

# Discussion on Collectivism and Connected Lending

PIER Research Workshop
21-22 July 2017



## **Key findings and comments**

- 1. Key findings on institutional collectivism
- 2. Determinants of connected lending
- 3. Measurements
- 4. Methodology



### 1. Key findings

- Country-level institutional collectivism matters to firm-level connected lending.
- Hofstede collectivism
  - Linked to corruption of bank officials, but not lending cronyism.
  - Rather related to work orientation
- GLOBE In-Group collectivism
  - Rather related to ties with family, not ties within group
- GLOBE Institutional collectivism
  - Related to collective action and collective distribution of resources



#### 2. Determinants of connected lending

- "The need to have special connections with banks"
- Country-level factors highly correlated with connected lending
  - Economic development, not only growth
  - Access to finance
  - Rule of law/corruption
- Firm-level factors quite irrelevant (?)
  - Size
  - Types of financing
  - Government-related or foreign firm
  - Existing relationships with banks



**Table 2** Hofstede's collectivism and the need for special connections

Company	Table 2 Hotstede's collectivism and the need for special connections						
Hofstede Power Distance		(1)	(2)	(3)	(4)	(5)	
Hofstede Power Distance	Hofstede Collectivism	0.0065***	0.0074	0.0030	$0.0069^{***}$	0.018***	
Hofstede Masculinity		(0.0018)	(0.0049)	(0.0018)	(0.0017)	(0.0040)	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Hofstede Power Distance		-0.0024			0.00017	
Hofstede Uncertainty Avoidance			(0.0050)			(0.0027)	
Hofstede Uncertainty Avoidance	Hofstede Masculinity		$0.0065^*$			0.014***	
Hofstede Long-Term Orientation			(0.0032)				
Hofstede Long-Term Orientation	Hofstede Uncertainty Avoidance		0.0024			-0.013***	
Supervisory Power			(0.0040)				
Supervisory Power	Hofstede Long-Term Orientation		0.000054			0.012***	
Private Monitoring			(0.0038)				
Private Monitoring         -0.070 (0.072)         0.16*** (0.046)           Bank Concentration         -0.0050 (0.0028)         -0.0016 (0.0028)         (0.0014)           Private Bureau Age         -0.0024 (0.0049**)         -0.0024 (0.0049**)         -0.0025 (0.0019)           Sales         0.0039 (0.0045) (0.0079) (0.0055) (0.0087) (0.0087)         -0.0070           Government         -0.32*** -0.28*** -0.35*** -0.33*** -0.16 (0.060) (0.087) (0.069) (0.098) (0.11)         -0.16*** -0.20*** -0.17*** -0.22*** -0.23**           Foreign         -0.18*** -0.20*** -0.17*** -0.22*** -0.23** (0.049) (0.049) (0.053) (0.051) (0.067) (0.085)         Export           Export         -0.10** -0.0090 -0.11* -0.081 (0.064) (0.064) (0.064)           Manufacturing         -0.16 -0.069 -0.18 -0.10 -0.18* (0.064) (0.064)           Manufacturing         -0.16 -0.069 -0.18 -0.10 -0.18* (0.062) (0.082)           Services         -0.12 -0.035 -0.16 -0.026 -0.026 -0.062 (0.095) (0.096) (0.063) (0.080)           Number of Competitors         0.064 -0.042 -0.070 -0.023 -0.034 (0.080)           Observations         4230 -2196 -3632 -2539 -1496 (0.045) (0.045) (0.045) (0.046)           Pseudo R²         0.015 -0.014 -0.017 -0.023 -0.046	Supervisory Power			$0.096^*$		-0.0086	
Bank Concentration				(0.047)		(0.021)	
Bank Concentration	Private Monitoring			-0.070		0.16***	
Private Bureau Age $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Č			(0.072)			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Bank Concentration			,	-0.0050	-0.0016	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					(0.0028)	(0.0014)	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Private Bureau Age				-0.0024	0.0049**	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					(0.0025)	(0.0019)	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sales	0.0039	0.015	0.010	0.0043	-0.0070	
Foreign		(0.0045)	(0.0079)	(0.0055)	(0.0087)	(0.0093)	
Foreign	Government	-0.32***	-0.28***	-0.35***	-0.33***	-0.16	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		(0.060)	(0.087)	(0.069)	(0.098)	(0.11)	
	Foreign	-0.18***	-0.20***	-0.17***	-0.22***		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						(0.085)	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Export	-0.10	-0.0090	-0.11**			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	•	(0.045)	(0.050)	(0.041)	(0.054)	(0.064)	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Manufacturing	-0.16	-0.069	-0.18	-0.10	-0.18*	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	· ·	(0.100)	(0.085)	(0.11)	(0.060)	(0.082)	
Number of Competitors $0.064$ $(0.042)$ $(0.073)$ $(0.051)$ $(0.059)$ $(0.045)$ Observations $4230$ $2196$ $3632$ $2539$ $1496$ Pseudo $R^2$ $0.015$ $0.014$ $0.017$ $0.023$ $0.046$	Services			-0.16		-0.062	
Number of Competitors $0.064$ $(0.042)$ $(0.073)$ $(0.051)$ $(0.059)$ $(0.045)$ Observations $4230$ $2196$ $3632$ $2539$ $1496$ Pseudo $R^2$ $0.015$ $0.014$ $0.017$ $0.023$ $0.046$		(0.095)	(0.065)	(0.096)	(0.063)	(0.080)	
	Number of Competitors				· · · · · · · · · · · · · · · · · · ·		
Observations         4230         2196         3632         2539         1496           Pseudo $R^2$ 0.015         0.014         0.017         0.023         0.046							
Pseudo $R^2$ 0.015 0.014 0.017 0.023 0.046	Observations		(		(		

