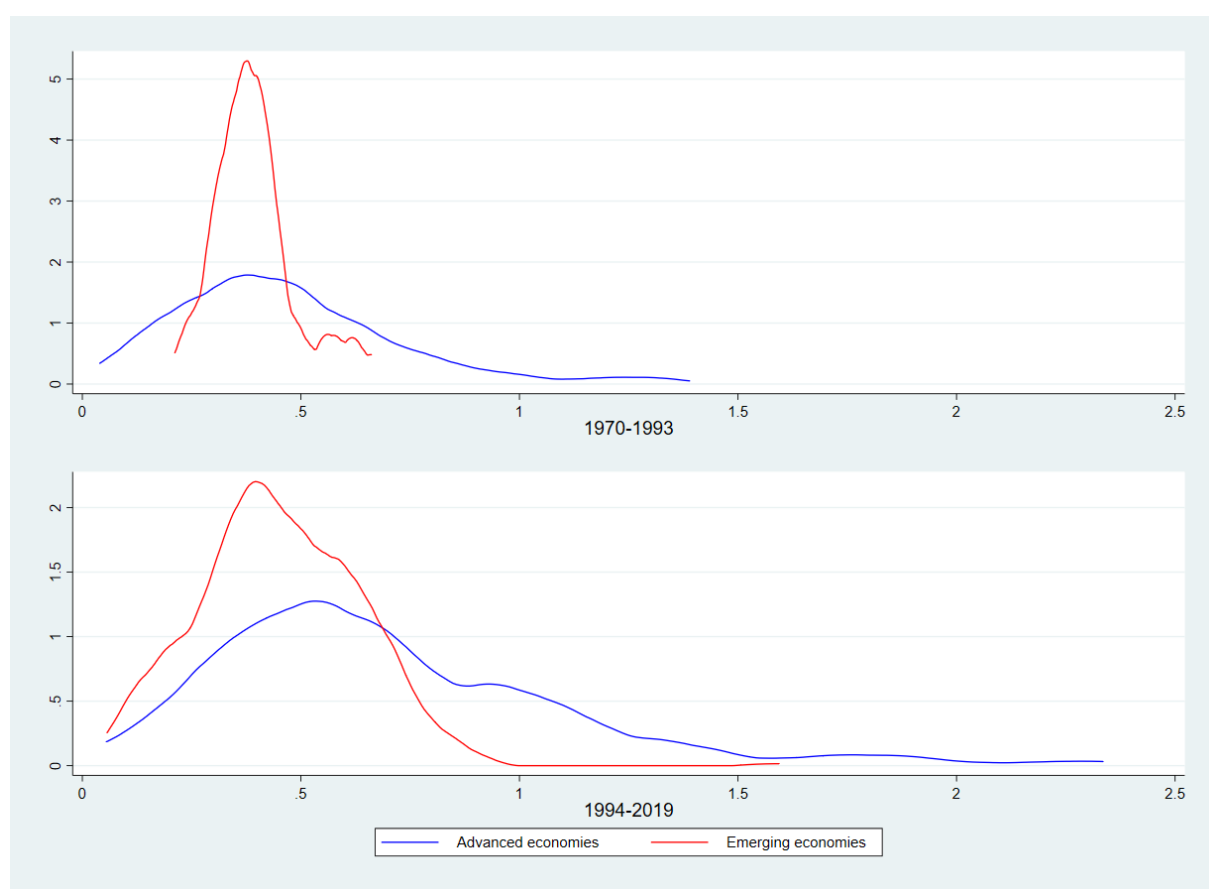


ON THE DEBT-GROWTH RELATIONSHIP AND RELATED GMM ISSUES

Gianni Carvelli

APPENDIX A

FIGURE A1. – *Kernel density estimation of debt-to-GDP ratio*



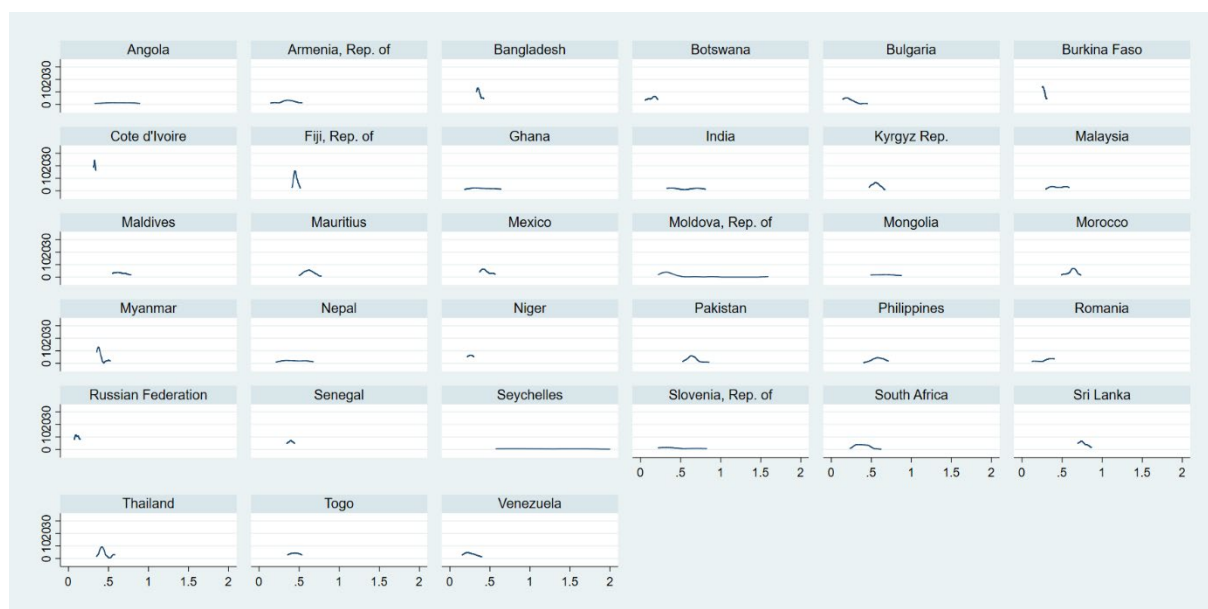
Notes: Author's elaboration on IMF data.

FIGURE A2. – *Kernel density estimation of debt-to-GDP ratio by country. Advanced economies*



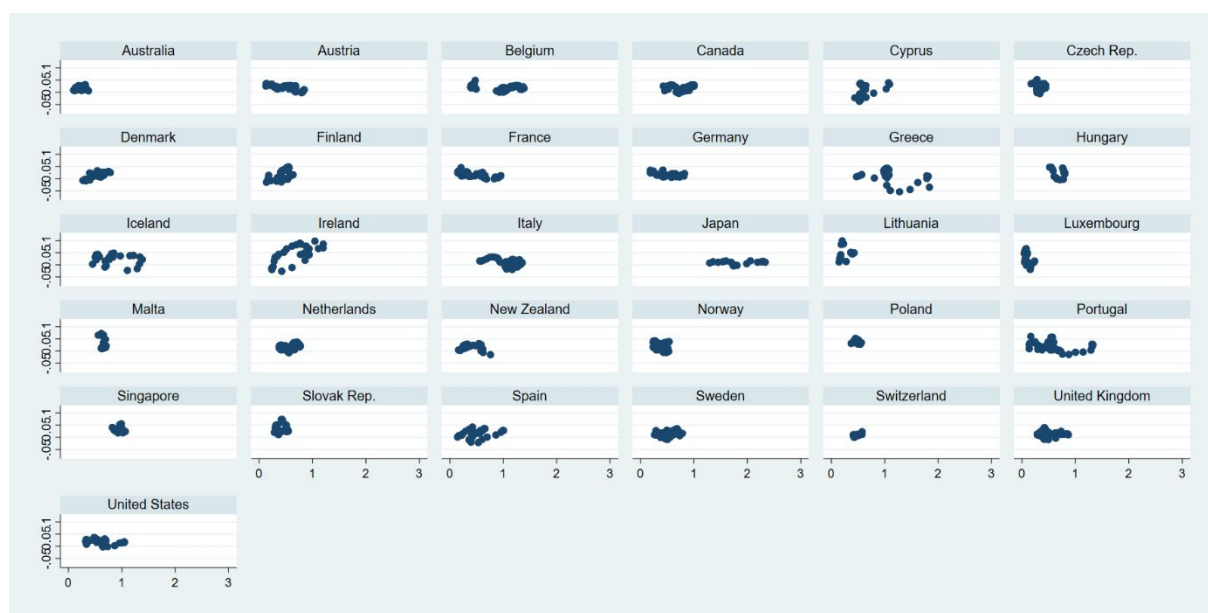
Notes: Author's elaboration on IMF data.

FIGURE A3 – *Kernel density estimation of debt-to-GDP ratio by country. Emerging markets*



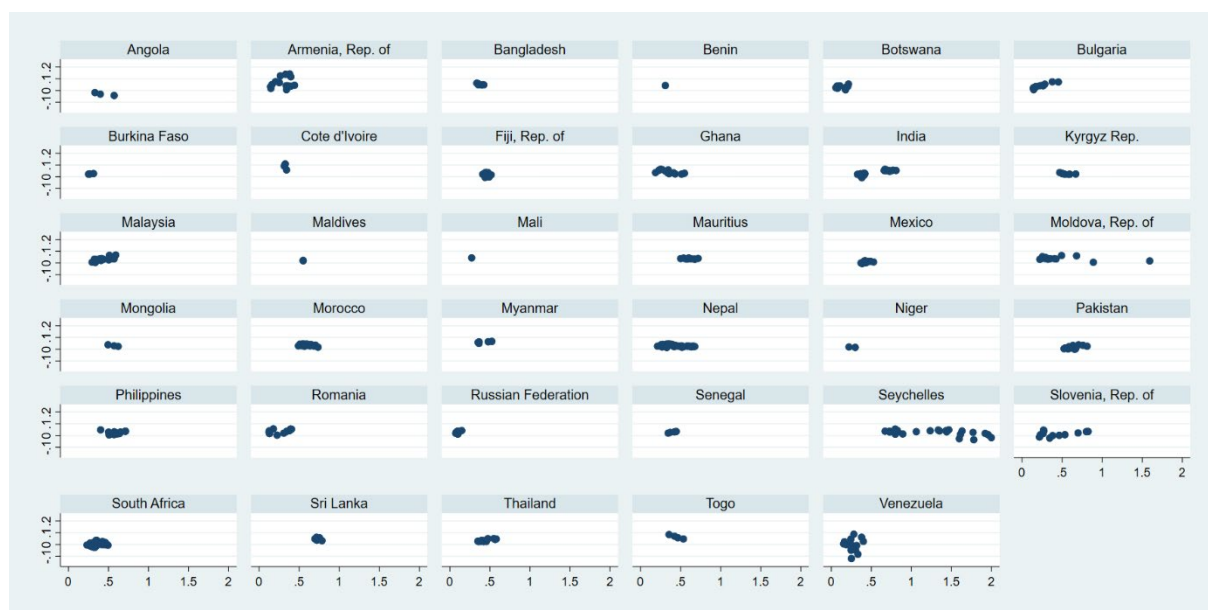
Notes: Author's elaboration on IMF data.

Figure A4. – *Output per capita vs debt-to-GDP ratio (growth rates) by country. Advanced economies*



Notes: Author's elaboration on IMF and PWT data. Annual episodes.

Figure A5. Output per capita vs debt-to-GDP ratio (growth rates) by country. Emerging economies



Notes: Author's elaboration on IMF and PWT data. Annual episodes.

