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**Working Paper**

## Ideas production and international knowledge spillovers: Digging deeper into emerging countries

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Online Appendix: A

**Table A1: Ideas Production and International Knowledge Spillovers (Domestically Filed Patents)**  
**Fixed Effects Results**

$$\ln A_{d,i,t}^{\cdot} = \alpha_i + \varphi_t + \lambda \ln L_{A,i,t} + \phi \ln A_{d,i,t} + \beta \ln A_{oecd,i,t-1}^{f,\omega_1} + \theta \ln A_{eme,i,t-1}^{f,\omega_2} + e_{i,t}$$

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]
<b>c</b>	-2.054 <sup>a</sup> (0.000)	-1.986 <sup>a</sup> (0.000)	-1.901 <sup>a</sup> (0.000)	-1.908 <sup>a</sup> (0.000)	-7.606 <sup>a</sup> (0.000)	13.097 <sup>a</sup> (0.472)	0.120 <sup>a</sup> (0.934)	-6.200 <sup>a</sup> (0.000)	-1.648 <sup>a</sup> (0.004)	-5.275 <sup>a</sup> (0.000)	-2.051 <sup>a</sup> (0.000)	-1.993 <sup>a</sup> (0.000)	29.871 <sup>a</sup> (0.095)	-1.843 <sup>a</sup> (0.001)	23.575 <sup>a</sup> (0.000)	-0.540 <sup>a</sup> (0.345)	26.376 <sup>a</sup> (0.000)
$L_{A,i,t}$	-0.024 (0.370)	-0.024 (0.352)	-0.025 (0.266)	-0.025 (0.333)	-0.071 <sup>b</sup> (0.043)	-0.014 (0.669)	-0.027 (0.352)	-0.010 (0.657)	-0.050 (0.329)	-0.019 (0.502)	-0.023 (0.283)	-0.023 (0.331)	-0.006 (0.856)	-0.044 (0.370)	0.042 (0.107)	-0.040 <sup>b</sup> (0.100)	0.012 (0.655)
$A_{d,i,t}$	1.045 <sup>a</sup> (0.000)	1.045 <sup>a</sup> (0.000)	1.043 <sup>a</sup> (0.000)	1.043 <sup>a</sup> (0.000)	1.128 <sup>a</sup> (0.000)	1.024 <sup>a</sup> (0.000)	1.047 <sup>a</sup> (0.000)	1.000 <sup>a</sup> (0.000)	1.040 <sup>a</sup> (0.000)	1.063 <sup>a</sup> (0.000)	1.045 <sup>a</sup> (0.000)	1.045 <sup>a</sup> (0.000)	1.011 <sup>a</sup> (0.000)	1.061 <sup>a</sup> (0.000)	1.081 <sup>a</sup> (0.000)	1.096 <sup>a</sup> (0.000)	1.109 <sup>a</sup> (0.000)
$A_{oecd,i,t}^{f,im}$	0.017 (0.551)										0.016 (0.543)					-0.615 <sup>b</sup> (0.041)	-0.620 <sup>a</sup> (0.000)
$A_{oecd,i,t}^{f,mm}$		0.008 (0.735)										0.009 (0.731)				0.500 <sup>a</sup> (0.000)	0.453 <sup>a</sup> (0.000)
$A_{eme,i,t}^{f,im}$			-0.002 (0.952)								-0.001 (0.971)					0.040 <sup>c</sup> (0.101)	0.009 (0.749)
$A_{eme,i,t}^{f,mm}$				-0.002 (0.924)								-0.002 (0.886)				0.012 (0.563)	0.050 <sup>a</sup> (0.003)
$A_{oecd,i,t}^{f,FDI}$					0.819 <sup>a</sup> (0.000)										2.111 <sup>a</sup> (0.000)		2.188 <sup>a</sup> (0.000)
$A_{oecd,i,t}^{G-prox}$						-0.896 (0.409)							-1.732 <sup>c</sup> (0.101)		-7.254 <sup>a</sup> (0.000)		-7.740 <sup>a</sup> (0.000)
$A_{eme,i,t}^{G-prox}$							-0.136 (0.131)						-0.187 <sup>b</sup> (0.023)			-0.575 <sup>a</sup> (0.000)	-0.312 <sup>b</sup> (0.011)
$A_{oecd,i,t}^{f,sci}$								0.646 <sup>a</sup> (0.000)							0.105 (0.376)		-0.020 (0.848)
$A_{oecd,i,t}^{f,uw}$									-0.021 (0.567)					-0.232 <sup>a</sup> (0.001)	5.281 <sup>a</sup> (0.000)		5.707 <sup>a</sup> (0.000)
$A_{eme,i,t}^{f,uw}$										0.244 <sup>a</sup> (0.000)				0.246 <sup>a</sup> (0.000)		0.517 <sup>a</sup> (0.000)	0.309 <sup>a</sup> (0.005)
OBS	586	586	586	586	484	586	586	431	586	586	586	586	586	586	382	586	382
$\bar{R}^2$	0.987	0.987	0.987	0.987	0.988	0.987	0.987	0.988	0.987	0.987	0.987	0.987	0.987	0.987	0.990	0.987	0.991
DW	1.014	1.014	1.014	1.014	0.893	1.018	1.016	1.075	1.015	1.017	1.014	1.014	1.025	1.017	1.077	1.031	1.099

OBS = total data points;  $\bar{R}^2$  is the goodness of fit statistic; DW = Durbin-Watson statistic. Not all data series are available for each country in the sample hence different OBS. Other variables' definitions are given in Table 2 of the main text. (.) denotes P-values. Throughout all fixed effects estimates, heteroskedasticity consistent standard errors (White, 1980) are used; superscripts 'a', 'b' and 'c' respectively denote significance at 1%, 5% and 10%. Also refer to footnotes 17 and 19 and the associated text in the paper regarding  $\bar{R}^2$  and DW statistics.

**Table A2: Ideas Production and International Knowledge Spillovers (Patents Filed at USPTO)**  
**Fixed Effects Results**

$$\ln \dot{A}_{d,i,t} = \alpha_i + \varphi_t + \lambda \ln L_{A,i,t} + \phi \ln A_{d,i,t} + \beta \ln A_{oeed,i,t-1}^{f,\omega_1} + \theta \ln A_{eme,i,t-1}^{f,\omega_2} + e_{i,t}$$

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]
<b>c</b>	-1.327 <sup>a</sup> (0.003)	-1.191 <sup>b</sup> (0.012)	-1.016 <sup>a</sup> (0.004)	-0.971 <sup>a</sup> (0.006)	2.370 (0.314)	48.098 (0.012)	-0.990 (0.464)	-12.06 (0.253)	-2.633 (0.030)	-2.997 (0.412)	-1.167 (0.017)	-0.844 (0.117)	50.065 (0.007)	-4.271 (0.277)	13.773 (0.421)	-0.010 (0.985)	13.505 (0.453)
$L_{A,i,t}$	0.444 <sup>a</sup> (0.000)	0.446 <sup>a</sup> (0.000)	0.420 <sup>a</sup> (0.000)	0.429 <sup>a</sup> (0.000)	0.404 <sup>a</sup> (0.000)	0.469 <sup>a</sup> (0.000)	0.435 <sup>a</sup> (0.000)	0.327 <sup>a</sup> (0.000)	0.612 <sup>a</sup> (0.000)	0.443 <sup>a</sup> (0.000)	0.425 <sup>a</sup> (0.000)	0.423 <sup>a</sup> (0.000)	0.469 <sup>a</sup> (0.000)	0.614 <sup>a</sup> (0.000)	0.518 <sup>a</sup> (0.000)	0.436 <sup>a</sup> (0.000)	0.498 <sup>a</sup> (0.000)
$A_{d,i,t}$	1.007 <sup>a</sup> (0.000)	1.010 <sup>a</sup> (0.000)	1.009 <sup>a</sup> (0.000)	1.005 <sup>a</sup> (0.000)	1.006 <sup>a</sup> (0.000)	1.031 <sup>a</sup> (0.000)	1.012 <sup>a</sup> (0.000)	0.933 <sup>a</sup> (0.000)	1.013 <sup>a</sup> (0.000)	1.026 <sup>a</sup> (0.000)	1.007 <sup>a</sup> (0.000)	1.006 <sup>a</sup> (0.000)	1.034 <sup>a</sup> (0.000)	1.025 <sup>a</sup> (0.000)	0.946 <sup>a</sup> (0.000)	1.010 <sup>a</sup> (0.000)	0.949 <sup>a</sup> (0.000)
$A_{oeed,i,t}^{f,im}$	0.053 (0.254)										0.021 (0.718)				-0.080 (0.312)		-0.292 <sup>c</sup> (0.093)
$A_{oeed,i,t}^{f,mm}$		0.031 (0.486)										-0.015 (0.779)			0.280 <sup>a</sup> (0.000)		0.390 <sup>b</sup> (0.013)
$A_{eme,i,t}^{f,im}$			0.086 <sup>b</sup> (0.046)								0.080 (0.129)					0.055 (0.478)	-0.003 (0.972)
$A_{eme,i,t}^{f,mm}$				0.082 <sup>b</sup> (0.012)								0.087 <sup>b</sup> (0.033)				0.080 (0.147)	0.085 (0.210)
$A_{oeed,i,t}^{f,FDI}$					-0.514 (0.226)										-0.693 (0.386)		-0.113 (0.894)
$A_{oeed,i,t}^{G-prox}$						-3.153 <sup>b</sup> (0.011)							-3.345 <sup>a</sup> (0.006)		-2.030 (0.416)		-4.367 <sup>c</sup> (0.103)
$A_{eme,i,t}^{G-prox}$							0.005 (0.963)						0.090 (0.490)			-0.153 (0.184)	0.108 (0.527)
$A_{oeed,i,t}^{f,sci}$								1.866 (0.250)							2.248 (0.117)		1.408 (0.369)
$A_{oeed,i,t}^{f,uw}$									0.125 <sup>c</sup> (0.095)					0.121 <sup>c</sup> (0.099)	0.291 (0.859)		3.218 (0.146)
$A_{eme,i,t}^{f,uw}$										0.208 (0.562)				0.170 (0.634)		0.061 (0.525)	-0.299 (0.180)
OBS	688	688	688	687	583	688	688	471	688	688	688	687	688	688	419	687	418
$\bar{R}^2$	0.994	0.964	0.964	0.964	0.966	0.964	0.964	0.962	0.964	0.964	0.964	0.964	0.964	0.964	0.965	0.964	0.962
DW	1.355	1.352	1.360	1.357	1.270	1.355	1.350	1.240	1.352	1.346	1.361	1.357	1.355	1.348	1.201	1.365	1.204

Please refer to notes of Table A1. Throughout all fixed effects estimations, fixed and time dummies are retained.

