TARIFFS IN THE 1930s AND THE 21st CENTURY

LUISS Guido Carli

Bachelor Thesis

AUTHOR: Alberto Bettini

EMAIL: albertobettini@icloud.com

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SUPERVISOR: Prof. Gianni Toniolo



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Abstract

Today, economists are as skeptical about tariffs as they were in 1930. Nevertheless, some politicians continue to impose them as they were a desirable policy.

This work makes a comparison between the Trump tariffs of 2018 and the Smoot–Hawley Tariff Act of 1930 in order to uncover what are the underlying motives and conditions that led to those duties.

Possibly, they were both the result of a political agenda rather than of an economic rationale. This work is divided in three Chapters.

The first, 1930, explains the Great Depression and its causes, the circumstances for the promulgation of the Smooth-Hawley Act, the opinions of the economists of that time and the consequences of the tariffs.

Chapter Two, 2018, describes the current situation, the Trump tariffs for each category of goods, the judgements of today economists and the reactions sparkled by the import duties. Finally, Chapter Three, A voice from yesterday and from today, confronts the viewpoints of two leading economists each opposed to the tariffs from their respective times: Frank William Taussig and Paul Krugman.

The Conclusion, *History Repeats?* sums up the findings of this work by pointing out the parallelisms of the 1930 situation and the one of 2018. Some of the discoveries are cause for concern.

Chapter One – 1930

1.1 - The Great Depression

United States of America suffered a severe economic depression that took place mostly during the 1930s.

It was the longest, deepest, and most widespread depression ever experienced by the industrialized western world. Its effectiveness and harshness varied substantially across countries; in most nations it started in 1929 and lasted until the late-1930s. Among all, it also had several consequences in terms of macroeconomic policy and economic theory. It is generally assumed that the Great Depression began after a major drop in stock prices that started around September and got markedly worse only after the famous market crash of October 29, 1929. However, many economists believe that the two events are at most tangentially related. "This conventional view can be seen very clearly in Dorn-Busch and Fischer's macroeconomics textbook [1984]. They argue that the Great Crash could not have caused the Great Depression because real output started down before stock prices collapsed and because the largest falls in output did not occur until nearly two years later, after the banking panics of 1931. Despite the dichotomy that economists often impose between the Great Crash and the Great Depression, it is nevertheless the case that the downturn in real output that began in August 1929 accelerated dramatically after the collapse of stock prices."1 "Between depression peak and 1932, worldwide gross domestic product (GDP) fell by an estimated 15% and the wholesale price index declined 33%. Some economies started to recover by the mid-1930s whereas other countries bore the drawbacks of such severe downturn until the beginning of World War II."²

"The Great Depression affected so many rich and poor countries of the world, inflicting devastating effects. Personal income, tax revenue, profits and prices dropped, while international trade plunged by more than 50%. Unemployment in the U.S. rose to 25% and

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¹ Romer, Christina D. *The Great Crash and the Onset of the Great depression*, the Quarterly Journal of Economics, vol.105, no. 3, Oxford University Press, University of California, Berkeley, Aug., 1990, p 597

² Duhigg, Charles. *Depression, you say? Check those safety nets*, New York Times, March 23, 2008

in some countries rose as high as 33%."³ Cities around the world were hit hard, especially those dependent on heavy industry.

1.2 - Great Depression causes

There are mainly two theories which aim to explain the causes behind such major downturn: The Keynesian and the monetarist explanations. The agreement among the supporters of the former is that the plunge in aggregate demand began with a collapse in investment. "The investment boom of the 1920s had left firms with an expanded stock of capital. As the capital stock approached its desired level, firms did not need as much new capital, and they cut back investment. The stock market crash of 1929 shook business confidence, further reducing investment. Real gross private domestic investment plunged nearly 80% between 1929 and 1932."

In those years, many individuals withdrew their investments, believing they could avoid additional losses.

Monetarists tend to view deviations of output from equilibrium ("natural output") as being a voluntary response of firms and workers to deviations of actual prices from their expected level. "In response to a demand shock, prices do not typically adjust rapidly enough to clear markets, and so agents find themselves constrained by a level of sales or employment different from what they would voluntarily choose to supply at going prices and wages." As a consequence, banking crisis cause monetary contractions, which then provoke a general price drop (deflation). "Irving Fisher outlined that the predominant condition which led to the Great Depression was a vicious circle of deflation and growing over-indebtedness. Those elements created the bubble to burst."

³ Frank, Robert H., Bernanke and Ben S., *Principles of Macroeconomics* (3rd edition, 2007), p.98

⁴The Great Depression and the Keynesian economics, Economics Principles, section 32.1

⁵ Gordon, Robert J. and James A. Wilcox, *Monetarist interpretation of the great depression: an evaluation and critique*, National Bureau of Economic Research, November 1978

⁶Fisher, Irving. *The debt deflation theory of great depression*, Journal of the Econometric society, vol.1, no.4, October 1933, The econometric society, p.337

The monetary explanation, however, have two weaknesses. First it might not able to explain why the demand for money was falling more rapidly than the supply during the initial downturn in 1930–31. Second it may fail to explain why in March 1933 a recovery took place although short term interest rates remained close to zero and the Money supply was still falling. "The Federal Reserve, however, did not push reserves into the banking system during the 1929-33 decline, even though the nominal money stock fell by a third. Its open market operations were irregular and surely not always on the side of expansion. Factions in the Federal Reserve arguing for less deflationary policies were over ruled by those who thought that the economy needed to go through a period of "liquidation" in order to lay the ground work for renewed expansion."

Liquidationists believed that a recession could cut unsuccessful investments and businesses in the troubled sector of the economy and to relocate capital and labour in technologically dynamic sectors of the economy. Many historians, however, agree on the disastrous consequences that this movement brought to the American economy.

Economists are evenly divided as to whether the traditional monetary explanation is right, or the traditional Keynesian is the primary explanation for the onset of the Great Depression.

As today, there is more consensus among economists and historians about the main objective of governments and, more in general, international establishments. Policies and reforms should try to keep aggregate demand in its stable growth path. Speaking broadly, the forecast of a depression should drive central banks to pour liquidity into the banking system, by enacting expansionary monetary policies and governments should cut taxes and accelerate spending in order to keep the nominal money stock and total nominal demand from collapsing. At the beginning of the Great Depression most economists believed in Say's law, according to which supply creates its own demand. The self-equilibrating powers of the market failed to explain the severity of the Depression.

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⁷ De Long and J. Bradford, *Old fashioned real business cycle theory and the great depression, Liquidation cycles*, National Bureau of Economic Research, December 1990

1.3 - Smoot-Hawley Tariff Act

"I almost went down on my knees to beg Herbert Hoover to veto the asinine Hawley-Smoot Tariff, that Act intensified nationalism all over the world." – Thomas Lamont, partner at J.P. Morgan, 1930

Reed Smoot was a Republican from Utah and chairman of the Senate Finance Committee. Willis C. Hawley, a Republican from Oregon, was chairman of the House Ways and Means Committee. They, together, sponsored the set of laws and provisions called "Smoot-Hawley Tariff Act". It aimed at raising tariffs on over 20,000 U.S. imported goods spread in different sectors of the market. Such rates were already very high at the time because in 1922 Congress had enacted the Fordney-McCumber Act, which has been considered by historians to be the most punitive protectionist tariffs passed in the country's history, raising the average import tax to around 40 percent. Such Act, not only did very little to boost American economy growth, but acquired retaliation by European governaments. Smoot-Hawley Act implications are often attributed to have intensified Great Depression damages to the U.S. economy. It is surely responsible for the downfall of imports and exports in the early 1930s. However, calculating the extent to which Smoot-Hawley raised tariffs is not straightforward, neither it is to identify and separate the consequences the bill and the great depression had on the American economy.

The table below displays average ad valorem rates produced in the economy prevailing in 1928 under different provisions. The Act of 1930 raised all dutiable imports to 41.14% from the already high 34.80% of the Act of 1922. However, it is shown, that the general increase in the average tariff rate applied to each category of goods produced in the economy was not the same. An average increase in tariff rates of about 10% was applied to sectors such as wool, spirits, agricultural products and tobacco. Other markets experienced little or no rise in tariff rates on import. Wood was the only sector of imports which had a decrease of average ad valorem rates under provisions of the Act of 1930 of about 4%.

Schedule	è	S
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Average Ad Valorem Rates

						Prevailing in 1928 Under Provisions of		
		1901	1912	1921	Act of 1922	House Bill	Senate Bill	Act of 1930
Α.	Chemicals	28%	26%	22%	28.92%	31.82%	30.95%	36.09%
В.	Earthenware, etc	51	51	34	45.52	54.87	53.09	53.73
c.	Metals	38	34	22	33.71	36.34	32.35	35.08
D.	Wood	19	12	16	15.84	25.34	15.65	11.73
Ε.	Sugar	72	48	31	67.85	92.36	77.15	77.21
F.	Tobacco	110	82	54	63.09	66.96	63.09	64.78
G.	Agricultural products	34	29	17	22.37	33.35	35.95	35.07
н.	Spirits	68	84	47	36.48	47.44	47.44	47.44
I.	Cotton manufacturers.	50	45	26	40.27	43.19	40.59	46.42
J.	Flax, hemp, jute	45	45	27	18.16	19.03	18.95	19.14
Κ.	Wool	70	56	35	49.54	58.09	57.38	59.83
L.	Silks	53	52	41	56.56	60.17	58.03	59.13
М.	Pulp and paper	24	21	19	24.51	26.14	25.91	26.06
N.	Sundries	_24	24	33	20.99	28.57	19.98	28.45
	All dutiable imports	49%	40%	30%	34.80%	43.15%	38.98%	41.14%

Figure 1: US Tariffs 1901-1930. Source: statistical abstract of the United States, 1926, p.551; Tariff review (April 1930), p.99; Tariff review (July 1930), p.196

According to this measure, Smoot-Hawley raised average tariff rates by about 6 percentage points, on average, from the already high rates prevailing under the Fordney-McCumber Tariff of 1922. Such major movement resulted in a major increase in the ration of import duties collected to the value of dutiable imports, as shown in the chart below. The peak of this measure was in 1933 at 59%.

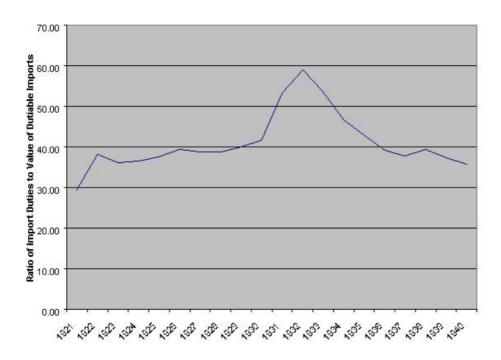


Figure 2: Ratio of import duties to value of dutiable imports 1921-1940. Source: U.S. Bureau of the Census, Historical Statistics of the United States, Colonial Times to 1970, Washington, D.C.: USGPO, 1975, Series 212

1.4 - Origins of the Bill, who wanted such Act and why?

Economists and historians have long wondered what prompted many members of the Republican party to foster a second increase version of the tariff rates. After all, the Fordney-McCumber Act of 1922 had already satisfied many republican's needs. However, in those years, the American Government faced intense pressures over greater protectionism from both the agricultural sector and the more industrialized one.

The most persistent area of concern was the condition of U.S. agriculture; in fact, as American industries had to deal with intense competition and oversupply, which frequently led to lower prices, European farmers recovered from the disastrous effects inflicted by World War I. The Act of 1922 had given them protection, but they claimed it wasn't enough. Farmers raised the 'crops surplus' issue. Indeed, they wanted higher protection for a specific kind of good which was at the core of their production at the time. They quarreled Fordney-McCumber Act to be completely ineffective. Years later, they worked out several projects to protect their self-interests and to acquire a larger share of the domestic market, so being more

shielded from international competition. The combination of such projects took the name of McNary-Haugen Farm Relief bill. President Calvin Coolidge exercised his veto power twice to block the promulgation of such proposals, staving off measures that favored farm interests through what amounted to Federal price support.⁸

Few months after, agriculture lobbies decided to draft a bill, later perfected by Dr. Charles Stewart of the University of Illinois. It proposed to pay, export bounties on the farm surpluses sold abroad by issuing negotiable instruments called debentures which would be receivable in payment tariff duties. This scheme would not even take money out of the treasury, though it would keep money from going into it, exactly as every protective tariff duty does, for no tariff duty can be protective without keeping goods from entering the country which would pay duties into the treasury if the rate were lower. The Export Debenture Plan was as like the tariff as any scheme could be without being identically the same thing. Even this time, it was not vetoed.

