The Impact of US - Canada Steel Import Tariffs on the Returns of Steel: An Event Study

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Abstract

An event study methodology is applied to multiple events surrounding the Canadian 25% steel tariff in 2018 to understand their impacts on both the US and Canadian steel industries. Although there were no significant immediate results in all events, the tariff announcement and executive order signing caused a slow decline in returns of Canadian Steel. The order signing also resulted in a longer-term negative impact on US steel. Overall, despite price spikes from these events as seen in the market, the results show mainly insignificant abnormal returns from both countries.

1) Introduction

Motivation

Donald Trump was recently re-elected as the president of the United States for his second term, stepping into office on January 20, 2025. One of his first economic actions as the new president was to impose a 25% import tariff for all products on Canada and Mexico (except for 10% tariff on Canadian electricity), citing border security reasons regarding fentanyl as the reason for the change (Boynton, 2025b). Canada, specifically, who has $1.9 billion in daily goods and services (or 20% of the country's GDP) exported to the US, could see heavy economic damage from this policy change as a result.

On March 4, 2025, the threatened tariffs went into effect, and Canada immediately countered with tariffs on $30 billion worth of U.S. export goods, starting a trade war between the countries. The following days saw multiple renegotiations and changes in the industry-specific tariffs from both Canada and U.S., including auto manufacturing, electricity, lumber steel and aluminium (Boynton, 2025b). Within less than 100 days of Trump stepping into office for his second term, the S&P 500 has dropped down over 8% from its all-time high on February 19, 2025, potentially due to the fear of economic downturn investors (Krauskopf & Ahmed, 2025).

This should not have been completely unforeseen, as Donald Trump had imposed a 25% import tariff on steel and 10% on aluminium to Canada as part of his renegotiation of the North American Free Trade Agreement (NAFTA) during his first presidential term starting 2017. Because the tariff on steel in 2018 was the same as the current tariff on Canada, studying its impact on the stock returns of steel would hopefully give us an understanding of how changes in US import tariffs on Canada would affect our investment decisions. Motivated by this, I aim to understand how the

25% US import tariff on Canadian Steel in 2018 affect the stock performance of major steel companies in both countries.

Literature Review

The renegotiation of NAFTA into the United States-Mexico-Canada Agreement (USMCA) during Trump's presidency brought significant economic and political changes. While NAFTA's overall impact on its members has been debated (Caliendo & Parro, 2014; Woldu et al., 2018), USMCA introduced new rules affecting various industries. The agreement's tariffs and regulatory shifts created tensions between the U.S., Canada, and Mexico, as the latter sought to counter U.S. protectionist policies (Menezes et al., 2022). Economically, the effects were mixed—Canadian and Mexican consumers benefited in commodity markets (Zhao et al., 2019), but sectors such as automotive, textiles, and apparel faced setbacks (Burfisher et al., 2019).

The trade agreement also had broader implications for global trade. Canada, in response to U.S. protectionism, increased its support for free-trade agreements with other partners, including China (Tuxhorn, 2021). Meanwhile, the agreement's impact on the U.S. labor market was negative, as it contributed to an increase in immigration without significantly boosting real GDP (Burfisher et al., 2019; Zhao et al., 2019). Moreover, despite the decrease in China's export into the US, exports from other countries such as Vietnam, Chinese Taipei and Mexico who offer alternatives of Chinese-exported goods saw a sharp increase (Zhang, 2024). While the renegotiation aimed to strengthen the U.S.'s economic dominance, its effects varied across industries, with some benefiting from greater market access while others faced new constraints.

Although there are numerous papers on the impacts of tariff negotiations on the economic and political stability of the countries involved with the United States during Donald Trump's first

presidency, there lacks literature on the consequences that the stock market faces. This is understandable, since the market and its speculation from the renegotiations of NAFTA to USMCA was relatively neutral despite the initial pessimism (Zhao et al., 2019).