**Table A3: Ideas Production and International Spillovers from Raw Conduits  
(Fixed Effects Estimates)**

$$\ln A_{d,i,t}^{\bullet} = \alpha_i + \varphi_t + \lambda \ln L_{A,i,t} + \phi \ln A_{d,i,t} + \beta \ln A_{oecd,i,t-1}^{C,\omega_1} + \theta \ln A_{eme,i,t-1}^{C,\omega_2} + e_{i,t}$$

**Panel A: Domestically Filed Patents**

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
<b>c</b>	-1.978 <sup>a</sup> (0.000)	-1.976 <sup>a</sup> (0.000)	-2.695 <sup>a</sup> (0.000)	-2.358 <sup>a</sup> (0.000)	-2.477 <sup>a</sup> (0.000)	-1.635 <sup>a</sup> (0.000)	-2.263 <sup>a</sup> (0.000)	-1.732 <sup>a</sup> (0.000)	-2.813 <sup>a</sup> (0.000)	-2.374 <sup>a</sup> (0.000)	-2.854 <sup>a</sup> (0.000)
$L_{A,i,t}$	-0.021 (0.455)	-0.022 (0.461)	-0.022 (0.470)	-0.027 (0.359)	-0.009 (0.767)	-0.034 (0.318)	-0.041 (0.151)	-0.049 <sup>b</sup> (0.098)	-0.001 (0.987)	-0.027 (0.356)	-0.019 (0.537)
$A_{d,i,t}$	1.048 <sup>a</sup> (0.000)	1.048 <sup>a</sup> (0.000)	1.052 <sup>a</sup> (0.000)	1.052 <sup>a</sup> (0.000)	1.046 <sup>a</sup> (0.000)	1.008 <sup>a</sup> (0.000)	1.048 <sup>a</sup> (0.000)	1.042 <sup>a</sup> (0.000)	1.026 <sup>a</sup> (0.000)	1.052 <sup>a</sup> (0.000)	1.031 <sup>a</sup> (0.000)
$A_{oecd,i,t}^{c,mm}$	0.001 (0.990)						-0.102 <sup>b</sup> (0.014)		0.029 (0.816)		-0.077 (0.544)
$A_{oecd,i,t}^{c,mm}$		2.3E-04 (0.992)						-0.089 <sup>a</sup> (0.003)	0.014 (0.878)		-0.006 (0.954)
$A_{eme,i,t}^{c,mm}$			0.083 <sup>b</sup> (0.048)				0.168 <sup>a</sup> (0.003)			0.003 (0.962)	0.135 <sup>c</sup> (0.077)
$A_{eme,i,t}^{c,mm}$				0.059 <sup>a</sup> (0.005)				0.116 <sup>a</sup> (0.000)		0.058 <sup>c</sup> (0.058)	0.043 (0.358)
$A_{oecd,i,t}^{c,FDI}$					0.045 <sup>b</sup> (0.054)				0.037 (0.222)		0.037 (0.205)
$A_{oecd,i,t}^{c,sci}$						0.019 (0.466)			0.010 (0.676)		-0.019 (0.525)
OBS	572	572	571	555	567	431	571	555	431	555	415
$\bar{R}^2$	0.987	0.987	0.987	0.987	0.987	0.989	0.987	0.987	0.989	0.987	0.989
DW	1.041	1.042	1.054	1.061	1.059	1.142	1.071	1.086	1.158	1.061	1.188

**Panel B: Patents Filed at USPTO**

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
<b>c</b>	-1.744 <sup>b</sup> (0.016)	-1.421 <sup>b</sup> (0.023)	-0.986 <sup>c</sup> (0.069)	-1.157 <sup>b</sup> (0.020)	-0.710 (0.159)	-0.432 (0.389)	-1.585 <sup>b</sup> (0.021)	-1.337 (0.033)	-2.068 (0.156)	-0.080 (0.889)	-0.662 (0.622)
$L_{A,i,t}$	0.434 <sup>a</sup> (0.000)	0.431 <sup>a</sup> (0.000)	0.410 <sup>a</sup> (0.000)	0.407 <sup>a</sup> (0.000)	0.405 <sup>a</sup> (0.000)	0.347 <sup>a</sup> (0.000)	0.441 <sup>a</sup> (0.000)	0.415 <sup>a</sup> (0.000)	0.359 <sup>a</sup> (0.000)	0.397 <sup>a</sup> (0.000)	0.346 <sup>a</sup> (0.000)
$A_{d,i,t}$	0.983 <sup>a</sup> (0.000)	0.987 <sup>a</sup> (0.000)	0.994 <sup>a</sup> (0.000)	0.988 <sup>a</sup> (0.000)	0.979 <sup>a</sup> (0.000)	0.963 <sup>a</sup> (0.000)	0.981 <sup>a</sup> (0.000)	0.987 <sup>a</sup> (0.000)	0.923 <sup>a</sup> (0.000)	0.984 <sup>a</sup> (0.0000)	0.917 <sup>a</sup> (0.000)
$A_{oecd,i,t}^{c,mm}$	0.090 <sup>c</sup> (0.076)						0.130 <sup>c</sup> (0.082)		0.193 (0.346)		0.542 <sup>b</sup> (0.032)
$A_{oecd,i,t}^{c,mm}$		0.063 (0.127)						0.024 (0.656)	-0.076 (0.665)		-0.208 (0.277)
$A_{eme,i,t}^{c,mm}$			0.034 (0.410)				-0.071 (0.319)			-0.201 <sup>b</sup> (0.023)	-0.461 <sup>a</sup> (0.000)
$A_{eme,i,t}^{c,mm}$				0.070 <sup>b</sup> (0.040)				0.055 (0.216)		0.173 <sup>a</sup> (0.008)	0.132 (0.121)
$A_{oecd,i,t}^{c,FDI}$					0.006 (0.658)				0.032 (0.531)		-0.008 (0.863)
$A_{oecd,i,t}^{c,sci}$						0.106 <sup>c</sup> (0.072)			0.114 <sup>b</sup> (0.017)		0.106 <sup>b</sup> (0.026)
OBS	609	610	610	591	618	494	609	591	466	591	448
$\bar{R}^2$	0.961	0.961	0.960	0.961	0.961	0.959	0.961	0.961	0.956	0.961	0.957
DW	1.380	1.379	1.370	1.378	1.378	1.337	1.382	1.380	1.334	1.388	1.376

Please refer to notes of Tables A1. In this table, the raw data on conduits are used. In these specifications,  $A_{oecd,i,t-1}^{C,\omega_1}$  and  $A_{oecd,i,t-1}^{C,\omega_2}$  denote lagged values of raw conduits as defined in the text. FDI, in this table, is the total inward FDI in the  $i^{\text{th}}$  sample country from rest of the world rather than bilateral FDI flows from OECD countries, hence the difference in OBS.

**Table A4: Knowledge Spillovers from G7 and G3 Groups of Industrialized to Emerging Countries (Fixed Effects Results)**

$$\ln \dot{A}_{d,i,t} = \alpha_i + \varphi_t + \lambda \ln L_{A,i,t} + \phi \ln A_{d,i,t} + \beta \ln A_{i,t-1}^f + e_{i,t}$$

