

Results Available Upon Request for
“The Dynamics of Trade and Competition”

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1 Nominal Exchange Rates

1.1 Short Run

Table 1: Prices (Short Run), all country pairs, sector-specific nominal exchange rates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Method	OLS	OLS	OLS	OLS	IV	IV	IV
$\Delta \ln \frac{\bar{p}_{it-1}}{\bar{p}_{it-1}^*}$	—	—	0.066 (1.963)	0.066 (1.978)	—	—	0.089 (1.842)
$\Delta \ln \theta_{it}$	-0.013 (-1.202)	-0.022 (-2.002)	-0.035 (-3.400)	—	—	—	—
$\Delta \ln \theta_{it}^*$	0.009 (0.989)	0.019 (1.995)	0.025 (2.701)	—	—	—	—
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	—	—	—	-0.029 (-4.231)	-0.177 (-4.473)	-0.176 (-4.553)	-0.207 (-4.060)
$\Delta \ln D_{it}$	0.007 (0.637)	-0.008 (-0.720)	-0.016 (-1.474)	-0.014 (-1.329)	-0.043 (-2.569)	-0.044 (-2.635)	-0.051 (-2.842)
$\Delta \ln D_{it}^*$	0.000 (-0.107)	0.002 (1.413)	0.002 (1.584)	0.003 (1.839)	0.013 (4.437)	0.012 (3.803)	0.013 (3.625)
$\Delta \ln P_t$	—	0.449 (5.542)	0.518 (6.518)	0.521 (6.576)	—	0.357 (3.349)	0.391 (3.289)
$\Delta \ln P_t^*$	—	-0.424 (-5.029)	-0.584 (-6.865)	-0.577 (-6.825)	—	-0.354 (-3.256)	-0.404 (-3.101)
N	800	800	720	720	800	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (5) to (7) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. Industry-specific bilateral nominal exchange rates (not reported) are included in all regressions.

Table 2: Productivity (Short Run), all country pairs, sector-specific nominal exchange rates

	(1)	(2)	(3)	(4)	(5)
Method	OLS	OLS	OLS	IV	IV
$\Delta \ln \frac{z_{it-1}^*}{z_{it-1}^*}$	–	–0.156 (–5.330)	–0.101 (–2.805)	–	–0.140 (–2.409)
$\Delta \ln \theta_{it}$	0.000 (–0.007)	0.008 (0.264)	–	–	–
$\Delta \ln \theta_{it}^*$	0.024 (0.911)	0.024 (0.854)	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–	0.074 (2.900)	0.676 (4.852)	0.871 (4.153)
$\Delta \ln D_{it}$	0.049 (1.565)	0.067 (2.145)	0.168 (4.598)	0.287 (4.889)	0.340 (4.647)
$\Delta \ln D_{it}^*$	–0.001 (–0.298)	0.000 (–0.060)	–0.040 (–7.419)	–0.073 (–6.903)	–0.084 (–5.905)
N	800	720	720	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. We cannot reject the hypothesis that the coefficients on domestic and foreign openness are equal but we can reject it for the coefficients on the number of domestic and foreign firms. In (4) and (5) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. Industry-specific bilateral nominal exchange rates (not reported) are included in all regressions.

Table 3: Markups (Short Run), all country pairs, sector-specific nominal exchange rates

	(1)	(2)	(3)	(4)	(5)
Method	OLS	OLS	OLS	IV	IV
$\Delta \ln \frac{\mu_{it-1}}{\mu_{it-1}^*}$	–	–0.224 (–5.900)	–0.226 (–6.009)	–	–0.223 (–5.021)
$\Delta \ln \theta_{it}$	–0.017 (–1.346)	–0.024 (–1.829)	–	–	–
$\Delta \ln \theta_{it}^*$	0.014 (1.223)	0.030 (2.575)	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–	–0.025 (–2.918)	–0.109 (–2.898)	–0.161 (–3.100)
$\Delta \ln D_{it}$	–0.038 (–2.834)	–0.050 (–3.796)	–0.050 (–4.072)	–0.061 (–3.811)	–0.078 (–4.358)
$\Delta \ln D_{it}^*$	0.004 (1.760)	0.005 (2.581)	0.005 (2.908)	0.010 (3.472)	0.013 (3.615)
N	800	720	720	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. We cannot reject the hypothesis that the coefficients on domestic and foreign openness are equal but we can reject it for the coefficients on the number of domestic and foreign firms. In (4) and (5) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. Industry-specific bilateral nominal exchange rates (not reported) are included in all regressions.

1.2 Long Run

Table 4: Prices (Long Run), all country pairs, sector-specific nominal exchange rates

	(1)	(2)	(3)	(4)
Method	OLS	OLS	IV	IV
$\Delta \ln \frac{\bar{P}_{it-1}}{\bar{P}_{it-1}^*}$	–	–	–	–0.012 (–0.230)
$\Delta \ln \theta_{it}$	–0.007 (–0.814)	–	–	–
$\Delta \ln \theta_{it}^*$	0.003 (0.406)	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–0.006 (–0.923)	–0.039 (–1.474)	–0.044 (–1.209)
$\Delta \ln D_{it}$	0.005 (0.557)	–0.001 (–0.105)	–0.016 (–1.435)	–0.015 (–1.179)
$\Delta \ln D_{it}^*$	–0.001 (–0.837)	0.001 (0.706)	0.004 (2.019)	0.005 (1.938)
$\Delta \ln P_t$	0.721 (5.386)	0.641 (6.592)	0.722 (5.682)	0.604 (3.470)
$\Delta \ln P_t^*$	–0.624 (–4.072)	–0.853 (–6.843)	–0.768 (–5.034)	–0.737 (–3.843)
$\ln \frac{\bar{P}_{it-1}}{\bar{P}_{it-1}^*}$	–0.484 (–17.465)	–0.451 (–18.419)	–0.379 (–9.036)	–0.341 (–7.381)
$\ln \theta_{it-1}$	0.011 (1.628)	–	–	–
$\ln \theta_{it-1}^*$	–0.003 (–0.410)	–	–	–
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	–	0.012 (2.423)	0.063 (2.401)	0.082 (2.794)
$\ln L_{t-1}$	–0.101 (–2.952)	–	–	–
$\ln L_{t-1}^*$	0.054 (1.664)	–	–	–
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	–	–0.069 (–6.687)	–0.074 (–6.161)	–0.075 (–4.897)
$\ln P_{t-1}$	0.310 (6.486)	0.301 (9.951)	0.265 (7.276)	0.214 (3.091)
$\ln P_{t-1}^*$	–0.283 (–5.469)	–0.352 (–10.100)	–0.319 (–7.546)	–0.295 (–3.841)
N	800	800	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (3) and (4) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. L_t denotes (real) GDP. Industry-specific bilateral exchange rates (not reported) are included in all regressions. Industry-specific bilateral nominal exchange rates (not reported) are included in all regressions.

Table 5: Productivity (Long Run), all country pairs, sector-specific nominal exchange rates

	(1)	(2)	(3)	(4)	(5)	(6)
Method	OLS	OLS	IV	IV	IV	IV
$\Delta \ln \frac{z_{it-1}^*}{z_{it-1}^*}$	—	—	—	-0.153 (-2.000)	-0.099 (-1.609)	-0.139 (-2.038)
$\Delta \ln \theta_{it}$	0.016 (0.559)	—	—	—	—	—
$\Delta \ln \theta_{it}^*$	0.022 (0.825)	—	—	—	—	—
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	—	0.062 (2.625)	0.491 (4.493)	0.512 (3.555)	0.564 (4.113)	0.594 (4.108)
$\Delta \ln D_{it}$	0.042 (1.384)	0.117 (3.533)	0.255 (4.647)	0.254 (4.034)	0.243 (4.374)	0.232 (1.741)
$\Delta \ln D_{it}^*$	0.001 (0.132)	-0.035 (-6.877)	-0.055 (-6.365)	-0.058 (-5.654)	-0.063 (-5.294)	-0.089 (-5.407)
$\ln \frac{z_{it-1}^*}{z_{it-1}^*}$	-0.354 (-11.790)	-0.307 (-9.713)	-0.307 (-6.165)	-0.290 (-4.345)	-0.295 (-4.028)	-0.216 (-3.077)
$\ln \theta_{it-1}$	-0.002 (-0.090)	—	—	—	—	—
$\ln \theta_{it-1}^*$	0.046 (1.783)	—	—	—	—	—
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	—	-0.045 (-2.085)	-0.343 (-2.502)	-0.479 (-2.494)	-0.206 (-1.484)	-0.184 (-1.288)
$\ln L_{t-1}$	0.187 (2.589)	—	—	—	—	—
$\ln L_{t-1}^*$	-0.248 (-3.052)	—	—	—	—	—
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	—	0.244 (5.807)	0.484 (5.079)	0.565 (4.298)	0.344 (2.173)	0.214 (1.577)
$\ln w_{it-1}$	-0.040 (-1.361)	—	—	—	—	—
$\ln w_{it-1}^*$	0.096 (3.742)	—	—	—	—	—
$\ln \frac{w_{it-1}}{w_{it-1}^*}$	—	-0.085 (-3.654)	-0.368 (-3.961)	-0.430 (-3.467)	-0.189 (-1.174)	-0.023 (-0.173)
N	800	800	800	720	720	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. We cannot reject the hypothesis that the coefficients on domestic and foreign variables are equal except for the coefficients on the number of domestic and foreign firms in (1) to (5). In (3) to (6) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. In (5) wages are instrumented by the average income tax rate for married individuals and in (6) the number of firms is further instrumented by its own lags. L_t denotes (real) GDP. Industry-specific bilateral nominal exchange rates (not reported) are included in all regressions.

