Tariff Passthrough at the Border and at the Store: Evidence from US Trade Policy*

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May 2019

Preliminary and Incomplete

Abstract

We use data collected at the border and at retailers to characterize the impact of recent changes in US trade policy on importers, consumers, and exporters. We start by studying the tariffs on imports of steel and Chinese goods that were imposed during 2018. We find little difference in the "at-the-dock" ex-tariff price levels and stickiness for otherwise equivalent goods that were affected and not affected. This nearly complete passthrough of tariffs to the total price paid by importers suggests the tariff incidence has fallen largely on the US. We simultaneously estimate exchange rate passthrough and find the response to be far more muted. Next, in-progress analyses of retail prices preliminarily show more heterogeneity, with the higher cost of imports passed through to consumers for some goods, such as washing machines, but absorbed by lower retailer profit margins for others, such as many from China. Finally, in contrast to imports, US exports subjected to retaliatory tariffs exhibited declines in their ex-tariff prices relative to equivalent but non-targeted goods.

JEL-Codes: F01, F13, F14, F04.

Keywords: Trade Policy, Tariffs, Exchange Rate Passthrough.

*This research was conducted with restricted access to Bureau of Labor Statistics (BLS) data. The views expressed herein are those of the authors and do not necessarily reflect the views of the BLS, the Federal Reserve Bank of Boston, the Federal Reserve System, or the IMF. We are grateful to Rozi Ulics for her substantial efforts as BLS project coordinator and to Florencia Nhilo and Keith Barnatchez for research assistance. Alberto Cavallo is a shareholder of PriceStats LLC, a private company that provided proprietary data used in this paper without any requirements to review the findings prior to their release.

1 Introduction

Since 2018, the United States has initiated a large number of significant changes to its trade policies. Most notably, it has imposed import tariffs ranging from 10 to 50 percent on goods including washing machines, solar panels, aluminum, steel, and roughly $250 billion of goods from China. In response, Canada, China, the European Union (EU), and Mexico have imposed retaliatory tariffs. On a scale not seen since the 1920s, the world's largest economies have passed measures making it far more costly to buy goods from each other.[1] This paper uses good-level data to assess the impact of these policy changes on US trade prices measured at the border and on US retail prices measured at the store.

We start by studying US import prices using product-level data from the Bureau of Labor Statistics (BLS). The response of import prices to tariffs is of critical interest in part as it contains information on the incidence of trade policy. If the tariff's incidence falls primarily on the exporter, the ex-tariff import price will drop significantly, leaving the importer (who pays the ex-tariff price plus the tariff) largely unaffected. In this case, the importing government's tariff revenues largely come from the reductions in profit margins from foreign exporters. Alternatively, if the tariff's incidence falls primarily on the importer, the ex-tariff import price will be relatively stable, raising the total cost the importer must pay (inclusive of tariffs) to buy foreign goods. Our analyses indicate that incidence of US import tariffs falls largely on the US, consistent with the results using Census unit values in Amiti, Redding, and Weinstein (2019) and Fajgelbaum, Goldberg, Kennedy, and Khandelwal (2019).[2]

We compare import (ex-tariff) price indices constructed for otherwise equivalent goods affected and not affected by tariffs and, as of April 2019, find essentially no difference. This is true when comparing price indices for steel products sourced from different countries, some of which face US import tariffs and others which don't. It is also true when comparing prices of

[1] See Amiti, Redding, and Weinstein (2019), Bown and Kolb (2019), and Cavallo, Cal, and Laski (2019) for helpful overviews of the policy setting and time-lines of changes made.

[2] This does not, of course, imply that China benefits from the policy. Even if Chinese exporters earned the same price and profit margin per unit exported to the US, the tariffs would reduce the number of units sold.

imports from China that are subject to the tariffs, both when compared to imports of the same types of goods but from non-Chinese suppliers and compared to other types of Chinese goods that aren't subject to tariffs. Using a regression framework, we compare import prices for goods affected and unaffected by the tariffs, controlling for other factors that might influence prices. Controlling only for sectoral inflation rates, these regressions suggest the typical good imported from China experienced an ex-tariff price decline of about 5 percent of the tariff rate after 9 months. This estimate means that a 20 percent tariff, for example, would be associated with a 1 percent decline in the ex-tariff price and a 19 percent increase in the total price paid by the US importer. When we additionally include controls for the exchange rate and foreign producer prices, the estimates become statistically indistinguishable from zero.

