

## Appendix: Inflationary Effects of Trade Disputes with China

This appendix provides detailed estimates from “Inflationary Effects of Trade Disputes with China” by Galina Hale, Bart Hobijn, Fernanda Nechio, and Doris Wilson, *FRBSF Economic Letter* 2019-07, February 25, 2019. <https://www.frbsf.org/economic-research/publications/economic-letter/2019/february/inflationary-effects-of-trade-disputes-with-china/el2019-07.pdf>

We first measure the local content of imported goods and the import content of U.S.-made goods using information from the 2017 Census Bureau U.S. International Trade Data, the 2016 Bureau of Labor Statistics input-output matrix, and the 2017 personal consumption expenditures (PCE) and nonresidential private fixed investment (PFI) from the U.S. national accounts.

Table 1 reports our results for PCE. The first column reports the expenditure shares of PCE, for reference. Column (2) reports the fraction of each category of PCE that is spent on imported goods, based on raw trade statistics. It shows that in 2017, only 10.3% of consumer spending was on imported goods and services. This was largely driven by durable and nondurable goods.

However, the shares reported in column (2) include the local content of imports, which should be removed, and exclude the import content of domestic goods, which should be added.

Column (3) shows that the local content of imports is about 4.4% of PCE. This means that, of the 10.3% of PCE consumers spent on imported goods, only 5.9% represents payments to foreigners. Column (4) reports the import content of U.S.-made goods, which is 4.7% of PCE.

To properly measure the share of the U.S. consumer spending that goes to imported goods, we take the total amount consumers spend on final goods produced abroad (10.3% of PCE), subtract local content that is embedded in the prices of these goods (4.4% of PCE), and add import content in U.S.-made goods and services (4.7% of PCE).

Column (5) shows that U.S. consumers spent 10.7% of their overall personal expenses on imported goods and services in 2017. While the shares reported in columns (2) and (5) are similar for total imports, the differences are more substantial for subcategories.

Table 2 repeats the same calculations for categories of nonresidential PFI: equipment, intellectual property goods, and structures.

Table 3 repeats the analysis, but limits the calculations to imports from China. The numbers in Panel A are analogous to those in column (5) of Table 1, while the numbers in Panel B are analogous to those in column (5) of Table 2. Numbers in Table 3 are used in the calculations of the impacts of tariffs on PCE and nonresidential PFI.

Table 1. Total spending on imports: Personal Consumer Expenditures (Hale et al. 2019)

	(1)	(2)	(3)	(4)	(5)
	PCE expenditure shares	Share spent on imports	Local content in imports sold to final demand	Import content in domestic goods	<b>Total spending on imports</b> (2)-(3)+(4)
Total	100.0	10.3	4.4	4.7	<b>10.7</b>
Less food and energy	88.8	10.4	4.4	4.3	<b>10.2</b>
Main industries:					
Durable goods	10.5	33.1	15.9	6.2	<b>23.3</b>
Nondurable goods	20.6	26.0	13.1	6.2	<b>19.1</b>
Services	68.9	2.1	0.0	4.1	<b>6.2</b>

Table 2. Total spending on imports: Nonresidential Private Fixed Investment

	(1)	(2)	(3)	(4)	(5)
	PFI expenditure shares	Share spent on imports	Local content in imports sold to final demand	Import content in domestic goods	<b>Total spending on imports</b> (2)-(3)+(4)
Nonresidential Fixed Investment	100.0	27.8	12.1	10.6	<b>26.3</b>
Main categories:					
Equipment	44.7	52.0	26.3	8.6	<b>34.3</b>
Intellectual Property Products	32.8	13.8	1.1	15.2	<b>28.0</b>
Structures	22.5	0.3	0.0	7.9	<b>8.1</b>

Table 3. Total spending on imports from China

Panel A. Personal Consumer Expenditures		Panel B. Nonresidential Private Fixed Investment	
Total	<b>1.7</b>	Total	<b>5.4</b>
Less food and energy	<b>1.8</b>		
Main industries:		Main categories:	
Durable goods	<b>6.6</b>	Equipment	<b>9.4</b>
Nondurable goods	<b>3.1</b>	Intellectual Property Products	<b>2.4</b>
Services	<b>0.6</b>	Structures	<b>1.6</b>