However, there were many news articles which detailed the impact that each tariff event had on the steel stock returns of both US and Canada. The first significant event was the recommendation of steep tariffs on foreign steel and aluminum from the Commerce Department of the Trump administration, on February 16, 2018. US steel prices soared, and steel manufacturing companies saw a spike in their stock prices (Egan, 2018). About one week later, Trump officially announced the plan for a 25% tariff on steel and 10% tariff on aluminum for multiple countries, causing the Canadian stock index, TSX, to fall sharply. The Dow Jones industry average and the S&P500 index, however, saw an increase in their prices (Hodges, 2018). On March 8, 2018, Trump signed an executive order to impose tariffs on many countries, with exemption on Canada and Mexico. Seeing the retreat from the tariffs on their closes trade partners, US steel prices fell sharply following the signings (Zacks, 2018).

The most significant event study on the events related to Trump's first-term renegotiation was of Sharple's (2022), who uses Mackinlay's (1997) Cumulative Abnormal Returns (CARs) and Thompson's (1993) CAR standard error derivation to evaluate the impact on selected industries. The paper found that some of these events had caused significant reactions from the agriculture and auto-manufacturing sectors of the US. This method of evaluating changes in valuation resulting from specific events is limited in research, but some of the findings have been valuable. Thompson (1993) and Parinduria and Thangavelu (2009) found the date of the final agreement to be statistically significant. Predictability also plays an important role, as Parinduria and

Thangavelu (2009) found that announcements and deals with little uncertainty have insignificant effects on investors' speculation.

My paper will follow the same method used by Sharple (2022) and Parinduria and Thangavelu (2009) to calculate the significance of the following four events on the stock returns of the top steel companies: Tariff Recommendation (February 16, 2018), Tariff Announcement (March 1, 2018), Executive Tariff Order Signed (March 8, 2018) and Canadian Retaliatory Tariffs (July 1, 2018) (Boynton, 2025a).

Summary and Results

Using the CAR method proposed by MacKinlay (1997) and Thompson's (1993) derivation of its standard error, I found that all four events had no immediate significant effects on either countries. However, looking at the longer-term effects of each event shows some significant findings. The signing of the executive order for tariffs on March 8, 2018, had significant negative effect on the returns of steel manufacturing stocks in both countries. The effect is more immediate in the US, whereas Canada saw a slow decline since the announcement of tariffs on March 1. This result (coincidentally) aligns with the findings of Thompson (1993) and Parinduria and Thangavelu (2009), who find that the final official event is the statistically significant one.

The graph of the CAR for each event in a 7-day window illustrates why prices increase in certain event but the results were insignificant. The tariff recommendation and announcement date saw a spike in the CAR on the date of the event, followed by a decline resulting in an insignificant final value. The same can be seen for Canada on the date of retaliatory tariff announcement. There are also two events which show relatively unchanged movements over a 15-day period: the Canadian retaliatory tariff announcement for the US and the tariff recommendation for Canada.

3) Empirical Method

Methodology:

MacKinlay's (1997) method of calculating the CAR of an event splits the data into 2 time frames per event: the estimation window and the event window.

The estimation window spans a certain amount of time before the event for which the "normal" market condition pertains, and is used to calculate the OLS parameters of an individual stock return regressing on the market returns. This will be our *Market Model*:

$$R_{it} = \alpha_i + \beta_i R_{Mt} + \varepsilon_{it}$$

where R_{it} is the returns of company i at time t, and R_{Mt} is the market returns at time t.

The event window will last x days before and after certain events (e.g. major announcements, mergers), where x can be between 1 to 20 days to allow for anticipations before or delays after the event. In this paper, we will evaluate the event windows of sizes 1, 3, 5 and 7. With the estimated parameters ($\hat{\alpha}_i$, $\hat{\beta}_i$) from the market model, I can calculate the *Abnormal Returns (ARs)* as follows:

$$AR_{it} = R_{it} - (\hat{\alpha}_i + \hat{\beta}_i R_{Mt})$$

Then, our *Cumulative Abnormal Returns (CAR)* would be the cumulative sum of all ARs in the event window:

$$CAR_{it} = \Sigma AR_{it}$$

Because the CAR is a cumulative value, its *standard error (SE)* cannot be calculated using the usual methods. Instead, I will use Thompson's (1993) calculation of the CAR standard error, leveraging the variance of the Abnormal Returns from our estimation window data:

$$SE(CAR_e) = \sqrt{T_e \cdot \sigma^2_{AR}}$$

where CAR_e is the CAR of event e, T_e is the number of days of event window e and σ_{AR}^2 is the variance of the ARs in our estimation window.

