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# Dumping Concerns amid Trade War and India-US Trade Deal

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**Abstract**. The trade war initiated by the US has taken several twists. Now, the US imposes a baseline tariff on almost all countries, while the tariff fight between China and the US has escalated further. In this analysis, using a global CGE model, we find that though the tariff escalation between China and the US would be economically beneficial for India due to increased domestic demand, to reap greater gains, India should go ahead with deeper tariff cuts. A tariff cut of 25% for all countries would expand India's economy two-times (2.62%) vis-a-vis expansion in no-action scenario (1.31%). A comprehensive India-US FTA may accelerate India's growth but, in its backdrop, dumping probability from China also rises, as bilateral total imports from China increase by 14%. The dumping from China may put the domestic industry at a disadvantage, as in India, dumping cases related to Chinese firms already occupy a major chunk of all dumping cases. Therefore, we propose a systemic approach to deal with dumping threats from China, which is unilateral tariff liberalization by India for all trading partners, excluding China. Such a policy does not affect India's welfare much, but bilateral imports from China fall drastically. Hence, the dumping probability would also be dialed down with fewer bilateral imports. The other key macroeconomic variables for India, like the GDP, sectoral outputs, aggregate exports, and domestic demand, do not fall significantly due to this policy action.

**Keywords: Trade War, Dumping Concerns, India-US FTA, Tariff Cut, CGE Analysis**
**JEL classification codes: F10, F13, F14, F15**

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# 1 Introduction

The trade war initiated by the US has taken several twists since its inception. On April 2nd, dubbed as 'liberation day' by the US president, a new set of (reciprocal) tariffs, along with a baseline tariff of 10% were announced. A 10% baseline tariff was imposed on almost every country in the world, while the reciprocal tariffs were rolled back after a few hours of their implementation, except for China. Since then, the reciprocal tariffs have been put on hold by the US to get a favorable deal from its trading partners.

In the case of China, the story is a little different. China was levied 34% tariff by the US, in retaliation, China also imposed a 34% tariff on US imports. In a tit-for-tat between China and the US, China escalated its tariffs on the US to 84%, while the US kept up its onslaught on China by escalating its tariffs, first to 125% and then 145%. Though both countries are involved in negotiating the tariffs, a significant positive outcome for the world trade order is yet to come.

Trade negotiations are on between the US and its major trading partners like Canada, Mexico, and the EU. Several Asian economies like South Korea and Japan are also in talks with the US officials. One of the Asian deals includes the India-US trade deal. Though the specifics are not known, both nations are negotiating for a trade deal. Hence, as of now, China is the only country that is facing the tariff heat and also retaliating against it.

Because of the high tariffs, the trade flow between the US and China has been disrupted. According to the UN COMTRADE data, China exports around 16-17% of its goods to the US and imports around 6-8% from the US. Since China now faces sudden trade barriers in the US market, it will look for other markets to export its products to clear its inventory. For that, it may take recourse to dumping. Dumping is a trade practice where a firm or a country exports its goods to another country at a price that is lower than the production cost of that good. To deal with such unfair market practices, anti-dumping duties can be levied on such goods after an investigation. The WTO allows such measures under Article VI of the GATT (the Anti-dumping Agreement). In India, the Directorate General of Trade Remedies (DGTR) investigates these cases.

Apart from other countries, India may be targeted by Chinese firms to dump their goods. There are several reasons behind the dumping concerns from China. First, India has a huge consumption capacity, which makes it a perfect market to clear the inventory. Second, China is India's largest import partner; India imports 14-15% of its goods (value-wise) from China. In such a situation, a few instances of low-cost imports may not come to the radar of anti-dumping authorities in India. Third, the dumping activity from China is not a new phenomenon. Many dumping cases have been investigated and are being investigated in India against Chinese firms for such practices. Figure 1 shows the status-wise related statistics from the period 2014 to 2024. One

may observe that of all the cases investigated, cases related to China are the dominant ones. In 2024, all the concluded cases related to China, while in 2023, 24 out of 29 cases concluded with China as a dumper country. The same kind of pattern is observed where the case investigation is ongoing. In recent years, after the COVID-19 outbreak, the dumping activity from China has seen a sharp rise. Hence, the dumping concerns related to China are genuine and should be considered vigilantly.

Another prominent development is the ongoing negotiation of the India-US trade agreement. Both sides are aiming for an interim goods deal by the fall of 2025. Since duty-free trade from India to the US will increase demand for Indian goods, demand for Chinese intermediate goods in India will also rise, and so will the dumping concerns. In such a situation, monitoring of dumping from China becomes more relevant.

This article is an extension of our previous analysis Jaiswal and Kumar (2025), which explores the policy options for India in the backdrop of different trade war modalities; the summary of the same is attached as an annexure to this paper. In our earlier analysis, we had analyzed the aggregate impacts of trade war and tariff cuts by India, and found that a deeper across-the-board tariff cut would be beneficial for India. In this article, we'll be more specific about the bilateral trade relations with China and the US. Apart from that, in India, though there is a system for investigation of dumping cases and counter-measures against them, it is more of a reactionary approach. In this article, we will consider a more proactive and systemic approach for dealing with dumping activities.

Hence, our objective in this article is many-fold. First, we will analyze the impact of the US-China trade face-off and its further escalation on the Indian economy. Since Jaiswal and Kumar (2025) recommends a deeper tariff cut (25%) by India, we will address the dumping concerns from China in the presence of the tariff cut. To lessen the dumping probability, we will also consider a unilateral policy option. Several Indian scholars have recommended that India should forge bilateral trade agreements with its major trading partners to reap economic benefits (Ganesh-Kumar and Chatterjee (2016), Pant and Paul (2018)). In a particular reference to the India-US Trade Deal, the Chairman of the $16^{th}$ Finance Commission and noted economist Arvind Panagariya also advocates for it because of its prospective benefits to India[1]. Therefore, the gains of a comprehensive India-US trade deal in the backdrop of a trade war will also be examined.

Hence, for these purposes, Section 2 describes the respective scenarios of the analysis. Section 3 is related to the discussion of the results. Section 4 will conclude.

[1]Available on https://economictimes.indiatimes.com/news/economy/foreign-trade/arvind-panagariya-us-deal-will-be-a-big-positive-for-india/articleshow/120833116.cms?from=mdr

# 2 Scenario Description

For this analysis, we have employed the same data and methodology that we have used in the earlier exercise, namely the GTAP model and the GTAP database 11.0v. For details on the GTAP model and database, please refer to Jaiswal and Kumar (2025). In this Section, we describe only the scenarios designed for the analysis. All scenarios have been classified in two sets- Set 1 and Set 2 which are non-FTA and FTA scenarios, respectively. The details of each scenario has been described as follows.

## 2.1 Set 1:

This is the non-FTA scenario, meaning the India-US trade agreement has not been considered here. In this set, only the tariff escalation between the US and China, and the dumping prospects from China will be examined. As a policy action, the tariff cut by India to gain the maximum from the trade war have been considered.

- **Run 1:** The US applies 10% baseline tariff on every country/region in the world except China. The US imposes 25% tariffs on China, and China counters this by imposing 25% tariff on US goods.
- **Run 2:** This is a run of tariff-escalation between China and the US. The US applies 10% baseline tariff on every country/region like Run 1, but for China, tariff is 50%. China retaliates with 50% tariff on US goods.
- **Run 3:** This simulation captures the impact of India's unilateral policy action of tariff cuts in the backdrop of the trade war as sketched in Run 2. Here, India cuts tariffs by 25% for all the regions and all the goods as suggested in Jaiswal and Kumar (2025).
- **Run 4:** This experiment is the same as Run 3 with just one change. The tariff cut of 25% by India is not provided to China, meaning the tariffs for China are maintained at their base level. Maintaining the base tariff for China in the face of a tariff cut for all other trade partners is expected to act as a precautionary anti-dumping measure.