When Herbert Hoover succeeded Coolidge, he realized that a solution was necessary to limit the growing agrarian anxiety. As a consequence, he promised a limited revision of the tariff of 1922 for the benefit of agriculture. This limited revision took the natural and inevitable course. The House Committee on Ways and Means, chaired by Hawley, began to hold public hearings January 7, 1929. All whom desired protection were welcomed and the already protected manufacturers came in quantity.⁹

Industrialists were concentrated in the North-East states in America at the time, mainly Pennsylvania, New York and Massachusetts. As a result, claims for higher tariffs came from such areas. The reasons why those states felt a second upward tariff revision of manufacturers was needed were not so different from those given by the agricultural sector.

Senator Reed Smoot, in fact, used the following words against claims by the Democratic party on the rise of unemployment in 1927. "Unemployment today doesn't compare with that of 1920 and 1921, when the republicans came into power after eight years of democratic

⁸ Dobson, John M, *Two centuries of Tariffs: The Background and the Emergence of the U.S. International Trade Commission*, United States International Trade Commission, December 1976, Washington

⁹ Fleming, D.F. *How the Smoot-Hawley Tariff was made*, Proceedings of the Annual Session (Southern Political Science Association), No. 9 (November 5-7, 1936), pp. 14-19, The University of Chicago Press on behalf of the Southern Political Science Association

administration. Today, much of it is still due to large importation of foreign merchandise that have been steadily reaching American shores. These have a tendency to supplant large quantities of American goods, thus slowing down many American industries. This factor contributes heavily to increase industrial unemployment, and the result is immediately felt in the lowering of the consuming power of the wage earners." According to him, the U.S. economy was characterized by oversupply which was primarily caused by very high levels of imports and mass production.

The New York Times reported that the issue raised by Senator Smoot was a recurrent them in the debate over the Bill. "Most of the petitioners for large basic industries have admitted states of over-production or over-capacity for meeting domestic demand. Some estimated excess facilities at as much as 25 percent."¹¹

As expected, increasing demand for higher tariffs came from leading figures as well. "Leading the charge was Joseph A. Grundy, President of the Pennsylvania Manufactures Association and a long-time Republican. Other leading tariff protagonists included Pennsylvania Governor John S. Fisher and Samuel M. Vauclain, president of the Baldwin Locomotive Works of Philadelphia."12 On September 5, 1929, in a meeting with President Hoover, S. Fisher expressed his concerns over increasing pressure to amend the tariff bill. "Earlier in the day President Hoover heard Representative Albert Johnson of Washington vigorously oppose the Senate Tariff bill, while two others, Governor Fisher of Pennsylvania and John E. Edgerton of New York, president of the National Manufactures Association, voiced protests against administrative features of the bill. Governor Fisher said that the American valuation plan was essential to a sound tariff bill and that protection could not be given to one group alone, but must be extended to the entire country. 'During the campaign we preached protection for the East, West and all parts of the country,' Governor Fisher said. 'We in Pennsylvania are for a tariff that will afford protection for all of our industries. We expect agricultural protection, but we are not going to stand for recognition of any section to the disadvantage of another." 13

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¹⁰ The New York Times, March 8, 1928, p.1

¹¹ New York Times, February 17, 1929, p.1

¹² Beaudreau, Bernard C. The petition against the Smoot-Hawley tariff bill, what 1028 economists overlooked, Université Laval, Quebec, Canada, April 7, 2016

¹³ New York Times, September 6, 1929, p.1

Joseph R. Grundy, President of the Manufacturers Association	"We therefore advocate a general revision of the tariff upward, that every section of the country with all labor in every industry and business may reap the benefit and enjoy profitable prosperity" (<i>New York Times</i> , June 11, 1928, p.1).
James J. Davis, Secretary of Labor	"An utmost economic call for increased duties and that the present unemployment was due to low tariff schedules which permit cheaply made goods to come in and cripple American industry" (<i>New York Times</i> , June 11, 1928, p.1).
William M. Butler, Chairman of the Republican National Committee	"has favored revision of the tariff for some time and while he is not impressing his personality on the platform drafters, it is believed that his views and those of others in the East will be taken into consideration. The compromise suggestion that the farm group offered for increased duties on farm-products and the decreasing of the free list has been met by the manufacturing interests with a willingness to cooperate with the farmers provided the industrial schedules are also considered favorably" (<i>New York Times</i> , June 11, 1928, p.1).
S.D. Fess, Senator from Ohio	"even should the convention decide that there should not be a general revision of the tariff favored in the platform, any tinkering with the tariff, such as the change in the farm schedules, inevitably would lead to a general revision." (Congressional Record, May 29, 1928.p. 10620)
George H. Moses, Permanent Chairman of the Republican National Conference	"In seeking for an economic policy for the United States, we know that our people will not turn to the party which clings to the fetich of free trade. In seeking for a policy to make the tariff effective for every interest in the United States, we know our people will not turn to the party whose strength and weakness alike lie in its sectional character" (Congressional Record, May 29, 1928.p. 10624).

Table 1 - Kansas City Republican Party tariff positions

Also, America's new greater need for more control over the domestic market through the use of tariffs was raised by Secretary of Labor, John J. Davis at the 1928 Kansas City Republican convention. For example, on June 11, he highlighted the successes and impending dangers facing U.S. industry.

"Summing it all up, the protective tariff, limited immigration, exclusion of child labor, general watchfulness of women in industry, the eight-hour day, collective bargaining coupled with conciliation and arbitration of injunction, are the important things in which the American laboring man is very much interested. Industrial competition among the countries of the world has caused fundamental changes in American industry that have vastly increased output and at the same time, relatively decreased the cost of production in practically all lines of endeavor." Davis firmly believed that competition was a threat to American economy because of lower manufacturing costs which other countries could sustain. As a result, he supported the imposition of higher tariff rates which could facilitate the record of progress American job market had achieved by those times.

As the positions of leading members of the republican party suggest, there was a clear conviction that loss of American jobs was directly correlated with the excess capacity of new machinery and rising imports. The general shared belief was that higher tariffs would surely allow firms to gain a larger domestic market share and that would help firms to benefit of lower average costs and, eventually, set lower prices to consumers.

Furthermore, Republicans' long-held faith in protectionism was known to everyone at the time; As reported "...protective tariff to be a fundamental and essential principle of the economic life of this nation." ¹⁵

1.5 - 1930 Economists' Opinion

Leading economists as well have given their opinion on the matter. Douglas A. Irwin believes that the agriculture sector was not doing well in the American economy at the time and there was a huge gap between the flourishing East and struggling farms in the Midwest. He thinks

¹⁴ Washington Post, June 12, 1928, p.4

¹⁵ The New York Times, June 24, 1928, p.13

that demand for higher protection by agrarians was the result of a frustration that they felt against industrialists, which were already protected by high duties and could set higher prices in the domestic economy, thus lowering their purchasing power. As a result, the economist explains that Republican party's promises were part of a broader political strategy to gain a wide consensus during the election among western voters. He made it clear, indeed, by stating that "...tariff did not originate in response to demand by politically powerful industries facing competition from imports but was offered up by republican politicians who wanted to appease farmers during the presidential election campaign in 1928...Of course, the manner in which Congress handled the tariff gave rise to its association with special interest lobbying and log-rolling, a perception that is wholly accurate."

Irwin sets the turning point for what literally paved the way to the Smoot-Hawley Tariff Act in the general agreement among progressive Midwestern republicans to allow farmers to have higher tariffs on imported agriculture goods.¹⁸

American leading economist Barry Eichengreen has agreed on Douglas main thought about the origin of the Smoot Hawley Act. According to him, in fact, income prosperity and wealth was very unevenly distributed in 1928 and that is the major cause behind claims raised by farmers. In fact, "after benefiting for high prices from 1917 to 1920, American agriculture failed to recover from the recession of the 1920-1921. For much of the decade, farm gate prices declined relative to the price of nonagricultural goods."

The economist then adds "in the 1928 presidential campaign, Hoover laid considerable stress on tariff protection for agriculture. Previously, agriculture had been the recipient of only modest tariffs, in part because duties on farm imports would have been ineffective given U.S. status as a net exporter of most agricultural goods. However, the American balance of trade

¹⁶ Irwin, Douglas A. *Peddling Protectionism: Smoot-Hawley and the great depression*, Oxford and Princeton, Princeton University Press, 2011, p. 18

¹⁷ Irwin, Douglas A. *Peddling Protectionism: Smoot-Hawley and the great depression*, Oxford and Princeton, Princeton University Press, 2011, p. 7

¹⁸ Irwin, Douglas A. *Peddling Protectionism: Smoot-Hawley and the great depression*, Oxford and Princeton, Princeton University Press, 2011, p. 27

¹⁹Eichengreen, Barry. *The Political Economy of the Smoot-Hawley Tariff Act*, National Bureau of Economic Research, Cambridge MA, August 1986, working paper No. 2001, p. 10

of farm products turned negative for the entire decade. Hence, an expanding segment of American agriculture grew to appreciate the relevance of tariff protection."²⁰

"Beaudreau points out to the growing problem of excess capacity in East-Coast manufacturing, which prompted Reed Smoot and Joseph Grundy, two ranking Republican Party leaders and policy stalwarts, to propose higher tariffs as a means of securing a greater share of the U.S. domestic market for U.S. firms. Higher tariffs on agricultural products, he argued, were thrown in for good political measure, especially in light of the farmer's plight and former President Calvin Coolidge's vetoing of the highly popular McNary-Haugen Farm Relief bill. Beaudreau puts the genesis of the Bill in the developments in late-1927/early-1928, specifically in growing unemployment."²¹

1.6 - The open letter of 1028 economists

Many economists started to express their strict opposition against such restrictive Act. "In the spring of 1930, there was a unanimous opposition of economists to the tariff Bill pending in Congress. Economic faculties that within a few years were to be split wide open on monetary policy, deficit finance, and the problem of big business, were practically at one in their belief that the Hawley-Smoot bill was absolutely not beneficial to the domestic economy."²²

As a result, a petition was drafted and given to president Hoover to urge him to pose the veto power over the Smoot-Hawley Tariff Act to avoid its promulgation.

The originators of such document were: Paul H. Douglas, professor of economics at University of Chicago, Irving Fisher, professor of economics at Yale University, Frank D. Graham, professor of economics at Princeton University, Ernest M. Patterson, professor of economics at University of Pennsylvania, Henry R. Seager, professor of economics at Columbia University, Frank W. Taussig, professor of economics at Harvard University and Clair Wilcox, associate professor of economics at Swarthmore College.

²⁰ Eichengreen, Barry. *The Political Economy of the Smoot-Hawley Tariff Act*, National Bureau of Economic Research, Cambridge MA, August 1986, working paper No. 2001, p. 12

²¹ Beaudreau, Bernard C. *The petition against the Smoot-Hawley tariff bill, what 1028 economists overlooked*, Université Laval, Ouebec, Canada, April 7, 2016

²² Economists against Smoot-Hawley, Econ. Journal Watch, Volume 4, number 3, September 2007, pp 345-358

Frank W. Taussig began his studies at Harvard University in 1876. "He wrote several articles which dealt with the impact of tariffs on American economy. He became later editor of the Quarterly Journal of Economics from 1889 to 1890, president of the American Economic Association in 1904 and 1905, and chair of the United States Tariff Commission." He played a central role in the diffusion of the protest. All the economists which opposed to the Act were, in fact, members of the American Economic Association at the time. According to Taussig, "Smoot was not only an out-and-out protectionist of the most tolerant stamp but was strongly interested in his own region and its own that this pride may have led him to want something." ²⁴

Prof. Wilcox and Prof. Douglas were actually the real creators of the petition. They began drafting the first statement together at Swarthmore college in March 1929.²⁵ The former chaired the International Trade Conference, which led to the General Agreement on Tariffs and Trade (GATT), the predecessor of today's World Trade Organization (WTO). The latter served as professor of economics in many Ivy League universities and had been a member of Chicago city council.

