



Mexico in the context of global trade tensions

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BANCO DE MÉXICO

^{*/} The opinions and points of view expressed do not necessarily represent the institutional position of the Bank of Mexico or its Board of Governors.

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Introduction

- Rising protectionism can be singled out as one of the main risks facing the world economy.
- In particular, there is uncertainty regarding the extent of the distortions that such measures could have on global trade and productive processes.
- There is also uncertainty about the effect that tariff measures and the deterioration in international trade conditions could have on the global economy, investment and global trade in the short and medium terms.
- Over a longer horizon, the effect of protectionist measures on Global Value Chains (GVCs) have the potential to magnify their adverse impact on global output.
- In this context, Mexico has faced its own share of trade tensions, such as the renegotiation of NAFTA.
 - ✓ *Recently, Mexico, the United States and Canada reached an agreement to update NAFTA, although its ratification by the US congress and Canada's parliament is still pending.*
 - ✓ *The new Treaty (USMCA) may have overall positive results on Mexico's trading conditions vis-à-vis a cancellation of NAFTA and may improve investment incentives within the country, but vis-à-vis NAFTA, at least some relevant sectors may be adversely affected (e.g. auto sector).*

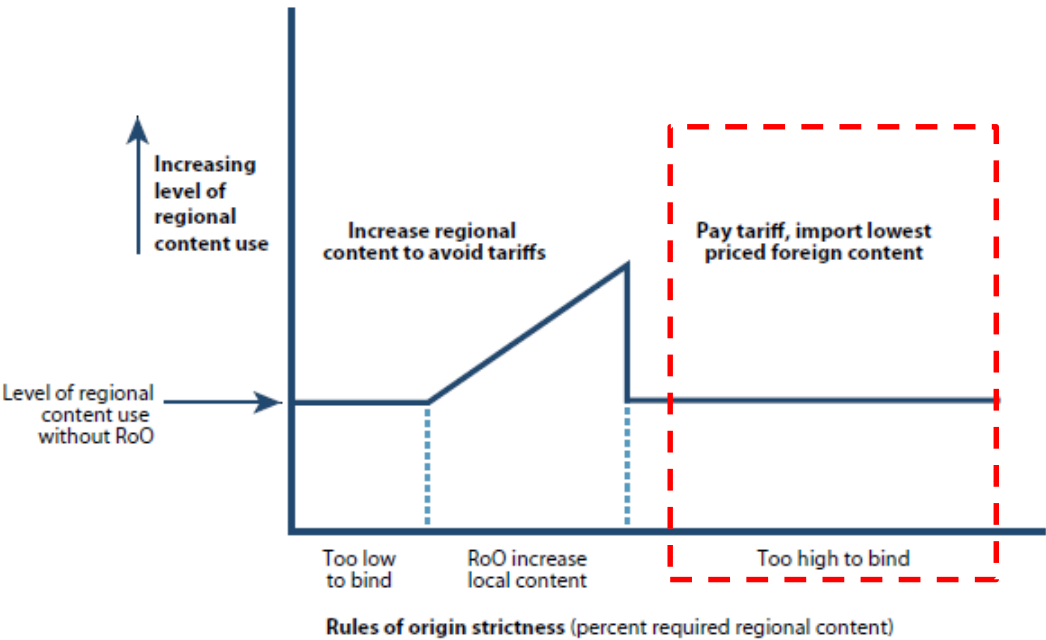
Auto sector: What is new in USMCA relative to NAFTA?

- Relative to NAFTA, USMCA imposes new conditions for tariff-free trade in the auto sector among Mexico, Canada, and the United States. These **new conditions imply a tightening in the rule of origin requirements for auto trade in North America.**
- For the auto sector there are four important changes in USMCA relative to NAFTA:
 1. **Regional Value Content (RVC):** increase in the percentage required for automobiles and light trucks from 62.5% to 75%, and from 60% to 70% for heavy trucks.
 2. **Requirements for vehicle parts content:** change from one content requirement level (62.5%) to three groups with different thresholds
 - i. Core parts (RVC of 75%)
 - ii. Principal parts (RVC of 70%)
 - iii. Complementary parts (RVC of 65%)
 3. **North American sourcing of metals:** at least 70% of the steel and aluminum used in the manufacture of cars and small trucks must originate in the USA, Canada or Mexico
 4. **Labor Value Content (LVC):** 40% of the materials for cars and 45% of the content for light trucks must be produced by regional enterprises that pay workers at least \$16 per hour.^{1/}

^{1/} The USMCA does not provide for the USD \$16 an hour wage rate to increase with inflation nor for the Parties to periodically update the rate threshold.

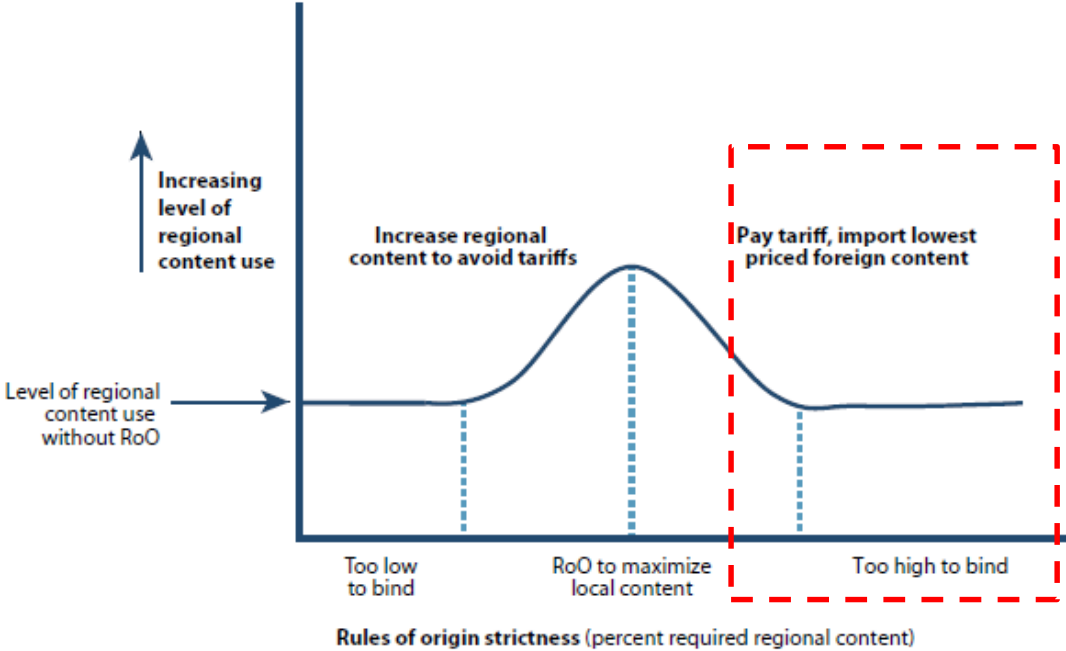
A **tightening in rules of origin requirements** has the potential to achieve an outcome opposite to its intended objective, as **local content can decrease if the burden of compliance is too high relative to the alternative**. With no change in the conditions for MFN trade for the automotive sector in the NAFTA region, the transition from NAFTA to USMCA could imply that at the margin less automotive trade will use the benefits of the Treaty.

Regional content and rules of origin at the firm level



RoO = rules of origin

Regional content and rules of origin at the industry level



RoO = rules of origin

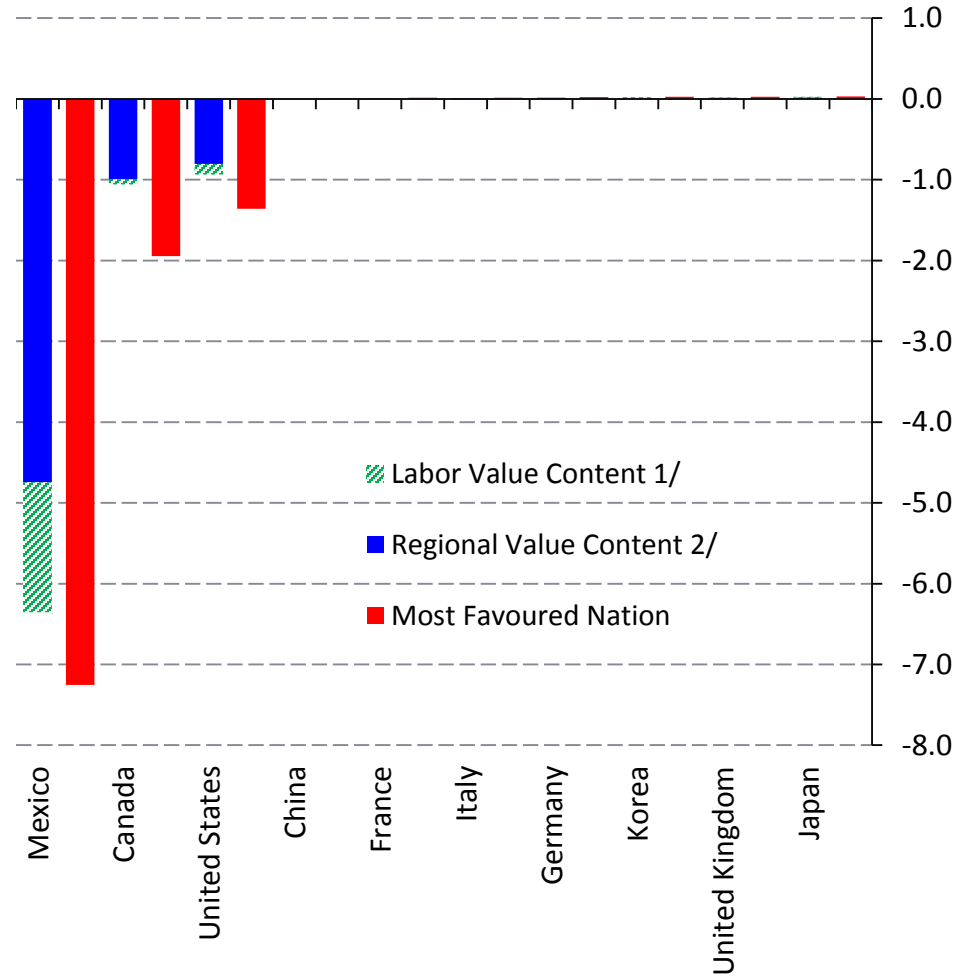
Source: Freund, Caroline. (2017). "Streamlining Rules of Origin in NAFTA". Peterson Institute for International Economics.

