March 9, 2018 I Economics

Analysis of USA Tariff Hike on Steel and Aluminium

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The USA President signed an executive order that will result in USA imposing tariffs on foreign made steel and aluminum. Steel imports would be subject to 25% and aluminum 10% tax. These measures are aimed at getting USA companies to buy local and boost domestic metal industry. It has been justified on grounds of fighting back against an "assault on our country" by foreign competitors. The expectation is that such increases could be extended to other commodities.

The protectionist measure that the USA signed in the name of employment generation and national security has raised concerns over global trade disruptions and the consequent impact on global growth.

However, the two neighbouring countries Canada and Mexico have been exempted from the tariff hike and there are expectations that the USA may soften its stance towards other countries also based on their bilateral relations and negotiations. This can soften the international blow amid threats of retaliation by trading partners.

Potential Impact

- **Steel and aluminium producers in the USA would benefit.** Century Aluminum said the tariffs would allow the company, which produces high-purity aluminum used in military aircraft, to recall about 300 workers and restart idle production lines at its smelter in eastern Kentucky by early 2019. U.S. Steel's announced that it planned to ramp up activity at its plant in Granite City, Illinois, and recall about 500 employees because of the new tariffs.
- **Rise in price** of the metals in the USA which could impact demand.
- **Rise in inflation -** The price rise in these metals could have cost implication for consumers in the USA given the wide range of products involved ranging from auto components to packaging which use steel and aluminium.
- **Corporate profits to be impacted** - The costs associated with costlier imports, changing suppliers and manufacturing process to impact margins of manufacturers in the USA.
- **Unintended consequences to be high**. It is felt that there would be unintended consequences for American manufacturers who depend on imported materials. They have argued that similar tariffs imposed in 2002 by President George W. Bush ended up eroding 200,000 U.S. jobs

- **The countries to be impacted immediately would be** South Korea, China, Japan, Germany, Turkey and Brazil.
- **Retaliatory measures -** Tariff on imports from USA by the affected countries, would impact exports of USA. More importantly this could have implication for global trade. The EU and China have indicated that they plan to levy counter tariffs on a range of goods (consumer goods, agricultural products and industrial products) being imported from the USA.
- **Restrictions** - Affected countries could also retaliate by imposing restrictions on the operations and business interest of the American companies in their respective countries viz. with respect to grant of licenses, permissions, quotas among others.
- **Tightening of monetary policy and Capital outflows -** a rise in inflation could prompt rate hike by the Fed which in turn could result in capital outflows from emerging economies.

USA and India: Foreign Trade

India has a trade surplus with USA. In value terms imports from the USA into India is around 50% of the exports from India to the USA. The trade surplus stood at around $20 billion in FY17.

The USA currently accounts for nearly 16% of India's exports. The share of exports to the USA has been progressively increasing over the years from 12.5% in FY14. In terms of growth, exports to the country have witnessed fluctuations. After growing by 9% in FY15 it contracted by (-) 5% in the following year. In the first 10 months of FY18 exports grew by 13% compared with 4% last year.

India's imports from the USA have been in the range of 5-7% of the total. There was a notable increase in imports from the USA into India in the first 10 months of FY18 by 14% compared with 5% growth in the same period of FY17 and negative growth of (-)0.1% and (-)2.7% in FY16 and FY15 respectively.

In terms of composition of exports to the USA, manufactured goods accounted for 86% of total exports. Gems & Jewelry have the highest share (21%), followed by chemicals & engineering goods (18% each) and textiles (8.2%).

Aluminum and steel together accounts for around 3% of India's exports to the USA.

India's imports from USA include engineering goods (40%), chemicals and related products (13%), non-electrical machinery (7%), agricultural and allied products (7%) among others. During FY18 (Apr-Jan), iron and steel accounted for 1.9% of imports from the USA (having moderated from 2.5% in FY16), and aluminum (and products of aluminum) for 0.9% of the imports.

