A Better Alternative to a Trade War

by

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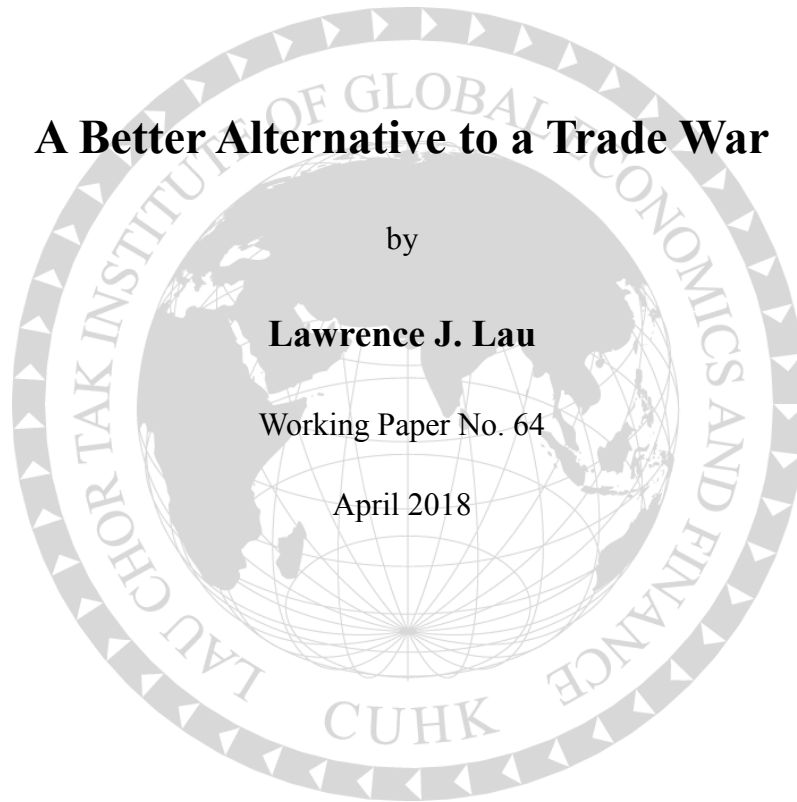
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A Better Alternative to a Trade War[§]

Lawrence J. Lau[1]

April 2018

Abstract: Reducing the U.S.-China trade deficit through the imposition of tariffs on Chinese exports to the U.S. risks retaliatory tariffs by China. The net result may be an involuntary reduction of trade between them, which lowers the aggregate welfare in both countries. It will be lose-lose. Moreover, the most likely net outcome of these new country-specific tariffs is the substitution of imports from China by imports from other countries on the part of U.S. importers. Thus, while the U.S. trade deficit with China falls, its trade deficit with other countries will rise. The overall U.S. trade deficit with the rest of the world will not be significantly altered. Almost all economists agree that the aggregate U.S. trade deficit with the rest of the world cannot be reduced without a corresponding reduction in the U.S. investment-saving imbalance, taking the U.S. real GDP as given. However, there is an exception: if there is an <u>autonomous</u> (unanticipated) increase in the demand for exports from the U.S. which increases the real GDP of the U.S. in the process, it is possible for the U.S. trade deficit to be reduced. Indeed, huge potential exists for the U.S. to substantially increase its exports of agricultural commodities, energy, and education and tourism services to China. Finally, we address the question of what constitutes "fair trade". There does not seem to be a generally accepted economic definition of "fairness". Any completely voluntary and non-coercive trade at the prevailing market price should be regarded as "fair".

1. Introduction

U.S. President Donald Trump wishes to reduce the U.S.-China trade deficit by US$100 billion. He proposes to accomplish this objective by imposing tariffs on up to US$150 billion worth of Chinese exports to the U.S. Whether this can be done in a manner consistent with the World Trade Organisation (WTO) rules is not so clear, but it is unlikely to deter President Trump from doing it. Under the new tariffs, Chinese exports to the U.S. will most certainly fall. However, just as increased voluntary trade between two trading partner-countries raises the aggregate welfare in both countries, an involuntary decrease in the trade between them lowers the aggregate welfare in both countries. It will be lose-lose.