The BLS micro data additionally offer the ability to study the price dynamics underlying the behavior of these indices. For example, there is no discernible difference in the share of steel imports experiencing price declines from countries affected by tariffs compared to those unaffected by tariffs. The share of goods experiencing ex-tariff price declines per month remained near the historical average of 5 percent for the affected goods from China, even as the frequency of price declines increased for all other goods to levels closer to 10 percent per month.

Given these data track prices of individual goods and are immune to possible changes in composition within categories, they are ideal for comparing the passthrough rates of tariffs with that of exchange rate shocks. Standard models assume that, absent imported intermediate inputs, tariffs and exchange rate movements of similar size and persistence should result in similar passthrough rates. The validity of this assumption is additionally critical for analyses of policies such as fiscal devaluations or border adjustment taxes.[3] Consistent with the results in Fitzgerald and Haller (2018), we find that import prices (inclusive of tariffs) move much less in response to exchange rate shocks than equivalently-sized changes in tariff rates. Our exchange rate passthrough estimate of roughly 20 percent for 9 months implies that a 20 percent dollar depreciation would only raise the dollar price of imports by 4 percent, far less than the 19 percent

[3]See, for example, Farhi, Gopinath, and Itskhoki (2019) and Barbiero, Farhi, Gopinath, and Itskhoki (2019).

discussed above for an equivalently sized tariff.

Next, having demonstrated that incidence of the US import tariffs fall largely on the US, we study the extent to which the "at-the-dock" price increases pass through into higher retailer prices or are instead absorbed by lower retailer profit margins. It is difficult to study the impact of tariffs using cross-sectional variation in retail price indices because they are often provided at a level of aggregation that combines meaningful shares of goods that are both affected and not affected by the tariffs. Toward that end, we collect online pricing data from retailers where we can identify whether individual goods are affected or not. Our work in this area remains in-progress, but we preliminarily find much less of a difference in price changes for affected and unaffected goods than what we found in the imports data. This is suggestive that, at least through April 2019, much of the price impact is absorbed by retailers who earn lower profit margins on those imports where they pay a tariff.

Another possibility, following the logic and analysis in Flaaen, Hortaçsu, and Tintelnot (2019) and Amiti, Redding, and Weinstein (2019), is that in response to the tariffs, domestic producers raise their prices to retailers on goods that compete with the imports. Or alternatively, retailers may simply be increasing prices throughout sectors that are exposed to the import tariffs, earning higher margins on those goods not impacted by tariffs. Indeed, scraped retailer prices for washing machines do exhibit a very clear jump shortly after tariffs were imposed.

Finally, we turn to BLS export prices, which we use to gauge whether US exporters maintained their prices in the face of retaliatory tariffs impacting their foreign sales. Since these tariffs were applied by many different governments, they vary more than the US import tariffs in terms of their timing, scope, and scale.[4] Simple comparisons of export price indices of affected and unaffected products, however, suggest that affected exporters have dropped their prices in response to foreign trade policies. Though our price index of affected exports is somewhat more volatile than the equivalent for unaffected exports, the most marked break in their trends occurs in mid-2018, precisely when foreign retaliation toward US trade policy began.

[4] The retaliatory tariffs range from 4 to 140 percent, but most range from 5 to 40 percent.

From early 2016 to early 2018, price growth for the exports that would later be affected by retaliatory tariffs averaged about 4 percent per year, roughly twice the rate for the remaining set of exports. From mid-2018 onward, affected export prices declined at an annual pace of roughly 5 percent, compared to flat prices for the unaffected products. Splitting the analysis by country reveals that this decline in the relative export price of retaliated-upon products is almost entirely driven by US shipments to China.

2 US Imports

We start with our analysis of US import price data collected by the International Pricing Program at the BLS. Prices are collected monthly by survey and used to construct import price indices. As a result, one strength of working with BLS data relative to Census data is the ability to trace the import price of an identical good over time.[5] Gopinath and Rigobon (2008) provides additional detail on the BLS dataset and its construction.

The data include many observations deemed "unusable" for BLS price indices, generally due to the lack of an actual transaction for a given good in a given month. Our baseline treatment fills forward the most recent usable price in the place of unusable observations. We further weight all analyses using expenditures at the "classification group" level, and begin all our analyses in 2005 as this is when these weights become available. We drop all price changes that exceed 2.3 log points in magnitude and focus only on market transactions.[6] We conduct the analysis using only prices of trade invoiced in US dollars, which represents over 94 percent of US trade over our sample, and also exclude petroleum products. We use data only involving partner countries for which we have data on aggregate prices and exchange rates (our data on these macro variables cover 182 countries).