Automotive Sector under USMCA

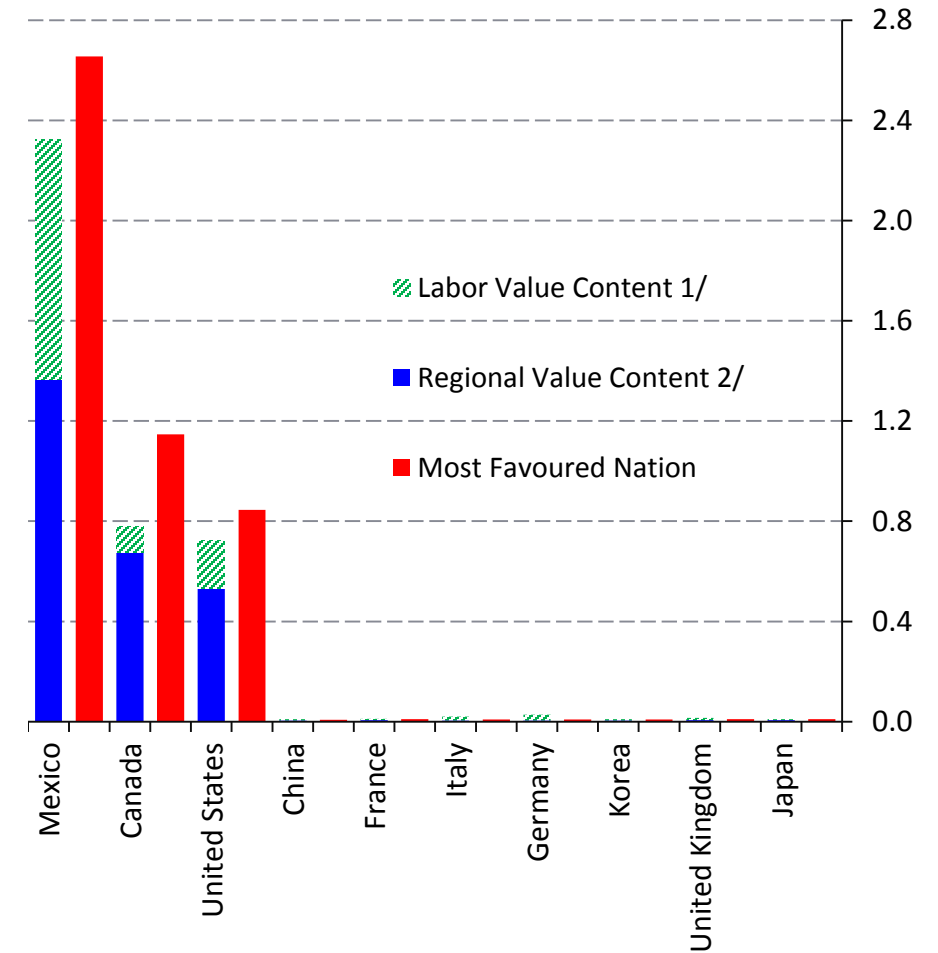
- In what follows we present the results of an exercise based on a **quantitative general equilibrium trade model** (see Costinot and Rodríguez-Clare [2014]) in which we compare, relative to the initial starting point of “NAFTA”, two counterfactual scenarios:
 - a) *Imposing MFN tariffs for North American trade in the auto sector.*
 - b) *Imposing the RVC and LVC conditions of the USMCA for automotive trade in the region.*
- To properly interpret the results of this exercise, it is important to keep in mind that **this exercise only contemplates the general equilibrium implications of changes to the barriers that shape automotive trade in the region.** The shift from NAFTA to USMCA contemplates changes in other sectors that are not being considered for the purposes of this exercise, and can have important macroeconomic consequences (i.e. reduce uncertainty) that are not accounted for. In addition, important assumptions had to be made in order to map RVC and LVC requirements into the model.

Comparative statics: Transition from NAFTA to USMCA in the automotive sector

Effect on Real Output of Transport Equipment Percent



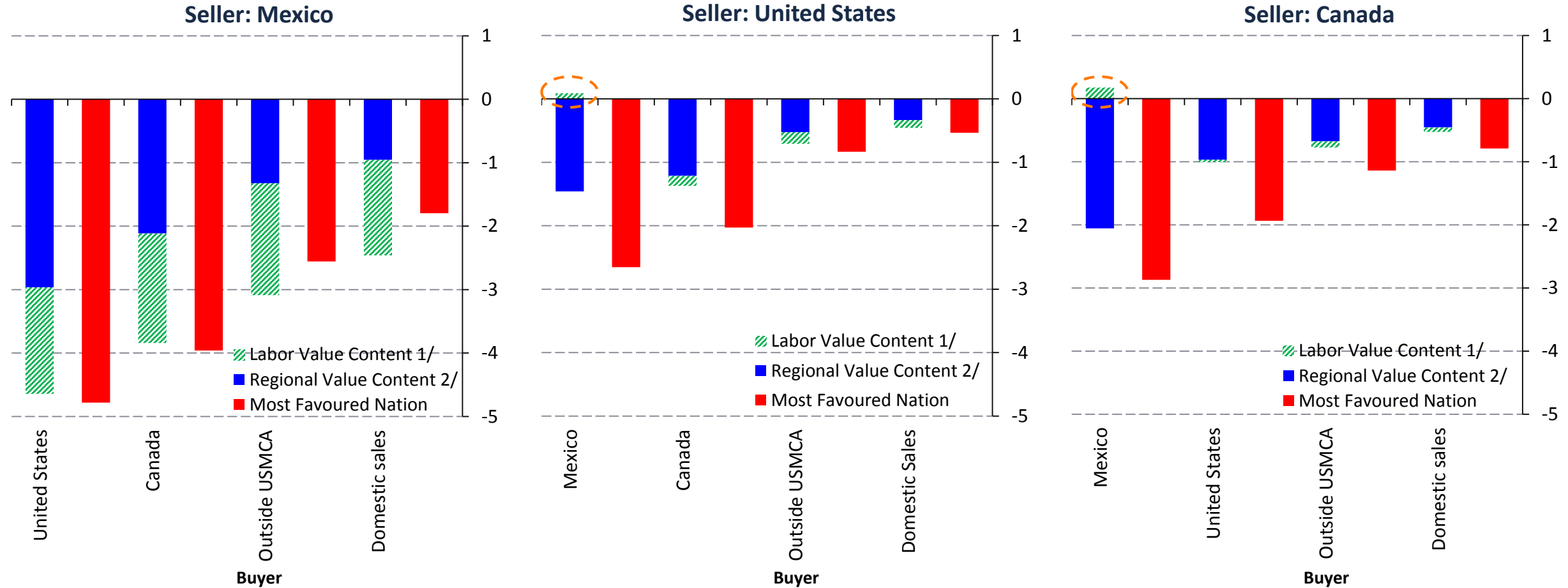
Effect on Prices of Transport Equipment Percent



1/ Introduced like an iceberg cost of 2.4% of transport equipment from Mexico to other USMCA partners estimated to capture the requirement of 40% of a car must be made in a plant where workers earn at least \$16 per hour.
 2/ Based on ad valorem equivalents of non-tariff measures obtained from Burfisher et al. (2019), adjusted for percentage use of tariff free treatment.
 Source: Elaborated by Banco de México with data from the World Input-Output Database 2016, based on Costinot, A., & Rodríguez-Clare, A. (2014) "Trade Theory with Numbers: Quantifying the Consequences of Globalization".
Handbook of International Economics, Volume 4, 197-261 and WTO Integrated Data Base (IDB).