Moreover, the most likely net outcome of these new country-specific tariffs is the substitution of imports from China by imports from other countries on the part of U.S. importers. Thus, while the U.S. trade deficit with China falls, its trade deficits with other countries will rise. The overall U.S. trade deficit with the rest of the world will not be significantly altered, and neither GDP nor employment in the U.S. will increase much.[2]

More fundamentally, almost all mainstream economists, U.S. and otherwise, agree that the aggregate U.S. trade deficit with the rest of the world cannot be reduced without a corresponding reduction in the U.S. investment-saving imbalance. In other words, unless investment is decreased or savings are increased in the U.S., the U.S. trade deficit with the rest of the world will remain essentially the same, whatever happens to the U.S.-China trade deficit. Selective country-specific protectionist policies, such as tariffs and quota policies, can shift the source of the trade deficit, for example, from a U.S.-China trade deficit to a U.S.-ASEAN trade deficit, but cannot reduce the aggregate total. This is indeed true if the U.S. real GDP is taken as given. However, there is an exception: if there is an <u>autonomous</u> (unanticipated) increase in the demand for exports from the U.S. which increases the real GDP of the U.S. in the process, it is possible for the U.S. trade deficit to be reduced. The key lies in the production and export of goods not previously produced or exported so that there is a genuine increase in both real GDP and exports.

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[2] In the longer run, it is theoretically possible that some existing producers may relocate their production facilities from China to the U.S. in order to avoid U.S. tariffs and other trade restrictions imposed on China, similar to what Japanese automobile manufacturers did in the past. However, this is unlikely to occur in labor-intensive industries.

Finally, we address the question of what constitutes "fair trade". There does not seem to be a generally accepted economic definition of fairness. Any completely voluntary and non-coercive trade between a willing buyer and a willing seller at the prevailing market price should be regarded as "fair". We also discuss some reasons why the U.S. may consider China to be "unfair".

2. The Size of the U.S.-China Trade Deficit

We begin by examining the size of the 2017 U.S.-China trade deficit. The U.S.-China trade deficit in goods, according to official U.S. data, was US$375 billion, compared to official Chinese data of US$276 billion. There are many reasons for the large discrepancy between the official data of the two countries. After adjustments for the differences in the valuation of exports (f.a.s. (free alongside ship) in the U.S. versus f.o.b. (free on board) in China) and imports (customs basis in the U.S. versus c.i.f. (cost, insurance and freight) in China)[3] and in the treatment of re-exports through Hong Kong, the discrepancy can be reduced to between US$325 billion (Chinese data) and US$368 billion (U.S. data).[4] If trade in services, in which the U.S. has a surplus of US$38 billion in 2017 according to U.S. data, is included, the 2017 U.S.-China trade deficit can be estimated to be between US$286 billion and US$330 billion. It is not clear why there is such a large remaining discrepancy in the official data on trade between the two countries. However, an annual discrepancy of approximately US$40 billion has persisted since 2004. It cannot be explained by the difference in the timing of the departure of goods from one country and arrival in the other.[5] One possible source of this discrepancy is re-exports to the U.S. of Chinese exports via ports other than Hong Kong. Another possible source of discrepancy is a systematic valuation difference between "customs basis" by the U.S. Customs and "f.o.b." as reported by Chinese exporters, reflecting perhaps the under-invoicing of Chinese exports by Chinese exporters in order to reduce profits booked in China and hence Chinese taxes.

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[3] It is assumed that "customs basis", which is how imports are measured in the U.S., is comparable to f.o.b. In fact, customs basis is not necessarily equivalent to f.o.b. and depends on the judgment of the customs officer.
[4] See Fung and Lau (1998), Fung and Lau (2001) and Fung, Lau and Xiong (2006).
[5] Since Chinese exports to the U.S. have been rising steadily over time, it is possible that in any given year, the recorded Chinese exports to the U.S. will exceed the recorded U.S. imports from China because of the time in transit. However, it is the other way around—recorded U.S. imports have consistently exceeded recorded Chinese exports.

However, not fully included in the U.S.-China service trade figures are royalties and license fee payments to third-country subsidiaries and affiliates of U.S. corporations such as Apple and Qualcomm. These are properly service revenues received by U.S. entities but attributed to third countries such as Ireland and the Netherlands. The precise values of these payments are not publicly available, but they are believed to be substantial. Thus, the true value of the U.S.-China trade deficit in goods and services, before adjustment to a value-added basis, is probably no larger than US$300 billion a year, which is admittedly still a large number.

Thus far, the discussion of the U.S.-China trade deficit is on the basis of the gross value of exports rather than its value-added. Value-added measures the GDP actually created by exports in the exporting country and can differ significantly from the gross value. For example, while the Apple iPhone is made in China, the domestic value-added in China is less than 5 percent of the gross value. If the U.S.-China trade deficit is calculated on the basis of value-added rather than gross value, and bearing in mind that service trade is all value-added, the U.S.-China deficit can be reduced by approximately a half, based on an earlier analysis of the 2015 bilateral trade data, to around US$150 billion a year.[6] This looks like a gap that is possible to narrow or even close in a few years' time if both China and the U.S. work together (see the discussions below).