TABLE A2. – *Dependent variable: growth of real GDP per capita*

	Advanced economies				Emerging economies			
	POLS		FE		POLS		FE	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent var. (<i>t-1</i>)	0.2990*** (0.0566)	0.3235*** (0.0972)	0.2393*** (0.0575)	0.1826* (0.0915)	0.2345*** (0.0720)	0.2210** (0.0955)	0.0277 (0.0893)	-0.0449 (0.0752)
Dependent var. (<i>t-2</i>)	-0.0520 (0.0497)	-0.0479 (0.0779)	-0.0870* (0.0455)	-0.0802 (0.0545)	0.0797 (0.0624)	0.0479 (0.0788)	-0.0851 (0.0915)	-0.0752 (0.0685)
Dependent var. (<i>t-3</i>)	0.0011 (0.0437)	0.0458 (0.0504)	-0.0229 (0.0381)	0.0078 (0.0335)	0.0212 (0.0503)	0.0667 (0.0643)	-0.0803* (0.0412)	-0.0803 (0.0522)
Dependent var. (<i>t-4</i>)	-0.0532 (0.0385)	-0.0668 (0.0468)	-0.0884*** (0.0243)	-0.0745** (0.0334)	0.0013 (0.0479)	-0.0832 (0.0531)	-0.1028*** (0.0350)	-0.1394*** (0.0448)
GDP pc (log)	-0.0101*** (0.0036)	-0.0089* (0.0048)	-0.0049 (0.0128)	0.0224 (0.0266)	-0.0051* (0.0026)	-0.0056 (0.0037)	0.0133 (0.0174)	0.0699 (0.0412)
Debt to GDP	-0.0073*** (0.0022)	-0.0052** (0.0026)	-0.1091*** (0.0178)	-0.1551*** (0.0423)	-0.0049 (0.0083)	0.0022 (0.0086)	-0.1673*** (0.0343)	-0.1218** (0.0479)
Capital pw growth	0.5016*** (0.1217)	0.3906** (0.1736)	0.6054*** (0.1136)	0.3405 (0.3106)	0.2243*** (0.0553)	0.3586*** (0.1213)	0.5190*** (0.1572)	0.7673*** (0.1542)
Population growth	-0.7839*** (0.1703)	-0.6574*** (0.2390)	-1.0907*** (0.3556)	-0.9121** (0.4124)	-0.7079*** (0.1657)	-0.8951*** (0.2077)	-2.5300*** (0.6534)	-3.7042*** (1.1313)
Openness index	0.0057*** (0.0012)	0.0045*** (0.0014)	0.0050 (0.0042)	0.0116 (0.0114)	0.0080* (0.0041)	0.0050 (0.0043)	0.0206* (0.0102)	0.0240* (0.0124)
Interest rate	-0.1757*** (0.0417)	-0.2096*** (0.0660)	-0.1994*** (0.0554)	-0.2755*** (0.0770)	-0.0193 (0.0366)	-0.0370 (0.0576)	-0.1330** (0.0556)	-0.3486*** (0.1181)
CAPB		0.0032 (0.0231)		-0.1047*** (0.0338)		0.0257 (0.0643)		-0.0429 (0.0996)
N*T	1089	673			527	241	525	241
N			31	29			35	16
R-squared (within)	0.555	0.613	0.588	0.683	0.446	0.631	0.488	0.697

Notes: Estimates at an annual level. The asterisks ***, ** and * denote significance at the 1%, 5% and 10% level, respectively. Individual and time effects are included but not reported. Robust standard errors (columns 1-2 and 6-7) and Windmeijer standard errors (columns 3-5 and 8-10) are reported in brackets. The Arellano-Bond test of autocorrelation and the Hansen-J statistic are reported.

TABLE A3. – *Dependent variable: growth of real GDP per hour worked*

	Advanced economies				Emerging economies			
	POLS		FE		POLS		FE	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent var. (<i>t-1</i>)	0.1328*** (0.0486)	0.1419** (0.0700)	0.0970** (0.0468)	0.0611 (0.0500)	0.0833 (0.0779)	0.1029 (0.0828)	-0.0864 (0.0759)	-0.0731 (0.0930)
Dependent var. (<i>t-2</i>)	0.0208 (0.0425)	-0.0190 (0.0625)	-0.0163 (0.0345)	-0.0941* (0.0479)	0.0731 (0.0709)	0.1716** (0.0797)	-0.0427 (0.0798)	0.0680 (0.0627)
Dependent var. (<i>t-3</i>)	0.0249 (0.0372)	0.0559 (0.0481)	-0.0063 (0.0248)	-0.0014 (0.0372)	0.0591 (0.0625)	-0.0015 (0.0767)	-0.0336 (0.0636)	-0.0838 (0.0652)
Dependent var. (<i>t-4</i>)	0.0934*** (0.0318)	0.0616 (0.0454)	0.0523 (0.0346)	-0.0118 (0.0396)	0.0003 (0.0570)	-0.0133 (0.0677)	-0.1158* (0.0579)	-0.1280 (0.0759)
GDP pc (log)	-0.0066* (0.0035)	-0.0077* (0.0045)	-0.0083 (0.0168)	0.0165 (0.0294)	-0.0114** (0.0044)	-0.0133** (0.0056)	-0.0313 (0.0291)	-0.0025 (0.0229)
Debt to GDP	-0.0058*** (0.0019)	-0.0043* (0.0025)	-0.0484** (0.0201)	-0.0631** (0.0253)	0.0017 (0.0111)	-0.0109 (0.0149)	-0.1253** (0.0484)	-0.2328** (0.0852)
Capital pw growth	0.2153* (0.1107)	0.2098 (0.1679)	0.0918 (0.1382)	-0.0107 (0.2078)	0.1705*** (0.0648)	0.1649 (0.1128)	0.3549*** (0.1124)	0.3620 (0.2103)
Population growth	-0.5125*** (0.1836)	-0.3506 (0.2690)	-0.5342** (0.2186)	-0.6585** (0.2796)	-0.4839* (0.2895)	-0.3167 (0.3456)	-1.4984 (1.7354)	-0.1058 (2.232)
Openness index	0.0032*** (0.0011)	0.0030** (0.0015)	-0.0006 (0.0037)	0.0104** (0.0047)	-0.0079 (0.0055)	-0.0087 (0.0082)	-0.0061 (0.0177)	-0.0023 (0.0133)
Interest rate	-0.1058*** (0.0364)	-0.1136** (0.0478)	-0.0852 (0.0588)	-0.0969 (0.0894)	-0.3410*** (0.0721)	-0.2746* (0.1478)	-0.3120* (0.1557)	-0.0591 (0.2322)
CAPB		-0.0683*** (0.0254)		-0.1895*** (0.0590)		-0.1107 (0.0957)		-0.1120 (0.1436)
N*T	1054	670	1047	670	258	180	256	180
N			30	29			16	11
R-squared (within)	0.333	0.306	0.304	0.304	0.472	0.431	0.476	0.428

Notes: Estimates at an annual level. The asterisks ***, ** and * denote significance at the 1%, 5% and 10% level, respectively. Individual and time effects are included but not reported. Robust standard errors (columns 1-2 and 6-7) and Windmeijer standard errors (columns 3-5 and 8-10) are reported in brackets. The Arellano-Bond test of autocorrelation and the Hansen-J statistic are reported.

TABLE A4. – *Dependent variable: TFP growth*

	Advanced economies				Emerging economies			
	POLS		FE		POLS		FE	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent var. (<i>t-1</i>)	0.1534** (0.0619)	0.1495 (0.0928)	0.1190** (0.0470)	0.0777 (0.0634)	0.2623*** (0.0711)	0.1480* (0.0827)	0.0864 (0.1122)	-0.0382 (0.0832)
Dependent var. (<i>t-2</i>)	0.0170 (0.0374)	-0.0241 (0.0535)	-0.0182 (0.0284)	-0.0923*** (0.0384)	0.1410** (0.0650)	0.1260** (0.0626)	0.0360 (0.0832)	0.0223 (0.0476)
Dependent var. (<i>t-3</i>)	0.0538 (0.0383)	0.0853* (0.0491)	0.0309 (0.0263)	0.0421 (0.0300)	0.1040* (0.0558)	0.0893 (0.0623)	-0.0291 (0.0378)	-0.0314 (0.0446)
Dependent var. (<i>t-4</i>)	0.0591* (0.0323)	0.0471 (0.0442)	0.0366 (0.0273)	0.0083 (0.0289)	0.1093* (0.0589)	-0.0024 (0.0550)	0.0316 (0.0634)	-0.0770 (0.0586)
GDP pc (log)	-0.0079** (0.0032)	-0.0085** (0.0042)	-0.0140 (0.0112)	0.0214 (0.0240)	-0.0035 (0.0030)	-0.0062* (0.0036)	0.0152 (0.0248)	0.0425 (0.0307)
Debt to GDP	-0.0056*** (0.0018)	-0.0048** (0.0023)	-0.0791*** (0.0244)	-0.1040*** (0.0333)	0.0035 (0.0085)	0.0056 (0.0087)	-0.2118*** (0.0556)	-0.1420*** (0.0455)
Capital pw growth	-0.1268 (0.1036)	-0.1514 (0.1584)	-0.2514* (0.1328)	-0.4860** (0.2288)	-0.1114* (0.0642)	-0.1126 (0.0708)	-0.2779*** (0.0817)	-0.1636 (0.1262)
Population growth	-0.1908 (0.1477)	-0.0575 (0.2204)	-0.2118 (0.1808)	-0.1901 (0.2961)	-0.2725 (0.1958)	-0.4758** (0.1998)	-0.4187 (0.6900)	-1.0758 (0.9150)
Openness index	0.0030*** (0.0010)	0.0028** (0.0013)	0.0035 (0.0036)	0.0071 (0.0065)	0.0041 (0.0048)	0.0017 (0.0042)	0.0127 (0.0107)	0.0098 (0.0101)
Interest rate	-0.1481*** (0.0362)	-0.1636*** (0.0496)	-0.1427*** (0.0504)	-0.1882** (0.0702)	-0.0721 (0.0632)	-0.1090* (0.0627)	-0.1978 (0.1326)	-0.1571 (0.1296)
CAPB		-0.0375* (0.0210)		-0.1463*** (0.0424)		0.0042 (0.0598)		-0.0371 (0.0993)
N*T	1059	673	1052	673	414	236	413	236
N			30	29			28	15
R-squared (within)	0.349	0.377	0.352	0.432	0.407	0.435	0.398	0.497

Notes: Estimates at an annual level. The asterisks ***, ** and * denote significance at the 1%, 5% and 10% level, respectively. Individual and time effects are included but not reported. Robust standard errors (columns 1-2 and 6-7) and Windmeijer standard errors (columns 3-5 and 8-10) are reported in brackets. The Arellano-Bond test of autocorrelation and the Hansen-J statistic are reported.

