Does the accession to the WTO influence the effect of cultural and institutional proximity on bilateral trade?

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May 23, 2015

Motivation

Aim of the research:

Analyze how the WTO accession changes the effect of cultural and institutional barriers

- What happens when there are no longer direct barriers such as tariffs?
- Difference between the WTO and RTA: same ideology, but varied effect?

Literature

Cultural proximity has positive effect on trade:

- Eurovision Song Contest example (Felbermayr and Toubal, 2010)
- Ethnic distance (Gokmen, 2013)
- Genetic distance (Spolaore et al., 2009)

The WTO positively influences bilateral trade (Rose, 2004; Tomz, Goldstein and Rivers, 2005)

Data and Methodology

Dyadic panel: 1950-2010, >200 countries
Importer and Exporter-Year Fixed Effects

- Thierry Mayer gravity and GeoDist datasets
- Bilateral Trade – the Correlates of Wars project
- Genetic distance – Spolaore and Wacziarg (2009)
- "Governance Matters" - D. Kaufmann, A. Kraay and M. Mastruzzi

Empirical Model

Standard Trade Gravity Model:

$$\ln \text{Imports}_{ijt} = \beta_0 + \beta_1 * \text{X} + \beta_2 * \text{WTO} + \beta_3 * (\text{X} * \text{WTO}) + \beta_4 * \text{Controls}$$

Controls:

- ln Distance
- Contiguity
- Colonial Links
- Same Country
- Legal Origin
- RTA/FTA
- WTO/GATT
- Common Currency
- GSP

Variables of Interest:

- Regulatory Quality
- Rule of Law
- Control of Corruption
- Common Language
- Genetic Distance

WTO Membership

	(1)	(2)	(3)	(4)	(5)	(6)
Δ Regulatory Quality	-0.216***					
	(0.016)					
WTO X Δ Regulatory Quality	-0.033*					
	(0.019)					
Δ Rule Of Law		-0.144***				
		(0.016)				
WTO X Δ Rule Of Law		-0.044**				
		(0.018)				
Δ Control of Corruption			-0.195***			
			(0.016)			
WTO X Δ Control of Corruption			0.020			
			(0.017)			
Common language (o)				0.052**		
				(0.026)		
WTO X Common language (o)				0.074**		
				(0.032)		
Common language (e)					0.020	
					(0.027)	
WTO X Common language (e)					0.127***	
					(0.035)	
Fst genetic distance						-0.00006***
						(0.000)
WTO X Fst						-0.00023***
						(0.000)
Observations	217,573	217,573	217,573	927,858	927,858	436,145
R-squared	0.76	0.75	0.75	0.73	0.73	0.74
Importer-Year FE	YES	YES	YES	YES	YES	YES
Exporter-Year FE	YES	YES	YES	YES	YES	YES

RTA Membership

	(1)	(2)	(3)	(4)	(5)	(6)
Δ Regulatory Quality	-0.232***					
	(0.012)					
RTA X Δ regulatory quality	-0.045					
	(0.047)					
Δ Rule Of Law		-0.168***				
		(0.012)				
RTA X Δ Rule Of Law		-0.045				
		(0.046)				
Δ Control of Corruption			-0.190***			
			(0.012)			
RTA X Δ Control of Corruption			0.100***			
			(0.038)			
Common language (o)				0.099***		
				(0.024)		
RTA X Common language (o)				-0.369***		
				(0.075)		
Common language (e)					0.093***	
					(0.025)	
RTA X Common language (e)					-0.250***	
					(0.076)	
Fst genetic distance						-0.00019***
						(0.000)
RTA X Fst						0.00016**
						(0.000)
Observations	217,573	217,573	217,573	927,858	927,858	436,145
R-squared	0.76	0.75	0.75	0.73	0.73	0.74
Importer-Year FE	YES	YES	YES	YES	YES	YES
Exporter-Year FE	YES	YES	YES	YES	YES	YES

RTA vs. WTO: Selection Bias

Two-sample t-test with equal variances for RTA and WTO membership:

	(WTO = 0) - (WTO = 1) Δ mean	(RTA = 0) - (RTA = 1) Δ mean
Δ Regulatory Quality	0.167***	0.3966***
Δ Rule Of Law	-0.024***	0.2928***
Δ Control of Corruption	-0.1047***	0.1632***
Fst genetic distance	0.939	749.2***
ln Distance	.0577***	1.619***

Note: *** p<0.01, ** p<0.05, * p<0.1

Common WTO Duration

	(1)	(2)	(3)	(4)	(5)	(6)
Δ Regulatory Quality	-0.167***					
	(0.014)					
Duration X Δ Regulatory Quality	-0.004***					
	(0.001)					
Δ Rule of Law		-0.112***				
		(0.014)				
Duration X Δ Rule of Law		-0.003***				
		(0.001)				
Δ Control of Corruption			-0.156***			
			(0.013)			
Duration X Δ Control of Corruption			-0.001			
			(0.001)			
Common Language (o)				0.084***		
				(0.025)		
Duration X Common Language (o)				0.001		
				(0.001)		
Common Language (e)					0.061**	
					(0.026)	
Duration X Common Language (e)					0.002	
					(0.002)	
Fst genetic distance						-0.000089***
						(0.000)
Duration X Fst						-0.00001***
						(0.000)
Common Duration	0.017***	0.017***	0.013***	0.015***	0.015***	0.024***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Observations	217,573	217,573	217,573	927,858	927,858	436,145
R-squared	0.76	0.76	0.76	0.73	0.73	0.74
Importer-Year FE	YES	YES	YES	YES	YES	YES
Exporter-Year FE	YES	YES	YES	YES	YES	YES

Results and Conclusion

- The results carry on and support the outcomes of the previous studies on the cultural barriers
- RTA membership tends to smooth out the effects of linguistic or institutional differences
- WTO accession makes them more visible
- More years spent in the WTO lead to the increased effect of cultural and institutional proximity