



ECONOMIC POLICY NOTE 28/2/2018

Protectionism returns to US policy agenda

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- With the recent safeguard tariffs on US imports of solar cells and washers, US trade protectionism is back. Retaliation by US trading partners is likely.
- The bad news is that a fully-fledged trade war would create serious economic damage. Moreover, selective protectionist measures reduce employment in affected industries. The good news is that selective protectionism is unlikely to harm either aggregate economic growth or stock market performance.

After a reasonably good first year in office, ultimately crowned with the success of tax reform, Donald Trump has returned to his trade agenda to defend US workers from the “carnage” of “bad trade deals”. With his decision on January 25, 2018, safeguard tariffs of 30 percent will be applied to US imports of solar cells and 20 to 50 percent to imports of washers.¹ But the US trade agenda is not yet exhausted here. In the months to come president Trump is supposed to take more measures on intellectual property rights, technology goods as well as steel and aluminum goods. Trump has also claimed to renegotiate NAFTA and, in case of failure, he has threatened to “tear it up”. It is more plausi-

ble than not that this is the beginning of a costly tit-for-tat whereby US trade protection will be countered by others.

The intensity of the tit-for-tat is difficult to predict, but it will ultimately determine the damage from protectionism to the US and the rest of the trading world. Recent estimations by Ralph Ossa from University of Chicago indicate that a global trade war, resulting in a rise in trade barriers for all countries, would slash real incomes by an average 3.4 percent.²

¹ The 20 percent tariff should apply to the first 1.2 million imported large industrial washers in 2018. On each additional unit the tariff of 50% is eligible.

² In a current context of a 3.6 percent annual GDP growth on average for developed and emerging economies in 2017, this corresponds to a loss of almost one year of growth efforts. For details regarding estimations of losses from a global trade war, see Ossa, Ralph (2014), “Trade wars and trade talks with data”, *American Economic Review* 104(12): 4104-4146. In another set of simulations,



Case study: US safeguard tariffs on steel 2002-2003

However, even a simple muscle flexing might be enough to impact some parts of the US economy, although the extent of harm would be limited to the loss of jobs in the user industries of the protected sector. This can be illustrated on the case of the US steel safeguard tariffs between March 2002 and December 2003. A retreat of this case is possible now, after US State Secretary of Commerce, Wilbur Ross, suggested in a report published on February 16, 2018 to impose tariffs and quotas on imports of steel and aluminum.³

Back in 2002, mounting competitive pressures on the steel industry led President George W. Bush to impose safeguard tariffs ranging between 8 and 30 percent on ten steel product groups with a total of 272 tariff lines. Steel imports from NAFTA countries, from other preferential trade agreement parties (Jordan and Israel) and from 100 developing countries falling under the so called *de minimis* provision were exempted.⁴ Moreover, around 1000 firm-specific exemptions were granted by the US Trade Representative.

Noland, Robinson and Moran [“Impact of Clinton’s and Trump’s trade proposals”, in: Markus Noland, Gary C. Hufbauer, Sherman Robinson, and Tyler Moran (Eds.), “Assessing trade agendas in the US presidential campaign”, PIIE Briefing Nr. 16-6, 2016] estimate that under a full-trade-war scenario, with the USA imposing a 45 percent tariff on nonoil imports from China and Mexico and the latter countries retaliating symmetrically, the US economy would experience a cumulative deviation in investment of 30 percent from its baseline and a rise in unemployment from 4.9 percent in 2017 to a pick of 8.6 percent in 2020.

³ The report provides Trump three options, among which a 24 percent tariff on all steel imports. Trump’s decision in this regard is expected by April 11, 2018.

⁴ *De minimis* provision under Art. 9.1 of the WTO Agreement on Safeguards assures that no safeguard measure is applied against a product originating in a developing country as long as its share of imports in the concerned country does not exceed 3 percent, or, if several developing countries with individual import shares below 3 percent are involved, safeguard measures will not be applied unless their collective share exceed 9 percent.

As a result of trade restriction, US imports of steel products diminished between 2002 and 2003 by five percent, bringing the industry’s trade deficit down by 28 percent. However, immediately after the protection ended, import growth rebounded and contributed to a rapid widening of the industry’s trade deficit, above the levels from pre-protectionist era (Figure 1).

