

# **VENTURE CAPITAL IN EUROPE: SOCIAL CAPITAL, FORMAL INSTITUTIONS AND MEDIATION EFFECTS**

Electronic Supplementary Material

Small Business Economics

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## SECTION A. FACTORISATION OF EXPLANATORY VARIABLES

The key explanatory variables are indexes built from a number of indicators. First, *FI Index* is a composite index proxying the level of structural formal institutional development, and it is generated by factorization from the following six indicators: *Governmental Effectiveness, Rule of Law, Political Stability, Voice and Accountability, Regulatory Quality, Control of Corruption*. Second, *RFI Index* is a composite index capturing the level of development of reformable formal institutions. It is constructed by factorization of the following three indicators: *Employment Protection, Taxation* and *Investors Protection*. Third, *Social Capital* measure is a composite index proxying the level of social capital development, and it is generated by factorization from the following indicators related to the extent of social networks, trust and civic norms: membership in labour unions, political parties or organizations, professional associations, religious organizations, sports, educational, art, music or cultural organizations (creating *Membership Index* proxying the social networks component); the extent to which people can be trusted (*Trust* variable proxying the trust component); voluntary work in labour unions, political parties or organizations, professional associations, religious organizations, sports, educational, art, music or cultural organizations (creating *Voluntary Activity* Index proxying the civic norms component).

In order to generate the indexes, we followed a standard factorization technique based on principal-component factor analysis. Here below, we present the main results for each of the generated factors, comprising the eigenvalues from the scree test (to determine the number of factors to be generated) and loading factors of rotated matrix (to determine how much each of the indicators contributes to the synthesized factor) for each of the factors.

### A.1 Structural formal institutions

Table A1. Scree test for structural formal institutions index (*FI Index*) based on six World Governance Indicators by the World Bank

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor 1	4.97149	4.39919	0.8286	0.8286
Factor 2	0.5723	0.35482	0.0954	0.924
Factor 3	0.21748	0.09032	0.0362	0.9602
Factor 4	0.12716	0.05934	0.0212	0.9814
Factor 5	0.06782	0.02408	0.0113	0.9927
Factor 6	0.04375	.	0.0073	1

Notes: LR test: independent vs. saturated:  $\chi^2(15) = 2234.18$ ,  $\text{Prob} > \chi^2 = 0.0000$ .

**Table A2. Rotated factor loadings (orthogonal varimax, Kaiser off) for structural formal institutions index**

Variable	Factor 1	Uniqueness
Governmental Effectiveness	0.9541	0.0897
Rule of Law	0.9666	0.0656
Political Stability	0.6987	0.5119
Voice and Accountability	0.9425	0.1118
Regulatory Quality	0.9013	0.1877
Control of Corruption	0.9686	0.0618

## A.2 Reformable formal institutions

**Table A3. Scree test for reformable formal institutions index (*RFI Index*) based on Employment Protection, Taxation and Investor Protection measures**

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor 1	1.39444	0.58272	0.4648	0.4648
Factor 2	0.81173	0.0179	0.2706	0.7354
Factor 3	0.79383	.	0.2646	1

Notes: LR test: independent vs. saturated:  $\chi^2(3) = 36.39$ ,  $\text{Prob} > \chi^2 = 0.0000$ .

**Table A4. Rotated factor loadings (orthogonal varimax, Kaiser off) for reformable formal institutions index (*RFI Index*)**

Variable	Factor 1	Uniqueness
<i>Employment Protection</i>	-0.6724	0.5479
<i>Taxation</i>	0.6825	0.5342
<i>Investor Protection</i>	0.6903	0.5235

## A.3 Membership index

**Table A5. Scree test for membership indicators**

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor 1	5.37286	4.76	0.9119	0.9119
Factor 2	0.61286	0.48844	0.104	1.0159
Factor 3	0.12441	0.07206	0.0211	1.037
Factor 4	0.05236	0.06325	0.0089	1.0459
Factor 5	-0.01089	0.03244	-0.0018	1.0441
Factor 6	-0.04333	0.06032	-0.0074	1.0367
Factor 7	-0.10365	0.00907	-0.0176	1.0191
Factor 8	-0.11272	.	-0.0191	1

Notes: LR test: independent vs. saturated:  $\chi^2(28) = 1.3e+06$ ,  $\text{Prob} > \chi^2 = 0.0000$ .