Finally, we will test the significance of the CAR using a t value that is an event's CAR divided by its standard error ($t = CAR_e / SE(CAR_e)$). Our null hypothesis is H_0: $CAR_e = 0$ and the alternative, H_A: $CAR_e \neq 0$. Two-sided t-tests under the significance levels of 0.1, 0.05 and 0.01, using the ARs in the estimation window as benchmark will be carried out for each event.

Estimation and Event Windows:

Our estimation window should be a significantly long period before our first event (tariff recommendation), and it should ideally be as monotonous as possible to be representative of a market that would be considered normal. During Trump's first presidency, he was elected more than a year before the tariff announcement, on November 8, 2016. Because Trump went into office on January 20, 2017, it is reasonable to take this date as the starting date of our estimation window. My estimation window will span from January 20, 2017, to February 6th, 2018, the day before the 7-day event window of the first event. It is worth noting that the date would only contain days that the stock markets are open, which will exclude weekends and the holidays of each country.

I will start my analysis with a 1-day margin for each event window. This is under the assumption that the market conditions are reflected immediately by prices, under the Efficient Market Hypothesis (EMH). However, I will also conduct further robustness analysis with larger event windows to gain a better understanding of the events. Events which happen on non-trading days, such as the day Canada imposed retaliatory tariffs, will take the closest 3 trading days instead.

Table 1: Description of events

Event	Date	Event Window	Description
1	Feb 16, 2018	Feb 15, 2018 – Feb 20, 2018	The Trump administration recommends a tariff of 24% on steel and aluminum
2	March 1, 2018	Feb 28, 2018 - March 2, 2018	Trump announced tariffs on steel (25%) and aluminum (10%) on many countries
3	March 8, 2018	March 7, 2018 - March 9, 2018	Trump signed an executive tariff order with exemption for Canada and Mexico
4	July 1, 2018*	June 29, 2018 - July 4, 2018**	Canada announced tariffs on $16.6 billion worth of US exports

*Happened on a non-trading day, event day is July 2 for US; July 3 for Canada

**June 29 and July 2-3 for US; June 29 and July 3-4 for Canada

4) Data

The data consists of the daily returns of the 7 top steel companies in each of the US and Canada which were publicly traded during Trump's first presidency. For the US, the tickers of these companies include CLF, CMC, MT, NUE, RS, STLD and X. For Canada, the tickers include ADE., BKI., CIA. CNT., CVW., FEO. and LIF. The market benchmark for US is the S&P500 Index, and for Canada is the S&P500/ TSX Composite Index. These stocks have daily close prices available on the Compustat database of the Wharton Research Data Services (WRDS), which I then calculate into daily returns. It is worth noting that the data for US is in USD whereas the data for Canada is in CAD, but because the analyses for both countries are separate, the difference is normalized.

There are many notable caveats in my selection of steel companies that affects the accuracy of the results and should be considered for the study. Firstly, these are all steel manufacturing companies. The effect of tariffs is very different for organizations that have steel input, due to the

price increase of steel as a material. Also, many large Canadian steel companies, such as Stelco and Algoma Steel, are excluded because their tickers could not be found on the database in the indicated time frame. Lastly, many of the companies I used in this study operate in more than just the country that they are from. For example, US Steel Corporation (ticker: X) also operates in Slovakia. This is important because the returns for a steel stock depends on all operations of that organization (e.g. a shortage of mines in Slovakia could damage the returns of X). However, given that the choices for companies operating solely on either country are limited, I will proceed with a portfolio with the choices indicated above.

The data is downloaded from specified queries from WRDS. The original datasets contain the date, stock name, stock ticker and daily closing price for each portfolio. The data for the indexes are collected separately. The daily returns of the stocks are calculated as follows:

$$R_{it} = \ln (P_{it} / P_{i, t-1}) = \ln (P_{it}) - \ln (P_{i, t-1})$$

where R_{it} is the daily returns of stock i on day t, and P_{it} is the closing price of stock i on day t.

The portfolio datasets are then manipulated to calculate the equal-weighted average daily stock returns over all the selected tickers, then is merged with the market returns to create a final dataframe which includes the date, average steel return and market return. This dataset is then divided into the estimation and event windows as specified above.

