Trade War and its effects on commodities

Barnabas Gan
Economist
Global Treasury Research & Strategy
April 2018
Executive Summary

• **Trade war concerns intensified** now with US President Trump’s comment to “consider whether US$100 billion of additional tariffs would be appropriate” in response to China’s proposal to impose US$50 billion tariffs against US aircrafts, automotive and soybeans. At the time of writing as of 6th April 2018, US stock index futures and growth-related commodities fell immediately while safe haven demand into gold rallied the yellow metal.

• **IMF commented that trade wars “not only hurt global growth, they are also unwinnable”** while World Bank chimed in that protectionism can “disrupt worldwide supply chains and affect long-term productivity”. According to Bloomberg Economics, a full-blown trade war may cost the global economy $470 billion (or about 89.3% of total US imports from China in 2017). Note that both US and China have substantial trade exposures, with US’ total trade with China at 16.9% of its total trade with the rest of the world, vice versa China’s total trade with the US at 14.3%.

• **Should trade tariff proposals turn concrete**, we opine that growth-related commodities could potentially trend similarly to a growth-recessionary year (crude oil, base metals: -10% to 30%), while safe haven demand into gold will lift the yellow metal beyond $1,600/oz. Impact on agricultural will likely be mixed, as crude palm oil could find favor with Chinese importers, while soybean prices could potentially fall as demand slackens.

• **At least for now, the trade tariff threats are merely… just threats.** Risk appetite could eventually recover should it stay as a war of threats (and executive orders). Watch out for potential huge swings in the commodity market (as well as the overall financial markets) should things escalate further.
Economics in brief: Who buys where and what?

US Exports to CN

1. Aircraft and Associated Equipment - 16,085 USD mn
2. Oil Seeds, Oleaginous Fruits: Extraction - 11,722 USD mn
3. Motor Cars for Transport of Persons - 10,553 USD mn
4. Thermionic, Cold Cathode - 6,012 USD mn
5. Oil frm Bituminous Minerals: Crude - 4,949 USD mn
6. Measuring, Checking & Analysing Instruments - 4,115 USD mn
7. Machinery & Equip: Specialized Particular Ind - 3,647 USD mn
8. Nonferrous Base Metal Waste & Scrap - 2,915 USD mn
9. Parts and Accessories for Motor Vehicles - 2,308 USD mn
10. Miscellaneous Manufactured Articles - 2,199 USD mn

US Imports from CN

1. Telecomm, Sound Record & Reproduce Equipment - 98,812 USD mn
2. Office Machinery & Automatic Data Processin - 74,488 USD mn
3. Miscellaneous Manufactured Articles - 56,999 USD mn
4. Electrical Machinery, Apparatus & Appliance - 48,326 USD mn
5. Apparel & Clothing Accessories - 30,929 USD mn
6. Furniture and Parts Thereof, etc - 24,843 USD mn
7. General Industrial Machinery & Equipment - 23,067 USD mn
8. Manufactures of Metals, nce - 21,185 USD mn
9. Road Vehicles - 14,745 USD mn
10. Footwear - 14,324 USD mn

Source: CEIC, OCBC. Trade data is calculated as a sum of 12 months into Jan 2018.
Economics in brief: Who buys where and what?

**China Exports to US**

- Electrical Machinery and Equipment: 110,542
- Nuclear Reactors, Machinery: 94,108
- Miscellaneous Mfg Articles: 53,469
- Base Metals and Articles: 23,990
- Vehicles, Aircraft, Vessels & Transport Equip: 20,472
- Plastics, Rubber and Articles Thereof: 19,879
- Footwear, Headgear, Umbrellas: 16,518
- Knitted Apparel & Clothing Accessories: 16,513
- Products of Chemical or Allied Industries: 14,537
- Not Knitted Apparel & Clothing Accessories: 14,498