The sketch was later revised and adjusted. Fisher suggested a paragraph to be added pointing out the implication of tariff policy considering America's creditor position at the time. This version was the one which was given to the press five weeks later. It was also sponsored by one economist at each university in US.

It acquired huge consensus: within 10 days, thousands of signatures came in, including the most leading figures of American economics. A copy was delivered to United States president, Herbert Hoover. The petition signed by 1028 economists was read in Senate on May, 5th 1930 and it is still preserved in the Congressional record.

First of all, it is remarkable to stress the fact that all the economists who shared their strict opposition against the promulgation of the Act, agreed on an important common belief: tariffs in general result in a higher final price of goods and commodities. As a result, cost of living would inevitably rise. Republicans had the opposite view about such effect, they believed, in

²³ Schumpter, J.A., Cole, A.H. and E.S. Mason. *Frank William Taussig*, the Quarterly journal of Economics, vol.55, No. 3(May 1941), pp 337-363

²⁴ Irwin, Douglas A. *Peddling Protectionism: Smoot-Hawley and the great depression*, Oxford and Princeton, Princeton University Press, 2011

²⁵ Economists against Smoot-Hawley, Econ. Journal Watch, Volume 4, number 3, September 2007, pp 345-358

fact, that higher tariffs, by securing a larger share of the U.S. market for domestic firms, would result in lower prices.

Economists were all pretty much concerned about raising unemployment in 1930 and there were several reasons why it received such an overwhelming attention. To be sure, the slump in output, investment, and prices was of a magnitude never seen before. None of the nineteenth-century depressions had produced such a high number of "out of work" persons. As cited in this passage of the petition "America is now facing the problem of unemployment. Her labor can find work only if her factories can sell their products. Higher tariffs would not promote such sales. We can not increase employment by restricting trade. American industry, in the present crisis, might well be spared the burden of adjusting itself."²⁶

In those years, in fact, unemployment was much more dependent on exports/imports than it is today. Major technological improvements that today have shifted many workers from one sector to a completely new one were still in the beginning side of the curve. Export/Import related industries occupied a very large share of the American industry at the end of 1929 and those employed the vast majority of workers at the time.²⁷ Economists' concern was well funded and America's trade growth was even confirmed by republican President Hoover while Secretary of Commerce, and in his speeches during the 1928 campaign "the rise in American exports after 1922 was not just an accident. Exports had increased by over a billion dollars during the Republican administration" he said in his speech at Newark, September 17, 1928. He added: "Now I want to clearly show what this means. It was not due to world recovery. If we make a survey of the world's trade today, we shall find that the export trade of all countries is only 10 per cent above pre-war, while ours is 58 per cent. It is no accident which has brought about this unique situation in the United States. It is not chance that has brought this added employment for American workmen and added markets for American farmers. Things like that don't happen. More than 2 million families earn their living today producing goods for exports, and another million families do in the manufacture of raw

²⁶Congressional Record, U.S. Senate, May 3rd 1930 pp 8327

²⁷ Crafts, Nicholas and Peter Fearon, *Lessons from the 1930s Great Depression*, Oxford Review of Economic Policy, Volume 26, pp 285-317, October 2010

materials which we import in exchange for our exports. This increase in exports has brought a living to so many people."²⁸

Year	Domestic Exports	Change from previous	Foreign Borrowing	Change from previous
		year		year
1923	\$4,090,715,000	\$	\$413,662,100	\$
1924	\$4,497,649,000	+406,934,000	928,493,742	+514,831,642
1925	\$4,818,722,000	+321,073,000	1,085,380,750	+156,887,008
1926	\$4,711,721,000	-107,001,000	1,134,659,650	+49,278,900
1927	\$4,758,864,000	+47,143,000	1,375,713,060	+241,053,410
1928	\$5,030,099,000	+271,235,000	1,250,951,267	-124,761,793
1929	\$5,157,083,000	+126,984,000	671,230,806	-579,720,461

Figure 3: US Domestic Exports and Foreign borrowing 1923-1929. Source: Boeckel, R. M. (1930). Foreign trade of the United States. Editorial research reports 1930(Vol. IV). Washington, DC: CQ Press. Retrieved from http://library.cqpress.com/cqresearcher/cqresrre1930110100

Even though for some economists the increase in America's foreign trade was associated with the rise in borrowing from the United States by foreign governments and foreign corporations, 1929 was the year in which United Stated registered the highest level of Exports.

At the beginning of the petition, Economists focused on which sectors would be most afflicted by the promulgation of the bill.

They, in fact reported on their petition: "Few people could hope to gain from such a change. Miners, construction, transportation and public utility workers, professional people and those employed in banks, hotels, newspaper offices, in the wholesale and retail trades, and scores of other occupations would clearly lose, since they produce no

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²⁸ Public papers of the presidents of United States: Herbert Hoover 1929

products which could be protected by tariff barriers. The vast majority of farmers, also, would lose. Their cotton, corn, lard, and wheat are export crops and are sold in the world market. They have no important competition in the home market."²⁹

By using these words, economists wanted to emphasize that most sectors of the market would be worse off after the imposition of tariffs only on certain goods. They would bore the imposition of higher prices by protected firms and see a considerable reduction in their export market.

Before trying to draw conclusions, it is meaningful to provide an accurate analysis regarding the share of different sectors of the American foreign trade in those years.

Figure 4: US Distribution of Exports by Economic Groups, 1830–1929

Year or yearly average	Crude Materials	Crude Foodstuffs	Manufactured Foodstuffs	Semi- manu-	Finished Manufactures
			(Per cent of total value)		
1830	62.7	4.7	16.3	7.0	9.3
1850	62.3	5.6	14.8	4.5	12.7
1880–84	32.2	24.1	24.7	4.4	14.1
1900–04	28.0	14.6	23.0	10.7	23.5
1910–14	33.1	5.9	13.8	16.0	30.7
1920–24	26.2	10.8	14.4	12.0	36.5
1925–29	25.8	6.7	10.2	14.1	43.1
1925	29.5	6.6	11.9	13.7	38.3

²⁹ Congressional Record, U.S. Senate, May 3rd 1930 pag. 8327

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Year or yearly	Crude	Crude	Manufactured	Semi-	Finished
average	Materials	Foodstuffs	Foodstuffs	manu-	Manufactures
1926	26.8	7.1	10.7	13.9	41.5
1927	25.1	8.8	9.7	14.7	41.6
1928	25.7	5.9	9.3	14.2	44.9
1929	22.2	5.2	9.4	14.1	49.1

Source: Boeckel, R. M. (1930), Foreign trade of the United States, *Editorial research reports 1930* (Vol. IV), Washington Press. Retrieved from http://library.cqpress.com/cqresearcher/

Considering what has been reported in the table above, it can be safely argued that America experienced significant changes in the nature of its exports during 100 years prior to 1929.

Manufacturing sector, which accounted for over 49% when the bill was under discussion, was sharply divided. Light industries, concentrating in the manufacture of specialty products, demanded higher protection from foreign competitors. In opposition stood heavy industry, particularly segments which relied on the assembly line and mass production. Automobile producers, led by Henry Ford, were strongly opposed to the bill. At the time, they accounted for over 10% of the above 'finished manufacturers'. The same held for producers of farm machinery and of iron and steel bars, sheet, rails and metal manufacturers, which were considered to export crude materials and semi-manufacture goods. ³⁰ Economists' words reflected perfectly the situation in the American job market in 1930. As they wrote in the petition, both sectors which were not shielded from the protection of the tariff bill and those which had no important competition in the American market realized they had nothing to gain from a reduction in international competition and started to express their opposition against the Act.

Economists stressed the fact that "Our export trade, in general, would suffer. Countries

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³⁰ Eichengreen, Barry. *The Political Economy of the Smoot-Hawley Tariff Act*, National Bureau of Economic Research, Cambridge MA, August 1986, working paper No. 2001, p. 19

can not permanently buy from us unless they are permitted to sell to us, and the more we restrict the importation of goods from them by means of ever higher tariffs the more we reduce the possibility of our exporting to them. This applies to such exporting industries as copper, automobiles, agricultural machinery, typewriters, and the like fully as much as it does to farming. The difficulties of these industries are likely to be increased still further if we pass a higher tariff."³¹

This line of reasoning was exact. It is unreal to assume that trading partners would have not reacted to a similar change. Given the size of U.S., the first expectation would have been the strategic moves of countries which ran trade surplus with America to find other solution by, perhaps, increasing their bilateral trade agreements with already existing markets or stipulate new ones. As a consequence, also by taking into account previous data, it is remarkable to state that U.S. likelihood to advance its trade export volume in the years after the promulgation of the bill would be drastically reduced. Industries which were doing business in international markets, especially by furnishing finished manufactured goods, would be facing hard times.

Also, economists pointed out "People can not benefit, therefore, from any tariff which is imposed upon the basic commodities which they produce. They would lose through the increased duties on manufactured goods, however, and in a double fashion. First, as consumers they would have to pay still higher prices for the products, made of textiles, chemicals, iron, and steel, which they buy. Second, as producers, their ability to sell their products would be further restricted by the barriers placed in the way of foreigners who wished to sell manufactured goods to us."³²

This statement was straight to point since the percentage share of finished manufacturers exported abroad had become six times more than a century ago. Also, crude materials accounted still for a very large share of the national trade income in 1929. Increasing tariff rates directly over basic goods and commodities could easily result much less competition in international markets due to higher prices. The massive plunge in imports would have brought all firms which based their production on goods and commodities from abroad to a

³²Congressional Record, U.S. Senate, May 3rd 1930 pag 8328

³¹ Congressional Record, U.S. Senate, May 3rd 1930 pag 8328

reduction of sales and, consequently, to a decrease in income for employees. As a consequence, many employees of import-related industries would see their jobs at risk if firms had to scale down their production.

The welfare cost would have been very high.

Even this time economists' opinion seemed to be well-grounded. These disastrous consequences would have also paved the way for an inevitable outcome: income distribution. Smoot-Hawley Act high tariff rates would had surely created winners and losers. When trade is restricted, in fact, high productivity firms tend to suffer, and the situation often results in a transfer of labour from more to less productive areas. This, by itself should not really be a problem if such areas would quickly adapt and possibly reach high level areas productivity. However, that is not the case, most of the times.

By considering exports and imports data reported above one could safely state that sectors who make a frequent use of materials which account for a large share would be the most hit by the promulgation of such tariff bill. Their wages would probably be pushed down by a reduction in sales of factories' products, as stated in the petition. Sectors which are more provincial, less educated and have lower flexibility tend to be less productive and that results in a more sensitivity with respect to external forces also called free market competition. Small firms in such sectors could probably benefit from a wealth reallocation.

By 1930, what just discussed was not so difficult to apply: Northern-eastern states were characterized by factories which wanted protection from foreign goods. Apparently, they thought protectionist measures included in such Act could be beneficial for them. Southern states were mainly characterized by the presence of cotton and tobacco firms which already bore an increase in tariff rates in the Fordney-McCumber Act.

Their main aim was to increase export to European countries, which were willing to pay higher prices for their goods. However even willingness to pay has its own limits.

In any trade war, however, as this example suggests, "the big losers are consumers, who are the vast majority of people," 33

³³ Palen, Marc-William. *What history has to say about the winners in trade wars*, New York times, March 8, 2018

1.7 - 1930 International reactions

The end of the petition conveyed a message which was extremely important for all the signatories "Finally, we would urge our Government to consider the bitterness which a policy of higher tariffs would inevitably inject into our international relations (..) A tariff war does not furnish good soil for the growth of world peace."³⁴

Economists thought there was a faulty logic in proposing yet another upward tariff revision, hoping to secure a greater share of the domestic market. Such a policy would have not brought long-run prosperity to the U.S. The basic flaw behind it was the assumption according to which trading partners would have not reacted. European peers, instead, acted the same, closing markets to U.S. exports. U.S. firms were no further ahead, as imports and exports contract.

