APPENDIX

EMPIRICAL RESULTS BASED ON THE US DOLLAR

This appendix provides empirical results based on the US dollar numeraire. In order to assess the effect of the base country on the outcomes, all tests applied to series constructed based on Thai baht are re-examined with similar techniques. Table A1 reports results of testing relative PPP of individual country by univariate unit root tests. Table A2 and A3 show the outcome of investigating weak and strong PPP based on time series cointegration tests. Results from panel cointegration are reported in Table A4.

Table A1

Unit Root Tests of Individual Real Exchange Rate

Based on the US Dollar Numeraire

Country	ADF	lag	PP	lag	Critical values	
Thailand	-2.234	1	-2.019	2		
FTA partners						
Australia	-1.516	1	-1.848	5	1% level	-3.516
China	-2.425	0	-2.650	2	5% level	-2.899
India	-1.286	2	-1.045	4	10% level	-2.586
Japan	-2.280	3	-2.273	3		
New Zealand	-1.611	1	-1.841	5		
SEA partners						
Indonesia	-1.940	3	-2.424	2		
Malaysia	-2.337	1	-1.960	3		
Philippines	-1.954	1	-1.826	4		
Singapore	-1.589	0	-1.672	4		

Table A2

Results of the Cointegration Regression using

Engle and Granger's Test (US dollar)

Restricted model: $\ln E_t = \alpha + \beta \ln(P_{it} / P_{US,t}) + u_t$

Country	α	β	adjusted R^2	CRDW	ADF
Thailand	3.657	2.778	0.720	0.131	-1.624
FTA partners					
Australia	0.405	-2.305	0.109	0.103	-2.116
China	2.107	1.282	0.879	0.229	-2.178
India	3.792	1.547	0.940	0.123	-2.024
Japan	4.756	0.397	0.179	0.213	-2.448
New Zealand	0.582	-0.957	0.043	0.086	-1.646
SEA partners					
Indonesia	8.859	1.407	0.928	0.284	-2.097
Malaysia	1.246	3.986	0.250	0.055	-2.156
Philippines	3.729	1.257	0.812	0.073	-1.827
Singapore	0.513	0.351	0.060	0.047	-1.848

Unrestricted model: $\ln E_t = \alpha + \beta_1 \ln(P_{it}) + \beta_2 \ln(P_{US,t}) + u_t$

Country	α	β_1	β_2	adjusted R^2	CRDW	ADF
Thailand	2.012	2.074	-1.721	0.730	0.138	-2.106
FTA partners						
Australia	-0.986	-2.315	2.624	0.257	0.125	-2.019
China	2.012	2.074	-1.721	0.730	0.138	-2.106
India	3.065	1.453	-1.296	0.939	0.120	-1.941
Japan	11.371	-1.362	-0.081	0.348	0.266	-3.098*
New Zealand	3.190	-3.301	2.741	0.107	0.107	-1.897
SEA partners						
Indonesia	13.560	1.707	-2.724	0.933	0.304	-2.236
Malaysia	-2.452	2.486	-1.675	0.706	0.122	-2.328
Philippines	-9.718	-0.570	3.487	0.863	0.101	-2.453
Singapore	8.989	-3.323	1.473	0.603	0.140	-1.626

Note: * indicates that null hypothesis is rejected at the 10% level.

Table A3

Results from Johansen Multivariate Cointegration Test (US dollar)

Country	Null hypothesis	Trace statistic	Maximal eigenvalue statistic	No. of cointegrating vector	Cointegrating vectors β_1	Cointegrating vectors β_2
Thailand	$H_0 : r = 0$	45.2656**	24.4088	1	-0.487	-1.746
	$H_0 : r \leq 1$	20.8568	13.2145		(0.689)	(1.391)
	$H_0 : r \leq 2$	7.64222	7.64222			
FTA partners						
Australia	$H_0 : r = 0$	47.0517**	24.5832	1	-16.638	61.030
	$H_0 : r \leq 1$	22.4684	14.9223		(8.709)	(14.901)
	$H_0 : r \leq 2$	7.54608	7.54608			
China	$H_0 : r = 0$	44.8457**	21.7394	1	0.840	3.819
	$H_0 : r \leq 1$	23.1063	12.2641		(0.120)	(0.867)
	$H_0 : r \leq 2$	10.8423	10.8423			
India	$H_0 : r = 0$	58.8032***	37.7225***	1	1.072	3.896
	$H_0 : r \leq 1$	21.0806	13.7885		(0.2392)	(0.818)
	$H_0 : r \leq 2$	7.2921	7.2921			
Japan	$H_0 : r = 0$	54.0405***	30.913***	1	6.618	-12.632
	$H_0 : r \leq 1$	23.1275	15.618		(2.269)	(3.330)
	$H_0 : r \leq 2$	7.50945	7.50945			
NZ	$H_0 : r = 0$	32.6747	16.3565	0	-	-
	$H_0 : r \leq 1$	16.3182	12.4967			
	$H_0 : r \leq 2$	3.82148	3.82148			
SEA partners						
Indonesia	$H_0 : r = 0$	32.2798	16.1185	0	-	-
	$H_0 : r \leq 1$	16.1613	12.897			
	$H_0 : r \leq 2$	3.26432	3.26432			
Malaysia	$H_0 : r = 0$	42.040	18.067	0	-	-
	$H_0 : r \leq 1$	23.974	15.736			
	$H_0 : r \leq 2$	8.238	8.238			
Philippines	$H_0 : r = 0$	32.973	17.408	0	-	-
	$H_0 : r \leq 1$	15.565	9.919			
	$H_0 : r \leq 2$	5.646	5.646			
Singapore	$H_0 : r = 0$	72.429***	47.388**	2	-9.379	7.538
	$H_0 : r \leq 1$	25.041	20.980**		(1.550)	(2.163)
	$H_0 : r \leq 2$	4.061	4.061			

Note: **, *** indicates that the null hypothesis is rejected at the 5% and 1% level, respectively.
NZ stands for New Zealand.
Number in parenthesis is standard error of coefficient.

Table A4

Panel Cointegration Tests Based on the US Dollar Numeraire

Trade Partners:	FTA Partners		SEA Neighbors	
Pedroni test				
panel-v	1.968		-1.686	
panel-rho	-0.879		1.751	
panel-ADF	-0.605		4.063***	
Kao test				
ADF	-1.998**		-1.681**	
Fisher test				
No. of CE.	None	At most 1	None	At most 1
Trace	16.85	2.886	275.4***	9.989
Maximal Eigenvalue	22.38**	2.886	43.39***	9.989

Note: **, *** indicates that the null hypothesis is rejected at the 5% and 1% level, respectively.