TABLE A5. – *Dependent variable: growth of capital per worker*

	Advanced economies				Emerging economies			
	POLS		FE		POLS		FE	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent var. (<i>t-1</i>)	1.0063*** (0.0764)	1.0409*** (0.1016)	0.8814*** (0.0581)	0.7396*** (0.1014)	0.8863*** (0.1077)	1.0701*** (0.0853)	0.7711*** (0.1846)	0.9630*** (0.0663)
Dependent var. (<i>t-2</i>)	-0.1764* (0.0914)	-0.2143** (0.1076)	-0.1657*** (0.0488)	-0.1910** (0.0714)	-0.0352 (0.1270)	-0.2577* (0.1392)	-0.0182 (0.1953)	-0.2441*** (0.0823)
Dependent var. (<i>t-3</i>)	-0.0012 (0.0868)	-0.0197 (0.1047)	0.0209 (0.0401)	0.0003 (0.0578)	0.0578 (0.0782)	0.0318 (0.1137)	0.0294 (0.0495)	0.0110 (0.0987)
Dependent var. (<i>t-4</i>)	0.0312 (0.0557)	0.0535 (0.0603)	-0.0190 (0.0245)	-0.0538 (0.0388)	-0.0090 (0.0460)	0.0405 (0.0432)	-0.0118 (0.0318)	0.0212 (0.0376)
GDP pc (log)	-0.0014 (0.0010)	-0.0006 (0.0011)	0.0087* (0.0038)	0.0171*** (0.0046)	-0.0015*** (0.0005)	-0.0024** (0.0010)	0.0043 (0.0042)	0.0053 (0.0071)
Debt to GDP	-0.0015** (0.0006)	-0.0013** (0.0005)	-0.0151*** (0.0050)	-0.0257*** (0.0044)	0.0005 (0.0030)	0.0030 (0.0032)	-0.0096 (0.0113)	-0.0210 (0.0171)
Population growth	0.0905* (0.0464)	0.0760 (0.0500)	0.1496*** (0.0522)	0.2129*** (0.0650)	0.0209 (0.0583)	-0.1162 (0.0740)	-0.2024 (0.2394)	-0.1860 (0.3761)
Openness index	0.0006* (0.0003)	0.0006 (0.0005)	-0.0017 (0.0019)	-0.0032 (0.0025)	0.0001 (0.0017)	0.0001 (0.0012)	-0.0028 (0.0030)	-0.0038 (0.0035)
Interest rate	-0.0172** (0.0084)	-0.0229** (0.0103)	-0.0290*** (0.0099)	-0.0399*** (0.0118)	-0.0211*** (0.0074)	-0.0073 (0.0194)	-0.0283*** (0.0095)	-0.0214 (0.0377)
CAPB		0.0030 (0.0056)		-0.0146* (0.0082)		-0.0171 (0.0284)		-0.0125 (0.0291)
N*T	1089	673	1082	673	527	241	525	241
N			31	29			35	16
R-squared (within)	0.8844	0.8669	0.8535	0.8206	0.9033	0.9161	0.7288	0.8389

Notes: Estimates at an annual level. The asterisks ***, ** and * denote significance at the 1%, 5% and 10% level, respectively. Individual and time effects are included but not reported. Robust standard errors (columns 1-2 and 6-7) and Windmeijer standard errors (columns 3-5 and 8-10) are reported in brackets. The Arellano-Bond test of autocorrelation and the Hansen-J statistic are reported.

TABLE A6. – *Dependent variable: growth of private investments per worker*

	Advanced economies				Emerging economies			
	POLS		FE		POLS		FE	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent var. (<i>t-1</i>)	0.2001*** (0.0554)	0.1814*** (0.0674)	0.0882 (0.0596)	0.0500 (0.0737)	-0.0818 (0.1145)	-0.0836 (0.1134)	-0.3644 (0.1713)	-0.3612 (0.1833)
Dependent var. (<i>t-2</i>)	-0.0683 (0.0536)	-0.0670 (0.0662)	-0.1053* (0.0577)	-0.1185 (0.0783)	-0.2378 (0.2018)	-0.2401 (0.2056)	-0.4119** (0.0933)	-0.4065** (0.0974)
Dependent var. (<i>t-3</i>)	-0.0222 (0.0526)	-0.0277 (0.0633)	-0.0636 (0.0464)	-0.0743 (0.0551)	0.1002 (0.1047)	0.0969 (0.1139)	-0.0540 (0.0810)	-0.0397 (0.0824)
Dependent var. (<i>t-4</i>)	-0.1172** (0.0579)	-0.1391* (0.0730)	-0.1183*** (0.0275)	-0.1365*** (0.0350)	0.1839 (0.1098)	0.1797 (0.1130)	0.1398 (0.1570)	0.1567 (0.1349)
GDP pc (log)	-0.0197 (0.0142)	-0.0111 (0.0170)	0.0708 (0.0543)	0.1446 (0.0894)	0.0957 (0.1051)	0.0989 (0.1015)	0.4183 (0.3704)	0.4200 (0.3902)
Debt to GDP	-0.0156* (0.0089)	-0.0167 (0.0103)	-0.4694*** (0.0994)	-0.5309*** (0.1119)	0.2025** (0.0881)	0.2028** (0.0888)	-0.2288 (0.4100)	-0.3149 (0.4602)
Population growth	-0.8197 (0.7923)	-0.9378 (0.9182)	-0.9860 (1.0817)	-1.3809 (1.4650)	-15.2847* (8.9923)	-15.4729* (8.7378)	-29.1677** (6.8007)	-27.6226** (6.6488)
Openness index	0.0125* (0.0072)	0.0120 (0.0086)	0.0367** (0.0157)	0.0267 (0.0187)	-0.0193 (0.0541)	-0.0198 (0.0552)	-0.4711 (0.5201)	-0.4394 (0.5771)
Interest rate	-0.6677*** (0.1625)	-0.8578*** (0.2372)	-0.9151*** (0.1665)	-1.0866*** (0.2432)	-1.2883 (1.2475)	-1.2564 (1.2265)	-1.0508 (0.5419)	-1.1678** (0.3001)
CAPB		0.1514 (0.1050)		0.0013 (0.1454)		0.0432 (0.5514)		-0.3299 (0.8762)
N*T	839	586	834	586	67	67	67	67
N			26	26			4	4
R-squared (within)	0.408	0.429	0.470	0.508	0.778	0.778	0.817	0.818

Notes: Estimates at an annual level. The asterisks ***, ** and * denote significance at the 1%, 5% and 10% level, respectively. Individual and time effects are included but not reported. Robust standard errors (columns 1-2 and 6-7) and Windmeijer standard errors (columns 3-5 and 8-10) are reported in brackets. The Arellano-Bond test of autocorrelation and the Hansen-J statistic are reported.

TABLE A7. – *Dependent variable: growth of real GDP per capita*

	Model A					Model B				
	POLS (1)	FE (2)	DIFF-GMM (3)	SYS-GMM (4)	FOD (5)	POLS (6)	FE (7)	DIFF-GMM (8)	SYS-GMM (9)	FOD (10)
Dependent var. (<i>t-1</i>)	0.4016*** (0.0464)	0.3259*** (0.0528)	0.1389*** (0.0495)	0.3853*** (0.0579)	0.4547*** (0.0556)	0.3333*** (0.0752)	0.2311*** (0.0786)	-0.0357 (0.0627)	0.3088*** (0.0797)	0.4185*** (0.0924)
Dependent var. (<i>t-2</i>)	0.0169 (0.0399)	-0.0093 (0.0601)	-0.0749 (0.0482)	0.0223 (0.0603)	0.0049 (0.0638)	0.0293 (0.0713)	-0.0057 (0.0733)	-0.1848*** (0.0411)	0.0281 (0.0967)	0.0064 (0.0985)
Dependent var. (<i>t-3</i>)	0.0396 (0.0306)	0.0112 (0.0236)	-0.0405 (0.0245)	0.0261 (0.0277)	0.0424 (0.0340)	0.0537 (0.0445)	0.0357 (0.0473)	-0.0077 (0.0584)	0.0532 (0.0574)	0.0720 (0.0684)
Dependent var. (<i>t-4</i>)	-0.0121 (0.0266)	-0.0372* (0.0217)	-0.0790*** (0.0233)	-0.0150 (0.0248)	0.0112 (0.0240)	-0.0905*** (0.0316)	-0.1015*** (0.0327)	-0.1254*** (0.0405)	-0.0783** (0.0382)	-0.0437 (0.0336)
GDP pc (log)	-0.0044*** (0.0014)	0.0099 (0.0079)	-0.0249 (0.0352)	-0.0053 (0.0034)	-0.0032 (0.0023)	-0.0059* (0.0032)	-0.0025 (0.0171)	0.0509 (0.0557)	-0.0020 (0.0045)	-0.0015 (0.0033)
Debt to GDP	-0.0040** (0.0020)	-0.0468*** (0.0169)	-0.0209 (0.0137)	-0.0182 (0.0133)	-0.0147 (0.0167)	-0.0072*** (0.0025)	-0.0574 (0.0386)	-0.0497** (0.0228)	-0.0479 (0.0465)	-0.0499 (0.0475)
Human capital	0.0012 (0.0021)	-0.0104 (0.0069)	-0.0215 (0.0427)	0.0009 (0.0071)	0.0019 (0.0035)	-0.0009 (0.0025)	-0.0125 (0.0085)	0.0869** (0.0395)	-0.0071 (0.0080)	-0.0020 (0.0043)
Net saving	0.0300*** (0.0112)	0.0499*** (0.0172)	0.2129*** (0.0664)	0.0263 (0.0262)	-0.0029 (0.0170)	0.0490** (0.0190)	0.0774* (0.0392)	0.2192* (0.1284)	-0.0067 (0.0446)	-0.0005 (0.0272)
Population growth	-0.3493*** (0.0867)	-0.1387 (0.4151)	0.2833 (1.8835)	-0.3976 (0.2620)	-0.4177** (0.1586)	-0.7433*** (0.1662)	-0.9982*** (0.2963)	-3.0578*** (0.9372)	-0.8434*** (0.2933)	-0.6400*** (0.1795)
Openness index	0.0045*** (0.0014)	0.0124** (0.0057)	0.0914*** (0.0232)	0.0079** (0.0033)	0.0015 (0.0034)	0.0021 (0.0013)	0.0189*** (0.0059)	0.0396* (0.0233)	0.0076* (0.0038)	0.0036* (0.0019)
Real exchange rate	-0.0104** (0.0047)	-0.0142** (0.0059)	-0.0598** (0.0256)	-0.0164 (0.0116)	-0.0021 (0.0105)	-0.0034 (0.0091)	-0.0078 (0.0142)	-0.1078*** (0.0352)	0.0155 (0.0192)	0.0028 (0.0157)
Gov. expenditure (productive)						-0.0348* (0.0206)	-0.0552 (0.0481)	-0.2142** (0.0993)	-0.0510 (0.0478)	-0.0657 (0.0433)
Gov. expenditure (unproductive)						-0.0656*** (0.0210)	-0.1505* (0.0778)	-0.5739*** (0.2101)	-0.0821* (0.0456)	-0.0368 (0.0238)
N*T	1,924	1,914	1,828	1,914	1,914	854	853	804	853	853
N		76	76	76	76		43	42	43	43
R-squared (within)	0.339	0.282				0.5345	0.4979			
AR(1) <i>p</i> -value			2.89e-06	8.68e-07	8.32e-07			0.010	0.001	0.002
AR(2) <i>p</i> -value			0.410	0.202	0.747			0.314	0.221	0.178
AR(3) <i>p</i> -value			0.831	0.366	0.287			0.042	0.294	0.351
Hansen <i>J</i> -Stat. <i>p</i> -value			0.035	0.798	0.056			0.250	0.151	0.088

Notes: Estimates at an annual level. The asterisks ***, ** and * denote significance at the 1%, 5% and 10% level, respectively. Individual and time effects are included but not reported. Robust standard errors (columns 1-2 and 6-7) and Windmeijer standard errors (columns 3-5 and 8-10) are reported in brackets. The Arellano-Bond test of autocorrelation and the Hansen-J statistic are reported.