United State most brilliant minds had preceded what, in fact, happened in years after the promulgation of the Bill: a trade war.

After the signature was posed over the bill by U.S. president, International trade partners reacted immediately. Almost each country, along with its leading press, released detailed analysis on the possible outcomes from such major move and governments started to develop an appropriate response to it. Foreign international relations started to crumble. As a matter of fact, "the popular press in Belgium, Italy, France, Germany, Spain, Sweden and Switzerland did not mince matters. In France our tariff was compared to a declaration of war, an economic blockade. In Sweden it was denounced as the most terrible blow against the economic life of the world. A Spanish newspaper pictured the United States as trampling on fair competition and on the peaceful spirit of international relationships. In Belgium the latest manifestation of American protectionism was assailed as narrow and malevolent, reckless, puerile, inopportune, highly damaging to trade and contrary to the traditions of friendship between the two nations. An English newspaper compared the Hawley-Smoot tariff to the German attack of 1914. One German daily complained that the United States by its haughty

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³⁴ Congressional Record, U.S. Senate, May 3rd 1930 pag 8328

attitude had provoked the indignation of all trading nations, and another referred to the Hawley-Smoot tariff as a monster of economic folly."³⁵ The idea was spread among western Europe and the response was unique: higher American import tariff rates would constitute a serious threat to world progress.

Not surprisingly, after few months, trade partners reacted with retaliatory measures. Important foreign tariff increases following Smoot-Hawley were those imposed by Canada, which was easily the largest trading partner of the United States. In 1929, 18 percent of U.S. merchandise exports went to Canada and 11 percent of U.S. merchandise imports came from Canada. It raised tariff rates twice during 1930s. In 1932, United Kingdom, which had been the main supporter of free trade for almost a century, raised tariffs and quotas against other countries and started to develop stronger trade relations with Commonwealth system. Germany and Japan developed important trade agreements and raised tariffs as well on imported goods. Italy was more damaged than other countries since it did not have a proper area of preferred trade. It started to develop trade deals with Soviet Russia which maintains still today.

1.8 - The impact of the Tariff Act on the Great Depression

Nowadays, economists and historians debate in terms of quantifying the damage which Smoot-Hawley tariff Act caused to the US economy since it is tough to separate the consequences that great depression brought to the American economy from those which were fostered by the promulgation of such highly debated bill. As commonly known, macroeconomic shocks usually tend to have high dependence between each other and this complicates further the objective. Among economists and historians, however, there's little disappointment on the fact that Smoot-Hawley Act surely helped to worsen the great depression effects.

³⁵ "The new American Tariff: Europe's answer" essay – October 1930 – foreign affairs

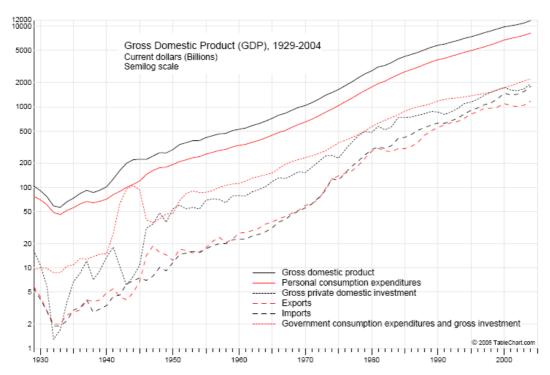


Figure 5: US GDP 1929-1940. Source: Economics chart index (2007), Bureau of Economic Analysis-U.S. department of commerce, Retrived from "https://www.economics-charts.com/gdp/gdp-1929-2004.html"

	Gross domestic product	Personal consumption expenditures	Gross private domestic investment	Exports	Imports	Government consumption and gross Investment
1929	103.6	77.4	16.5	5.9	5.6	9.4
1930	91.2	70.1	10.8	4.4	4.1	10.0
1931	76.5	60.7	5.9	2.9	2.9	9.9
1932	58.7	48.7	1.3	2.0	1.9	8.7
1933	56.4	45.9	1.7	2.0	1.9	8.7

1934	66.0	51.5	3.7	2.6	2.2	10.5
1935	73.3	55.9	6.7	2.8	3.0	10.9

Figure 7: US shares of GDP expenditures 1929-1935. Source: Economics chart index (2007), Bureau of Economic Analysis-U.S. department of commerce, Retrieved from "https://www.economics-charts.com/gdp-1929-2004.html"

The charts above clearly incorporate not only the effects of the trade war that began in 1930, but also the damages provoked by the so called Great Depression, which about started a year earlier. However, they're helpful to draw some conclusions.

It is important, however, to highlight the record-low U.S. economy registered in terms of Exports, Imports and Gross private domestic investment in the years after the promulgation of the bill, which brought a wave of protectionism and nationalism all over the world.

"In terms of unemployment, instead, any out-of-work people did not bother to register when they were no longer entitled to the subsidy or when the benefit was too small to bother collecting. Moreover, as we have seen, "unemployment" was a term applied mostly to industrial workers. Only a small minority of those underemployed in agriculture or in the traditional service sector were included in the official head count." ³⁶ One of the most innovative and complete surveys of unemployment was compiled in the United Kingdom by a group of high-profile international scholars under the auspices of the Royal Institute of International Affairs. As a rough estimate, the study put total unemployment worldwide to be about three times higher at the end of 1932 than it had been in 1929.

The Great Depression, it was argued, produced "hard core unemployment" consisting of persons who "have been out of work for long periods and are unlikely to obtain work unless the total demand for labor relative to available supply is very much increased."³⁷

The main outcomes of this part can be summarized in few points.

³⁶Feinstein, Charles, Peter Temin and Gianni Toniolo, *The World Economy Between the Wars*, Oxford University Press, Oxford and New York 2008 (chapter 7, unemployment)

³⁷ Royal Institute of International Affairs (1935). Unemployment, an International problem: A Report by a Study Group of members of the Royal Institute of International Affairs. Oxford: Oxford University Press

The faulty logic that lied behind republican main thoughts is based is the assumption that trading partners would not react. As discussed above, instead, a trade war took place and international relation between long-life partners had gotten worse. Economists, as reported, largely forecasted such result. In the petition, such issue was argued very generally. For what concerns a microeconomic perspective, Smoot-Hawley Act raised tariff rates and duties by about 20% which, inevitably, caused import relative prices to rise about 6% further. Deflation, which was present at the time due to various factors explained in the introduction, combined with a major fall in import volumes had devasting effect on the economy. Roughly estimating import amounted at 4% of the national GDP, as reported above, it could be argued that the joint impact of the bill and deflation reduced imports by about 18%. "The bill can be held accountable for 7% in the observed 40% decline in volume in U.S. trade in two years that followed." "38"

As known, a myriad of other factors contributed to the drop in American economy growth, and to the second World War, but inarguably one consequence of Smoot-Hawley in the US was that never again would a sitting US president be so avowedly anti-trade. Until today.

³⁸Irwin, Douglas A. *Smoot-Hawley, a more quantitative assessment*", The Review of Economics and Statistics Vol. 80, No. 2 (May, 1998), pp.334, MIT press, Boston.

Chapter Two - 2018

2.1 – Almost a century later

Republican candidate Donald Trump took office on January 20th, 2017, so becoming the 45th president of United States of America. The country is one of the biggest markets in the world in terms of imports and exports by volume. Congress has the power to regulate trade agreements and establish tariff rates, as clearly stated in the Constitution "The Congress shall have power to lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts and provide for the common Defense and to promote the general Welfare of the United States; but all Duties, Imposts and Excises shall be uniform throughout the United States."³⁹

However, there exists a way for the President to bypass such constitutional limits and invoke his own intention freely: the issuance of an executive order. Such document is a signed, written, and published directive that manages operations of the federal government and, according to the U.S. constitution, has the force of law. For what concerns trade, it is remarkable to highlight some differences with respect to the situation in the 1930s, which was described in the first part of the thesis.

Nowadays America is involved in several free trade agreements (FTAs) with many countries around the globe.

One of the most important being the North American Free Trade Agreement (NAFTA). It establishes free trade deals between Mexico, the U.S. and Canada. It entered into effect in 1994 and eliminated a series of protectionist measures that these countries had imposed upon each other in the past, especially related to the automotive and agricultural sector.

Another significant agreement is the Transatlantic Trade and Investment Partnership (TTIP), which concerns trade deals between the European Union and the United States. It has not yet been concluded, with the last round of negotiations being held in October 2016. Its main aim is the reciprocal promotion of trade expansion and economic growth.

³⁹ Article I, Section 8, paragraph 1, United States Constitution

Furthermore, the U.S. is today part of the WTO, the largest intergovernmental economic organization internationally.

Based in Genève, its main objective is to deal with regulatory processes of goods and services trading. It provides structure for the management of trade agreements between countries and makes sure there are no conflicts of interest between participating countries which adhere to WTO agreements. The organization provides fundamental support to the smooth conduct of trade deals between countries and regulates actions which seek to challenge them. It replaced GATT, which was established after World War II, together with other major institutions, such as the World Bank and the IMF.

These institutions were not present in the 1930s; nowadays, instead, their incidence is extremely important when it comes to helping countries achieve their trade policy objectives and to establishing fair relations between worldwide trade partners.

2.2 – Trump Tariffs

"None of this is reasonable, but reason is a sentiment that is very unevenly distributed in this world," Jean-Claude Juncker, president of European Commission, 2018

During his presidential campaign, Donald Trump, often remarked his support of protectionist measures. He said he would re-negotiate trade agreements to provide more favorable conditions for American companies. As promised, in fact, as of his third day in office, he issued an executive order which withdrew the United States from the TPP, arguing that it would undermine U.S. independence and sovereignty. The Trans-Pacific Partnership was a deal which aimed to boost economic growth and to create a new single market, similar to that of the EU. It also included measures to enforce labour and environmental standards, copyrights, patents and other legal protections. Nations like Japan, Australia, New Zealand, Canada, Malaysia and Mexico adhered in 2015. Trump criticized NAFTA and stated that

⁴⁰ Donnan, Shawn. *Donald Trump ends his brief flirtation with TTP*, Financial Times, Washington, April 18

"it was the worst trade deal the U.S. has ever signed, and it has killed American jobs." The U.S. Government has, in fact, started to actively move towards an amendment of such deal, in collaboration with Canada and Mexico. However, negotiations have not finished, and no clear outcome has arisen.

The U.S. President has recently pointed out several reasons for which he believes in the necessity of protectionist measures.

The United States has one of the lowest exports of goods and services as percent of GDP in the world. This factor is surely directly linked to the steady increase of the U.S. trade balance deficit. This is shown in the chart below.

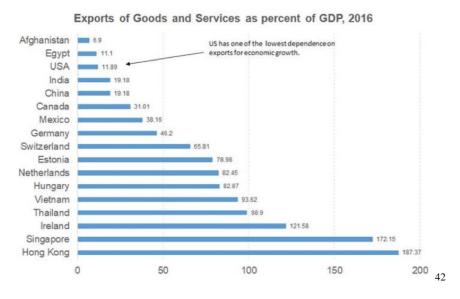


Figure 8: Exports of goods and services as percent of GDP in 2016. Source: World Bank national accounts data, and OECD National Accounts data files, March 2018

⁴¹ Gandell, Stephen. *Donald Trump says Nafta was the worst trade deal the U.S. ever signed*, Fortune magazine, Sep. 27, 2016

⁴² Exports of goods and services represent the value of all goods and other market services provided to the rest of the world. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. They exclude compensation of employees and investment income (formerly called factor services) and transfer payments.

In January 2018, the Trump administration-imposed tariffs on both washing machines and solar panels. "Trump's tariff decisions fell under section 201 of the US Trade Act of 1974. Under this law, the US International Trade Commission, or ITC, investigates whether imports cause injury to a U.S. industry. If the majority of commissioners find that there is a problem, the president then has the legal authority to take action. Because the panel has found that there were troubles with both solar panels and washing machines, Trump had the legal authority to impose import protection."⁴³

In fact, according to the U.S. ITC, domestic producers have suffered global competition through the years and such forces have induced the vast majority of firms to continuously report negative financial performances.⁴⁴

2.3 – Washing Machines

The table below shows the way tariff rates have been applied on the washing machine industry.