The estimation window (January 20, 2017 to February 6, 2018) shows a similar positive relationship between the average steel returns and the market returns for both countries, as seen in Figure 1. This shows that the steel market moves quite well with the general market during this period, which we assume as our “normal” market condition. Although there is more disparity in the market returns in the US, possibly caused by the need to adapt to the new Trump administration, the steel returns in both countries are very similar, falling in the +/- 5% daily range.

The summary statistics for both average steel returns and market returns during the estimation window are shown in Table 2. The number of observations is different between the two countries, 260 for US and 263 for Canada, due to the different days in which each market was open.

Table 2: Summary statistics of daily returns in estimation window (in %)

Variable	Obs	Mean	Std. Dev.	Min	Max
US Steel Market					
R_{US}	260	0.126	2.076	-5.584	18.144
$R_{M, US}$	260	0.068	0.539	-4.184	1.729
Canadian Steel Market					
R_{CA}	263	0.1	2.491	-6.113	17.253
$R_{M, CA}$	263	-0.001	0.477	-1.753	1.293

Table 2. *Summary statistics of daily steel portfolio returns (R_c) and daily market returns ($R_{M, c}$) for the US vs Canada during the estimation window (January 20, 2017 to February 6, 2018). All units are in %.*

Figure 1: Average steel returns on market returns in estimation window (in %)

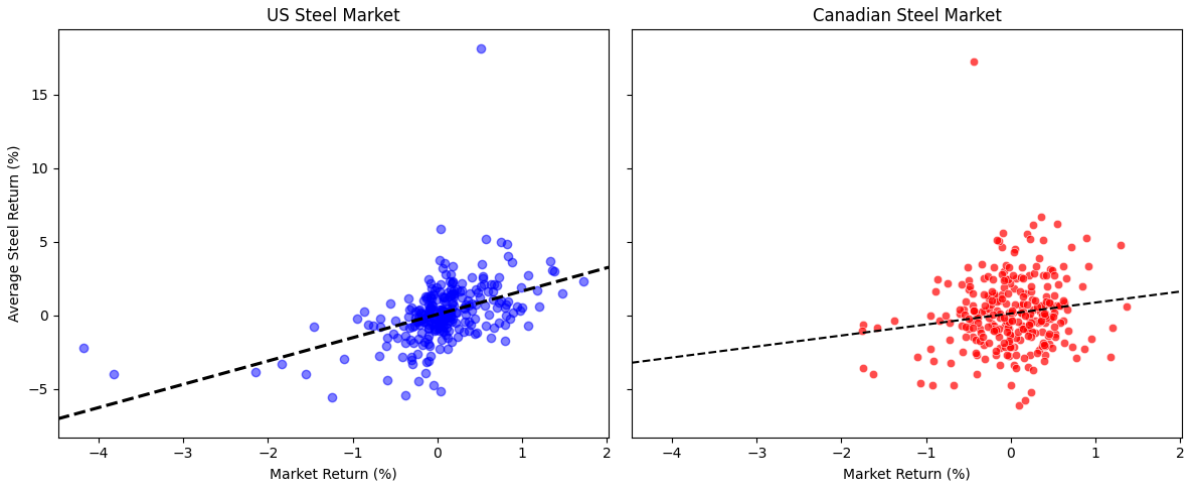

Fig. 1. *Comparison of daily steel portfolio returns and daily market returns for the US vs Canada during the estimation window (January 20, 2017 to February 6, 2018). All units are in %.*

Table 3 shows all daily returns in our +/-1 day event windows, for both the steel average and the market. Day 0 is the day of the event, and the other two are respectively the recorded date before and after the event. There are 2 notable returns that surpass the +/- 5% daily returns range seen in the estimation window: US steel returns increased by 6.97% on the day of tariff recommendation, and Canadian steel returns increased by 3.54% on the day of Canada's retaliatory tariffs. These variables are worth noting when considering the results of our significance test. US steel returns also saw a noticeably steep decrease of 3.65% on the tariff announcement day. These variables are worth noting to better understand our findings later in the paper.