The protection of the industry produced negative spillover effects to other parts of the US economy. Steel is a key input in several industries.⁵ Taken together the steel-using industries generated in 2001 far more value added than did the steel industry itself and employed 57 workers for every employee in the steel industry.⁶

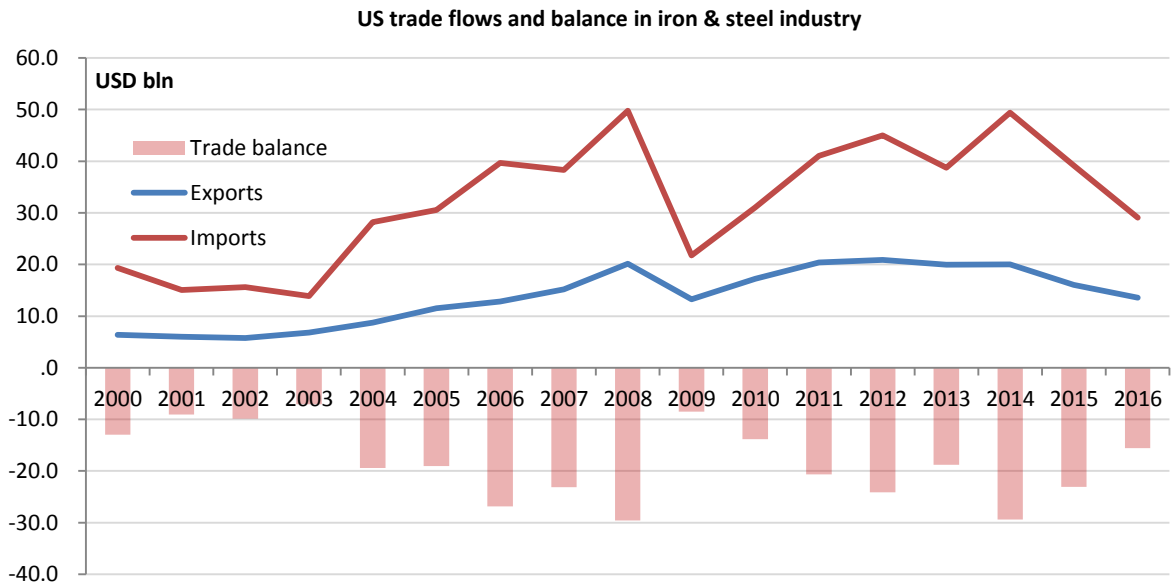
It is difficult to precisely quantify the extent of the damage (direct and indirect), also due to challenge to separate it from other cyclical and structural factors at play in the US economy at that time. But it is strongly suggestive that damage did result, given that each of the steel-using industries experienced an above-average employment drop in the two years under safeguard tariffs (Table 1).

⁵ Based on input-output tables for the US, we identified 7 industries with an above-average intensity of steel-related inputs in the industry’s overall intermediate consumption. These are: manufacture of basic metals (30%), manufacture of fabricated metal products (28%), manufacture of electrical equipment (18%), manufacture of machinery and equipment not elsewhere classified (n.e.c.) (12%), manufacture of furniture; other manufacture n.e.c. (6%), manufacture of other transport equipment (5%), manufacture of motor vehicles, trailers and semi-trailers (9%). All these industries depend intensively not only on domestic supply but also on steel imports from abroad. Finally, manufacture of food products, beverages and tobacco products and manufacture of coke and refined petroleum products are among the most intensive steel importers, with relatively low domestic demand for steel.

⁶ See Ikenson, Daniel J. (2002), „Steel trap: How subsidies and protectionism weaken the US steel industry”, Cato Briefing Paper No. 14.



Figure 1. US trade in iron and steel industry



Source: Own elaborations Flossbach von Storch Research Institute based on data from OECD STAN Bilateral Trade in Goods by Industry and End-use (BTDIxE)

Table 1. Employment change in the US steel-consuming industries during steel protection (2002-2003)

