allocation of resources which further helps in enhancing economic activities. So, the revenue of government of Nepal is highly correlated with those imports and their linkage effects on the economy. Thus, import has become a blessing in disguise for the Nepal government and Nepalese economy.

REFERENCES