Comparative statics: Transition from NAFTA to USMCA in the automotive sector

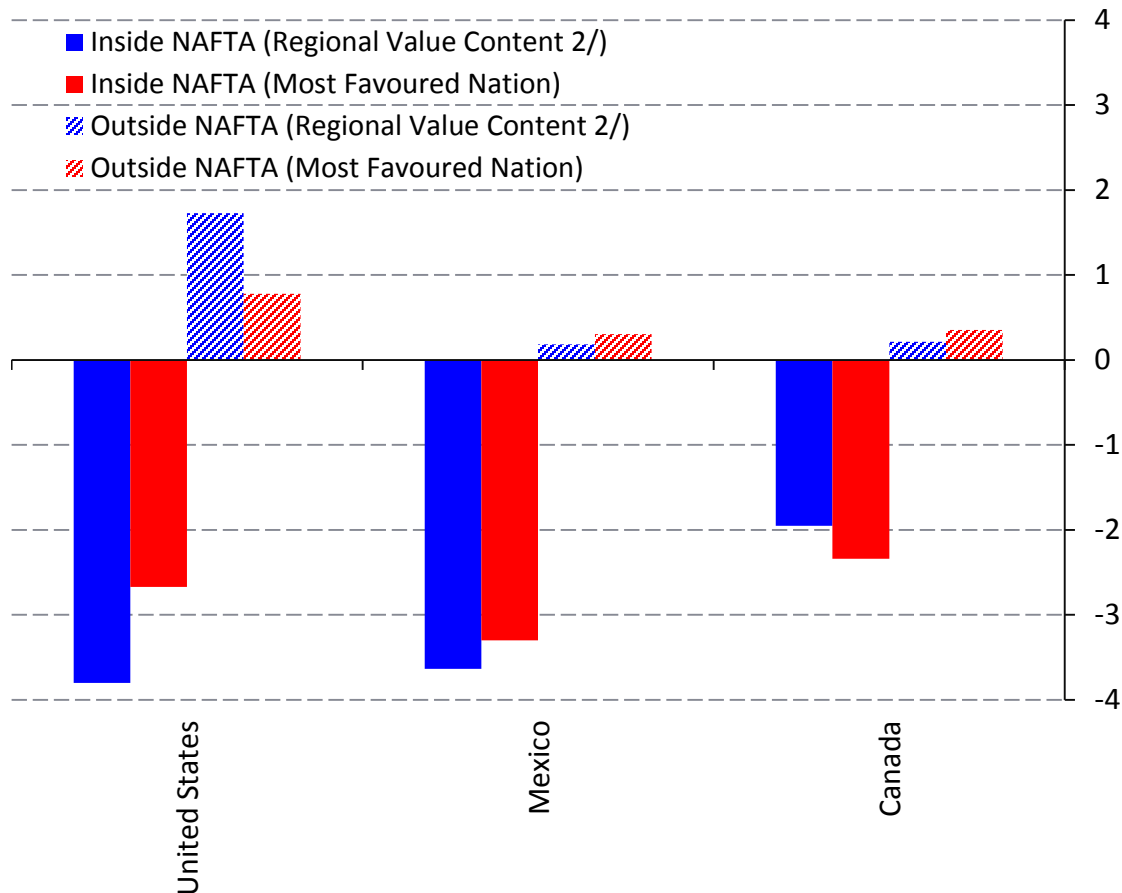
Effect on Sales of Transport Equipment Destination Market Percent



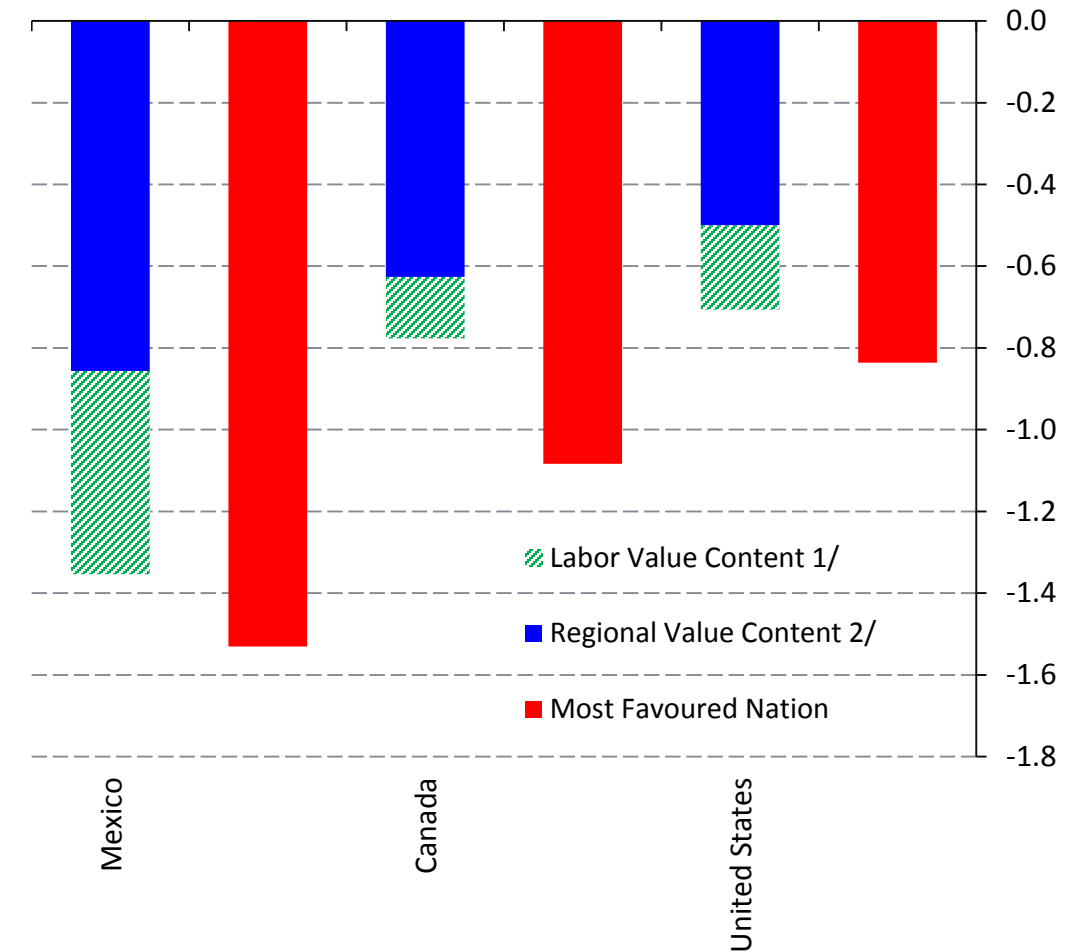
1/ Introduced like an iceberg cost of 2.4% of transport equipment from Mexico to other USMCA partners estimated to capture the requirement of 40% of a car must be made in a plant where workers earn at least \$16 per hour.
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Comparative statics: Transition from NAFTA to USMCA in the automotive sector

Effect on Real Imports of Transport Equipment Percent



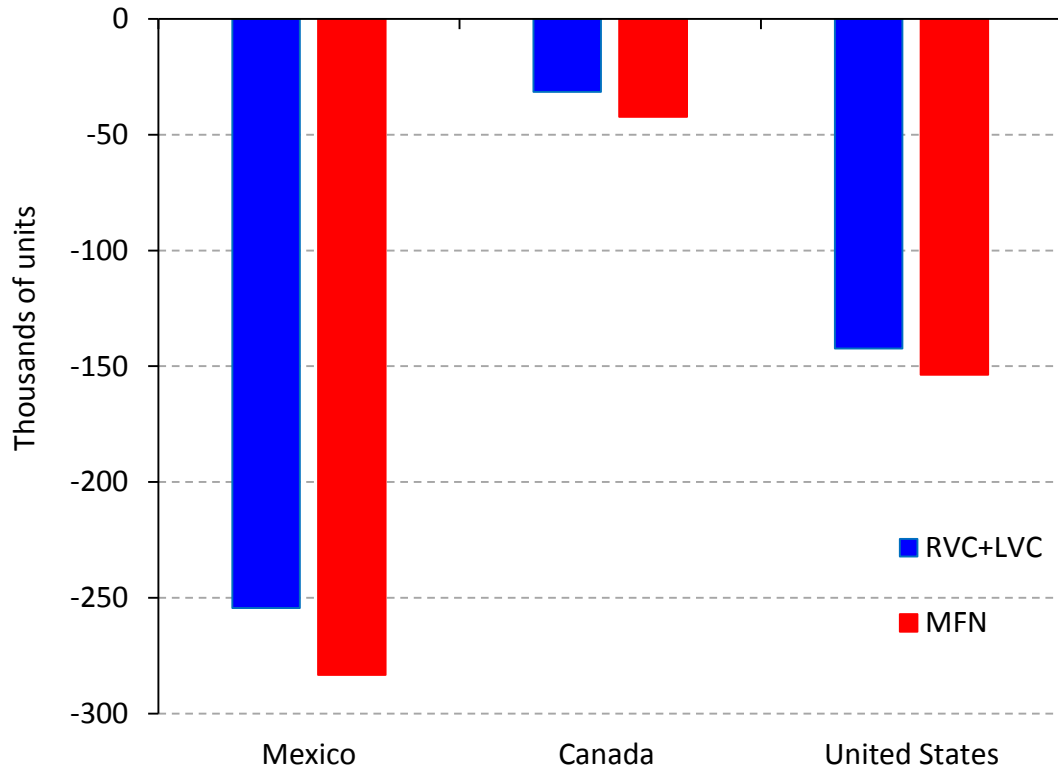
Effect on Real Consumption of Transport Equipment* Percent



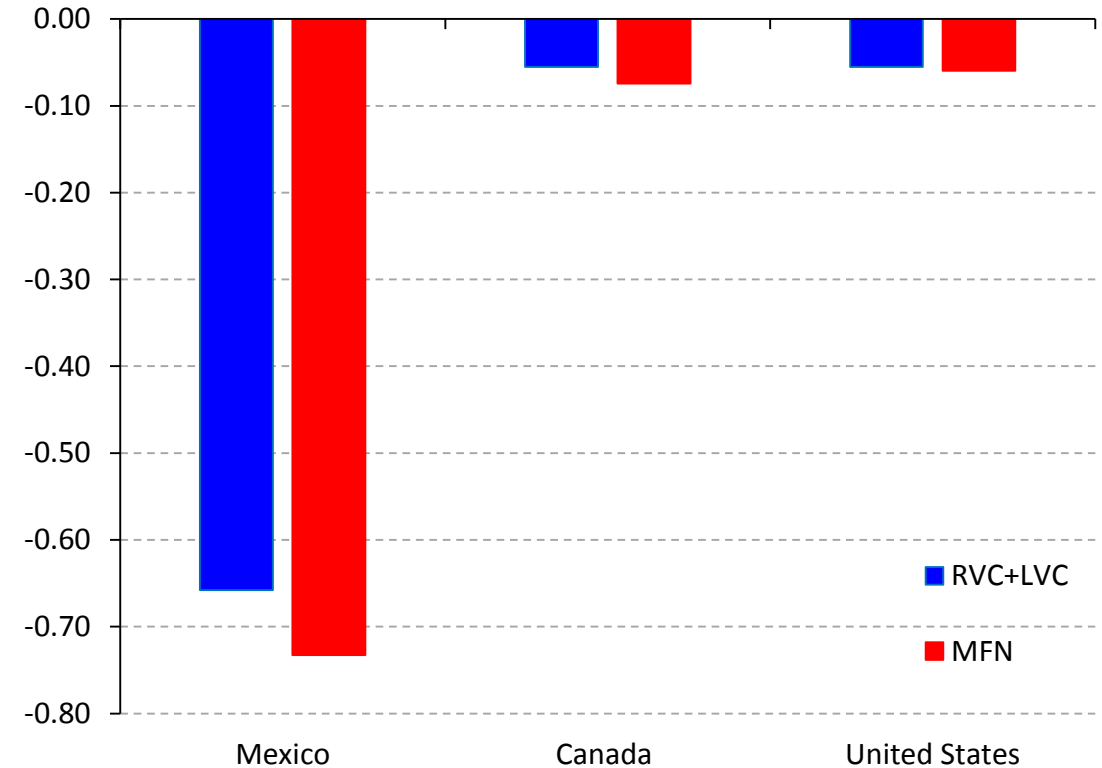
1/ Introduced like an iceberg cost of 2.4% of transport equipment from Mexico to other USMCA partners estimated to capture the requirement of 40% of a car must be made in a plant where workers earn at least \$16 per hour.
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 Source: Elaborated by Banco de Mexico with data from the World Input-Output Database 2016, based on Costinot, A., & Rodríguez-Clare, A. (2014) "Trade Theory with Numbers: Quantifying the Consequences of Globalization".
Handbook of International Economics, Volume 4, 197-261 and WTO Integrated Data Base (IDB).