Table 3: Daily returns for steel and market in each event window (in %)

Market	**US**		**Canada**	
Variable	R_{US}	$R_{M, US}$	R_{CA}	$R_{M, CA}$
Event 1: Tariff Recommendation				
Day -1	0.614	1.2	2.723	0.517
Day 0	5.865	0.037	1.026	0.292
Day 1	-1.542	-0.586	-1.847	-0.085
Event 2: Tariff Announcement				
Day -1	-2.542	-1.116	0.168	-1.469
Day 0	3.233	-1.341	-0.418	-0.316
Day 1	0.038	0.506	-2.39	-0.061
Event 3: Executive Order Signed				
Day -1	1.748	0.048	-2.527	-0.468
Day 0	-2.891	-0.445	0.533	0.426
Day 1	-0.270	1.723	-0.149	0.251
Event 4: Canadian Retaliatory Tariffs*				
Day -1	-0.326	0.076	1.289	0.603

Day 0	0.366	0.306	5.124	-0.090
Day 1	-1.684	-0.496	-0.540	0.255

*US: Day -1: June 29, Day 0: July 2, Day 1: July 3

Canada: Day -1: June 29, Day 0: July 3, Day 1: July 4

Table 3. *Daily steel portfolio returns and market returns for +/- 1 day event windows for all 4 events, for the US vs Canada. All units are in %.*

5) Results

The findings of the 1-day window results, which consist of the MacKinlay's (1997) Cumulative Abnormal Returns (CARs) and their standard errors as derived by Thompson (1993), can be seen in Table 4. Each CAR value is evaluated at significant levels 0.1, 0.05 and 0.01.

Table 4: Results in each event window (in %)

	$\mathbf{CAR_{US}}$	$\mathbf{CAR_{CA}}$
	(1)	(2)
Tariff Recommendation	3.805	0.65
	(3.24)	(4.282)
Tariff Announcement	3.971	0.425
	(3.24)	(4.282)
Executive Order Signed	-5.013	-2.533
	(3.24)	(4.282)
Canadian Retaliatory Tariffs	-1.491	4.544
	(3.24)	(4.282)

*, **, *** corresponds to 0.1, 0.05, 0.01 significance levels, respectively

Table 4. *Results for all events under +/- 1 day event windows, evaluated under 0.1, 0.05 and 0.01 significant levels. The numbers are the Cumulative Abnormal Returns (CARs) with their standard errors in brackets. All units are in %.*

The results of Table 4 suggest that all four events have no immediate significant impact on the returns of steel manufacturing stocks in either country. This is a rather surprising conclusion considering what we know about the reaction of stock prices to these events. For our first event, the tariff recommendation from the Commerce Department, we saw a spike in US steel prices (Egan, 2018). Event 2, tariff announcement, resulted in another increase for the US market but caused a gradual decrease for Canadian index (Hodges, 2018). Finally, the US steel market reacted negatively to the exemption of Canada and Mexico from the tariff executive order, causing a sharp fall in their prices (Zacks, 2018).

It is notable that all the price reactions reported above has CAR values that are larger than its standard error (in absolute terms), except for the impact of event 2 on Canadian steel. Another event which has the same result that was not reported on the news was Canada's reaction to the announcement of the retaliatory tariffs on July 1, 2018. The daily returns on the date of these events are +5.9% for event 1, +3.2% for event 2 and -2.9% for event 3 for US steel, and +5.1% for Canadian steel on event 4. Two out of four of these have returns outside of the -5% to +5% range in the estimation window, making their significance more surprising.

The insignificance of these events should not be conclusive for my research since it only means that steel prices did not react immediately on a 1-day window. There could be multiple reasons explaining this insignificance, despite the price increase on the stock market. The first reason being that the stock returns respond in a delayed manner, which can be examined under larger event windows. Another reason lies in the nature of the CAR, which is a cumulative sum which we only use the last value. This means that a spike in returns on the day of the event followed by a decline could lead to an insignificant value. To examine the feasibility of these possibilities, I will conduct further robustness analysis on different event window sizes and individual stock CARs.