TABLE A8. – *Dependent variable: growth of real GDP per capita*

	Model A					Model B				
	POLS (1)	FE (2)	DIFF-GMM (3)	SYS-GMM (4)	FOD (5)	POLS (6)	FE (7)	DIFF-GMM (8)	SYS-GMM (9)	FOD (10)
Five-year non-overlapping periods										
GDP pc (log)	-0.0493*** (0.0065)	-0.4116*** (0.0634)	-0.4714*** (0.0869)	-0.0464** (0.0185)	-0.0426** (0.0177)	-0.0725*** (0.0124)	-0.4039*** (0.0510)	-0.5285*** (0.1102)	-0.0764** (0.0366)	-0.0741** (0.0301)
Debt to GDP	-0.0133* (0.0073)	-0.1538*** (0.0366)	-0.0136 (0.0613)	-0.0309 (0.0626)	-0.2104** (0.0859)	-0.0102 (0.0078)	-0.0402 (0.0613)	-0.0794 (0.0848)	-0.1569* (0.0919)	-0.3176*** (0.0993)
Human capital	0.0249*** (0.0083)	0.0527* (0.0312)	0.2223* (0.1271)	-0.0246 (0.0274)	0.0094 (0.0207)	0.0215*** (0.0081)	0.0679*** (0.0191)	0.1948 (0.1449)	-0.0151 (0.0188)	-0.0001 (0.0167)
Net saving	0.1962*** (0.0391)	0.4572*** (0.1153)	0.9078*** (0.1986)	0.3607*** (0.1300)	0.1715 (0.1067)	0.3436*** (0.0466)	0.3839*** (0.1404)	0.5797** (0.2397)	0.7420*** (0.1422)	0.7206*** (0.1218)
Population growth	-3.6379*** (0.3577)	-3.2095** (1.3555)	-4.4601* (2.4404)	-5.4661*** (1.2944)	-3.1183*** (0.8114)	-3.3376*** (0.5763)	-1.7820 (1.4709)	-2.0054 (2.1945)	-4.6021*** (1.6746)	-4.2730*** (1.2157)
Openness index	0.0301*** (0.0042)	-0.0224 (0.0330)	0.0107 (0.0483)	0.0469** (0.0220)	0.0281*** (0.0093)	0.0182*** (0.0044)	0.0071 (0.0145)	-0.0877*** (0.0310)	-0.0023 (0.0180)	-0.0022 (0.0137)
Real exchange rate	0.0373 (0.0245)	-0.2639*** (0.0372)	-0.1451 (0.1310)	0.0276 (0.0328)	0.1033 (0.0925)	-0.1707 (0.1814)	-0.5244* (0.2659)	-0.6177** (0.3053)	-0.0416 (0.3088)	-0.1646 (0.3839)
Gov. expenditure (productive)						-0.1391** (0.0683)	0.0133 (0.1427)	-0.0714 (0.2681)	0.2656 (0.1752)	-0.0057 (0.1472)
Gov. expenditure (unproductive)						-0.3108*** (0.0580)	-1.2237*** (0.3827)	-0.8471 (0.5179)	-0.5371*** (0.1853)	-0.4567*** (0.1648)
N*T	1048	1047	977	1047	1047	620	620	577	620	620
N		64	62	64	64		40	39	40	40
R-squared (within)	0.442	0.601				0.625	0.737			
AR(1) <i>p</i> -value			0.049	0.001	0.000			0.958	0.038	0.675
AR(2) <i>p</i> -value			0.869	0.768	0.939			0.351	0.853	0.543
AR(3) <i>p</i> -value			0.361	0.102	0.105			0.339	0.252	0.348
Hansen <i>J</i> -Stat. <i>p</i> -value			0.411	0.366	0.067			0.125	0.359	0.074
Five-year overlapping periods										
GDP pc (log)	-0.0078*** (0.0014)	-0.0534*** (0.0124)	-0.1723*** (0.0303)	-0.0063 (0.0060)	-0.0024 (0.0048)	-0.0155*** (0.0020)	-0.0881*** (0.0148)	-0.1154*** (0.0184)	-0.0093 (0.0056)	-0.0077 (0.0080)
Debt to GDP	-0.0065*** (0.0023)	-0.0180** (0.0070)	-0.0031 (0.0054)	-0.0283** (0.0125)	-0.0391 (0.0280)	-0.0066*** (0.0019)	-0.0226*** (0.0075)	-0.0221*** (0.0038)	-0.0358 (0.0214)	-0.1265* (0.0638)
Human capital	0.0033 (0.0020)	0.0143 (0.0132)	0.1453*** (0.0333)	0.0002 (0.0118)	0.0046 (0.0102)	0.0052*** (0.0018)	0.0016 (0.0099)	0.0508* (0.0258)	-0.0067 (0.0074)	-0.0048 (0.0114)
Net saving	0.0345*** (0.0079)	0.0289 (0.0194)	0.0763** (0.0371)	0.0191 (0.0288)	0.0040 (0.0283)	0.0438*** (0.0147)	0.0810** (0.0360)	0.0445 (0.0621)	0.0012 (0.0478)	0.0110 (0.0698)
Population growth	-0.5647*** (0.0682)	-0.2138 (0.3973)	-0.0726 (1.0421)	-0.5821 (0.4047)	-1.1391*** (0.2986)	-0.7111*** (0.1252)	-1.0422** (0.3984)	-1.8009*** (0.6354)	-0.9005** (0.3584)	-1.4892*** (0.4638)
Openness index	0.0080*** (0.0010)	0.0078 (0.0080)	0.0406*** (0.0132)	0.0160** (0.0062)	0.0023 (0.0114)	0.0059*** (0.0011)	0.0305*** (0.0096)	0.0294** (0.0131)	0.0104*** (0.0037)	0.0088** (0.0038)
Real exchange rate	-0.0148*** (0.0037)	-0.0045 (0.0066)	-0.0166 (0.0110)	-0.0305** (0.0146)	0.0028 (0.0248)	0.0001 (0.0067)	0.0232* (0.0127)	0.0051 (0.0154)	-0.0050 (0.0191)	0.0458 (0.0422)
Gov. expenditure (productive)						0.0600*** (0.0157)	0.0758 (0.1042)	0.1644 (0.1551)	0.0528 (0.0527)	0.0413 (0.0633)
Gov. expenditure (unproductive)						-0.0453*** (0.0170)	-0.0308 (0.0238)	-0.1659*** (0.0515)	-0.0279 (0.0457)	-0.1458** (0.0665)
N*T	1652	1641	1555	1641	1641	698	697	651	697	697
N		76	76	76	76		41	40	41	41
R-squared (within)	0.232	0.219				0.547	0.556			
AR(1) <i>p</i> -value			0.005	0.000	0.007			0.381	0.008	0.471
AR(2) <i>p</i> -value			0.205	0.001	0.243			0.877	0.671	0.245
AR(3) <i>p</i> -value			0.056	0.931	0.906			0.049	0.226	0.291
Hansen <i>J</i> -Stat. <i>p</i> -value			0.067	0.180	0.542			0.526	0.318	0.265

Notes: Estimates at a five-year level. The asterisks ***, ** and * denote significance at the 1%, 5% and 10% level, respectively. Individual and time effects are included but not reported. Robust standard errors (columns 1-2 and 6-7) and Windmeijer standard errors (columns 3-5 and 8-10) are reported in brackets. The Arellano-Bond test of autocorrelation and the Hansen-J statistic are reported.

Table A9. – *Dependent variable: growth of real GDP per hour worked*

	Model A					Model B				
	POLS (1)	FE (2)	DIFF-GMM (3)	SYS-GMM (4)	FOD (5)	POLS (6)	FE (7)	DIFF-GMM (8)	SYS-GMM (9)	FOD (10)
Dependent var. (<i>t-1</i>)	0.2396*** (0.0472)	0.1335*** (0.0414)	-0.0566 (0.0704)	0.1867*** (0.0513)	0.3842*** (0.0587)	0.2118*** (0.0645)	0.1108** (0.0521)	-0.0657 (0.0845)	0.1891*** (0.0555)	0.2511*** (0.0589)
Dependent var. (<i>t-2</i>)	0.1006*** (0.0361)	0.0259 (0.0504)	-0.1589** (0.0611)	0.0564 (0.0541)	-0.0187 (0.0571)	0.0474 (0.0434)	-0.0099 (0.0387)	-0.1829*** (0.0525)	0.0300 (0.0439)	0.0234 (0.0575)
Dependent var. (<i>t-3</i>)	0.0119 (0.0329)	-0.0503** (0.0222)	-0.0800** (0.0393)	0.0399 (0.0291)	0.0001 (0.0339)	0.0080 (0.0402)	-0.0349 (0.0305)	-0.0689 (0.0428)	0.0294 (0.0410)	0.0344 (0.0438)
Dependent var. (<i>t-4</i>)	0.0662** (0.0326)	-0.0123 (0.0260)	-0.0502 (0.0400)	0.1028*** (0.0358)	0.1749*** (0.0553)	-0.0060 (0.0376)	-0.0555** (0.0265)	-0.0447 (0.0507)	0.0279 (0.0256)	0.0488* (0.0254)
GDP pc (log)	-0.0054** (0.0024)	0.0107 (0.0092)	-0.0010 (0.0404)	-0.0065 (0.0043)	-0.0014 (0.0032)	-0.0122*** (0.0043)	-0.0304** (0.0138)	-0.0093 (0.0381)	-0.0087 (0.0073)	-0.0093** (0.0041)
Debt to GDP	-0.0069*** (0.0017)	-0.0854*** (0.0168)	-0.1013*** (0.0233)	-0.0795*** (0.0203)	-0.0852*** (0.0259)	-0.0070*** (0.0020)	-0.1060*** (0.0348)	-0.1466*** (0.0459)	-0.0897** (0.0339)	-0.0814*** (0.0289)
Human capital	0.0020 (0.0025)	-0.0108* (0.0055)	-0.0237 (0.0409)	0.0006 (0.0053)	-0.0033 (0.0045)	0.0012 (0.0026)	0.0084 (0.0064)	-0.0413 (0.0245)	0.0005 (0.0064)	-0.0009 (0.0037)
Net saving	0.0250** (0.0125)	0.0002 (0.0271)	0.0633 (0.0675)	0.0273 (0.0269)	-0.0107 (0.0233)	0.0273* (0.0144)	0.0110 (0.0336)	0.0894* (0.0495)	-0.0398 (0.0459)	-0.0079 (0.0253)
Population growth	-0.4869*** (0.1011)	-0.9957*** (0.2627)	-1.3036** (0.6379)	-0.6315*** (0.2062)	-0.1996 (0.1513)	-0.4182** (0.1623)	-0.7462** (0.2806)	-1.2740** (0.5658)	-0.3735 (0.2835)	-0.1602 (0.1855)
Openness index	0.0024* (0.0013)	-0.0046 (0.0059)	0.0113 (0.0204)	0.0070** (0.0031)	0.0019 (0.0019)	0.0010 (0.0013)	0.0048 (0.0068)	0.0121 (0.0272)	0.0052 (0.0037)	0.0013 (0.0016)
Real exchange rate	-0.0054 (0.0055)	-0.0125 (0.0102)	-0.0469** (0.0201)	-0.0098 (0.0139)	-0.0162 (0.0166)	-0.0079 (0.0070)	-0.0099 (0.0100)	-0.0718** (0.0353)	0.0024 (0.0162)	-0.0038 (0.0113)
Gov. expenditure (productive)						-0.0157 (0.0269)	0.0233 (0.0676)	-0.0090 (0.1274)	-0.0133 (0.0396)	-0.0200 (0.0207)
Gov. expenditure (unproductive)						-0.0644*** (0.0196)	-0.0256 (0.0761)	-0.1611 (0.1608)	-0.0960** (0.0442)	-0.0565** (0.0240)
N*T	1182	1176	1125	1176	1176	766	765	725	765	765
N		48	48	48	48		38	38	38	38
R-squared (within)	0.299	0.239				0.419	0.322			
AR(1) <i>p</i> -value			1.14e-05	1.74e-06	6.93e-06			0.000	0.000	0.000
AR(2) <i>p</i> -value			0.486	0.835	0.034			0.638	0.570	0.938
AR(3) <i>p</i> -value			0.973	0.430	0.039			0.292	0.183	0.144
Hansen <i>J</i> -Stat. <i>p</i> -value			0.894	0.562	0.095			0.765	0.392	0.100

Notes: Estimates at an annual level. The asterisks ***, ** and * denote significance at the 1%, 5% and 10%, respectively. Individual and time effects are included but not reported. Robust standard errors (columns 1-2 and 6-7) and Windmeijer standard errors (columns 3-5 and 8-10) are reported in brackets. The Arellano-Bond test of autocorrelation and the Hansen-J statistic are reported.