Components	Year I	Year II	Year III
First 1.2mln units of imported finished washers	20%	18%	16%
All subsequent imports of finished washers	50%	45%	40%
Covered parts excluded from tariffs	50000 units	70000 units	90000 units
Tariffs on covered parts	50%	45%	40%

Table 2. – Tariff rates applied to the washing machines industry. Source: Office of the United States Trade Representative, Washington D.C, January 2018

⁴³ Bown, Chad P. *Donald Trump's Solar and Washer Tariffs may have now opened the floodgates of protectionism*, Peterson Institute for International Economics, Jan 25, 2018

⁴⁴ Swanson, Ana and Brad Plumer, *Trump slaps steep tariffs on foreign washing machines and solar products*, New York Times, Jan.22, 2018, Washington

This major move will surely lessen competition from international producers of washing machines since their products will become much more expensive in the domestic U.S. market. As a result, there would be less demand for foreign products whereas domestic aggregate demand will increase. Samsung and LG, two of the major exporters of washing machines in the U.S. have already expressed their doubts as to the effective benefits of such high tariff rates.

According to the Observatory of Economic Complexity, the United States had run a consistently high trade deficit for what concerns washing machines production. In 2016, its exports amounted to 126 m million dollars from international trading partners, while its imports were about 509 million dollars.⁴⁵

Looking at the policy decision superficially, the governments' move may seem profitable. A rise in aggregate demand will boost domestic company sales, helping to increase profits and further production.

These effects could likely lead to higher demand for new jobs and to a potential fall of domestic unemployment.

All this, however, comes at a cost.

However, an in-depth analysis which takes into account a broader picture may lead to conflicting results. First of all, it is important to consider the loss of consumer welfare. Average prices imposed by domestic firms would very likely start to rise, sooner or later, depending on the share of the market each firm possesses. Consumers might have fewer and more expensive choices. Then, probably at a later stage, inflation would likely increase steadily.

Furthermore, data from OEC clearly shows that 61% of washing machines are imported from Mexico, 13% from China and 9.5% from South Korea⁴⁶. In terms of overall exports, Mexico and China, are, respectively, the second and the third biggest U.S. trading partners. This move could be seen as the first chessboard move by President Trump toward a wave of protectionism and it is surely not positive.

⁴⁵ OEC, Washing Machines market, United States, 2016

⁴⁶ OEC, Washing Machines Import Market by destination, United States, 2016

2.4 – Solar panels

In early 2017, two companies called Suniva and SolarWorld filed a petition to urge the Trump administration to enact protective tariffs against international competition. These two companies blamed high imports of foreign solar panels into the U.S. economy for their losses. Protective measures by the government were taken subsequently.

The table below shows the way tariff rates have been applied on the solar panel industry.

Components	Year I	Year II	Year III	Year IV
Safeguard Tariff on Modules and Cells	30%	25%	20%	15%
Safeguard Tariff on Modules and Cells	2.5 gigawatts	2.5 gigawatts	2.5 gigawatts	2.5 gigawatts

Table 3 – Tariff rates applied to the solar panels. Source: Office of the United States Trade Representative, Washington D.C, January 2018

These decisions have raised deep concerns among economists, environmentalists and business people. It is clearly shown in the table below, which includes relevant citations from industry leaders and ex-New York City Mayor Michael Bloomberg.

Micheal Bloomberg	Tariffs will "raise Americans' electric bills and hurt our environment
Solar energy industries Association	23,000 jobs would be lost in 2018, pointing out that most solar manufacturing in the US revolves around making parts for cheaper imported panels, rather than the cells and panels themselves
Tony Clifford, chief development officer of Standard Solar	It boggles my mind that this president – any president, really – would voluntarily choose to damage one of the fastest-growing segments of our economy

Table 4 – Opinions on solar panels tariffs. Source: Oliver Milman, *Donald Trump's tariffs on panels will cost US solar industry thousands of jobs*, The Guardian, Jan. 24, 2018

A possible explanation for such claims is the following.

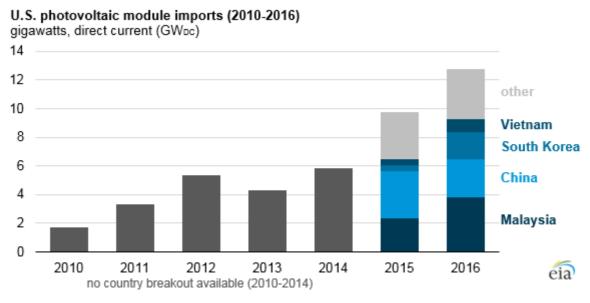


Figure 9: US photovoltaic module imports 2010-2016. Source: Cara Marcy, U.S. imports of solar photovoltaic modules mainly come from Asia, U.S. Energy Information Administration, Feb. 14, 2018

As reported in the chart above, which shows the U.S. photovoltaic module imports between 2010 and 2016, there has been a steep and steady increase of the volume of imports in recent years. It is important to emphasize that such outcome could be the direct effect of both globalization and an ever more global supply chain in the production of solar panels. As demonstrated by the chart, in fact, the share of imports from South Korea and Vietnam has increased substantially over only one year, namely from 2015 to 2016.

It follows that "as for U.S. solar manufacturing, it is unlikely that these tariffs will significantly change the landscape. Based on the timeline for getting a manufacturing facility financed, developed and certified, and due to the tariff being placed on cells as well as assembled modules, companies that had not already been planning to establish a U.S. manufacturing presence will be unlikely to benefit from these tariffs. As a result, the U.S. will continue to import 80%-90% of our solar cells and modules at a higher cost due to the tariff,

potentially putting solar out of reach for many homeowners, making some utility-scale projects uneconomical, and driving up prices for ratepayers."⁴⁷

As cited above, there seems to be reason to worry about the future profitability of the solar panel market. As highlighted in the bar chart below, solar PV installation costs have decreased steadily since 2009 reaching a record low in 2016. Through assessment of both graphs, there is enough evidence to emphasize the correlation between the steady increase of globalization and the annual increase of cheaper manufacturing components. Market competition has had deep implications on the increasing volume of installations until 2016 and an ever more globalized supply chain has helped solar panel installations become cheaper year after year. All these features paved the way for this economic sector to create jobs and further advance its technological tools.

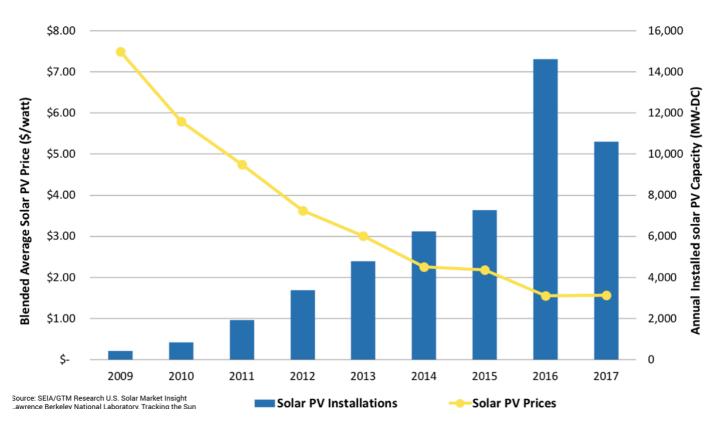


Figure 10 : Average price of solar panels. Source: Solar industry research data, solar energy industry association, Berkeley National Laboratory, 2017

⁴⁷ Section 201 of Solar Tariffs, Solar Energy Industries Association, Feb. 2, 2018

Considering the data presented above, it is very likely that tariffs on solar panel modules and cells will make PV installation more expensive, potentially leading to market contractions, job and investment losses.

2.5 – Steel and aluminum

On March 1, President Trump expressed his intention to enforce a 25 percent tariff on steel imports and a 10 percent tariff on aluminum imports.

"The day after, President Trump declared a global trade war and said it would be easy to win; he vowed to impose trade restrictions on any country that he felt had an unfair trade relationship with the United States, so drawing the blueprints for the most protectionist U.S. trade policy in roughly 100 years.

The announcement gained support from some labor groups, including the AFL-CIO, one of the most important American Unions, but drew alarm from numerous business groups and sent the U.S. stock market tumbling."⁴⁸

Donald Trump's new trade policy still maintains the aim discussed above: the idea is to make imports more expensive and boost growth and earnings for American steel and aluminum manufacturers.

However, when tariffs are imposed on basic commodities such as steel and aluminum, the result could have a much wider ranging effect than expected. Indeed, such materials are "what economists call intermediate goods, something used as an input to make something else. Steel is one of the most widely used inputs, being used to produce cars, trucks, buildings, highways, home appliances (like washing machines), and thousands of other items. Aluminum as well, is an input for thousands of other products, such as military and commercial systems; with the most important being one of the biggest exporting sectors: airplanes."

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⁴⁸ Paletta, Damia., *Trump insists 'trade wars are good, and easy to win' after vowing new tariffs,* The Washington Post, March 2, 2018

⁴⁹ Dorfman, Jeffrey. On steel tariffs, the math doesn't just add up, Fobes Economy, March 4, 2018

It is noteworthy to highlight the fact that President Donald Trump had to provide legal basis to ground his proposal of an increase in tariffs rates. He cited the provisions stated in section 232 of the Trade Expansion Act of 1962, according to which "Secretary of Commerce is allowed to conduct comprehensive investigations to determine the effects of imports of any article on the national security of the United States."50

"In this case, Wilbur Ross, Trump's commerce secretary, conducted an investigation, which Trump called for last April, into the impacts of steel and aluminum imports. That report was enough legal justification for Trump to bypass both Congress and the independent US International Trade Commission (USITC), which is typically called on to weigh in on proposed tariffs."51

As a result, Trump could adjust tariff rates accordingly by stating that the current inflows of steel and aluminum imports are a threat to U.S. national security.

As for June 2018, different tariff rates and quotas have been imposed on target countries. The process followed a path that involved directly Trade Representative Robert Lighthizer to negotiate with countries seeking to turn their temporary tariff exemptions into permanent ones.52

Countries such as Argentina, Brazil, Australia and South Korea had opted for discussions about the possibility of imposition of "alternative means" that would yield a satisfactory result for the U.S. After months of negotiations, a final outcome has been reached. Trump administration-imposed quota rates on the four countries cited above. Argentina agreed to limit exports of steel products to the US to 180,000 tonnes per year, based on the average of steel exports during the past three years plus an additional 35%. Such exports will be exempt from a 25% tariff imposed on steel from several countries following the Section 232 investigation into US imports on national security grounds.⁵³

Brazil has negotiated that semi-finished steel exports to the United States will be subject to quotas based on the average for the three years from 2015-2017, while finished steel products

⁵⁰ Fact sheet, Section 232 investigations, the Effects of imports on National Security, April 20, 2017

⁵¹ Golshan, Tara. Why Trump can raise steel tariffs without Congress, Vox, March 8, 2018

⁵² Rosenfeld, Everett. U.S. extends tariffs exemptions for EU and other allies, CNBC, April 30, 2018 ⁵³ Peroni, Felipe. Argentina agrees to 232 steel export quota, American Metal Market, May 2, 2018, San Paolo

will be limited to a quota of 70 percent the average for those years. The Brazilian government, however, declared that it remains open to negotiate a solution that benefits industries in both countries.⁵⁴

For what concerns Australia, instead, U.S. government has given exemption from tariff rates but has imposed quotas rates on the value of imports from the country. No specific value has been defined yet since negotiations are still rolling. ⁵⁵

Also South Korea has reached an agreement, according to which it is permanently exempt from tariff rates but it accepted quotas as part of the new trade deal. South Korea's trade ministry has declared that the country has agreed to receive a quota of about 2.68 million tonnes of steel exports, the equivalent of 70% of the annual average Korean steel exports to the U.S. between 2015 and 2017, that will be exempt from the new tariffs.