India's trade surplus with the USA will continue even with the imposition of tariffs on these metals. Although, the exports of steel and aluminium to the USA could see moderation if the buyers there shift to buying from local producers, the overall impact could be negligible given the low share these commodities have in the overall basket.

Overview and Impact on Aluminum Industry

The imposition of the import tariffs on aluminium is aimed at protecting the internal economy which has been affected by cheap imports. The country plans to ramp up the metal's production capacity, curb imports, revive the industry and provide employment.

From 2013 to 2016 aluminium industry's employment in the USA fell by 58%, 6 smelters shut down, and only 2 of the remaining 5 smelters are operating at capacity, even though demand has grown considerably. Reasons for the shutdown of these aluminium smelters were due to the financial distress faced by the producers due to lower metal prices, increased Chinese competition and high energy cost.

Table 1: Aluminium Industry in the USA

Primary Aluminium Market Snapshot (Thousands MT)	2013-2016 Average	2017 Annualized
Total Demand for Primary Aluminium in U.S. (production +imports -exports)	4,681	5,516
U.S. Annual Capacity	2,195	1,818
U.S. Annual Production (liquid)	1,518	785
Capacity Utilization Rate (%)	69%	39%
Imports and Exports (Thousands MT)		
Imports of Primary Aluminium to U.S.	3,536	5,046
Exports of Primary Aluminium from the U.S.	373	315
Import Penetration (%)	76%	91%

Source: US Department of Commerce

Nearly 90% of the aluminium demand in the USA is met through imports. The annual aluminium production declined to 785 thousand tonnes in 2017 from an average production of 1,518 thousand tonnes during 2011-16, while demand was around 5,516 thousand mt. The supply short fall was met through imports. Aluminium imports rose from 3,536 thousand mt to 5,046 thousand mt during 2011-17.The increased imports coupled with decline in global aluminium prices has led to a decline in capacity utilization of aluminium manufacturers in the country; from 69% in 2013-16 to 39% as of 2017.

The tariff hike as per the Department of Commerce estimation is intended to lead to a near doubling of capacity utilization rates (to 80%) and would restrict imports to 4,377 thousand mt, 13% lower than that in 2017. Domestic production could rise to 1454 thousand mt, an 85% increase from current levels. The increased domestic production would cater to around 20% of the domestic demand (assuming constant demand and exports of FY17), compared with the current 9%.

Table 2: Proposal by the USA Department of Commerce

Import Levels and Domestic Production Targets Based on 80% Capacity Utilization (Thousand MT)	
Maximum Import Level	4,377
Estimated Import Penetration	79%
Estimated Production	1,454

Source: US Department of Commerce

Top Exporters of Aluminium to the USA

Canada has been the largest contributor to the overall aluminium imports of the USA, accounting for a 43% share followed by Russia and UAE which have a 11% and 10% share respectively.

Table 3: Country-wise Imports of Aluminium by USA (Thousand MT)

	2016 Jan-Oct	2017 Jan-Oct	% share
Canada	2,275	2,478	43%
Russia	628	626	11%
UAE	435	569	10%
China	438	547	9%
Bahrain	154	214	4%
Argentina	158	182	3%
Qatar	96	104	2%
South Africa	61	142	2%
India	45	132	2%
All Other	594	771	14%
Total	**4,883**	**5,764**	

Source: US Department of Commerce

India accounts for only 2% of the aluminium imports by the USA. Since Canada is exempted from the tariff imposition, Asian and European countries are likely to face the brunt, which could lead to a change in trade dynamics of the particular nation.

Aluminium imports from Canada by the USA were around 2,478 thousand mt in 2017, January-October. Considering that the USA raises its capital utilization rate to 80% and sticks to the target of importing 4,377 thousand mt, the country will still have to depend on markets outside Canada to meet the demand of 1,397 thousand mt of aluminium (approximately 25% of the total demand) assuming the flow of imports from Canada remain stable.

India's aluminium exports to the USA

In FY17, primary aluminium exports to the USA by India stood at 49.1 thousand mt and accounted for 2.1% of the 2,342 thousand mt of primary aluminium exported by India.