Panel A: Domestically Filed Patents

	c	$L_{A,i,t}$	$A_{d,i,t}$	$A_{i,t}^{f,im}$	$A_{i,t}^{f,imm}$	$A_{i,t}^{f,FDI}$	$A_{i,t}^{G-prox}$	$A_{i,t}^{f,sci}$	$A_{i,t}^{f,uw}$	OBS	$\bar{R}^2$	DW
G3	-2.073 (0.000) <sup>a</sup>	-0.023 (0.374)	1.047(0.000) <sup>a</sup>	0.018 (0.544)						586	0.987	1.014
	-2.067 (0.000) <sup>a</sup>	-0.022 (0.390)	1.047(0.000) <sup>a</sup>		0.016 (0.530)					586	0.987	1.014
	-1.368 (0.331)	-0.055 (0.122)	1.040(0.000) <sup>a</sup>			-0.037 (0.863)				484	0.988	0.874
	0.642 (0.961)	-0.022 (0.579)	1.036(0.000) <sup>a</sup>				-0.154 (0.844)			586	0.987	1.015
	-2.211(0.000) <sup>a</sup>	0.027 (0.396)	0.907(0.000) <sup>a</sup>					0.134 (0.001) <sup>a</sup>		358	0.989	1.034
	-1.648(0.004) <sup>a</sup>	-0.050 (0.329)	1.040(0.000) <sup>a</sup>						-0.022 (0.567)	586	0.987	1.015
	-18.928(0.389)	0.016(0.680)	0.952(0.000) <sup>a</sup>	0.122(0.474)	-0.011(0.931)	-0.138(0.729)	0.997(0.488)	0.138(0.012) <sup>b</sup>	-0.023(0.442)	341	0.989	0.915
G7	-2.051 (0.000) <sup>a</sup>	-0.024 (0.361)	1.046(0.000) <sup>a</sup>	0.016 (0.602)						586	0.987	1.014
	-2.065 (0.000) <sup>a</sup>	-0.022 (0.385)	1.047(0.000) <sup>a</sup>		0.016 (0.543)					586	0.987	1.014
	-4.121 (0.017) <sup>b</sup>	-0.067(0.064) <sup>c</sup>	1.092(0.000) <sup>a</sup>			0.363 (0.151)				484	0.988	0.873
	0.971 (0.945)	-0.022 (0.578)	1.036(0.000) <sup>a</sup>				-0.172 (0.839)	0.143 (0.003) <sup>a</sup>		586	0.987	1.015
	-2.338 (0.000) <sup>a</sup>	0.033 (0.307)	0.904(0.000) <sup>a</sup>							358	0.989	1.031
	-1.648 (0.004) <sup>a</sup>	-0.050 (0.329)	1.040(0.000) <sup>a</sup>						-0.021 (0.567)	586	0.987	1.015
	67.476 (0.003) <sup>a</sup>	0.022 (0.462)	1.023(0.000) <sup>a</sup>	-0.293 (0.129)	0.286 (0.049) <sup>b</sup>	2.448 (0.000) <sup>a</sup>	-5.183 (0.000) <sup>a</sup>	0.055 (0.393)	-0.028 (0.197)	341	0.990	0.971
Panel B: Patents filed at the USPTO												
G3	-1.262 (0.004) <sup>a</sup>	-0.066(0.070) <sup>c</sup>	1.009(0.000) <sup>a</sup>	0.046 (0.317)						688	0.964	1.355
	-1.198 (0.011) <sup>b</sup>	-0.062(0.100) <sup>c</sup>	1.010 (0.000) <sup>a</sup>		0.032 (0.475)					688	0.964	1.352
	2.231 (0.307)	-0.090(0.070) <sup>c</sup>	0.999 (0.000) <sup>a</sup>			-0.591 (0.214)				583	0.967	1.272
	92.147 (0.001) <sup>a</sup>	-0.041 (0.288)	1.000 (0.000) <sup>a</sup>				-6.050 (0.001) <sup>a</sup>			688	0.964	1.369
	0.614 (0.132)	-0.205 (0.000) <sup>a</sup>	0.916 (0.000) <sup>a</sup>					0.048 (0.157)		400	0.965	1.243
	-2.634 (0.030) <sup>b</sup>	0.101 (0.420)	1.013 (0.000) <sup>a</sup>						0.127 (0.095) <sup>c</sup>	688	0.964	1.352
	506.15 (0.000) <sup>a</sup>	-0.117 (0.407)	0.777 (0.000) <sup>a</sup>	-0.169(0.003) <sup>a</sup>	0.446(0.000) <sup>a</sup>	7.881 (0.000) <sup>a</sup>	-35.591 (0.000) <sup>a</sup>	0.062 (0.177)	0.000 (0.997)	371	0.968	1.379
G7	-1.349 (0.003) <sup>a</sup>	-0.063 (0.079) <sup>c</sup>	1.009 (0.000) <sup>a</sup>	0.057 (0.219)						688	0.964	1.356
	-1.224 (0.010) <sup>a</sup>	-0.061 (0.102) <sup>c</sup>	1.010 (0.000) <sup>a</sup>		0.035 (0.440)					688	0.964	1.352
	5.998 (0.018) <sup>b</sup>	-0.061 (0.215)	1.006 (0.000) <sup>a</sup>			-1.330 (0.007) <sup>a</sup>				583	0.967	1.287
	76.203 (0.000) <sup>a</sup>	-0.031 (0.422)	1.000 (0.000) <sup>a</sup>				-4.981 (0.000) <sup>a</sup>			688	0.964	1.374
	0.554 (0.181)	-0.203 (0.000) <sup>a</sup>	0.916 (0.000) <sup>a</sup>					0.054 (0.164)		400	0.965	1.244
	-2.634 (0.030) <sup>b</sup>	0.101 (0.420)	1.013 (0.000) <sup>a</sup>						0.126 (0.095) <sup>c</sup>	688	0.964	1.352
	0.319 (0.970)	-0.017 (0.900)	0.869 (0.000) <sup>a</sup>	-0.020 (0.770)	0.268(0.003) <sup>a</sup>	-0.499 (0.742)	#	0.062 (0.347)	0.009 (0.924)	371	0.965	1.242

Please refer to notes of Table A1. # denotes exclusion of the covariate due to collinearity.

**Table A5: Bilateral International Knowledge Spillovers from Individual G7 Countries to Emerging Countries in the Panel (Fixed Effects Results)**

$$\ln A_{d,i,t} = \alpha_i + \varphi_t + \lambda \ln L_{A,i,t} + \phi \ln A_{d,i,t} + \beta \ln A_{i,t-1}^{\omega} + e_{i,t}$$

Panel A: Domestically Filed Patents

	C	$L_{A,i,t}$	$A_{d,i,t}$	$A_{i,t}^{f,sm}$	$A_{i,t}^{f,mm}$	$A_{i,t}^{f,FDI}$	$A_{i,t}^{G-prox}$	$A_{i,t}^{f,sci}$	$A_{i,t}^{f,uw}$	OBS	$\bar{R}^2$	DW
Canada	-1.889 (0.000) <sup>a</sup>	-0.027 (0.317)	1.043 (0.000) <sup>a</sup>	-0.005 (0.861)						586	0.987	1.014
	-1.878 (0.000) <sup>a</sup>	-0.027 (0.321)	1.041 (0.000) <sup>a</sup>		-0.009 (0.591)					586	0.987	1.015
	-2.007 (0.000) <sup>a</sup>	-0.041 (0.121)	1.062 (0.000) <sup>a</sup>			0.313(0.000) <sup>a</sup>				442	0.988	0.875
	-4.778 (0.000) <sup>a</sup>	-0.025 (0.346)	1.039 (0.000) <sup>a</sup>				0.255(0.000) <sup>a</sup>			586	0.987	1.000
	-1.771 (0.000) <sup>a</sup>	0.013 (0.672)	0.948 (0.000) <sup>a</sup>					0.091(0.000) <sup>a</sup>		341	0.989	1.026
	-3.869 (0.000) <sup>a</sup>	-0.004 (0.886)	1.038 (0.000) <sup>a</sup>						0.182(0.016) <sup>b</sup>	611	0.985	1.025
	-2.124 (0.000) <sup>a</sup>	0.012 (0.644)	0.956 (0.000) <sup>a</sup>	0.109(0.058) <sup>c</sup>	-0.077(0.057) <sup>c</sup>	0.532(0.000) <sup>a</sup>	#	0.060 (0.003) <sup>a</sup>	#	305	0.990	0.959
Germany	-2.325 (0.000) <sup>a</sup>	-0.014 (0.554)	1.046 (0.000) <sup>a</sup>	0.058 (0.195)						586	0.987	1.022
	-2.253 (0.000) <sup>a</sup>	-0.014 (0.567)	1.047 (0.000) <sup>a</sup>		0.048 (0.205)					586	0.987	1.020
	-2.714 (0.000) <sup>a</sup>	-0.043 (0.085) <sup>c</sup>	1.043 (0.000) <sup>a</sup>			0.233(0.000) <sup>a</sup>				484	0.988	0.866
	-4.811 (0.000) <sup>a</sup>	-0.020 (0.470)	1.042 (0.000) <sup>a</sup>				0.198(0.000) <sup>a</sup>			586	0.986	0.997
	-1.721 (0.000) <sup>a</sup>	0.023 (0.507)	0.938 (0.000) <sup>a</sup>					0.051 (0.102) <sup>c</sup>		358	0.988	0.974
	-3.818 (0.000) <sup>a</sup>	0.003 (0.929)	1.041 (0.000) <sup>a</sup>						0.132(0.037) <sup>b</sup>	611	0.985	1.017
	-2.705 (0.000) <sup>a</sup>	0.029 (0.296)	0.957 (0.000) <sup>a</sup>	0.239(0.003) <sup>a</sup>	-0.073 (0.256)	-0.053(0.642)	#	0.042 (0.113)	#	341	0.989	0.917
France	-2.027 (0.000) <sup>a</sup>	-0.022 (0.355)	1.046 (0.000) <sup>a</sup>	0.021 (0.564)						586	0.987	1.015
	-2.073 (0.000) <sup>a</sup>	-0.015 (0.520)	1.046 (0.000) <sup>a</sup>		0.022 (0.390)					586	0.987	1.015
	-2.718 (0.000) <sup>a</sup>	-0.049 (0.057) <sup>c</sup>	1.042 (0.000) <sup>a</sup>			0.343(0.000) <sup>a</sup>				484	0.988	0.870
	-5.760 (0.000) <sup>a</sup>	-0.024 (0.383)	1.040 (0.000) <sup>a</sup>				0.290(0.000) <sup>a</sup>			586	0.987	1.000
	-1.276 (0.000) <sup>a</sup>	-0.026 (0.411)	0.960 (0.000) <sup>a</sup>					0.020 (0.485)		324	0.989	0.839
	-4.460 (0.000) <sup>a</sup>	-0.003 (0.911)	1.039 (0.000) <sup>a</sup>						0.206(0.013) <sup>b</sup>	611	0.985	1.021
	-3.182 (0.000) <sup>a</sup>	-0.004 (0.873)	0.979 (0.000) <sup>a</sup>	0.091 (0.494)	-0.005 (0.958)	0.307(0.036) <sup>a</sup>	#	0.021 (0.372)	#	324	0.989	0.870
Italy	-1.673 (0.000) <sup>a</sup>	-0.036 (0.138)	1.040 (0.000) <sup>a</sup>	-0.043 (0.190)						586	0.987	1.016
	-1.677 (0.000) <sup>a</sup>	-0.042 (0.067)	1.040 (0.000) <sup>a</sup>		-0.030 (0.235)					586	0.987	1.015
	-1.957 (0.000) <sup>a</sup>	-0.040 (0.101)	1.061 (0.000) <sup>a</sup>			0.114(0.011) <sup>b</sup>				459	0.988	0.884
	-3.340 (0.000) <sup>a</sup>	0.013 (0.636)	1.047 (0.000) <sup>a</sup>				0.084(0.050) <sup>a</sup>			586	0.986	0.969
	-2.897 (0.000) <sup>a</sup>	0.032 (0.309)	1.047 (0.000) <sup>a</sup>					n.a.	0.042 (0.394)	611	0.984	1.004
	-1.992 (0.000) <sup>a</sup>	-0.022 (0.354)	1.055 (0.000) <sup>a</sup>	-0.107 (0.161)	0.102 (0.116)	0.118 (0.188)	#	n.a.	#	459	0.988	0.888
	-2.128 (0.000) <sup>a</sup>	-0.018 (0.489)	1.048 (0.000) <sup>a</sup>	0.022 (0.177)						586	0.987	1.016
Japan	-2.196 (0.000) <sup>a</sup>	-0.014 (0.602)	1.050 (0.000) <sup>a</sup>		0.026(0.030) <sup>b</sup>					586	0.987	1.019
	-4.427 (0.000) <sup>a</sup>	-0.010 (0.725)	1.062 (0.000) <sup>a</sup>			0.553(0.024) <sup>b</sup>				467	0.988	0.852
	-12.00 (0.000) <sup>a</sup>	0.008 (0.729)	1.048 (0.000) <sup>a</sup>				0.611(0.006) <sup>a</sup>			586	0.986	0.974

