

Crisis-Proof Services:  
Why Trade in Services Did Not Suffer  
During the 2008-2009 Collapse  
ONLINE APPENDIX

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Table 1: Overview of the NBB Surveys on Trade in Services

Survey Name	Frequency	Mandatory declaration criteria	Services Targeted
F01DGS	M	€10M annual Intrastat or €5M monthly Intrastat or €1M annual Extrastat	All
F01CDC	M	List of firms in Law n 187 of 30.12.1982	All
F01MER	M/Q	€10M annual Intrastat or €5M monthly Intrastat or €1M annual Extrastat	Merchanting
F03MER	M/Q	All firms declaring €10M Intrastat	Merchanting
F03CMS	M/Q/A	€1,000 annual Intrastat or €5,000 monthly Intrastat or €1,000 annual Extrastat	All except Transport, Merchanting, Telecommunications, Insurance, Construction, Energy
F13CON	M/Q	All firms	Construction
F23CON	M/Q	All firms	Energy, Recycling, Real Estate
F03TRP	M/Q/A	All firms	Transport
F03AVS	Q	All firms	Telecommunications
F02BRO	M/Q	All firms with more than 10 employees	Insurance
F02CCI	M	All payments with credit cards not included in the other surveys	All
F02TRA	M/Q	Travel Agencies with more than 10M annual turnover	Travel

**Note:** This table presents the different surveys that constitute the NBB Trade in Services dataset from 2006 onwards, their frequency (M stands for monthly, Q for quarterly and A for annual), the criteria to make the declaration mandatory and the services targeted by the each survey. All values are in Euros.



Table 3: DD Regression on continuing firm-country-service triplets, continuous variables

	Goods		Services	
	$\beta_1$	$\beta_2$	$\beta_1$	$\beta_2$
<b>Heterogeneity Channel</b>				
Size	0.0260 <sup>a</sup> (0.008)	-0.0187 <sup>c</sup> (0.011)	-0.0000 (0.000)	-0.0000 (0.000)
Productivity	0.0333 <sup>b</sup> (0.015)	-0.0422 <sup>b</sup> (0.019)	-0.0090 (0.039)	-0.0017 (0.052)
Foreign Ownership Dummy	-0.0286 (0.029)	-0.0085 (0.043)	-0.0280 (0.117)	-0.0079 (0.159)
Multinational Dummy	-0.0146 (0.027)	-0.0116 (0.041)	0.0496 (0.091)	-0.1949 (0.161)
<b>Global Value Chain Channel</b>				
Share of Intermediates	0.0055 (0.005)	-0.0039 (0.006)	0.0171 (0.187)	-0.2233 (0.289)
Share of Exports	-0.3424 (0.338)	-0.5167 (0.392)	-0.2919 (0.358)	0.5367 (0.541)
Share of Imports	-0.5168 (0.365)	-0.1397 (0.583)	0.3992 (0.376)	-1.5467 <sup>b</sup> (0.717)
Valued Added Chain	0.0133 (0.009)	0.0011 (0.014)	-0.0035 (0.002)	0.0162 <sup>a</sup> (0.004)
Share of Stocks	0.0013 (0.131)	0.0336 (0.140)	-0.0582 (0.423)	0.1566 (0.647)
<b>Credit Constraint Channel</b>				
External Financial Dependence	0.0000 (0.000)	0.0001 (0.000)	0.0000 (0.000)	-0.0000 (0.000)
Share of Debts	-0.0195 (0.043)	-0.0429 (0.058)	-0.2010 (0.225)	0.2775 (0.353)
Share of Long-Term Debts	0.0505 (0.043)	-0.0474 (0.064)	0.1781 (0.216)	-0.1919 (0.379)
Share of Financial Debts	-0.0236 (0.038)	-0.0029 (0.046)	-0.2391 (0.181)	0.2993 (0.323)
<b>Demand Channel:</b>				
GDP Growth	0.9534 <sup>c</sup> (0.511)	1.4122 <sup>c</sup> (0.826)	1.5226 (1.655)	-0.9846 (2.653)
Constant	-0.0404 (0.145)		0.0655 (0.371)	
Service Dummies	Yes		Yes	
Industry Dummies	Yes		Yes	
Other Controls	Yes		Yes	
Observations	319,161		14,080	
$R^2$	0.0143		0.0566	
Prob > F	0.0000		0.0000	

**Note:** This table presents the estimated coefficients disaggregating the different channels into their components  $\beta_1$  refers to the estimated effects in normal time and  $\beta_2$  refers to the estimated effect of the same variables during the crisis. On the left side estimates for exports of goods and on the right for exports of services. Multi-level clustered standard errors in parentheses (at the firm, service or product and country level). <sup>a</sup>  $p < 0.01$ , <sup>b</sup>  $p < 0.05$ , <sup>c</sup>  $p < 0.1$ .