The dependent variable is Special Connections. The errors are clustered at the country level. Robust clustered standard errors are reported in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10, 5, and 1 percent level, respectively.



Table 3 In-Group collectivism, institutional collectivism, and the need for special connections

Table 3 in-Group collectivism, inst				4.40	
	(1)	(2)	(3)	(4)	(5)
In-Group Collectivism	0.17	-0.022	0.042	0.12	-0.074
	(0.064)	(0.11)	(0.068)	(0.097)	(0.17)
Institutional Collectivism	-0.42***	-0.58***	-0.34***	-0.42***	-1.10***
	(0.12)	(0.18)	(0.100)	(0.15)	(0.25)
Power Distance		-0.048			-0.44
		(0.15)			(0.30)
Assertiveness		-0.24			-0.80
		(0.16)			(0.50)
Gender Egalitarianism		-0.051			-0.43
		(0.16)			(0.23)
Uncertainty Avoidance		-0.21			0.083
•		(0.17)			(0.30)
Future Orientation		-0.0033			0.31
		(0.16)			(0.33)
Performance Orientation		0.30			0.19
		(0.22)			(0.29)
Humane Orientation		0.16			-0.21
		(0.092)			(0.24)
Supervisory Power		` ′	0.074		0.14**
			(0.044)		(0.049)
Private Monitoring			-0.16**		-0.24**
3			(0.065)		(0.091)
Bank Concentration			(5.555)	-0.0035	-0.0022
				(0.0029)	(0.0024)
Private Bureau Age				-0.0019	0.0026
				(0.0026)	(0.0036)
Sales	0.0013	-0.0077	0.010	0.0077	-0.017
	(0.0062)	(0.0068)	(0.0059)	(0.0086)	(0.013)
Government	-0.35	-0.33***	-0.38***	-0.43	-0.34***
Government	(0.064)	(0.064)	(0.068)	(0.099)	(0.098)
Foreign	-0.23	-0.22***	-0.23	-0.24	-0.22***
i orongin	(0.051)	(0.052)	(0.057)	(0.072)	(0.075)
Export	-0.11	-0.11	-0.076	-0.040	-0.013
Export	(0.052)	(0.049)	(0.051)	(0.063)	(0.064)
Manufacturing	-0.13	-0.15	-0.16	-0.087	-0.12
Managarang	(0.10)	(0.098)	(0.11)	(0.068)	(0.064)
Services	-0.10	-0.10	-0.12	-0.017	-0.034
50171003	(0.094)	(0.090)	(0.099)	(0.065)	(0.056)
Number of Competitors	-0.038	-0.064	-0.039	-0.054	0.0059
Number of Competitors	(0.050)	(0.042)	(0.051)	(0.078)	(0.070)
Observations	4068	4068	3446	2310	
Pseudo R <sup>2</sup>					2149
	0.018	0.023	0.022	0.025	0.040
Countries	40	40	33	23	21

The dependent variable is Special Connections. The errors are clustered at the country level. Robust clustered standard errors are reported in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10, 5, and 1 percent level, respectively.