	Loss of hours worked on average between 2002 and 2003	Share of steel imports over industry's total intermediate consumption	Share of steel products over industry's total intermediate consumption
Manufacture of machinery and equipment n.e.c.	-8.5%	2.4%	11.6%
Manufacture of basic metals	-8.8%	5.7%	30.3%
Manufacture of fabricated metal products, ex. machinery and equipment	-6.0%	5.2%	28.4%
Manufacture of other transport equipment	-5.9%	1.0%	5.4%
Manufacture of furniture; other manufacturing	-4.6%	1.3%	6.3%
Manufacture of electrical equipment	-8.6%	3.5%	17.9%
Manufacture of motor vehicles, trailers and semi-trailers	-4.5%	1.6%	8.5%
Average over all industries	-0.7%	0.4%	2.1%

Source: Own elaborations Flossbach von Storch Research Institute based on OECD STAN Database for Structural Analysis and WIOD input-output tables for the US



However, it seems that the harm was limited to the loss of jobs and that there was no visible macro impact. US GDP growth even accelerated after March 2002 (Figure 2). Also the stock market was not particularly affected by the measures. Both steel producing and steel using industries did better than the broad stock market between March 2003 and December 2003 (Figure 3).⁷

How did it end? Nine WTO members (Brazil, China, Chinese Taipei, the EU, Japan, Korea, New Zealand, Norway and Switzerland) opposed the safeguard measures in the WTO. It was found that the safeguards violated WTO rules by failing to show a “causal link” between increased imports and “serious injury” on the US side. Also, the US did not provide comprehensive and appropriate evidence of “unforeseen developments” of steel imports explaining their increase. Due to the continuation of non-compliance of the US with the WTO-ruling, the EU was authorized to raise retaliatory tariffs on US goods. It targeted, among others, citrus fruits and textiles, with the aim to build up internal opposition to the US protectionism. Safeguard measures on steel were eventually terminated by the US in December 2003.

Who’s next on Trump’s trade agenda?

Table 2 gives an overview of industries with a negative trade balance as of 2016, which could be destined for protection by Donald Trump and the US government in the attempt to restore the US trade balance. Among the three industries with a trade deficit above 100 billion US dollar, manufacture of motor vehicles, trailers and semi-trailers and manufacturing of electronic and optical products are the likely candi-

⁷ In the first year under steel tariffs the stock market performance was mixed, with automobiles, auto components and steel index underperforming and machinery as well as electrical equipment outperforming the broad stock market index.

dates. Regarding the latter, import tariffs are already in play: solar cell manufacturing belongs to this industry. And imports of vehicles have been already targeted by Donald Trump with a potential 35 percent tariff. In both industries, one could expect a non-negligible impact in terms of higher prices on user-industries, given the relatively high shares of imports going to intermediate consumption. Considering additionally imports of capital goods, these shares increase to 71 and 44 percent, respectively.⁸ In the case of electronic and optical equipment, a negative impact on re-exports should be also expected, given their relatively high share (22 percent) over total imports.

Protectionist measures could be also applied on products from other industries with trade deficits. And in analogy with the previously analysed case of steel tariffs, negative spillover effects on employment could follow.

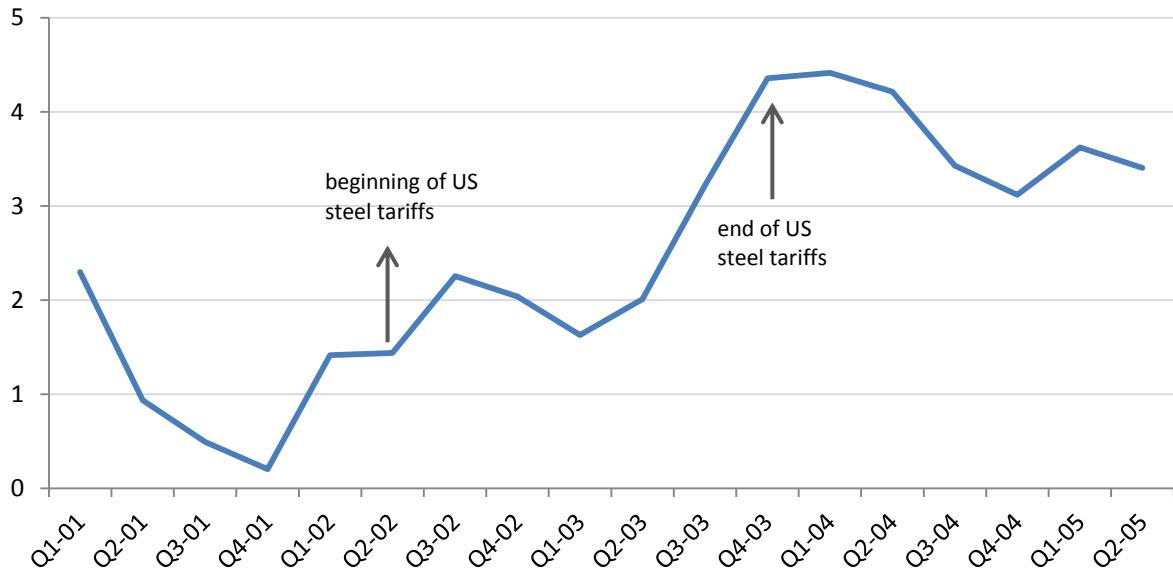
However, a detrimental impact on the US and the rest of the trading world does not need to end here. As a response to US trade barriers, affected trade partners could target and retaliate on exporting sectors and their products, as illustrated in Table 3. This could be particularly painful for manufacturers of military fighting vehicles, air and spacecraft and chemicals and chemical products, given that 63, 51 and 25 percent, respectively, of the industries’ outputs is being exported.⁹