**Table A6. Rotated factor loadings (orthogonal varimax, Kaiser off) for membership index**

Variable	Factor 1	Uniqueness
Membership in religious organization(s)	0.7857	0.3296
Membership in educational organization(s)	0.8852	0.1041
Membership in labour union(s)	0.6353	0.4204
Membership in political partie(s)	0.7196	0.3549
Membership in political organization(s)	0.7699	0.2058
Membership in professional association(s)	0.9431	0.0914
Membership in youth organization(s)	0.8404	0.2332
Membership in sports, educational, art, music or cultural organizations	0.9286	0.0982

## A.4 Voluntary activity index

**Table A7. Scree test for voluntary activity indicators**

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor 1	4.05572	3.51053	0.8941	0.8941
Factor 2	0.5452	0.36871	0.1202	1.0143
Factor 3	0.17649	0.06787	0.0389	1.0532
Factor 4	0.10862	0.06687	0.0239	1.0771
Factor 5	0.04176	0.08449	0.0092	1.0863
Factor 6	-0.04273	0.12813	-0.0094	1.0769
Factor 7	-0.17086	0.0072	-0.0377	1.0393
Factor 8	-0.17806	.	-0.0393	1

Notes: LR test: independent vs. saturated:  $\chi^2(28) = 7.6e+05$ ,  $\text{Prob} > \chi^2 = 0.0000$ .

**Table A8. Rotated factor loadings (orthogonal varimax, Kaiser off) for voluntary activity index**

Variable	Factor 1	Uniqueness
Voluntary activity in religious organization(s)		0.6302
Voluntary activity in educational organization(s)	0.7962	0.3184
Voluntary activity in labour union(s)		0.718
Voluntary activity in political partie(s)	0.5642	0.5069
Voluntary activity in political organization(s)	0.8043	0.3055
Voluntary activity in professional association(s)	0.8904	0.1289
Voluntary activity in youth organization(s)	0.8317	0.2183
Voluntary activity in sports, educational, art, music or cultural organizations	0.8151	0.2461

Notes: Blanks represent  $\text{abs}(\text{loading}) < 0.5$ .

## A.5 Social capital index

**Table A9. Scree test for social capital index based on membership index, trust and voluntary activity index**

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor 1	2.07590	1.96178	1.0125	1.0125
Factor 2	0.11412	0.25389	0.0557	1.0682
Factor 3	-0.13977	.	0.0682	1.0000

Notes: LR test: independent vs. saturated:  $\chi^2(3) = 3.0e+05$ ,  $\text{Prob} > \chi^2 = 0.0000$ .

**Table A10. Rotated factor loadings (orthogonal varimax, Kaiser off) for social capital index**

Variable	Factor 1	Uniqueness
Membership index	0.9410	0.1145
Trust	0.7173	0.4224
Voluntary activity index	0.8222	0.2731

## SECTION B. ROBUSTNESS ANALYSIS AND ADDITIONAL EVIDENCE

### B.1 Robustness analysis

We run several robustness analyses to corroborate the findings. We deploy Structural Equation Modeling (SEM) technique, which should offer a reliable alternative method for estimating mediation effect. SEM allows for relatively easier interpretation and estimation of mediation hypotheses because it can yield results based on longitudinal data in a single step of analysis (MacKinnon 2008). We estimate the full model with social capital, *structural and reformable formal institutions* variables, as well as all controls. The results presented in Table B1 (Models B1a and B1b) are almost completely coherent with the mainline analysis. Social capital's impact on VC activity is fully mediated by *structural formal institutions*, while high taxation levels impact VC activity negatively. In this case, the minority investor protection yields to be not only a positive driver of VC like in the baseline analysis, but also a significant one.