TABLE A10. – *Dependent variable: growth of real GDP per hour worked*

	Model A					Model B				
	POLS (1)	FE (2)	DIFF-GMM (3)	SYS-GMM (4)	FOD (5)	POLS (6)	FE (7)	DIFF-GMM (8)	SYS-GMM (9)	FOD (10)
Five-year non-overlapping periods										
GDP pc (log)	-0.0460*** (0.0066)	-0.1727*** (0.0477)	-0.3183*** (0.0801)	-0.0340** (0.0163)	-0.0147 (0.0140)	-0.0638*** (0.0108)	-0.2563*** (0.0503)	-0.3687*** (0.0839)	-0.0590* (0.0300)	-0.0537** (0.0226)
Debt to GDP	0.0552 (0.0533)	0.0513 (0.0984)	-0.0448 (0.0696)	-0.0211*** (0.0054)	-0.0923** (0.0448)	-0.0218 (0.0625)	-0.0484 (0.0483)	-0.0148 (0.0676)	-0.0141** (0.0056)	-0.0782 (0.0582)
Human capital	0.0125* (0.0074)	0.0456* (0.0267)	0.2275** (0.1021)	0.0166 (0.0198)	-0.0063 (0.0126)	0.0326*** (0.0068)	0.0814*** (0.0202)	0.2111* (0.1165)	0.0197 (0.0159)	0.0166 (0.0118)
Net saving	0.1633*** (0.0355)	0.0587 (0.1065)	0.4680*** (0.1360)	0.2819*** (0.0775)	0.1445 (0.0871)	0.1606*** (0.0392)	0.0991 (0.1337)	0.4685*** (0.1365)	0.3224*** (0.1052)	0.2991*** (0.0712)
Population growth	-2.2301*** (0.2851)	-1.8507 (1.2707)	-5.0950** (2.4972)	-2.9137*** (0.6607)	-2.1993*** (0.4843)	-1.1217** (0.4366)	-0.4215 (0.8788)	-1.1891 (1.2192)	-1.5409 (1.1072)	-1.2940 (0.8047)
Openness index	0.0066* (0.0038)	0.0444* (0.0229)	0.0247 (0.0381)	0.0055 (0.0111)	0.0002 (0.0094)	0.0064* (0.0037)	0.0156 (0.0166)	0.0462* (0.0274)	0.0045 (0.0132)	0.0032 (0.0089)
Real exchange rate	-0.5221*** (0.1478)	-0.0320 (0.2054)	0.1445 (0.2004)	0.0435 (0.2191)	-0.1822 (0.1930)	-0.0800 (0.1570)	-0.3078 (0.1878)	-0.1775 (0.2138)	0.2846 (0.2634)	0.4802 (0.4279)
Gov. expenditure (productive)						-0.1030 (0.0772)	-0.1101 (0.1580)	-0.2355 (0.1919)	-0.0952 (0.1810)	-0.2397* (0.1368)
Gov. expenditure (unproductive)						-0.1728*** (0.0519)	-0.1633 (0.2531)	-0.4185 (0.4033)	-0.3568*** (0.1241)	-0.1877 (0.1147)
N*T	861	860	812	860	860	587	587	547	587	587
N		45	45	45	45		37	37	37	37
R-squared (within)	0.386	0.333				0.447	0.412			
AR(1) <i>p</i> -value			0.003	0.014	0.031			0.051	0.075	0.324
AR(2) <i>p</i> -value			0.981	0.600	0.607			0.051	0.076	0.074
AR(3) <i>p</i> -value			0.014	0.034	0.060			0.059	0.083	0.121
Hansen <i>J</i> -Stat. <i>p</i> -value			0.801	0.650	0.555			0.098	0.352	0.290
Five-year overlapping periods										
GDP pc (log)	-0.0090*** (0.0021)	-0.0207 (0.0139)	-0.0706*** (0.0236)	-0.0048 (0.0070)	-0.0024 (0.0054)	-0.0197*** (0.0022)	-0.0618*** (0.0135)	-0.0652*** (0.0189)	-0.0172** (0.0064)	-0.0162*** (0.0054)
Debt to GDP	-0.0100*** (0.0014)	-0.0289*** (0.0103)	-0.0065 (0.0103)	-0.0246* (0.0130)	-0.0708** (0.0273)	-0.0073*** (0.0014)	-0.0373*** (0.0071)	-0.0394*** (0.0085)	-0.0381*** (0.0135)	-0.0297** (0.0137)
Human capital	0.0040** (0.0020)	-0.0061 (0.0095)	0.0513* (0.0260)	0.0110 (0.0083)	0.0023 (0.0056)	0.0050*** (0.0016)	0.0136 (0.0105)	0.0282 (0.0249)	0.0029 (0.0055)	0.0007 (0.0038)
Net saving	0.0265** (0.0119)	0.0186 (0.0268)	0.0763 (0.0457)	0.0409 (0.0327)	-0.0102 (0.0398)	0.0156 (0.0122)	-0.0024 (0.0267)	-0.0435 (0.0271)	-0.0119 (0.0400)	0.0243 (0.0258)
Population growth	-0.7059*** (0.0672)	-0.7762*** (0.2757)	-1.0850* (0.5400)	-1.0459*** (0.2642)	-0.6780*** (0.1879)	-0.2256** (0.0897)	-0.2732 (0.2003)	-0.7252* (0.3792)	-0.1850 (0.2251)	-0.2130 (0.1941)
Openness index	0.0053*** (0.0010)	-0.0061 (0.0050)	-0.0006 (0.0102)	0.0064** (0.0032)	0.0040 (0.0032)	0.0031*** (0.0009)	0.0040 (0.0050)	0.0038 (0.0076)	0.0052* (0.0030)	0.0011 (0.0021)
Real exchange rate	-0.0014 (0.0040)	-0.0047 (0.0071)	-0.0057 (0.0107)	-0.0081 (0.0144)	0.0327 (0.0267)	0.0013 (0.0049)	0.0127 (0.0103)	0.0067 (0.0178)	-0.0092 (0.0149)	-0.0255** (0.0123)
Gov. expenditure (productive)						0.0430 (0.0999)	0.0053 (0.0288)	0.0395 (0.0389)	0.0257 (0.0317)	0.0559 (0.0404)
Gov. expenditure (unproductive)						-0.0432*** (0.0116)	-0.0499 (0.0504)	-0.0370** (0.0171)	-0.0860** (0.0344)	-0.0625** (0.0291)
N*T	1037	1031	980	1031	1031	653	652	613	652	652
N		48	48	48	48		37	37	37	37
R-squared (within)	0.2867	0.2494				0.525	0.475			
AR(1) <i>p</i> -value			0.040	0.008	0.542			0.694	0.167	0.033
AR(2) <i>p</i> -value			0.203	0.217	0.449			0.623	0.571	0.674
AR(3) <i>p</i> -value			0.032	0.058	0.091			0.071	0.055	0.094
Hansen <i>J</i> -Stat. <i>p</i> -value			0.076	0.121	0.298			0.366	0.250	0.041

Notes: Estimates at a five-year level. The asterisks ***, ** and * denote significance at 1%, 5% and 10% level, respectively. Individual and time effects are included but not reported. Robust standard errors (columns 1-2 and 6-7) and Windmeijer standard errors (columns 3-5 and 8-10) are reported in brackets. The Arellano-Bond test of autocorrelation and the Hansen-J statistic are reported.

TABLE A11. – *Dependent variable: TFP growth*

	Model A					Model B				
	POLS (1)	FE (2)	DIFF-GMM (3)	SYS-GMM (4)	FOD (5)	POLS (6)	FE (7)	DIFF-GMM (8)	SYS-GMM (9)	FOD (10)
Dependent var. (<i>t-1</i>)	0.3132*** (0.0528)	0.2373*** (0.0677)	0.0964 (0.0776)	0.2782*** (0.0813)	0.3261*** (0.0799)	0.1940** (0.0776)	0.0480 (0.0851)	-0.2053** (0.0996)	0.1601* (0.0836)	0.2559*** (0.0938)
Dependent var. (<i>t-2</i>)	0.0214 (0.0448)	-0.0126 (0.0717)	-0.1049* (0.0604)	-0.0081 (0.0751)	-0.0242 (0.0745)	0.1531** (0.0672)	0.0676 (0.0758)	-0.1970*** (0.0558)	0.1270 (0.1177)	0.0847 (0.1203)
Dependent var. (<i>t-3</i>)	0.0326 (0.0364)	-0.0099 (0.0247)	-0.0728** (0.0293)	0.0291 (0.0255)	0.0365 (0.0332)	0.0695 (0.0477)	0.0025 (0.0557)	-0.1233 (0.0822)	0.0640 (0.0647)	0.0865 (0.0824)
Dependent var. (<i>t-4</i>)	0.0348 (0.0378)	0.0049 (0.0336)	-0.0729** (0.0304)	0.0315 (0.0401)	0.0468 (0.0282)	-0.0257 (0.0396)	-0.0779** (0.0352)	-0.1551*** (0.0537)	-0.0218 (0.0464)	0.0237 (0.0489)
GDP pc (log)	-0.0038** (0.0015)	0.0035 (0.0086)	0.0001 (0.0269)	-0.0035 (0.0023)	-0.0021 (0.0013)	-0.0065** (0.0031)	-0.0152 (0.0150)	0.0470 (0.0518)	-0.0071* (0.0036)	-0.0045** (0.0019)
Debt to GDP	-0.0040* (0.0024)	-0.0340** (0.0134)	-0.0129 (0.0106)	-0.0218* (0.0127)	-0.0249* (0.0148)	-0.0026 (0.0021)	-0.0334 (0.0276)	-0.0311 (0.0224)	-0.0326 (0.0367)	-0.0298 (0.0318)
Human capital	0.0046** (0.0022)	-0.0088 (0.0088)	-0.0368 (0.0255)	0.0066 (0.0076)	0.0021 (0.0035)	0.0040 (0.0025)	-0.0128 (0.0100)	-0.0829** (0.0345)	0.0062 (0.0060)	0.0018 (0.0027)
Net saving	-0.0030 (0.0109)	-0.0085 (0.0199)	0.0990 (0.0704)	-0.0423 (0.0321)	-0.0473** (0.0234)	0.0056 (0.0149)	0.0392* (0.0211)	0.0892 (0.0601)	-0.0685** (0.0335)	-0.0253 (0.0172)
Population growth	-0.1970** (0.0900)	0.0803 (0.5033)	1.0186 (1.6248)	-0.2275 (0.3524)	-0.2987 (0.2305)	-0.2182 (0.1430)	-0.7404*** (0.2720)	-2.1186*** (0.7490)	-0.0859 (0.2480)	-0.1748 (0.1925)
Openness index	0.0026* (0.0013)	0.0135*** (0.0050)	0.0525*** (0.0192)	0.0040 (0.0036)	0.0039 (0.0025)	0.0006 (0.0012)	0.0238*** (0.0067)	0.0256 (0.0162)	0.0070** (0.0029)	0.0014 (0.0014)
Real exchange rate	-0.0092 (0.0057)	-0.0132* (0.0068)	-0.0385 (0.0255)	-0.0101 (0.0104)	-0.0110* (0.0064)	-0.0028 (0.0094)	-0.0028 (0.0134)	-0.1093** (0.0444)	0.0161 (0.0187)	0.0062 (0.0155)
Gov. expenditure (productive)						-0.0268 (0.0218)	-0.0285 (0.0392)	-0.0790 (0.1187)	-0.0467 (0.0382)	-0.0534* (0.0299)
Gov. expenditure (unproductive)						-0.0067 (0.0194)	-0.0592 (0.0515)	-0.2835* (0.1599)	0.0024 (0.0352)	0.0045 (0.0212)
N*T	1728	1721	1646	1721	1721	839	838	790	838	838
N		69	69	69	69		42	42	42	42
R-squared (within)	0.229	0.175				0.377	0.346			
AR(1) <i>p</i> -value			7.45e-05	5.14e-05	2.81e-05			0.001	0.001	0.001
AR(2) <i>p</i> -value			0.972	0.628	0.295			0.423	0.770	0.121
AR(3) <i>p</i> -value			0.208	0.382	0.499			0.372	0.782	0.502
Hansen <i>J</i> -Stat. <i>p</i> -value			0.988	0.650	0.461			0.590	0.146	0.727