Table 6: Markups (Long Run), all country pairs, sector-specific nominal exchange rates

	(1)	(2)	(3)	(4)
Method	OLS	OLS	IV	IV
$\Delta \ln \frac{\mu_{it-1}}{\mu_{it-1}^*}$	—	—	—	0.045 (1.052)
$\Delta \ln \theta_{it}$	-0.025 (-2.190)	—	—	—
$\Delta \ln \theta_{it}^*$	0.013 (1.235)	—	—	—
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	—	-0.011 (-1.515)	-0.019 (-0.732)	-0.023 (-0.776)
$\Delta \ln D_{it}$	-0.037 (-3.226)	-0.036 (-3.424)	-0.037 (-3.021)	-0.040 (-3.054)
$\Delta \ln D_{it}^*$	0.005 (2.525)	0.004 (2.650)	0.006 (2.618)	0.006 (2.483)
$\ln \frac{\mu_{it-1}}{\mu_{it-1}^*}$	-0.627 (-17.297)	-0.566 (-16.345)	-0.554 (-15.378)	-0.622 (-12.806)
$\ln \theta_{it-1}$	-0.019 (-2.200)	—	—	—
$\ln \theta_{it-1}^*$	0.000 (-0.021)	—	—	—
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	—	0.004 (0.740)	0.030 (1.842)	0.031 (1.599)
$\ln L_{t-1}$	-0.046 (-1.807)	—	—	—
$\ln L_{t-1}^*$	0.075 (2.534)	—	—	—
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	—	-0.016 (-2.109)	-0.028 (-2.678)	-0.028 (-2.225)
N	800	800	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. We cannot reject the hypothesis that the coefficients on domestic and foreign variables are equal except for the coefficients on the number of domestic and foreign firms. In (3) and (4) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. L_t denotes (real) GDP. Industry-specific bilateral nominal exchange rates (not reported) are included in all regressions.

2 Factor Endowments

2.1 Short Run

Table 7: Productivity (Short Run), all country pairs, controlling for factor endowments

	(1)	(2)	(3)	(4)	(5)
Method	OLS	OLS	OLS	IV	IV
$\Delta \ln \frac{z_{it-1}}{z_{it-1}^*}$	–	–0.083 (–2.211)	–0.083 (–2.228)	–	–0.115 (–1.922)
$\Delta \ln \theta_{it}$	0.039 (1.080)	0.055 (1.424)	–	–	–
$\Delta \ln \theta_{it}^*$	–0.060 (–1.844)	–0.071 (–2.045)	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–	0.064 (2.460)	0.665 (4.508)	0.874 (3.840)
$\Delta \ln D_{it}$	0.145 (3.802)	0.170 (4.274)	0.177 (4.705)	0.299 (4.936)	0.351 (4.575)
$\Delta \ln D_{it}^*$	–0.033 (–5.871)	–0.034 (–5.892)	–0.033 (–6.054)	–0.065 (–6.091)	–0.075 (–5.184)
$\Delta \ln \alpha_{it}$	–0.641 (–1.626)	–0.657 (–1.587)	–	–	–
$\Delta \ln \alpha_{it}^*$	0.912 (1.925)	1.088 (2.121)	–	–	–
$\Delta \ln \frac{\alpha_{it}}{\alpha_{it}^*}$	–	–	–0.819 (–2.376)	–0.383 (–0.834)	–0.227 (–0.397)
N	800	720	720	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (4) and (5) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. α_{it} denotes an interaction term between aggregate capital stock and sectoral capital shares.

2.2 Long Run

Table 8: Productivity (Long Run), all country pairs, controlling for factor endowments

	(1)	(2)	(3)	(4)	(5)	(6)
Method	OLS	OLS	IV	IV	IV	IV
$\Delta \ln \frac{z_{it-1}^*}{z_{it-1}^*}$	–	–	–	–0.017 (–0.302)	–0.059 (–0.946)	–0.066 (–1.028)
$\Delta \ln \theta_{it}$	0.044 (1.265)	–	–	–	–	–
$\Delta \ln \theta_{it}^*$	–0.049 (–1.509)	–	–	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	0.049 (2.054)	0.385 (4.161)	0.417 (3.607)	0.585 (3.964)	0.551 (3.843)
$\Delta \ln D_{it}$	0.107 (2.923)	0.108 (3.196)	0.219 (4.553)	0.215 (4.287)	0.214 (3.672)	0.143 (1.078)
$\Delta \ln D_{it}^*$	–0.028 (–5.263)	–0.028 (–5.640)	–0.043 (–6.158)	–0.044 (–5.815)	–0.062 (–5.423)	–0.079 (–4.898)
$\Delta \ln \alpha_{it}$	–0.764 (–1.846)	–	–	–	–	–
$\Delta \ln \alpha_{it}^*$	0.888 (1.708)	–	–	–	–	–
$\Delta \ln \frac{\alpha_{it}}{\alpha_{it}^*}$	–	–0.841 (–2.467)	–0.340 (–0.666)	–0.269 (–0.506)	–0.815 (–1.323)	–0.666 (–1.091)
$\ln \frac{z_{it-1}^*}{z_{it-1}^*}$	–0.324 (–10.061)	–0.322 (–10.127)	–0.320 (–6.798)	–0.347 (–6.404)	–0.268 (–3.949)	–0.268 (–4.122)
$\ln \theta_{it-1}$	–0.022 (–0.744)	–	–	–	–	–
$\ln \theta_{it-1}^*$	0.035 (1.208)	–	–	–	–	–
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	–	–0.027 (–1.198)	–0.152 (–1.251)	–0.133 (–0.927)	–0.001 (–0.009)	0.098 (0.751)
$\ln L_{t-1}$	0.247 (4.700)	–	–	–	–	–
$\ln L_{t-1}^*$	–0.237 (–4.374)	–	–	–	–	–
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	–	0.242 (5.593)	0.331 (4.778)	0.332 (3.906)	0.108 (0.845)	0.145 (1.292)
$\ln w_{it-1}$	–0.035 (–1.083)	–	–	–	–	–
$\ln w_{it-1}^*$	0.071 (2.303)	–	–	–	–	–
$\ln \frac{w_{it-1}}{w_{it-1}^*}$	–	–0.058 (–2.347)	–0.226 (–2.552)	–0.201 (–2.119)	0.103 (0.673)	–0.039 (–0.264)
$\ln \alpha_{it-1}$	0.179 (1.285)	–	–	–	–	–
$\ln \alpha_{it-1}^*$	–0.271 (–2.151)	–	–	–	–	–
$\ln \frac{\alpha_{it-1}}{\alpha_{it-1}^*}$	–	0.251 (2.383)	–0.132 (–0.601)	–0.092 (–0.477)	0.227 (0.928)	0.262 (1.072)
N	800	800	800	720	720	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (3) to (6) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. In (5) wages are instrumented by the average income tax rate for married individuals and in (6) the number of firms is further instrumented by its own lags. L_t denotes (real) GDP. α_{it} denotes an interaction term between aggregate capital stock and sectoral capital shares.

3 Arellano-Bond

3.1 Short Run

Table 9: Prices (Short Run), Arellano-Bond estimations, all country pairs

	(1)	(2)
$\Delta \ln \frac{p_{it-1}}{p_{it-1}^*}$	0.384 (13.560)	0.372 (13.012)
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	-0.076 (-8.045)	-0.077 (-7.763)
$\Delta \ln D_{it}$	-0.039 (-4.015)	-0.033 (-3.315)
$\Delta \ln D_{it}^*$	0.007 (4.427)	0.009 (5.645)
$\Delta \ln P_t$	0.471 (8.633)	0.467 (8.557)
$\Delta \ln P_t^*$	-0.622 (-11.820)	-0.551 (-9.931)
N	720	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. Instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. The number of lagged dependent variables (one) is chosen in order to reject autocorrelation of order 2. In (2), industry-specific bilateral nominal exchange rates (not reported) are included.

Table 10: Productivity and Markups (Short Run), Arellano-Bond estimations, all country pairs

Productivity	(1)	(2)	Markups	(3)
$\Delta \ln \frac{z_{it-1}}{z_{it-1}^*}$	0.394 (9.190)	0.397 (9.265)	$\Delta \ln \frac{\mu_{it-1}}{\mu_{it-1}^*}$	0.196 (4.770)
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	0.087 (2.460)	0.090 (2.534)	$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	-0.060 (-5.051)
$\Delta \ln D_{it}$	0.211 (5.778)	0.212 (5.771)	$\Delta \ln D_{it}$	-0.070 (-6.482)
$\Delta \ln D_{it}^*$	-0.032 (-6.132)	-0.032 (-6.151)	$\Delta \ln D_{it}^*$	0.008 (4.553)
$\Delta \ln \frac{\alpha_{it}}{\alpha_{it}^*}$	-	0.402 (1.168)	-	-
N	720	720	N	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. Instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. The number of lagged dependent variables (one) is chosen in order to reject autocorrelation of order 2. In (2), α_{it} denotes an interaction term between aggregate capital stock and sectoral capital shares.

