

THE RESORT TO PROTECTIONISM DURING THE GREAT RECESSION:
WHICH FACTORS MATTERED?¹

R
D

Abstract:

T R
R
R R T R R

1. Introduction

D

R

R R
R R

R R

R R

T

D

R

R

R

R

2. Further remarks concerning the departure from the existing literature

R

R

T

J

D

D

D

R

D

T

D

R

D

D

D

3. A theoretical benchmark for crisis-era protectionism

$$t_j^{AV}$$

$$t_j^{AV} = \left(\frac{X_j}{M_j e_j}\right) \sum_i \left(\frac{\Phi_i \varphi_i}{\kappa_i}\right)$$

$$\Phi_i$$

$$\varphi_i = \left(\frac{x_i}{X_j}\right)$$

$$\kappa_i = \left(\frac{e_i}{e_j}\right)$$

$$t_j^{AV}$$

$$t_j^{AV} = \left(\frac{X_j}{M_j}\right)\left(\frac{1}{e_j}\right)Z_j$$

$$Z_j$$

$$\mathbf{D}$$

$$\mathbf{T}$$

D

D

D

D

T

D

D

TR

D

D

R

R

D

R

D

$$\left(\frac{X_j}{M_j}\right)$$

$$\left(\frac{X_j}{M_j}\right)$$

Z_j

D

R

R

R

R

D

$$\ln\left(t_j^{AV}\right)=\tilde{C}+\ln\left(\frac{X_j}{M_j}\right)^p+e_j^p+\tilde{Z}_j^p+\varepsilon_j$$

\tilde{C}

$$\ln\left(\frac{X_j}{M_j}\right)^p$$

$$\ln\left(\frac{X_j}{M_j}\right)\quad e_j^p$$

$$\tilde{Z}_j^p$$

$$\varepsilon_j$$

JR

JR

R

D

$$\ln\left(\frac{TDV}{1-TDV}\right)$$

R

4. Accounting for the deviations from the standard model: A statistical approach

R

R

D

R

J

J

J

J

JR

J

J

R

R

D

R

5. Caveats and closing remarks

T

R

R

D

D

References

D

R

J

D

D

D

D

R

D

R

T

D

R

D

J

T

J

R

D

J

D

R

D

J

D R

Tensions Contained...For Now: Th

T T

R

R

Theoretical Annex.

$$\left(\frac{t_i}{1+t_i}\right) = \left(\frac{\frac{I_i - \alpha_L}{\beta} + \alpha_L}{1 - \beta} + \alpha_L\right) \left(\frac{\frac{x_i}{m_i}}{e_i}\right) = \Phi_i \left(\frac{\frac{x_i}{m_i}}{e_i}\right)$$

$$\left(\frac{t_i}{1+t_i}\right) \approx t_i$$

$$t_i m_i \approx \Phi_i \left(\frac{x_i}{e_i}\right) \Rightarrow \sum_i \left(\frac{t_i m_i}{M_j}\right) \approx \sum_i \frac{\Phi_i}{M_j} \left(\frac{x_i}{e_i}\right) = \sum_i \frac{\Phi_i}{M_j} \left(\frac{\varphi_i X_j}{\kappa_i e_j}\right) = \sum_i \left(\frac{\Phi_i \varphi_i}{\kappa_i}\right) \left(\frac{X_j}{M_j e_j}\right)$$

$$t_j^{AV} = \left(\frac{X_j}{M_j e_j}\right) \sum_i \left(\frac{\Phi_i \varphi_i}{\kappa_i}\right) + \dots$$

Table 1: Regression estimates for the prediction for aggregate trade policy standard derived from the Grossman Helpman (1995) model.