## 2.2 Set 2:

In this set of scenarios, the India-US trade agreement has also been considered. Set 2 runs will show the impact of the India-US deal on the Indian economy, as well as the dumping concerns from China amid the trade war and the India-US trade deal. Tariff cuts by India have also been applied.

- **Run 5:** In this scenario, a trade war is happening as in Run 2, but the US does not impose any tariffs on India. Instead, a full free trade agreement between India and

China is functional, meaning there is zero-duty trade for all goods between the two countries.

- **Run 6:** Here, apart from the India-US agreement, India cuts 25% duty for all countries across the board, even as the trade war, as in Run 3 prevails in the rest of the world.
- **Run 7:** India cuts tariffs by 25% for all countries across the board except China, for which India maintains base tariff rates, along with the trade war prevailing in the rest of the world.

All the scenarios have been summarized in Table 1.

# 3 Results and Discussion

In this Section, we present and discuss the results of several macroeconomic variables according to the scenarios described earlier. In particular, we analyze the welfare and change in GDP for India, the sectoral output of India, the aggregate export and import of India, the bilateral exports of India to China and the US, and the bilateral imports of India from China and the US.

## 3.1 Escalation of Trade War and Dumping Concerns

As described earlier, Run 1 and Run 2 are the specific scenarios related to the trade war between China and the US. In Table 2, it is observed that the sectoral output is increasing in both these scenarios, while aggregate exports (Table 3) are going down. The reason behind such a pattern is as follows. Since the entire world is facing tariffs, the interconnected world economy may face an economic slowdown, which would reduce the demand for goods. Among others, Indian goods would face a timid demand from the world because of the slowdown. This is why the aggregate exports are going down by 1.4%. The decreased world demand for the goods would lower the world prices of the same, which may increase the import demand by several countries. The countries with high consumption capacity may benefit in such a situation. As evident in Table 4, the aggregate imports to India rise both in Run 1 and Run 2. Since Indian firms are getting cheaper intermediate inputs from the world, their finished products would be cheaper as well, which will boost domestic demand for the same. The household demand for the domestic goods has been shown in Table 5. All the sectors see a positive change in demand by households. Since domestic demand for domestic goods is increasing, the sectoral output will increase (1.1% in Run1). The sectoral output increase implies an increase in GDP, India's GDP will increase by 0.96% (Run 1) as shown in Figure 2. Due to cheaper imports of finished and intermediate goods, consumer and producer surplus will increase, respectively; and due to expansion in output, factor employment will also

increase, which will jointly increase the welfare for the country. India sees an uptick of 20 billion USD in welfare, as shown in Figure 3.

Now, coming to the bilateral trade flows of India to China and the USA in Run 1. India's export to China goes down by around 4% as shown in Table 6. Since each country is facing the US tariffs so their exports to the US will go down, and hence, due to value chain linkages, these countries will demand less of Chinese raw and intermediate goods. Also, China faces high US tariffs. Due to these factors, Chinese demand for Indian goods, particularly raw goods like Extraction products, goes down severely (-25%). Since India is facing a 10% baseline tariff, total export to the US is down by 16%; except 'Textile and Leather' sector, every sector's export to the US is negative (Table 7).

As evident in Table 8, in Run 1, imports from China increase by 3.5%, a particular rise exceeding 5% can be seen in several sectors like 'Meat and Livestock', 'Transport equipment', 'Metals', and 'Other Services'. China is a very dominant player in world trade. Due to a sudden shock in the US market, and also weak demand from other economies, the world price for Chinese goods will go down. A trade flow from China to India would happen because of the price wedge. Cheaper Chinese goods would be good for consumers, but the firms may face competition, which may cause several firms to close down. Here comes the dumping concerns from China. Though the low prices of Chinese goods seem to be market-driven in the model, in reality, due to sudden market barriers, Chinese firms may do so artificially to shift/dump their inventory. The imports from the US to India declined by around 25% (Table 9) because the US products are no longer price-competitive. This is because tariffs on each country make intermediate inputs for the US costlier, which in turn makes the finished products of the US costlier. So finally, the demand shifts from the US to other countries.

Now, turning to the escalation of the trade war, which has been captured by Run 2, when the US and China impose 50% tariffs on each other, the trade war gets intensified. This will further shrink the world economy, and the demand for goods will taper, which will cause the composite price index of goods to plunge further. In such a situation, Indian firms buy more intermediate inputs like 'Extraction products', 'Textile and Leather', 'Rubber and Plastics', and 'Metals' from the World market (Run 2, Table 4), which further fuels household demand for domestic goods (Run 2, Table 5). Except for 'Extraction' and 'Pharma', sectoral outputs increase for each sector, so does the GDP and the Welfare. GDP expands by 1.3% from 0.96% earlier (Figure 2); the Welfare reaches 28.5 billion USD from 20 billion USD (Figure 3). Aggregate exports from India do not get better very much, but some improvements in sectoral exports of 'Textile and Leather', and 'Other manufacturing' are visible here (Run 2, Table 3). In short, we may say that an escalation of the trade war may benefit India more if it does not engage in the trade war and remains a bystander.

Bilateral exports from India to China will shrink further because of the economic

slowdown in China and the world (Run 2, Table 6). Bilateral exports from India to the US are still negative except the 'Textile and Leather' sector, which sees a positive change of 26% over the base value (Run 2, Table 7). Imports to India from the USA further shrink to around 27% because of further price increments and uncompetitiveness in the world market (Run 2, Table 9).

Though an intensified trade war between China and the US brings economic benefits for India, the dumping concerns from China become more prominent because the imports from China increase by 6% over the base value in contrast to 3.5% earlier (Run 2, Table 8). A particular rise can be seen in 'Meat and Livestock (19.4% )', 'Transport Equipment (10.6% )', and 'Metals (9.2%)'.

## 3.2 Tariff cuts and Dumping Concerns

As shown in Jaiswal and Kumar (2025), a broad based trade policy option that benefits India in the context of the ongoing trade war is a unilateral cut in tariffs (25%) across all commodities for all trade partners. In this subsection, we will discuss the repercussions of tariff cuts on the Indian economy in the backdrop of trade war escalation, and the prospects of dumping concerns in the presence of tariff cuts. Run 3 and Run 4 are the tariff-cut scenarios where India cuts 25% tariff for all the imported goods.

When India slashes tariffs on all imports from all trade partners, the market price of the imports further goes down because of tariff removal. In this way, there are two effects on the prices: first, the slowdown effect (explained earlier) and the tariff effect. Because of additional price slumps, aggregate imports to India increase by 4.3% (Run 3, Table 4). Household demand for domestic goods increases, and this in turn increases the sectoral output. In Run 3 of Table 5, the percent change in household demand for each sector of goods, except 'Pharma' and 'Metals', exceeds the change observed in Run 2. The domestic demand for 'Pharma' and 'Metals' has been substituted by the imports from China, as it can be seen from Run 3 of the Table 8. Nevertheless, due to high domestic demand, total sectoral output increases by 2.8%. The biggest benefit of tariff cuts will be for the manufacturing sectors, including 'Machines and Electricals', 'Transport Equipment', and 'Other manufacturing'.

Interestingly, India's GDP will expand by two-times over what it did in Run 2, meaning just by a 25% tariff cut, India's GDP may grow by 2.62% while in the no-cut scenario of Run 2, it was only 1.31%. Regarding Welfare, India will add an additional 25.3 billion USD by cutting tariffs by 25%. So, instead of being a bystander in the trade war, India should swim against the tide and take a proactive approach of tariff cuts to improve its welfare.