3.2 Long Run

Table 11: Prices (Long Run), Arellano-Bond estimations, all country pairs

Prices	(1)	(2)
$\Delta \ln \frac{\bar{p}_{it-1}}{\bar{p}_{it-1}^*}$	0.299 (11.534)	0.287 (11.012)
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	-0.027 (-3.212)	-0.018 (-2.076)
$\Delta \ln D_{it}$	-0.006 (-0.656)	0.006 (0.631)
$\Delta \ln D_{it}^*$	0.003 (2.464)	0.004 (2.919)
$\Delta \ln P_t$	0.458 (4.987)	0.515 (5.522)
$\Delta \ln P_t^*$	-0.619 (-5.439)	-0.541 (-4.648)
$\Delta \ln \frac{\alpha_{it}}{\alpha_{it}^*}$	-	-
$\ln \frac{\bar{p}_{it-1}}{\bar{p}_{it-1}^*}$	-0.289 (-16.833)	-0.312 (-16.634)
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	0.010 (2.884)	0.010 (2.648)
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	-0.049 (-5.692)	-0.054 (-5.806)
$\ln P_{t-1}$	0.159 (4.858)	0.173 (5.168)
$\ln P_{t-1}^*$	-0.188 (-4.975)	-0.186 (-4.824)
N	720	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. Instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. The number of lagged dependent variables (one) is chosen in order to reject autocorrelation of order 2. L_t denotes (real) GDP. In (2), industry-specific bilateral nominal exchange rates (not reported) are included.

Table 12: Productivity and Markups (Long Run), Arellano-Bond estimations, all country pairs

Productivity	(1)	(2)	Markups	(3)
$\Delta \ln \frac{z_{it-1}^*}{z_{it-1}^*}$	0.278 (8.734)	0.270 (8.426)	$\Delta \ln \frac{\mu_{it-1}^*}{\mu_{it-1}^*}$	0.262 (7.279)
$\Delta \ln \frac{\theta_{it}^*}{\theta_{it}^*}$	-0.013 (-0.428)	-0.009 (-0.314)	$\Delta \ln \frac{\theta_{it}^*}{\theta_{it}^*}$	-0.067 (-6.838)
$\Delta \ln D_{it}$	0.096 (2.893)	0.082 (2.435)	$\Delta \ln D_{it}$	-0.079 (-8.130)
$\Delta \ln D_{it}^*$	-0.025 (-5.246)	-0.024 (-4.979)	$\Delta \ln D_{it}^*$	0.006 (4.028)
$\Delta \ln \frac{\alpha_{it}^*}{\alpha_{it}^*}$	-	-0.751 (-2.189)	-	-
$\ln \frac{z_{it-1}^*}{z_{it-1}^*}$	-0.256 (-11.751)	-0.263 (-11.546)	$\ln \frac{\mu_{it-1}^*}{\mu_{it-1}^*}$	-0.460 (-15.733)
$\ln \frac{\theta_{it-1}^*}{\theta_{it-1}^*}$	-0.044 (-2.699)	-0.033 (-1.956)	$\ln \frac{\theta_{it-1}^*}{\theta_{it-1}^*}$	-0.011 (-2.738)
$\ln \frac{L_{it-1}^*}{L_{it-1}^*}$	0.142 (4.770)	0.137 (3.915)	$\ln \frac{L_{it-1}^*}{L_{it-1}^*}$	-0.004 (-0.821)
$\ln \frac{w_{it-1}^*}{w_{it-1}^*}$	-0.041 (-2.366)	-0.027 (-1.519)	-	-
$\ln \frac{\alpha_{it-1}^*}{\alpha_{it-1}^*}$	-	0.107 (1.267)	-	-
N	720	720	N	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. Instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. The number of lagged dependent variables (one) is chosen in order to reject autocorrelation of order 2. L_t denotes (real) GDP. In (2), α_{it} denotes an interaction term between aggregate capital stock and sectoral capital shares.

4 Benchmark: Italy

4.1 Short Run

Table 13: Prices (Short Run), Benchmark is Italy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Method	OLS	OLS	OLS	OLS	IV	IV	IV	GMM
$\Delta \ln \frac{P_{it}^* - 1}{P_{it-1}^*}$	–	–	–0.058 (–0.873)	–0.056 (–0.844)	–	–	0.184 (1.628)	0.324 (5.374)
$\Delta \ln \theta_{it}$	–0.033 (–1.721)	–0.030 (–1.631)	–0.037 (–1.963)	–	–	–	–	–
$\Delta \ln \theta_{it}^*$	0.050 (2.630)	0.044 (2.374)	0.029 (1.469)	–	–	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–	–	–0.033 (–2.311)	–0.211 (–4.883)	–0.187 (–4.593)	–0.231 (–3.991)	–0.048 (–2.582)
$\Delta \ln D_{it}$	–0.042 (–2.403)	–0.025 (–1.480)	–0.028 (–1.653)	–0.027 (–1.637)	–0.065 (–3.034)	–0.048 (–2.331)	–0.051 (–2.167)	–0.033 (–2.230)
$\Delta \ln D_{it}^*$	0.013 (3.680)	0.010 (2.993)	0.007 (2.050)	0.008 (2.389)	0.020 (4.420)	0.017 (3.917)	0.019 (3.501)	0.010 (3.022)
$\Delta \ln P_t$	–	0.567 (4.189)	0.685 (4.541)	0.691 (4.628)	–	0.516 (3.099)	0.466 (2.150)	0.486 (4.445)
$\Delta \ln P_t^*$	–	–0.635 (–5.018)	–0.886 (–5.935)	–0.880 (–5.957)	–	–0.540 (–3.423)	–0.489 (–2.109)	–0.723 (–6.273)
N	260	260	234	234	260	260	234	234

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (5) to (8) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. In (8), the number of lagged dependent variables (one) is chosen in order to reject autocorrelation of order 2.

Table 14: Productivity (Short Run), Benchmark is Italy

	(1)	(2)	(3)	(4)	(5)	(6)
Method	OLS	OLS	OLS	IV	IV	GMM
$\Delta \ln \frac{z_{it}^* - 1}{z_{it}^* - 1}$	–	–0.046 (–0.726)	–0.059 (–0.939)	–	–0.010 (–0.089)	0.348 (5.917)
$\Delta \ln \theta_{it}$	0.036 (0.499)	0.061 (0.790)	–	–	–	–
$\Delta \ln \theta_{it}^*$	–0.254 (–3.579)	–0.243 (–3.193)	–	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–	0.153 (2.655)	1.217 (5.760)	1.285 (5.445)	0.294 (4.123)
$\Delta \ln D_{it}$	0.144 (2.193)	0.175 (2.455)	0.219 (3.248)	0.315 (2.981)	0.320 (2.750)	0.137 (2.126)
$\Delta \ln D_{it}^*$	–0.088 (–6.596)	–0.088 (–6.272)	–0.078 (–6.009)	–0.127 (–5.654)	–0.132 (–5.402)	–0.088 (–6.703)
N	260	234	234	260	234	234

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (4) to (6) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. In (6), the number of lagged dependent variables (one) is chosen in order to reject autocorrelation of order 2.

Table 15: Markups (Short Run), Benchmark is Italy

	(1)	(2)	(3)	(4)	(5)	(6)
Method	OLS	OLS	OLS	IV	IV	GMM
$\Delta \ln \frac{\mu_{it}^* - 1}{\mu_{it}^* - 1}$	–	–0.236 (–3.568)	–0.243 (–3.695)	–	–0.241 (–3.620)	0.276 (3.733)
$\Delta \ln \theta_{it}$	–0.006 (–0.390)	–0.010 (–0.625)	–	–	–	–
$\Delta \ln \theta_{it}^*$	0.034 (2.129)	0.032 (1.958)	–	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–	–0.021 (–1.732)	–0.062 (–2.128)	–0.049 (–1.652)	–0.035 (–2.200)
$\Delta \ln D_{it}$	–0.016 (–1.107)	–0.025 (–1.663)	–0.030 (–2.110)	–0.027 (–1.862)	–0.032 (–2.236)	–0.034 (–2.543)
$\Delta \ln D_{it}^*$	0.008 (2.775)	0.008 (2.618)	0.007 (2.422)	0.009 (2.832)	0.008 (2.605)	0.005 (1.609)
N	260	234	234	260	234	234

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (4) to (6) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. In (6), the number of lagged dependent variables (one) is chosen in order to reject autocorrelation of order 2.

