

Appendix 4: Estimation outputs

Table A: Correlation matrix for the dependent and independent variables

<u>Variables</u>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Yield spread	1.00									
2. Corporate spread (1)	0.24	1.00								
3. VIX	0.05	0.72	1.00							
4. Current account-to-GDP	-0.20	0.06	-0.01	1.00						
5. Debt service	0.40	0.14	0.00	-0.25	1.00					
6. Debt-to-GDP	0.47	0.15	-0.00	-0.20	0.77	1.00				
7. Budget Balance-to-GDP	-0.52	-0.32	-0.13	0.36	-0.41	-0.45	1.00			
8. Monetary policy (2)	-0.36	-0.30	0.01	-0.04	-0.16	-0.22	0.47	1.00		
9. Liquidity	-0.11	0.00	0.01	0.02	0.19	0.34	-0.00	-0.00	1.00	
10. GDP growth	-0.36	-0.02	0.05	0.21	-0.15	-0.21	0.33	0.25	-0.04	1.00

Notes:

(1) Yield spread between Moody's Seasoned US AAA corporate bonds and 10-year US Treasury Bonds

(2) EONIA rate

Table B: Descriptive statistics

<u>Variables</u>	<u>Observations</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Min.</u>	<u>Max</u>	<u>Expectation</u>
Yield spread ^r	432	1.35001	3.1975	-1.198	33.134	N/A
Corporate spread	432	1.57166	.496581	.7	2.68	+
VIX	432	20.9041	8.97573	11.03492	58.59594	+
Current account-to-GDP ^r	432	-6.96666	5.87986	-23.2	6.8	-
Debt service ^r	432	1.10289	4.15347	-4.839581	22.37172	+
Debt-to-GDP ^r	432	7.22638	30.1435	-43.4	96.7	+
Budget Balance-to-GDP ^r	432	-1.76472	5.00800	-28.477	7.958	-
Monetary policy	432	2.00410	1.36040	.107	4.265	+
Liquidity ^r	432	.36021	.38569	.0252485	1.462969	-
GDP growth ^r	432	-.04953	1.15143	-4.7	5.7	-

Notes:

^r relative to Germany

Table C: Baseline specification

X_{it}	Yield spread of country i relative to Germany					
	All countries		Central countries		Peripheral countries	
	β	z -stats	β	z -stats	β	z -stats
Corporate spread (1)	.1978***	(3.97)	.1775***	(5.30)	.4393***	(4.44)
Current account-to-GDP	.0045	(0.77)	-.0034	(-0.96)	-.0097	(-0.46)
Debt service	-.0117	(-1.17)	-.0014	(-0.14)	-.0177	(-1.45)
Debt-to-GDP	.0430***	(9.87)	.0039	(1.06)	.0390***	(5.29)
Budget Balance-to-GDP	-.0508***	(-3.96)	.0006	(0.05)	-.0907***	(-4.76)
Monetary policy	-.0567**	(-2.42)	-.0576***	(-2.97)	-.1574***	(-3.00)
Liquidity	-3.5164***	(-7.82)	-.4594	(-0.79)	-2.5481***	(-3.91)
GDP growth	.0086	(0.66)	.0100	(1.33)	-.0052	(-0.18)
D_n	γ_n		γ_n		γ_n	
Dummy Belgium	Omitted ^a		Omitted ^a		Omitted ^a	
Dummy Finland	1.477***	(6.68)	-.190	(-1.03)		
Dummy France	3.097***	(7.88)	.209	(0.47)		
Dummy Greece	2.575	(1.16)			-.2691	(-0.12)
Dummy Ireland	1.917***	(5.66)			-.5650	(-1.40)
Dummy Italy	3.225***	(7.91)			-.0492	(-0.09)
Dummy Netherlands	1.240***	(5.71)	-.136	(-0.84)		
Dummy Portugal	1.684***	(2.76)			-.9148	(-1.49)
Dummy Spain	2.782***	(10.92)			/	/
Constant	.01401	(0.07)	.3209*	(1.91)	1.9878***	(4.50)
Number of Obs.	432		192		240	
Number of groups	9		4		5	
Avg. Obs. per group	48		48		48	
Wald χ^2	332.64		57.79		161.90	
Prob > χ^2	0.000		0.000		0.000	

Notes:

Panel FGLS regression with country dummies.

In the ordinary brackets are the z -statistics, computed using Parks-Kmenta(1986)'s HPAC-robust standard errors.

Significance at 1% denoted by ***, at 5% by ** and at 10% by*.