Due to tariff cuts on intermediate inputs, finished products become cheaper, which makes exports more competitive in the world market. Hence, aggregate exports rise by 2.3% over the base value. The biggest rise is in the manufacturing sector, like 'Machines

and Electricals' (8.9%), 'Transport Equipment' (12.2%), as evident in Table 3. Bilateral exports from India to both China and the US remain in the negative zone due to the slowdown effect. Though exports to China and the US marginally improve compared to Run 2, the percent change in exports is -4.2% and -10.7%, respectively.

The bilateral imports from China increase to 8.6% over the base value in Run 3 (Table 8). Like aggregate imports, the bilateral imports will also experience dual effects of the slowdown and the tariff removal, but the increment in Chinese imports is two times (8.6%) of the increment in the aggregate imports (4.3%). All the sectors see a significant jump in imports; particularly a rise in 'Transport equipment' (21.4%), 'Metals' (14.5% ), and 'Machinery and Electricals' (12.4%) is noticeable in the manufacturing sector. These high jumps in imports indicate that the tariff cuts may provide a conducive environment for dumping by Chinese firms. Even if imports are not significantly high, dumping activities may occur, but the probability of dumping increases with a high increase in imports.

One proactive option for India to prevent/reduce dumping by China is to take a systemic approach to deal with such activities. In Run 4, India cuts tariffs by 25% for all countries except China, meaning China's tariffs are maintained at their base level. This will make the import price of Chinese goods relatively costlier compared to that of other trade partners. It is seen that just by maintaining China's tariffs, the imports from China show only a small increase of 1.7% (Run 4, Table 8). At the same time, the sectoral output does not get affected much, it still expands by 2.6% while in Run 3, the sectoral output was 2.8% (Run 4, Table 2). The same pattern is observed for GDP and Welfare. GDP goes from 2.6% to 2.5%, and Welfare decreases from 53.8 billion USD to 51.6 billion USD. Though there is a loss in both of these, the loss is not very significant.

The aggregate imports also shrink because the imports from China, one of the biggest import partners of India, shrink (Run 4, Table 4). Aggregate exports from India also decrease because maintaining China tariffs will make Indian firms procure intermediate materials at relatively higher prices, which will diminish the competitiveness of India's exports in the World market. Still, India's aggregate exports see a rise of 1.6% in Run 4 vis-a-vis 2.3% in Run 3 (Table 3). The bilateral exports from India to China and the US decline further because, due to tariff liberalization, there is more domestic competition, hence firms reallocate their resources in domestic production and easily accessible export markets. In other words, because of costlier Chinese and USA goods, consumers switch their demand to domestic production and other import markets; hence, subsequently, producers change their production strategy as per Armington substitution. This is why domestic firms focus more on domestic markets and the World minus the US and China markets.

In short, it may be said that the unilateral tariff cuts by India will improve its welfare, but tariff liberalization, excluding China, will also rein in the dumping prospects to

a great extent. The trade-off emanating from the latter policy does not seem to be detrimental to India.

## 3.3 India-US FTA and Dumping Concerns

In this subsection, we will discuss the implications of the India-US full FTA amid the trade war and the dumping concerns emanating from this. We will again experiment with the idea of tariff liberalization with and without China, as discussed in the previous subsection.

Run 5 is related to the India-US FTA. When the trade agreement becomes functional US consumers would find Indian goods cheaper and consequently, export demand from US would rise. To meet this increased demand, sectoral output in India expands by 5% (Run 5, Table 2) and total exports to the US increase by a whopping 45% (Run 5, Table 7). A noticeable rise occurs in exports of several sectors, including 'Textile and Leather' (127%), 'Machines and Electricals' (93.1%), and 'Other manufacturing' (74.5%), etc. At the same time, the 'Grain Crops' and 'Extraction sectors' exports go down by 12% and 7.8%, respectively. The increments are mainly happening in the manufacturing sectors, meaning the US firms shift their demand to Indian intermediate materials. Since Indian consumers also find US goods cheaper, the total imports from the US increase by 12% (Run 5, Table 9). Interestingly, the sectoral imports of the services sector and some of the manufacturing sector go down, while the imports of 'Processed Food' (490%), 'Meat and Livestock' (160%), and 'Grain Crops' (70%) register a very high jump. However, even in the case of services and manufacturing, the decline in India's imports from US is less than that in all Set 1 scenarios. This suggests that the import price of these US commodities continue to remain uncompetitive compared to other trade partners even though the trade agreement helps in narrowing down the price differential between the US and other trade partners compared to Set 1 scenarios. This pattern may be observed in Run 5 of Table 5. Household demand for domestic goods for Processed Food (1.3%), Meat and Livestock (3%), and Grain Crops (1.8%) is lower than the demand for 'Utility and Construction' (5.2%), 'Transport and Communication' (6.3%) and 'Other Services' (6.2%).

Though the aggregate export increases in the FTA scenario, bilateral export to China further declines because of the slowdown and the Armington substitution effect (Table 6). As explained earlier, there is a very weak demand from China, also the Indian firms would shift their supply to cater to the domestic and the US demands. Since India's output and exports increase so its aggregate imports also increase (9.4%) as evident in Run 5 of Table 4. The bilateral imports from China to India increase further due to more demand for intermediate materials from Indian firms (Table 8). All the sectors except 'Processed Food' experience an uptick in imports from China. This time, the import demand for Chinese goods in India is due to both domestic and external factors, unlike in

earlier scenarios, where demand was due to domestic factors. Since imports from China to India increase more (10.2% ) in the backdrop of the trade war and the India-US trade deal, more frequent and aggressive monitoring of dumping should be done for several sectors, including 'Metals', 'Pharma', 'Machine and Electricals', and 'Transport Equipment'.

India's GDP expands by 5% in Run 5 because of an increase in sectoral output. India's welfare also improves because of several factors. First is terms of trade improvement, which is due to lower import prices; the second is improvement in allocative efficiency due to tariff removal from US goods; and the third is employment effect due to output and GDP increase. Hence, Welfare increases to 113 billion USD. It should be noted that the welfare increase in Run 3 and Run 4 was just 53.8 and 51.6 billion USD, while in Run 5, it is more than double that of Run 3 or Run 4. It indicates that the India-US deal will be very beneficial for India if implemented correctly.

Now, if India cuts tariff by 25% unilaterally for rest of the countries including China, GDP will increase by 6.1% (Run 6), and when China is excluded, the increase will be around 5.97% (Run 7), not a severe loss for India. The same is with Welfare, which comes down from 136.4 billion USD to 134.1 billion USD. The difference in sectoral output in both these scenarios is also insignificant (0.1%). The difference for aggregate exports is 0.7% (Run 6 and 7 in Table 3). In Run 6 of tariff removal for all countries, household demand for domestic goods increase for all sectors except 'Pharma' sector, but in Run 7, where China is not provided tariff benefits, 'Pharma' sector's household demand also booms.

Since there is also a 25% tariff cut for all other countries, aggregate import demand increases by 12.4% (Table 4). In Run 7, when China is excluded from tariff liberalization, the increase in imports goes down to 11.8%. Seeing this in the context of bilateral imports from China, we find that the imports from China boil down to 6.5% in Run 7 from around 14% in Run 6. In contrast to this, bilateral imports from the USA to India increase from 7.5% (Run 6) to 8.6% (Run 7) when China is excluded from tariff relaxations. Since Chinese goods appear costlier because of tariffs, Indian consumers and firms shift their demand to the US because of zero duty. Anyway, the import demand of the US goods shrinks in Run 6, and Run 7 compared to Run 5 (12% ) because of price competition from other countries.

Bilateral exports from India to China decline further because of the same reason as explained earlier. Bilateral exports to the US increase both in Run 6 (49%) and Run 7 (48%) as shown in Table 7. Since India slashes the tariff, it gains more export competitiveness in the US market. Hence, demand for Indian goods in the US market increases. Again, the difference between the two scenarios is around 1% which is tolerable.