4.2 Long Run

Table 16: Prices (Long Run), Benchmark is Italy

	(1)	(2)	(3)	(4)	(5)
Method	OLS	OLS	IV	IV	GMM
$\Delta \ln \frac{\bar{P}_{it-1}}{\bar{P}_{it-1}^*}$	–	–	–	0.048 (0.342)	0.296 (4.912)
$\Delta \ln \theta_{it}$	–0.029 (–1.750)	–	–	–	–
$\Delta \ln \theta_{it}^*$	0.019 (1.087)	–	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–0.024 (–1.959)	–0.088 (–1.584)	–0.112 (–1.486)	–0.034 (–2.016)
$\Delta \ln D_{it}$	–0.024 (–1.718)	–0.022 (–1.648)	–0.038 (–1.664)	–0.035 (–1.484)	–0.018 (–1.350)
$\Delta \ln D_{it}^*$	0.004 (1.118)	0.005 (1.548)	0.013 (2.337)	0.012 (2.036)	0.007 (2.211)
$\Delta \ln P_t$	0.645 (3.563)	0.664 (3.797)	0.777 (2.438)	0.638 (1.635)	0.746 (4.610)
$\Delta \ln P_t^*$	–1.230 (–5.183)	–1.178 (–5.184)	–0.735 (–1.850)	–1.080 (–2.567)	–0.846 (–3.308)
$\ln \frac{\bar{P}_{it-1}}{\bar{P}_{it-1}^*}$	–0.475 (–9.431)	–0.480 (–9.891)	–0.468 (–5.693)	–0.590 (–5.058)	–0.369 (–8.804)
$\ln \theta_{it-1}$	0.010 (0.812)	–	–	–	–
$\ln \theta_{it-1}^*$	–0.012 (–0.928)	–	–	–	–
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	–	0.013 (1.335)	0.164 (2.007)	0.140 (1.307)	0.003 (0.363)
$\ln L_{t-1}$	–0.052 (–2.349)	–	–	–	–
$\ln L_{t-1}^*$	0.034 (1.547)	–	–	–	–
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	–	–0.043 (–2.447)	–0.096 (–2.852)	–0.075 (–1.910)	–0.020 (–1.018)
$\ln P_{t-1}$	0.424 (5.717)	0.436 (6.169)	0.574 (3.178)	0.732 (2.512)	0.382 (4.814)
$\ln P_{t-1}^*$	–0.535 (–6.288)	–0.540 (–6.514)	–0.730 (–3.289)	–0.944 (–2.630)	–0.400 (–4.167)
N	260	260	260	234	234

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (3) to (5) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. L_t denotes (real) GDP. In (5), the number of lagged dependent variables (one) is chosen in order to reject autocorrelation of order 2.

Table 17: Productivity (Long Run), Benchmark is Italy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Method	OLS	OLS	IV	IV	IV	IV	GMM
$\Delta \ln \frac{z_{it-1}}{z_{it-1}^*}$	—	—	—	0.169 (1.280)	0.143 (1.037)	-0.043 (-0.269)	0.322 (5.768)
$\Delta \ln \theta_{it}$	0.093 (1.374)	—	—	—	—	—	—
$\Delta \ln \theta_{it}^*$	-0.208 (-2.932)	—	—	—	—	—	—
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	—	0.166 (3.203)	1.070 (5.831)	1.083 (5.039)	1.145 (5.090)	0.859 (3.343)	0.152 (2.264)
$\Delta \ln D_{it}$	0.182 (2.992)	0.190 (3.280)	0.342 (3.652)	0.317 (3.245)	0.292 (2.789)	0.403 (1.488)	0.087 (1.477)
$\Delta \ln D_{it}^*$	-0.068 (-5.311)	-0.064 (-5.449)	-0.098 (-4.983)	-0.097 (-4.612)	-0.117 (-4.547)	-0.134 (-2.915)	-0.059 (-4.595)
$\ln \frac{z_{it-1}}{z_{it-1}^*}$	-0.375 (-5.477)	-0.367 (-5.519)	-0.517 (-4.873)	-0.595 (-4.642)	-0.484 (-3.044)	-0.402 (-2.520)	-0.309 (-6.304)
$\ln \theta_{it-1}$	-0.018 (-0.313)	—	—	—	—	—	—
$\ln \theta_{it-1}^*$	0.008 (0.120)	—	—	—	—	—	—
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	—	-0.028 (-0.588)	-0.004 (-0.016)	0.072 (0.213)	0.254 (0.773)	-0.138 (-0.421)	0.036 (0.871)
$\ln L_{t-1}$	0.418 (4.041)	—	—	—	—	—	—
$\ln L_{t-1}^*$	-0.205 (-1.757)	—	—	—	—	—	—
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	—	0.306 (3.282)	0.538 (1.939)	0.578 (1.695)	0.239 (0.624)	0.544 (1.631)	0.136 (1.822)
$\ln w_{it-1}$	-0.104 (-1.697)	—	—	—	—	—	—
$\ln w_{it-1}^*$	0.150 (2.196)	—	—	—	—	—	—
$\ln \frac{w_{it-1}}{w_{it-1}^*}$	—	-0.143 (-2.634)	-0.303 (-1.433)	-0.283 (-1.068)	0.074 (0.225)	-0.165 (-0.591)	-0.030 (-0.674)
N	260	260	260	234	234	234	234

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (3) to (7) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. In (5) wages are instrumented by the average income tax rate for married individuals and in (6) the number of firms is further instrumented by its own lags. L_t denotes (real) GDP. In (7), the number of lagged dependent variables (one) is chosen in order to reject autocorrelation of order 2.

Table 18: Markups (Long Run), Benchmark is Italy

	(1)	(2)	(3)	(4)	(5)
Method	OLS	OLS	IV	IV	GMM
$\Delta \ln \frac{\mu_{it-1}}{\mu_{it-1}^*}$	–	–	–	–0.024 (–0.277)	0.252 (4.092)
$\Delta \ln \theta_{it}$	–0.009 (–0.649)	–	–	–	–
$\Delta \ln \theta_{it}^*$	0.017 (1.155)	–	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–0.016 (–1.457)	–0.037 (–1.269)	–0.037 (–1.090)	–0.044 (–3.068)
$\Delta \ln D_{it}$	–0.027 (–2.119)	–0.026 (–2.156)	–0.022 (–1.511)	–0.017 (–0.972)	–0.036 (–3.063)
$\Delta \ln D_{it}^*$	0.006 (2.442)	0.006 (2.616)	0.010 (3.191)	0.010 (2.957)	0.003 (1.200)
$\ln \frac{\mu_{it-1}}{\mu_{it-1}^*}$	–0.501 (–8.492)	–0.520 (–9.036)	–0.555 (–8.199)	–0.635 (–6.571)	–0.409 (–8.455)
$\ln \theta_{it-1}$	0.014 (1.544)	–	–	–	–
$\ln \theta_{it-1}^*$	–0.008 (–0.791)	–	–	–	–
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	–	0.013 (1.873)	0.067 (3.541)	0.085 (3.318)	0.002 (0.382)
$\ln L_{t-1}$	–0.029 (–2.071)	–	–	–	–
$\ln L_{t-1}^*$	–0.013 (–0.946)	–	–	–	–
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	–	–0.007 (–0.829)	–0.058 (–3.142)	–0.067 (–2.970)	0.008 (1.167)
N	260	260	260	234	234

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (3) to (5) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. L_t denotes (real) GDP. In (5), the number of lagged dependent variables (one) is chosen in order to reject autocorrelation of order 2.

5 EU Imports

5.1 Short Run

Table 19: Prices (Short Run), EU Imports, all country pairs

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Method	OLS	OLS	OLS	OLS	IV	IV	IV
$\Delta \ln \frac{\bar{p}_{it-1}}{\bar{p}_{it-1}^*}$	–	–	0.070 (2.084)	0.070 (2.090)	–	–	0.170 (2.209)
$\Delta \ln \theta_{it}$	–0.023 (–2.325)	–0.018 (–1.893)	–0.029 (–3.219)	–	–	–	–
$\Delta \ln \theta_{it}^*$	0.026 (2.836)	0.021 (2.422)	0.027 (3.280)	–	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–	–	–0.028 (–4.507)	–0.226 (–3.712)	–0.239 (–3.785)	–0.288 (–2.705)
$\Delta \ln D_{it}$	–0.008 (–0.697)	–0.008 (–0.740)	–0.015 (–1.482)	–0.015 (–1.483)	–0.056 (–2.567)	–0.059 (–2.623)	–0.068 (–2.328)
$\Delta \ln D_{it}^*$	0.005 (2.814)	0.003 (1.443)	0.003 (1.661)	0.003 (1.807)	0.018 (3.453)	0.020 (3.922)	0.023 (2.628)
$\Delta \ln P_t$	–	0.443 (5.458)	0.507 (6.348)	0.508 (6.373)	0.194 (1.352)	–	0.094 (0.412)
$\Delta \ln P_t^*$	–	–0.445 (–5.346)	–0.591 (–6.980)	–0.590 (–6.986)	–0.204 (–1.397)	–	–0.103 (–0.399)
N	800	800	720	720	800	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (5) to (7) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies.

Table 20: Productivity (Short Run), EU Imports, all country pairs

	(1)	(2)	(3)	(4)	(5)
Method	OLS	OLS	OLS	IV	IV
$\Delta \ln \frac{z_{it}^*}{z_{it}^* - 1}$	–	–0.072 (–1.924)	–0.074 (–1.971)	–	–0.063 (–0.628)
$\Delta \ln \theta_{it}$	–0.003 (–0.105)	0.009 (0.256)	–	–	–
$\Delta \ln \theta_{it}^*$	–0.073 (–2.459)	–0.084 (–2.680)	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–	0.050 (2.112)	1.002 (3.922)	1.535 (3.043)
$\Delta \ln D_{it}$	0.132 (3.544)	0.157 (4.050)	0.172 (4.561)	0.373 (4.115)	0.482 (3.310)
$\Delta \ln D_{it}^*$	–0.036 (–6.157)	–0.037 (–6.173)	–0.033 (–5.958)	–0.100 (–4.872)	–0.136 (–3.604)
N	800	720	720	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (4) and (5) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies.