	-1.134 (0.008) <sup>a</sup>	-0.028 (0.572)	0.953 (0.000) <sup>a</sup>					0.006 (0.843)		324	0.989	0.982
	-7.778 (0.046) <sup>b</sup>	0.024 (0.360)	1.046 (0.000) <sup>a</sup>						0.369 (0.183)	611	0.985	1.007
	-6.252 (0.000) <sup>a</sup>	-0.006 (0.891)	1.002 (0.000) <sup>a</sup>	0.077 (0.465)	0.030 (0.743)	0.780(0.002) <sup>b</sup>	#	-0.002 (0.930)	#	307	0.989	0.878
UK	-2.054 (0.000) <sup>a</sup>	-0.022 (0.392)	1.047 (0.000) <sup>a</sup>	0.025 (0.339)						586	0.987	1.016
	-2.163 (0.000) <sup>a</sup>	-0.015 (0.560)	1.053 (0.000) <sup>a</sup>		0.035(0.088) <sup>c</sup>					586	0.987	1.019
	-5.356 (0.000) <sup>a</sup>	-0.029 (0.162)	1.050 (0.000) <sup>a</sup>			0.829(0.000) <sup>a</sup>				484	0.988	0.866
	-11.79 (0.000) <sup>a</sup>	-0.009 (0.703)	1.048 (0.000) <sup>a</sup>				0.714(0.000) <sup>a</sup>			586	0.987	0.997
	-1.979 (0.000) <sup>a</sup>	0.046 (0.118)	0.924 (0.000) <sup>a</sup>					0.087 (0.000) <sup>a</sup>		358	0.989	1.006
	-8.667 (0.000) <sup>a</sup>	0.004 (0.877)	1.044 (0.000) <sup>a</sup>						0.547(0.003) <sup>a</sup>	611	0.985	1.020
	-5.853 (0.000) <sup>a</sup>	0.056 (0.063) <sup>c</sup>	0.981 (0.000) <sup>a</sup>	-0.108 (0.231)	0.182(0.004) <sup>a</sup>	0.717(0.000) <sup>a</sup>	#	0.073(0.004) <sup>a</sup>	#	341	0.989	0.912
US	-1.965 (0.000) <sup>a</sup>	-0.026 (0.358)	1.044 (0.000) <sup>a</sup>	0.011 (0.668)						586	0.987	1.014
	-1.731 (0.000) <sup>a</sup>	-0.033 (0.220)	1.040 (0.000) <sup>a</sup>		-0.024 (0.371)					586	0.987	1.017
	-2.511 (0.000) <sup>a</sup>	-0.042 (0.112)	1.041 (0.000) <sup>a</sup>			0.190(0.000) <sup>a</sup>				484	0.988	0.864
	-4.422 (0.000) <sup>a</sup>	-0.023 (0.411)	1.039 (0.000) <sup>a</sup>				0.169(0.000) <sup>a</sup>			586	0.986	0.997
	-1.780 (0.000) <sup>a</sup>	0.015 (0.622)	0.923 (0.000) <sup>a</sup>					0.074 (0.007) <sup>a</sup>		358	0.988	0.985
	-3.646 (0.000) <sup>a</sup>	0.000 (0.998)	1.039 (0.000) <sup>a</sup>						0.113(0.038) <sup>b</sup>	611	0.985	1.019
	-2.790 (0.000) <sup>a</sup>	0.002 (0.929)	0.934 (0.000) <sup>a</sup>	0.067 (0.413)	-0.007 (0.915)	0.171(0.027) <sup>b</sup>	#	0.068 (0.016) <sup>b</sup>	#	341	0.989	0.868

Each of our sample countries is paired with each industrialized trading partner country listed in the first column. Hence, all spillover pools are the relevant bilateral measures for each sample country. For example,  $A_{i,t}^{f,m}$ , in the row Canada, is the total import ratio weighted knowledge spillover pool relevant for each of our sample countries, originating from Canada. Since each sample country trades differently, the relevant spillover pool differs across countries. Estimates are bilateral spillover parameters from each of these industrialized countries. Six spillover pools pertain to the six conduits discussed in the paper. In the last row of each country, we pool all bilateral foreign knowledge spillover pools (FKSPs) together. Numbers within parentheses are P-values. Superscripts ‘a’, ‘b’ and ‘c’ respectively denote significance at 1%, 5% and 10%. OBS = total data points;  $\bar{R}^2$  is the goodness of fit statistic; DW is the Durbin-Watson statistic. Please refer to footnotes 17 and 19 as well as the associated text in the main body of the paper regarding  $\bar{R}^2$  and DW statistics. # Spillover pools based on geographical proximity and disembodied channels each show singularity problem hence could not be pooled for joint estimation.

**Table A6: Bilateral International Knowledge Spillovers from Individual G7 Countries to Emerging Countries in the Panel  
(Fixed Effects Results)**

$$\ln A_{d,i,t}^{\bullet} = \alpha_i + \varphi_t + \lambda \ln L_{A,i,t} + \phi \ln A_{d,i,t} + \beta \ln A_{i,t-1}^{f,\omega} + e_{i,t}$$