**China Imports from the US**

- Vehicles, Aircraft, Vessels & Transport Equip: 30,334
- Electrical Machinery and Equipment: 17,843
- Nuclear Reactors, Machinery: 16,943
- Vegetable Products: 16,077
- Products of Chemical or Allied Industries: 15,368
- Optical, Photographic Instruments: 12,032
- Mineral Fuels, Mineral Oils & Products: 9,001
- Plastics, Rubber and Articles Thereof: 8,088
- Pulp of Wood, Paper and Paperboard: 5,773
- Base Metals and Articles: 5,622

Source: CEIC, OCBC. Trade data is calculated as a sum of 12 months into Feb 2018.
Top US import sources of products

### Chemicals & Related Products
(Mar'17 - Feb '18)

- **USD bn**
- **Canada**: 25
- **Germany**: 23
- **China**: 19
- **Switzerland**: 16
- **UK**: 10
- **India**: 10
- **Japan**: 9
- **Italy**: 8
- **France**: 8
- **Mexico**: 7

### Manufactured Goods
(Mar'17 - Feb '18)

- **USD bn**
- **China**: 55
- **Canada**: 40
- **Mexico**: 21
- **India**: 17
- **Germany**: 10
- **Japan**: 9
- **S. Korea**: 9
- **Taiwan**: 8
- **Russia**: 8
- **Brazil**: 6

### Machinery and Transport Equipment
(Mar'17 - Feb '18)

- **USD bn**
- **China**: 275
- **Mexico**: 204
- **Japan**: 104
- **Canada**: 91
- **Germany**: 66
- **S. Korea**: 48
- **Malaysia**: 28
- **Taiwan**: 24
- **UK**: 22
- **Italy**: 19

### Misc. Manufactured Articles
(Mar'17 - Feb '18)

- **USD bn**
- **Canada**: 153
- **Mexico**: 35
- **Japan**: 15
- **Germany**: 12
- **Italy**: 11
- **India**: 10
- **Indonesia**: 9
- **France**: 8
- **UK**: 8

Source: CEIC, OCBC
Top US export sources of products

**Machinery & Transport Equipment (Mar'17 - Feb '18)**

- Canada: 130 USD bn
- Mexico: 111 USD bn
- China: 55 USD bn
- Germany: 28 USD bn
- UK: 23 USD bn
- Japan: 21 USD bn
- S. Korea: 21 USD bn
- France: 19 USD bn
- Hong Kong: 15 USD bn
- Brazil: 15 USD bn

**Crude Materials (ex-fuels) (Mar'17 - Feb '18)**

- China: 26 USD bn
- Mexico: 7 USD bn
- Canada: 7 USD bn
- Japan: 4 USD bn
- S. Korea: 2 USD bn
- Turkey: 2 USD bn
- Vietnam: 2 USD bn
- Netherlands: 2 USD bn
- Indonesia: 2 USD bn
- Germany: 2 USD bn

**Chemicals & Related Products (Mar'17 - Feb '18)**

- Canada: 32 USD bn
- Mexico: 28 USD bn
- China: 16 USD bn
- Japan: 12 USD bn
- Belgium: 11 USD bn
- Netherlands: 9 USD bn
- Germany: 8 USD bn
- Brazil: 8 USD bn
- S. Korea: 7 USD bn
- UK: 7 USD bn

**Misc Manufactured Articles (Mar'17 - Feb '18)**

- Canada: 28 USD bn
- Mexico: 19 USD bn
- China: 10 USD bn
- Japan: 9 USD bn
- UK: 9 USD bn
- Hong Kong: 8 USD bn
- Germany: 7 USD bn
- Netherlands: 7 USD bn
- Switzerland: 6 USD bn
- Belgium: 5 USD bn

Source: CEIC, OCBC
Soybeans: The sensitivities surrounding it

- Globally, China is the world’s top soybean importer, and Brazil, US and Argentina are the top three exporters.
- China imports 60% of the soybeans traded worldwide in 2017, up from 41% back in 2005.
- Note that China is also the top soybean importer from the US, accounting for 57.1% of US total soybean exports.