⁸ Among the most intensive intermediate users of motor vehicles is the industry itself (with 33% of its intermediate consumption constituted by own sector’s products), in addition to manufacture of machinery and equipment n.e.c. (5%) and, among services, wholesale and retail trade (9%) and repair and installation of machinery and equipment (7%). For electrical and optical equipment, the users are the sector itself (31%), in addition to manufacture of other transport equipment (11%) and among services telecommunications (9%) and motion picture, video and television program production (7%).

⁹ Noteworthy is also the fact that almost 11 percent of US exports of aerospace products and parts and 3.3 percent of chemicals and chemical products go to China.

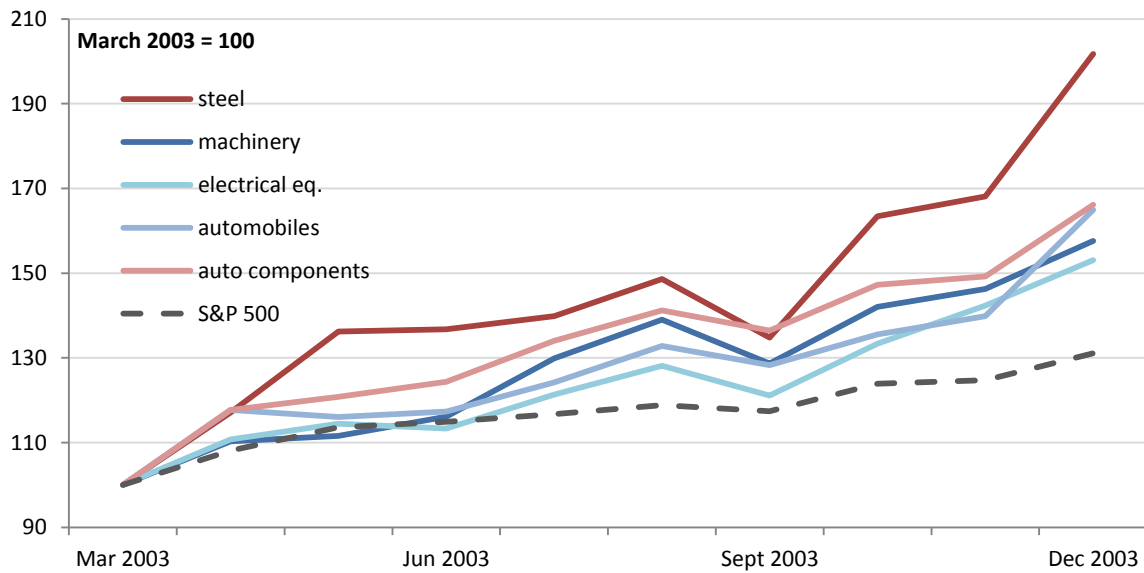


Figure 2. US GDP growth



Source: Haver Analytics

Figure 3. S&P 500 index and sectoral S&P 500 indices of steel-producing and steel-using sectors