Table 4: Primary Aluminium exports by India to the US (in quantity and value)

	(in thousand tonnes)	Quantity Share in total aluminium exported by India (in %)	(in USD million)	Value Share in total aluminium exports value by India (in %)
2014-15	16.4	1.4%	39.1	1.4%
2015-16	33.8	2.1%	57	2.1%
2016-17	49.1	2.1%	86.6	2.1%
2017-18 April-Oct	51.2	3.3%	100	3.3%

Source: CMIE

Both in quantity and value terms, the aluminium exports from India to the USA has accounted for 1-3% of its total exports. During April-October 2017, primary aluminium exports to the USA grew by 352% to 51.7 thousand mt, while its value

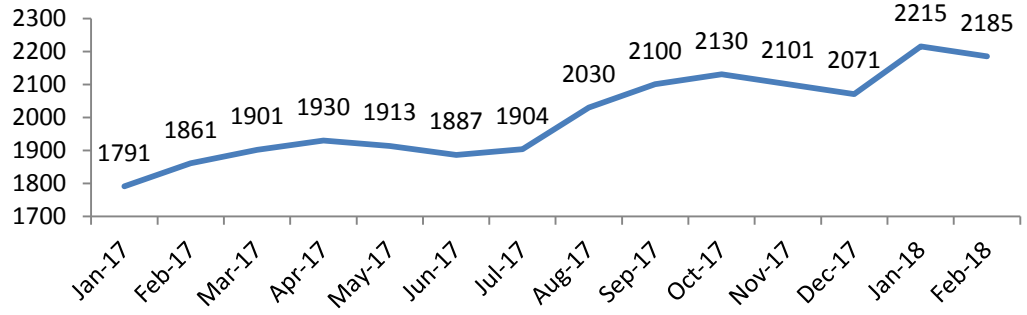
increased by 445% to USD 180.3 million on a y-o-y. This increase can in part be attributed to the increase in domestic production of primary aluminium by 38% (y-o-y) with improvement in the operational efficiencies. Exports from India have grown by 27% (785 thousand mt) in the current fiscal while domestic consumption (480 thousand mt) has contracted by 25%.

Movement in International Aluminium prices

The international aluminium prices in the last 1 year saw a 23.6% rise amid fluctuations. Prices were USD 1,791/tonne in January 2017 and it rose to USD 2,215/tonne in January 2018.

The rise in prices can be attributed to supply cuts undertaken by the Chinese government to reduce over capacity and to address environmental issues. The Chinese government's efforts are expected to translate into the closure of around 4 million MT or around 10% of the country's total smelting capacity.

Chart 1: Trend in International Aluminium Prices since Jan'17 (USD/tonne)



Source: LME

Impact on Steel Industry

The import tariff on steel is aimed to protect the industrial base of the country which the USA government believes hasbeen hurt by cheap steel imports. It is also expected to increase production and consumption of domestic steel and thereby reduce the reliance on imports.

Table 5: Share of top 4 players in world crude steel production (in %)

	China	Japan	India	USA
2014-15	49.8	6.7	5.4	5.3
2015-16	50.1	6.6	5.7	5.0
2016-17	50.0	6.5	6.0	4.9

Source: CMIE

The share of USA in global steel production has been on the decline since 2014-15. This resulted in the country being replaced by India as the world's 3rd largest producer of steel.

Table 6: Steel industry in the USA

Steel Market Snapshot (millions of metric tons)	2011-2016 Average	2017 Annualized
Total Demand for Steel in U.S. (production + imports-exports)	105.5	107.3
U.S. Annual Capacity	114.4	113.3
U.S. Annual Production (liquid)	84.6	81.9
Capacity Utilization Rate (percentage)	74	72.3
Imports and Exports (millions of metric tons)		
Imports of Steel to U.S. (including semi-finished)	31.8	36
Exports of Steel from the U.S.	10.8	10.1
Percent Import Penetration	30.1	33.8

Source: US Department of Commerce

Nearly 34% of the demand in the USA was met through imports in 2017. The annual steel production in the USA declined to 81.9 million tonnes in 2017 from an average production of 84.6 million tonnes during 2011-16, while demand was around 107 million tonnes. The supply short fall was met through imports. Steel imports rose from 31.8 million tonnes to 36 million tonnes during 2011-17. The increased imports have led to a decline in capacity utilization of steel manufacturers; from 74% in 2011-16 to 72% as of 2017.