In this way, we may remark that though the India-US free trade agreement seems to

be economically beneficial for India, the dumping prospects from China may escalate because of several factors, but tariff liberalization, excluding China, may be a pragmatic approach to prevent/reduce dumping. Such a policy will shift import demand from China to other import partners of India without any significant economic loss to the Indian economy.

# 4 Conclusion

In this analysis, we find that India may gain from the ongoing trade war situation, even if India does nothing and remains a bystander. An escalation of the trade war between the US and China may further benefit India because of an increase in domestic demand, but to get the maximum from this situation, a deeper tariff cut of 25% by India is recommended. This finding is in line with those of our earlier analysis Jaiswal and Kumar (2025). Several studies, including Ganesh-Kumar et al. (2006), Polaski et al. (2008), have also shown that unilateral tariff cuts will benefit India.

The trade war escalation between China and the US, and/or the unilateral tariff cuts by India, would also increase the prospects of dumping from China to India. China has been a serial offender in dumping activities in India, and ongoing global economic developments may aggravate these activities even more. Even in the backdrop of the India-US FTA, the Chinese may try to divert their supplies to India at a lower price. As a policy option to prevent this threat, we recommend cutting tariffs across the board for all trading partners except China. Though this manoeuvre may not prevent dumping entirely, but may become helpful in a significant reduction. A significant reduction will protect the domestic industry from unfair market practices.

The India-US trade deal may become a conduit of economic development in India if negotiated and implemented cautiously. Rules of Origin should not be made cumbersome to follow, and any kind of other non-tariff barrier should be addressed and mutually diluted. Moreover, the India-US trade deal, plus tariff cuts for all other countries, excluding China, may address India's problem of jobless growth. These developments may add several employment, especially in the manufacturing sector.

Dumping from the big and dominant countries may be considered one of the fallouts of the collapse of the international order. Hence, a long-term strategy should be to improve the world order. Multinational agencies like the WTO should be strengthened so that no individual country can bend the rules in its favour.

# References

Ganesh-Kumar, A. and Chatterjee, T. (2016). Mega external preferential trade agreements and their impacts on indian economy. *Foreign Trade Review*, 51(1):46–80.

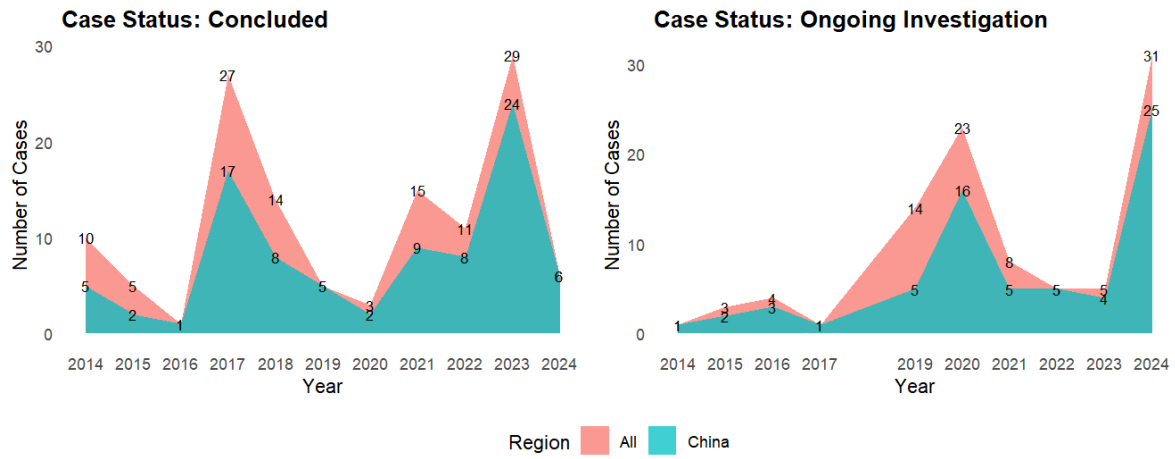
Ganesh-Kumar, A., Panda, M., and Burfisher, M. E. (2006). Reforms in indian agro-processing and agriculture sectors in the context of unilateral and multilateral trade agreements. *IGIDR, Working Paper, 2006-11*.

Jaiswal, H. and Kumar, A. G. (2025). Trade war and some policy alternatives for india. *Indira Gandhi Institute of Development Research, Mumbai, India*, No. 2025-004.

Pant, M. and Paul, A. (2018). The role of regional trade agreements: In the case of india. *Journal of Economic Integration*, 33(3):538–571.

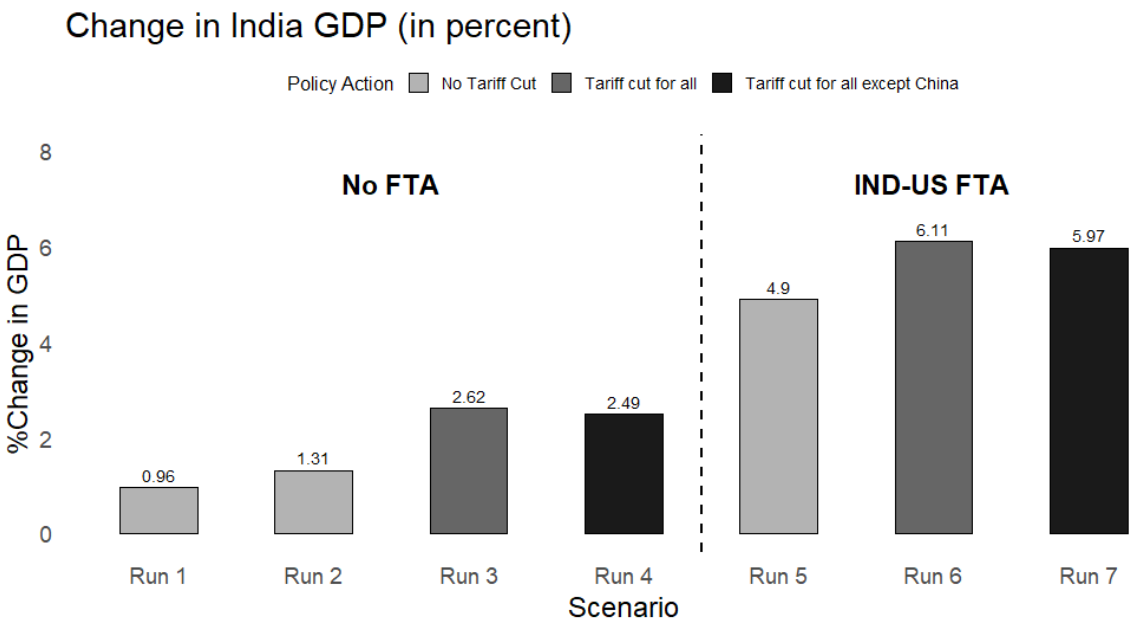
Polaski, S., Ganesh-Kumar, A., McDonald, S., Panda, M., and Robinson, S. (2008). India's trade policy choices. *Carnegie Endowment for International Peace, Washington D.C*.