Table 21: Markups (Short Run), EU Imports, all country pairs

	(1)	(2)	(3)	(4)	(5)
Method	OLS	OLS	OLS	IV	IV
$\Delta \ln \frac{\mu_{it}^*}{\mu_{it}^* - 1}$	–	–0.223 (–5.921)	–0.224 (–5.937)	–	–0.223 (–5.772)
$\Delta \ln \theta_{it}$	–0.011 (–0.995)	–0.016 (–1.440)	–	–	–
$\Delta \ln \theta_{it}^*$	0.016 (1.589)	0.023 (2.223)	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–	–0.020 (–2.570)	0.009 (0.188)	0.025 (0.403)
$\Delta \ln D_{it}$	–0.038 (–3.041)	–0.049 (–3.896)	–0.050 (–4.118)	–0.034 (–2.100)	–0.041 (–2.260)
$\Delta \ln D_{it}^*$	0.005 (2.756)	0.006 (3.138)	0.006 (3.175)	0.004 (0.985)	0.003 (0.568)
N	800	720	720	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (4) and (5) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies.

5.2 Long Run

Table 22: Prices (Long Run), EU Imports, all country pairs

	(1)	(2)	(3)	(4)
Method	OLS	OLS	IV	IV
$\Delta \ln \frac{\bar{P}_{it-1}}{\bar{P}_{it-1}^*}$	–	–	–	0.026 (0.535)
$\Delta \ln \theta_{it}$	–0.009 (–1.102)	–	–	–
$\Delta \ln \theta_{it}^*$	0.007 (0.826)	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–0.008 (–1.322)	–0.008 (–1.322)	–0.026 (–0.705)	–0.025 (–0.450)
$\Delta \ln D_{it}$	–0.007 (–0.772)	–0.006 (–0.724)	–0.025 (–1.964)	–0.020 (–1.464)
$\Delta \ln D_{it}^*$	0.001 (0.542)	0.001 (0.699)	0.004 (1.298)	0.005 (1.037)
$\Delta \ln P_t$	0.621 (6.142)	0.618 (6.271)	0.645 (4.514)	0.480 (2.075)
$\Delta \ln P_t^*$	–0.927 (–7.251)	–0.925 (–7.311)	–0.926 (–4.705)	–0.886 (–3.302)
$\ln \frac{\bar{P}_{it-1}}{\bar{P}_{it-1}^*}$	–0.424 (–17.986)	–0.424 (–18.007)	–0.333 (–7.683)	–0.321 (–6.637)
$\ln \theta_{it-1}$	0.013 (2.150)	–	–	–
$\ln \theta_{it-1}^*$	–0.009 (–1.681)	–	–	–
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	–	0.010 (2.430)	0.075 (2.825)	0.085 (3.172)
$\ln L_{t-1}$	–0.059 (–4.898)	–	–	–
$\ln L_{t-1}^*$	0.060 (5.132)	–	–	–
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	–	–0.060 (–5.937)	–0.043 (–2.935)	–0.041 (–2.391)
$\ln P_{t-1}$	0.291 (9.466)	0.290 (9.575)	0.226 (5.371)	0.193 (2.197)
$\ln P_{t-1}^*$	–0.360 (–10.160)	–0.355 (–10.171)	–0.334 (–6.940)	–0.329 (–3.371)
N	800	800	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (3) and (4) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. L_t denotes (real) GDP.

Table 23: Productivity (Long Run), EU Imports, all country pairs

	(1)	(2)	(3)	(4)	(5)	(6)
Method	OLS	OLS	IV	IV	IV	IV
$\Delta \ln \frac{z_{it-1}^*}{z_{it-1}^*}$	–	–	–	–0.007 (–0.104)	0.005 (0.071)	–0.018 (–0.233)
$\Delta \ln \theta_{it}$	–0.014 (–0.441)	–	–	–	–	–
$\Delta \ln \theta_{it}^*$	–0.062 (–2.069)	–	–	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	0.029 (1.336)	0.548 (3.835)	0.605 (3.402)	0.708 (3.516)	0.736 (4.003)
$\Delta \ln D_{it}$	0.110 (3.109)	0.121 (3.595)	0.292 (4.520)	0.273 (4.095)	0.274 (4.009)	0.287 (1.818)
$\Delta \ln D_{it}^*$	–0.031 (–5.683)	–0.029 (–5.679)	–0.063 (–5.424)	–0.067 (–5.150)	–0.076 (–4.382)	–0.101 (–4.704)
$\ln \frac{z_{it-1}^*}{z_{it-1}^*}$	–0.321 (–10.337)	–0.317 (–10.218)	–0.370 (–6.924)	–0.411 (–6.382)	–0.381 (–4.445)	–0.338 (–4.169)
$\ln \theta_{it-1}$	–0.067 (–3.075)	–	–	–	–	–
$\ln \theta_{it-1}^*$	0.088 (3.495)	–	–	–	–	–
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	–	–0.069 (–3.831)	–0.338 (–3.344)	–0.273 (–2.131)	–0.153 (–1.337)	–0.145 (–1.353)
$\ln L_{t-1}$	0.256 (5.396)	–	–	–	–	–
$\ln L_{t-1}^*$	–0.265 (–5.757)	–	–	–	–	–
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	–	0.259 (6.562)	0.448 (6.072)	0.455 (5.311)	0.349 (2.483)	0.293 (2.606)
$\ln w_{it-1}$	–0.060 (–2.046)	–	–	–	–	–
$\ln w_{it-1}^*$	0.145 (4.992)	–	–	–	–	–
$\ln \frac{w_{it-1}}{w_{it-1}^*}$	–	–0.104 (–4.550)	–0.416 (–5.006)	–0.355 (–3.910)	–0.193 (–1.168)	–0.097 (–0.823)
N	800	800	800	720	720	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (3) to (6) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. In (5) wages are instrumented by the average income tax rate for married individuals and in (6) the number of firms is further instrumented by its own lags. L_t denotes (real) GDP.

Table 24: Markups (Long Run), EU Imports, all country pairs

	(1)	(2)	(3)	(4)
Method	OLS	OLS	IV	IV
$\Delta \ln \frac{\mu_{it-1}}{\mu_{it-1}^*}$	–	–	–	0.046 (1.061)
$\Delta \ln \theta_{it}$	–0.008 (–0.847)	–	–	–
$\Delta \ln \theta_{it}^*$	0.006 (0.623)	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–0.008 (–1.195)	0.040 (1.352)	0.051 (1.420)
$\Delta \ln D_{it}$	–0.040 (–3.653)	–0.037 (–3.526)	–0.026 (–2.038)	–0.026 (–1.902)
$\Delta \ln D_{it}^*$	0.005 (2.787)	0.005 (3.277)	0.002 (0.915)	0.002 (0.636)
$\ln \frac{\mu_{it-1}}{\mu_{it-1}^*}$	–0.544 (–15.895)	–0.545 (–16.070)	–0.540 (–15.336)	–0.602 (–12.630)
$\ln \theta_{it-1}$	0.008 (1.274)	–	–	–
$\ln \theta_{it-1}^*$	–0.016 (–2.618)	–	–	–
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	–	0.012 (2.551)	0.022 (1.663)	0.027 (1.603)
$\ln L_{t-1}$	–0.028 (–2.931)	–	–	–
$\ln L_{t-1}^*$	0.015 (1.616)	–	–	–
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	–	–0.022 (–3.410)	–0.024 (–3.449)	–0.023 (–2.680)
N	800	800	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (3) and (4) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. L_t denotes (real) GDP.

6 Non-EU Imports

6.1 Short Run

Table 25: Prices (Short Run), Non-EU Imports, all country pairs

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Method	OLS	OLS	OLS	OLS	IV	IV	IV
$\Delta \ln \frac{P_{it-1}}{P_{it-1}^*}$	–	–	0.056 (1.642)	0.057 (1.667)	–	–	0.036 (0.833)
$\Delta \ln \theta_{it}$	–0.015 (–1.822)	–0.018 (–2.164)	–0.024 (–3.036)	–	–	–	–
$\Delta \ln \theta_{it}^*$	0.012 (1.389)	0.007 (0.878)	0.013 (1.593)	–	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–	–	–0.018 (–3.203)	–0.117 (–4.964)	–0.111 (–4.704)	–0.133 (–4.851)
$\Delta \ln D_{it}$	–0.007 (–0.639)	–0.010 (–0.865)	–0.016 (–1.512)	–0.014 (–1.322)	–0.034 (–2.340)	–0.033 (–2.298)	–0.040 (–2.747)
$\Delta \ln D_{it}^*$	0.003 (2.065)	0.001 (0.613)	0.001 (0.496)	0.001 (0.599)	0.003 (1.637)	0.005 (2.703)	0.003 (1.490)
$\Delta \ln P_t$	–	0.457 (5.641)	0.542 (6.784)	0.546 (6.843)	0.412 (4.237)	–	0.502 (4.901)
$\Delta \ln P_t^*$	–	–0.485 (–5.710)	–0.650 (–7.598)	–0.635 (–7.527)	–0.464 (–4.669)	–	–0.587 (–5.410)
N	800	800	720	720	800	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (5) to (7) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies.