Notes: Estimates at an annual level. The asterisks ***, ** and * denote significance at the 1%, 5% and 10% level, respectively. Individual and time effects are included but not reported. Robust standard errors (columns 1-2 and 6-7) and Windmeijer standard errors (columns 3-5 and 8-10) are reported in brackets. The Arellano-Bond test of autocorrelation and the Hansen-J statistic are reported.

TABLE A12. – *Dependent variable: TFP growth*

	Model A					Model B				
	POLS (1)	FE (2)	DIFF-GMM (3)	SYS-GMM (4)	FOD (5)	POLS (6)	FE (7)	DIFF-GMM (8)	SYS-GMM (9)	FOD (10)
Five-year non-overlapping periods										
GDP pc (log)	-0.0330*** (0.0065)	-0.2910*** (0.0825)	-0.3701*** (0.0965)	-0.0249 (0.0155)	-0.0283 (0.0182)	-0.0468*** (0.0081)	-0.2216*** (0.0439)	-0.2493** (0.0971)	-0.0327 (0.0215)	-0.0375** (0.0169)
Debt to GDP	-0.0146*** (0.0050)	-0.0111 (0.0341)	0.0289 (0.0679)	0.0753 (0.0495)	0.0441 (0.0568)	-0.0146*** (0.0050)	-0.0287 (0.0481)	0.0649 (0.0692)	-0.0090 (0.0642)	-0.0428 (0.0766)
Human capital	0.0266*** (0.0064)	-0.0009 (0.0317)	0.2075* (0.1054)	-0.0003 (0.0204)	0.0147 (0.0164)	0.0224*** (0.0054)	-0.0499*** (0.0161)	0.0763 (0.1105)	-0.0024 (0.0175)	0.0066 (0.0145)
Net saving	0.0911*** (0.0336)	0.1418 (0.0943)	0.4794*** (0.1126)	0.1942** (0.0900)	0.1265 (0.0874)	0.1619*** (0.0349)	0.1600* (0.0927)	0.3630** (0.1517)	0.3537*** (0.0925)	0.3415*** (0.0793)
Population growth	-1.8892*** (0.2984)	-1.0021 (1.0067)	-3.5065** (1.6363)	-2.8992** (1.1689)	-2.0571** (0.9178)	-0.6899** (0.3304)	-0.1180 (0.5515)	-1.2365 (1.3868)	-1.4836 (0.9043)	-1.2280* (0.7073)
Openness index	0.0143*** (0.0033)	0.0040 (0.0183)	0.0839** (0.0354)	0.0256 (0.0161)	0.0118 (0.0072)	0.0038 (0.0031)	0.0111 (0.0128)	-0.0240 (0.0282)	-0.0063 (0.0091)	-0.0073 (0.0073)
Real exchange rate	0.1302*** (0.0265)	-0.0904* (0.0480)	0.0795 (0.0586)	0.1442*** (0.0283)	0.1577*** (0.0305)	-0.1525 (0.1165)	-0.0342 (0.1423)	-0.0527 (0.1741)	0.1141 (0.1682)	0.0249 (0.2129)
Gov. expenditure (productive)						-0.0921 (0.0605)	-0.0033 (0.0986)	-0.1182 (0.1526)	0.0665 (0.1443)	-0.1161 (0.1163)
Gov. expenditure (unproductive)						-0.1458*** (0.0415)	-0.1468 (0.1831)	-0.3053 (0.3084)	-0.3465*** (0.1025)	-0.2248** (0.0961)
N*T	968	968	906	968	968	617	617	575	617	617
N		57	56	57	57		39	38	39	39
R-squared (within)	0.3613	0.5372				0.518	0.626			
AR(1) <i>p</i> -value			0.158	0.102	0.129			0.153	0.121	0.143
AR(2) <i>p</i> -value			0.151	0.748	0.714			0.407	0.677	0.630
AR(3) <i>p</i> -value			0.536	0.514	0.484			0.153	0.121	0.143
Hansen <i>J</i> -Stat. <i>p</i> -value			0.277	0.035	0.620			0.564	0.701	0.097
Five-year overlapping periods										
GDP pc (log)	-0.0065*** (0.0013)	-0.0487*** (0.0139)	-0.1254*** (0.0261)	-0.0013 (0.0043)	-0.0004 (0.0032)	-0.0120*** (0.0016)	-0.0587*** (0.0118)	-0.0629*** (0.0154)	-0.0090** (0.0044)	-0.0085 (0.0052)
Debt to GDP	-0.0070*** (0.0021)	-0.0123** (0.0053)	0.0047 (0.0072)	-0.0202** (0.0093)	-0.0189 (0.0275)	-0.0032** (0.0014)	-0.0109** (0.0044)	-0.0084*** (0.0023)	-0.0232 (0.0154)	-0.0687 (0.0424)
Human capital	0.0087*** (0.0020)	-0.0104 (0.0133)	0.1022*** (0.0279)	0.0048 (0.0107)	0.0011 (0.0067)	0.0100*** (0.0013)	-0.0082 (0.0113)	0.0280 (0.0192)	0.0054 (0.0052)	-0.0029 (0.0090)
Net saving	-0.0179** (0.0073)	-0.0394** (0.0185)	0.0351 (0.0304)	-0.0619* (0.0339)	-0.0482* (0.0286)	-0.0177* (0.0104)	-0.0068 (0.0196)	-0.0774*** (0.0262)	-0.0815** (0.0385)	-0.0895* (0.0492)
Population growth	-0.2983*** (0.0640)	0.0248 (0.4041)	0.4673 (0.8722)	-0.2627 (0.4348)	-0.5575* (0.3204)	-0.0600 (0.0821)	-0.4417** (0.1825)	-0.9578*** (0.3013)	0.0624 (0.2909)	-0.2867 (0.3252)
Openness index	0.0053*** (0.0008)	0.0148** (0.0067)	0.0250** (0.0099)	0.0041 (0.0060)	-0.0043 (0.0077)	0.0035*** (0.0009)	0.0260*** (0.0079)	0.0110** (0.0053)	0.0072** (0.0029)	0.0059** (0.0029)
Real exchange rate	-0.0111*** (0.0040)	-0.0018 (0.0060)	-0.0024 (0.0109)	-0.0314** (0.0126)	-0.0149 (0.0115)	0.0038 (0.0056)	0.0198** (0.0094)	0.0094 (0.0115)	0.0013 (0.0181)	0.0522* (0.0306)
Gov. expenditure (productive)						0.0143 (0.0123)	-0.0470 (0.0680)	0.0015 (0.0847)	0.0096 (0.0393)	0.0337 (0.0465)
Gov. expenditure (unproductive)						-0.0438*** (0.0147)	-0.0134 (0.0190)	-0.0945*** (0.0326)	-0.0539 (0.0381)	-0.1296*** (0.0328)
N*T	1503	1496	1420	1496	1496	698	697	651	697	697
N		69	69	69	69		41	40	41	41
R-squared (within)	0.214	0.289				0.426	0.569			
AR(1) <i>p</i> -value			0.343	0.029	0.132			0.717	0.197	0.586
AR(2) <i>p</i> -value			0.483	0.071	0.030			0.458	0.866	0.310
AR(3) <i>p</i> -value			0.026	0.761	0.645			0.017	0.032	0.221
Hansen <i>J</i> -Stat. <i>p</i> -value			0.010	0.295	0.198			0.425	0.315	0.088

Notes: Estimates at a five-year level. The asterisks ***, ** and * denote significance at the 1%, 5% and 10% level, respectively. Individual and time effects are included but not reported. Robust standard errors (columns 1-2 and 6-7) and Windmeijer standard errors (columns 3-5 and 8-10) are reported in brackets. The Arellano-Bond test of autocorrelation and the Hansen-J statistic are reported.

