Web Appendix to "Economic driving forces of preferential trade agreements between Japan, Korea, and the ASEAN countries"

This appendix presents and discusses the results of several robustness checks, in particular the possible role of IMF program participation and of bilateral import competition. The estimation follows the same approach as in the paper.

Several Southeast Asian countries have sought financial support from the IMF in the past. As IMF programs regularly prescribe macroeconomic reforms, it is possible that participation in an IMF program in the recent past has influenced tariff liberalization choices. For example, IMF program participation might lead to lower most-favored-nation tariffs, which would make the effect of intra-industry trade on liberalization less pronounced: the difference between the MFN tariff and the final tariff in a PTA would be less for all goods covered. Less likely but possible is that countries that have undergone economic reforms due to IMF arrangements are more able and willing to pursue deep bilateral trade liberalization.

I therefore include a dummy variable that is equal to 1 if in any of the five years preceding the PTA, an IMF Standby Arrangement, IMF Extended Fund Facility Arrangement or IMF Structural Adjustment Facility was in effect for at least 5 months in a particular year. The IMF program data is from Dreher (2006). Results are shown in columns (1) and (2) in Table A.1 below, with (1) the results when using dummy variables for VIIT and HIIT and (2) the results using levels of VIIT and HIIT. The estimated coefficient never reaches statistical significance without affecting the estimates of the other coefficients in the model, so that there is no evidence of influence of prior IMF program participation.

Furthermore, it is possible that countries cut tariffs more deeply for goods that are not actually traded much bilaterally between the partners, but retain a high MFN tariff for this particular good because there is high import competition from a third country. In this case, low values of bilateral import competition would be associated with higher preference margins. To control for this possibility, I replace the IMPORTCOMPETITION variable in the main specification (which measures import competition from any source) with the measure BILATERALIMPORTCOMPETITION, operationalized as the five-year moving average in *t-5* to *t-1* for imports of a good from the partner country divided by the domestic production of the good. Because lower values would predict higher preference margins, we should expect a negative sign on the estimated coefficient in the tobit model and a positive sign in the logit model.

However unlike the multilateral measure of import competition, the coefficient does not reach statistical significance—neither in the tobit model (3) or logit model (4)—and has the wrong sign. Not much changes about the coefficients on HIIT and VIIT, except that HIIT is no longer statistically significant in the logit model.

This suggests that it is imports in general rather than from a specific partner that determine whether an industry lobbies against tariff reductions, in particular since the two measures are only weakly correlated (ρ = 0.10).

Table A.1: Robustness Checks

	(1)	(2)	(3)	(4)
Independent variable:	Preference Margin		Preference Margin	Excluded Category
HIIT	2.914**		3.836**	-0.497
	(0.728)		(0.770)	(0.351)
VIIT	1.997**		2.911**	-0.176*
	(0.549)		(0.578)	(0.082)
lnExports	-0.520*	-0.567*	-0.782*	0.136*
	(0.238)	(0.250)	(0.346)	(0.056)
ImportCompetition	-16.505**	-16.696**		
	(4.966)	(5.031)		
lnBilateralFDIFlows	0.103	0.095	0.348	
	(3.330)	(3.319)	(1.044)	
IMFProg	0.287	0.204		
	(8.249)	(8.227)		
HIITlevel		0.403**		
		(0.113)		
VIITlevel		0.254*		
		(0.111)		
$BilateralImportCompetition_{ij}$			10.994	
			(20.213)	
$BilateralImportCompetition_{ji}$				-4.409
				(6.423)
Constant	16.168	16.736	7.393	-4.816**
	(21.913)	(21.899)	(6.164)	(0.428)
Observations	15569	15569	14055	17350
Clusters	9	9	9	10
log-likelihood	-49295.502	-49317.795	-44708.836	-934.068

* significant at 5%; ** significant at 1%. (1) and (2) is a tobit estimator; (3) and (4) a logit estimator. Two-tailed tests are conducted for all estimates. Standard errors (S.E.) are bootstrapped by resampling from PTA clusters with 1,000 repetitions.

References

Dreher, Axel. 2006. "IMF and Economic Growth: The Effects of Programs, Loans, and Compliance with Conditionality." *World Development* 34 (5): 769–788. doi:10.1016/j.worlddev.2005.11.002.