Long term effects of transition from NAFTA to USMCA in the automotive sector

Effect on Light Vehicle Production*
Thousands of units



Effect on GDP*
Percent



* Note: Calculated by applying the percent losses estimated for transport equipment sector output in the counterfactual exercises to each country's light vehicle production for 2018.

Source: Banco de Mexico with data from Automotive News, Canada's National Statistical Agency, U.S. BEA, OCDE and INEGI.

* Note: Calculated by running the percent losses estimated for transport equipment sector output in the counterfactual exercises through each country's input-output table (as available from the OECD).

Source: Banxico with data from Automotive News, Canada's National Statistical Agency, U.S. BEA, OCDE e INEGI.

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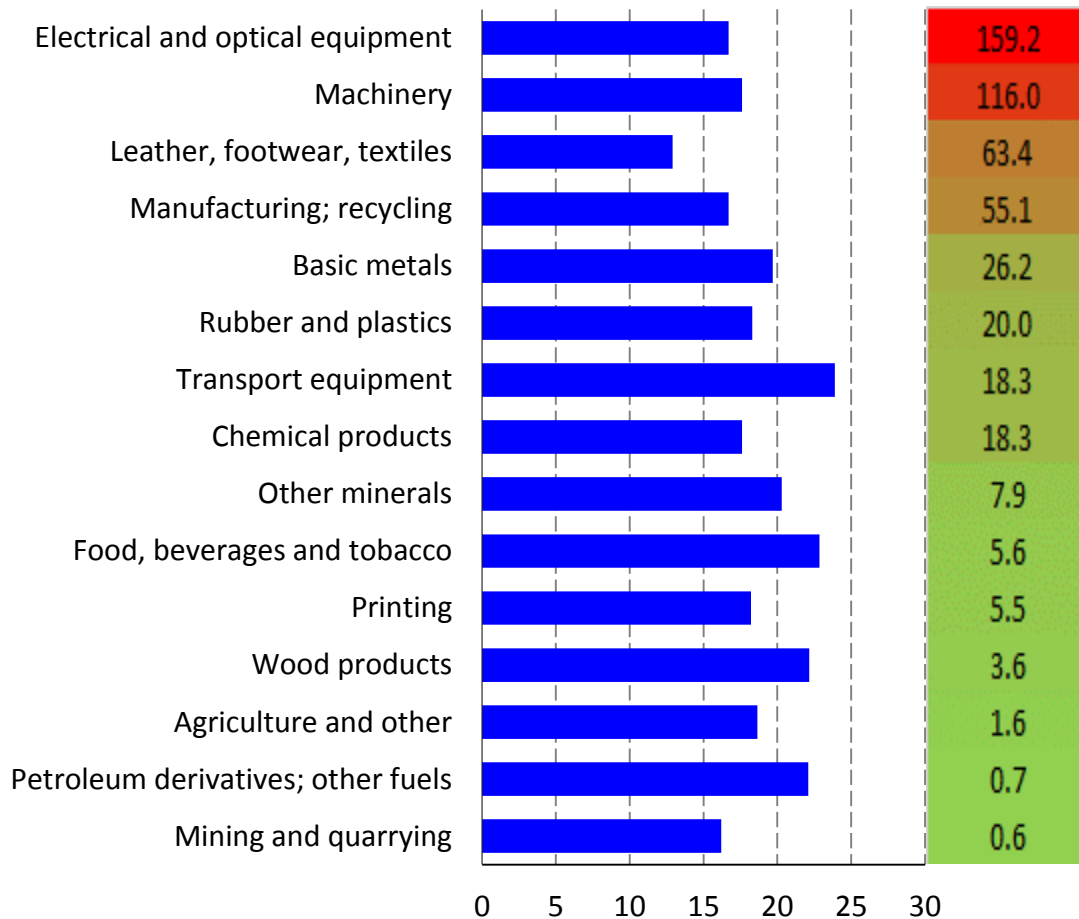
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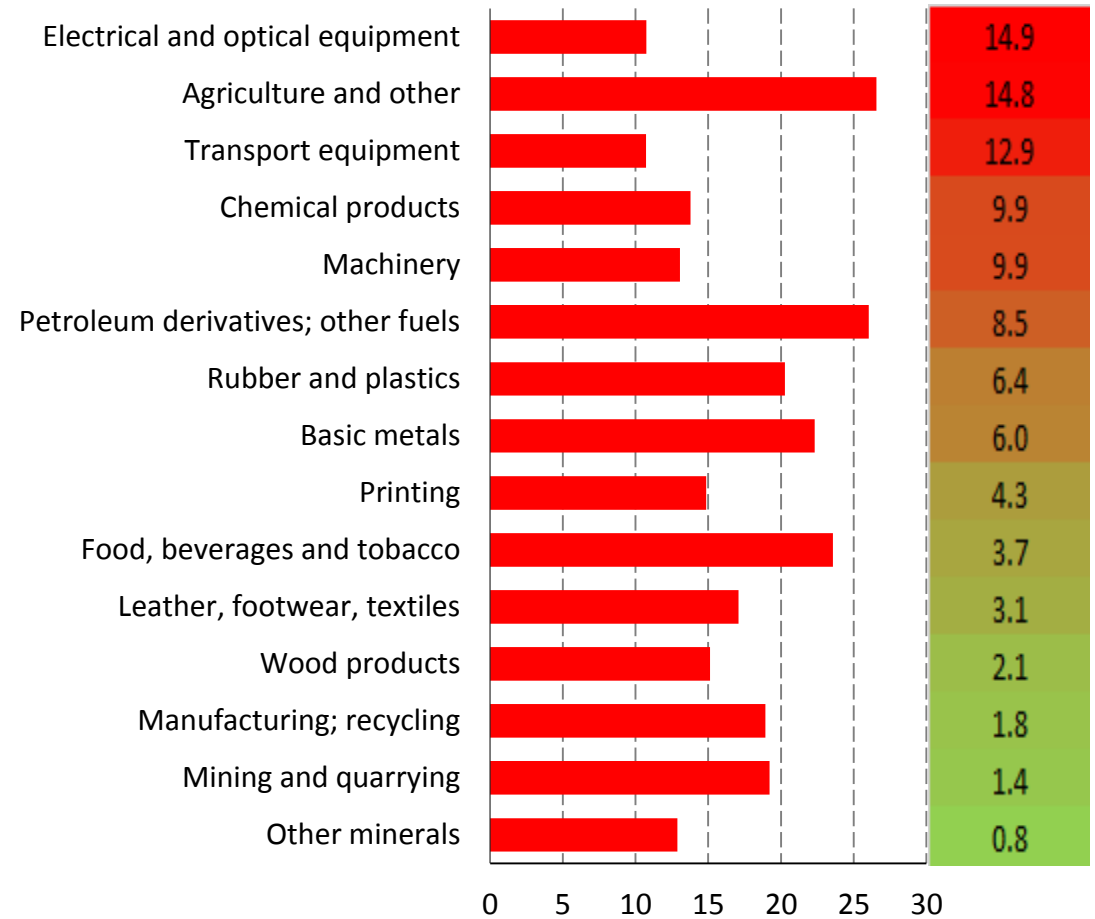
4 Final remarks

Weighted Average of Additional Ad-valorem Tariff to U.S. Imports from China by Sector
Percentage



Note: The numbers at the right represent the amount affected in billions of dollars.
Source: Census Bureau .