TABLE A13. – *Dependent variable: growth of capital per worker*

	Model A					Model B				
	POLS (1)	FE (2)	DIFF-GMM (3)	SYS-GMM (4)	FOD (5)	POLS (6)	FE (7)	DIFF-GMM (8)	SYS-GMM (9)	FOD (10)
Dependent var. (<i>t-1</i>)	0.9237*** (0.0588)	0.8197*** (0.0754)	0.5562*** (0.0541)	0.9657*** (0.0676)	1.1100*** (0.0876)	0.9614*** (0.1332)	0.8666*** (0.0672)	0.5786*** (0.0550)	0.9180*** (0.1298)	0.9553*** (0.1187)
Dependent var. (<i>t-2</i>)	-0.1762** (0.0794)	-0.1814* (0.0955)	-0.2081** (0.0891)	-0.2509** (0.1102)	-0.3410** (0.1366)	-0.2380 (0.1689)	-0.2520 (0.2083)	-0.1259 (0.1689)	-0.1615 (0.2767)	-0.1101 (0.2411)
Dependent var. (<i>t-3</i>)	0.1169* (0.0625)	0.1013* (0.0521)	0.0675 (0.0422)	0.1450** (0.0713)	0.2093* (0.1233)	0.2204 (0.1514)	0.1783 (0.1487)	0.0949 (0.0946)	0.1642 (0.1903)	0.1916 (0.2450)
Dependent var. (<i>t-4</i>)	-0.0242 (0.0313)	-0.0698*** (0.0191)	-0.0779*** (0.0287)	-0.0517 (0.0356)	-0.0926 (0.0863)	-0.0657 (0.0786)	-0.0416 (0.0543)	0.0025 (0.0418)	-0.0202 (0.0643)	-0.0958 (0.1067)
GDP pc (log)	-0.0008** (0.0004)	0.0034 (0.0028)	-0.0015 (0.0104)	-0.0004 (0.0013)	0.0001 (0.0007)	-0.0003 (0.0008)	-0.0025 (0.0071)	-0.0205 (0.0152)	0.0012 (0.0020)	0.0010 (0.0014)
Debt to GDP	-0.0020*** (0.0006)	-0.0100*** (0.0035)	-0.0082 (0.0054)	-0.0090* (0.0051)	-0.0098* (0.0052)	-0.0013** (0.0007)	-0.0243*** (0.0025)	-0.0215*** (0.0017)	-0.0246*** (0.0039)	-0.0259*** (0.0043)
Human capital	-0.0003 (0.0006)	-0.0032 (0.0024)	-0.0032 (0.0102)	-0.0030 (0.0026)	-0.0015 (0.0012)	-0.0013** (0.0007)	-0.0009 (0.0025)	0.0042 (0.0096)	-0.0044* (0.0023)	-0.0017 (0.0012)
Net saving	0.0157*** (0.0034)	0.0324*** (0.0068)	0.0530*** (0.0194)	0.0287** (0.0123)	0.0104 (0.0074)	0.0133* (0.0072)	0.0231** (0.0088)	0.0796*** (0.0174)	0.0110 (0.0084)	0.0027 (0.0056)
Population growth	0.0716** (0.0290)	0.1281*** (0.0475)	0.2152 (0.1875)	0.0205 (0.0627)	0.0035 (0.0354)	-0.0025 (0.0506)	0.1267 (0.0808)	0.0825 (0.1290)	-0.0486 (0.0895)	-0.0136 (0.0566)
Openness index	0.0001 (0.0004)	-0.0017 (0.0027)	0.0189*** (0.0062)	0.0017 (0.0021)	0.0002 (0.0008)	-0.0004 (0.0005)	-0.0000 (0.0022)	0.0151 (0.0098)	-0.0003 (0.0010)	-0.0001 (0.0004)
Real exchange rate	-0.0010 (0.0014)	0.0002 (0.0023)	0.0033 (0.0053)	-0.0030 (0.0026)	-0.0025 (0.0019)	-0.0043 (0.0032)	-0.0014 (0.0046)	0.0043 (0.0097)	-0.0047 (0.0035)	-0.0078** (0.0038)
Gov. expenditure (productive)						-0.0091* (0.0051)	-0.0093 (0.0166)	-0.0304 (0.0279)	-0.0150 (0.0144)	-0.0134 (0.0100)
Gov. expenditure (unproductive)						-0.0098 (0.0061)	-0.0204 (0.0250)	-0.0280 (0.0445)	-0.0048 (0.0188)	-0.0013 (0.0105)
N*T	1910	1900	1815	1900	1900	854	853	804	853	853
N		75	75	75	75		43	42	43	43
R-squared (within)	0.816	0.669				0.888	0.742			
AR(1) <i>p</i> -value			0.002	0.001	0.000			0.001	0.002	0.006
AR(2) <i>p</i> -value			0.459	0.275	0.087			0.132	0.605	0.427
AR(3) <i>p</i> -value			0.315	0.313	0.368			0.066	0.067	0.062
Hansen <i>J</i> -Stat. <i>p</i> -value			0.665	0.981	0.055			0.464	0.222	0.087

Notes: Estimates at an annual level. The asterisks ***, ** and * denote significance at the 1%, 5% and 10% level, respectively. Individual and time effects are included but not reported. Robust standard errors (columns 1-2 and 6-7) and Windmeijer standard errors (columns 3-5 and 8-10) are reported in brackets. The Arellano-Bond test of autocorrelation and the Hansen-J statistic are reported.

TABLE A14. – *Dependent variable: growth of capital per worker*

	Model A					Model B				
	POLS (1)	FE (2)	DIFF-GMM (3)	SYS-GMM (4)	FOD (5)	POLS (6)	FE (7)	DIFF-GMM (8)	SYS-GMM (9)	FOD (10)
Five-year non-overlapping periods										
GDP pc (log)	-0.0195*** (0.0057)	-0.0664* (0.0354)	-0.0673 (0.0564)	-0.0284 (0.0207)	-0.0210 (0.0173)	-0.0288 (0.0186)	-0.0751 (0.0606)	-0.1418** (0.0611)	-0.0140 (0.0433)	-0.0408 (0.0464)
Debt to GDP	-0.0482*** (0.0065)	-0.2741*** (0.0784)	-0.1842*** (0.0544)	-0.2831*** (0.0918)	-0.3624*** (0.1208)	-0.0390*** (0.0058)	-0.1868*** (0.0477)	-0.1793*** (0.0369)	-0.2379** (0.1051)	-0.2226*** (0.0689)
Human capital	0.0433*** (0.0092)	0.0558 (0.0350)	0.1155* (0.0654)	0.0731* (0.0379)	0.0479* (0.0269)	-0.0574*** (0.0112)	0.0843*** (0.0275)	0.0129 (0.0504)	-0.0658** (0.0250)	-0.0572** (0.0235)
Net saving	0.3167*** (0.0499)	0.0870 (0.0724)	0.0460 (0.1199)	0.3078* (0.1803)	0.2502* (0.1459)	0.2935** (0.1176)	0.0162 (0.1059)	0.0449 (0.0865)	0.3080 (0.1983)	0.3810 (0.2293)
Population growth	1.0785*** (0.4147)	0.5675 (0.8225)	-0.7094 (2.1771)	-1.5478 (1.5806)	0.7935 (1.1271)	0.3158 (0.5610)	0.9493 (0.8147)	0.2056 (1.4563)	-0.6917 (1.6549)	0.3756 (1.4094)
Openness index	-0.0041 (0.0053)	-0.0323 (0.0288)	-0.0064 (0.0555)	0.0232 (0.0206)	0.0020 (0.0143)	-0.0123 (0.0091)	-0.0066 (0.0144)	-0.0281 (0.0187)	-0.0119 (0.0203)	-0.0132 (0.0182)
Real exchange rate	-0.0698* (0.0383)	-0.1981*** (0.0286)	-0.2255** (0.0856)	-0.1669*** (0.0526)	-0.1360** (0.0678)	-0.5821*** (0.1858)	-0.3706* (0.1856)	-0.3591** (0.1440)	-0.4396 (0.2847)	-0.7883* (0.3939)
Gov. expenditure (productive)						-0.1574*** (0.0525)	0.1225 (0.0751)	-0.1381 (0.1159)	-0.0158 (0.1603)	-0.0369 (0.1228)
Gov. expenditure (unproductive)						-0.4364*** (0.0608)	-1.0494** (0.3938)	-0.6701** (0.3251)	-0.5034** (0.2014)	-0.4532*** (0.1588)
N*T	1,048	1,047	977	1,047	1,047	620	620	577	620	620
N		64	62	64	64		40	39	40	40
R-squared (within)	0.364	0.327				0.4104	0.5237			
AR(1) <i>p</i> -value			0.014	0.175	0.681			0.031	0.234	0.154
AR(2) <i>p</i> -value			0.012	0.133	0.268			0.025	0.782	0.992
AR(3) <i>p</i> -value			0.024	0.128	0.093			0.765	0.699	0.956
Hansen <i>J</i> -Stat. <i>p</i> -value			0.002	0.000	0.061			0.233	0.412	0.069
Five-year overlapping periods										
GDP pc (log)	-0.0023*** (0.0008)	0.0008 (0.0063)	-0.0139 (0.0103)	-0.0069 (0.0052)	-0.0011 (0.0044)	-0.0035* (0.0021)	-0.0082 (0.0119)	-0.0159 (0.0131)	0.0002 (0.0080)	0.0032 (0.0065)
Debt to GDP	-0.0106*** (0.0012)	-0.0191*** (0.0045)	-0.0124** (0.0052)	-0.0170** (0.0081)	-0.0295 (0.0247)	-0.0059*** (0.0013)	-0.0228*** (0.0060)	-0.0230*** (0.0024)	-0.0023 (0.0076)	-0.0135 (0.0164)
Human capital	-0.0028** (0.0011)	-0.0081 (0.0088)	0.0125 (0.0116)	-0.0033 (0.0089)	-0.0031 (0.0072)	-0.0098*** (0.0015)	-0.0044 (0.0083)	-0.0019 (0.0103)	-0.0148** (0.0063)	-0.0099** (0.0041)
Net saving	0.0574*** (0.0058)	0.0685*** (0.0127)	0.0554*** (0.0158)	0.0961*** (0.0352)	0.0632* (0.0335)	0.0983*** (0.0126)	0.0540* (0.0296)	0.0500 (0.0348)	0.1377*** (0.0337)	0.1438*** (0.0348)
Population growth	0.4290*** (0.0448)	0.3188*** (0.1137)	0.0549 (0.2083)	0.1760 (0.2443)	0.3284 (0.2073)	-0.0038 (0.0926)	0.2464 (0.2227)	-0.0711 (0.2825)	-0.4223 (0.3461)	-0.3262 (0.2898)
Openness index	0.0003 (0.0008)	-0.0100 (0.0070)	0.0105 (0.0080)	0.0102 (0.0077)	0.0006 (0.0064)	-0.0032*** (0.0010)	-0.0041 (0.0047)	0.0101 (0.0099)	-0.0045 (0.0033)	-0.0046 (0.0027)
Real exchange rate	0.0014 (0.0030)	0.0019 (0.0062)	-0.0136* (0.0075)	0.0005 (0.0105)	0.0038 (0.0202)	-0.0074 (0.0049)	0.0006 (0.0073)	-0.0016 (0.0093)	-0.0103 (0.0135)	-0.0314* (0.0173)
Gov. expenditure (productive)						-0.0154 (0.0111)	0.0178 (0.0183)	-0.0531 (0.0355)	0.0121 (0.0470)	0.0212 (0.0310)
Gov. expenditure (unproductive)						-0.0918*** (0.0119)	-0.0526 (0.0419)	0.0504 (0.0637)	-0.1163** (0.0555)	-0.1157** (0.0435)
N*T	1638	1627	1542	1,627	1,627	698	697	651	697	697
N		75	75	75	75		40	40	41	41
R-squared (within)	0.291	0.287				0.439	0.382			
AR(1) <i>p</i> -value			4.28e-05	0.032	0.856			0.033	0.048	0.526
AR(2) <i>p</i> -value			0.002	0.178	0.293			0.043	0.813	0.091
AR(3) <i>p</i> -value			0.055	0.171	0.310			0.155	0.160	0.162
Hansen <i>J</i> -Stat. <i>p</i> -value			0.057	0.061	0.094			0.395	0.400	0.621

Notes: Estimates at a five-year level. The asterisks ***, ** and * denote significance at the 1%, 5% and 10% level, respectively. Individual and time effects are included but not reported. Robust standard errors (columns 1-2 and 6-7) and Windmeijer standard errors (columns 3-5 and 8-10) are reported in brackets. The Arellano-Bond test of autocorrelation and the Hansen-J statistic are reported.