6) Robustness

Different Event Window Sizes

Table 5 shows the results from different event window sizes, including 1, 3, 5 and 7. The only event showing significance on the 10% level is the signing of the tariff executive order on March 8, 2018: generating a negative CAR for US steel in the 3-day event window, and for Canadian steel in the 5-day event window. The CAR values for these are -8.22% and -15.088% respectively. This illustrates a reaction over a longer time frame, indicating that it was either delayed or came before the day of the event.

Figure 2 gives us a more holistic view of what happens with this event. It shows the CAR of every event over the event windows for each country, and I color-coded all events which has noticeable movements either in the 1-day window or over the entire 15 days. Let us first look at the executive order signing, which has significance in Table 5 and is colored red. We can see a notable fall in the CAR for US steel within 1 day around the event, whereas the descend is gradual for Canada and it had started almost a week before the announcement day. For the US, this finding aligns with the steep fall in steel prices in reaction to the exemption of Canada and Mexico from the tariff order (Zacks, 2018). The significance of event 3 on Canada would best be understood if we also look at event 2, which I colored in blue. Chronologically, these two events happen exactly a week after the other, meaning that the blue line is an extension of the red line. We see that despite not having an immediate reaction to the signings of the executive order (which is reasonable since they were exempted), there was a gradual decrease since Trump's announcement of tariffs, which did not stop after the executive orders were signed despite the exemptions. This finding aligns with how the Canadian index declines in anticipation of the tariffs (Hodges, 2018).

There are also 3 lines which have very similar movements in the 1-day window, which sees a sharp increase in the CAR followed by a decline after day 0. These include tariff recommendation (orange) and announcement (blue) for the US and the retaliatory tariff announcement (green) for Canada, which are events with CAR values higher than their standard errors in Table 4. This explains the insignificance despite the notable price movements (Egan, 2018; Hodges, 2018). Over a 7-day window, there is only a notable decrease in US steel CAR following tariff announcements, as it led to the executive signings with exemption of Canada. The other two events remain relatively unchanged.

Lastly, there are 2 lines which I did not color in figure 2 for convenience of visualization: Canadian retaliatory tariffs announcement for the US and tariff recommendation from the Commerce Department for Canada. These events see relatively stable movement throughout the 7-day window. This could mean that the Canadian market did not react as fast to the news as the US, whereas the retaliatory had less effect on the US steel industry as it did on Canada's.

Table 5: Results on various event windows (in %)

	CAR_{US} (1)	CAR_{CA} (2)
1-Day Event Window		
Tariff Recommendation	3.805	0.65
	(3.24)	(4.282)
Tariff Announcement	3.971	0.425
	(3.24)	(4.282)
Executive Order Signed	-5.013	-2.533
	(3.24)	(4.282)
Canadian Retaliatory Tariffs	-1.491	4.544
	(3.24)	(4.282)
3-Day Event Window		
Tariff Recommendation	5.076	2.687
	(4.95)	(6.54)
Tariff Announcement	0.876	-4.283
	(4.95)	(6.54)
Executive Order Signed	-8.222*	-9.472
	(4.95)	(6.54)
Canadian Retaliatory Tariffs	-5.093	3.637
	(4.95)	(6.54)
5-Day Event Window		
Tariff Recommendation	1.852	1.582
	(6.205)	(8.199)
Tariff Announcement	-3.465	-5.779
	(6.205)	(8.199)
Executive Order Signed	-4.81	-15.088*
	(6.205)	(8.199)
Canadian Retaliatory Tariffs	-7.422	1.214
	(6.205)	(8.199)
7-Day Event Window		
Tariff Recommendation	4.991	3.292
	(7.246)	(9.574)
Tariff Announcement	-7.117	-11.199
	(7.246)	(9.574)
Executive Order Signed	-3.645	-11.993
	(7.246)	(9.574)
Canadian Retaliatory Tariffs	-6.695	0.776
	(7.246)	(9.574)

*, **, *** corresponds to 0.1, 0.05, 0.01 significance levels, respectively

Table 5. *Results for all events under +/- 1, 3, 5, 7 days event windows, evaluated under 0.1, 0.05 and 0.01 significant levels. All units are in %.*

Figure 2: 7-day event window CAR (in %)