^a Naturally coded: Omitted (to avoid multicollinearity, we include only N-1 dummies)

(1) Yield spread between Moody's Seasoned US AAA corporate bonds and 10-year US Treasury Bonds

Table D: Model with a crisis dummy

X_{it}	Yield spread of country i relative to Germany					
	All countries		Central countries		Peripheral countries	
	$\beta_1(X_{it})$	$\beta_2(CRISIS_{it} * X_{it})$	$\beta_1(X_{it})$	$\beta_2(CRISIS_{it} * X_{it})$	$\beta_1(X_{it})$	$\beta_2(CRISIS_{it} * X_{it})$
Corporate spread (1)	.1045 (1.40)	.5631*** (3.08)	.0937***(3.02)	.2285*** (3.31)	.2412 (1.40)	1.628*** (4.00)
Current account-to-GDP	.0169* (1.76)	-.0217** (-2.17)	.0009 (0.24)	-.0021 (-0.45)	.0309 (0.94)	-.0729 (-1.48)
Debt service	-.0004 (-0.03)	-.0429 (-1.14)	-.0065 (-0.48)	.0112 (0.50)	.0047 (0.22)	-.1233* (-2.06)
Debt-to-GDP	.0207*** (4.01)	.0225*** (4.10)	.0019 (0.54)	.0055 (1.63)	-.0001 (-0.01)	.0643*** (4.25)
Budget Balance-to-GDP	-.0662***(-3.31)	-.0503**(-2.13)	-.0067 (-0.56)	.0547*** (3.60)	-.0420 (-0.82)	-.1528***(-2.62)
Monetary policy	.0469 (0.88)	-.1932**(-1.95)	.0398* (1.73)	-.1202***(-2.78)	.0183 (0.14)	-.3572* (-1.61)
Liquidity	-2.834***(-4.44)	-.3671* (-1.74)	-.8247 (-1.21)	.1827 (1.65)	-3.215***(-2.80)	-2.228** (-2.40)
GDP growth	-.0189 (-0.62)	-.0327 (-0.77)	-.0001 (-0.01)	.0237 (1.45)	-.0069 (-0.11)	-.1874** (-2.15)
D_n	γ_n		γ_n		γ_n	
Dummy Belgium	Omitted ^a		Omitted ^a		Omitted ^a	
Dummy Finland	.9359*** (3.93)		-.2747* (-1.69)			
Dummy France	2.291*** (4.48)		.3981 (0.81)			
Dummy Greece	2.091 (1.27)				-.2918 (-0.18)	
Dummy Ireland	1.090*** (4.20)				-1.790***(-3.44)	
Dummy Italy	2.865*** (5.02)				2.227*** (2.63)	
Dummy Netherlands	.6975*** (3.35)		-1.1808 (-1.30)			
Dummy Portugal	1.234*** (2.71)				-1.146* (-1.81)	
Dummy Spain	2.005*** (5.59)				/	
	λ		λ		λ	
Crisis	-.6503* (-1.82)		.1220 (0.84)		-2.519** (-2.11)	
Constant	.0239 (0.09)		.2070 (1.09)		1.868** (2.06)	
Number of Obs.	432		192		240	
Number of groups	9		4		5	
Avg. Obs. per group	48		48		48	
Wald χ^2	541.49		239.21		510.96	
Prob > χ^2	0.000		0.000		0.000	

Notes:

Panel FGLS regression with country dummies.

In the ordinary brackets are the z- statistics, computed using Parks-Kmenta(1986)'s HPAC-robust standard errors.

Significance at 1% denoted by ***, at 5% by ** and at 10% by*.

Z-statistics within parameters.

^a Naturally coded: Omitted (to avoid multicollinearity, we include only N-1 dummies).

(1) Yield spread between Moody's Seasoned US AAA corporate bonds and 10-year US Treasury Bonds

Table E: Baseline specification (Robustness check)

X_{it}	Yield spread of country i relative to Germany					
	All countries		Central countries		Peripheral countries	
	β	z -stats	β	z -stats	β	z -stats
VIX	.0097***	(3.76)	.0086***	(7.24)	.0091	(1.49)
Current account-to-GDP	-.0024	(-0.39)	-.0039	(-1.23)	-.0135	(-0.50)
Debt service	-.0077	(-0.66)	-.0105	(-1.08)	-.0074	(-0.44)
Debt-to-GDP	.0414***	(9.01)	.0087***	(2.58)	.0352***	(4.01)
Budget Balance-to-GDP	-.0527***	(-4.12)	-.0177*	(-1.89)	-.0846***	(-3.88)
Monetary policy	-.0559**	(-2.48)	-.0417***	(-2.88)	-.2110***	(-2.80)
Liquidity	-3.561***	(-7.07)	-.9045	(-1.59)	-2.264***	(-2.98)
GDP growth	.0094	(0.60)	.0075	(1.10)	.0201	(0.55)
D_n	γ_n		γ_n		γ_n	
Dummy Belgium	Omitted ^a		Omitted ^a		Omitted ^a	
Dummy Finland	1.430***	(6.49)	-.0052	(-0.03)		
Dummy France	3.090***	(7.18)	.5581	(1.27)		
Dummy Greece	2.370	(1.04)			-.0421	(-0.02)
Dummy Ireland	1.829***	(5.37)			-.4360	(-0.97)
Dummy Italy	3.254***	(7.20)			-.0827	(-0.13)
Dummy Netherlands	1.235***	(5.67)	.0070	(0.04)		
Dummy Portugal	1.568***	(2.64)			-.7352	(-1.19)
Dummy Spain	2.686***	(10.05)			/	/
Constant	.1280	(0.68)	.3854**	(2.20)	2.400***	(4.78)
Number of Obs.	432		192		240	
Number of groups	9		4		5	
Avg. Obs. per group	48		48		48	
Wald χ^2	292.78		115.65		96.30	
Prob > χ^2	0.000		0.000		0.000	