Furthermore, as our primary dependent variable is correlated through time (however note that a Fisher-type test rejects the null hypothesis on the presence of a unit root, i.e. Inverse chi-squared (36) equal to 90.6571), we use a dynamic panel data estimator to additionally corroborate the findings. We opt for system generalized method of moments (GMM-SYS) approach given that some of our independent variables are time-invariant. The results of this additional robustness check, which are presented also in Table B1 (Model B1c), are virtually the same as the results of the main analysis. In this respect, we also verified that the results were not greatly influenced by the inclusion or exclusion of year dummies. Moreover, in order to address the possible problems of endogeneity, we lag all our independent variables and we additionally estimate another specification that excludes two potentially most worrying control variables – GDP growth and inflation. The results are presented in Table B1 (Models B1d and B1e) and fully support the findings of the main analysis.

**Table B1. Determinants of venture capital activity on a country level (unbalanced panel data, 1997-2015): Robustness analyses.**

Model	B1a	B1b	B1c	B1d	B1e
Method	SEM	SEM	GMM-SYS	RE	RE
Dependent variable	FI Index	VC Activity	VC Activity	VC Activity	VC Activity
<i>Social Capital</i>	<b>0.517 ***</b> [0.048] (0.000)	0.001 [0.005] (0.755)	-0.009 [0.007] (0.209)	-0.004 [0.004] (0.317)	-0.007 [0.005] (0.555)
<i>FI Index</i>		<b>0.018 ***</b> [0.005] (0.000)	<b>0.020 **</b> [0.009] (0.034)	<b>0.023 ***</b> [0.006] (0.000)	<b>0.028 ***</b> [0.006] (0.000)
<i>Employment Protection</i>	0.001 [0.000] (0.604)	-0.000 [0.000] (0.593)	-0.000 [0.000] (0.109)	0.000 [0.000] (0.540)	0.000 [0.000] (0.711)
<i>Taxation</i>	<b>0.017 ***</b> [0.004] (0.000)	<b>-0.001 **</b> [0.000] (0.046)	<b>-0.002 **</b> [0.001] (0.045)	<b>-0.001 **</b> [0.000] (0.015)	<b>-0.001 *</b> [0.000] (0.077)
<i>Investor Protection</i>	<b>-0.287 ***</b> [0.071] (0.000)	<b>0.012 *</b> [0.006] (0.064)	0.016 [0.010] (0.119)	0.012 [0.008] (0.183)	0.011 [0.009] (0.320)
<i>IPO Volume</i>	<b>14.449 ***</b> [4.251] (0.001)	<b>0.706 *</b> [0.374] (0.059)	0.076 [0.329] (0.816)	0.621 [0.529] (0.240)	0.457 [0.532] (0.554)
<i>M&amp;A Volume</i>	<b>1.099 *</b> [0.627] (0.080)	<b>0.331 ***</b> [0.000] (0.000)	<b>0.226 ***</b> [0.077] (0.004)	<b>0.309 ***</b> [0.108] (0.004)	<b>0.330 ***</b> [0.110] (0.004)
<i>GDP Growth</i>	<b>0.055 ***</b> [0.013] (0.000)	<b>0.004 ***</b> [0.001] (0.000)	<b>0.002 *</b> [0.001] (0.068)	<b>0.005 ***</b> [0.001] (0.000)	
<i>Inflation</i>	<b>-0.037 **</b> [0.016] (0.024)	0.001 [0.001] (0.415)	0.002 [0.002] (0.369)	-0.001 [0.001] (0.273)	
<i>Technological Opportunity</i>	-0.000 [0.000] (0.909)	<b>-0.000 **</b> [0.000] (0.020)	<b>-0.000 **</b> [0.000] (0.023)	<b>-0.000 *</b> [0.000] (0.068)	<b>-0.000 **</b> [0.000] (0.020)
<i>Internet Bubble</i>	0.036 [0.104] (0.729)	<b>0.044 ***</b> [0.009] (0.000)	<b>0.052 ***</b> [0.012] (0.000)	<b>0.047 ***</b> [0.013] (0.000)	<b>0.055 ***</b> [0.014] (0.001)
<i>Financial Crisis</i>	<b>-0.271 **</b> [0.109] (0.013)	<b>-0.043 ***</b> [0.009] (0.000)	<b>-0.033 ***</b> [0.009] (0.000)	<b>-0.040 ***</b> [0.009] (0.000)	<b>-0.031 **</b> [0.007] (0.013)
<i>French Legal System</i>	<b>-1.013 ***</b> [0.177] (0.000)	-0.024 [0.016] (0.134)	0.041 [0.031] (0.182)	0.018 [0.027] (0.492)	0.014 [0.024] (0.727)
<i>German Legal System</i>	<b>-0.342 *</b> [0.183] (0.061)	-0.005 [0.016] (0.729)	0.014 [0.023] (0.548)	-0.002 [0.028] (0.961)	-0.006 [0.028] (0.631)
<i>Scandinavian Legal System</i>	<b>0.359 **</b> [0.145] (0.013)	<b>0.030 **</b> [0.013] (0.018)	0.013 [0.021] (0.518)	0.022 [0.021] (0.292)	0.015 [0.018] (0.502)
<i>VC Activity (t-1)</i>			<b>0.382 ***</b> [0.099] (0.000)		
<i>Constant</i>			0.001 (0.062) (0.991)	-0.027 [0.070] (0.701)	-0.015 [0.071] (0.937)
<b>Observations</b>	318	318	318	318	332
<b>No. of countries</b>	18	18	18	18	18
<b>Wald chi2</b>				7957.18	1241.33
<b>Prob &gt; chi2</b>				0.000	0.000
<b>Log likelihood</b>	-5332.958				
<b>AR (1)</b>			-2.13 [0.033] **		
<b>AR (2)</b>			1.23 [0.219]		
<b>Hansen test (p-value)</b>			5.89 [104] (1.000)		

