RCEP
Regional Comprehensive
Economic Partnership Agreement

USMCA
United States-
Mexico-Canada
Agreement

EU
European Union

CPTPP
Comprehensive and Progressive
Agreement for Trans-Pacific
Partnership

AfCFTA
African Continental
Free Trade Area

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The Economics of Deep Trade Agreements

WORLD BANK GROUP

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Contents

Services trade and state intervention

Non-trade issues in trade agreements

Conclusion

CHAPTER 7

The impact of preferential trade agreements on the duration of antidumping protection

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Antidumping duties and preferential trade agreements (PTAs) are two of the more prominent trade policy developments over the last four decades. Between 1980 and 2015, more than 7,100 antidumping cases were initiated by 50 countries and about 4,100 cases resulted in measures being imposed (Bown 2015), making antidumping the most common form of discretionary protection that accounts for about 90% of the administered protection imposed (Bown 2011). Over the same time, there has been a rapid expansion of PTAs. As of 2020, nearly 500 PTAs have been notified to the WTO, with 306 of these in force.

Antidumping and PTAs both discriminate against trading partners. PTAs discriminate against non-PTA members by decreasing the tariff rates for members, while antidumping duties increase the level of protection on a set of targeted suppliers. If, in addition to lowering tariffs on member countries, PTAs reduce antidumping protection against PTA members relative to non-PTA members, then the discretionary nature of antidumping protection might reinforce the discrimination that is inherent in PTAs. This possibility seems particularly likely for those PTAs that have specific rules related to the use of antidumping measures against PTA members (Blonigen 2005, Prusa and Teh 2010, Bown and Tovar 2016, Prusa 2016).

In a new study (Prusa and Zhu, 2021), we extend the existing research to examine if PTAs have affected the duration of antidumping protection. Unlike some forms of administrative protection, antidumping protection can remain in place for as long as the country imposing the protection wants. The WTO Antidumping Agreement only requires that countries periodically review the antidumping orders and assess whether the protection is still needed.

This study takes advantage of two databases developed by the World Bank – the Global Antidumping Database (Bown 2015) and the Deep Trade Agreements database (Mattoo et al. 2020). The former contains key case information for all antidumping actions initiated by all major users for the period 1980 to 2015. As part of an expansive project, Prusa (2020) maps antidumping provisions in 283 PTAs notified to the WTO between 1958 and 2015. By combining the information in the two databases, we can determine for

each case when antidumping measures were imposed and when, if ever, the measures were removed. We are also able to determine if the antidumping user and antidumping target were members of a PTA, and if so, whether the antidumping measure was in place before, during, or after the antidumping measure.

Before analysing the impact of PTAs, it is instructive to first review the overall duration trends using the non-parametric Kaplan-Meier survival estimator. Because more than one-third of the antidumping measures imposed were still in place at the end of 2015, survival analysis techniques must be used to properly account for the censoring issue.

In Table 7.1 we report the number of quarters of protection for the 25th percentile, 50th percentile, and 75th percentile of measures. As seen in the table, across all antidumping measures, half were revoked within 27 quarters. Said differently, the median duration across all antidumping measures against all targeted countries over the entire 1980–2015 sample is 27 quarters, or just about seven years. While this median estimate is not unlike the eight-year maximum length of protection specified under the safeguard agreement, a sizeable proportion of duties are in place for far longer: 25% of all antidumping measures last longer than 52 quarters (13 years).

TABLE 7.1   KAPLAN-MEIER ESTIMATED SURVIVAL TIME

(quarters of protection)		Survival time		
	No. of cases	25%	50%	75%
All cases	4,064	22	27	52
Cases – Non-China	3,120	21	25	48
Cases – China	944	23	49	87

One of the major developments in antidumping activity over the past 20 years has been the emergence of China as a prime target of antidumping measures. In terms of duration, there is compelling evidence that China is being treated differently than other WTO members. When we divide the targeted countries into 'China' and 'all countries except China', we see that antidumping protection against China is far longer lived than against other countries. The median duration for cases against China (49 quarters) is longer than the 75th percentile for all other countries; remarkably 25% of cases against China are in place for more than 20 years.

To get a sense of the PTA effect, we begin by examining the pre- and post-PTA duration for each country that uses antidumping measures. We do not specify one year to define the pre- versus the post-period for all users; rather, we allow the pre-/post-period to vary by antidumping user. This approach allows us to identify a country-specific 'early' and

'late' period. For all country pairs of PTA members, we use the PTA inception date as the date that defines pre versus post. For country pairs who are not PTA members, we demarcate the pre-/post-period with the date of each antidumping-using country's most economically significant PTA. As seen in Table 7.2, the median duration is about the same in the pre- and post-periods: 25 and 28 quarters, respectively. However, this does not imply there has not been a change in duration. Rather, it appears countries are applying much more scrutiny for the upper half of cases. The 75th-percentile duration in the early period is 48 quarters as compared to 70 quarters in the later period, a considerable increase in the length of protection.