A quota is a measure used in the regulation of trade volume between nations and it usually involves a limit on a particular kind of good imposed by the government.⁵⁶

The situation is very different for what concerns U.S. biggest trade partners: EU, Canada, Mexico. The three allies cited had previously been exempted by the imposition of such tariff rates but a new decision from U.S. government has been released, including all of them to be subject to indefinite enforcement of taxes which were previously anticipated by Trump administration, respectively 25% on steel imports and 10% on aluminum imports.⁵⁷

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⁵⁴ Boadle, Anthony and Leslie Adler. *Brazil Says U.S. Tariffs and Quotas Unjust, Still Open to Negotiate*, The New York Times, June 1, 2018, Brasilia

⁵⁵ Toscano, Nick. *Australian steel spared from Trump's tough tariffs*, The Sydney Morning Herald, May 1, 2018

⁵⁶ Joon Cho, Seong. *U.S. exempts South Korea from steel tariffs, but imposes import quota*, CNBC world economy, March 26, 2018

⁵⁷ Bryan, Bob. *Trump's trade war is likely to kill hundreds of thousands of jobs*, Business Insider Politics, June 3, 2018

2.6 - The new petition

Many economists consider the Smoot-Hawley Act a cautionary tale, a measure that "put 'Great' in the Great Depression". Much has changed from 1930 to today. Not the opinion on tariffs of most economists.

Today, a group of economists convened by the National Taxpayers Union are pointing the striking parallels between the Smoot-Hawley Act discussed in the first part of the thesis and today's Trump tariffs. As their predecessors, they have decided to write an open letter to president Trump and to the Congress urging to reconsider the imposition of such tariffs. The letter is identical to the original one, except for a few edits of the part not considered to be relevant today.

The following introduction has been added:

"In 1930, 1028 economists urged Congress to reject the protectionist Smoot-Hawley Tariff Act. Today, Americans face a host of new protectionist activity, including threats to withdraw from trade agreements, misguided calls for new tariffs in response to trade imbalances, and the imposition of tariffs on washing machines, solar components, and even steel and aluminum used by U.S. manufacturers. Congress did not take economists' advice in 1930, and Americans across the country paid the price. The undersigned economists and teachers of economics strongly urge you not to repeat that mistake. Much has changed since 1930, for example, trade is now significantly more important to our economy, but the fundamental economic principles as explained at the time have not changed." 58

Its main arguments are still that tariffs on imports will increase prices for consumers; that they will spur other countries to respond in kind, making American products more expensive abroad; and that they will create geopolitical tensions. "A tariff war does not furnish good soil for the growth of world peace."⁵⁹

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⁵⁸ Open letter to president Trump and Congress, National Taxpayers Union (NTU), letter retrived by https://www.ntu.org/library/doclib/Embargoed-Economists-Letter-2018-1.pdf

⁵⁹ Congressional Record, U.S. Senate, May 3rd 1930 pag 8327

Among the signatories, there are 15 Nobel laureates and former economic advisers of US Presidents Bush, Obama, Clinton and Reagan. They are: Alvin Roth, Richard Thaler, Oliver D. Hart, Gary Hufbauer, Roger Myerson, Harvey Rosen, Robert C. Merton, James Heckman, George Ackerlof, Avinash K. Dixit, Raymon Riezman, James E. Anderson, Robert E. Lucas Jr., Robert Shiller, Vernon Smith, J. Bradford Jensen, Daron Acemoglu, Donald J. Boudreaux, Robert Engle, Eric Maskin, James C. Miller III, Eugene F. Fama, Robert M. Solow, Edmund S. Phelps, Laura Tyson, N. Gregory Mankiw, Jason Furman, Alan Deardorff, Gene Grossman, Douglas Holtz-Eakin, Alan Blinder and Gordon Hanson.

Economists were as skeptical about the tariffs back then as they are today, because in both cases the reasons behind the taxes have more to do with politics than with economics. That's why Bryan Riley, a Taxpayers trade expert who supported the creation of the new version of the letter says there is no need to rewrite the 1930 form because its ideas are timeless. According to leading economics professor Daron Acemoglu, the policies coming out of the White House "are bound to hurt most Americans." He also added that "there is very little chance that the current administration, which is not interested in furthering anybody's welfare other than the president and his immediate family, would listen to it." David Autor has given his opinion too, stating that Donald Trump is extremely naive and uninformed about the costs and benefits of trade. The MIT economist believes, in fact, that U.S. president is a pure mercantilist; he simply thinks exports are good, imports are bad. "The idea of slapping large tariffs, or border taxes, on imports is a very destructive idea on all kinds of fronts", he added. 10

2.7 - 2018 International Reactions

President Trump's tariffs have ignited strong oppositions from governments, corporations and organizations around the world. One of the key motivations behind international reactions is the fear of a trade war.

⁶⁰ Campoy, Ana. Economists are warning Donald Trump with a letter from the 1930s, Quartz, April 21, 2018

⁶¹ Aleem, Zeesham. "Another kick in the teeth": a top economist on how trade with China helped elect Trump, VOX, March 29, 2017

Jean-Claude Juncker, EU Commission president, has given a declaration during an EU Commission press release, saying "I am concerned by this decision. The EU believes these unilateral US tariffs are unjustified and at odds with World Trade Organization rules. This is protectionism, pure and simple. Over the past months we have continuously engaged with the US at all possible levels to jointly address the problem of overcapacity in the steel sector. Overcapacity remains at the heart of the problem and the EU is not the source of but on the contrary equally hurt by it. That is why we are determined to work towards structural solutions together with our partners. We have also consistently indicated our openness to discussing ways to improve bilateral trade relations with the US but have made it clear that the EU will not negotiate under threat. By targeting those who are not responsible for overcapacities, the US is playing into the hands of those who are responsible for the problem. The US now leaves us with no choice but to proceed with a WTO dispute settlement case and with the imposition of additional duties on a number of imports from the US. We will defend the Union's interests, in full compliance with international trade law."⁶²

As a consequence, a list of target U.S. products has already been identified on which EU will impose tariffs and duties. The list contains goods divided into three categories: steel, agricultural products, and consumer products. They include sweetcorn, orange juice, cranberries, bourbon, motorcycles, make-up, clothing and stainless-steel sinks as well as various steel bars and tubes used in construction and industry. Perhaps one the most striking features is that the EU reaction doesn't involve only US but, virtually, all countries it trades with, including leading exporters such as China, India, Russia, South Korea, and Turkey.⁶³

Canada has given its severe reaction as well to the move by U.S. president Donald Trump. "The American administration has made a decision today that we deplore, and obviously is going to lead to retaliatory measures, as it must," Prime Minister Justin Trudeau said at a news conference in Ottawa with Freeland. "We regret that. We would much rather move together in partnership," he said. Canada will impose retaliatory tariffs on \$12.8 billion worth of U.S. exports and challenge U.S. steel and aluminum tariffs under the North American Free Trade Agreement and the World Trade Organization (WTO), Canadian Foreign Minister

⁶² EU Commision- press release, European Commission reacts to the US restrictions on steel and aluminum affecting the EU, Brussels, May 31, 2018

⁶³ Reuters staff, Europe's response to U.S. import tariffs, March 16, 2018, Brussels

Chrystia Freeland said on Thursday. The Canadian tariffs are set to go into effect on July 1 and stay in place until the United States lifts its own measures.⁶⁴

As a result, concrete retaliatory measures have been released by the Canadian government. Two lists of U.S. products have been drafted on which it has been anticipated a 25 percent tariff on the first list and 10 percent on the second. The list includes steel and aluminum in various forms, but also orange juice, maple syrup, whiskey, toilet paper and a wide variety of other products. U.S. seems to be the one less in danger by the counter measures drafted by Canada. In fact, the few proposed agricultural targets are farm chemicals and cucumbers. As the other countries, also Mexico has reacted in a similar way. The country has already published the tariffs it's imposing on products imported from the United States. The list shows tariffs ranging from 15 to 25 percent include a host of pork products, apples, potatoes, cheeses, bourbon, inboard motor boats and some flat steel and tubes. Mexico has declared that it will waive tariffs on up to 350,000 tons of pork imported from other nations to avoid destabilizing the market. 66

Mexico's economy minister Ildefonso Guajardo said the tit-for-tat measures would complicate talks between the United States, Canada and Mexico to revamp the North American Free Trade Agreement. He also added that Mexico is going to stick to the clearly defined battlefield, where the response is appropriate and proportional. ⁶⁷ After the imposition of tariffs, China has given its response too. The Chinese finance ministry said it was suspending obligations to the World Trade Organization to reduce import duties and published a list of 120 items that will get a 15 percent tariff and a 25 percent tax on eight items imported from the U.S., including pork and related products. ⁶⁸

⁶⁴ Martell, Alisson. *Canada to impose tariffs on U.S., challenge at WTO*, Reuters Business News, May 31, 2018 ⁶⁵ *Notice of intent to impose countermeasures action against the United States in response to tariffs on Canadian steel and aluminium products*, Department of Finance Canada

⁶⁶ The Associated Press, *Mexico publishes retaliatory tariffs on US imports*, The New York Times, June 5, 2018 ⁶⁷ O' Boyle, Michael and Frank Jack Daniel, *Mexico aims tariffs at Trump country...sees Nafta complications*, Reuters Business News, May 31, 2018

⁶⁸ Wallace, Charles. Chinese respond to Trump with increased tariffs, Forbes, April 2, 2018, Washington

2.8 – A focus on China

Trade relation within U.S. and China has changed dramatically through the years. Nowadays, it looks totally different from the 1930s. As a result, a careful analysis might be useful to evaluate whether U.S. protectionist trade policies can have the same implications they had in the past. First of all, it is remarkable to highlight that there has been a considerable rise in trade from China, mainly after the post-World War II era. China went through a process of liberalization which brought the country to be the second-largest exporter in the world. Much of it is also due to the cheap, trainable labour and to the trade-related infrastructure provision through the establishment of special economic zones. Also, as commonly known, China has always had at disposal a vast pool of low-skilled workers that has contributed to push down the average costs of the manpower. During last 50 years, workers have been trained to accomplish several new tasks, so becoming more skill intensive.

As a result, China's output now accounts for more than half of the increase in total global manufacturing exports. More than a century ago, the composition of Chinese exports was mainly characterized by primary products and raw materials. Today, instead, its exports are mainly composed of manufactured products.⁶⁹

The reasons lying behind the wide spread of Chinese exports can be of different type. One of the most important ones being surely China's manufacturing wages, even if increased through the years, still much lower than other developed economies'. Such 'international' wage differences are presumably a significant determinant of China's attractiveness as a location within production networks. As a result, many companies have located their production headquarters there.

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⁶⁹ Athukorala, Prema-Chandra. *China's Evolving Role in Global Production Networks: Implications for Trump's Trade War*, China's new sources of Economic growth, ANU press 2017

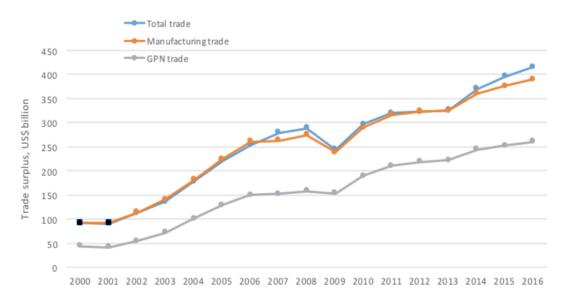


Figure 11: China trade surplus with US 200-2016. Source: UN database, China total trade surplus with U.S., 2017

As clearly shown by figure above, China's trade surplus with United States has increased steadily and remarkable changes in the nature of trade between these two countries have occurred. China's trade surplus has been, in fact, one of the main reasons brought in favor by Trump administration for his policy decisions. However, the present U.S. government has based its decisions against China on levels of exports, imports and trade accounts between the two. Taking into account the rapid increase in the rate of exports of China's global machinery trade to multinational enterprises, a factor which might be worth considering is how much have Chinese goods contributed to the competitiveness of American Corporations in the world trade today. Furthermore, China is supplying ever more basic goods and services in East Asia. This, I believe, is an important indicator to watch because the country is decreasing its trade dependence from neighbors. From this analysis, an important feature emerges. Global competitiveness of large U.S. corporations' output is becoming ever more dependent on China's inputs. Given such sophisticated interdependence between businesses in the two countries, it is very likely that, sooner or later, Trump's imposition of punitive tariffs will end much earlier than expected and with many complaints.⁷⁰

⁷⁰ Athukorala , Prema-Chandra. *China's Evolving Role in Global Production Networks: Implications for Trump's Trade War*, China's new sources of Economic growth, ANU press 2017

Chapter Three – A voice from yesterday and from today

3.1 - Frank William Taussig

The first part of the thesis was concerned with an analysis of the petition signed by 1028 economists in 1930. Its text included several reasons why economists believed the Smoot-Hawley Tariff Act should have not been promulgated. Amongst a growing number of economists who opposed trade policy decisions during the 1930s, Frank W. Taussig is perhaps the most prominent example, writing several articles and conducting deep investigations on the benefits and drawbacks associated with the enforcement of tariffs in that period.