# Figures



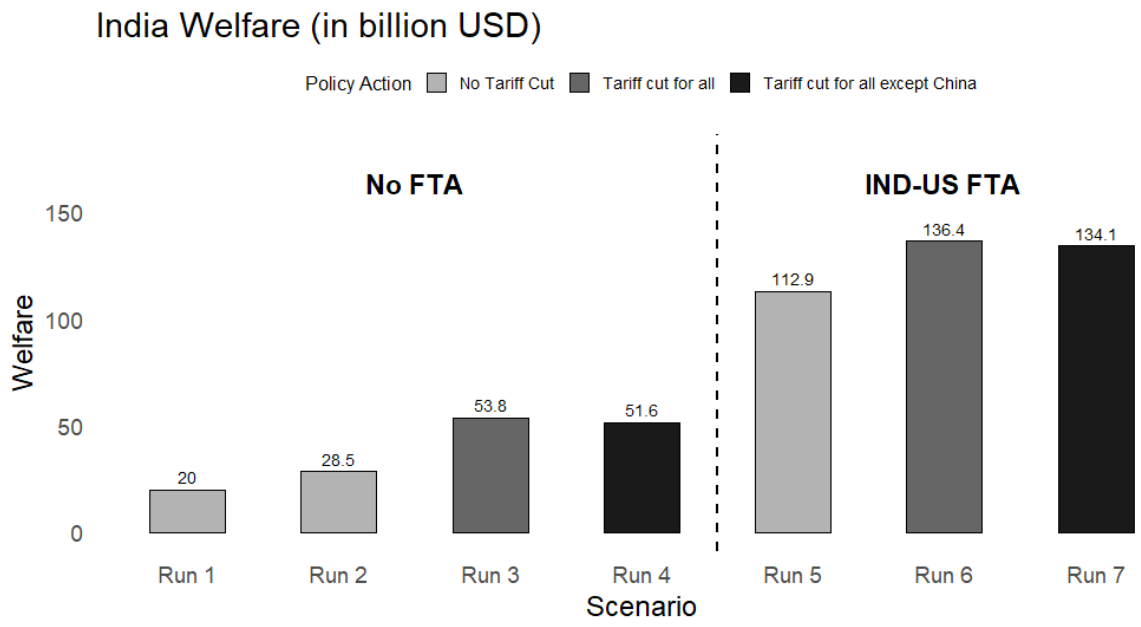

***Source:*** Authors' depiction using data from DGTR, Department of Commerce, GoI as extracted on 1/5/2025

Figure 1: Status-wise Dumping cases over the years




***Source:*** Authors

Figure 2: Percentage change in India GDP in different scenarios




***Source:*** Authors

Figure 3: Welfare gains for India in different scenarios

# Tables

| Scenario | Simulation | Description |
|---|---|---|
| Set 1 (Non-FTA Scenario) | Run 1 | US imposes baseline tariff of 10% on every country/region. For China, US tariffs are set at 25%. China retaliates with 25% tariffs on US. |
| | Run 2 | Run 1 + China and US impose 50% tariff on each other for all goods. |
| | Run 3 | Run 2 + 25% tariff cut by India for all the countries/regions across the board |
| | Run 4 | Run 2 + 25% Tariff cut by India for all regions except China, for whom base tariff rates continue. |
| Set 2 (FTA Scenario) | Run 5 | Run 2 + India-US Full Free Trade Agreement; i.e. zero tariffs by both countries for all goods. |
| | Run 6 | Run 3 + India-US Full Free Trade Agreement |
| | Run 7 | Run 4 + India-US Full Free Trade Agreement |

***Source:*** Authors

Table 1: Scenarios and their description

| | Sectoral Output | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Sector | Base Value | Run 1 | Run 2 | Run 3 | Run 4 | Run 5 | Run 6 | Run 7 |
| GrainsCrops | 349788.5 | 0.2 | 0.4 | 0.6 | 0.5 | 1.4 | 1.6 | 1.5 |
| MeatLstk | 160043.1 | 0.6 | 0.8 | 1.6 | 1.5 | 2.9 | 3.7 | 3.6 |
| Extraction | 129715.9 | -2.3 | -2.6 | -1.9 | -2.0 | -2.3 | -1.7 | -1.8 |
| ProcFood | 171893.5 | 0.2 | 0.3 | 0.3 | 0.3 | 0.7 | 0.8 | 0.7 |
| Chemicals | 169589.8 | 1.6 | 1.7 | 3.1 | 3.1 | 4.2 | 5.4 | 5.3 |
| Tex_Lea | 163295.2 | 0.8 | 1.7 | 3.3 | 3.3 | 7.6 | 9.1 | 9.1 |
| RubPlast | 60821.9 | 1.6 | 2.0 | 3.1 | 3.1 | 5.5 | 6.5 | 6.5 |
| Metals | 215505.1 | 2.5 | 2.6 | 3.7 | 3.6 | 4.8 | 5.7 | 5.6 |
| Pharma | 50423.9 | -1.7 | -1.9 | 0.3 | 0.1 | 6.1 | 8.2 | 7.9 |
| Mach_Elec | 112175.5 | 2.4 | 2.8 | 4.4 | 4.6 | 7.0 | 8.5 | 8.7 |
| Trans_Equp | 43131.8 | 2.3 | 2.7 | 4.3 | 4.2 | 5.3 | 6.8 | 6.6 |
| Other_Mnf | 537896.8 | 2.2 | 2.6 | 4.2 | 4.1 | 7.2 | 8.7 | 8.6 |
| Util_Cons | 790847.1 | 1.7 | 2.2 | 3.6 | 3.4 | 6.4 | 7.7 | 7.5 |
| TransComm | 931818.3 | 0.9 | 1.2 | 2.6 | 2.5 | 5.1 | 6.4 | 6.2 |
| OthServices | 1132251 | 1.1 | 1.5 | 2.9 | 2.7 | 5.6 | 6.9 | 6.7 |
| Total | 5019197.4 | 1.1 | 1.5 | 2.8 | 2.6 | 5.1 | 6.2 | 6.1 |

***Source:*** Authors
***Note:*** The percent changes in all the scenarios from R1 to R7 are over the base value. The base value is in million USD.

Table 2: Percentage Change in India's Sectoral Output

| | Aggregate Exports from India | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Sector | Base Value | Run 1 | Run 2 | Run 3 | Run 4 | Run 5 | Run 6 | Run 7 |
| GrainsCrops | 17107.1 | -4.5 | -5.5 | -4.4 | -4.7 | -14 | -13.3 | -13.5 |
| MeatLstk | 2569.4 | -2.7 | -4.1 | -3.0 | -3.3 | -17.8 | -17.2 | -17.4 |
| Extraction | 7001.4 | -21.0 | -25.0 | -23.6 | -23.8 | -34.5 | -33.4 | -33.5 |
| ProcFood | 16180.2 | -4.9 | -5.7 | -3.5 | -3.8 | -3.8 | -2.0 | -2.3 |
| Chemicals | 25185.6 | 1.3 | 1.0 | 5.6 | 4.6 | 3.1 | 7.1 | 6.1 |
| Tex_Lea | 43834.3 | 0.9 | 3.6 | 8.4 | 7.2 | 18.4 | 22.9 | 21.6 |
| RubPlast | 5649 | -0.7 | -0.1 | 4.2 | 3.3 | 4.8 | 8.7 | 7.8 |
| Metals | 35064.8 | 1.2 | 0.5 | 5.3 | 4.5 | 1.2 | 5.4 | 4.7 |
| Pharma | 18208.5 | -6.6 | -7.5 | -3.1 | -4.1 | 7.9 | 12.2 | 11.1 |
| Mach_Elec | 22663.1 | 2.1 | 2.3 | 8.9 | 7.7 | 12.1 | 18.5 | 17.2 |
| Trans_Equp | 4774.1 | 5.4 | 5.1 | 12.2 | 10.9 | 3.7 | 9.9 | 8.7 |
| Other_Mnf | 86069.1 | 2.3 | 3.2 | 7.8 | 7.0 | 15.8 | 20.3 | 19.5 |
| Util_Cons | 2968.4 | 0.4 | 0 | 2.6 | 2.1 | -4.6 | -2.4 | -2.9 |
| TransComm | 71612.3 | -5.3 | -6.0 | -4.0 | -4.4 | -2.9 | -1.2 | -1.6 |
| OthServices | 48956.1 | -3.1 | -3.6 | -1.3 | -1.7 | -1.1 | 0.8 | 0.4 |
| Total | 407843.4 | -1.42 | -1.37 | 2.3 | 1.6 | 4.6 | 8.0 | 7.3 |

***Source:*** Authors
***Note:*** The percent changes in all the scenarios from R1 to R7 are over the base value. The base value is in million USD.