Weighted Average of Additional Ad-valorem Tariff to Chinese Imports from the U.S. by Sector
Percentage



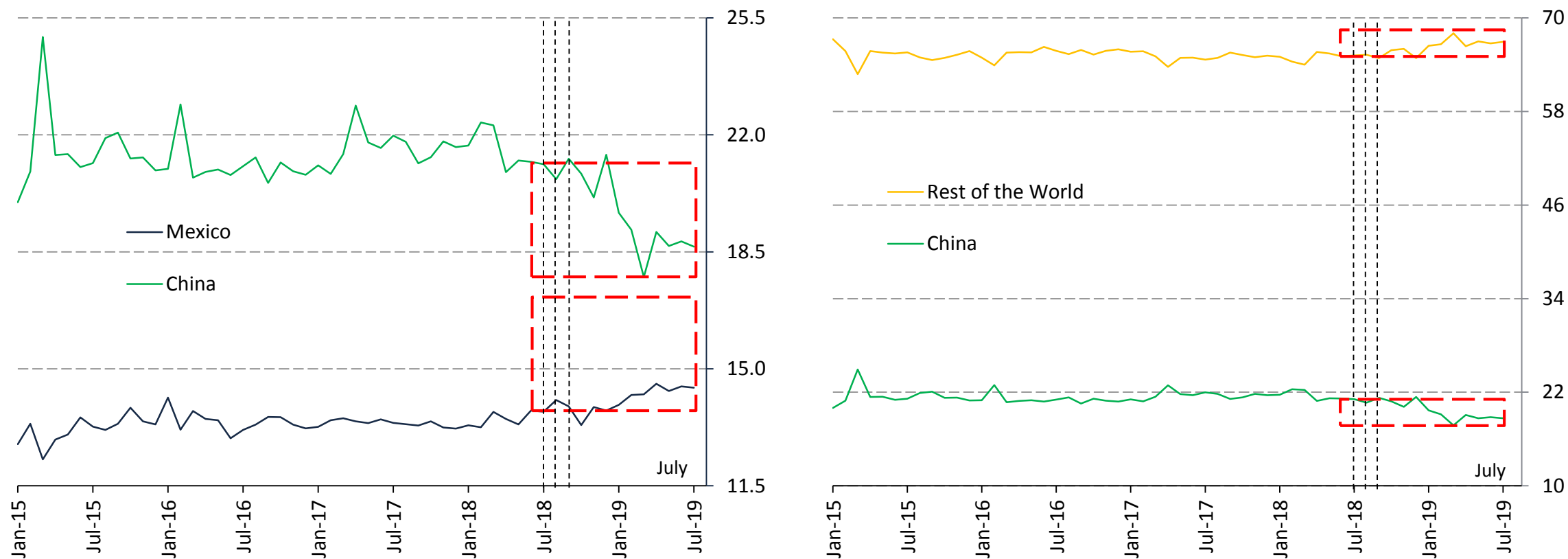
Note: The numbers at the right represent the amount affected in billions of dollars.
Source: Census Bureau .

Trade diversion gains for Mexico from the US-China trade war

- In a context of a moderation in global economic activity, the escalation of bilateral trade tensions between the United States and various countries has affected on international trade patterns.
- It is natural to assume that US-China trade disputes could in principle divert trade to Mexico.
- Indeed, Mexico's share in the US imports has been increasing while that of China has decreased.
 - ✓ *Although the imposition of higher tariffs on China by the US can explain, in part, the greater share of Mexico into the US imports, the total gain is not completely attributable to those tariffs.*
 - ✓ *The evidence suggests that this increase can be partly associated with greater participation in goods in which, regardless of the tariff increase, China has no presence in the US market.*

Share of U.S. Total Imports

Percentage; s. a.



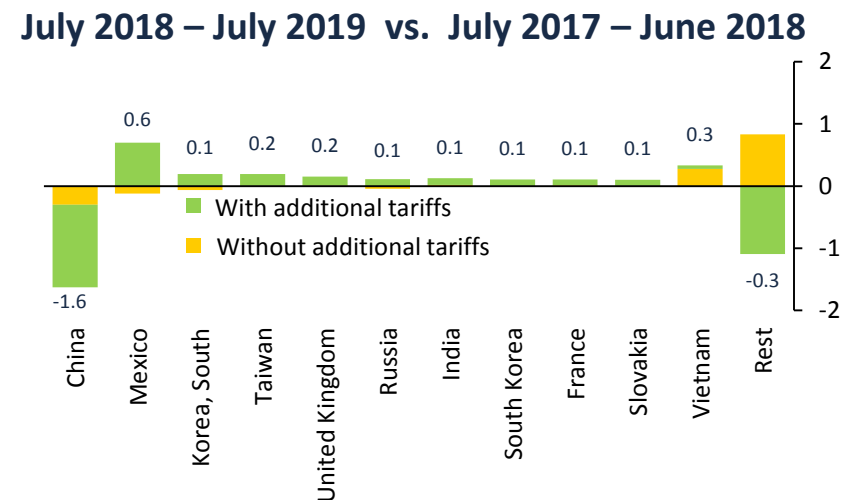
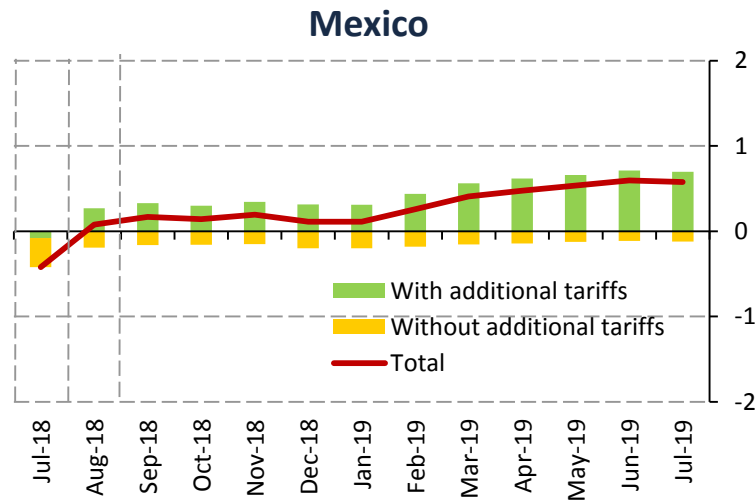
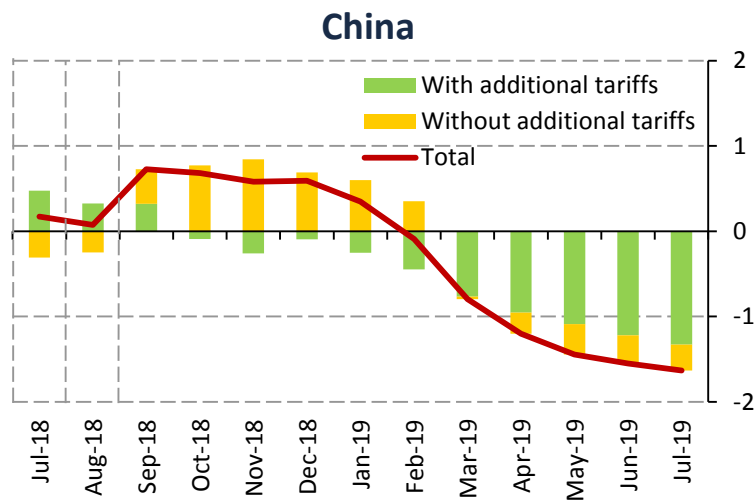
*Dotted lines indicate the month when each list became effective; July, August and September of 2018 for lists 1, 2 and 3, respectively.

s. a. / Seasonally adjusted data.

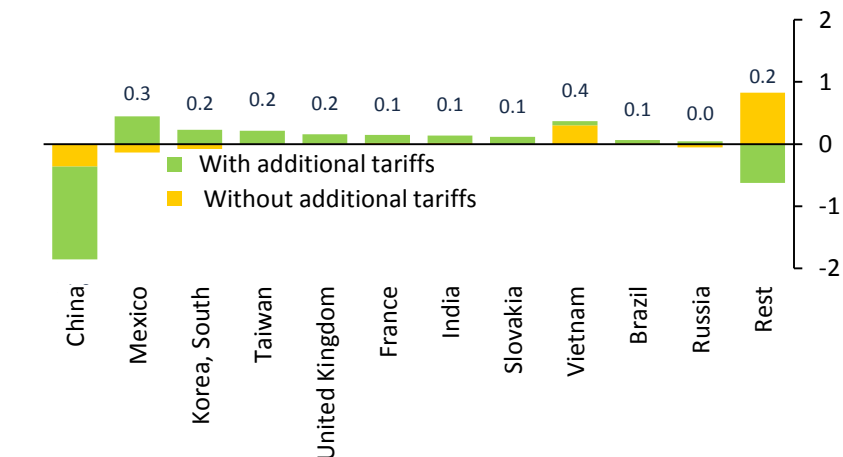
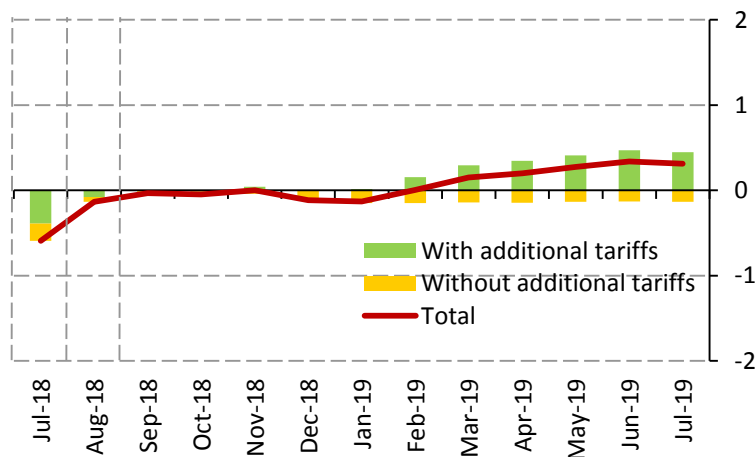
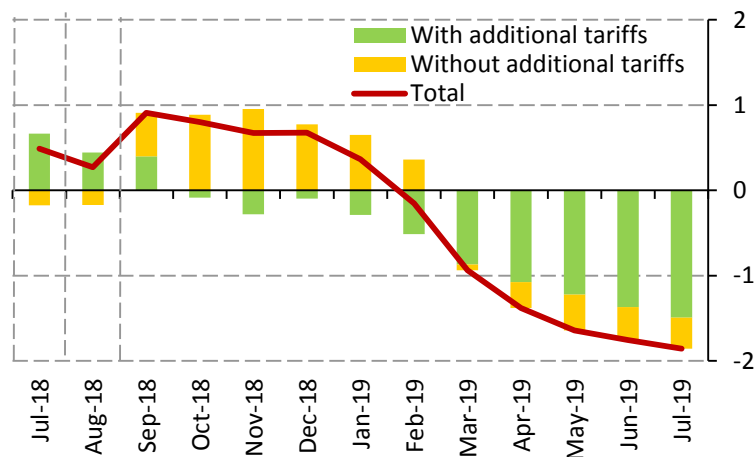
Source: Banco de México with data from U.S. Department of Commerce.