Source: Bloomberg



Table 2. US industries with trade deficit

<i>Industry</i>	<i>Trade balance In bn USD</i>	<i>Share of intermediate imports over indus- try's total imports</i>	<i>Share of re-exports over industry's total imports</i>
Motor vehicles, trailers and semi-trailers	-175.7	33.8%	3.7%
Electronic and optical products; scientific instruments	-115.0	26.0%	21.6%
Extraction of crude petroleum and natural gas	-102.9	100.0%	0.1%
Wearing apparel	-82.1	0.1%	2.8%
Furniture, other manufacturing	-76.6	13.9%	22.1%
Computers and peripheral equipment	-65.5	20.6%	23.6%
Electrical equipment	-61.3	52.1%	14.0%
Basic pharmaceutical products and pharmaceutical preparations	-44.9	28.3%	4.5%
Machinery and equipment n.e.c.	-35.7	40.2%	11.2%
Leather and related products	-35.3	2.0%	3.7%
Manufacture of other fabricated metal products; metalworking service activities	-24.9	71.9%	6.8%
Rubber and plastics products	-21.9	71.7%	6.8%
Textiles	-17.6	34.2%	4.1%
Iron and steel	-15.5	100.0%	3.2%
Beverages	-15.1	1.7%	2.4%
Non-ferrous metals	-14.9	68.0%	9.5%
Wood and products of wood and cork, except furniture	-13.2	90.6%	1.4%
Other non-metallic mineral products	-11.4	87.3%	3.7%
Food products	-6.3	19.1%	2.2%
Electricity, gas, steam and air conditioning supply	-2.0	100.0%	0.0%
Railroad equipment and transport equipment n.e.c.	-1.7	33.0%	5.6%
Fishing and aquaculture	-1.5	4.5%	2.2%
Other mining and quarrying	-0.6	73.4%	20.8%

Source: Own calculations Flossbach von Storch Research Institute based on data from OECD STAN Bilateral Trade in Goods by Industry and End-use (BTDIXE)

Table 3. US industries with trade surplus

<i>Industry</i>	<i>Trade balance in bn of USD</i>	<i>Share of export over industry's output</i>
Air and spacecraft and related machinery	86.9	50.7 %
Coke and refined petroleum products	32.3	15.3%
Crop and animal production, hunting and related service activities	21.7	10.7%
Chemicals and chemical products	19.9	25.4%
Mining of coal and lignite	3.7	2.8%
Mining of metal ores	3.7	2.8%
Manufacture of weapons and ammunition	2.0	8.9%
Forestry and logging	1.8	4.0%
Military fighting vehicles	1.5	63.4%
Paper and paper products	0.8	11.6%
Building of ships and boats	0.3	6.6%
Tobacco products	0.2	3.1%
Printing and reproduction of recorded media	0.1	0.9%

Source: Own calculations Flossbach von Storch Research Institute based on data from OECD STAN Bilateral Trade in Goods and OECD STAN Database for Structural Analysis by Industry and End-use (BTDIXE)



Make trade or perish

There should be no doubt that unfair trading practices undermine the harmonious functioning of the global trading order. But the WTO's dispute resolution has exactly the aim to assist discordant trading partners in a peaceful resolution of trade tensions. As a matter of facts, the US enjoys an above-average success rate in disputes judged at the WTO since its foundation in 1995.¹⁰ At the same time, some WTO rules might be indeed outdated and could be renegotiated to better reflect the changing nature of trade today. Finally, the lack of an investment treaty between the US and China undermines the fair access to reciprocal markets for multinationals and only adds fuel to the flames.

Should Donald Trump push ahead with protectionist pledges, a tit-for-tat trade conflict or at least elements thereof would be unavoidable.

Smaller muscle flexing with respect to single industries would probably not harm the big macro picture, nor would it negatively impact stock market developments. Against this, a fully-fledged trade war would be detrimental to the US and its trading partners.

More generally, however, the current Trump's strategy reflects a false diagnosis of the underlying problem of chronic current account deficits of the US. As long as US excess demand consumption is financed by savings from abroad there is no economic reason for current account deficits to improve. Protectionism only reallocates the deficits among sectors. With regard to protectionism and trade wars, Donald Trump should heed the warning of his illustrious predecessor Thomas Jefferson that "the most successful war seldom pays for its losses".

¹⁰ See "America wins often with trade referee that Trump wants to avoid", Bloomberg, March 27, 2017, available at: <https://www.bloomberg.com/news/articles/2017-03-27/trump-isn-t-a-fan-of-the-wto-but-u-s-lawyers-often-win-there>.



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