[5]One weakness of these data relative to others is that prices are sampled and purchase quantities are not available at the product level.

[6]More than a third of the import prices are non-market transactions such as intrafirm trade or shipments among related parties. Neiman (2010) characterizes differences in market and related party pricing behavior in the BLS data.

2.1 US Imports from China

Import tariffs were enacted on China in three waves during 2018. First, in July, the US imposed a 25 percent ad-valorem tariff on roughly $34 billion of imports. Second, in August, the 25 percent tariff was extended to cover another $16 billion in shipments. Third, in September, a 10 percent tariff was applied to roughly $200 billion in goods. Since goods in the BLS data can be concorded with harmonized system (HS) codes and we know the provenance of each shipment, we can easily associate each good with the tariff rate that applies to it in each month.

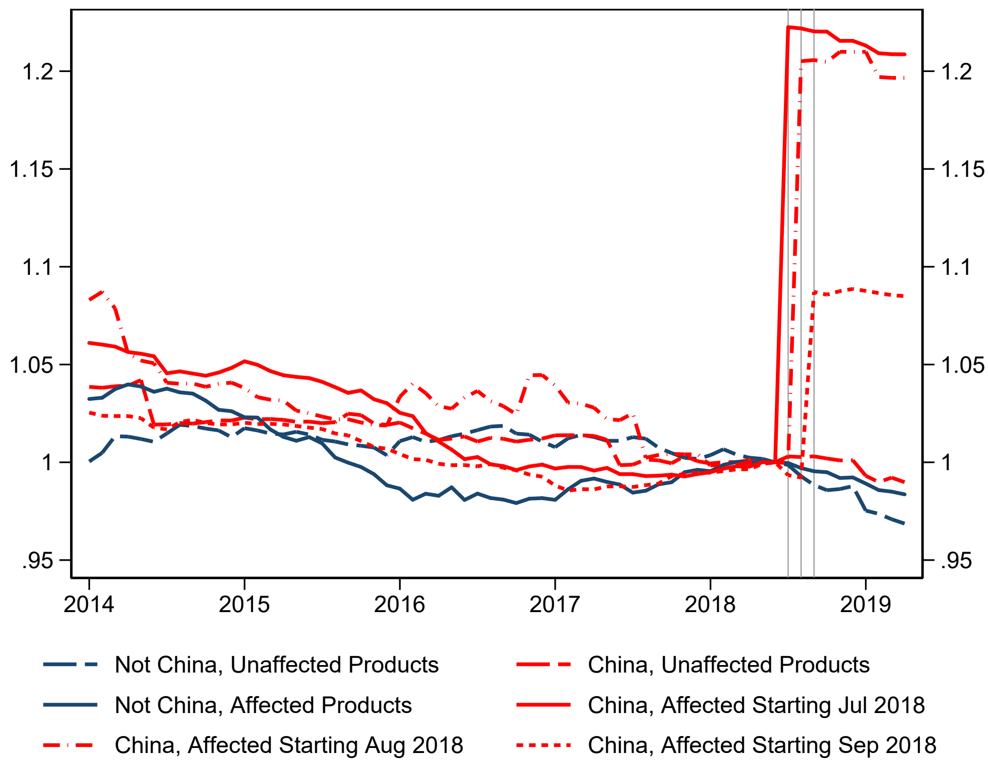
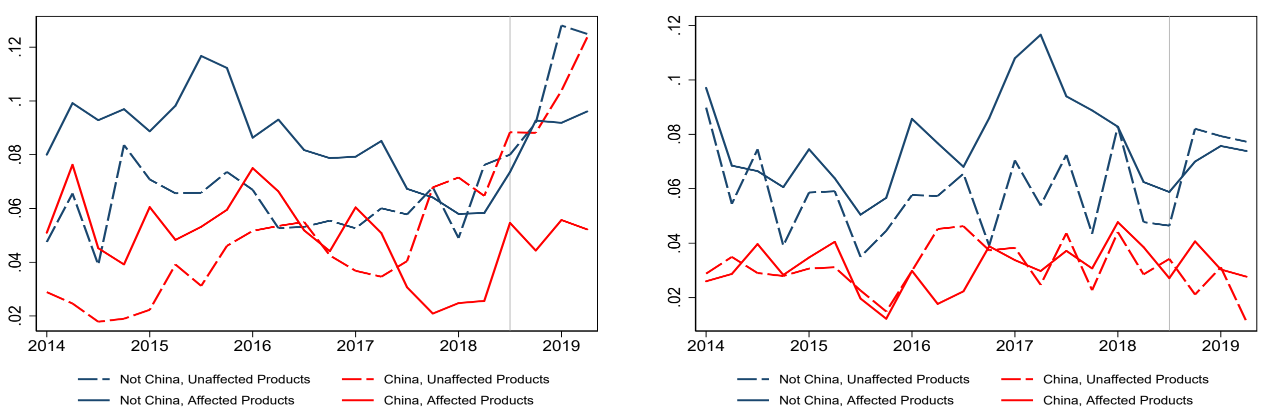