3. A Trade War is Lose-Lose

Imposing tariffs on Chinese exports to the U.S. is unlikely to do the trick of reducing the U.S.-China trade deficit because of the possibility of retaliation by China, which would reduce U.S. exports to China at the same time. The problem of a trade war is that there are no winners—both countries lose because their feasible consumption choices are artificially restricted and reduced. Exporters in both countries will be hurt because of the reduction in their exports, and importers in both countries will see their businesses decline. And the consumers and producers who use imported goods in both countries will have to pay higher prices.

Imports can indeed help to keep the rate of inflation low. Research has shown that between 1994 and 2017, a one-percentage-point increase in the Chinese share of U.S. non-oil

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[6] See Lawrence J. Lau, Xikang Chen and Yanyan Xiong (2017).

imports reduced the annual rate of growth of the U.S. non-oil price index by 1.0 percentage point. The Chinese share of total U.S. non-oil imports rose more or less continuously from 2.7 percent in 1989 to almost 22 percent in 2009, where it more or less remained through 2017. Between 1989 and 2017, the average annual rate of growth of the U.S. non-oil price index was 2.5%, a drop of 2.6% from the 5.1% in the previous 28-year period of 1961–1989. The slowdown in the core rate of inflation since 1989, which in turn permitted a lower U.S. rate of interest, can be partially attributed to the increase in Chinese imports.[7] Imposing tariffs on Chinese imports will definitely lower its share of U.S. non-oil imports and may raise the U.S. core rate of inflation.

Thus, if a trade war breaks out between China and the U.S., both countries stand to lose, and not insubstantially. While the threat of a trade war may make sense from a tactical point of view, no one really wants to see it actually happen. There is, however, a better alternative: the U.S. trade deficit with China can also be reduced by the U.S. increasing its exports of goods to China. Moreover, there are two different ways for the U.S. to increase its exports. The first is rerouting its existing exports to other countries to China instead, and the second is producing new output for export to China, especially using resources that are currently underutilized. The first way is mostly cosmetic. U.S. GDP and employment will not increase much even though the U.S.-China trade deficit will fall. There is little net real benefit to the U.S. (or, for that matter, to China), except to be able to claim that the trade deficit has been successfully reduced. The second way, however, will lead to genuine increases in economic well-being in both the U.S. and China. U.S. producers and exporters will benefit, as will Chinese importers and consumers and producers who use the new imported goods.

Furthermore, tariffs against China may not even lower the overall U.S. trade deficit with the rest of the world because U.S. importers may substitute for Chinese imports with imports from other countries. The history of the U.S. apparel trade provides an interesting example. Between 1989 and 2017, the share of Hong Kong, Taiwan and South Korea combined in U.S. apparel imports declined from 36.9% to 1.7%, replaced by the share of Chinese imports, which rose from 11.7% to 36.6%. With new tariffs on apparel imports from China, the Chinese share will fall sharply, to be replaced by imports from Vietnam, Cambodia, Indonesia and Bangladesh. The total U.S. apparel imports may remain more or less the same.

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[7] See Lau and Tang (2018).

4. The National Income Identity and an Autonomous Increase in Exports

The national income identity may be written as

$$Y = C + I + G + X - M,$$

where Y is the aggregate real output of an economy, C is real personal consumption, I is real gross investment, G is real government consumption, X is real exports and M is real imports, and X − M is the trade deficit. The savings of the economy, the difference between output and consumption, are given by

$$S = Y - (C + G) = I + X - M,$$

which may be rewritten as

$$I - S = M - X,$$

that is, the excess of investment over savings is the difference between imports and exports, which is precisely the trade deficit, for given aggregate real output Y.

To see how an autonomous (unanticipated) increase in exports, based on underutilized domestic resources, can reduce the trade deficit, suppose the increase is represented by ΔX, which in turn generates an increase in Y of ΔY. For example, there are strong demands for chicken feet and animal innards from China, which would be worthless in the U.S. otherwise. The increase in Y may generate an increase in personal consumption ΔC, which must in any case be less than ΔY, but it should not generate any increase in G, at least not until the following budget cycle, and in M.[8] It may, however, require a small increase in I. The change in savings is given by

$$\Delta S = \Delta Y - \Delta C = \Delta I + \Delta X, \text{ so that}$$

$\Delta S - \Delta I = \Delta X$, which is greater than zero by assumption. The difference between investment and savings, $(I + \Delta I) - (S + \Delta S) = I - S - (\Delta S - \Delta I) = I - S - \Delta X$ is therefore reduced and the trade deficit is reduced correspondingly. This can happen because there is surplus potential output which can be produced with little or no additional resources.