**China soybean import sources**
(2017)
- Brazil: 58%
- USA: 35%
- Argentina: 7%
- Others: 0%

**Who (may) buy US soybeans then?**
(Top soybean importers [ex-China] - 2017)
- Mexico: $1,732
- Japan: $1,546
- Turkey: $948
- Egypt: $864
- Italy: $610
- Malaysia: $339
- Portugal: $329
- Norway: $215
- Romania: $59
- Chile: $46

Source: UN Comtrade, OCBC
Crude Oil: Excluded from tariffs… for now

- **Note that energy trade has been excluded** from the tit-for-tat tariff threats… for now, likely as China remains thirsty for crude oil and its distillates.
- **Trade-wise, China imported US$4.4bn of US crude oil in 2017**, or 20.3% of total US crude oil exports. Assuming 2017’s average price of $54.9/bbl, China imported 222 thousand barrels per day from the US, or merely 0.22% of global demand.
- **We view that China’s potential move to impose tariffs on US-imported crude remains unlikely**, given the very small impact it has on trade balances, as well as China’s increasing demand for crude oil over the many years.

### China's crude oil imports

![Graph showing China's crude oil imports](chart.png)

### Top importers of US crude oil (2017)

<table>
<thead>
<tr>
<th>Country</th>
<th>USD bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>6.1</td>
</tr>
<tr>
<td>China</td>
<td>4.4</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2.1</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1.7</td>
</tr>
<tr>
<td>Rep. of Korea</td>
<td>1.1</td>
</tr>
<tr>
<td>Italy</td>
<td>0.9</td>
</tr>
<tr>
<td>France</td>
<td>0.6</td>
</tr>
<tr>
<td>Singapore</td>
<td>0.6</td>
</tr>
<tr>
<td>Japan</td>
<td>0.5</td>
</tr>
<tr>
<td>Colombia</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Source: Bloomberg, CEIC, OCBC
Crude Oil: Growth-related in nature

- Still, crude oil prices remain to be intricately correlated with investors’ risk appetite and global growth prospects. While trade tariff proposals from both US and China had left energy trade untouched, energy prices turned south into early April 2018.

- The reason behind lower crude oil prices is simple: the inhibition of world trade through trade tariffs between the two largest economies in the world (which represents 48.5% of global nominal GDP) will negatively impact global trade activities, growth prospects, and eventually oil prices.

- The shortfall in demand, should world trade dampens, will likely be a second-order effect; the negative impact trade war has on global growth has broad implication on income, employment and inflation, which then consequently affects demand for global commodities including crude oil.

Source: Bloomberg, IMF, OCBC
Gold: Fear gives gold wings

- **Trade war concerns** have rallied the yellow metal since the first signs of tariff threats emerged. As recent as early March when US President Trump signed executive orders pertaining to the steel and aluminium tariffs, gold prices rose to as high as $1,360/oz, up from $1,305/oz in end-February.

- **In tandem with higher gold prices**, ETF buying has pick-up over the same period, suggesting that higher paper demand was the pillar behind the stronger gold price, although the relatively weaker greenback did support it as well.

- **Note that past 30-day USD-Gold correlation remained strong at -0.812**, suggesting that the dollar weakness, should it persist, is a persuasive driver in supporting the yellow metal.

Source: CFTC, Bloomberg, OCBC
Gold: Any negative news are likely gold-friendly

- IMF: Trade wars “not only hurt global growth, they are also unwinnable”. World Bank chimed in that protectionism can “disrupt worldwide supply chains and affect long-term productivity”.

- **A full-blown trade war may cost the global economy $470 billion** (or about 89.3% of total US imports from China in 2017), according to Bloomberg. Note that both US and China have substantial trade exposures, with US’ total trade with China at 16.9% of its total trade with the rest of the world, vice versa China’s total trade with the US at 14.3%.

- **We view that trade wars has the potential to inject negative consequences on both growth and trade activities.** However, the impact on the yellow metal should we view historical reference, was positive in the near term but mixed into the longer period.

- **Also, note that the recent (and similar) steel tariffs imposed** during the Bush administration back in 2002 saw an estimate welfare loss of $41.6 million (according to the US International Trade Commission) and affected almost 50,000 jobs in metal, machinery and equipment producing industries and 197,000 lost in steel-consuming industries.