The third part of this thesis focuses mainly on his opinion about trade and analyzes the differences between his line of reasoning to condemn protectionist policies and Paul Krugman's view about the same issue.

The American economist Frank Taussig made a clear and compelling case for free trade principles. He stated that deviations from such ideologies must always be grounded, justified and applied to valid circumstances. Protectionism had always been a mere political issue, often with hidden scopes, whereas free trade held its own sphere of intellect.⁷¹

"As much on grounds of political morality as on grounds of economic expediency, Taussig never was in sympathy with U.S. tariff legislation. He was far indeed from being a protectionist in the ordinary sense of the term. But he was not a free trader either. He frankly recognized whatever seemed to him to be tenable in the protectionist arguments - particularly, but not exclusively, the infant industry argument and never tried to minimize it as economists who sympathize with free trade are in the habit of doing." ⁷²

⁷¹ Taussig, Frank W. *The present position of the doctrine of free trade*, Publications of the American Economic Association, 3rd Series, Vol. 6, No. 1, Papers and Proceedings of the Seventeenth Annual Meeting. Part I (Feb., 1905), pp. 29-65, American Economic Association

⁷² J.A. Schumpter, A.H. Cole and E.S. Mason, *Frank William Taussig*, the Quarterly Journal of Economics, vol.55, No. 3(May 1941), pp 337-363

As a matter of fact, Taussig had a very specific idea of what should have been the real objective behind the use of tariffs: equalizing opportunities. All people should benefit, and benefit alike. This equal treatment for all; or rather, this assurance in equality of conditions was at the core of his beliefs. The economist believed no special favors to any person or any industry should be provided. He made clear⁷³ that he deeply agreed with the words used by John Stuart Mill on free trade, "the only case in which, on mere principles of political economy, protecting duties can be defensible, is when they are imposed temporarily (especially in a young and rising nation) in hopes of naturalizing a foreign industry, in itself perfectly suitable to the circumstances of the country(...)But the protection should be confined to cases in which there is good ground of assurance that the industry which it fosters will after a time be able to dispense with it; nor should the domestic producers ever be allowed to expect that it will be continued to them beyond the time necessary for a fair trial of what they are capable of accomplishing."⁷⁴

Frank Taussig made substantial investigations on the U.S. trade disaster of the 1930s. He had always maintained his line of reasoning when opposing protective tariffs. He advocated, indeed, that if a domestic producer had higher costs than his foreign rival, then the government could step in to assist such circumstance by increasing duties, which would eventually enable the American firm to hold his own competitive conditions. Nevertheless, a decrease in duty rates was absolutely necessary in case the domestic producer didn't need them to keep up with foreign competition. Also, he was strongly against the enforcement of tariffs whenever a group of dominant individuals and organizations blamed a particular factor for their loss of leadership, with the hidden intent of securing an advantage and a gain. In that case, the doctrine of equalizing costs was always ignored: very much wanted to benefit interest groups, and different industries.

The notion having been thus instilled that "a tariff" means a help and a profit to the industry whose products are affected, every section and every industry wants its tariff. To summarize:

⁷³ Taussig, Frank W. *Some Aspects of the Tariff Question*, Part I, Chapter II, section I.II.1 Cambridge, MA, Harvard University Press, 1915, 1st edition

⁷⁴ Mill, J.S. Principles of Political Economy with some of their application to Social Philosophy, book V, William J. Ashley ed., 1909, London

no special favors, no special profits and merely equality of positions was a principle at the core of Taussig's thought.⁷⁵

According to his research, the American professor claimed there was no industrial depression in 1928, no general panic about dumping and no damaging floods of cheap imports. Consequently, in light of the theories he developed throughout the years, he found out that the "best example of the way in which the equalization principle was ignored, almost discarded, was in the sugar duty. That duty had already been raised in 1922. In the tariff act of 1913 it had been 1H a pound; in 1922 it was made 1.760. In the bill as passed by the House in 1930 it had been set at 2.40. The figures were the result of give and take, maneuvering and corn-promise. There was no pretense that any one of them was based on the difference in cost between the domestic and foreign producer."⁷⁶

Taussig demonstrated that such trend was very recurrent in the American economy. Indeed, thanks to his past investigations on various Tariff Acts since 1867, he could state that there was a persistent demand of duties on goods and services which struggled in the domestic economy only due to domestic competition. This discover led him to conclude that the entire cycle was based on repeated failures and every time the government's intervention of raising tariffs on imported goods was needless.

3.2 - Paul Robin Krugman

In the second part of this thesis a description has been conducted over the trade policy moves taken by the Trump administration today. In addition, an analysis has been steered over the impacts these trade policy moves have already had on the America's international relations and the new edition of the 1930 petition signed by economists has been reported. Among all, this thesis focuses on Paul Krugman's opinion about free trade in general and the effects of the enforcement of Trump tariffs on imports on certain kind of goods and services.

⁷⁵ Taussig, Frank W. *The Tariffs Act of 1930*, The Quarterly Journal of Economics, Vol. 45, No. 1 (Nov., 1930), pp. 1-21, Oxford University Press

⁷⁶ Taussig, Frank W. *The Tariffs*, 1929-1930, The Quarterly Journal of Economics, Vol. 44, No. 2 (Feb., 1930), pp. 175-204, Oxford University Press

In his work paper "Is free trade passé" Paul Krugman jests about the fact that if economists had a creed, that should include the affirmations "I understand the Principle of Comparative Advantage and I advocate Free Trade."

Krugman recognizes that many people assess international trade benefits to a country on the basis of its "fairness" and he considers comparative advantage as an idea both simple and profound, that yet conflicts directly with both stubborn popular prejudices and powerful interests.

The scope of Krugman's paper is to demonstrate that notwithstanding interventionism arguments, Free Trade still remains best possible trade policy. However, such idea is not an optimum (as in the laissez-faire belief), rather, a reasonable rule of the thumb.⁷⁷

Krugman distinguishes that International Trade occurs due to comparative advantage, increasing return to scale and imperfect competition. He argues that trade is mutually beneficial for the engaged countries because they may exploit the complementary differences in resources and technology and bolster their productivity while increasing the quantity of goods available to consumers. However, "showing that free trade is better than no trade is not the same thing as showing that free trade is better than sophisticated government intervention."

Indeed, the Laissez-Faire approach stating that free trade is the best possible policy relies on the assumption of fully efficient markets, and that is never the case. Krugman argues that since "increasing returns and imperfect competition are necessary parts of the explanation of international trade, we are living in a second-best world where government intervention can in principle improve on market outcomes." ⁷⁸

Therefore, Krugman tackles the main arguments in favor of a governmental intervention, the Strategic Trade policy reasoning and the External Economies one. The Strategic Trade argument begins remarking that in a world of increasing returns to scale and imperfect competition some firms are able to secure super-normal returns on the resources they employ. If economies of scale are sufficiently large, there may be room for only one profitable actor,

⁷⁷ Krugman, Paul R. *Is Free Trade passé?* The Journal of Economic Perspectives, Vol. 1, No. 2 (Autumn, 1987), pp. 131-144, The American Economic Association

⁷⁸⁷⁸ Krugman, Paul R. *Is Free Trade passé?* The Journal of Economic Perspectives, Vol. 1, No. 2 (Autumn, 1987), pp. 131-144, The American Economic Association

i.e. if another enters, both firms would incur in losses. Therefore, if a country secures that the winning firm is domestic, it can raise its national income at the expense of the foreign country.

As some Interventionist economists suggest, governmental policies of export subsidy and import restrictions may deter foreign entrants to compete in lucrative markets. If one has to analyze the case of tariffs, when there is a significant domestic market for a good, the imposition of a tax on imports may rise profits of native firms while lowering them for the foreign ones. Krugman identifies correctly that this line of reasoning is very spread among non-economists as it clearly suggests protectionist views to make sense. Indeed, Trump's explanation for the tariffs heavily relies on the rhetoric that domestic firms suffer from "unfair trade practices" of commercial partners.

In addition to the economic considerations, swimming against the tide is pivotal aspect of Trump's contrarian political persona. "I think this is mostly Trump trying to look tough" Krugman remarked.⁷⁹

Another argument in favor of governmental intervention follows the External Economies consideration.

If an industry is believed to yield positive externalities and knowledge spillovers, a country might want to secure such business in its territories as the home economy would reap the benefits.

Krugman debunks the two arguments following economic and political reflections. Firstly, it is extremely difficult to quantify ex-ante the intended effects of an intervention on an oligopolistic competition framework. It depends whether firms act cooperatively or not and if they compete by setting prices or outputs. Most importantly, it is a complex multi stage game which rules are sometimes obscure to the players themselves. Even more difficult is to quantify the positive externalities of an industry.

Secondly, the benefits of an intervention may be offset by the entry of other firms. Possibly, such firms would not survive if the prices had not been artificially inflated by a tariff, delaying the problem of underperformance and overcapacity winding down at a later stage.

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⁷⁹ Krugman, Paul R. *Paul Krugman explains trade and tariffs*, The New York Times opinions, March 15, 2018

For instance, after the imposition of Trump Tariffs, Century Aluminum, the main US aluminum company, plans on partially restarting a plant that was shut down. ⁸⁰ But what will happen should the tariffs be repealed in the future? Possibly, the import taxes are perpetuating inefficiencies rather than facilitating a necessary natural adjustment.

Finally, interventions alter the general domestic equilibrium. Excess returns in a protected industry may be offset by returns lost somewhere else. As Krugman stated, from the steel and aluminum tariffs "the US will gain a few jobs in steel. But we'll lose jobs in lots of other, "downstream" industries like autos." This statement is corroborated by the studies conducted on the Bush 30% Tariffs on Steel of 2002, lasting for 21 months. Estimates of the net job losses due to higher steel prices varies from a conservative estimate of 28,000-43,000 from the Peterson Institute for International Economics ⁸¹ to 200,000 from the Consuming Industries Trade Action Coalition found that 200,000 workers in U.S. manufacturing lost their jobs as a result of the tariffs. ⁸²

Most importantly, Krugman's defense of Free Trade relies on political considerations. First and foremost, protectionist policies might provoke other countries to promote retaliatory measures and trade wars are very likely to be the consequence of it (this is also the case for Trump tariffs, as we have discussed in 2.7). All countries involved would be worse off than if they adopted a hands-off approach. Not only that, tariffs may hinder the goodwill and trust built up in years of multilateral relations. The renegotiation of the NAFTA, initiated under the Trump administration, reportedly suffered from slow progress also due to the fact that the threat of imposing Steel and Aluminum tariffs was used as a bargaining chip in the negotiations. ⁸³

Last but not least, Krugman notes that interventionist governments may not act in the national interest. Rather, they may be influenced by interest group pressures or by other political agendas. The Trump's Tariffs indeed will benefit the steel and aluminum industries located

⁸⁰Long, Heater. Winners and Losers from Trump's tariffs, The Washington Post, March 6, 2018

⁸¹ Hufbauer, Gary Clyde and Ben Goodrich. *Steel policy: The good, the bad and the ugly*, International Economics policy briefs, Peterson Institute for International Economics, January 2003

⁸² Francois, Joseph and Laura M. Baughman. *The Unintended consequences of U.S. steel imports Tariffs: A quantification of the impact during 2002*, Trade Partnership Worldwide, LLC, prepared for the CITAC Foundation, February 7, 2003

⁸³ Wingrove, Josh and Shannon Pettypiece, *Nafta Haggling could slide into 2019 after metal tariffs*, Bloomberg Politics, June 1, 2018

in the rust-belt. Trump won Swing states of the area (Ohio, Pennsylvania, Michigan and Wisconsin) partly by appealing to blue-collar workers' frustration with free trade policies. Possibly, the decisions of imposing such tariffs was made also to maintain the rust-belt support in the upcoming election of 2020.⁸⁴

Similarly, also the tariff on solar panels is seen as having a political rationale rather than an economic one. Considering that renewable energy is a growing sector as opposed to the fossil fuel one, it seems that Trump had pushed for such tariff in order to win the praises of Republican financers and blue-collar voters, hoping for a revival for the U.S. coal industry.⁸⁵

Even after considering the flaws of the markets, Krugman remains skeptical about government intervention. The economic benefits of such policies are ambiguous at best, often deleterious. Most importantly, interventionists fail to consider an underlying aspect of the world: politics are as imperfect as the markets. Even if one cannot argue that Free Trade is the best possible policy because the markets are efficient, heuristically it remains the best strategy in order to curb distortions arising from political pressures and retaliatory acts.