Cumulative Change on U.S. Imports' Share

Average share between July 2018 and the specified period vs. July 2017-June 2018, percentage points



Excluding HTS Subheadings where China had no share in 2017 (such as oil and most vehicles*)



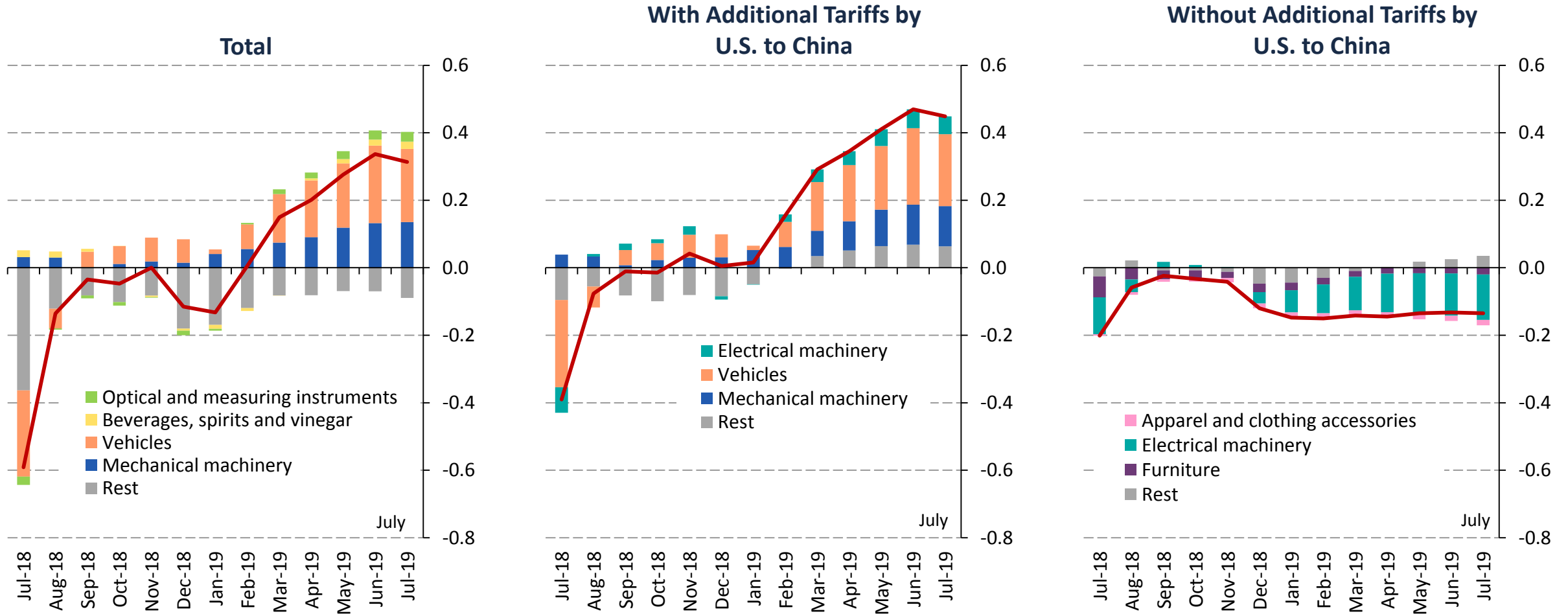
*Around 80% of the value of total U.S. imports of light vehicles is excluded from the analysis, because China had no share in 2017 in the products that make up this item.

**Dotted lines indicate the month when each list became effective; July, August and September of 2018 for lists 1, 2 and 3, respectively.

Source: Banco de México with data from U.S. Department of Commerce. For more details, see Box 2 in the Jan-Mar 2019 Quarterly Report.

Decomposition of the Cumulative Change in Mexico's Share in U.S. Imports, excluding HTS Subheadings where China had no share in 2017 (such as oil and most vehicles*)

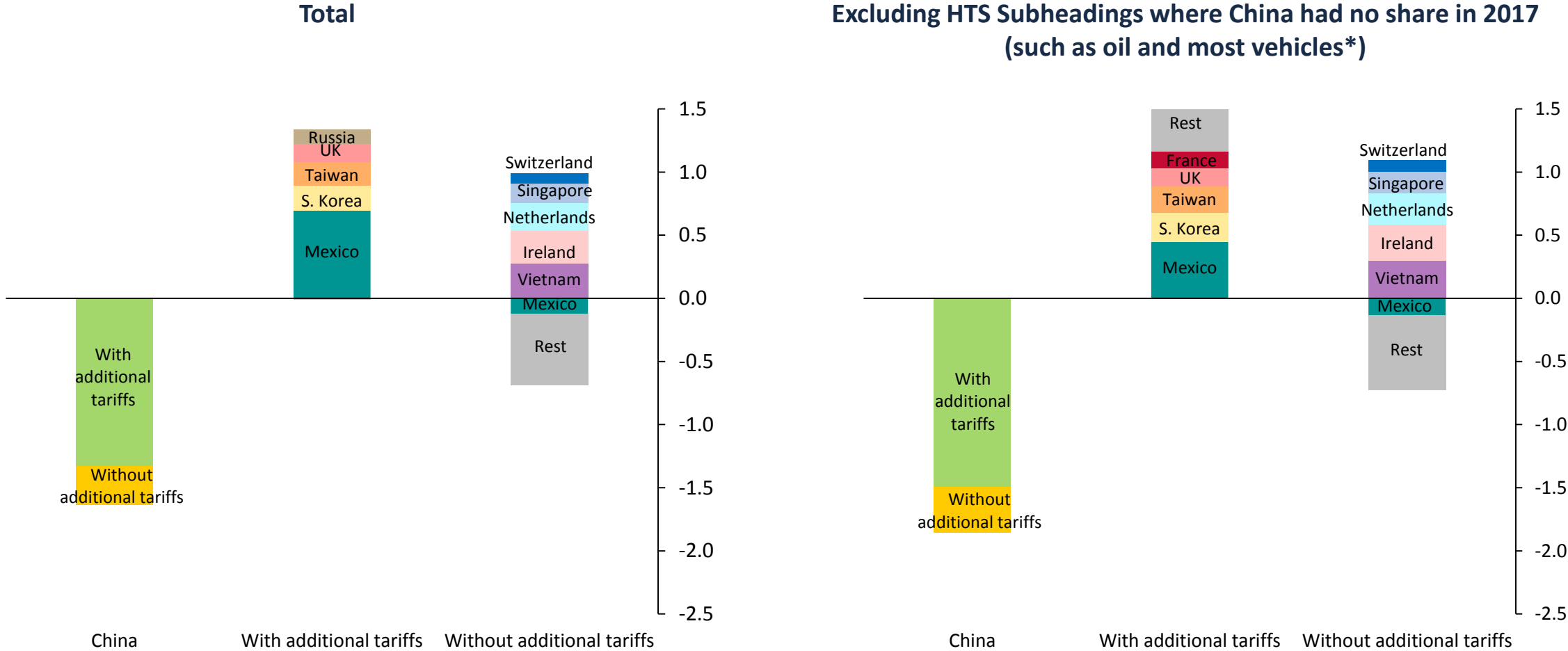
Average share on the specified period vs. July 2017 - June 2018, percentage points



*Around 80% of the value of total U.S. imports of light vehicles is excluded from the analysis, because China had no share in 2017 in the products that make up this item.
Source: Banco de México with data from U.S. Department of Commerce.