The 24% tariff hike as per the Department of Commerce estimation is intended to lead to an increase in capacity utilization rate (to 80%) and would restrict imports to 22.7 million tonnes, a 37% decline from the import levels of 2017. The increased utilization rate would push up domestic production to 90.6 million tonnes, 10.6% increase from current levels.

Table 7: Proposal by the USA Department of Commerce

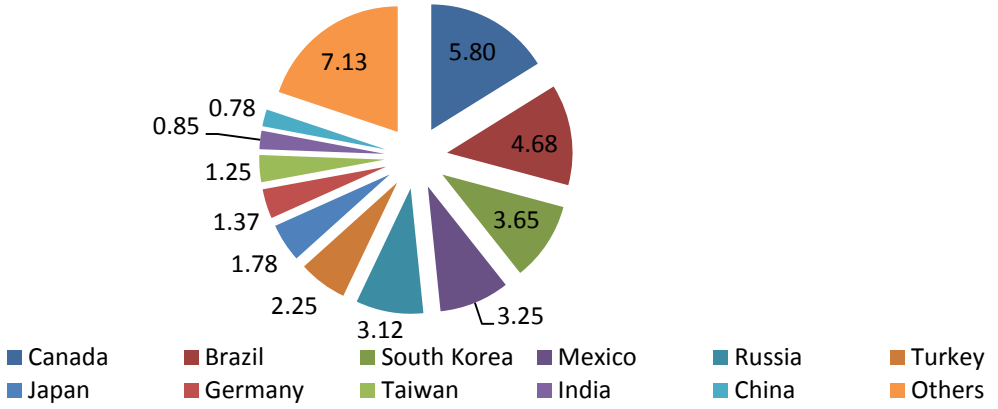
Import Levels and Domestic Production Targets Based on 80% Capacity Utilization	
Maximum Import Level (mmt)	22.7
Estimated Import Penetration	22%
Estimated Production (mmt)	90.6

Source: US Department of Commerce

Top exporters of steel to the US

Of the 36 million tonnes of steel imported by the USA during 2017, imports from Canada were the highest at 5.8 million tonnes followed by Brazil, South Korea, Mexico among others and the quantity of steel imported by the USA from these countries was 4.7 million tonnes, 3.7 million tonnes, 3.3 million tonnes, respectively.

Chart 2: Top steel exporters to the US in 2017 (Annualized) (in million tonnes)



Source: US Department of Commerce

It is to be noted that exports from India and China to the USA were 0.9 million tonnes and 0.8 million tonnes, respectively, during 2017. So, if the proposed import duty is imposed, it would have a major bearing on the large steel importers like Brazil, South Korea as Canada and Mexico stands out of the purview while the impact on India and China will be marginal.

Steel imports from Canada and Mexico by the USA was around 9 million tonnes in 2017. Considering that the USA raises its capital utilization rate to 80% and sticks to the target of importing 22.7 million tonnes, the country will still have to depend on markets outside Canada and Mexico to meet the demand of 13.7 million tonnes of steel (approximately 13% of the total demand) assuming imports from Canada and Mexico remains constant at 9 million tonnes.

India's steel exports to the USA

In FY17, finished steel exports to the USA by India stood at 235.5 thousand tonnes and accounted for 2.1% of the 11.3 million tonnes of finished steel exported by India. The share of steel exports to the USA has declined over the years in quantity as well as value terms.