TABLE 7.2   DURATION OF ANTIDUMPING MEASURES, PRE- AND POST-PTAS

(quarters of protection)		Survival time		
	No. of cases	**25%**	**50%**	**75%**
Pre-PTA	1,666	21	25	48
Post-PTA	2,398	22	28	70

To evaluate the impact of PTAs on duration, we rely on Prusa (2020), who maps PTAs into three mutually exclusive categories: (i) PTAs that disallow antidumping actions among members; (ii) PTAs that have no specific language or provisions on antidumping; and (iii) PTAs that allow antidumping against PTA members but include specific provisions on how antidumping is to be implemented against PTA members. The categorisation means we have 153 PTAs with no rules, 109 with antidumping rules, and 21 that prohibit the use of antidumping.

The next step is to overlay the pre-/post- analysis with the information on whether the user and target are in a PTA, and if so, whether the PTA has antidumping rules. These results are depicted in Table 7.3.

It is useful to compare how the estimated duration varies over time. Before the PTA was enacted, antidumping cases involving PTA members had a longer duration than those not involving PTA members. By contrast, we see that once the PTA is enacted, the order is flipped. Cases among PTA members have a shorter duration as compared to those against non-PTA members. The median duration increased by 12 quarters for targeted countries who are not PTA members but decreased for those who were PTA members: 4 quarters for those who were in PTAs without antidumping rules and 15 quarters for those in PTAs with rules. These figures suggest that PTAs do reduce the length of antidumping protection, a finding that we confirm in our formal econometric estimates.

TABLE 7.3   DURATION OF ANTIDUMPING MEASURES, PRE-/POST-PTAS, PTA CLASSIFICATION

(quarters of protection)		Survival time		
	No. of cases	25%	50%	75%
Pre-PTA				
No PTA	1,308	21	25	47
PTA – No antidumping rules	174	21	32	51
PTA – Antidumping rules	184	24	38	53
Post-PTA				
No PTA	1,712	23	37	77
PTA – No antidumping rules	480	21	28	48
PTA – Antidumping rules	206	19	23	38

Given our prior discussion about the rising number of antidumping cases targeting China, we are concerned about the extent to which these differential effects are caused by China. To investigate this issue, we re-did the analysis excluding China as a target. As shown in Table 7.4, excluding China indeed reduces the pre-/post- effect but does not alter the finding regarding the impact of PTA membership. It appears the enactment of PTAs shortens the duration of antidumping measures between members (with no effect or perhaps a slight increase in duration for non-members).

The above discussion suggests that there are changes that relate to both time (pre- versus post) and also PTA membership. Because PTA members may be less likely to have affirmative determinations in the first place, we formally examine the issue using a Heckman selection model to control for non-random selection. In particular, we observe the length of the protection only for antidumping cases that resulted in measures being applied. For those antidumping investigations that were rejected (no duties applied) or were 'settled', we do not have any information on duration. If the decision to impose antidumping duties is systematically correlated with unobservables that also affect the duration, using only the antidumping measures might produce biased estimators.

TABLE 7.4   DURATION OF ANTIDUMPING MEASURES, PRE-/POST-PTAS, PTA CLASSIFICATION (EXCLUDE CHINA)

(quarters of protection)		Survival time		
	No. of cases	25%	50%	75%
Pre-PTA				
No PTA	1,159	21	24	45
PTA – No antidumping rules	117	22	41	68
PTA – Antidumping rules	167	23	37	52
Post-PTA				
No PTA	1,160	22	27	52
PTA – No antidumping rules	315	21	24	46
PTA – Antidumping rules	202	19	23	38

In the first stage, a selection equation investigates the binary decision of whether or not to impose antidumping measures, estimated through a probit. In the second stage, the outcome equation focuses on the length of the protection conditional on an affirmative determination. Given that our dependent variable measures antidumping duration, which is naturally right-censored, we estimate a censored normal regression model. The selection equation includes the same independent variables as the outcome equation, except for the selection variables. The key feature of this procedure is to include variables that affect the decision of whether to impose measures, but which are not relevant for the duration of protection. In our probit estimation, we include the bilateral exchange rate and the GDP of the antidumping-using country as the selection variables. These two variables control for unobserved macroeconomic shocks such as business cycles or exchange rate fluctuations that can have significant effects on antidumping activities, as shown by Knetter and Prusa (2003).

The estimation confirms the non-parametric findings. In particular, across all using countries, we find that a PTA leads to a sharp reduction by over 30% in the duration of antidumping measures for its members. The result is confirmed when we partition our users into developing and developed countries, with the strongest results when the targeted country is developed.

We also examine whether antidumping provisions in PTAs exert a greater impact on the duration of such measures. We find the duration of antidumping measures for country pairs with a PTA with antidumping rules is shorter, on average, than country pairs with a PTA without antidumping rules, which in turn is shorter than country pairs not in a PTA. In particular, PTAs with antidumping rules experience more than a 50% reduction in duration, and cases with PTAs with no antidumping rules experience a 25% reduction in duration. Our key findings with respect to the impact of PTAs on the duration of protection remain essentially unchanged after dropping cases targeting China from the analysis.

We believe our study is particularly relevant in the context of the current trade policy arena, which is dominated by PTAs and antidumping protection. Our results indicate that after the implementation of a PTA, antidumping measures on PTA non-partners remain in place for longer periods, further reinforcing the preferences already inherent in the PTA.

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