Table 26: Productivity (Short Run), Non-EU Imports, all country pairs

	(1)	(2)	(3)	(4)	(5)
Method	OLS	OLS	OLS	IV	IV
$\Delta \ln \frac{z_{it-1}^*}{z_{it-1}^*}$	–	–0.082 (–2.178)	–0.080 (–2.141)	–	–0.139 (–2.785)
$\Delta \ln \theta_{it}$	0.055 (2.024)	0.069 (2.296)	–	–	–
$\Delta \ln \theta_{it}^*$	–0.017 (–0.635)	–0.025 (–0.851)	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–	0.047 (2.140)	0.405 (4.992)	0.489 (4.566)
$\Delta \ln D_{it}$	0.159 (4.203)	0.184 (4.700)	0.173 (4.579)	0.247 (5.078)	0.280 (5.131)
$\Delta \ln D_{it}^*$	–0.030 (–5.645)	–0.030 (–5.589)	–0.031 (–5.708)	–0.037 (–5.675)	–0.037 (–5.294)
N	800	720	720	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (4) and (5) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies.

Table 27: Markups (Short Run), Non-EU Imports, all country pairs

	(1)	(2)	(3)	(4)	(5)
Method	OLS	OLS	OLS	IV	IV
$\Delta \ln \frac{\mu_{it-1}^*}{\mu_{it-1}^*}$	–	–0.226 (–6.024)	–0.226 (–6.016)	–	–0.237 (–5.364)
$\Delta \ln \theta_{it}$	–0.020 (–2.224)	–0.019 (–2.010)	–	–	–
$\Delta \ln \theta_{it}^*$	0.017 (1.833)	0.028 (2.909)	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–	–0.024 (–3.368)	–0.098 (–4.012)	–0.132 (–4.235)
$\Delta \ln D_{it}$	–0.042 (–3.313)	–0.049 (–3.906)	–0.051 (–4.239)	–0.062 (–4.241)	–0.076 (–4.823)
$\Delta \ln D_{it}^*$	0.005 (2.542)	0.005 (2.798)	0.005 (2.753)	0.006 (3.044)	0.006 (3.100)
N	800	720	720	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (4) and (5) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies.

6.2 Long Run

Table 28: Prices (Long Run), Non-EU Imports, all country pairs

	(1)	(2)	(3)	(4)
Method	OLS	OLS	IV	IV
$\Delta \ln \frac{P_{it-1}}{P_{it-1}^*}$	–	–	–	0.006 (0.136)
$\Delta \ln \theta_{it}$	–0.006 (–0.827)	–	–	–
$\Delta \ln \theta_{it}^*$	–0.006 (–0.861)	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	0.000 (0.006)	–0.037 (–2.153)	–0.045 (–1.845)
$\Delta \ln D_{it}$	–0.006 (–0.683)	–0.003 (–0.376)	–0.013 (–1.268)	–0.013 (–1.159)
$\Delta \ln D_{it}^*$	0.000 (0.316)	0.001 (0.408)	0.002 (1.105)	0.003 (1.584)
$\Delta \ln P_t$	0.715 (7.022)	0.697 (7.070)	0.708 (5.524)	0.713 (4.097)
$\Delta \ln P_t^*$	–0.890 (–7.086)	–0.877 (–7.008)	–0.789 (–5.558)	–0.666 (–4.232)
$\ln \frac{P_{it-1}}{P_{it-1}^*}$	–0.422 (–18.279)	–0.423 (–18.349)	–0.417 (–14.397)	–0.377 (–11.018)
$\ln \theta_{it-1}$	0.019 (3.721)	–	–	–
$\ln \theta_{it-1}^*$	–0.017 (–3.039)	–	–	–
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	–	0.018 (4.310)	0.018 (0.948)	0.042 (1.856)
$\ln L_{t-1}$	–0.073 (–6.089)	–	–	–
$\ln L_{t-1}^*$	0.070 (5.738)	–	–	–
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	–	–0.071 (–7.030)	–0.075 (–5.547)	–0.090 (–5.470)
$\ln P_{t-1}$	0.316 (10.420)	0.312 (10.412)	0.302 (8.883)	0.277 (4.062)
$\ln P_{t-1}^*$	–0.359 (–10.301)	–0.358 (–10.327)	–0.333 (–8.871)	–0.297 (–4.502)
N	800	800	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (3) and (4) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. L_t denotes (real) GDP.

Table 29: Productivity (Long Run), Non-EU Imports, all country pairs

	(1)	(2)	(3)	(4)	(5)	(6)
Method	OLS	OLS	IV	IV	IV	IV
$\Delta \ln \frac{z_{it-1}}{z_{it-1}^*}$	–	–	–	–0.057 (–0.971)	–0.071 (–1.164)	–0.072 (–1.270)
$\Delta \ln \theta_{it}$	0.057 (2.082)	–	–	–	–	–
$\Delta \ln \theta_{it}^*$	–0.018 (–0.660)	–	–	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	0.040 (1.998)	0.279 (4.124)	0.357 (4.142)	0.379 (4.045)	0.314 (3.364)
$\Delta \ln D_{it}$	0.132 (3.663)	0.115 (3.383)	0.185 (4.358)	0.200 (4.057)	0.199 (3.982)	0.081 (0.710)
$\Delta \ln D_{it}^*$	–0.026 (–5.047)	–0.027 (–5.374)	–0.029 (–5.103)	–0.028 (–4.418)	–0.032 (–3.876)	–0.050 (–3.355)
$\ln \frac{z_{it-1}}{z_{it-1}^*}$	–0.320 (–9.779)	–0.318 (–10.111)	–0.324 (–8.178)	–0.333 (–6.538)	–0.301 (–4.540)	–0.252 (–4.569)
$\ln \theta_{it-1}$	–0.009 (–0.396)	–	–	–	–	–
$\ln \theta_{it-1}^*$	0.005 (0.212)	–	–	–	–	–
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	–	–0.008 (–0.506)	–0.056 (–0.763)	–0.102 (–0.969)	–0.088 (–0.817)	–0.061 (–0.564)
$\ln L_{t-1}$	0.256 (5.207)	–	–	–	–	–
$\ln L_{t-1}^*$	–0.219 (–4.222)	–	–	–	–	–
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	–	0.242 (5.843)	0.309 (4.345)	0.349 (3.478)	0.282 (1.943)	0.162 (1.229)
$\ln w_{it-1}$	–0.039 (–1.206)	–	–	–	–	–
$\ln w_{it-1}^*$	0.062 (2.665)	–	–	–	–	–
$\ln \frac{w_{it-1}}{w_{it-1}^*}$	–	–0.057 (–2.791)	–0.125 (–3.325)	–0.142 (–2.692)	–0.073 (–0.628)	0.074 (0.736)
N	800	800	800	720	720	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (3) to (6) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. In (5) wages are instrumented by the average income tax rate for married individuals and in (6) the number of firms is further instrumented by its own lags. L_t denotes (real) GDP.

Table 30: Markups (Long Run), Non-EU Imports, all country pairs

	(1)	(2)	(3)	(4)
Method	OLS	OLS	IV	IV
$\Delta \ln \frac{\mu_{it-1}}{\mu_{it-1}^*}$	—	—	—	0.007 (0.155)
$\Delta \ln \theta_{it}$	-0.013 (-1.493)	—	—	—
$\Delta \ln \theta_{it}^*$	0.015 (1.758)	—	—	—
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	—	-0.014 (-2.306)	-0.034 (-1.769)	-0.051 (-2.077)
$\Delta \ln D_{it}$	-0.040 (-3.631)	-0.039 (-3.690)	-0.042 (-3.378)	-0.045 (-3.181)
$\Delta \ln D_{it}^*$	0.004 (2.691)	0.004 (2.748)	0.005 (3.237)	0.006 (3.118)
$\ln \frac{\mu_{it-1}}{\mu_{it-1}^*}$	-0.543 (-15.743)	-0.545 (-15.882)	-0.508 (-13.226)	-0.534 (-9.869)
$\ln \theta_{it-1}$	0.000 (-0.089)	—	—	—
$\ln \theta_{it-1}^*$	0.008 (1.184)	—	—	—
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	—	-0.004 (-0.761)	0.028 (1.724)	0.036 (1.805)
$\ln L_{t-1}$	-0.028 (-2.616)	—	—	—
$\ln L_{t-1}^*$	0.007 (0.642)	—	—	—
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	—	-0.018 (-2.307)	-0.044 (-2.882)	-0.051 (-2.675)
N	800	800	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (3) and (4) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. L_t denotes (real) GDP.