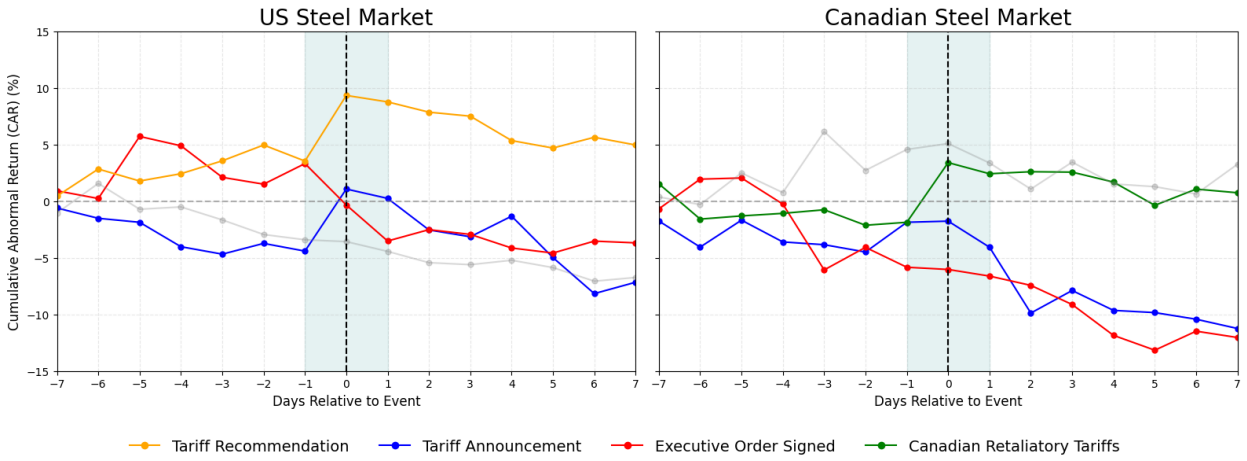

Fig. 2. *Time-series graphs of the CARs under 7-day event windows for all events in the US vs Canada. The events which have significant movements are colored according to the legend. The 1-day event window is highlighted to emphasize the main results. All units are in %.*

Individual Stock Returns

Table 6 shows the results for each stock which I selected when evaluated under a 1-day event window. Unlike the entire portfolio, there are some significant results for the stocks. Generally, the US stocks move together in reaction to the events, whereas Canadian stocks had more mixed reactions. On the 5% significance level, stocks that were impacted include the US Steel Corp (ticker: X) gaining from tariff recommendation, Cleveland-Cliffs Inc (ticker: CLF) gaining from tariff announcement and Century Global Commodities Corp (ticker: CNT.) gaining from the Canadian retaliatory tariff announcement. The daily returns of these stocks were +13%, +14.9% and +29.5% respectively, significantly beyond the normal range of -5% to +5% for the steel

portfolio returns in the estimation window. We can also see a gain for Commercial Metals Co (ticker: CMC) from tariff announcement and a loss for Cleveland-Cliffs Inc (ticker: CLF) from the executive order signing on a 10% significance level. The daily returns for these were +8.4% and -4.5% respectively. Despite these significance for individual stocks, their weight in the steel portfolio is not enough to turn into the same results for our main findings.

Table 6: 1-day event window CAR for steel companies (in %)

US Steel Companies							
	CLF	CMC	MT	NUE	RS	STLD	X
Event 1	4.943	3.12	-4.399	2.865	3.933	3.493	13.818**
	(5.838)	(3.552)	(12.203)	(2.509)	(2.103)	(3.151)	(5.649)
Event 2	11.848**	6.433*	-0.945	3.910	2.646	4.331	7.451
	(5.838)	(3.552)	(12.203)	(2.509)	(2.103)	(3.151)	(5.649)
Event 3	-10.651*	-4.503	-9.221	-3.737	-2.701	-4.137	-5.781
	(5.838)	(3.552)	(12.203)	(2.509)	(2.103)	(3.151)	(5.649)
Event 4	-1.125	-0.654	-3.699	-1.246	-0.586	-1.291	-1.468
	(5.838)	(3.552)	(12.203)	(2.509)	(2.103)	(3.151)	(5.649)
Canadian Steel Companies							
	ADE.	BKI.	CIA.	CNT.	CVW.	FEO.	LIF.
Event 1	-2.748	9.816	1.649	0.207	-9.382	3.981	0.201
	(52.892)	(12.514)	(7.518)	(11.636)	(8.887)	(13.017)	(3.157)
Event 2	49.154	-6.098	-0.755	0.594	1.173	-1.948	-2.628
	(52.892)	(12.514)	(7.518)	(11.636)	(8.887)	(13.017)	(3.157)
Event 3	40.067	3.882	-5.905	9.179	-2.254	-16.065	-4.417
	(52.892)	(12.514)	(7.518)	(11.636)	(8.887)	(13.017)	(3.157)
Event 4	-43.497	4.413	-3.929	29.747**	-0.715	0.318	0.267
	(52.892)	(12.514)	(7.518)	(11.636)	(8.887)	(13.017)	(3.157)