Decomposition of the Accumulated Change in U.S. Import Shares by Country

Average share on July 2018 - July 2019 vs. July 2017 - June 2018

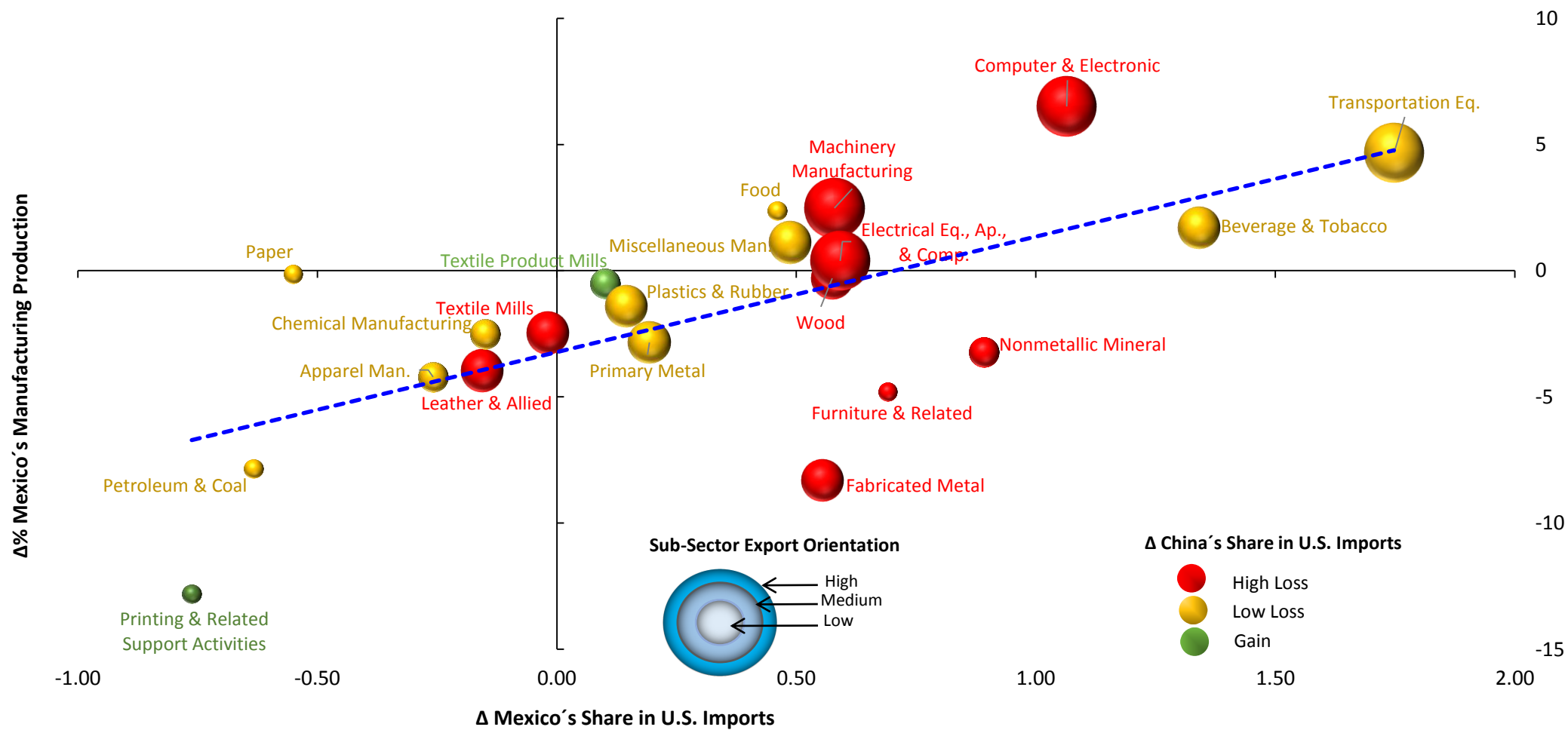


*Around 80% of the value of total U.S. imports of light vehicles is excluded from the analysis, because China had no share in 2017 in the products that make up this item.

Source: Banco de México with data from U.S. Department of Commerce.

Manufacturing: Production and Export

Percentage; s. a.



s. a./ Seasonal adjusted series.

Comparisons are from the period **Jan-Jul 2019 vs. Jan-Jul 2018**. The colors of the spheres represent the change in the Chinese products' share in U.S. imports.

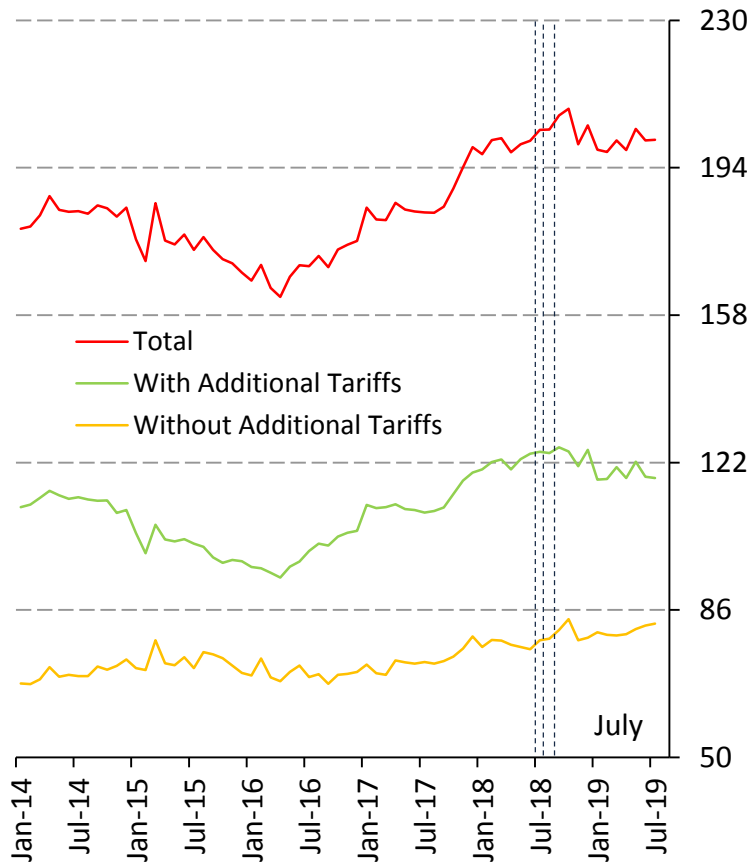
Source: US Census Bureau, System of National Accounts and EMIM, INEGI.

U.S. Imports with and without Additional Tariffs to China

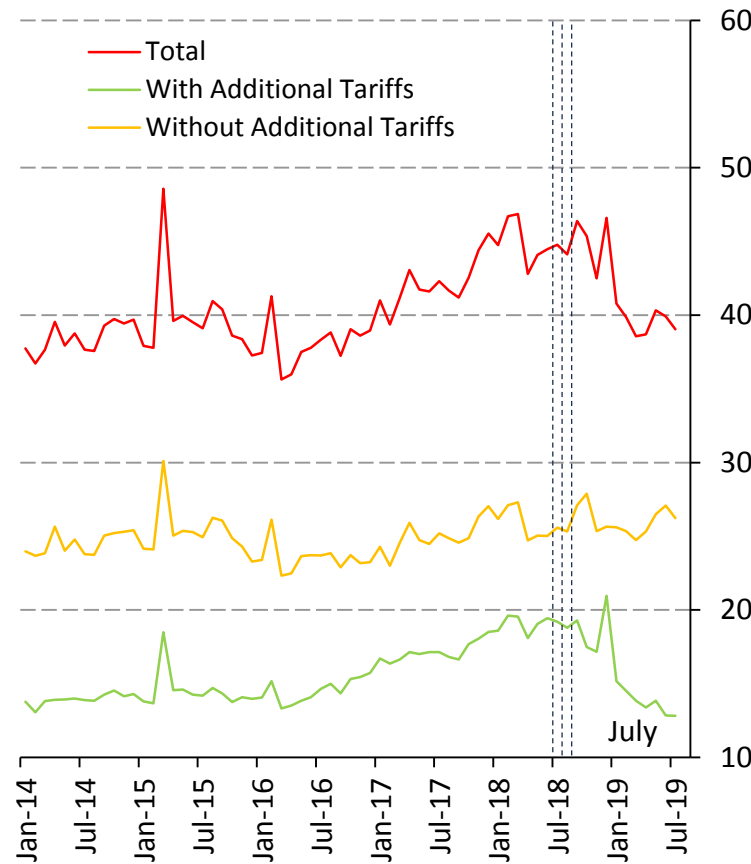
Excluding HTS Subheadings where China had no share in 2017 (such as oil and most vehicles*)

U.S. Billions dollars, s. a.

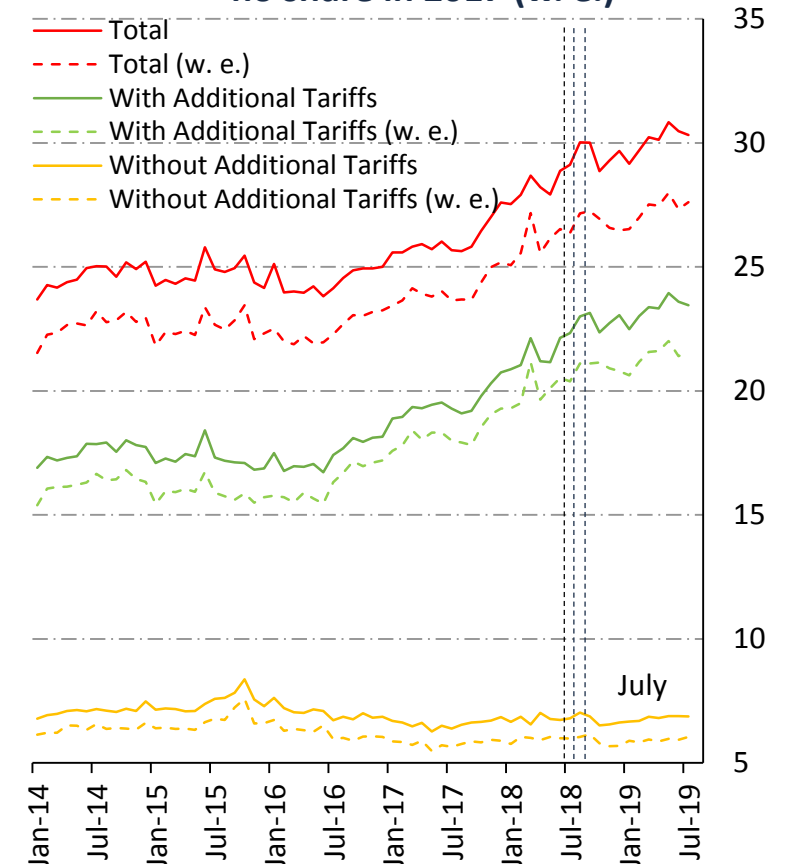
Total U.S. Imports



U.S. Imports from China



U.S. Imports from Mexico Total and Excluding HTS Subheadings where China had no share in 2017 (w. e.)



*Around 80% of the value of total U.S. imports of light vehicles is excluded from the analysis, because China had no share in 2017 in the products that make up this item.

**Dotted lines indicate the month when each list became effective; July, August and September of 2018 for lists 1, 2 and 3, respectively.

s. a. / Seasonally adjusted data.

w. e. / With exclusions.

Source: Banco de México with data from U.S. Department of Commerce.