7 Non-Linearities

7.1 Short Run

Table 31: Prices (Short Run), Non-Linearities, all country pairs

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Method	OLS	OLS	OLS	OLS	IV	IV	IV
$\Delta \ln \frac{\bar{p}_{it-1}}{\bar{p}_{it-1}^*}$	–	–	0.070 (2.074)	0.065 (1.940)	–	–	0.083 (1.336)
$\Delta \ln \theta_{it}$	–0.022 (–1.737)	–0.023 (–1.843)	–0.044 (–3.519)	–	–	–	–
$\Delta \ln \theta_{it}^*$	0.024 (2.460)	0.020 (2.038)	0.028 (2.972)	–	–	–	–
$(\Delta \ln \theta_{it})^2$	–0.019 (–0.350)	–0.006 (–0.112)	0.055 (1.052)	–	–	–	–
$(\Delta \ln \theta_{it}^*)^2$	–0.097 (–2.126)	–0.081 (–1.818)	–0.083 (–2.043)	–	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–	–	–0.027 (–3.825)	–0.195 (–4.456)	–0.194 (–4.316)	–0.286 (–3.654)
$\left(\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}\right)^2$	–	–	–	–0.023 (–0.874)	0.386 (1.647)	0.419 (1.667)	0.571 (1.880)
$\Delta \ln D_{it}$	–0.008 (–0.734)	–0.010 (–0.910)	–0.019 (–1.819)	–0.016 (–1.521)	–0.046 (–2.521)	–0.044 (–2.417)	–0.063 (–2.645)
$\Delta \ln D_{it}^*$	0.006 (3.132)	0.003 (1.685)	0.003 (1.892)	0.003 (1.631)	0.006 (1.200)	0.007 (1.523)	0.007 (1.341)
$\Delta \ln P_t$	–	0.447 (5.526)	0.518 (6.515)	0.524 (6.583)	0.428 (3.467)	–	0.468 (2.921)
$\Delta \ln P_t^*$	–	–0.451 (–5.385)	–0.601 (–7.083)	–0.607 (–7.195)	–0.449 (–3.600)	–	–0.493 (–2.857)
N	800	800	720	720	800	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (5) to (7) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies.

Table 32: Productivity (Short Run), Non-Linearities, all country pairs

	(1)	(2)	(3)	(4)	(5)
Method	OLS	OLS	OLS	IV	IV
$\Delta \ln \frac{z_{it-1}^*}{z_{it-1}^*}$	–	–0.076 (–2.034)	–0.076 (–2.027)	–	–0.274 (–2.221)
$\Delta \ln \theta_{it}$	0.048 (1.164)	0.060 (1.251)	–	–	–
$\Delta \ln \theta_{it}^*$	–0.063 (–1.910)	–0.073 (–2.075)	–	–	–
$(\Delta \ln \theta_{it})^2$	–0.039 (–0.215)	0.008 (0.038)	–	–	–
$(\Delta \ln \theta_{it}^*)^2$	0.052 (0.342)	0.011 (0.074)	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–	0.064 (2.328)	0.823 (4.003)	1.601 (3.379)
$(\Delta \ln \frac{\theta_{it}}{\theta_{it}^*})^2$	–	–	0.042 (0.411)	–3.569 (–3.098)	–5.450 (–2.701)
$\Delta \ln D_{it}$	0.148 (3.873)	0.173 (4.357)	0.176 (4.658)	0.292 (3.487)	0.437 (3.100)
$\Delta \ln D_{it}^*$	–0.034 (–5.582)	–0.034 (–5.485)	–0.034 (–6.013)	–0.019 (–0.906)	–0.029 (–0.923)
N	800	720	720	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (4) and (5) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies.

Table 33: Markups (Short Run), Non-Linearities, all country pairs

	(1)	(2)	(3)	(4)	(5)
Method	OLS	OLS	OLS	IV	IV
$\Delta \ln \frac{\mu_{it-1}^*}{\mu_{it-1}^*}$	–	–0.241 (–6.435)	–0.225 (–5.969)	–	–0.063 (–0.608)
$\Delta \ln \theta_{it}$	–0.009 (–0.652)	–0.005 (–0.302)	–	–	–
$\Delta \ln \theta_{it}^*$	0.013 (1.222)	0.023 (2.077)	–	–	–
$(\Delta \ln \theta_{it})^2$	–0.111 (–1.813)	–0.144 (–2.239)	–	–	–
$(\Delta \ln \theta_{it}^*)^2$	0.120 (2.383)	0.151 (3.030)	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–	–0.029 (–3.289)	–0.056 (–0.740)	0.045 (0.355)
$(\Delta \ln \frac{\theta_{it}}{\theta_{it}^*})^2$	–	–	0.016 (0.492)	–1.502 (–3.553)	–1.725 (–2.970)
$\Delta \ln D_{it}$	–0.040 (–3.110)	–0.048 (–3.789)	–0.052 (–4.270)	–0.068 (–2.218)	–0.063 (–1.731)
$\Delta \ln D_{it}^*$	0.003 (1.688)	0.004 (1.905)	0.006 (3.109)	0.030 (3.861)	0.028 (3.297)
N	800	720	720	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (4) and (5) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies.

7.2 Long Run

Table 34: Prices (Long Run), Non-Linearities, all country pairs

	(1)	(2)	(3)	(4)
Method	OLS	OLS	IV	IV
$\Delta \ln \frac{\bar{P}_{it-1}}{\bar{P}_{it-1}^*}$	–	–	–	0.018 (0.256)
$\Delta \ln \theta_{it}$	–0.015 (–1.453)	–	–	–
$\Delta \ln \theta_{it}^*$	0.003 (0.314)	–	–	–
$(\Delta \ln \theta_{it})^2$	0.037 (0.846)	–	–	–
$(\Delta \ln \theta_{it}^*)^2$	–0.065 (–1.799)	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–0.004 (–0.563)	–0.053 (–1.430)	–0.139 (–1.654)
$\left(\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}\right)^2$	–	–0.024 (–1.036)	0.177 (0.968)	0.409 (1.485)
$\Delta \ln D_{it}$	–0.009 (–0.963)	–0.005 (–0.600)	–0.021 (–1.683)	–0.027 (–1.545)
$\Delta \ln D_{it}^*$	0.001 (0.958)	0.001 (0.765)	0.003 (0.852)	0.003 (0.827)
$\Delta \ln P_t$	0.664 (6.473)	0.641 (6.494)	0.723 (5.024)	0.481 (1.989)
$\Delta \ln P_t^*$	–0.916 (–7.208)	–0.911 (–7.235)	–0.809 (–4.753)	–0.668 (–2.541)
$\ln \frac{\bar{P}_{it-1}}{\bar{P}_{it-1}^*}$	–0.416 (–17.434)	–0.418 (–17.657)	–0.352 (–6.674)	–0.289 (–5.029)
$\ln \theta_{it-1}$	0.017 (2.198)	–	–	–
$\ln \theta_{it-1}^*$	–0.010 (–1.467)	–	–	–
$(\ln \theta_{it-1})^2$	–0.001 (–0.380)	–	–	–
$(\ln \theta_{it-1}^*)^2$	0.004 (1.134)	–	–	–
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	–	0.014 (2.925)	0.051 (1.444)	0.057 (1.141)
$\left(\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}\right)^2$	–	0.000 (–0.093)	–0.014 (–0.799)	0.006 (0.330)
$\ln L_{t-1}$	–0.061 (–5.074)	–	–	–
$\ln L_{t-1}^*$	0.062 (5.233)	–	–	–
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	–	–0.063 (–6.294)	–0.073 (–5.044)	–0.078 (–3.433)
$\ln P_{t-1}$	0.298 (9.700)	0.292 (9.683)	0.250 (5.810)	0.109 (0.973)
$\ln P_{t-1}^*$	–0.361 (–10.223)	–0.353 (–10.032)	–0.287 (–4.672)	–0.191 (–1.372)
N	800	800	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (3) and (4) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. L_t denotes (real) GDP.

Table 35: Productivity (Long Run), Non-Linearities, all country pairs

	(1)	(2)	(3)	(4)	(5)	(6)
Method	OLS	OLS	IV	IV	IV	IV
$\Delta \ln \frac{z_{it}-1}{z_{it-1}^*}$	–	–	–	–0.237 (–1.455)	–0.145 (–1.059)	–0.219 (–1.344)
$\Delta \ln \theta_{it}$	0.052 (1.309)	–	–	–	–	–
$\Delta \ln \theta_{it}^*$	–0.053 (–1.612)	–	–	–	–	–
$(\Delta \ln \theta_{it})^2$	–0.048 (–0.279)	–	–	–	–	–
$(\Delta \ln \theta_{it}^*)^2$	0.047 (0.333)	–	–	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	0.051 (2.058)	0.424 (2.202)	1.138 (2.470)	1.287 (2.999)	1.305 (2.700)
$\left(\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}\right)^2$	–	0.020 (0.220)	–2.035 (–2.069)	–4.576 (–2.495)	–4.900 (–2.712)	–4.971 (–2.443)
$\Delta \ln D_{it}$	0.125 (3.457)	0.120 (3.521)	0.281 (3.549)	0.385 (2.966)	0.382 (2.977)	0.643 (1.744)
$\Delta \ln D_{it}^*$	–0.029 (–5.091)	–0.029 (–5.643)	–0.018 (–1.073)	–0.011 (–0.471)	–0.009 (–0.324)	–0.006 (–0.123)
$\ln \frac{z_{it}-1}{z_{it-1}^*}$	–0.315 (–9.954)	–0.312 (–9.961)	–0.269 (–3.513)	–0.432 (–2.988)	–0.498 (–2.984)	–0.459 (–2.715)
$\ln \theta_{it-1}$	–0.055 (–1.803)	–	–	–	–	–
$\ln \theta_{it-1}^*$	0.046 (1.534)	–	–	–	–	–
$(\ln \theta_{it-1})^2$	–0.001 (–0.045)	–	–	–	–	–
$(\ln \theta_{it-1}^*)^2$	–0.020 (–1.559)	–	–	–	–	–
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	–	–0.058 (–2.778)	–0.580 (–2.748)	–0.418 (–1.049)	–0.144 (–0.519)	–0.186 (–0.596)
$\left(\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}\right)^2$	–	–0.003 (–0.526)	0.120 (1.585)	0.129 (1.105)	0.077 (0.705)	0.182 (1.270)
$\ln L_{t-1}$	0.271 (5.481)	–	–	–	–	–
$\ln L_{t-1}^*$	–0.262 (–5.328)	–	–	–	–	–
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	–	0.264 (6.568)	0.558 (4.822)	0.666 (3.038)	0.559 (1.984)	0.556 (2.084)
$\ln w_{it-1}$	–0.065 (–2.031)	–	–	–	–	–
$\ln w_{it-1}^*$	0.112 (3.971)	–	–	–	–	–
$\ln \frac{w_{it-1}}{w_{it-1}^*}$	–	–0.093 (–4.050)	–0.527 (–3.887)	–0.508 (–2.166)	–0.368 (–1.219)	–0.379 (–1.301)
N	800	800	800	720	720	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (3) to (6) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. In (5) wages are instrumented by the average income tax rate for married individuals and in (6) the number of firms is further instrumented by its own lags. L_t denotes (real) GDP.