Table 3: Percentage Change in India's Aggregate Exports

| | Aggregate Imports to India | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Sector | Base Value | Run 1 | Run 2 | Run 3 | Run 4 | Run 5 | Run 6 | Run 7 |
| GrainsCrops | 12370.3 | 1.0 | 1.9 | 15.3 | 14.7 | 17.7 | 30.8 | 30.1 |
| MeatLstk | 420.9 | 1.2 | 2.4 | 8.6 | 8.4 | 20.9 | 26.7 | 26.4 |
| Extraction | 141886.7 | 4.7 | 5.5 | 7.6 | 7.5 | 12.2 | 14.2 | 14.1 |
| ProcFood | 19501.5 | -0.1 | 0.4 | 9.9 | 9.9 | 24.1 | 32.0 | 31.9 |
| Chemicals | 47720.3 | -0.6 | 0 | 3.0 | 2.4 | 7.4 | 10.3 | 9.6 |
| Tex_Lea | 11039.1 | 1.0 | 2.9 | 10.0 | 4.1 | 12.2 | 19.9 | 13.6 |
| RubPlast | 6736.8 | -0.7 | 0.2 | 6.6 | 4.5 | 9.0 | 15.6 | 13.4 |
| Metals | 72927.5 | -0.3 | 0.3 | 4.5 | 4.2 | 7.1 | 11.4 | 11.0 |
| Pharma | 4986.9 | -1.2 | -0.2 | 3.9 | 1.9 | 9.2 | 13.3 | 11.1 |
| Mach_Elec | 40155.5 | 0.1 | 1.3 | 5.3 | 3.2 | 9.9 | 14.1 | 11.9 |
| Trans_Equp | 8618.7 | -1.3 | -0.6 | 2.1 | 1.5 | 6.9 | 9.7 | 9.1 |
| Other_Mnf | 102759.2 | -1.4 | -0.7 | 1.8 | 1.1 | 7.7 | 9.9 | 9.2 |
| Util_Cons | 2226.3 | 0.6 | 1.5 | 1.6 | 1.6 | 8.2 | 8.4 | 8.5 |
| TransComm | 41280.9 | -1.9 | -1.5 | -1.3 | -1.2 | 5.0 | 5.3 | 5.4 |
| OthServices | 33290.1 | -3.6 | -3.4 | -3.2 | -3.1 | 3.1 | 3.3 | 3.4 |
| Total | 545920.7 | 0.5 | 1.2 | 4.3 | 3.8 | 9.4 | 12.4 | 11.8 |

***Source:*** Authors
***Note:*** The percent changes in all the scenarios from R1 to R7 are over the base value. The base value is in million USD.

Table 4: Percentage Change in India's Aggregate Imports

| | Household demand for domestic goods | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Sector | Base Value | Run 1 | Run 2 | Run 3 | Run 4 | Run 5 | Run 6 | Run 7 |
| GrainsCrops | 174736.2 | 0.4 | 0.6 | 0.6 | 0.6 | 1.8 | 1.8 | 1.8 |
| MeatLstk | 83798.3 | 0.6 | 0.8 | 1.5 | 1.5 | 3.1 | 3.7 | 3.6 |
| Extraction | 12740.6 | 10. | 1.4 | 2.1 | 2.1 | 4.2 | 4.9 | 4.9 |
| ProcFood | 133146.3 | 0.7 | 0.9 | 0.8 | 0.7 | 1.3 | 1.3 | 1.2 |
| Chemicals | 15312.2 | 1.1 | 1.4 | 2.3 | 2.2 | 4.4 | 5.1 | 5.1 |
| Tex_Lea | 86364.2 | 0.7 | 0.8 | 1.2 | 1.5 | 2.9 | 3.2 | 3.6 |
| RubPlast | 11027.9 | 1.1 | 1.4 | 1.9 | 2.0 | 4.3 | 4.6 | 4.8 |
| Metals | 119.5 | 2.9 | 3.1 | 2.0 | 2.1 | 4.0 | 2.8 | 2.9 |
| Pharma | 261.6 | 2.6 | 2.3 | 0.7 | 2.4 | 1.1 | -0.3 | 1.3 |
| Mach_Elec | 5506.3 | 1.4 | 1.6 | 2.0 | 2.4 | 4.0 | 4.3 | 4.7 |
| Trans_Equp | 19114.7 | 1.0 | 1.4 | 2.3 | 2.3 | 4.6 | 5.5 | 5.5 |
| Other_Mnf | 89955.7 | 1.6 | 2.0 | 2.8 | 2.8 | 4.8 | 5.6 | 5.6 |
| Util_Cons | 58545.2 | 1.1 | 1.5 | 2.6 | 2.5 | 5.2 | 6.2 | 6.1 |
| TransComm | 338287 | 1.3 | 1.8 | 3.2 | 3.1 | 6.3 | 7.6 | 7.5 |
| OthServices | 505591.2 | 1.2 | 1.7 | 3.1 | 3.0 | 6.2 | 7.5 | 7.4 |
| Total | 1534506.9 | 1.1 | 1.4 | 1.0 | 2.3 | 4.7 | 5.6 | 5.6 |

***Source:*** Authors
***Note:*** The percent changes in all the scenarios from R1 to R7 are over the base value. The base value is in million USD.

Table 5: Percentage Change in Household demand for domestic goods in India

| | Bilateral Exports from India to China | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Sector | Base Value | Run 1 | Run 2 | Run 3 | Run 4 | Run 5 | Run 6 | Run 7 |
| 1 GrainsCrops | 419.7 | 0.8 | 0.8 | 1.8 | 1.4 | -8.1 | -7.4 | -7.8 |
| 2 MeatLstk | 7.9 | -5.1 | -8.9 | -8.9 | -8.9 | -22.8 | -21.5 | -21.5 |
| 3 Extraction | 3100 | -25.2 | -31.3 | -30.2 | -30.4 | -40.0 | -39.1 | -39.3 |
| 4 ProcFood | 637 | -3.0 | -5.1 | -3.4 | -3.8 | -10.0 | -8.7 | -9.1 |
| 5 Chemicals | 2687.2 | 0.1 | -2.5 | 1.2 | 0.3 | -7.4 | -4.3 | -5.2 |
| 6 Tex_Lea | 2269 | -5.1 | -9.9 | -6.2 | -7.3 | -17.2 | -14.3 | -15.2 |
| 7 RubPlast | 138.9 | -0.6 | -3.5 | 0 | -0.9 | -8.6 | -5.8 | -6.6 |
| 8 Metals | 3976.1 | -2.3 | -6.1 | -2.1 | -3.0 | -11.3 | -7.9 | -8.7 |
| 9 Pharma | 121.8 | 0 | -3.2 | 0.9 | -0.2 | -8.5 | -5.2 | -6.2 |
| 10 Mach_Elec | 1174.3 | -0.4 | -4.4 | 1.1 | -0.1 | -10.7 | -6.2 | -7.3 |
| 11 Trans_Equp | 12.7 | -3.1 | -7.1 | -1.6 | -2.4 | -13.4 | -8.7 | -9.4 |
| 12 Other_Mnf | 4400.5 | 2.3 | -0.3 | 3.5 | 2.7 | -4.9 | -1.6 | -2.4 |
| 13 Util_Cons | 75.9 | -4.2 | -7.8 | -5.8 | -6.3 | -11.6 | -9.9 | -10.4 |
| 14 TransComm | 1410.5 | 0 | -1.9 | -0.2 | -0.7 | -5.5 | -4.1 | -4.6 |
| 15 OthServices | 1138.8 | 5.3 | 5.3 | 7.1 | 6.6 | 1.3 | 2.8 | 2.3 |
| Total | 21570.1 | -3.9 | -7.3 | -4.2 | -4.9 | -13.0 | -10.4 | -11.1 |

***Source:*** Authors
***Note:*** The percent changes in all the scenarios from R1 to R7 are over the base value. The base value is in million USD.

