S3 Appendix

First stage regressions for the 2SLS estimations Global model

Table 1: First stage regressions for Table 5

	Dependent variable:			
	Internet users	Broadband users	Mobile phone users	Fixed phone users
	(1)	(2)	(3)	(4)
Female labour force (%)	1.490***	0.696***	-0.280*	-2.040***
, ,	(0.223)	(0.148)	(0.150)	(0.391)
Population density (log)	-598.644	379.944	-1,511.189***	$\hat{7}70.21\hat{9}$
- , , , ,	(499.831)	(292.430)	(402.110)	(522.031)
Government expenditure (% GDP)	0.283	0.759***	-0.291*	$-0.528^{'}$
	(0.287)	(0.164)	(0.172)	(0.587)
Trade (% of GDP)	-0.202***	-0.141****	0.087***	-0.392^{***}
,	(0.038)	(0.021)	(0.030)	(0.073)
Non agriculture value added (% GDP)	-0.450	0.261	-0.045	-0.902**
, ,	(0.280)	(0.200)	(0.141)	(0.381)
GDP growth	-0.442^{***}	-0.269****	0.042	-0.648****
	(0.127)	(0.058)	(0.090)	(0.201)
GDP per capita (log)	10.580***	-4.975***	5.716**	7.812*
	(2.566)	(1.495)	(2.377)	(4.470)
Population (log)	564.464	-456.424	1,528.552***	-759.195
	(500.326)	(292.870)	(404.067)	(524.060)
Constant	-7,950.049	6,596.284	-21,536.980***	10,773.260
	(7,025.000)	(4,113.831)	(5,685.467)	(7,356.142)
Country fixed effects	Yes	Yes	Yes	Yes
Yearly fixed effects	Yes	Yes	Yes	Yes
Observations	844	757	865	867
Adjusted R ²	0.951	0.929	0.951	0.915
Residual Std. Error	189.094	97.068	121.132	371.310

Note:

*p<0.1; **p<0.05; ***p<0.01 Robust Std. Errors in parenthesis

Table 2: F tests for IV (female labour force (%)) from first stage regressions for Table 5

	F	p
internet users	75.726	0
broadband users	57.339	0
mobile phone users	7.066	0.008
fixed telephony users	39.818	0

\mathbf{US} model

Table 3: First stage regressions for Table 8 $\,$

	Dependent variable: % of households w. internet 201	
	(1)	(2)
bachelors degree per hab. 2005	0.007***	0.007***
· -	(0.001)	(0.001)
commute in minutes 2005		0.003
population 2013 (log)	0.002	0.002
F • F • • • • • • • • • • • • • • • • •	(0.003)	(0.003)
% of unemployment 2013	0.004***	0.005***
1 1	(0.001)	(0.001)
% of white population 2013	0.158***	0.162***
	(0.029)	(0.029)
income 2013 (log)	0.211***	0.215***
	(0.024)	(0.024)
population density 2013	-0.001	-0.001
	(0.002)	(0.002)
% of employment in service 2011	0.001*	0.001
	(0.0004)	(0.0004)
commute in minutes 2012	-0.0003	-0.003***
	(0.001)	(0.001)
Constant	-1.765***	-1.801***
	(0.240)	(0.240)
Observations	443	443
Adjusted R^2	0.667	0.670
Residual Std. Error	0.041	0.041

*p<0.1; **p<0.05; ***p<0.01 Robust Std. Error in parenthesis

Table 4: F tests for IVs from first stage regressions for Table 8 $\,$

	F	р
bachelors degree per hab., 2005	129.773	0
the above + commute in minutes, 2005	67.772	0

UK model

Table 5: First stage regressions for Table 11

	$Dependent\ variable:$		
	download speed, 2011 (log)		
	(1)	(2)	
N. of universities	-0.089^{***}	0.029	
	(0.033)	(0.018)	
N. of broadband tests, 2011		-0.0002^{***}	
		(0.00002)	
population, 2011 (log)	0.175^{***}	0.233***	
	(0.011)	(0.013)	
broadband tests per capita, 2011	-0.195	0.083	
	(0.186)	(0.147)	
% of unemployment, 2011	-0.816	-1.025^*	
	(0.553)	(0.548)	
% of British population, 2011	0.213^{*}	-0.120	
	(0.130)	(0.133)	
population density, 2011	0.002^{*}	0.002	
	(0.001)	(0.001)	
% of people working from home, 2011	0.383	0.708**	
	(0.299)	(0.298)	
employment in service, 2011 (%)	0.203	0.158	
	(0.221)	(0.220)	
Constant	6.298***	6.191***	
	(0.267)	(0.263)	
Observations	3,032	3,032	
Adjusted R ²	0.208	0.227	
Residual Std. Error	0.498	0.492	

Note:

*p<0.1; **p<0.05; ***p<0.01 Robust Std. Errors

Table 6: F tests for IVs from first stage regressions for Table 8

	F	p
N. of universities	9.992	0.002
the above $+$ N. of broadband tests, 2011	41.799	0