Patents filed at the USPTO

	C	$L_{A,i,t}$	$A_{d,i,t}$	$A_{i,t}^{f,m}$	$A_{i,t}^{f,mm}$	$A_{i,t}^{f,FDI}$	$A_{i,t}^{G-prox}$	$A_{i,t}^{f,sci}$	$A_{i,t}^{f,uw}$	OBS	$\bar{R}^2$	DW
Canada	-1.153 (0.002) <sup>a</sup>	0.452 (0.000) <sup>a</sup>	1.013 (0.000) <sup>a</sup>	0.048 (0.250)						688	0.964	1.357
	-0.999 (0.002) <sup>a</sup>	0.442 (0.000) <sup>a</sup>	1.014 (0.000) <sup>a</sup>		0.017 (0.588)					688	0.964	1.353
	-0.771 (0.046) <sup>b</sup>	0.398 (0.000) <sup>a</sup>	0.997 (0.000) <sup>a</sup>			0.323(0.000) <sup>a</sup>				534	0.968	1.279
	-3.790 (0.000) <sup>a</sup>	0.440 (0.000) <sup>a</sup>	1.008 (0.000) <sup>a</sup>				0.238(0.000) <sup>a</sup>			688	0.964	1.350
	1.768 (0.000) <sup>a</sup>	0.225 (0.000) <sup>a</sup>	0.941 (0.000) <sup>a</sup>					-0.147(0.000) <sup>a</sup>		380	0.967	1.249
	-3.450 (0.000) <sup>a</sup>	0.427 (0.000) <sup>a</sup>	1.006 (0.000) <sup>a</sup>						0.250 (0.000) <sup>a</sup>	711	0.963	1.376
0.879 (0.110)	0.280 (0.000) <sup>a</sup>	0.932 (0.000) <sup>a</sup>	0.153 (0.217)	0.005 (0.959)	0.358(0.001) <sup>a</sup>	#	-0.209 (0.000) <sup>a</sup>	#	332	0.968	1.290	
Germany	-1.731 (0.000) <sup>a</sup>	0.469 (0.000) <sup>a</sup>	0.998 (0.000) <sup>a</sup>	0.122(0.015) <sup>b</sup>						688	0.964	1.364
	-1.579 (0.000) <sup>a</sup>	0.470 (0.000) <sup>a</sup>	1.002 (0.000) <sup>a</sup>		0.099(0.028) <sup>b</sup>					688	0.964	1.362
	-1.954 (0.000) <sup>a</sup>	0.418 (0.000) <sup>a</sup>	1.007 (0.000) <sup>a</sup>			0.400(0.000) <sup>a</sup>				583	0.966	1.254
	-5.247 (0.000) <sup>a</sup>	0.459 (0.000) <sup>a</sup>	1.020 (0.000) <sup>a</sup>				0.309(0.000) <sup>a</sup>			688	0.963	1.337
	0.255 (0.597)	0.295 (0.000) <sup>a</sup>	0.903 (0.000) <sup>a</sup>					0.094 (0.013) <sup>b</sup>		400	0.965	1.269
	-4.834 (0.000) <sup>a</sup>	0.443 (0.000) <sup>a</sup>	1.017 (0.000) <sup>a</sup>						0.334(0.000) <sup>a</sup>	711	0.963	1.363
-1.694 (0.000) <sup>a</sup>	0.451 (0.000) <sup>a</sup>	0.888 (0.000) <sup>a</sup>	0.118 (0.510)	0.235 (0.132)	-0.224 (0.229)	#	0.002 (0.953)	#	371	0.964	1.197	
France	-1.493 (0.000) <sup>a</sup>	0.468 (0.000) <sup>a</sup>	0.999 (0.000) <sup>a</sup>	0.108(0.004) <sup>a</sup>						688	0.964	1.373
	-1.362 (0.000) <sup>a</sup>	0.471 (0.000) <sup>a</sup>	1.001 (0.000) <sup>a</sup>		0.067(0.035) <sup>b</sup>					688	0.964	1.366
	-1.588 (0.000) <sup>a</sup>	0.413 (0.000) <sup>a</sup>	1.007 (0.000) <sup>a</sup>			0.450(0.000) <sup>a</sup>				583	0.966	1.257
	-5.310 (0.000) <sup>a</sup>	0.456 (0.000) <sup>a</sup>	1.022 (0.000) <sup>a</sup>				0.343(0.000) <sup>a</sup>			688	0.963	1.337
	0.667 (0.259)	0.276 (0.000) <sup>a</sup>	0.928 (0.000) <sup>a</sup>					0.045 (0.285)		360	0.965	1.157
	-4.848 (0.000) <sup>a</sup>	0.440 (0.000) <sup>a</sup>	1.019 (0.000) <sup>a</sup>						0.369 (0.000) <sup>a</sup>	711	0.963	1.363
-1.785 (0.001) <sup>a</sup>	0.400 (0.000) <sup>a</sup>	0.886 (0.000) <sup>a</sup>	0.209 (0.107)	0.069 (0.522)	0.228 (0.346)	#	-0.042 (0.339)	#	352	0.965	1.204	
Italy	-1.371 (0.000) <sup>a</sup>	0.465 (0.000) <sup>a</sup>	1.006 (0.000) <sup>a</sup>	0.085(0.031) <sup>c</sup>						688	0.964	1.365
	-1.364 (0.000) <sup>a</sup>	0.474 (0.000) <sup>a</sup>	1.010 (0.000) <sup>a</sup>		0.066 (0.068) <sup>c</sup>					688	0.964	1.360
	-0.665 (0.163)	0.410 (0.000) <sup>a</sup>	1.031 (0.000) <sup>a</sup>			0.402(0.005) <sup>a</sup>				555	0.967	1.293
	-5.408 (0.000) <sup>a</sup>	0.456 (0.000) <sup>a</sup>	1.022 (0.000) <sup>a</sup>				0.373(0.000) <sup>a</sup>			688	0.963	1.336
	-4.870 (0.000) <sup>a</sup>	0.440 (0.000) <sup>a</sup>	1.020 (0.000) <sup>a</sup>					n.a.	0.403 (0.000) <sup>a</sup>	711	0.963	1.362
-1.734 (0.000) <sup>a</sup>	0.494 (0.000) <sup>a</sup>	1.029 (0.000) <sup>a</sup>	0.085 (0.283)	0.097 (0.186)	-0.147 (0.318)	#	n.a.	#	555	0.968	1.352	
Japan	-0.856 (0.032) <sup>b</sup>	0.430 (0.000) <sup>a</sup>	1.011 (0.000) <sup>a</sup>	-0.008 (0.777)						688	0.964	1.351
	-0.821 (0.049) <sup>b</sup>	0.427 (0.000) <sup>a</sup>	1.011 (0.000) <sup>a</sup>		-0.010 (0.677)					688	0.964	1.351



	-1.109 (0.003) <sup>a</sup>	0.377 (0.000) <sup>a</sup>	0.996 (0.000) <sup>a</sup>			0.399(0.000) <sup>a</sup>				562	0.967	1.293
	-4.921 (0.000) <sup>a</sup>	0.439 (0.000) <sup>a</sup>	1.010 (0.000) <sup>a</sup>				0.284(0.000) <sup>a</sup>			688	0.964	1.349
	1.275 (0.002) <sup>a</sup>	0.221 (0.000) <sup>a</sup>	0.920 (0.000) <sup>a</sup>					0.012 (0.720)		360	0.967	1.267
	-4.590 (0.000) <sup>a</sup>	0.426 (0.000) <sup>a</sup>	1.008 (0.000) <sup>a</sup>						0.298 (0.000) <sup>a</sup>	711	0.963	1.375
	-1.023 (0.022) <sup>b</sup>	0.256 (0.003) <sup>a</sup>	0.915 (0.000) <sup>a</sup>	0.043 (0.623)	-0.004 (0.969)	0.682(0.006) <sup>a</sup>	#	-0.018 (0.646)	#	333	0.964	1.165
UK	-1.171 (0.000) <sup>a</sup>	0.445 (0.000) <sup>a</sup>	1.011 (0.000) <sup>a</sup>	0.065(0.025) <sup>b</sup>						688	0.964	1.355
	-1.040 (0.002) <sup>a</sup>	0.444 (0.000) <sup>a</sup>	1.013 (0.000) <sup>a</sup>		0.023 (0.409)					688	0.964	1.351
	-1.867 (0.000) <sup>a</sup>	0.414 (0.000) <sup>a</sup>	1.005 (0.000) <sup>a</sup>			0.419(0.000) <sup>a</sup>				583	0.966	1.259
	-5.152 (0.000) <sup>a</sup>	0.454 (0.000) <sup>a</sup>	1.017 (0.000) <sup>a</sup>				0.329(0.000) <sup>a</sup>			688	0.963	1.341
	0.555 (0.238)	0.276 (0.000) <sup>a</sup>	0.900 (0.000) <sup>a</sup>					0.065 (0.154)		400	0.965	1.251
	-4.686 (0.000) <sup>a</sup>	0.439 (0.000) <sup>a</sup>	1.016 (0.000) <sup>a</sup>						0.352 (0.000) <sup>a</sup>	711	0.963	1.366
	-2.500 (0.000) <sup>a</sup>	0.457 (0.000) <sup>a</sup>	0.901 (0.000) <sup>a</sup>	0.186(0.078) <sup>c</sup>	0.106 (0.135)	0.212 (0.168)	#	0.020 (0.692)	#	371	0.964	1.185
US	-1.060 (0.005) <sup>a</sup>	0.436 (0.000) <sup>a</sup>	1.011 (0.000) <sup>a</sup>	0.026 (0.579)						688	0.964	1.352
	-0.947 (0.020) <sup>b</sup>	0.436 (0.000) <sup>a</sup>	1.012 (0.000) <sup>a</sup>		0.003 (0.950)					688	0.964	1.350
	-1.962 (0.000) <sup>a</sup>	0.392 (0.000) <sup>a</sup>	0.992 (0.000) <sup>a</sup>			0.351(0.000) <sup>a</sup>				583	0.967	1.277
	-5.116 (0.000) <sup>a</sup>	0.438 (0.000) <sup>a</sup>	1.005 (0.000) <sup>a</sup>				0.278(0.000) <sup>a</sup>			688	0.964	1.354
	0.641 (0.111)	0.258 (0.000) <sup>a</sup>	0.918 (0.000) <sup>a</sup>					0.043 (0.195)		400	0.965	1.243
	-4.770 (0.000) <sup>a</sup>	0.425 (0.000) <sup>a</sup>	1.004 (0.000) <sup>a</sup>						0.289 (0.000) <sup>a</sup>	711	0.963	1.380
	-2.319 (0.000) <sup>a</sup>	0.352 (0.000) <sup>a</sup>	0.864 (0.000) <sup>a</sup>	-0.004 (0.936)	0.229(0.000) <sup>a</sup>	0.214(0.035) <sup>b</sup>	#	0.066 (0.060) <sup>c</sup>	#	371	0.964	1.214

Please refer to notes to Table A5.