Figure 1: Import Price Indices, by China Tariff Wave (in Logs, June 2018=1)

Figure 1 plots price indices – inclusive of tariffs – constructed for six mutually exclusive and collectively exhaustive groups of US imports. The first two groups include the set of products that are unaffected by the 2018 tariff policy changes, divided into those exported by China and those exported by other countries. The third group includes products with HS codes that are affected, but which do not face the tariffs because they are not imported from China. The fourth, fifth, and sixth groups, then, capture imports from China that are affected by the three waves of tariff changes.[7] The price indices are normalized to 1 in June 2018, the last month prior to the imposition of tariffs on China.

All six categories exhibit very similar mildly deflationary trends for the four years prior to the tariffs. Affected products imported from countries other than China had the least deflation, with prices dropping by an annual average rate only slightly above 0 percent over the period. Other goods experienced annual deflation averaging closer to 1 or 1.5 percent over the same period. The products never targeted by tariffs, either because they are not affected good types or are affected good types but imported from countries other than China, continue these trends through 2018 and into early 2019. By contrast, each affected good category from China saw an immediate jump in its price, inclusive of tariffs, during the month the policy was implemented. The scale of the jumps are only slightly below the scale of the tariff rates, consistent with the fact that the ex-tariff prices did not exhibit meaningful breaks from their trends.



(a) Price Decreases

(b) Price Increases

Figure 2: Frequency of Monthly Price Changes (Averaged to Quarter)

The price indices in Figure 1 reflect the frequency of import price changes as well as the size of any non-zero changes. Since the BLS data are at the level of individual goods, we can observe if the stability of ex-tariff prices reflects "wait and see" behavior or any other important changes in patterns of price stickiness. Figure 2(a) plots the share of prices each month which decrease,

[7]Here, and in the rest of our analyses of the tariff on Chinese imports, we exclude a small number of goods that are impacted both by a China tariff and another product-based tariff (such as a steel product or solar panel).

averaged across the three months in each quarter to smooth the otherwise volatile series. It does this separately for four categories of goods: those of the type unaffected by the tariffs and imported from countries other than China, those unaffected even though they are imported from China, those affected but imported from outside of China, and those affected and imported from China, where only this latter group includes goods where the importer must actually pay a tariff. There are no obvious differences across the four groups and, if anything, products in that last set of goods appears the most stable. Figure 2(b) plots the equivalent static for price increases and, again, finds little evidence of important changes in pricing behavior brought about by the tariffs.

Above, we established that ex-tariff price indices do not evolve differently for Chinese goods targetted by the tariff and that tariffs do not appear to have changed the price stickiness of these goods. We now conclude our analysis of the Chinese import tariffs with regression analyses capable of controlling for multiple factors other than tariffs and the exporter country that might matter for pricing trends. Further, we can use the framework to compare the passthrough to importer prices of the tariffs with an equivalent-sized movement in the exchange rate.

We consider two types of regression specifications. The first is run with all monthly observations, including periods in which there is no price change. We estimate:

$$\begin{aligned}\Delta \ln \left(P_{i,j,k,t}\right) &= \delta_k + \phi_{\mathrm{CN}}^{\Omega} + \phi_{\mathrm{CN}}^{-\Omega} + \sum_{l=0}^{9} \gamma_{\mathrm{CN},l} \Delta \tau_{\mathrm{CN},k,t-l} \\ &+ \sum_{l=0}^{11} \beta_l^S \Delta \ln \left(S_{j,t-l}\right) + \sum_{l=0}^{11} \beta_l^X \Delta \ln \left(X_{j,t-l}\right) + \epsilon_{i,j,k,t}, \qquad (1)\end{aligned}$$

where $P_{i,j,k,t}$ is the price of item i imported from country j in sector k at month t, where sectors are defined as the BLS's "primary stratum lower" and is a level of disaggregation in between the HS4 and HS6 levels.[8] The fixed effect δ_k therefore captures an average sectoral inflation rate. We let $k \in \Omega$ denote those sectors that are affected by the tariff, so the fixed effects $\phi_{\mathrm{CN}}^{\Omega}$ and $\phi_{\mathrm{CN}}^{-\Omega}$ allow for a constant deviation from those sectoral inflation rates for affected and unaffected goods imported from China, respectively.