Table 6: Percentage Change in Bilateral Exports from India to China

| | Bilateral Exports from India to USA | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Sector | Base Value | Run 1 | Run 2 | Run 3 | Run 4 | Run 5 | Run 6 | Run 7 |
| 1 GrainsCrops | 1019.7 | -37.3 | -39.2 | -38.6 | -38.7 | -12.1 | -11.6 | -11.7 |
| 2 MeatLstk | 95.3 | -30.2 | -33.3 | -32.5 | -32.6 | 8.9 | 9.4 | 9.2 |
| 3 Extraction | 128.2 | -66.6 | -69.8 | -69.2 | -69.2 | -7.8 | -6.5 | -6.4 |
| 4 ProcFood | 3684.9 | -21.9 | -23.4 | -22.0 | -22.2 | 9.1 | 10.5 | 10.2 |
| 5 Chemicals | 3043.1 | -18.9 | -18.4 | -15.3 | -15.9 | 44.1 | 48.6 | 47.6 |
| 6 Tex_Lea | 9613.7 | 7.7 | 26.2 | 31.1 | 30.0 | 127 | 133.7 | 131.9 |
| 7 RubPlast | 882.8 | -19.1 | -13.8 | -10.6 | -11.2 | 53.0 | 57.6 | 56.5 |
| 8 Metals | 3037.2 | -22.2 | -20.7 | -17.4 | -17.9 | 52.4 | 57.6 | 56.7 |
| 9 Pharma | 6651.7 | -24.2 | -26.3 | -23.3 | -23.9 | 27.4 | 31.4 | 30.4 |
| 10 Mach_Elec | 3701.1 | -11.9 | -6.7 | -1.3 | -2.2 | 93.1 | 102.4 | 100.5 |
| 11 Trans_Equp | 301 | -20.6 | -21.3 | -16.3 | -17.1 | 67.7 | 76.8 | 75.1 |
| 12 Other_Mnf | 18078.5 | -10.1 | -5.3 | -1.7 | -2.3 | 74.5 | 80.0 | 79.0 |
| 13 Util_Cons | 36.7 | -21.8 | -24.0 | -22.3 | -22.6 | 12.8 | 14.7 | 14.4 |
| 14 TransComm | 16363.1 | -23.8 | -26.2 | -24.9 | -25.1 | 1.9 | 3.2 | 3.0 |
| 15 OthServices | 11560.4 | -24.1 | -26.6 | -25.3 | -25.5 | 1.7 | 3.0 | 2.7 |
| Total | 78197.4 | -16.1 | -13.5 | -10.7 | -11.2 | 45.1 | 49.0 | 48.2 |

***Source:*** Authors
***Note:*** The percent changes in all the scenarios from R1 to R7 are over the base value. The base value is in million USD.

Table 7: Percentage Change in Bilateral Exports from India to USA

| | Bilateral Imports to India from China | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Sector | Base Value | Run 1 | Run 2 | Run 3 | Run 4 | Run 5 | Run 6 | Run 7 |
| 1 GrainsCrops | 389.3 | 5.4 | 10.7 | 31.8 | -0.7 | 14.6 | 39.0 | 4.6 |
| 2 MeatLstk | 9.8 | 10.2 | 19.4 | 33.7 | 12.2 | 22.4 | 39.8 | 17.3 |
| 3 Extraction | 153.7 | -4.6 | 3.8 | 14.6 | 0.8 | 11.6 | 23.0 | 8.2 |
| 4 ProcFood | 314.5 | 2.1 | 4.7 | 14.4 | -6.9 | -9.5 | 2.6 | -16.5 |
| 5 Chemicals | 10187 | 2.9 | 5.2 | 8.9 | 1.0 | 9.4 | 13.9 | 5.6 |
| 6 Tex_Lea | 7204.5 | 1.4 | 3.9 | 11 | 1.0 | 12.0 | 20.0 | 9.2 |
| 7 RubPlast | 2316.4 | 2.5 | 4.7 | 8.4 | -1.3 | 9.9 | 14.5 | 4.2 |
| 8 Metals | 6636.1 | 6.1 | 9.2 | 14.5 | 1.2 | 13.7 | 19.8 | 5.9 |
| 9 Pharma | 2403.7 | 4.9 | 7.4 | 9.8 | 3.6 | 11.4 | 15.0 | 8.3 |
| 10 Mach_Elec | 15687.3 | 4.8 | 7.7 | 12.4 | 2.4 | 13.6 | 19.3 | 8.6 |
| 11 Trans_Equp | 879.4 | 7.1 | 10.6 | 21.9 | 3.9 | 15.7 | 28.3 | 9.3 |
| 12 Other_Mnf | 38581.8 | 2.9 | 5.1 | 5.0 | 1.6 | 7.8 | 8.7 | 5.1 |
| 13 Util_Cons | 302.4 | 1.4 | 3.4 | 3.5 | 3.7 | 10.4 | 10.5 | 10.8 |
| 14 TransComm | 1287.7 | 3.9 | 6.1 | 6.3 | 6.5 | 13.0 | 13.2 | 13.4 |
| 15 OthServices | 1231.8 | 6.0 | 8.4 | 8.6 | 8.8 | 15.4 | 15.6 | 15.8 |
| Total | 87585.4 | 3.5 | 6.0 | 8.6 | 1.7 | 10.2 | 13.8 | 6.5 |

***Source:*** Authors
***Note:*** The percent changes in all the scenarios from R1 to R7 are over the base value. The base value is in million USD.

Table 8: Percentage Change in Bilateral Imports to India from China

| | Bilateral Imports to India from USA | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Sector | Base Value | Run 1 | Run 2 | Run 3 | Run 4 | Run 5 | Run 6 | Run 7 |
| 1 GrainsCrops | 1708.6 | -4.8 | -3.6 | -2.9 | -2.3 | 69.0 | 53.2 | 54.2 |
| 2 MeatLstk | 30.1 | -22.3 | -23.3 | -5.6 | -5.3 | 160.1 | 148.2 | 148.8 |
| 3 Extraction | 2396.8 | 7.4 | 10.4 | 13.8 | 13.5 | 51.3 | 46.9 | 46.5 |
| 4 ProcFood | 1014 | -19.1 | -20.6 | 6.8 | 7.2 | 489.4 | 442.1 | 443.7 |
| 5 Chemicals | 3833.2 | -32.4 | -35.5 | -32.6 | -31.4 | 4.7 | -0.8 | 1.0 |
| 6 Tex_Lea | 227.6 | -38.0 | -42.5 | -39.7 | -35.0 | 19.1 | 7.9 | 16.2 |
| 7 RubPlast | 458.5 | -32.7 | -35.9 | -33.5 | -31.5 | 15.6 | 6.5 | 9.7 |
| 8 Metals | 4222.7 | -38.8 | -42.4 | -40.0 | -39.3 | 3.9 | -4.3 | -3.2 |
| 9 Pharma | 549.2 | -34.2 | -37.7 | -35.0 | -32.4 | 8.2 | 1.3 | 5.2 |
| 10 Mach_Elec | 2508.6 | -43.5 | -47.6 | -45.3 | -42.9 | -0.8 | -9.1 | -5.1 |
| 11 Trans_Equp | 756.9 | -44.4 | -47.9 | -46.5 | -45.5 | -13.1 | -19.3 | -17.9 |
| 12 Other_Mnf | 13416.1 | -33.0 | -36.3 | -32.5 | -31.5 | 3.7 | -0.3 | 1.1 |
| 13 Util_Cons | 72.7 | -23.4 | -25.6 | -25.4 | -25.4 | -19.7 | -19.5 | -19.5 |
| 14 TransComm | 8134.4 | -17.3 | -18.8 | -18.6 | -18.6 | -12.8 | -12.5 | -12.5 |
| 15 OthServices | 10957.7 | -15.6 | -17.0 | -16.8 | -16.7 | -10.9 | -10.6 | -10.5 |
| Total | 50287 | -24.7 | -26.8 | -24.4 | -23.7 | 12.0 | 7.5 | 8.6 |

***Source:*** Authors
***Note:*** The percent changes in all the scenarios from R1 to R7 are over the base value. The base value is in million USD.