*Notes:* Models B1a and B1b are estimated using SEM procedure in STATA. Model B1c is estimated using GMM-SYS with moment conditions of endogenous variables restricted to the interval t-2 (t-3) to t-5 (t-4) for instruments in levels (differences) with finite-sample correction for the two-step covariance matrix developed by Windmeijer (2005). The time-varying independent variables are lagged one time period in the GMM-SYS estimation. Standard errors and p-values of Hansen statistics are reported in round brackets. Degrees of freedom are in square brackets. Model B1d is estimated using GLS (random effects) with all independent variables lagged for one time unit (year). Model B1e repeats the same estimates with the exclusion of GDP Growth and Inflation variables. Standard errors, clustered by the country ID, are reported in squared brackets. P-values are presented in parenthesis. \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1%, respectively.

Then, we execute several tests to corroborate that multicollinearity does not corrupt our results. First, we conduct variance inflation factors (VIF) test, which indicates no concerns of severe multicollinearity (global VIF value is 7.34 for the fully specified model, which is below the “rule of thumb” critical value of 10 according to Gujarati and Porter, 2003). Second, we follow an alternative method proposed by several authors that comprises orthogonalizing highly correlated variables of interest with a modified Gram-Schmidt procedure (Cohen et al. 2013; Saville and Wood 2012). This technique creates transformed variables that are uncorrelated with one another (using *orthog* command in Stata). In this case, the VIF values are substantially lower in general, while the average one was 2.36, and the estimates based on the ortogonolized variables yield virtually unchanged results. Third, we also introduce the variables of *reformable formal institutions* in the model, one by one, similarly to Desai et al. (2003) and Klapper et al. (2006). The obtained results are analogous to the original analysis (see Table B2, Models B2a, B2b and B2c), as all the coefficients sustain the direction of their impact. The significance of taxation coefficient is even higher in the full specification (from 15% to 1.5%), and hence we rule out the possibility of this finding being driven by multicollinearity, in which case adding highly correlated variables would decrease (and not increase) significance of the corresponding coefficients.

Finally, as we are not able to run fixed effects (FE) estimator because our main model specification includes some country-level time-invariant covariates, a part of the latter variables’ (most importantly *Social Capital*) explanatory power might reside in unobserved country characteristics. However, it is fair to say that social capital, as many other institutions, is intrinsically rooted at the national level (see P. A. Hall and Soskice 2001). The inclusion of a set of dummy variables for the legal system of countries in our main model(s) captures a part of the country fixed effects and partially elevates the issue. Additionally, in order to increase the reliability and robustness of our analysis, we also conduct analysis with an alternative country classification following a consolidated approach based on the varieties of capitalism (Hall and Soskice 2001). These new results, presented in Table B3 (Model B3), totally comply with our key findings. Likewise, we made a general distinction between the Northern European and Mediterranean countries and the results remain unchanged.