[8] This is the lowest level of aggregation for which the BLS deems indices to be publishable.

The term $\tau_{\text{CN},k,t-l}$ equals the log gross additional tariff rate that is newly applied in a particular month to imports from China in sector k at time $t-l$, and would equal $0.22(\approx \ln(1.25))$, say, to correspond with a 25 percent tariff. The lag structure allows monthly price changes to differentially reflect changes in tariffs that went into effect recently compared with further in the past. To evaluate the accumulated impact of tariffs 9 months after they are applied, therefore, we report the point estimate and standard error of $\sum_{l=0}^{9} \gamma_{\text{CN},l}$. This gives the estimate of tariff rate passthrough after 10 months (i.e. current month plus 9 lags).

Finally, $S_{j,t-l}$ is the value of country j's currency in US dollars at time $t-l$ and $X_{j,t-l}$ is the producer price index in j at $t-l$. The point estimate of $\sum_{l=0}^{11} \beta_l^S$ therefore constitutes our estimate of exchange rate passthrough (ERPT) after one year (i.e. current month plus 11 lags).

		(1)	**(2)**	**(3)**	**(4)**
Tariffs 10 mo.	$\left(\sum_{l=0}^{9} \gamma_{\text{CN},l}\right)$	-0.060**	-0.057**		0.037
		(0.026)	(0.027)		(0.037)
ERPT 1 yr.	$\left(\sum_{l=0}^{11} \beta_l^S\right)$			0.215***	0.218***
				(0.026)	(0.027)
PPI PT 1 yr.	$\left(\sum_{l=0}^{11} \beta_l^X\right)$			0.043	0.032
				(0.071)	(0.075)
China Affected	$(\phi_{\text{CN}}^{\Omega})$		0.000		-0.000
			(0.000)		(0.000)
China Not-Affected	$(\phi_{\text{CN}}^{-\Omega})$		-0.000		-0.001
			(0.001)		(0.001)
	Adj. R^2	0.000	0.003	0.005	0.005
	Obs.	837,431	837,431	837,431	837,431
	Sector FEs?	No	Yes	Yes	Yes

Robust standard errors in parentheses. ***, **, and * denote statistical significance at the 1, 5, and 10 percent level.

Table 1: Regression Analysis of Chinese Import Tariffs, Monthly Data

Table 1 reports the results from estimating (1) on monthly data. Column (1) reports the cumulative impact of 10 months of tariffs in a specification that does not condition on any other variables.[9] The estimated coefficient of -0.060 means, for example, that a 10 percent tariff would be associated with a 0.6 percent lower ex-tariff price and a 9.4 percent higher overall price faced by the importer. Column (2) adds sectoral fixed effects plus the China-specific fixed effects ϕ and roughly preserves the magnitude of this estimate. Column (3) removes the tariff and China-specific covariates and estimates a relatively standard passthrough regression, finding that when the dollar depreciates by about 10 percent, import prices rise by about 2.15 percent. Finally, in Column (4) we estimate the tariff impact in a specification that also controls for sectoral effects and exchange rates. Our exchange rate passthrough estimate is largely unchanged but the tariff response flips signs and loses significance.

Next, we consider a second type of regression where we only include non-zero price changes. In particular, for each price spell of good i, we define t_1 as the first month of the spell and t_0 as the first month of the previous spell. We then estimate:

$$\begin{aligned}\frac{1}{t_1 - t_0}\ln\left(\frac{P_{i,j,k,t_1}}{P_{i,j,k,t_0}}\right) &= \delta_k + \phi^{\Omega}_{\text{CN}} + \phi^{-\Omega}_{\text{CN}} + \gamma\tau_{\text{CN},k,t_1} \\ &+ \beta^S \frac{1}{t_1 - t_0}\ln\left(\frac{S_{j,t_1}}{S_{j,t_0}}\right) + \beta^X \frac{1}{t_1 - t_0}\ln\left(\frac{X_{j,t_1}}{X_{j,t_0}}\right) + \epsilon_{i,j,k,t_1,t_0}, \qquad (2)\end{aligned}$$

where the term $(t_1 - t_0)$ serves to scale the changes to all correspond to monthly frequency. In this specification, τ_{CN,k,t_1} equals the tariff level for goods from China in sector k at t_1 and is meant to allow estimates of γ to capture differential inflation rates for goods impacted by the tariffs.[10]