INDEPENDENT VARIABLES	DEPENDENT VARIABLES								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Intensity of local competition, e	-0.0118*	-0.0127	-0.0217	-0.0362**	-0.0281**	-0.00614*	-0.00543	-0.00410*	-0.00155
Ratio of national exports to imports, 2000-5	0.0563***	0.0748**	0.0619**	0.112***	0.0943***	0.0192***	0.0317***	0.0114**	0.00719***
Freedom of press score	0.000598	0.00101	0.00210**	0.000689	0.00198**	0.000252	0.000186	-5.26e-05	-6.90e-05
Total # elections 2009 and 2010	-0.00522	-0.00657	-0.00777	-0.0112	-0.00719	-0.00102	-0.00330	-0.00113	-0.00160
Democracy index	0.00267	0.00407	0.00246	0.00278	0.00411*	0.000912	0.00126	0.000536	0.000242
Change of forecasted real GDP growth in 2009	-0.0427***	-0.0438***	-0.0499**	-0.116***	-0.0588***	-0.0117***	-0.0298***	-0.0190***	-0.00979***
Change of forecasted real GDP growth in 2010	-0.0454***	-0.0457***	-0.0552*	-0.118***	-0.0695***	-0.0186***	-0.0257***	-0.0134**	-0.00904***
Observations	117	117	117	117	117	117	117	117	117
R-squared	0.174	0.119	0.122	0.262	0.187	0.120	0.260	0.309	0.301
Adj. R-squared	0.121	0.0627	0.0653	0.215	0.134	0.0632	0.212	0.265	0.256
Degrees of freedom	109	109	109	109	109	109	109	109	109
Nr. neg. predictions if dep. variable not transformed	11	12	26	11	11	13	12	18	13
Correlation betw. y's and errors	0.975	0.986	0.961	0.930	0.943	0.981	0.955	0.944	0.920

Body text of table reports parameter estimate and stars (*) to indicate extent of statistical significance: *** p<0.01, ** p<0.05, * p<0.1

Figure 1: Plot of regression residuals versus the dependent variable, where the latter equals the number of red state measures implemented.

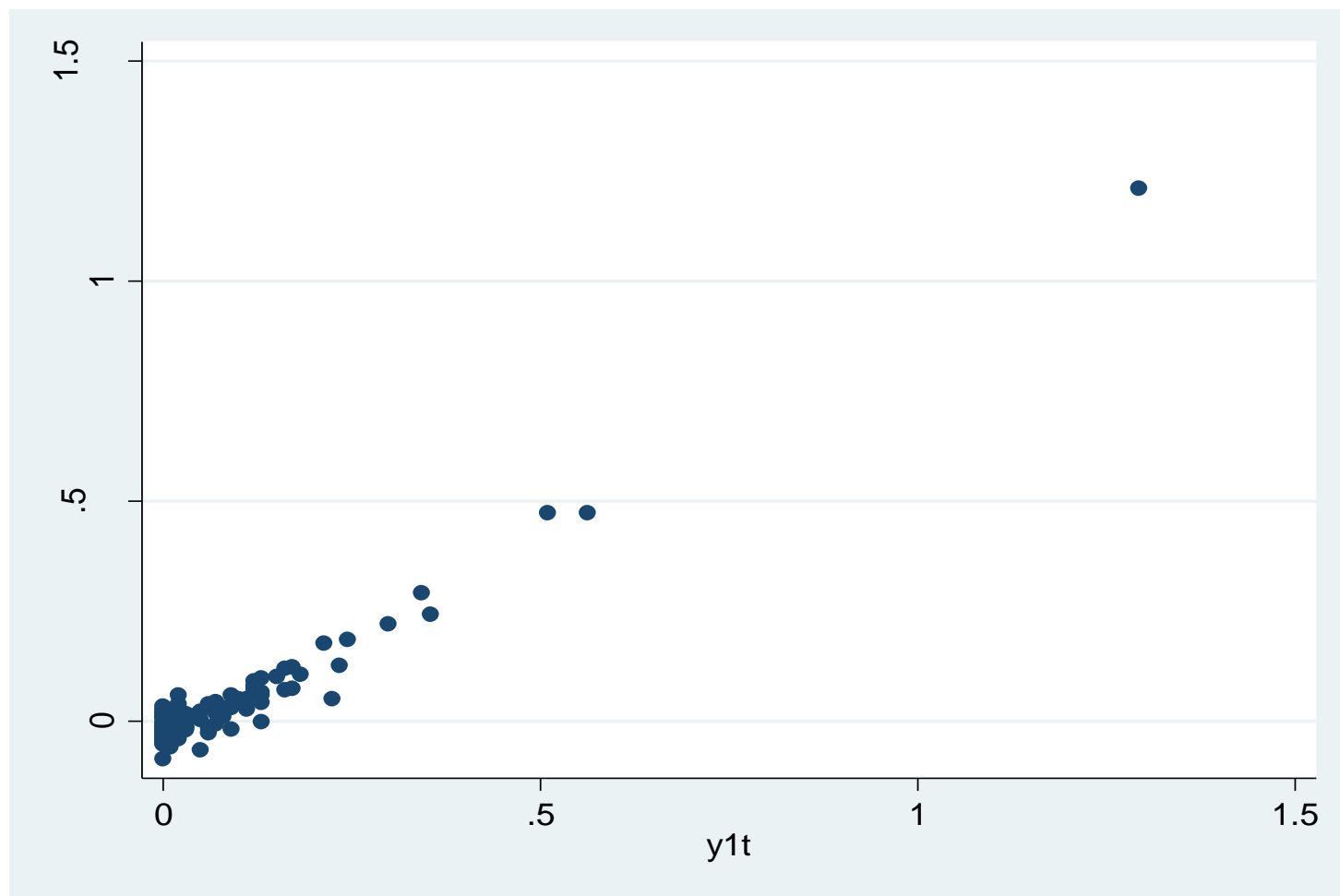


Table 2: Regression estimates when the residuals from the first stage regressions are used as the dependent variable.