![Gold movement during past tariffs](chart)

**Gold movement during past tariffs**

- US 45% tariff on motorcycles (Apr 1983)
- Bush Steel Tariffs (March 2002)
- Russian embargo on Ukraine Goods (Aug 2013)

Source: CFTC, Bloomberg, OCBC
Palm oil to benefit from soybean-related tariffs

- **Palm oil is said to be second only to soybean oil in world production of vegetable oils.** Palm fruits have long been considered to be a viable substitute for soybeans. From the edible oils perspective, both commodities are used to produce cooking oils, used for frying, baking and other types of cooking.

- **Palm oil is also used in the production of livestock feed.** Palm fatty acid distillate (PFAD) is also an active ingredient as a fat supplement for livestock. Palm kernel meal, a by-product after oil has been extracted, has also been used as a viable substitute to soy meals.

![Nutritive Profile of Palm Kernel Meal](Image)

![Global Consumption of Meals (2013)](Image)

![Palm Kernal Cake is the third most nutritious meal (Digestable Nutrients %)](Image)

Source: MPOB, OCBC
Brazil could benefit too, but?

• Brazil being the world’s largest exporter of soybean, could benefit from China’s increased demand away from US-grown soybeans. As of 2016, China imports 40% of total Brazil’s soybean production.

• However, Brazil’s soybean production capacity has been nearing its peak. Over 70% of Brazil’s soybean export capacity¹ is from China’s demand.

• Should China totally cease import demand from US-grown soybean, around $12.0 billion worth of soybean (or 33.2 thousand tons) of import demand would need to be sourced from elsewhere. Assuming Brazil’s soybean export capacity of 74.5% as of 2016, only 13.2 thousand tons of soybean are export-ready, and also assuming that Brazil exports only to China alone.

Brazil soybean export capacity to China is >70%

Most of Brazil's soybean production is exported

Source: UN Comtrade, USDA, OCBC

¹ Calculated by total Chinese soybean exports as a % of Brazil’s production, after accounting for domestic consumption
## Summary of impact on commodities

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Perceived Impact</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude Oil</td>
<td>Crude Oil remains to be a growth-related commodity. Although current trade tariff proposals have said little on energy trade, the negative impact it may have on global growth and trade activities should eventually drag crude oil prices. A full-blown trade war, depending its severity, could be recessionary in nature, thus placing downward pressure on crude oil especially.</td>
<td>-10% to -30%</td>
</tr>
<tr>
<td>Gold</td>
<td>Gold is perceived to be a favored safe haven asset in times of trade war. This is especially given the possibility of a weaker greenback, as well as first-order negative impact on both the US and China's economies. Should a full-blown trade war occur, the concerns surrounding it will likely discount the relatively rosier economic fundamental we are facing today.</td>
<td>+10% to +20%</td>
</tr>
<tr>
<td>PGMs and Silver</td>
<td>The Platinum Group Metals and Silver prices could see mixed behaviour, depending on the intensity of the risk aversion. The PGMs and Silver assets are considered to be quasi precious-industrial metals, in which risk aversion could leave prices in a range. Still, we think the industrial component of these metals may dominate should risk aversion takes hold.</td>
<td>-5% to -10%</td>
</tr>
<tr>
<td>Base Metals</td>
<td>Base metals, similar to crude oil, will likely trend in line with risk aversion and growth concerns. Base metal prices are also intricately related to China's demand, given China being the largest consumer of base metals. With the trade war centering on China as well, the negative impact it may have on overall Chinese economic growth could well limit global base metal demand. Negative spill-over effects into global growth would also play a part in limiting base metal prices.</td>
<td>-10% to -15%</td>
</tr>
<tr>
<td>Palm Oil</td>
<td>Palm fruits are considered to be a viable substitute to soybeans, both from cooking oils and animal feeds. Key beneficiaries to higher palm prices will center on Asia, especially Indonesia and Malaysia as the world's largest palm producers. Should China completely cease imports of US-grown soybeans, about 33.2 thousand tons of soybean demand have to sourced elsewhere, in which a part of it may be fulfilled by palm.</td>
<td>+5% to 15%</td>
</tr>
</tbody>
</table>
Thank You
Disclaimer