TABLE A15. – *Dependent variable: growth of private investments per worker*

	Model A					Model B				
	POLS (1)	FE (2)	DIFF-GMM (3)	SYS-GMM (4)	FOD (5)	POLS (6)	FE (7)	DIFF-GMM (8)	SYS-GMM (9)	FOD (10)
Dependent var. <i>(t-1)</i>	0.3132*** (0.0528)	0.2373*** (0.0677)	0.0964 (0.0776)	0.2782*** (0.0813)	0.3261*** (0.0799)	0.1940** (0.0776)	0.0480 (0.0851)	-0.2053** (0.0996)	0.1601* (0.0836)	0.2559*** (0.0938)
Dependent var. <i>(t-2)</i>	0.0214 (0.0448)	-0.0126 (0.0717)	-0.1049* (0.0604)	-0.0081 (0.0751)	-0.0242 (0.0745)	0.1531** (0.0672)	0.0676 (0.0758)	-0.1970*** (0.0558)	0.1270 (0.1177)	0.0847 (0.1203)
Dependent var. <i>(t-3)</i>	0.0326 (0.0364)	-0.0099 (0.0247)	-0.0728** (0.0293)	0.0291 (0.0255)	0.0365 (0.0332)	0.0695 (0.0477)	0.0025 (0.0557)	-0.1233 (0.0822)	0.0640 (0.0647)	0.0865 (0.0824)
Dependent var. <i>(t-4)</i>	0.0348 (0.0378)	0.0049 (0.0336)	-0.0729** (0.0304)	0.0315 (0.0401)	0.0468 (0.0282)	-0.0257 (0.0396)	-0.0779** (0.0352)	-0.1551*** (0.0537)	-0.0218 (0.0464)	0.0237 (0.0489)
GDP pc (log)	-0.0038** (0.0015)	0.0035 (0.0086)	0.0001 (0.0269)	-0.0035 (0.0023)	-0.0021 (0.0013)	-0.0065** (0.0031)	-0.0152 (0.0150)	0.0470 (0.0518)	-0.0071* (0.0036)	-0.0045** (0.0019)
Debt to GDP	-0.0298 (0.0318)	-0.0326 (0.0367)	-0.0129 (0.0106)	-0.0218* (0.0127)	-0.0249* (0.0148)	-0.0026 (0.0021)	-0.0334 (0.0276)	-0.0311 (0.0224)	-0.0340** (0.0134)	-0.0040* (0.0024)
Human capital	0.0046** (0.0022)	0.0088 (0.0088)	0.0368 (0.0255)	0.0066 (0.0076)	0.0021 (0.0035)	0.0040 (0.0025)	0.0128 (0.0100)	0.0829** (0.0345)	0.0062 (0.0060)	0.0018 (0.0027)
Net saving	-0.0030 (0.0109)	-0.0085 (0.0199)	0.0990 (0.0704)	-0.0423 (0.0321)	0.0473** (0.0234)	0.0056 (0.0149)	0.0392* (0.0211)	0.0892 (0.0601)	0.0685** (0.0335)	0.0253 (0.0172)
Population growth	-0.1970** (0.0900)	0.0803 (0.5033)	1.0186 (1.6248)	-0.2275 (0.3524)	-0.2987 (0.2305)	-0.2182 (0.1430)	-0.7404*** (0.2720)	-2.1186*** (0.7490)	-0.0859 (0.2480)	-0.1748 (0.1925)
Openness index	0.0026* (0.0013)	0.0135*** (0.0050)	0.0525*** (0.0192)	0.0040 (0.0036)	0.0039 (0.0025)	0.0006 (0.0012)	0.0238*** (0.0067)	0.0256 (0.0162)	0.0070** (0.0029)	0.0014 (0.0014)
Real exchange rate	-0.0092 (0.0057)	-0.0132* (0.0068)	-0.0385 (0.0255)	-0.0101 (0.0104)	-0.0110* (0.0064)	-0.0028 (0.0094)	-0.0028 (0.0134)	-0.1093** (0.0444)	0.0161 (0.0187)	0.0062 (0.0155)
Gov. expenditure (productive)						-0.0268 (0.0218)	-0.0285 (0.0392)	-0.0790 (0.1187)	-0.0467 (0.0382)	0.0045 (0.0212)
Gov. expenditure (unproductive)						-0.0067 (0.0194)	-0.0592 (0.0515)	-0.2835* (0.1599)	0.0024 (0.0352)	-0.0534* (0.0299)
N*T	1728	1721	1646	1721	1721	839	838	790	838	838
N		69	69	69	69		42	42	42	42
R-squared (within)	0.229	0.175				0.377	0.346			
AR(1) <i>p</i> -value			7.45e-05	5.14e-05	2.81e-05	.	.	0.001	0.001	0.001
AR(2) <i>p</i> -value			0.972	0.628	0.295	.	.	0.423	0.770	0.121
AR(3) <i>p</i> -value			0.208	0.382	0.499	.	.	0.372	0.782	0.502
Hansen <i>J</i> -Stat. <i>p</i> -value			0.144	0.558	0.611			0.701	0.060	0.042

Notes: Estimates at an annual level. The asterisks ***, ** and * denote significance at the 1%, 5% and 10% level, respectively. Individual and time effects are included but not reported. Robust standard errors (columns 1-2 and 6-7) and Windmeijer standard errors (columns 3-5 and 8-10) are reported in brackets. The Arellano-Bond test of autocorrelation and the Hansen-J statistic are reported.

TABLE A16. – *Dependent variable: growth of private investments per worker*

	Model A					Model B				
	POLS (1)	FE (2)	DIFF-GMM (3)	SYS-GMM (4)	FOD (5)	POLS (6)	FE (7)	DIFF-GMM (8)	SYS-GMM (9)	FOD (10)
Five-year non-overlapping periods										
GDP pc (log)	-0.1439*** (0.0488)	-0.9254*** (0.1197)	-1.8830*** (0.3100)	-0.2675* (0.1403)	-0.4665*** (0.0951)	-0.1103** (0.0530)	-0.9697*** (0.1365)	-1.7449*** (0.3883)	-0.1941 (0.1713)	-0.2623** (0.1012)
Debt to GDP	0.1122*** (0.0325)	-0.0691 (0.1499)	0.0141 (0.2713)	-0.0263 (0.2545)	-0.1456 (0.3336)	-0.1453*** (0.0395)	-0.0834 (0.1935)	-0.2018 (0.3305)	-0.4263* (0.2324)	-0.3937 (0.3326)
Human capital	0.0114 (0.0231)	-0.1534 (0.2480)	1.0824** (0.4583)	0.0319 (0.0771)	0.0900 (0.0735)	0.0096 (0.0253)	-0.0347 (0.3237)	1.3059* (0.6432)	0.0207 (0.0703)	0.0665 (0.0629)
Net saving	1.3886*** (0.1973)	1.7591*** (0.4631)	3.1975*** (0.5173)	2.4652*** (0.4510)	3.4131*** (0.3241)	1.7725*** (0.2382)	1.1022** (0.5079)	2.8063*** (0.7335)	2.8896*** (0.7195)	2.9913*** (0.5450)
Population growth	-3.4649 (2.3484)	-12.0760** (5.4903)	3.9556 (11.4831)	-4.8963 (7.8295)	3.4967 (5.3325)	-6.2434** (2.5125)	-12.8579** (6.3246)	-5.1414 (11.1728)	-10.0290 (8.6598)	-5.2404 (4.5539)
Openness index	0.0552** (0.0247)	0.3349*** (0.0931)	0.1252 (0.1662)	0.0551 (0.0836)	0.0423 (0.0791)	0.0501** (0.0230)	0.2613** (0.0981)	-0.2751** (0.1150)	0.0663 (0.0745)	0.0835 (0.0668)
Real exchange rate	-0.0388 (0.7179)	-2.4287*** (0.8266)	-4.0006*** (0.8261)	-0.4208 (0.8559)	-0.1144 (0.9343)	-1.5555*** (0.2671)	-3.5459*** (0.3961)	-1.8184 (0.6929)	-2.0393** (0.7520)	-1.5084** (0.8943)
Gov. expenditure (productive)						0.2651 (0.2671)	0.5894 (0.3961)	0.0919 (0.6929)	1.3107* (0.7520)	1.2055 (0.8943)
Gov. expenditure (unproductive)						-0.2371 (0.2371)	(1.2691)	(2.0982)	(0.7835)	(0.5624)
N*T	613	613	584	613	613	518	518	489	518	518
N		29	29	29	29		29	29	29	29
R-squared (within)	0.4505	0.6551				0.493	0.676			
AR(1) <i>p</i> -value			0.926	0.00174	0.0491			0.784	0.089	0.137
AR(2) <i>p</i> -value			0.0155	0.193	0.143			0.009	0.052	0.016
AR(3) <i>p</i> -value			0.798	0.100	0.465			0.885	0.153	0.195
Hansen <i>J</i> -Stat. <i>p</i> -value			0.033	0.602	0.164			0.151	0.025	0.433
Five-year overlapping periods										
GDP pc (log)	-0.0155 (0.0132)	-0.2227*** (0.0643)	-0.3034*** (0.1096)	-0.0141 (0.0339)	-0.0291 (0.0305)	-0.0236* (0.0140)	-0.2666*** (0.0586)	-0.3343*** (0.1180)	-0.0212 (0.0366)	-0.0301 (0.0382)
Debt to GDP	0.0002 (0.0075)	-0.0686* (0.0335)	-0.0891** (0.0415)	-0.1999*** (0.0549)	-0.4619*** (0.1227)	0.0087 (0.0086)	-0.0485** (0.0215)	-0.0834** (0.0307)	-0.2281*** (0.0712)	-0.3997*** (0.1225)
Human capital	0.0098* (0.0055)	-0.0411 (0.0596)	0.2029* (0.0995)	-0.0098 (0.0190)	0.0183 (0.0210)	0.0100* (0.0060)	-0.0786 (0.0646)	0.1760 (0.1301)	-0.0064 (0.0224)	0.0363 (0.0221)
Net saving	0.0741 (0.0695)	0.1968*** (0.0558)	0.1627 (0.1353)	0.0654 (0.1538)	0.0801 (0.2438)	0.1343* (0.0793)	0.1247* (0.0729)	-0.0239 (0.1329)	0.0752 (0.1612)	-0.0494 (0.3537)
Population growth	-1.4003** (0.5681)	-2.5264*** (0.9075)	-4.3807*** (1.2745)	-1.2762 (1.9209)	-1.8901 (1.2724)	-1.5716** (0.6127)	-2.5370*** (0.8170)	-3.9740*** (1.2629)	-1.1414 (2.0411)	-0.7661 (1.3478)
Openness index	0.0130** (0.0052)	0.1025*** (0.0335)	0.0811 (0.0616)	0.0126 (0.0120)	0.0292** (0.0124)	0.0134*** (0.0051)	0.0894*** (0.0319)	0.0789 (0.0625)	0.0154 (0.0133)	0.0311** (0.0145)
Real exchange rate	-0.0579*** (0.0185)	-0.0088 (0.0409)	-0.0884 (0.0612)	-0.1057** (0.0389)	-0.0111 (0.0600)	-0.0189 (0.0195)	0.0590 (0.0429)	0.0313 (0.0627)	-0.0900* (0.0516)	-0.1495** (0.0656)
Gov. expenditure (productive)						-0.0375 (0.0623)	0.0226 (0.1355)	-0.2312 (0.1886)	0.1398 (0.2083)	0.0984 (0.3061)
Gov. expenditure (unproductive)						-0.1551*** (0.0587)	-0.5272** (0.2301)	-0.1791 (0.4826)	-0.0276 (0.1974)	-0.2540 (0.2442)
N*T	605	605	576	605	605	546	546	517	546	546
N		29	29	29	29		29	29	29	29
R-squared (within)	0.419	0.634				0.426	0.652			
AR(1) <i>p</i> -value			0.002	0.007	0.463			0.002	0.045	0.641
AR(2) <i>p</i> -value			0.047	0.101	0.053			0.031	0.039	0.033
AR(3) <i>p</i> -value			0.275	0.796	0.978			0.490	0.889	0.767
Hansen <i>J</i> -Stat. <i>p</i> -value			0.540	0.197	0.602			0.531	0.408	0.033

Notes: Estimates at a five-year level. The asterisks ***, ** and * denote significance at the 1%, 5% and 10% level, respectively. Individual and time effects are included but not reported. Robust standard errors (columns 1-2 and 6-7) and Windmeijer standard errors (columns 3-5 and 8-10) are reported in brackets. The Arellano-Bond test of autocorrelation and the Hansen-J statistic are reported.