Table 4: Treated and Control Group Characteristics

	Goods Exp.	Services Exp.	Diff
log Size	2.983 (0.0445)	3.091 (0.046)	-0.107 (0.064)
log Productivity	-2.302 (0.020)	-2.350 (0.021)	0.048 (0.029)
log Capital Intensity	-3.952 (0.043)	-4.020 (0.052)	0.068 (0.067)
log Average Wage	-2.867 (0.015)	-2.893 (0.013)	0.026 (0.020)
MNE	0.052 (0.006)	0.055 (0.006)	-0.002 (0.008)
FOR	0.130 (0.009)	0.132 (0.009)	-0.002 (0.013)

**Note:** This table presents the characteristics and the differences of matched services and goods exporters, in terms of size, productivity, capital intensity, average wage, multinational status and foreign ownership. In the last column there is the t statistic of a t-test where the null hypothesis is that the difference is equal to zero. <sup>b</sup> indicates significance of the difference at the 5% level.

Table 5: Investigating Mechanisms: Regression on continuing firm-countries, Heterogeneity

Panel a: Bi-Exporters												
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	All	Durables	Consumables	Business Services	Transport Services	Services to Non Residents	Telecomm. Services	Construction Services	Financial Services	Other Services	OECD	non-OECD
$\gamma_3^{HET}$	0.2086 <sup>b</sup>	0.0707	0.1513	0.1051	0.3923 <sup>a</sup>	1.0545	-0.2072	0.0527	0.2706	0.1378	0.2088 <sup>b</sup>	0.2108
	(0.098)	(0.143)	(0.119)	(0.088)	(0.076)	(0.649)	(0.229)	(0.317)	(0.215)	(0.243)	(0.106)	(0.188)
Country-Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	12,442	9,166	11,105	6,007	6,957	400	761	647	1,056	1,696	9,533	6,310
$R^2$	0.0336	0.0352	0.0314	0.0569	0.0445	0.2710	0.1582	0.2072	0.1767	0.1165	0.0130	0.0689

  

Panel b: Matched Mono Exporters												
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	All	Durables	Consumables	Business Services	Transport Services	Services to Non Residents	Telecomm. Services	Construction Services	Financial Services	Other Services	OECD	non-OECD
$\gamma_3^{HET}$	0.0109	0.0708	0.0177	0.0190	0.2207 <sup>b</sup>	-1.2548	-0.0118	1.0219 <sup>a</sup>	0.1214	-0.0252	0.0177	0.0411
	(0.053)	(0.113)	(0.054)	(0.267)	(0.110)	(2.024)	(0.113)	(0.270)	(0.133)	(0.589)	(0.054)	(0.051)
Country-Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	27,830	16,630	24,414	8,646	12,113	7,730	9,762	7,717	8,317	7,825	24,414	19,526
$R^2$	0.0244	0.0280	0.0253	0.0663	0.0467	0.0656	0.0728	0.0651	0.0693	0.0630	0.0253	0.0027

Note: This table reports the estimated coefficients for  $\gamma_3^{HET}$  for the firms that trade both goods and services (Bi-Exporters) and for the matched firms exporting either goods or services (Mono-Exporters). Clustered standard errors in parentheses (at the firm level). <sup>a</sup> p<0.01, <sup>b</sup> p<0.05, <sup>c</sup> p<0.1.

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Table 6: Investigating Mechanisms: Regression on continuing firm-countries, Global Value Chain

Panel a: Bi-Exporters												
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	All	Durables	Consumables	Business Services	Transport Services	Services to Non Residents	Telecomm. Services	Construction Services	Financial Services	Other Services	OECD	non-OECD
$\gamma_3^{GVC}$	-0.0368	0.3495	-0.0177	0.0437	-0.0841	0.4672 <sup>c</sup>	-3.6562 <sup>c</sup>	-0.0898	1.1074	0.3360 <sup>b</sup>	-0.0256	-0.1321
	(0.148)	(0.345)	(0.137)	(0.147)	(0.128)	(0.244)	(2.103)	(0.722)	(0.669)	(0.167)	(0.136)	(0.117)
Country-Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	10,752	7,589	9,535	6,272	5,227	362	642	529	1,019	1,628	8,178	5,889
$R^2$	0.0385	0.0415	0.0354	0.0452	0.0682	0.2791	0.1810	0.2145	0.1985	0.1129	0.0142	0.0768

  

Panel b: Matched Mono Exporters												
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	All	Durables	Consumables	Business Services	Transport Services	Services to Non Residents	Telecomm. Services	Construction Services	Financial Services	Other Services	OECD	non-OECD
$\gamma_3^{GVC}$	0.1944	0.0599	0.2761	-0.2293	-0.7629	3.4930	-0.0001	-3.1039 <sup>a</sup>	-0.1304	-0.7269	-0.6171 <sup>a</sup>	-0.3515 <sup>a</sup>
	(0.190)	(0.474)	(0.209)	(0.263)	(0.516)	(26.024)	(0.267)	(0.824)	(0.319)	(1.622)	(0.162)	(0.112)
Country-Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	18,363	7,502	15,087	8,006	7,410	7,254	9,178	7,260	7,348	7,313	12,879	12,597
$R^2$	0.0367	0.0562	0.0403	0.0654	0.0649	0.0650	0.0779	0.0647	0.0647	0.0657	0.0080	0.0211

Note: This table reports the estimated coefficients for  $\gamma_3^{GVC}$  for the firms that trade both goods and services (Bi-Exporters) and for the matched firms exporting either goods or services (Mono-Exporters). Clustered standard errors in parentheses (at the firm level). <sup>a</sup> p<0.01, <sup>b</sup> p<0.05, <sup>c</sup> p<0.1.