

Antidumping protection: Good for Bad Firms but Bad for good Firms.

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Antidumping duties by now have become the most frequently used instruments of trade protection. While for the past 20 years the world has seen a drastic fall in tariff barriers, protection is still around but in a different form. The fall in tariffs has coincided with a spectacular increase in the number of antidumping measures.

In principle, antidumping duties can only be applied when the foreign trade partner is charging lower prices abroad than in its own market. This is regarded as an “unfair” dumping practice that needs to be regulated. The current antidumping rules however are not well equipped to distinguish between “fair” and “unfair” trade. When foreign producers produce goods more cheaply, their prices are bound to be lower, especially when they export to a large market like the US or the EU where they are likely to face more competition than in their own domestic markets. What appears to be unfair trade may well be an indication of foreign comparative advantage.

Due to the poor distinction between “fair” and “unfair” trade, one can not exclude that antidumping protection can be “abused” to shelter uncompetitive domestic industries from more efficient rather than “unfair” foreign importers.

The recent availability of firm-level datasets now makes it possible to verify whether antidumping protects “inefficient” industries. In addition it can be verified with micro data what happens to the efficiency of domestic firms during the protection period which lasts about 5 years. A recent paper by Konings and Vandenbussche (2008) sheds some light on both these issues.

Antidumping protects inefficient domestic Firms?

In a study that identifies over 4,000 EU producers involved in EU antidumping cases in the mid-nineties, Konings and Vandenbussche (2008) find evidence of a clear productivity ranking between domestic EU firms prior to the protection. They compare the productivity of firms that “filed for and obtained antidumping protection”, to the productivity of “similar firms that neither applied nor obtained protection”. In that comparison it is clear that the average protected firm has a much lower productivity than the “matched” firm prior to protection. This suggests that industries¹ applying for and obtaining antidumping protection indeed seem to be the “less efficient” ones. This finding seems to fuel the suspicion that antidumping measures can be put in place for reasons that have little to do with the “unfairness” by foreign rival firms. The firm-level evidence reported in this study clearly shows that antidumping duties protect less efficient EU industries. The allegation that antidumping is used for industrial policy purposes therefore seems substantiated.

Another interesting productivity comparison arises from the analysis. Firms that “file for protection but do not get it”, appear to have higher productivity levels prior to the filing than the firms that “filed and get protection” afterwards. This seems to suggest that amongst firms that file for protection, the European Commission grants it only to the least efficient ones. The productivity ranking of firms prior to filing is illustrated in Table 1 below. In the left margin we distinguish three groups of firms: 1) matched

¹ Industries are defined at the 4 digit NACE level.

firms (no filing, no protection), Termination firms (file but no protection) and Protected/Affirmative firms (file and protection). The first column gives the average “Total Factor Productivity” of the firms in each group with highest productivity in the matched followed by the terminations and with the protected firms having the lowest productivity prior to protection.

Table 1: Comparing Average Total Factor Productivity Across Firms

	Productivity Before Filing	Productivity After Filing
Matched Control Group		
<i>Mean</i>	2.23	2.32
<i>Median</i>	1.43	1.53
<i>Standard Deviation</i>	2.55	2.63
Termination Cases		
<i>Mean</i>	1.46	1.43
<i>Median</i>	1.14	1.18
<i>Standard Deviation</i>	1.51	1.13
Affirmative AD Cases		
<i>Mean</i>	1.32	1.55
<i>Median</i>	1.10	1.23
<i>Standard Deviation</i>	1.05	8.65

Affirmative cases: firms that file and get protection.

Termination cases: firms that file but do not get protection

Matched firms: firms similar to firms in affirmative cases but that do not file for protection

Antidumping protection and the productivity of domestic firms

Another question that has not been addressed previously is to what extent antidumping protection affects the productivity of firms during the protection. Can protection improve the efficiency of the protected firms? Can temporary protection turn around the fortune of EU firms? In other words, can the antidumping protection close the efficiency gap that exists at the outset between firms filing for protection and similar firms in other sectors that did not? Ultimately, it is in the interest of policymakers and others to know how temporary protection affects firms’ productivity.

The results reported by Konings and Vandenbussche (2008) shed some light on this. They find that the productivity of the average domestic firm improves during antidumping protection. However, the productivity increase is never sufficient to close the efficiency gap with similar firms belonging to other sectors. The productivity ranking between the various groups of firms as they occur at the end of the protection period is illustrated in column 2 of Table 1. There it can be verified that the “Total Factor Productivity” of the “matched” firms remains far higher than productivity in the groups of firms that filed for protection. The Protected firms appear to reach a productivity level of firms that “filed but did not get protection” but the productivity increase is by far not substantial enough to close the efficiency gap with the “matched” firms.

Based on these results one can question the desirability of protection. In the absence of protection, a likely course of events is that some firms from the filing industries

would have exited. The resources freed up from that would in the end flow towards more efficient sectors in the economy, resulting in a larger productivity increase than the one resulting from antidumping protection.