⁸⁴ Cornwell, Susan. *Rust-belt democrats praise Trump's threatened metals tariffs*, Reuters Business News, March 2, 2018

⁸⁵ Krugman, Paul R. The Economics of Dirty Old Men, The New York Times, 26 January 2018

Conclusions – Does history repeat itself?

As stated many times by leading economist Milton Friedman, the beneficial effects of a tariff are tangible and visible for a concentrated, well-organized group of interests. The drawbacks brought by a tariff, instead, are invisible. In fact, the loss of jobs is very widespread and there is there no union capable of reorganizing the resulting unemployed workers. Ref Consumers all over are paying higher prices to purchase domestic goods and services. Very often they cannot even recognize that it has been mainly caused by the enforcement of the tariffs. So, the cons produced by tariffs are spread over a much larger scale, and they are difficult to identify by both consumers and workers. This is directly linked to the reason why pursuing the interests of a smaller group is a very powerful tool to unsheathe in electoral campaigns.

The theme discussed above acquires a central role both in protectionist policies adopted during the 1930s and those imposed today. As discussed in section 3.1, following the investigations made by Frank Taussig, many upward revisions of tariff rates included in the Smoot-Hawley Tariff Act were not necessary and they were prompted by members of the Republican Party for the 1928 Hoover presidential campaign to appease the agrarian electorate and the north-eastern industrialist lobbying groups.

It is remarkable to stress the fact that the 1,028 economists which signed the petition in 1930 pointed out a lot of different drawbacks brought by the imposition of higher tariffs and some of them are still valid today. Through the analysis of publications by Frank Taussig it can be stated that there's enough evidence to conclude that the 1930 bill was an awry mere political move not based on economic insights.

Similarly, some eighty years later, one cannot but think that the main reasons behind Trump's trade policy moves are the same. In section 3.2, a throughout analyses on Paul Krugman's opinions has also been conducted and it seems that electoral promises and give outs to key political groups of interests are definitely a key motivation behind the recent trade policy moves. All such policies have various direct effects on income distribution. Indeed, in today's case they are probably going to widen a wage gap that is already very large in the U.S.

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⁸⁶Friedman, Milton. Interview extract from *Free to Choose*, PBS Series, 1980

What follows today is that the Trump administration has disregarded historical evidence. The disastrous consequences that the Smoot Hawley Tariff Act had on the American economy are very well known to economists and policy makers today. Moreover, current policy decisions have a worsening effect due to a very different global setting from the late 1920s. While in 1930 the world was still facing the lingering effects of World War I, a widespread economic crisis and the consolidation of nationalist sentiments, the current situation is very different. Today, the bulk of U.S. trade partners are highly developed democracies linked together by treaties of economic cooperation and political governance, such as the EU.

Furthermore, international intergovernmental organizations such as the WTO and the OECD have a prominent role in the international trade framework. When virtually every voice is against the unilateral, unjustified imposition of tariffs on the grounds of detrimental economic effects, and deterioration of international relations could be safely argued that Trump's tariffs are obtuse and will likely cause negative externalities.

Yet, this thesis argues that these phenomena are occurring increasingly more often in today's developed world and there is a fil rouge that links all of them. The election of Donald Trump, Brexit, the rise of nationalism throughout Europe, from Marine Le Pen, to the Italian Five Star Movement-Lega victory are all dictated by populist, anti-globalization sentiments that, regretfully, mimic the ideologies that were booming in the 1930s. Achieving the protection of self-interests through unfair policies involving heavy state interventions, human and financial xenophobia is still in vogue today.

To sum up, this thesis stigmatizes that today could be the worst period in history to promote protectionism and other anti-globalization policies. As Christine Lagarde has recently emphasized in a speech, the world is experiencing a very powerful upswing in terms of growth and political reforms that support this momentum are necessary. They are difficult to implement but much easier when the window of opportunity is open.⁸⁷

As John Fitzgerald Kennedy once said: "Fix the roof when the sun is shining, not when it is raining."

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⁸⁷ Lagarde Christine, Fix the roof when the window of opportunity is open: three priorities for the global economy, Extract from Speech at University of Hong Kong, 2018

Is the enforcement of tariff rates signaling a mutation, a change of politically sentiments? Hopefully they are just a relapse in the old errors and not the basis of the future global political course.

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Appendix

1930 Letter Against Smoot-Hawley Tariff Act

The undersigned American economists and teachers of economics strongly urge that any measure which provides for a general upward revision of tariff rates be denied passage by Congress, or if passed, be vetoed by the President. We are convinced that increased protective duties would be a mistake. They would operate, in general, to increase the prices which domestic consumers would have to pay. By raising prices, they would encourage concerns with higher costs to undertake production, thus compelling the consumer to subsidize waste and inefficiency in industry. At the same time, they would force him to pay higher rates of profit to established firms which enjoyed lower production costs. A higher level of protection, such as is contemplated by both the House and Senate bills, would therefore raise the cost of living and injure the great majority of our citizens. Few people could hope to gain from such a change. Miners, construction, transportation and public utility workers, professional people and those employed in banks, hotels, newspaper offices, in the wholesale and retail trades, and scores of other occupations would clearly lose, since they produce no products which could be protected by tariff barriers. The vast majority of farmers, also, would lose. Their cotton, corn, lard, and wheat are export crops and are sold in the world market. They have no important competition in the home market. They cannot benefit, therefore, from any tariff which is imposed upon the basic commodities which they produce. They would lose through the increased duties on manufactured goods, however, and in a double fashion. First, as consumers they would have to pay still higher prices for the products, made of textiles, chemicals, iron, and steel, which they buy.

Second, as Smoot-Hawley producers, their ability to sell their products would be further restricted by the barriers placed in the way of foreigners who wished to sell manufactured goods to us. Our export trade, in general, would suffer. Countries can not permanently buy from us unless they are permitted to sell to us, and the more we restrict the importation of goods from them by means of ever higher tariffs the more we reduce the possibility of our exporting to them. This applies to such exporting industries as copper, automobiles, agricultural machinery, typewriters, and the like fully as much as it does to farming. The

difficulties of these industries are likely to be increased still further if we pass a higher tariff. There are already many evidences that such action would inevitably provoke other countries to pay us back in kind by levying retaliatory duties against our goods. There are few more ironical spectacles than that of the American Government as it seeks, on the one hand, to promote exports through the activity of the Bureau of Foreign and Domestic Commerce, while, on the other hand, by increasing tariffs it makes exportation ever more difficult. President Hoover has well said, in his message to Congress on April 16, 1929, "It is obviously unwise protection which sacrifices a greater amount of employment in exports to gain a less amount of employment from imports."

We do not believe that American manufacturers, in general, need higher tariffs. The report of the President's committee on recent economics changes has shown that industrial efficiency has increased, that costs have fallen, that profits have grown with amazing rapidity since the end of the war. Already our factories supply our people with over 96 percent of the manufactured goods which they consume, and our producers look to foreign markets to absorb the increasing output of their machines. Further barriers to trade will serve them not well, but ill.

Many of our citizens have invested their money in foreign enterprises. The Department of Commerce has estimated that such investments, entirely aside from the war debts, amounted to between \$12,555,000,000 and \$14,555,000,000 on January 1, 1929. These investors, too, would suffer if protective duties were to be increased, since such action would make it still more difficult for their foreign creditors to pay them the interest due them. America is now facing the problem of unemployment. Her labor can find work only if her factories can sell their products. Higher tariffs would not promote such sales. We can not increase employment by restricting trade. American industry, in the present crisis, might well be spared the burden of adjusting itself to new schedules of protective duties. Finally, we would urge our Government to consider the bitterness which a policy of higher tariffs would inevitably inject into our international relations. The United States was ably represented at the World Economic Conference which was held under the auspices of the League of Nations in 1927. This conference adopted a resolution announcing that "the time has come to put an end to the increase in tariffs and move in the opposite direction." The higher duties proposed in our pending legislation violate the spirit of this agreement and plainly invite other nations to

compete with us in raising further barriers to trade. A tariff war does not furnish good soil for the growth of world peace.

ORIGINATORS AND FIRST SIGNERS

Paul H. Douglas, professor or economics, University of Chicago.

Irving Fisher, professor of economics, Yale University.

Frank D. Graham, professor of economics, Princeton University.

Ernest M. Patterson, professor of economics, University of Pennsylvania.

Henry R. Seager, professor of economics, Columbia University.

Frank W. Taussig, professor of economics, Harvard University

Clair Wilcox, associate professor of economics, Swarthmore College.

2018 NTU Open Letter

May 3, 2018

Open letter to President Trump and Congress:

In 1930, 1,028 economists urged Congress to reject the protectionist Smoot-Hawley Tariff Act. Today, Americans face a host of new protectionist activity, including threats to withdraw from trade agreements, misguided calls for new tariffs in response to trade imbalances, and the imposition of tariffs on washing machines, solar components, and even steel and aluminum used by U.S. manufacturers.

Congress did not take economists' advice in 1930, and Americans across the country paid the price. The undersigned economists and teachers of economics strongly urge you not to repeat that mistake. Much has changed since 1930 -- for example, trade is now significantly

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more important to our economy -- but the fundamental economic principles as explained at the time have not. [The following text is taken from the 1930 letter.]

We are convinced that increased protective duties would be a mistake. They would operate, in general, to increase the prices which domestic consumers would have to pay. A higher level of protection would raise the cost of living and injure the great majority of our citizens. Few people could hope to gain from such a change. Construction, transportation and public utility workers, professional people and those employed in banks, hotels, newspaper offices, in the wholesale and retail trades, and scores of other occupations would clearly lose, since they produce no products which could be protected by tariff barriers.

The vast majority of farmers, also, would lose through increased duties, and in a double fashion. First, as consumers they would have to pay still higher prices for the products, made of textiles, chemicals, iron, and steel, which they buy. Second, as producers, their ability to sell their products would be further restricted by barriers placed in the way of foreigners who wished to sell goods to us.

Our export trade, in general, would suffer. Countries cannot permanently buy from us unless they are permitted to sell to us, and the more we restrict the importation of goods from them by means of ever higher tariffs the more we reduce the possibility of our exporting to them. Such action would inevitably provoke other countries to pay us back in kind by levying retaliatory duties against our goods.

Finally, we would urge our Government to consider the bitterness which a policy of higher tariffs would inevitably inject into our international relations. A tariff war does not furnish good soil for the growth of world peace.

FIRST SIGNERS

Alvin Roth, Stanford University
Richard H. Thaler, University of Chicago
Oliver D. Hart, Harvard University
Daron Acemoglu, Massachusetts Institute of Technology
Roger Myerson, University of Chicago
N. Gregory Mankiw, Harvard University

Avinash K. Dixit, Princeton University

James Heckman, University of Chicago

Gene Grossman, Princeton University

Robert C. Merton, Massachusetts Institute of Technology

Raymond Riezman, University of Iowa

James E. Anderson, Boston College

Donald J. Boudreaux, George Mason University

Robert Shiller, Yale University

Vernon Smith, Chapman University

J. Bradford Jensen, Georgetown University

Gary Hufbauer, Peterson Institute for International Economics

Robert E. Lucas, Jr., University of Chicago

Robert Engle, New York University

Eric Maskin, Harvard University

Gordon Hanson, UC San Diego

Eugene F. Fama, University of Chicago

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