Notes:

Panel FGLS regression with country dummies.

In the ordinary brackets are the z- statistics, computed using Parks-Kmenta(1986)'s HPAC-robust standard errors.

Significance at 1% denoted by ***, at 5% by ** and at 10% by*.

^a Naturally coded: Omitted (to avoid multicollinearity, we include only N-1 dummies)

Table F: Model with a crisis dummy (Robustness check)

X_{it}	Yield spread of country i relative to Germany											
	All countries				Central countries				Peripheral countries			
	$\beta_1(X_{it})$		$\beta_2(CRISIS_{it} * X_{it})$		$\beta_1(X_{it})$		$\beta_2(CRISIS_{it} * X_{it})$		$\beta_1(X_{it})$		$\beta_2(CRISIS_{it} * X_{it})$	
VIX	.0021	(0.42)	.0128**	(1.97)	.0042*	(1.62)	.0015	(0.47)	.0120	(0.73)	-.0152	(-0.73)
Current account-to-GDP	.0131	(1.36)	-.0045	(-0.44)	-.0006	(-0.16)	-.0031	(-0.55)	.0376	(1.02)	-.0401	(-0.75)
Debt service	-.0080	(-0.47)	-.0241	(-0.71)	-.0109	(-0.81)	.0135	(0.62)	.0058	(0.22)	-.0396	(-0.63)
Debt-to-GDP	.0206***	(3.93)	.0252***	(4.68)	.0065*	(1.62)	.0077**	(2.16)	.0030	(0.18)	.0401***	(2.51)
Budget Balance-to-GDP	-.0637***	(-3.24)	-.0206	(-0.91)	-.0155	(-1.21)	.0625***	(3.59)	-.0263	(-0.44)	-.1374**	(-2.01)
Monetary policy	.0524	(1.11)	-.1683*	(-1.84)	.0273	(0.96)	-.0911**	(-1.96)	.0509	(0.30)	.0412	(0.15)
Liquidity	-2.064***	(-3.25)	-.4532**	(-2.33)	-1.027	(-1.57)	.1363	(1.21)	-3.052**	(-2.16)	-1.384	(-1.43)
GDP growth	-.0116	(-0.41)	.0224	(0.60)	-.0037	(-0.38)	.0315**	(2.26)	-.0108	(-0.17)	-.0166	(-0.18)
D_n	γ_n				γ_n				γ_n			
Dummy Belgium	Omitted ^a				Omitted ^a				Omitted ^a			
Dummy Finland	1.099***	(4.27)			-.0101	(-0.06)						
Dummy France	1.830***	(3.68)			.6469	(1.36)						
Dummy Greece	2.435	(1.43)							.6331	(0.38)		
Dummy Ireland	1.312***	(4.85)							-1.471***	(-2.54)		
Dummy Italy	2.164***	(3.81)							2.040**	(2.09)		
Dummy Netherlands	.7244***	(3.36)			.0305	(0.21)						
Dummy Portugal	1.415***	(2.90)							-.6664	(-0.92)		
Dummy Spain	2.001***	(5.54)										
	λ				λ				λ			
Crisis	.2425	(1.12)			.5079***	(3.98)			.9266	(0.78)		
Constant	-.0641	(-0.25)			.1963	(1.00)			1.781*	(1.64)		
Number of Obs.		432				192				240		
Number of groups		9				4				5		
Avg. Obs. per group		48				48				48		
Wald χ^2		355.30				184.95				254.81		
Prob > χ^2		0.000				0.000				0.000		

Notes:

Panel FGLS regression with country dummies.

In the ordinary brackets are the z- statistics, computed using Parks-Kmenta(1986)'s HPAC-robust standard errors.

Significance at 1% denoted by ***, at 5% by ** and at 10% by*.

Z-statistics within parameters.

^a Naturally coded: Omitted (to avoid multicollinearity, we include only N-1 dummies).