**Table B2. Determinants of venture capital activity on a country level (unbalanced panel data, 1997-2015): Robustness analyses (continued).**

Model	B2a	B2b	B2c
Method	RE	RE	RE
Dependent variable	VC Activity	VC Activity	VC Activity
<i>Social Capital</i>	-0.002 [0.004] (0.708)	-0.002 [0.005] (0.719)	-0.002 [0.004] (0.758)
<i>FI Index</i>	<b>0.015 ***</b> <b>[0.005]</b> <b>(0.002)</b>	<b>0.016 ***</b> <b>[0.005]</b> <b>(0.000)</b>	<b>0.016 ***</b> <b>[0.005]</b> <b>(0.003)</b>
<i>Employment Protection</i>	0.000 [0.000] (0.612)		
<i>Taxation</i>		-0.001 [0.000] (0.153)	
<i>Investor Protection</i>			0.007 [0.008] (0.430)
<i>IPO Volume</i>	0.665 [0.534] (0.213)	0.653 [0.530] (0.218)	0.680 [0.534] (0.203)
<i>M&amp;A Volume</i>	<b>0.319 ***</b> <b>[0.109]</b> <b>(0.004)</b>	<b>0.317 ***</b> <b>[0.110]</b> <b>(0.004)</b>	<b>0.318 ***</b> <b>[0.109]</b> <b>(0.004)</b>
<i>GDP Growth</i>	<b>0.004 ***</b> <b>[0.001]</b> <b>(0.002)</b>	<b>0.004 ***</b> <b>[0.001]</b> <b>(0.002)</b>	<b>0.004 ***</b> <b>[0.001]</b> <b>(0.003)</b>
<i>Inflation</i>	0.001 [0.001] (0.394)	0.001 [0.001] (0.300)	0.001 [0.001] (0.393)
<i>Technological Opportunity</i>	<b>-0.000 ***</b> <b>[0.000]</b> <b>(0.001)</b>	<b>-0.000 ***</b> <b>[0.000]</b> <b>(0.002)</b>	<b>-0.000 ***</b> <b>[0.000]</b> <b>(0.002)</b>
<i>Internet Bubble</i>	<b>0.044 ***</b> <b>[0.013]</b> <b>(0.001)</b>	<b>0.044 ***</b> <b>[0.013]</b> <b>(0.001)</b>	<b>0.044 ***</b> <b>[0.013]</b> <b>(0.000)</b>
<i>Financial Crisis</i>	<b>-0.044 ***</b> <b>[0.009]</b> <b>(0.000)</b>	<b>-0.043 ***</b> <b>[0.009]</b> <b>(0.000)</b>	<b>-0.044 ***</b> <b>[0.009]</b> <b>(0.000)</b>
<i>French Legal System</i>	-0.000 [0.022] (0.998)	0.002 [0.021] (0.914)	0.012 [0.026] (0.622)
<i>German Legal System</i>	-0.014 [0.022] (0.524)	-0.016 [0.021] (0.441)	0.002 [0.029] (0.994)
<i>Scandinavian Legal System</i>	0.028 [0.025] (0.276)	0.023 [0.024] (0.332)	0.033 [0.026] (0.197)
<i>Constant</i>	0.020 [0.021] (0.329)	<b>0.042 *</b> <b>[0.022]</b> <b>(0.060)</b>	-0.031 [0.070] (0.659)
<b>Observations</b>	318	318	318
<b>No. of countries</b>	18	18	18
<b>Wald chi2</b>	578.28	509.05	521.18
<b>Prob &gt; chi2</b>	0.000	0.000	0.000

*Notes:* All models are estimated using GLS (random effects), and they introduce the three reformable institutional variables one by one. Standard errors, clustered by the country ID, are reported in squared brackets. P-values are presented in parenthesis. \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1%, respectively.