Table A7: Knowledge Spillovers from Emerging Country Groups (E7 and E2) to Individual Emerging Countries in the Panel (Fixed Effects Results)										
$\ln \dot{A}_{d,i,t} = \alpha_i + \varphi_t + \lambda \ln L_{A,i,t} + \phi \ln A_{d,i,t} + \theta \ln A_{i,t-1}^{f,\omega_2} + e_{i,t}$										
Panel A: Domestically filed patents										
	C	$L_{A,i,t}$	$A_{d,i,t}$	$A_{i,t}^{f,sm}$	$A_{i,t}^{f,mm}$	$A_{i,t}^{G-prox}$	$A_{i,t}^{f,uw}$	OBS	$\bar{R}^2$	DW
E2	-1.947 <sup>a</sup> (0.000)	-0.008 (0.800)	1.034 <sup>a</sup> (0.000)	-0.017 (0.510)				611	0.985	1.055
	-2.007 <sup>a</sup> (0.000)	-0.010 (0.741)	1.039 <sup>a</sup> (0.000)		-0.007 (0.774)			611	0.985	1.052
	-1.082 (0.250)	-0.009 (0.743)	1.036 <sup>a</sup> (0.000)			-0.069 (0.276)		611	0.985	1.053
	-1.651 <sup>a</sup> (0.003)	-0.050 (0.329)	1.040 <sup>a</sup> (0.000)				-0.027 (0.567)	586	0.987	1.015
	-0.910 (0.497)	-0.050 (0.326)	1.040 <sup>a</sup> (0.000)	-0.014 (0.535)	0.024 (0.221)	-0.055 (0.426)	-0.029 (0.538)	586	0.987	1.018
E7	-2.117 <sup>a</sup> (0.000)	-0.019 (0.408)	1.045 <sup>a</sup> (0.000)	0.026 (0.222)				611	0.985	1.056
	-2.035 <sup>a</sup> (0.000)	-0.015 (0.543)	1.043 <sup>a</sup> (0.000)		0.011 (0.523)			611	0.985	1.052
	-2.429 <sup>b</sup> (0.017)	-0.008 (0.780)	1.043 <sup>a</sup> (0.000)			0.025 (0.649)		611	0.985	1.052
	-1.649 <sup>a</sup> (0.004)	-0.050 (0.329)	1.040 <sup>a</sup> (0.000)				-0.026 (0.567)	586	0.987	1.015
	-1.192 (0.160)	-0.051 (0.292)	1.041 <sup>a</sup> (0.000)	0.021 (0.450)	-0.012 (0.628)	-0.036 (0.493)	-0.024 (0.583)	586	0.987	1.016
Panel B: Patents filed at the USPTO										
E2	-0.880 <sup>b</sup> (0.013)	-0.081 <sup>b</sup> (0.033)	1.011 <sup>a</sup> (0.000)	-0.068 <sup>a</sup> (0.001)				689	0.964	1.365
	-0.928 <sup>a</sup> (0.008)	-0.085 <sup>b</sup> (0.026)	1.019 <sup>a</sup> (0.000)		-0.039 (0.112)			688	0.964	1.352
	-3.857 <sup>b</sup> (0.036)	-0.078 <sup>b</sup> (0.037)	1.013 <sup>a</sup> (0.000)			0.293 (0.144)		689	0.964	1.352
	-2.616 <sup>b</sup> (0.030)	0.101 (0.420)	1.013 <sup>a</sup> (0.000)				0.211 <sup>c</sup> (0.095)	688	0.964	1.352
	-6.141 <sup>a</sup> (0.003)	0.102 (0.424)	1.013 <sup>a</sup> (0.000)	-0.073 <sup>b</sup> (0.041)	0.005 (0.894)	0.350 (0.130)	0.218 <sup>c</sup> (0.082)	687	0.964	1.365
E7	-0.929 <sup>a</sup> (0.006)	-0.074 <sup>b</sup> (0.045)	1.011 <sup>a</sup> (0.000)	-0.005 (0.866)				689	0.964	1.351
	-0.973 <sup>a</sup> (0.003)	-0.070 <sup>c</sup> (0.051)	1.011 <sup>a</sup> (0.000)		-0.006 (0.763)			688	0.964	1.346
	-1.659 (0.209)	-0.077 <sup>b</sup> (0.035)	1.014 <sup>a</sup> (0.000)			0.068 (0.558)		689	0.964	1.349
	-2.623 <sup>b</sup> (0.030)	0.101 (0.420)	1.013 <sup>a</sup> (0.000)				0.197 <sup>c</sup> (0.095)	688	0.964	1.352
	-3.846 <sup>b</sup> (0.028)	0.110 (0.375)	1.015 <sup>a</sup> (0.000)	-0.009 (0.846)	-0.008 (0.777)	0.106 (0.343)	0.201 <sup>c</sup> (0.085)	687	0.964	1.347

Please refer to notes of Tables A1 and A5. The groups of emerging seven (E7) and emerging two (E2) are defined in the notes to Table 5 in the paper.

**Table A8: Bilateral Knowledge Spillovers from Individual E7 Countries to Emerging Countries in the Panel (Fixed Effects Results)**

$$\ln A_{d,i,t}^* = \alpha_i + \varphi_t + \lambda \ln L_{A,i,t} + \phi \ln A_{d,i,t} + \theta \ln A_{i,t-1}^{f,\omega_2} + e_{i,t}$$

Domestically Filed Patents

	c	$L_{A,i,t}$	$A_{d,i,t}$	$A_{i,t}^{f,im}$	$A_{i,t}^{f,imm}$	$A_{i,t}^{G-prox}$	$A_{i,t}^{f,uw}$	OBS	$\bar{R}^2$	DW
China	-1.809(0.000) <sup>a</sup>	-0.006 (0.854)	1.015(0.000) <sup>a</sup>	-0.027 (0.326)				580	0.981	1.082
	-1.923(0.000) <sup>a</sup>	-0.011 (0.706)	1.027(0.000) <sup>a</sup>		-0.007 (0.752)			586	0.981	1.071
	-2.551(0.000) <sup>a</sup>	-0.012 (0.678)	1.026(0.000) <sup>a</sup>			0.048(0.003) <sup>a</sup>		588	0.980	1.036
	-2.557(0.000) <sup>a</sup>	-0.029 (0.266)	1.037(0.000) <sup>a</sup>				0.063(0.000) <sup>a</sup>	586	0.987	1.005
	-2.953(0.000) <sup>a</sup>	-0.005 (0.882)	1.007(0.000) <sup>a</sup>	-0.044 (0.187)	0.016 (0.470)	0.092(0.020) <sup>b</sup>	#	580	0.980	1.063
India	-2.133(0.000) <sup>a</sup>	0.004 (0.914)	1.037(0.000) <sup>a</sup>	-0.019 (0.423)				586	0.984	1.055
	-2.011(0.000) <sup>a</sup>	-0.007 (0.821)	1.040(0.000) <sup>a</sup>		0.024 (0.124)			586	0.984	1.055
	-3.045(0.000) <sup>a</sup>	-0.004 (0.899)	1.034(0.000) <sup>a</sup>			0.089(0.009) <sup>a</sup>		586	0.984	1.025
	-3.025(0.000) <sup>a</sup>	-0.026 (0.328)	1.038(0.000) <sup>a</sup>				0.123(0.000) <sup>a</sup>	586	0.987	1.004
	-3.755(0.000) <sup>a</sup>	0.028 (0.455)	1.035(0.000) <sup>a</sup>	-0.077(0.002) <sup>a</sup>	0.047(0.008) <sup>a</sup>	0.135(0.000) <sup>a</sup>	#	586	0.984	1.056
Malaysia	-2.132(0.000) <sup>a</sup>	-0.003 (0.936)	1.045(0.000) <sup>a</sup>	0.005 (0.729)				593	0.985	1.040
	-1.969(0.000) <sup>a</sup>	-0.021 (0.499)	1.052(0.000) <sup>a</sup>		0.030(0.002) <sup>a</sup>			593	0.985	1.038
	-2.684(0.000) <sup>a</sup>	0.034 (0.342)	1.043(0.000) <sup>a</sup>			0.026 (0.304)		593	0.985	1.004
	-2.577(0.000) <sup>a</sup>	0.011 (0.707)	1.047(0.000) <sup>a</sup>				0.044(0.077) <sup>a</sup>	586	0.986	0.971
	-1.944(0.000) <sup>a</sup>	0.011 (0.729)	1.049(0.000) <sup>a</sup>	-0.012 (0.665)	0.035(0.029) <sup>b</sup>	-0.034 (0.279)	#	593	0.985	1.003
Mexico	-2.010(0.000) <sup>a</sup>	-0.014 (0.673)	1.042(0.000) <sup>a</sup>	-0.003 (0.842)				586	0.985	1.057
	-1.636(0.000) <sup>a</sup>	-0.034 (0.203)	1.034(0.000) <sup>a</sup>		0.032(0.023) <sup>b</sup>			564	0.986	1.039
	-4.168(0.031) <sup>a</sup>	0.050 (0.048) <sup>b</sup>	1.057(0.000) <sup>a</sup>			0.151 (0.445)		586	0.985	1.015
	-2.747(0.065) <sup>a</sup>	0.055 (0.029) <sup>b</sup>	1.061(0.000) <sup>a</sup>				-0.005(0.980) <sup>a</sup>	586	0.986	0.957
	-4.511(0.025) <sup>a</sup>	0.003 (0.921)	1.037(0.000) <sup>a</sup>	-0.032 (0.293)	0.051(0.001) <sup>a</sup>	0.258 (0.217)	#	564	0.986	1.027
Russia	-2.069(0.000) <sup>a</sup>	-0.017 (0.523)	1.014(0.000) <sup>a</sup>	0.066(0.004) <sup>a</sup>				540	0.983	1.095
	-2.005(0.000) <sup>a</sup>	0.011 (0.696)	1.009(0.000) <sup>a</sup>		0.017 (0.235)			540	0.983	1.074
	-2.101(0.265) <sup>a</sup>	0.064 (0.038) <sup>b</sup>	1.032(0.000) <sup>a</sup>			-0.036 (0.763)		540	0.982	1.034
	0.808(0.402) <sup>a</sup>	0.027 (0.331)	1.025(0.000) <sup>a</sup>				-0.252 (0.001) <sup>a</sup>	536	0.986	0.970
	@	0.143 (0.000) <sup>a</sup>	0.888(0.000) <sup>a</sup>	0.011 (0.456)	0.012 (0.258)	-0.167(0.000) <sup>a</sup>	#	540	0.954	0.412
Thailand	-2.265(0.000) <sup>a</sup>	0.014 (0.675)	1.036(0.000) <sup>a</sup>	-0.029 (0.183)				586	0.986	1.080
	-2.289(0.000) <sup>a</sup>	0.007 (0.823)	1.053(0.000) <sup>a</sup>		-0.001 (0.953)			586	0.986	1.070
	-2.779(0.000) <sup>a</sup>	0.020 (0.529)	1.056(0.000) <sup>a</sup>			0.038 (0.070) <sup>c</sup>		586	0.985	1.024
	-2.414(0.000) <sup>a</sup>	-0.017 (0.517)	1.042(0.000) <sup>a</sup>				0.060 (0.000) <sup>a</sup>	586	0.986	0.996
	-3.056(0.000) <sup>a</sup>	0.025 (0.469)	1.049(0.000) <sup>a</sup>	-0.016 (0.513)	0.002 (0.914)	0.068 (0.070) <sup>c</sup>	#	586	0.985	1.027
Turkey	-1.722(0.000) <sup>a</sup>	-0.023 (0.477)	1.008(0.000) <sup>a</sup>	-0.042 (0.166)				586	0.986	1.088
	-1.803(0.000) <sup>a</sup>	-0.024 (0.433)	1.024(0.000) <sup>a</sup>		-0.005 (0.652)			586	0.985	1.071
	-2.405(0.000) <sup>a</sup>	-0.027 (0.288)	1.020(0.000) <sup>a</sup>			0.071 (0.000) <sup>a</sup>		586	0.985	1.056
	-2.539(0.000) <sup>a</sup>	-0.022 (0.359)	1.039(0.000) <sup>a</sup>				0.085 (0.000) <sup>a</sup>	586	0.987	1.006
	-2.999(0.000) <sup>a</sup>	-0.024 (0.428)	0.999(0.000) <sup>a</sup>	-0.056 (0.188)	0.007 (0.681)	0.141 (0.000) <sup>a</sup>	#	586	0.985	1.081