Table 36: Markups (Long Run), Non-Linearities, all country pairs

	(1)	(2)	(3)	(4)
Method	OLS	OLS	IV	IV
$\Delta \ln \frac{\mu_{it-1}}{\mu_{it-1}^*}$	–	–	–	0.163 (1.274)
$\Delta \ln \theta_{it}$	–0.007 (–0.603)	–	–	–
$\Delta \ln \theta_{it}^*$	0.005 (0.510)	–	–	–
$(\Delta \ln \theta_{it})^2$	–0.073 (–1.388)	–	–	–
$(\Delta \ln \theta_{it}^*)^2$	0.091 (2.083)	–	–	–
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–	–0.014 (–1.812)	0.072 (1.243)	0.279 (1.900)
$\left(\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}\right)^2$	–	0.013 (0.455)	–0.995 (–3.034)	–1.785 (–2.632)
$\Delta \ln D_{it}$	–0.039 (–3.455)	–0.038 (–3.558)	–0.030 (–1.355)	0.003 (0.082)
$\Delta \ln D_{it}^*$	0.003 (1.747)	0.005 (3.044)	0.019 (3.426)	0.023 (2.602)
$\ln \frac{\mu_{it-1}}{\mu_{it-1}^*}$	–0.541 (–15.783)	–0.543 (–15.908)	–0.454 (–6.765)	–0.605 (–4.574)
$\ln \theta_{it-1}$	0.015 (1.878)	–	–	–
$\ln \theta_{it-1}^*$	–0.012 (–1.511)	–	–	–
$(\ln \theta_{it-1})^2$	0.008 (2.063)	–	–	–
$(\ln \theta_{it-1}^*)^2$	–0.001 (–0.369)	–	–	–
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	–	0.008 (1.460)	0.086 (2.134)	0.148 (1.895)
$\left(\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}\right)^2$	–	0.000 (–0.054)	–0.007 (–0.312)	–0.019 (–0.480)
$\ln L_{t-1}$	–0.025 (–2.414)	–	–	–
$\ln L_{t-1}^*$	0.017 (1.705)	–	–	–
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	–	–0.024 (–3.436)	–0.057 (–2.895)	–0.080 (–2.046)
N	800	800	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. In (3) and (4) instruments for openness include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. L_t denotes (real) GDP.

8 Instrumenting Number of Firms

8.1 Short Run

Table 37: Prices (Short Run), IV Number of Firms, all country pairs

	(1)	(2)	(3)
Method	IV	IV	IV
$\Delta \ln \frac{\bar{P}_{it-1}}{\bar{P}_{it-1}^*}$	–	–	0.108 (2.201)
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–0.156 (–3.703)	–0.157 (–3.699)	–0.161 (–2.939)
$\Delta \ln D_{it}$	–0.103 (–1.633)	–0.092 (–2.020)	–0.129 (–2.200)
$\Delta \ln D_{it}^*$	0.025 (4.371)	0.028 (5.071)	0.027 (4.824)
$\Delta \ln P_t$	0.268 (2.071)	–	0.289 (1.913)
$\Delta \ln P_t^*$	–0.186 (–1.370)	–	–0.174 (–1.188)
N	800	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. Instruments for openness and the number of firms include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies.

Table 38: Productivity (Short Run), IV Number of Firms, all country pairs

	(1)	(2)
Method	IV	IV
$\Delta \ln \frac{z_{it}^* - 1}{z_{it-1}^*}$	–	–0.138 (–2.334)
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	0.597 (3.870)	0.695 (3.027)
$\Delta \ln D_{it}$	0.544 (3.289)	0.677 (3.718)
$\Delta \ln D_{it}^*$	–0.126 (–6.356)	–0.128 (–5.942)
N	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. Instruments for openness and the number of firms include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies.

Table 39: Markups (Short Run), IV Number of Firms, all country pairs

	(1)	(2)
Method	IV	IV
$\Delta \ln \frac{\mu_{it} - 1}{\mu_{it-1}^*}$	–	–0.223 (–5.256)
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–0.086 (–2.130)	–0.118 (–2.120)
$\Delta \ln D_{it}$	–0.148 (–3.421)	–0.136 (–3.185)
$\Delta \ln D_{it}^*$	0.017 (3.347)	0.020 (3.951)
N	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. Instruments for openness and the number of firms include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies.

8.2 Long Run

Table 40: Prices (Long Run), IV Number of Firms, all country pairs

	(1)	(2)
Method	IV	IV
$\Delta \ln \frac{P_{it-1}}{P_{it-1}^*}$	–	–0.037 (–0.543)
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–0.023 (–0.722)	–0.042 (–0.912)
$\Delta \ln D_{it}$	0.056 (1.033)	0.070 (1.176)
$\Delta \ln D_{it}^*$	0.010 (2.054)	0.011 (1.647)
$\Delta \ln P_t$	0.659 (4.351)	0.456 (1.891)
$\Delta \ln P_t^*$	–0.687 (–3.146)	–0.594 (–1.849)
$\ln \frac{P_{it-1}}{P_{it-1}^*}$	–0.314 (–5.558)	–0.284 (–4.816)
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	0.093 (2.368)	0.116 (2.700)
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	–0.079 (–5.273)	–0.093 (–4.346)
$\ln P_{t-1}$	0.215 (4.769)	0.140 (1.527)
$\ln P_{t-1}^*$	–0.264 (–4.842)	–0.212 (–1.986)
N	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. Instruments for openness and the number of firms include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. L_t denotes (real) GDP.

Table 41: Productivity (Long Run), IV Number of Firms, all country pairs

	(1)	(2)	(3)	(4)
Method	IV	IV	IV	IV
$\Delta \ln \frac{z_{it}^*}{z_{it-1}^*}$	–	–0.198 (–1.977)	–0.119 (–1.808)	–0.111 (–1.630)
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	0.085 (0.346)	0.238 (1.159)	0.425 (2.821)	0.530 (3.559)
$\Delta \ln D_{it}$	–0.835 (–1.595)	–0.235 (–0.722)	0.258 (1.976)	0.242 (1.838)
$\Delta \ln D_{it}^*$	–0.032 (–0.904)	–0.050 (–1.999)	–0.084 (–4.329)	–0.077 (–4.456)
$\ln \frac{z_{it-1}^*}{z_{it-1}^*}$	–0.160 (–1.446)	–0.248 (–2.913)	–0.258 (–3.402)	–0.246 (–3.606)
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	–1.245 (–2.842)	–0.871 (–2.800)	–0.331 (–2.423)	–0.271 (–2.044)
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	0.751 (3.951)	0.692 (4.387)	0.383 (2.575)	0.302 (2.697)
$\ln \frac{w_{it-1}}{w_{it-1}^*}$	–0.823 (–3.166)	–0.601 (–3.325)	–0.198 (–1.170)	–0.122 (–1.026)
N	800	720	720	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. Instruments for openness and the number of firms include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. In (3) wages are instrumented by the average income tax rate for married individuals and in (4) the number of firms is further instrumented by its own lags. L_t denotes (real) GDP.

Table 42: Markups (Long Run), IV Number of Firms, all country pairs

	(1)	(2)
Method	IV	IV
$\Delta \ln \frac{\bar{\mu}_{it-1}}{\bar{\mu}_{it-1}^*}$	–	0.034 (0.737)
$\Delta \ln \frac{\theta_{it}}{\theta_{it}^*}$	–0.031 (–1.004)	–0.033 (–0.929)
$\Delta \ln D_{it}$	–0.188 (–3.013)	–0.153 (–2.485)
$\Delta \ln D_{it}^*$	0.010 (2.499)	0.012 (2.914)
$\ln \frac{\bar{\mu}_{it-1}}{\bar{\mu}_{it-1}^*}$	–0.534 (–13.286)	–0.556 (–10.662)
$\ln \frac{\theta_{it-1}}{\theta_{it-1}^*}$	–0.020 (–0.680)	–0.005 (–0.156)
$\ln \frac{L_{t-1}}{L_{t-1}^*}$	–0.027 (–2.208)	–0.030 (–2.036)
N	800	720

Notes: Country/industry fixed effects are included in all regressions, t -statistics in parenthesis. Instruments for openness and the number of firms include cif/fob, EU directives interacted with NTBs, weighted distance interacted with the elasticity of substitution, weight to value and 1992 and 1999 dummies. L_t denotes (real) GDP.