**Table B3. Determinants of venture capital activity on a country level (unbalanced panel data, 1997-2015), with the control variable related to the general country classification based on the varieties of capitalism (P. A. Hall and Soskice 2001).**

<b>Model</b>	<b>B3</b>
<b>Method</b>	<b>RE</b>
<b>Dependent variable</b>	<b>VC Activity</b>
<i>Social Capital</i>	0.005 [0.007] (0.508)
<i>FI Index</i>	<b>0.020 ***</b> <b>[0.007]</b> <b>(0.003)</b>
<i>Employment Protection</i>	-0.000 [0.000] (0.374)
<i>Taxation</i>	<b>-0.001 *</b> <b>[0.000]</b> <b>(0.078)</b>
<i>Investor Protection</i>	<b>0.017 ***</b> <b>[0.006]</b> <b>(0.003)</b>
<i>IPO Volume</i>	0.817 [0.532] (0.124)
<i>M&amp;A Volume</i>	<b>0.339 ***</b> <b>[0.112]</b> <b>(0.002)</b>
<i>GDP Growth</i>	<b>0.004 ***</b> <b>[0.001]</b> <b>(0.007)</b>
<i>Inflation</i>	0.001 [0.001] (0.301)
<i>Technological Opportunity</i>	<b>-0.000 ***</b> <b>[0.000]</b> <b>(0.002)</b>
<i>Internet Bubble</i>	<b>0.044 ***</b> <b>[0.013]</b> <b>(0.001)</b>
<i>Financial Crisis</i>	<b>-0.044 ***</b> <b>[0.010]</b> <b>(0.000)</b>
<i>Liberal Market Economy</i>	-0.037 [0.023] (0.106)
<i>Coordinated Market Economy</i>	-0.013 [0.021] (0.554)
<i>Constant</i>	-0.052 [0.039] (0.180)
<b>Observations</b>	318
<b>Number of countries</b>	18
<b>Wald chi2</b>	604.31
<b>Prob &gt; chi2</b>	0.000

*Notes:* Model B3 is estimated using GLS (random effects). Standard errors, clustered by the country ID, are reported in squared brackets. P-values are presented in parenthesis. \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1%, respectively.

## **B.2 Additional evidence**

Then, in order to provide additional insights into the dynamics of VC industry, we repeat the main analysis (full model) for three subgroups of VC – investments in start-up and expansion phase of new ventures (we do not provide analysis regarding VC investments in the seed stage, as they are virtually negligible in the sample, and as such do not provide sufficient heterogeneity for econometric analysis). The results presented in Table B4 (Models B4a-d) are coherent with

the results of the estimates with the aggregate measure of VC activity. However, there are a few differences worth remarking. First, neither the fiscal policy nor inflation rate appear to have an impact on the VC investments in the start-up stage, while the Scandinavian legal system seems to be favorable for these early stage investments (see Models B4a and B4b). As for the VC investments in the expansion stage, the most notable difference is that the coefficient of the social capital variable seems to lose significance level in Model B4c. That is, the direct effect of social capital on the VC investment in the expansion stage is not as significant. This could be possibly explained by the fact that later stage investments are done between professional and mature ventures with a track record of success and more tangible assets, meaning the information asymmetries are not as severe as in the initial rounds of funding and strong country-level social capital does not add much of value to it. Another interesting difference is that minority investor protection regulation appears to be a significant factor (see Model B4d). The later stage investments require higher capital commitment leading to higher risk, and investor protection regulation could be an effective formal mechanism to abate some portion of that hazard.

Finally, in unreported regressions (available upon request), we also analyzed further and deeper the role of social capital. Specifically, we searched for the possible presence of significant moderating and super-additive effects on VC activity arising between this construct and the *structural* and *reformable formal institutions*. No relevant interaction terms were found, suggesting interestingly that the impact of social capital on VC flows not only exclusively but also rather uniformly through *structural formal institutions*. Then, we also decomposed **Social Capital** into its three underlying constructs (proxying the extent of social networks, trust and civic norms) and introduced the three related variables (separately) into the models' specifications. Results confirm the role of social capital in all the three components in the terms exposed in the main analysis, albeit revealing a (slight) loss of statistical significance of the variable related to civic norms. Lastly, we also tried to reconstruct a time-varying index of social capital by accounting for three waves of the EVS conducted in years 1990, 1999 and 2008, though on a variable number of countries. The alternative longitudinal measure was, as expected, highly correlated with the original cross-sectional one ( $r=0.930$ ), and produced similar results regarding the impact of social capital on VC activity.