Table 2 reports the results of estimating (2) on data that only includes non-zero price changes. The results are qualitatively consistent with those from the monthly specification in Table 1. The import tariffs on Chinese goods are associated with economically small price declines that become statistically insignificant once other controls such as the exchange rate are included. By contrast exchange rate passthrough in these estimates rises to roughly 0.35.

[9] Note that, while the third wave of tariffs on Chinese imports will not contribute to the estimates for lags of 8 months or more, it still contributes to this cumulative sum based on its contribution to estimates of the γ's with shorter lags.

[10] This specification may not be well-suited to think about changes where t_0 is after the tariff has been imposed, but our results appear qualitatively robust to dropping such observations.

		(1)	(2)	(3)	(4)
Tariffs	γ	-0.014	-0.001		0.011
		(0.010)	(0.012)		(0.012)
ERPT	β^S			0.351***	0.349***
				(0.047)	(0.047)
PPI PT	β_l^X			0.891***	0.900***
				(0.131)	(0.131)
China Affected	$\phi_{\mathrm{CN}}^{\Omega}$		0.004**		0.005**
			(0.002)		(0.002)
China Not-Affected	$\phi_{\mathrm{CN}}^{-\Omega}$		0.002*		0.003***
			(0.001)		(0.001)
	Adj. R^2	0.000	0.007	0.021	0.021
	Obs.	106,940	106,940	106,940	106,940
	Sector FEs?	No	Yes	Yes	Yes

Robust standard errors in parentheses. ***, **, and * denote statistical significance at the 1, 5, and 10 percent level.

Table 2: Regression Analysis of Chinese Import Tariffs, Conditional on Price Change

2.2 Tariffs on Steel Imports

Prior to the tariffs placed on Chinese imports, in March 2018, the US placed a 25 percent tariff on steel imports from all countries. At the time, exemptions were made for imports from Argentina, Australia, Brazil, Canada, Mexico, the European Union (EU), and South Korea. By June, the exemptions were lifted for Canada, the EU, and Mexico, so June was effectively the second wave of steel tariffs. The exemptions to the remaining countries were made permanent. Equivalent to our analysis in Figure 1, therefore, we can compare import price indices – inclusive of tariffs – for steel imports from these three groups of countries.

Figure 3 shows the evolution of steel prices, which had been quite volatile during the preceding four years. Steel prices from all three groups tracked each other relatively closely until the steel tariff were introduced. After that point, prices from affected countries jumped to roughly 20 percent above those from unaffected countries and this difference remained through to early