HYPOTH-		WTO	DEPENDENT VARIABLES								
ESIS	MEMBER	INDEPENDENT VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
H1		WTO Accession process	-0.0729	-0.0527	0.406	-0.281	0.272	-0.117	0.0218	0.00813	-0.0184
H2	Long	Share of exports to other WTO members	-0.142	-0.188	0.375	-0.303	0.192	-0.116	-0.0150	-0.0113	-0.0206
H2	New	Share of exports to other WTO members	0.0310	0.0397	0.418	0.328*	0.226*	0.0259	0.00542	-0.00538	0.00114
H3	Long	Share of non-agri products under tariff bindings	0.000174	0.000253	-7.98e-05	0.000224	-0.000157	0.000125	4.34e-05	1.92e-05	4.63e-05
H3	New	Share of non-agri products under tariff bindings	-0.00250	-0.00301	-0.000814	-0.00627	-0.000908	-0.00171*	-0.000666	-0.000280	-0.000272
H4	Long	Difference between bound and applied average tariff rates	-0.000141	-0.000138	0.000396	-0.000368	0.000520	-0.000130	-1.32e-05	-0.000128	-4.37e-05
H4	New	Difference between bound and applied average tariff rates	-0.00499*	-0.00702*	-0.0226**	-0.0286***	-0.0153***	-0.00368**	-0.00114	9.93e-05	-0.000650
H5	Long	Share of duty-free bound in non-agricultural goods	-0.000399	-0.00114	-0.000572	0.00129	1.76e-05	-0.000810	0.000515	0.000595**	-9.66e-05
H5	New	Share of duty-free bound in non-agricultural goods	-0.000877	-0.00175	-0.00192	-0.00515	-0.00190	-0.00103	0.000231	0.000359	9.77e-05
H6	Long	TPRM in 2009 or 2010	-0.0372*	-0.0327	-0.0158	-0.0342	-0.0180	-0.00581	-0.0302***	-0.0184***	-0.0128***
H6	New	TPRM in 2009 or 2010	0.00431	0.0224	-0.127	-0.0532	-0.0416	0.00910	-0.00640	0.00210	-0.00126
H7	Long	Interaction with free press measure	-0.00111*	-0.00147*	-0.000401	-0.00127	-0.00100	-0.000617*	-0.000378	-0.000124	-0.000141
H7	New	Interaction with free press measure	0.000785*	0.000666	0.00487	0.00462**	0.00218	0.000570*	0.000282	-2.35e-05	-7.52e-05
H8	Long	LDC status	-0.00105	-0.00539	-0.0374	-0.0327	-0.0460	-0.00766	0.00454	0.00809	0.00251
H8	New	LDC status	-0.0319	-0.0391	-0.172	-0.209	-0.104	-0.0230	-0.00865	0.00676	0.000215
Observations			117	117	117	117	117	117	117	117	117
R-squared			0.105	0.093	0.241	0.198	0.195	0.086	0.151	0.170	0.163

Adj. R-squared	-0.0280	-0.0413	0.128	0.0791	0.0754	-0.0498	0.0252	0.0468	0.0389
Degrees of freedom	101	101	101	101	101	101	101	101	101

Body text of table reports parameter estimate and stars (*) to indicate extent of statistical significance: *** p<0.01, ** p<0.05, * p<0.1

Table 3: Regression estimates for the first stage regressions in which the Grossman Helpman regressions have been purged of the variation associated with the WTO-related independent variables.

[illegible]

R-squared	0.252	0.180	0.328	0.408	0.349	0.163	0.393	0.452	0.473
Adj. R-squared	0.0767	-0.0117	0.171	0.270	0.196	-0.0333	0.251	0.324	0.349
Degrees of freedom	94	94	94	94	94	94	94	94	94
Correlation betw. y's and residuals	0.958	0.976	0.856	0.876	0.885	0.974	0.914	0.886	0.845
Body text of table reports parameter estimate and stars (*) to indicate extent of statistical significance: *** p<0.01, ** p<0.05, * p<0.1									