**Table B4. Determinants of venture capital activity on a country level (unbalanced panel data, 1997-2015): Additional evidence.**

Model	B4a	B4b	B4c	B4d
Dependent variable	Start-up VC	Start-up VC	Expansion VC	Expansion VC
<i>Social Capital</i>	<b>0.003 **</b> [0.001] (0.028)	-0.000 [0.002] (0.883)	0.004 [0.003] (0.200)	-0.001 [0.003] (0.865)
<i>FI Index</i>		<b>0.005 ***</b> [0.001] (0.000)		<b>0.012 ***</b> [0.004] (0.002)
<i>Employment Protection</i>		-0.000 [0.000] (0.502)		-0.000 [0.000] (0.714)
<i>Taxation</i>		-0.001 [0.000] (0.705)		<b>-0.001 ***</b> [0.000] (0.001)
<i>Investor Protection</i>		0.002 [0.003] (0.451)		<b>0.015 ***</b> [0.005] (0.004)
<i>IPO Volume</i>	0.153 [0.121] (0.204)	0.124 [0.122] (0.306)	0.693 [0.431] (0.109)	0.570 [0.432] (0.187)
<i>M&amp;A Volume</i>	<b>0.104 ***</b> [0.035] (0.003)	<b>0.104 ***</b> [0.034] (0.002)	<b>0.227 ***</b> [0.080] (0.005)	<b>0.211 ***</b> [0.076] (0.006)
<i>GDP Growth</i>	<b>0.001 ***</b> [0.000] (0.001)	<b>0.001 **</b> [0.000] (0.038)	<b>0.003 ***</b> [0.001] (0.001)	<b>0.003 ***</b> [0.001] (0.006)
<i>Inflation</i>	-0.001 [0.000] (0.888)	-0.001 [0.000] (0.663)	0.001 [0.001] (0.262)	<b>0.002 **</b> [0.001] (0.048)
<i>Technological Opportunity</i>	-0.000 [0.000] (0.760)	-0.000 [0.000] (0.716)	<b>-0.000 ***</b> [0.000] (0.000)	<b>-0.000 ***</b> [0.000] (0.000)
<i>Internet Bubble</i>	<b>0.014 ***</b> [0.005] (0.002)	<b>0.014 ***</b> [0.004] (0.002)	<b>0.027 ***</b> [0.009] (0.004)	<b>0.027 ***</b> [0.009] (0.003)
<i>Financial Crisis</i>	<b>-0.007 ***</b> [0.003] (0.009)	<b>-0.006 **</b> [0.003] (0.026)	<b>-0.039 ***</b> [0.008] (0.000)	<b>-0.035 ***</b> [0.007] (0.000)
<i>French Legal System</i>	<b>-0.007 *</b> [0.003] (0.055)	-0.005 [0.007] (0.409)	-0.001 [0.020] (0.951)	0.028 [0.019] (0.151)
<i>German Legal System</i>	-0.006 [0.004] (0.141)	-0.009 [0.007] (0.210)	-0.007 [0.020] (0.713)	0.013 [0.021] (0.542)
<i>Scandinavian Legal System</i>	<b>0.012 **</b> [0.005] (0.017)	<b>0.010 *</b> [0.006] (0.070)	0.017 [0.023] (0.451)	0.014 [0.018] (0.451)
<i>Constant</i>	0.030 [0.003] (0.213)	0.030 [0.024] (0.213)	-0.006 [0.019] (0.736)	<b>-0.071 *</b> [0.041] (0.083)
<b>Observations</b>	318	318	318	318
<b>No. of countries</b>	18	18	18	18
<b>Wald chi2</b>	371.68	739.34	1010.17	633.69
<b>Prob &gt; chi2</b>	0.000	0.000	0.000	0.000

*Notes:* All models are estimated using GLS (random effects) and provide additional evidence on the impact of institutions on more nuanced types of venture capital (start-up and expansions stages). Standard errors, clustered by the country ID, are reported in squared brackets. P-values are presented in parenthesis. \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1%, respectively.

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