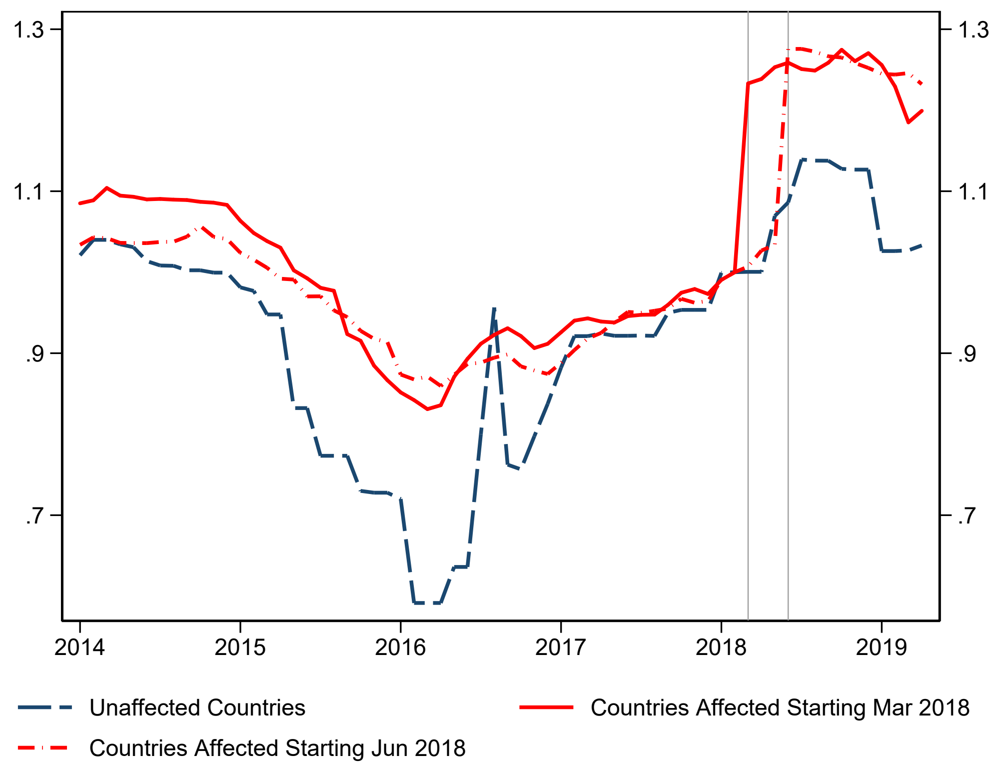


Figure 3: Steel Import Price Indices, by Tariff Wave (in Logs, June 2018=1)

2019.[11]

3 US Retail Prices

Our work on retail prices is in progress. The introduction describes our preliminary qualitative conclusions.

4 US Exports

In response to the US trade policies of 2018, many countries including Canada, China, the EU, and Mexico, imposed retaliatory measures on the US. We obtain data on the retaliatory tariffs from the International Trade Administration website. These tariffs were more heterogeneous in timing and scale than the US measures. As such, we do not generate export price indices by

[11]Regression analyses suggest similar conclusions but estimates are imprecise given the small number of imported steel products.

waves as we did for imports in Figures 1 and 3, nor do we generate such indices inclusive of tariffs. Figure 4, however, demonstrates that the ex-tariff prices on US exports impacted by retaliation appear to have meaningfully dropped starting in mid-to-late 2018 relative to those goods that are not affected.

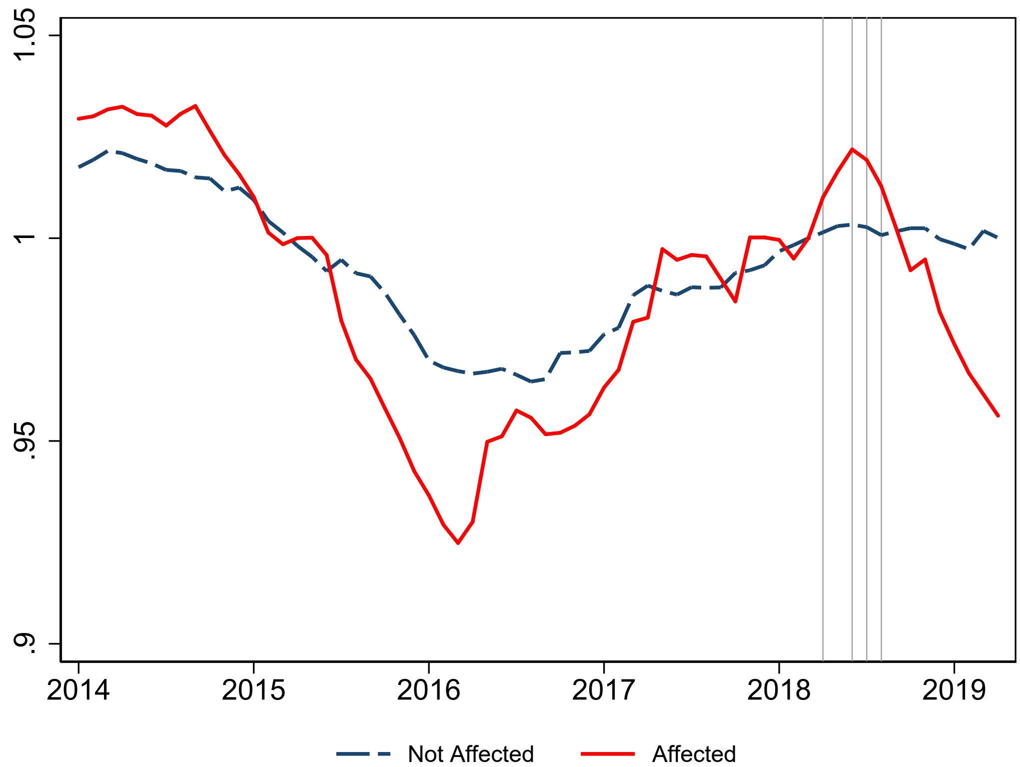


Figure 4: Export Price Indices (in Logs, March 2018=1)

The argument made above that incidence of US import tariffs was largely on the US reflected the fact that ex-tariff import prices to the US did not appear to change for targeted goods. The fact that we do see declines in the ex-tariff export prices of targeted US products suggests that the retaliatory tariffs imposed on the US may have meaningful incidence in the US as well.