*, **, *** corresponds to 0.1, 0.05, 0.01 significance levels, respectively

Table 6. *Results for all selected companies under 1-day event windows, evaluated under 0.1, 0.05 and 0.01 significant levels. All units are in %.*

Overall, the only event in which I find significant results was the signing of the executive order on March 8, 2018, on larger event windows. Because this was the final agreement from all events this paper considers, this finding aligns with the conclusions of Thompson (1993) and Parinduria and Thangavelu (2009), who state that the final agreement is the date that has significant effect on the stock returns, which would be the tariff imposition date (event 3). This is very likely coincidental, because we see that the significance over the 7-day window for Canada has no connection with the event itself, since they were exempted from the order. The US saw significance in the 3-day window, but there was no immediate effect. Moreover, Parinduria and Thangavelu (2009) find that the predictability of the market resulting from an event also influences the investors' speculation of their returns. Given the many insignificant results from Table 4, this may be reflective of the uncertainty of the market reaction on these tariff policies from Trump.

It should be noted that these results depend on two important assumptions which I have established for this event study method. The first is that the "normal" market condition from which we calculate the Cumulative Abnormal Returns (CARs) is set to be approximately a year before the first event window, starting from the day Donald Trump stepped into the office for his first presidency (January 20, 2017). The assumption of a "normal" market is due to the economy being under the same administration, but in reality there are countless other factors that could affect not only the steel industry but the market as a whole. The second important assumption is that my choice of steel companies and portfolio is representative of the steel market of each country. As mentioned above, this can be problematic due to the lack of the biggest steel organizations which did not have publicly listed stocks (e.g. Stelco and Algoma for Canada), and that some companies

have operations in other countries. My decision to use an equal-weighted portfolio could also be troublesome because results will be most suitable for a hypothetical investor who has a portfolio with equal spendings on these stocks at the time, which is quite an unrealistic scenario. I used these assumptions to simplify the complexities of the real market, therefore, the findings should be interpreted with them in consideration.

7) Conclusion

Using an event study that calculates the abnormality of returns of the steel industry for both the US and Canada in reaction to the different tariff events in 2018, I find that there are no significant results for any events in an immediate timeframe. However, by looking at the results over longer time periods, we see that certain events caused notable movements in the steel cumulative abnormal returns (CAR). This includes the executive order signing on March 8 for both countries, and the tariff announcement on March 1 for Canada. These two events illustrate a slow decline in Canadian steel returns in anticipation of the uncertainty of policies, rather than the immediate effect of either event. Multiple events saw a spike in returns on the date followed by a decline leading to insignificant results, including tariff recommendation (February 16) and tariff announcement for the US and retaliatory tariff announcement (July 1) for Canada. Results also show that US steel barely reacted to the retaliatory tariffs, while Canada reacted slower to their neighbors to the tariff recommendation by the Commerce Department.

All in all, these findings are similar, although coincidentally so, with the findings of existing literature which state that the final event is statistically significant. It also suggests uncertainty in the market regarding the policies themselves, as reflected in the insignificance of my results. There are many assumptions which I made that may hamper the accuracy of the paper including my

selection of the estimation window, the steel companies, and the weight of the portfolio, which can be addressed in future papers. Also, it would be impossible to make any conclusions about the outcome of tariffs in 2025 from the results of this paper, because the entire Canadian market is affected by the tariffs instead of just the steel industry. With that said, it would still be interesting to see the methodology of this paper being recreated for different industries (such as auto manufacturing) in 2025.

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