Table 8: Finished steel exports by India to the US (in quantity and value)

	Quantity		Value	
	(in thousand tonnes)	Share in total steel exported by India (in %)	(in USD million)	Share in total steel exports value by India (in %)
2014-15	613.2	7.2	662.1	8.6
2015-16	312.6	5.0	400.7	8.0
2016-17	235.5	2.1	283.1	3.7
Apr-Oct 17	128.7	1.8	180.3	3.3

Source: CMIE

During April-October 2017, finished steel exports to the USA grew by 3.4% to 128.7 thousand tonnes, while its value increased by 23.5% to USD 180.3 million on a y-o-y basis.

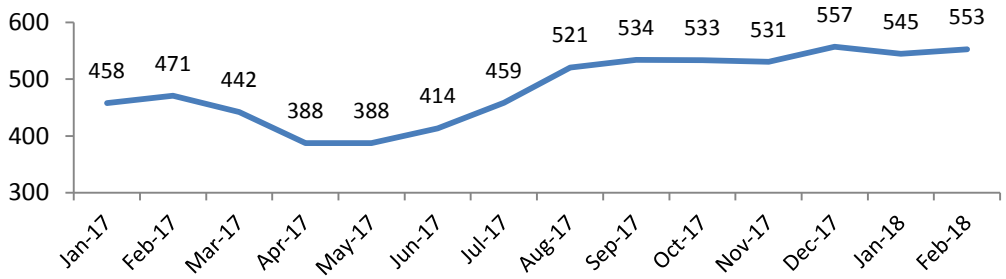
Considering the quantity of steel exports by India to the USA, the tariff hike is not likely to dent steel exports from India.

Movement in international steel prices

The HRB (hot rolled band) steel prices in China in the last 1 year saw a 20% rise amid fluctuations. It rose by USD 32 per tonne to USD 471 per tonne during Jan-Feb'17, only to decline by USD 88 per tonne (USD 388 per tonne) by May'17. Thereafter, it has seen a sustained increase to USD 553 per tonne in Feb'18.

The improvement in prices can be attributed to supply cuts undertaken by the Chinese government to reduce over capacity and to address environmental issues. Also, better outlook for global steel industry is believed to have supported the steel prices.

Chart 3: HRB prices – China (USD per Metric Tonne)



Source: SteelBenchmarker

Conclusion

- Assuming the USA is able to meet its target of 80% capacity utilization rate and with Canada and Mexico being exempted from the tariff hike, approximately 1,397 thousand mt of aluminium (about 25% of the total demand) and around 14 million tonnes of steel (approximately 13% of the total demand) which will continue to be imported from other countries will be subject to the tariff hike.
- The tariff hike will increase the steel and aluminium prices in the USA market as the present consumers that use the imported metals for making their products will have to pay more to buy from the current suppliers. Also, this would cause a disruption in supply chain of consumers as they would now seek new suppliers to meet their consumption demand which, in turn, can result in a buildup of prices there.
- Further, countries that depend on the USA for their exports would have to search for new markets to offload their steel and aluminum products which may result in oversupply to other markets, thereby disrupting demand-supply dynamics. This may put some pressure on these metal prices in international markets (outside the USA).
- Given that the movement in international prices of both steel and aluminium is primarily driven by the demand-supply situation in China, the tariff hike would have a limited impact on global price movements.
- Ramping up of production of these metals in the USA may not be immediate and may entail various constraints such as establishing new supply chains, procurement of raw materials, raising adequate funding for operations and modernization along with various costs associated with the manufacturing process to suit specific needs of buyers. The US Department of Commerce estimates that it would take up to 9 months to restart idled capacity for aluminium.

It needs to be seen how quickly the USA is able to increase its domestic production to meet its domestic demand. We do not foresee a noteworthy increase in the domestic supply of USA in the next one year.

- India is unlikely to be adversely impacted by the tariff hikes, given its limited share in exports of these metals to the USA. However, companies that have exposure to the USA markets may see a decline in their topline and bottom line. Also, going forward other and newer markets would be increasingly preferred by Indian exporters.
- India's trade surplus with the USA will continue even with the imposition of tariffs on these metals.

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