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[8] This is because no imported inputs will be necessary for the production of the additional output. While it is possible to have an increase in imported consumer goods due to the increase in Y, it should already be subsumed as part of ΔC. In any case, it should not be large on the margin.

The production of new output resulting from new autonomous export demands generates new GDP and new employment, making use of the underutilized productive potential in the U.S. The underutilization of resources may have been the result of incompleteness of markets, especially futures markets, or failure of coordination. Two areas of potential U.S. exports that can be huge and are relatively uncontroversial are agricultural commodities and energy. China has a huge demand for agricultural commodities, and, in addition, there is also great potential for the U.S. to increase the value-added content of U.S. agricultural exports, for example, by producing and exporting meat (beef, pork and poultry) instead of feed grains (corn and soybeans) to China. In 2017, China imported more than US$115 billion of agricultural commodities, but only 20 percent of the imports came from the U.S. Moreover, Chinese imports of agricultural commodities have been increasing by more than 10 percent per year. Thus, there is the potential of U.S. exports of agricultural commodities to China rising from the current US$20 billion plus a year to US$50 billion a year in three to five years, on the basis of new as well as higher value-added U.S. production. The U.S. has significant surplus production capacity (for example, it has an abundance of land, water and pastures) for agricultural commodities if there is assured long-term demand.

There is also a huge and growing Chinese demand for energy, which can be met by exports of liquefied natural gas (for example, from Alaska) and shale oil, which are again new production, from the U.S. In 2016, China imported a total of US$117 billion of crude oil and US$9 billion of natural gas. Imports of oil and gas from the U.S. were minuscule, at US$0.2 billion and US$0.08 billion respectively. Given China's huge and growing demand for energy, and especially for non-polluting energy such as natural gas, and the U.S. being transformed into a net energy exporter because of its rising shale oil production, it is entirely possible for the U.S. to become a top energy exporter to China, gradually increasing to US$50 billion a year, again based on new production.

Thus, it is easy to envisage that additional exports in the agriculture and energy areas alone can amount to US$100 billion a year, with almost 100 percent U.S. value-added content. Moreover, these increased exports are likely to persist for a long time. The beauty of this type of solution is that no one is hurt economically. In the U. S., the new exports consist of new domestic supply that already has its committed export demand, so that it will not drive up or drive down prices or otherwise affect the markets. In China, not only are the imports likely to be less expensive than the cost of domestic production on the margin, they serve the important

purpose of meeting the expanded and expanding domestic demand, without affecting the domestic markets.[9] So, all in all, this is likely to be win-win all around. However, for both U.S. producers and Chinese importers, long-term contracts with credible enforcement mechanisms are necessary in order that both supplies in the U.S. and demands in China are forthcoming and sustained and not subject to arbitrary interruptions.

Another fast-growing component of U.S. exports to China is services, also with almost 100 percent value-added content, driven by the Chinese demand for education and tourism. The expenditures of Chinese students and tourists in the U.S. have been rising rapidly. They can also form a significant part of the increase in the U.S. exports of goods and services to China. Actions such as imposing more stringent tourist visa requirements on Chinese tourists and reducing the number of visas issued to Chinese students are counterproductive as they are likely to contribute to widening rather than narrowing the U.S.-China trade deficit. Having more Chinese students and tourists in the U.S. will also help improve the people-to-people relations between the two countries.

All three of the above-mentioned potential areas for increased U.S. exports to China— energy, agricultural commodities and education and tourism services—can contribute significantly to narrowing or even closing the U.S.-China trade deficit in gross value as well as value-added terms.

Finally, increasing U.S. exports of high-technology goods to China is also a possibility as Chinese demand for such goods remains high. However, this is likely to be more controversial for national security as well as competitive considerations on the part of the U.S. In addition, for the same reasons as the U.S. Government discourages the use of Huawei servers and cell phones in the U.S., the Chinese Government may also eventually decide that it is too risky to rely on U.S. high-technology products. This mutual stand-off is likely to create implicit or even explicit protectionist barriers in both countries, to the benefit of their monopolistic producers and the detriment of their consumers.

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[9] In addition, the hygienic conditions for the raising of livestock are probably better in the U.S.

5. What is "Fair" Trade?

When is trade considered fair? While the theory of comparative advantage shows that both trading partner-countries benefit in the aggregate if they trade, it does not specify how the gains from trade are distributed between them. The relative distribution of gains depends on their initial positions, comparative advantages and relative market power. There is no generally accepted simple indicator or yardstick for the degree of fairness, which remains a subjective concept.