For exports, we again consider two types of regression specifications analogous to the case of China imports. Our preliminary regression analysis of the first specification is consistent with the visual conclusion reached from Figure 4. Specifically, we start by running the following equation with all monthly observations, including periods in which there is no price change:

$$\Delta \ln (P_{i,j,k,t}) = \delta_k + \sum_{l=0}^{9} \gamma_l \Delta \tau_{k,t-l} + \sum_{l=0}^{11} \beta_l^S \Delta \ln (S_{j,t-l}) + \sum_{l=0}^{11} \beta_l^X \Delta \ln (X_{j,t-l}) + \epsilon_{i,j,k,t}. \quad (3)$$

Table 3 reports the results from estimating (3) on monthly data. As shown in column (1) there is a 55 percent passthrough of the tariff into ex-tariff US export prices after ten months. That is, a 10 percent tariff imposed on US exports reduces US ex-tariff export prices by 5.5 percent. This estimate reduces slightly to 5.1 percent when controlling for other price-determining factors, as seen in column (4). The cumulative one-year ERPT estimates are close to 20 percent. This estimate is little changed when we simultaneously include tariff measures as a covariate.

		(1)	**(2)**	**(3)**	**(4)**
Tariffs 10 mo.	$\left(\sum_{l=0}^{9} \gamma_l\right)$	-0.545**	-0.539**		-0.505**
		(0.212)	(0.216)		(0.216)
ERPT 1 yr.	$\left(\sum_{l=0}^{11} \beta_l^S\right)$			0.189***	0.189***
				(0.019)	(0.019)
PPI PT 1 yr.	$\left(\sum_{l=0}^{11} \beta_l^X\right)$			0.235***	0.235***
				(0.042)	(0.042)
	Adj. R^2	0.000	0.001	0.002	0.002
	Obs.	424,832	424,832	424,832	424,832
	Sector FEs?	No	Yes	Yes	Yes

Robust standard errors in parentheses. ***, **, and * denote statistical significance at the 1, 5, and 10 percent level.

Table 3: Regression Analysis of Retaliatory Export Tariffs, Monthly Data

Our second specification yields somewhat different results on the passthrough of retaliatory tariffs on US export prices. Here, we only include non-zero price changes, define $\{t_0, t_1\}$ as above, and estimate the following:

$$\begin{aligned} \frac{1}{t_1 - t_0} \ln \left(\frac{P_{i,j,k,t_1}}{P_{i,j,k,t_0}} \right) &= \delta_k + \gamma \tau_{k,t_1} + \beta^S \frac{1}{t_1 - t_0} \ln \left(\frac{S_{j,t_1}}{S_{j,t_0}} \right) \\ &+ \beta^X \frac{1}{t_1 - t_0} \ln \left(\frac{X_{j,t_1}}{X_{j,t_0}} \right) + \epsilon_{i,j,k,t_1,t_0}, \end{aligned} \quad (4)$$

Table 4 reports the results. Here, our estimates of passthrough rise to nearly 0.35, similar to the results from import regressions conditional on a price change, as reported in Table 2. The magnitude of the coefficient on tariff passthrough, however, drops significantly. In ongoing work we plan to better understand differences in these estimates, but for now cautiously conclude from Figure 4 and the results in Table 3 that retailiatory tariffs applied to US exports exhibited lower passthrough than was the case for the US tariffs on imports.

		(1)	**(2)**	**(3)**	**(4)**
Tariffs	γ	-0.058***	-0.063***		-0.051***
		(0.020)	(0.020)		(0.021)
ERPT	β^S			0.342***	0.342***
				(0.031)	(0.031)
PPI PT	β_l^X			1.119***	1.115***
				(0.086)	(0.086)
	Adj. R^2	0.000	0.001	0.015	0.015
	Obs.	64,990	64,990	64,990	64,990
	Sector FEs?	No	Yes	Yes	Yes

Robust standard errors in parentheses. ***, **, and * denote statistical significance at the 1, 5, and 10 percent level.

Table 4: Regression Analysis of Retaliatory Export Tariffs, Conditional on Price Change

5 Conclusion

To be completed.

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