Each of our 30 sample countries is paired with each of the emerging trading partner countries listed in the first column. Hence, all spillover pools are the relevant bilateral measures for each sample country. For example,

$A_{i,t}^{f,im}$ , in the row China, is the total import ratio weighted knowledge spillover pool relevant for each of our sample countries, originating from China. Each estimation, reported in each row, contains only 30 of the 31 countries because the trading partner (listed in the first column) becomes the source of spillover. Since each sample country trades differently, the relevant spillover pool differs across countries. Estimates are the bilateral spillover parameters from each of these selected emerging countries. Four spillover pools pertain to the four conduits discussed in the paper. In the last row, we pool all four spillover pools together. Numbers within parentheses are P-values. Please refer to notes of Tables A1 and A5 for further details. # Disembodied knowledge spillover pools could not be jointly estimated due to data singularity. @ the overall constant term is dropped in the estimation.

**Table A9: Bilateral Knowledge Spillovers from Individual E7 Countries to Emerging Countries in the Panel (Fixed Effects Results)**

$$\ln A_{d,i,t} = \alpha_i + \varphi_t + \lambda \ln L_{A,i,t} + \phi \ln A_{d,i,t} + \theta \ln A_{i,t-1}^{\omega_2} + e_{i,t}$$

Patents Filed at the USPTO

	c	$L_{A,i,t}$	$A_{d,i,t}$	$A_{i,t}^{f,im}$	$A_{i,t}^{f,imm}$	$A_{i,t}^{G-prox}$	$A_{i,t}^{f,uw}$	OBS	$\bar{R}^2$	DW
China	-0.704(0.072) <sup>a</sup>	0.405(0.000) <sup>a</sup>	0.994(0.000) <sup>a</sup>	-0.076 (0.001)				656	0.957	1.388
	-0.846(0.022) <sup>a</sup>	0.417(0.000) <sup>a</sup>	1.007(0.000) <sup>a</sup>		-0.037(0.123)			661	0.958	1.363
	-1.692(0.000) <sup>a</sup>	0.463(0.000) <sup>a</sup>	1.026(0.000) <sup>a</sup>			0.051(0.007) <sup>a</sup>		664	0.957	1.339
	-1.642(0.000) <sup>a</sup>	0.472(0.000) <sup>a</sup>	1.036(0.000) <sup>a</sup>				0.047 (0.006) <sup>a</sup>	688	0.963	1.324
	-2.071(0.000) <sup>a</sup>	0.457(0.000) <sup>a</sup>	0.998(0.000) <sup>a</sup>	-0.177(0.000) <sup>a</sup>	0.119(0.002) <sup>a</sup>	0.110(0.011) <sup>b</sup>	#	655	0.957	1.373
India	-0.970(0.010) <sup>a</sup>	0.434(0.000) <sup>a</sup>	1.035(0.000) <sup>a</sup>	-0.017 (0.551)				661	0.959	1.351
	-0.950(0.005) <sup>a</sup>	0.432(0.000) <sup>a</sup>	1.036(0.000) <sup>a</sup>		-0.007 (0.711)			660	0.959	1.347
	-1.655(0.000) <sup>a</sup>	0.449(0.000) <sup>a</sup>	1.024(0.000) <sup>a</sup>			0.062(0.000) <sup>a</sup>		661	0.959	1.350
	-1.527(0.000) <sup>a</sup>	0.448(0.000) <sup>a</sup>	1.010(0.000) <sup>a</sup>				0.065 (0.000) <sup>a</sup>	688	0.963	1.346
	-1.472(0.011) <sup>a</sup>	0.444(0.000) <sup>a</sup>	1.025(0.000) <sup>a</sup>	0.020 (0.537)	-0.009 (0.691)	0.047(0.224) <sup>a</sup>	#	660	0.959	1.348
Malaysia	-1.459(0.001) <sup>a</sup>	0.480(0.000) <sup>a</sup>	1.010(0.000) <sup>a</sup>	-0.068 (0.000) <sup>a</sup>				668	0.963	1.379
	-1.616(0.000) <sup>a</sup>	0.496(0.000) <sup>a</sup>	1.019(0.000) <sup>a</sup>		-0.039(0.004) <sup>a</sup>			666	0.963	1.358
	-1.957(0.000) <sup>a</sup>	0.476(0.000) <sup>a</sup>	1.004(0.000) <sup>a</sup>			0.084(0.000) <sup>a</sup>		668	0.963	1.364
	-1.458(0.000) <sup>a</sup>	0.435(0.000) <sup>a</sup>	1.001(0.000) <sup>a</sup>				0.090 (0.000) <sup>a</sup>	688	0.964	1.358
	-2.487(0.000) <sup>a</sup>	0.462(0.000) <sup>a</sup>	0.992(0.000) <sup>a</sup>	-0.097 (0.001) <sup>a</sup>	0.038(0.079) <sup>b</sup>	0.166(0.000) <sup>a</sup>	#	666	0.963	1.390
Mexico	-0.874(0.017) <sup>a</sup>	0.433(0.000) <sup>a</sup>	1.002(0.000) <sup>a</sup>	0.013 (0.552)				661	0.962	1.356
	-0.371(0.289) <sup>a</sup>	0.393(0.000) <sup>a</sup>	0.980(0.000) <sup>a</sup>		0.035(0.011) <sup>b</sup>			635	0.965	1.389
	-3.355(0.000) <sup>a</sup>	0.451(0.000) <sup>a</sup>	1.008(0.000) <sup>a</sup>			0.274(0.000) <sup>a</sup>		661	0.962	1.349
	-2.847(0.000) <sup>a</sup>	0.448(0.000) <sup>a</sup>	1.011(0.000) <sup>a</sup>				0.267 (0.000) <sup>a</sup>	668	0.963	1.347
	-2.620(0.002) <sup>a</sup>	0.414(0.000) <sup>a</sup>	0.998(0.000) <sup>a</sup>	-0.036 (0.170)	0.047(0.001) <sup>a</sup>	0.240(0.015) <sup>b</sup>	#	635	0.965	1.397
Russia	-0.536(0.164) <sup>a</sup>	0.393(0.000) <sup>a</sup>	1.013(0.000) <sup>a</sup>	0.003 (0.930)				609	0.962	1.359
	-0.526(0.146) <sup>a</sup>	0.393(0.000) <sup>a</sup>	1.010(0.000) <sup>a</sup>		0.004 (0.812)			607	0.962	1.360
	-2.683(0.000) <sup>a</sup>	0.394(0.000) <sup>a</sup>	1.013(0.000) <sup>a</sup>			0.224(0.000) <sup>a</sup>		609	0.962	1.359
	-2.175(0.000) <sup>a</sup>	0.404(0.000) <sup>a</sup>	1.016(0.000) <sup>a</sup>				0.207 (0.000) <sup>a</sup>	630	0.965	1.352
	-2.644(0.004) <sup>a</sup>	0.394(0.000) <sup>a</sup>	1.011(0.000) <sup>a</sup>	0.005 (0.856)	0.001 (0.978)	0.219(0.020) <sup>b</sup>	#	607	0.962	1.361
Thailand	-1.143(0.001) <sup>a</sup>	0.443(0.000) <sup>a</sup>	1.005(0.000) <sup>a</sup>	-0.041 (0.086) <sup>c</sup>				661	0.964	1.374
	-1.164(0.001) <sup>a</sup>	0.438(0.000) <sup>a</sup>	1.000(0.000) <sup>a</sup>		-0.046(0.017) <sup>b</sup>			657	0.964	1.377
	-1.868(0.000) <sup>a</sup>	0.452(0.000) <sup>a</sup>	1.007(0.000) <sup>a</sup>			0.114(0.000) <sup>a</sup>		661	0.964	1.364
	-1.570(0.000) <sup>a</sup>	0.443(0.000) <sup>a</sup>	1.007(0.000) <sup>a</sup>				0.111 (0.000) <sup>a</sup>	688	0.964	1.359
	-2.608(0.000) <sup>a</sup>	0.450(0.000) <sup>a</sup>	0.996(0.000) <sup>a</sup>	-0.015 (0.584)	-0.019 (0.332)	0.206(0.001) <sup>a</sup>	#	657	0.964	1.376
Turkey	-0.585(0.107) <sup>a</sup>	0.393(0.000) <sup>a</sup>	1.011(0.000) <sup>a</sup>	-0.013 (0.568)				661	0.965	1.408
	-0.501(0.150) <sup>a</sup>	0.398(0.000) <sup>a</sup>	1.011(0.000) <sup>a</sup>		0.015 (0.190)			660	0.965	1.400
	-1.354(0.000) <sup>a</sup>	0.419(0.000) <sup>a</sup>	1.021(0.000) <sup>a</sup>			0.085(0.000) <sup>a</sup>		661	0.965	1.398
	-1.674(0.000) <sup>a</sup>	0.477(0.000) <sup>a</sup>	1.031(0.000) <sup>a</sup>				0.075 (0.001) <sup>a</sup>	668	0.963	1.326
	-1.049(0.004) <sup>a</sup>	0.381(0.000) <sup>a</sup>	1.011(0.000) <sup>a</sup>	-0.066 (0.026) <sup>b</sup>	0.050(0.000) <sup>a</sup>	0.098(0.013) <sup>b</sup>	#	660	0.965	1.415