Unit Value Index of Exports from Mexico to the U.S. of Products with Additional Tariffs to China

Index $t_0 = 100$; 3-month moving average and controls for similar goods not subject to additional tariffs to China

Tariffs on U.S. Imports Enacted by U.S. to China

List ^{1/}	Date Enacted	Products (# HTSUS-8) ^{2/}	Tariff change (p.p.)	Billions USD ^{3/}
List 1	Jul 6, 2018	818	25	34
List 2	Aug 23, 2018	279	25	16
List 3	Sep 24, 2018	5,733 ^{4/}	25	200
List 4A	Sep 1, 2019		15	
List 4B	Dec 15, 2019	3,805 ^{5/}	15	300

1/ On September 3, 2019, the U.S. Trade Representative Office (USTR) notice an additional increase in the tariff rate from 25 to 30% in lists 1, 2 and 3, effective as of October 1, 2019. Although an official statement has not been issued, through its social networks the president of the United States reported that this measure would be postponed until October 15.

2/ The USTR allowed applications to be made for certain products to be excluded. Thus, for lists 1, 2 and 3, 174, 34 and 9 ten-digit tariff codes have been excluded, respectively. The exclusion will be retroactive to the date on which the tariff measures began in each of the lists and the duration of the same will be one year after the date of publication.

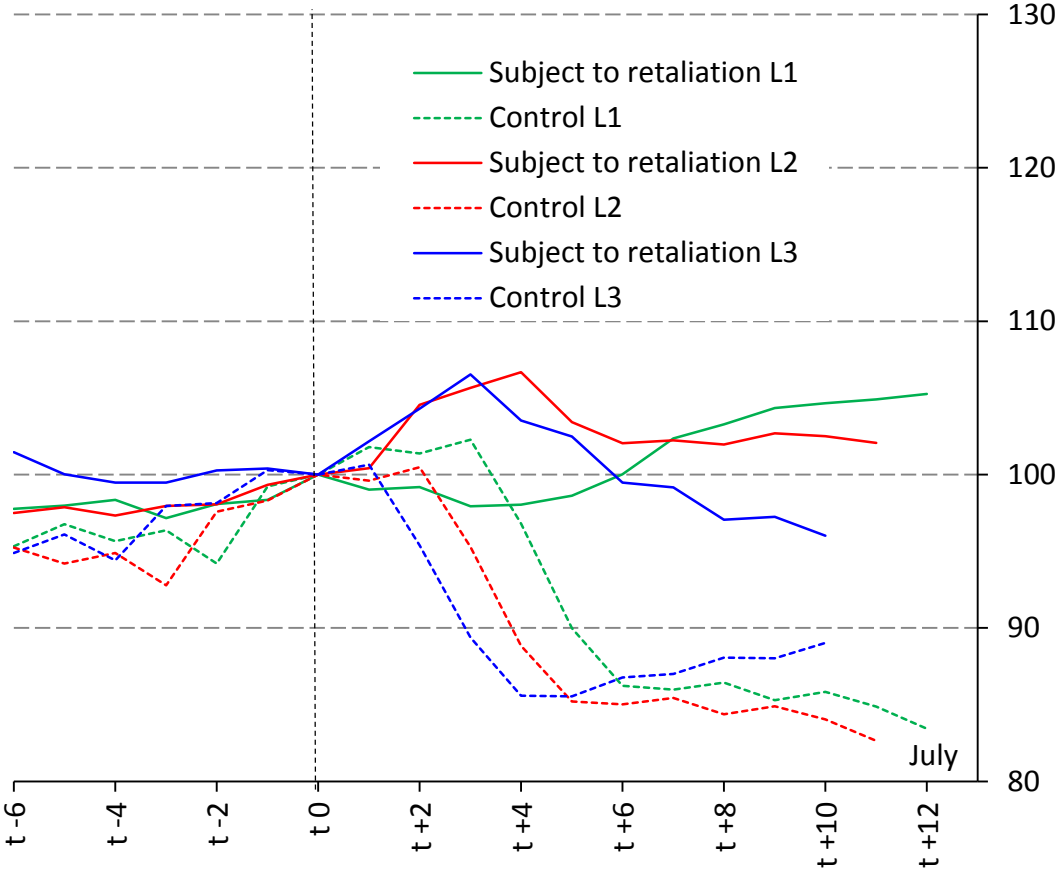
3/ It refers to a commercial annual value calculated by the USTR.

4/ At the beginning the list included 5,745 eight-digit subheadings.

5/ The action taken on July 2, 2019 by the USTR included an additional duty of 25% for 3,805 eight-digit subheadings. On August 20, 2019, the USTR indicated that the additional tariff rate would be modified to 10%, to finally place it in an additional 15% on August 30 of this year.

Note: Controls for L1, L2 and L3 may include many of the same goods.

Source: United States Trade Representative Office.



* t_0 indicates the month when each list became effective; July, August and September of 2018 for lists 1, 2 and 3, respectively.

Source: Banco de México with data from PMI Comercio Internacional, S.A. de C.V.; and SAT, SE, Banco de México and INEGI. Merchandise Trade Balance. SNIEG. Information of National Interest.

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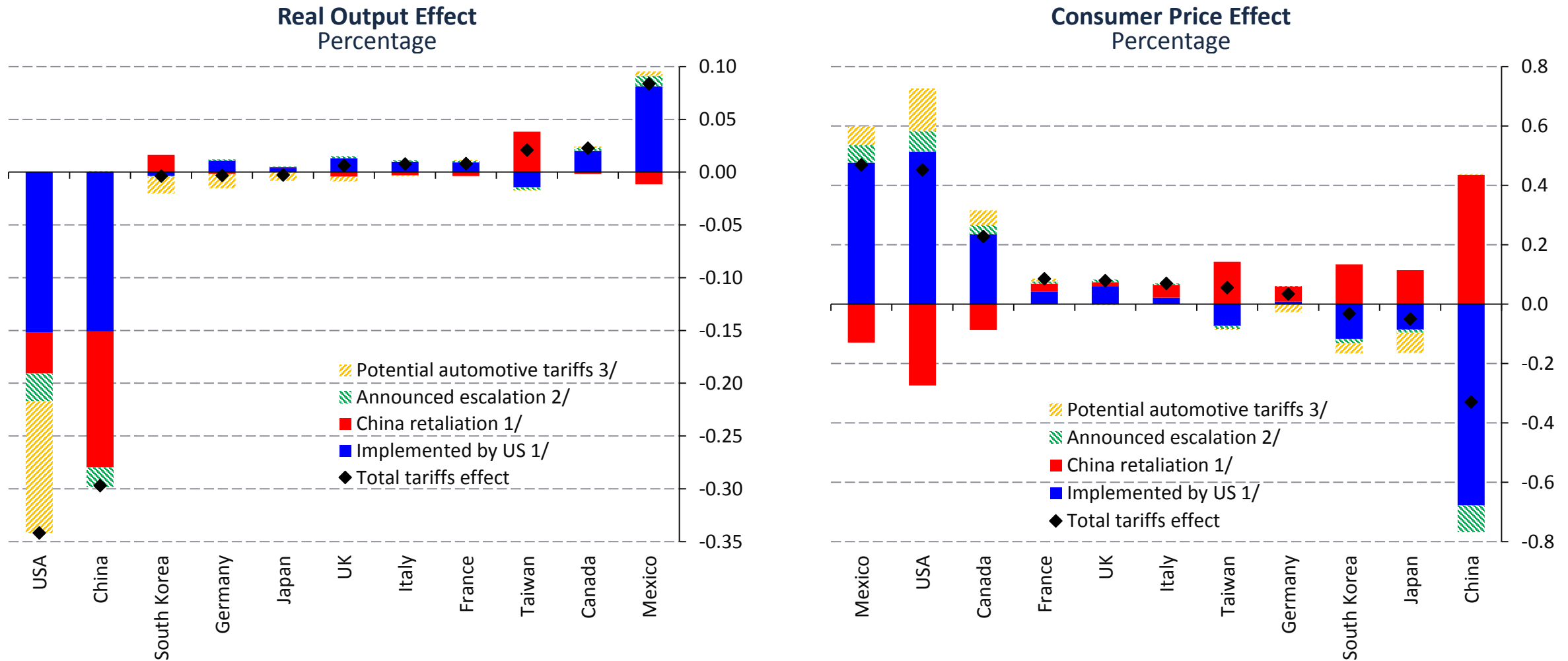
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Estimation of long-term effects and spillovers from US-China trade tensions

- In what follows we present the results of another exercise based on a **quantitative general equilibrium trade model** (see Costinot and Rodríguez-Clare [2014]), that uses as inputs the information contained in the World Input-Output Database (WIOD), in which we estimate how the recent wave of tariff measures, either implemented or threatened between the US and China, could affect long-term economic activity in these countries, as well as the potential spillovers of these measures to third countries.
- To properly interpret the results of this exercise, it is important to keep in mind that this exercise only contemplates the general equilibrium implications of changes to tariff rates. The effects that the uncertainty around trade policy may generate in investment and consumption decisions is not captured by this exercise.

Estimation of long-term effects and spillovers from US-China trade tensions



1/ The implemented scenario considers all the implemented tariffs by USA to Chinese imports (250Bn in 2018 and 300Bn in 2019), as well as the retaliations provided by China during 2018 and 2019.

2/ The Announced escalation scenario considers the potential rise of 5pp for each set of goods implemented by US announced in August.

3/ Excludes Canada and Mexico.

Source: Calculations provided by Banco de Mexico with information from the World Input-Output Database 2016, based on Costinot, A., & Rodríguez-Clare, A. (2014) "Trade Theory with Numbers: Quantifying the Consequences of Globalization". *Handbook of International Economics*, Volume 4, 197-261.

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Final Remarks

- There is some evidence suggesting that Mexico has benefitted from the trade diversion caused by US-China trade disputes.
- However, these “gains” may be short-lived if trade tensions lead to a further slowdown of global economic activity, larger trade distortions and a break-up of GVC.
- Furthermore, Mexico faces its own share of trade tensions:
 - ✓ *USMCA still not ratified by the U.S. and Canada.*
 - ✓ *Tariff threats related to non-trade issues (i.e. migration).*
 - ✓ *Possibly, an implementation of further 232 tariffs.*



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