Table 9: Percentage Change in Bilateral Imports to India from USA

# Annexure

**Summary of our previous analysis [Jaiswal and Kumar (2025)]**

In his second term as the President of the United States, Mr. Donald Trump has imposed high tariffs on Canada, Mexico, and China, with a 25% tariff hike for the first two and a 10% raise for China. Further, several other trade partners of the US, such as ASEAN, the European Union (EU), India, Japan, and the Republic of Korea, are also on Mr. Trump's hit list. Castigating India as a 'Tariff King', Mr. Trump has threatened to impose reciprocal tariffs on India's exports to the US. Mr. Trump's justification behind the imposition of tariffs is the perceived asymmetric trade relations and the persisting trade deficit the US has with its major trade partners. The retaliatory tariffs imposed by Canada, Mexico, and China and the threat of retaliation by its other trade partners have sparked concerns about a new global trade war, which might become a serious threat to international trade and globalization. Against this background, this paper attempts to assess the impact of the trade war on the global economy, various countries, and India in particular. It also explores some near-term policy options that India may consider using a global Computable General Equilibrium Model, viz., the GTAP model. The paper begins by examining the nature of the US's trade balance on both merchandise and services accounts and the tariffs and non-tariff measures at a sectoral level. We find the following stylised facts:

- Though the US has a deficit in goods trade, it runs a surplus in services trade.
- Top five major contributors to the US trade deficit in goods are the ASEAN, China, the European Union, Japan, and Mexico, which collectively contribute around 80%, while India contributes only 2.3%-2.7%.
- The average total trade deficit of the US with India is around 24% of total bilateral trade, during 2016-23. The deficit in goods with India is steady around 20%-22% while the deficit in services has gone down significantly from 6.4% in 2016 to 1.4% in 2023.
- Among major trading partners of the US, India charges a hefty tariff (12.4%) for US products. Apart from India, the Republic of Korea have average aggregate MFN tariffs of more than 10%.
- India and China charge very high tariffs in absolute terms, but in comparative terms, Korea and Canada charge much higher tariffs. The Republic of Korea charges the US 54.5 times what the US charges it, and in the case of Canada, this is 26.3 times; but for India and China, these are 3.6 times and 2.3 times only, respectively.
- More than half of the commodities imported from the US are charged up to 10% by India. There are only 116 US commodities that are charged more than or equal

to 100% tariff by India, with the maximum rate being 150%. In comparison, the maximum rate in Korea, Norway, Thailand, Turkey, among others is way above India's maximum rate, going up to 800% in Korea.

- In services, India does not seem to be a protective market anymore, except for 'the Government services.' The Trade services in India is the most open service sector.
- Mexico and China are highly restrictive in almost all sectors. The US is also very protective in 'Trade services', 'Water transport', and 'Construction services'.
- Canada, China, and the EU protect their markets by applying Non-tariff Measures (NTM) intensively. The US comes closer in this.
- Out of the agriculture, manufacturing and natural resources, the agriculture sector is the most protected sector in any country using NTM.

Using the GTAP model, we develop various scenarios that capture trade war between the US and its trading partners and the policy options for India. We consider three possible near-term policy options for India, viz., (i) do nothing, (ii) retaliate by increasing tariff, and (iii) swim against the tide by cutting tariffs. We develop four sets of scenarios that combine alternative trade war situations and India's policy response, as follows:

- **Set-1:** Country-wise uniform tariffs across all commodities by the US and retaliatory measures by trading partners.
- **Set-2:** Combination of uniform tariffs for a few countries, reciprocal tariffs for other major trading partners, and metal tariffs by the US and retaliatory measures by trading partners.
- **Set-3:** India cuts tariffs by 10% over base rates in a context of the trade war situation of Set-1 and Set-2.
- **Set-4:** Same as Set-3 but with a 25% tariff cut by India to explore if a deeper cut would benefit India more.

The results of these simulations are as follows:

**Global impacts:**

- The World GDP may go down by 5.6% to 7.2% due to unilateral tariff imposition by the US on its trading partners. The retaliation by a few of the targeted countries may make the situation worse for the World GDP (-11% to -12.6%). If every targeted country adopts retaliatory measures, the World GDP may shrink by 13.8%.
- In both Set 1 and Set 2 scenarios, the most adversely affected countries in the trade war would be the US, Canada, and Mexico because of their higher interdependence on each other. Their GDP may shrink by 41%, 60%, and 62% respectively.

- The retaliation by Canada, China, the EU, and Mexico will make things worse for other countries except India.
- Some non-targeted and non-participating regions like the GCC, Oceania, and Latin America will also suffer from the trade war because of supply chain linkages.
- The Set 2 scenario may benefit Japan and the Republic of Korea because reciprocal tariffs are less detrimental than uniform tariffs. Korea, and Japan may gain 44-51 billion USD and 200-250 billion USD, respectively, in welfare.

**Impacts on India:**

- If each targeted country, except India, undertakes the retaliatory measure against the US tariff, India may gain up to 0.6% in GDP in the Set 1 scenario and up to 0.9% in the Set 2.
- A retaliation by India will bring GDP and welfare loss for India.
- In aggregate terms, India's exports and output would increase but it may lose in several sectors.
- In the goods sector, chemicals, metals products, machinery, electrical products, transport equipment, and other manufacturing products will see a rise in exports in all scenarios, while in services, utility services (electricity, gas distribution, water, and construction) will increase.
- The big-losing sectors in the goods will be extraction and pharmaceuticals, whose exports may go down by 21% and 11%. In the transport services sector, the fall will be caused by the slowdown in global trade.
- In terms of output, the extraction, pharmaceuticals, processed food and textile and leather products lose. The rubber and plastic sector, which saw a decline in exports, will actually gain in terms of output because of intermediate demand from other sectors.
- The biggest output loss will be for the pharmaceutical which may lose production up to 3.9% in the absence of any tariff cut by India.
- India will benefit from a unilateral 10% tariff cut to the tune of 1.1% to 1.9% of GDP. The welfare gain is in the range of 21 to 36 billion USD. A deeper cut brings greater benefits.
- The tariff cuts will recoup a sector from the loss. The pharmaceutical sector, which is losing up to 3.85% in output, may lose only 1.66% in the presence of tariff cuts.
- In the presence of tariff cuts, the production of each sector except extraction, processed food, and pharmaceuticals will increase. A deeper tariff cut will be more beneficial.

- In the presence of the tariff cuts, demand for the unskilled labor force will increase by 2% while for the skilled one, it may be more than 2.5%.
- These simulations clearly show that retaliation is the worst policy option for India. While doing nothing benefits India, clearly, the gains are much larger when India swims against the tide and undertakes unilateral tariff cuts.