Please refer to notes to Table A8.

**Table A10: Knowledge Spillovers within Countries of each Regional Cluster (Fixed Effects Results)**

$$\ln \dot{A}_{d,i,t} = \alpha_i + \varphi_t + \lambda \ln L_{A,i,t} + \phi \ln A_{d,i,t} + \theta \ln A_{eme,i,t-1}^{f,\omega_2} + e_{i,t}$$

Panel A: Domestic filings

	c	$L_{A,i,t}$	$A_{d,i,t}$	$A_{i,t}^{f,sm}$	$A_{i,t}^{f,mm}$	$A_{i,t}^{f,uw}$	OBS	$\bar{R}^2$	DW
ARAB	-0.737 (0.827)	-0.237 (0.413)	1.290(0.000) <sup>a</sup>	-0.449 (0.058) <sup>c</sup>			59	0.976	1.593
	-5.256 (0.000) <sup>a</sup>	0.226 (0.168)	1.312(0.000) <sup>a</sup>		0.221 (0.000) <sup>a</sup>		59	0.986	2.141
	-3.230 (0.000) <sup>a</sup>	0.157 (0.139)	1.385(0.000) <sup>a</sup>			-0.305(0.000) <sup>a</sup>	59	0.978	1.359
	-2.115 (0.007) <sup>a</sup>	0.141 (0.451)	1.372(0.000) <sup>a</sup>	0.043 (0.823)	0.032 (0.094) <sup>c</sup>	-0.411 (0.171)	59	0.980	1.389
ASIA	-0.784 (0.336)	0.737(0.000) <sup>a</sup>	0.966(0.000) <sup>a</sup>	0.000 (1.000)			126	0.993	1.574
	-0.730 (0.331)	0.736(0.000) <sup>a</sup>	0.970(0.000) <sup>a</sup>		-0.012 (0.677)		126	0.993	1.573
	-1.743 (0.003) <sup>a</sup>	0.763(0.000) <sup>a</sup>	1.025(0.000) <sup>a</sup>			0.061(0.085) <sup>c</sup>	126	0.994	1.607
	-1.540 (0.030) <sup>a</sup>	0.764(0.000) <sup>a</sup>	1.017(0.000) <sup>a</sup>	0.019 (0.806)	0.002 (0.962)	0.034 (0.612)	126	0.993	1.614
EE	0.790 (0.406)	0.137(0.062) <sup>c</sup>	0.642(0.000) <sup>a</sup>	0.641 (0.000) <sup>a</sup>			246	0.981	0.916
	3.942 (0.000) <sup>a</sup>	0.214(0.038) <sup>b</sup>	0.340(0.000) <sup>a</sup>		0.019 (0.620)		246	0.977	0.772
	6.237 (0.001) <sup>a</sup>	0.298(0.036) <sup>b</sup>	0.332(0.000) <sup>a</sup>			-0.243(0.006) <sup>a</sup>	246	0.974	0.784
	3.427 (0.021) <sup>b</sup>	0.189(0.065) <sup>c</sup>	0.611(0.000) <sup>a</sup>	0.596 (0.000) <sup>a</sup>	0.024 (0.479)	-0.237(0.015) <sup>b</sup>	246	0.978	0.884
LA	-3.497 (0.077) <sup>c</sup>	0.907(0.000) <sup>a</sup>	1.447(0.000) <sup>a</sup>	0.201 (0.008) <sup>a</sup>			138	0.973	1.122
	-2.460 (0.199)	0.830(0.001) <sup>a</sup>	1.386(0.000) <sup>a</sup>		0.131 (0.010) <sup>a</sup>		138	0.973	1.124
	-0.708 (0.648)	0.911(0.000) <sup>a</sup>	1.120(0.000) <sup>a</sup>			-0.235(0.002) <sup>a</sup>	138	0.974	1.105
	0.200 (0.888)	0.943(0.000) <sup>a</sup>	1.456(0.000) <sup>a</sup>	0.399 (0.000) <sup>a</sup>	-0.120 (0.229)	-0.479(0.000) <sup>a</sup>	138	0.976	1.189

Panel B: Patents filed at the USPTO

ARAB	-4.797 (0.020) <sup>b</sup>	0.162(0.406)	1.630(0.000) <sup>a</sup>	0.892 (0.009) <sup>a</sup>			91	0.955	2.047
	-2.201 (0.244)	0.084(0.714)	1.281(0.000) <sup>a</sup>		0.290 (0.017) <sup>b</sup>		91	0.951	2.001
	-4.556 (0.000) <sup>a</sup>	0.268(0.044) <sup>b</sup>	1.296(0.000) <sup>a</sup>			-0.122 (0.351)	91	0.948	1.627
	2.723 (0.092) <sup>c</sup>	0.176 (0.176)	1.480(0.000) <sup>a</sup>	0.394 (0.002) <sup>a</sup>	0.251 (0.000) <sup>a</sup>	-1.120(0.000) <sup>a</sup>	91	0.956	1.923
ASIA	-3.460 (0.000) <sup>a</sup>	0.390(0.000) <sup>a</sup>	3.5E-05(0.004) <sup>a</sup>	0.972 (0.000) <sup>a</sup>			169	0.979	1.208
	-1.113 (0.075) <sup>c</sup>	0.348(0.000) <sup>a</sup>	4.5E-05 (0.002) <sup>a</sup>		0.599 (0.000) <sup>a</sup>		169	0.976	1.029
	-4.781 (0.000) <sup>a</sup>	0.373(0.000) <sup>a</sup>	6.5E-05 (0.000) <sup>a</sup>			0.560(0.000) <sup>a</sup>	169	0.951	0.599
	-0.557 (0.213)	0.375(0.000) <sup>a</sup>	4.4E-05 (0.000) <sup>a</sup>	0.911 (0.000) <sup>a</sup>	-0.021 (0.857)	-0.301(0.003) <sup>a</sup>	169	0.979	1.367
EE	-1.188 (0.481)	0.453(0.008) <sup>a</sup>	-3.8E-04 (0.001) <sup>a</sup>	-0.019 (0.905)			281	0.899	0.868
	-1.690 (0.312)	0.508(0.004) <sup>a</sup>	-0.001(0.000) <sup>a</sup>		-0.137 (0.331)		281	0.900	0.878
	-13.78 (0.000) <sup>a</sup>	0.531(0.001) <sup>a</sup>	-1.8E-05 (0.902)			1.437(0.000) <sup>a</sup>	281	0.879	0.757
	-8.560 (0.000) <sup>a</sup>	0.370(0.019) <sup>a</sup>	6.4E-05 (0.680)	-0.144 (0.431)	0.336 (0.005) <sup>a</sup>	1.009(0.000) <sup>a</sup>	281	0.883	0.778
LA	-2.848 (0.004) <sup>a</sup>	-0.102 (0.519)	1.438(0.000) <sup>a</sup>	0.039 (0.683)			169	0.961	1.766
	-2.795 (0.005) <sup>a</sup>	-0.097 (0.535)	1.424(0.000) <sup>a</sup>		-0.034 (0.650)		169	0.961	1.779
	-0.424 (0.491)	-0.129 (0.345)	1.495(0.000) <sup>a</sup>			-0.330(0.003) <sup>a</sup>	169	0.962	1.750
	-0.539 (0.668)	-0.101 (0.448)	1.504(0.000) <sup>a</sup>	0.131 (0.493)	-0.109 (0.450)	-0.377(0.075) <sup>a</sup>	169	0.962	1.754

Please refer to footnote 14 and the associated text for the definitions of ARAB, ASIA, EE and LA regional group (cluster) of countries. Notes to Tables A1 and A5 provide for further details.