

APPENDIX

Appendix A Results of Pooled OLS Model

```
. regress lntradeij lngdppci lngdppcj lnbxchij lndij borderij afta crisis
```

Source	SS	df	MS	Number of obs = 126		
Model	376.094586	7	53.727798	F(7, 118) = 131.67		
Residual	48.1506209	118	.408056109	Prob > F = 0.0000		
Total	424.245207	125	3.39396166	R-squared = 0.8865		
				Adj R-squared = 0.8798		
				Root MSE = .63879		

lntradeij	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lngdppci	2.163435	.226917	9.53	0.000	1.714078	2.612792
lngdppcj	1.490843	.0891588	16.72	0.000	1.314284	1.667401
lnbxchij	-.4649524	.0407711	-11.40	0.000	-.5456902	-.3842145
lndij	-2.575793	.4788132	-5.38	0.000	-3.523973	-1.627612
borderij	.5171341	.4546339	1.14	0.258	-.3831648	1.417433
afta	-.671545	.214362	-3.13	0.002	-1.09604	-.2470499
crisis	-.4581254	.1588542	-2.88	0.005	-.7727	-.1435508
_cons	-.8626124	3.86609	-0.22	0.824	-8.518523	6.793298

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Appendix B Results of Random Effects Model

```
. xtreg lntradeij lngdppci lngdppcj lnbxchij lndij borderij afta crisis, re
```

Random-effects GLS regression	Number of obs	=	126
Group variable: country1	Number of groups	=	6
R-sq: within = 0.6700	Obs per group: min	=	21
between = 0.9701	avg	=	21.0
overall = 0.8792	max	=	21
	Wald chi2(7)	=	283.36
corr(u_i, X) = 0 (assumed)	Prob > chi2	=	0.0000

lntradeij	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
lngdppci	2.170762	.2992394	7.25	0.000	1.584263	2.75726
lngdppcj	1.327057	.3224211	4.12	0.000	.6951233	1.958991
lnbxchij	-.3501492	.1511525	-2.32	0.021	-.6464027	-.0538957
lndij	-1.850976	1.778852	-1.04	0.298	-5.337462	1.63551
borderij	1.147969	1.686253	0.68	0.496	-2.157026	4.452963
afta	-.6800849	.2038744	-3.34	0.001	-1.079671	-.2804984
crisis	-.4635308	.149495	-3.10	0.002	-.7565355	-.1705261
_cons	-5.332709	13.56749	-0.39	0.694	-31.92451	21.25909
sigma_u	.50695455					
sigma_e	.58335853					
rho	.43026716	(fraction of variance due to u_i)				

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Appendix C Result of Breush Pagan Lagrange Multiplier Test

```
. xttest0
```

Breusch and Pagan Lagrangian multiplier test for random effects

$$\text{lntrade}_{ij}[\text{country1}, t] = Xb + u[\text{country1}] + e[\text{country1}, t]$$

Estimated results:

	Var	sd = sqrt(Var)
lntrade _{ij}	3.393962	1.842271
e	.3403072	.5833585
u	.2570029	.5069546

Test: Var(u) = 0

chibar2(01) = 7.19
Prob > chibar2 = 0.0037

Appendix D Variance-inflating factor of independent variables

```
. estat vif
```

Variable	VIF	1/VIF
border _{ij}	14.18	0.070508
ln _{dij}	12.88	0.077635
lnbxch _{ij}	7.04	0.142050
lngdppc _j	3.46	0.289116
afta	2.19	0.457071
lngdppci	2.05	0.487367
crisis	1.20	0.832303
Mean VIF	6.14	

Appendix E Correlations between variables

```
. correlate lntradeij lngdppci lngdppcj lnbxchij lndij borderij afta crisis
(obs=126)
```

	lntrad~j	lngdppci	lngdppcj	lnbxchij	lndij	borderij	afta	crisis
lntradeij	1.0000							
lngdppci	0.4322	1.0000						
lngdppcj	0.3284	0.1680	1.0000					
lnbxchij	0.0007	0.0752	0.8002	1.0000				
lndij	-0.5722	0.0000	-0.1888	-0.3220	1.0000			
borderij	0.4977	-0.0000	-0.4347	-0.3871	-0.7028	1.0000		
afta	0.2331	0.6804	0.0986	0.0469	0.0000	-0.0000	1.0000	
crisis	-0.1245	-0.1533	-0.0257	-0.0088	0.0000	0.0000	-0.3824	1.0000

Appendix F Modified Wald Test for Groupwise Heteroscedasticity

```
. xttest3
```

Modified Wald test for groupwise heteroskedasticity
in fixed effect regression model

H0: $\sigma(i)^2 = \sigma^2$ for all i

```
chi2 (6) = 15.90
Prob>chi2 = 0.0143
```

Appendix G Test for cross sectional independence

```
. xtcsd, pesaran abs
```

Pesaran's test of cross sectional independence = 2.436, Pr = 0.0149

Average absolute value of the off-diagonal elements = 0.202

```
. xtcsd, friedman
```

Friedman's test of cross sectional independence = 48.095, Pr = 0.0000

Appendix H Test for autocorrelation in panel data

```
. xtserial lntradeij lngdppci lngdppcj lnbxchij lndij borderij afta crisis
```

Wooldridge test for autocorrelation in panel data

H0: no first-order autocorrelation

F(1, 5) = 1.912
Prob > F = 0.2253

Appendix I Result of Feasible Generalized Least Square (FGLS)

```
. xtgls lntradeij lngdppci lngdppcj lnbxchij lndij borderij afta crisis, panels  
> (correlated) corr(independent)
```

Cross-sectional time-series FGLS regression

Coefficients: generalized least squares

Panels: heteroskedastic with cross-sectional correlation

Correlation: no autocorrelation

Estimated covariances = 21 Number of obs = 126
Estimated autocorrelations = 0 Number of groups = 6
Estimated coefficients = 8 Time periods = 21
Wald chi2(7) = 729.36
Prob > chi2 = 0.0000

lntradeij	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
lngdppci	2.220918	.2354428	9.43	0.000	1.759459	2.682377
lngdppcj	1.434908	.0780684	18.38	0.000	1.281897	1.587919
lnbxchij	-.4031778	.0421828	-9.56	0.000	-.4858545	-.3205011
lndij	-2.008036	.4344778	-4.62	0.000	-2.859597	-1.156475
borderij	1.03043	.4533775	2.27	0.023	.1418267	1.919034
afta	-.6674636	.2252201	-2.96	0.003	-1.108887	-.2260404
crisis	-.4450586	.1669463	-2.67	0.008	-.7722673	-.11785
_cons	-5.159232	3.43976	-1.50	0.134	-11.90104	1.582575

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