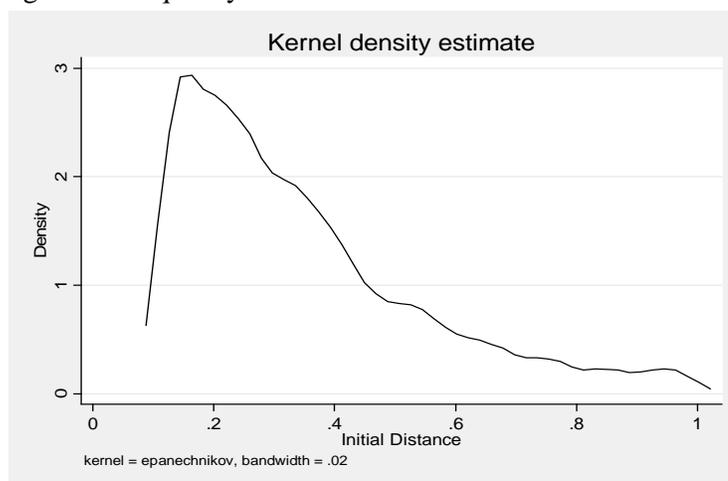
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Two results emerging from the analysis were discussed thus far. First, those firms applying for protection have a lower efficiency than other firms prior to the filing. Second, during protection, the average productivity of protected firms is increased, but never sufficient to close the efficiency gap with similar EU firms in other sectors not filing for protection, which questions the desirability of protection.

In a subsequent step the analysis reveals how average effects can hide underlying firm heterogeneity. The initial firm level productivity distribution of protected firms is shown in Figure 1 and reveals another interesting result. The horizontal axis is normalized between zero and 1 and reflects the number of firms for each efficiency level with zero reflecting the least productive firms in their industry and 1 the most efficient firms in their industry. From this frequency distribution, we clearly see that there are substantial differences between protected firms in terms of initial productivity. The productivity distribution is skewed to the left suggesting that the majority of firms have an efficiency level, measured by their distance from 1, well below the efficiency of the best firm in their industry.

Allowing for this firm heterogeneity into the regression analysis suggests that the effect of antidumping protection on firm-level productivity, while positive on average, is subject to firm heterogeneity. While antidumping protection raises the productivity of the lowly efficient firms it reduces the productivity of the highly efficient firms. Hence it appears that antidumping protection is Good for Bad Firms but Bad for Good firms!

Figure 1: Frequency of Good firms and Bad firms



Several explanations are plausible for this finding. The threat of exit is one element that clearly differs amongst firms with different efficiency levels. The most efficient

firms amongst the protected ones will face little or no threat of exit while the least efficient ones may be much more pressurized to take action during protection to try and avoid an exit scenario. This may explain why the least efficient firms engage in more effort to increase productivity during protection than the most efficient domestic firms. Another possible explanation for why antidumping protection appears to improve the productivity of “bad” firms but to reduce the productivity of “good” firms could be related to the correlation between efficiency and exporting. More efficient firms are likely to be the exporters (Melitz, 2003; Melitz and Ottaviano, 2005). As a result when the EU imposes antidumping protection against its trade partners, its own exporters may face retaliation abroad (Vandenbussche and Zanardi, 2008). This retaliation will reduce the sales of highly efficient EU exporters more than that of lowly efficient non-exporters which could explain the loss in productivity of highly efficient EU firms during protection. None of the explanations above has been formally tested at this point in time but merits further analysis.

Further questions

Slowly an interesting set of new results on firms’ responses to trade policy are appearing. But there are still many issues uncovered. Today we do not understand well the mechanisms at work within the firm in response to trade policy. What is it that firms do when trade policy changes? Do they change their product mix? (Bernard et al., 2006), do they change the skill composition of workers? (Monfort et al., 2008), Do they increase R&D investment? Do they engage in higher value added activities (Schott, 2008)? Does protection lower domestic firms’ exit probability?

Antidumping protection seems to have become a tool of industrial policy aimed at fostering the interests of inefficient industries. Therefore, policymakers should at least know how effective the duty instrument is with respect to their objectives e.g. fostering the interests of domestic firms. At present very little is known about within firm-level responses to trade policy and this clearly merits further analysis.

References

J. Konings and H. Vandenbussche (2008),”Heterogeneous Responses of Firms to Trade Protection”, *Journal of International Economics*, forthcoming.

M. Melitz (2003). “The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity”, *Econometrica*, vol. 71(6), pp. 1695-1725.

M. Melitz and G. Ottaviano (2005), “Market Size, Trade and Productivity “, NBER working paper 11393, June.

A.B. Bernard, S. Redding and P. Schott (2006),”Multi-Product Firms and Product Switching”, revised version of NBER-paper 9789.

P. Monfort, H. Vandenbussche and E. Forlani, (2008), “Chinese Import Competition and Skill-Upgrading in the Textiles industry”, LICOS-discussion paper, KULeuven.

P. Schott (2008), “The Relative Sophistication of Chinese Exports”, *Economic Policy*, 53, 5-49.

H. Vandebussche and M. Zanardi (2008), "What Explains the Proliferation of Antidumping Laws?", *Economic Policy*, January