One possible notion of "fairness" could be a bilateral trade balance of zero. But this notion of fairness does not make too much economic sense. For example, it will require a major oil exporter such as Saudi Arabia to have balanced trade with every other country, large and small. Another possible notion of "fairness" is a trade balance of zero with the rest of the world. While this may seem fair enough, it will in actuality deprive the U. S. of the opportunity to benefit from the seigniorage of providing the world with an international medium of exchange, whereas if it runs a large trade deficit with the rest of the world, it can pay for the excess imports with U.S. dollar cash or bonds, both of which it can print more or less at will. In fact, the ability to maintain a persistent trade deficit with the rest of the world can be regarded as an advantage rather than a disadvantage, as the rest of the world is willing to extend credit to the country providing the international liquidity indefinitely. Still another notion of fairness is that all trading partner-countries should be treated identically—charged the same price, applied the same tariffs and quotas, etc.—that there is no discriminatory treatment. In practice, there is discriminatory treatment everywhere because of bilateral or multilateral agreements of various kinds.

It is indeed true that China has been a major beneficiary of opening its economy and acceding to the WTO. It has managed to grow to be the second largest economy in the world as well as the second largest trading nation. More than 600 million Chinese people have been lifted out of poverty over the past four decades. None of this would have been possible had China not decided to undertake economic reform and join the world economy in 1978. The U.S. may feel that China has benefitted much more than the U.S. and therefore the outcome is "unfair". It is, however, difficult to quantify and compare the benefits that each country derives from trade, especially since the perceived benefits and costs may be different for different

countries. And there is no compelling economic logic why the benefits, even if measurable, should be the same among trading partner-countries.

There are a couple of other reasons why the U.S. may consider China to be unfair, but they do not have much to do with trade per se. The first has to do with Chinese restrictions on foreign investment in certain sectors. For example, a foreign automobile manufacturer has to form a joint venture with a Chinese enterprise as a partner in order to establish a manufacturing operation in China and can only own up to 50 percent of the joint venture. This is, however, about to change in the near future. Already, a foreign investor is allowed to own up to 51 percent of an insurance company in three years' time and 100 percent in five years' time. Further liberalization is likely to follow. Moreover, after forty years of economic reform, many Chinese enterprises have become both large and strong, and it is no longer justifiable to invoke the "infant industry" argument in favor of protection.

However, restrictions on foreign ownership are not uncommon in many other countries. For example, the U.S. does not permit a foreign investor to own more than 25 percent of an U.S. airline. Neither Japan nor South Korea have allowed wholly foreign-owned automobile manufacturing operations. (In fact, there are very few foreign joint ventures in the automobile manufacturing industry in these two countries.) In addition, foreign investment into the United States may need to be approved by the Committee on Foreign Investment in the United States (CFIUS), which has broad discretionary powers. Complete liberalization of foreign direct investment into China is probably difficult to achieve in the short run. A framework that involves separate and different negative lists for industries closed to foreign investment and national treatment otherwise on a reciprocal basis appears to be the best way forward.

The second concerns the alleged theft of intellectual property by Chinese enterprises. The Chinese Government does not condone the theft of intellectual property (in fact, the theft of any kind); nor does it engage in cyber theft itself. This is clear from its establishment of a special intellectual property court system that has jurisdiction of the entire country. However, it is possible that some Chinese enterprises may be engaged in such illegal activities. The obvious and straightforward solution is for the victims of such thefts to produce credible evidence, file formal complaints against the wrongdoers and request the Chinese Government to assist in the investigation. Without evidence, not much can be done about the complaints. Even if a state-owned enterprise is involved, charges should still be pressed and investigated.

However, just because an enterprise is state-owned, it does not imply that the state is responsible for its behavior and actions. The state is only one of many shareholders. One cannot simply blame the shareholders and hold them responsible for the behavior and actions of enterprises in which they have invested. For example, Uber shareholders cannot be held responsible for what Uber does, but the board of directors and the senior management of Uber should be.

Finally, it should be recognized that the market does not concern itself with "fairness". Any voluntary and non-coercive trade between a willing buyer and a willing seller at the market price can and should be considered "fair".

6. Concluding Remarks

A trade war between China and the U.S. can and should be averted. It is certain to lower the aggregate welfare of both countries and that of the rest of the world as well. We have outlined a much better alternative way for narrowing the U.S.-China trade deficit, which is win-win for both China and the U.S., with positive spillover effects for the rest of the world. It deserves to be seriously considered by both countries.

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