Treasury Market Research & Strategy

Selena Ling (LingSSSelena@ocbc.com)  Tel : (65) 6530 4887
Emmanuel Ng (NgCYEmmanuel@ocbc.com)  Tel : (65) 6530 4073
Tommy Xie Dongming (XieD@ocbc.com)  Tel : (65) 6530 7256
Barnabas Gan (BarnabasGan@ocbc.com)  Tel : (65) 6530 1778
Terence Wu (TerenceWu@ocbc.com)  Tel : (65) 6530 4367
Alan Lau (AlanLau@ocbc.com)  Tel : (65) 6530 4367

OCBC Credit Research

Andrew Wong (WongVKAM@ocbc.com)  Tel : (65) 6530 4736
Wong Liang Mian (NickWong@ocbc.com)  Tel : (65) 6530 7348
Ezien Hoo (EzienHoo@ocbc.com)  Tel : (65) 6722 2215
Wong Hong Wei (WongHongWei@ocbc.com)  Tel : (65) 6722 2533

This publication is solely for information purposes only and may not be published, circulated, reproduced or distributed in whole or in part to any other person without our prior written consent. This publication should not be construed as an offer or solicitation for the subscription, purchase or sale of the securities/instruments mentioned herein. Any forecast on the economy, stock market, bond market and economic trends of the markets provided is not necessarily indicative of the future or likely performance of the securities/instruments. Whilst the information contained herein has been compiled from sources believed to be reliable and we have taken all reasonable care to ensure that the information contained in this publication is not untrue or misleading at the time of publication, we cannot guarantee and we make no representation as to its accuracy or completeness, and you should not act on it without first independently verifying its contents. The securities/instruments mentioned in this publication may not be suitable for investment by all investors. Any opinion or estimate contained in this report is subject to change without notice. We have not given any consideration to and we have not made any investigation of the investment objectives, financial situation or particular needs of the recipient or any class of persons, and accordingly, no warranty whatsoever is given and no liability whatsoever is accepted for any loss arising whether directly or indirectly as a result of the recipient or any class of persons acting on such information or opinion or estimate. This publication may cover a wide range of topics and is not intended to be a comprehensive study or to provide any recommendation or advice on personal investing or financial planning. Accordingly, they should not be relied on or treated as a substitute for specific advice concerning individual situations. Please seek advice from a financial adviser regarding the suitability of any investment product taking into account your specific investment objectives, financial situation or particular needs before you make a commitment to purchase the investment product. OCBC Bank, its related companies, their respective directors and/or employees (collectively “Related Persons”) may or might have in the future interests in the investment products or the issuers mentioned herein. Such interests include effecting transactions in such investment products, and providing broking, investment banking and other financial services to such issuers. OCBC Bank and its Related Persons may also be related to, and receive fees from, providers of such investment products.

This report is intended for your sole use and information. By accepting this report, you agree that you shall not share, communicate, distribute, deliver a copy of or otherwise disclose in any way all or any part of this report or any information contained herein (such report, part thereof and information, “Relevant Materials”) to any person or entity (including, without limitation, any overseas office, affiliate, parent entity, subsidiary entity or related entity) (any such person or entity, a “Relevant Entity”) in breach of any law, rule, regulation, guidance or similar. In particular, you agree not to share, communicate, distribute, deliver or otherwise disclose any Relevant Materials to any Relevant Entity that is subject to the Markets in Financial Instruments Directive (2014/65/EU) (“MiFID”) and the EU’s Markets in Financial Instruments Regulation (600/2014) (“MiFIR”) (together referred to as “MiFID II”), or any part thereof, as implemented in any jurisdiction. No member of the OCBC Group shall be liable or responsible for the compliance by you or any Relevant Entity with any law, rule, regulation, guidance or similar (including, without limitation, MiFID II, as implemented in any jurisdiction).

Co.Reg.no.:193200032W