#### 3. Measurements: survey on collectivism

Survey questions are different (weak correlation)

	Correlations
	between Hofstede
	and GLOBE
	(2)
GLOBE's practices scores	
Power distance	0.56**
Institutional collectivism	0.22
In-group collectivism	-0.81**
Uncertainty avoidance	-0.67**
Gender egalitarianism	-0.19
Assertiveness	0.30*
Future orientation	-0.05
GLOBE's values scores	
Power distance	-0.10
Institutional collectivism	-0.59**
In-group collectivism	-0.33*
Uncertainty avoidance	0.36**
Gender egalitarianism	0.03
Assertiveness	0.20
Future orientation	-0.22

<sup>†</sup>p<0.10; \*p<0.05; \*\*p<0.01.

Source: Tang and Koveos (2008)



#### 3. Measurements: survey on collectivism

#### Survey methodology differences

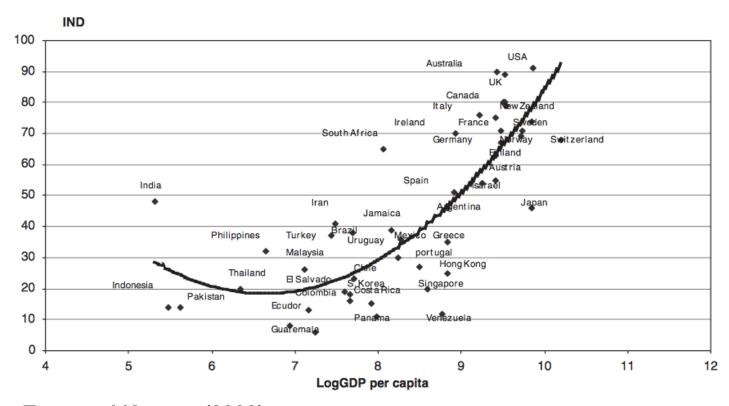
Differences	GLOBE Model	Hofstede Model		
Time period	1994-1997	1967-1973		
Primary researchers involved	170	1		
Respondents	Managers	Non-managers and managers		
Organizations surveyed 951		1		
Type of organizations	Non-multinational	IBM and its subsidiaries		
Industries	Food processing, financial and telecommunication services			
Number of societies surveyed 62		72		
Analysis	Team effort	Single effort		
Project design	US-based	Dutch-based		
Number of cultural dimensions	Nine	Four		

Source: Shi and Wang (2011)



#### 3. Measurements

Collectivism (individualism) much influenced by level of economic development



Source: Tang and Koveos (2008)



### 4. Methodology

Special Connectionsi,  $j = \alpha + \beta'$  Cultural Dimensionsj +  $\delta'$  Country-Level Controlsj +  $\gamma'$  Firm Characteristicsi,  $j + \epsilon i, j$ ,

- Caution on nested data
- Variation of cultural dimensions across firms country aggregate not a representative of individual or organizational culture?
- Robustness



Table 7 Institutional collectivism and the need for special connections—robustness tests

Table 7 Institutional collectivism	and the need ic	or speciai conn	ections—robu	istness tests	
	(1)	(2)	(3)	(4)	(5)
	Ordered	Probit	IV probit	Only firms	Only firms
	probit	2		with bank	without
	3	categories		finance	bank
	categories				finance
In-Group Collectivism	-0.37***	-0.42***	-2.70***	-0.55***	-0.33***
	(0.098)	(0.11)	(0.56)	(0.12)	(0.098)
Institutional Collectivism	0.081	0.057	-0.27***	0.062	0.021
	(0.044)	(0.057)	(0.084)	(0.053)	(0.052)
Supervisory Power	-0.16***	-0.18**	-0.29	-0.17**	-0.15**
	(0.056)	(0.068)	(0.046)	(0.067)	(0.055)
Private Monitoring	0.0093	0.0024	-0.022***	0.0089	0.016**
	(0.0063)	(0.0069)	(0.0072)	(0.0062)	(0.0063)
Sales	-0.37***	-0.43***	-0.35***	-0.35***	-0.32***
	(0.066)	(0.080)	(0.094)	(0.092)	(0.075)
Government	-0.24***	-0.23***	-0.28***	-0.33***	-0.14
	(0.064)	(0.070)	(0.069)	(0.092)	(0.074)
Foreign	-0.044	-0.074	-0.087	0.023	<b>-</b> 0.10*
	(0.060)	(0.059)	(0.058)	(0.061)	(0.047)
Export	-0.14	-0.15	-0.21**	-0.070	-0.29
	(0.11)	(0.092)	(0.079)	(0.087)	(0.16)
Manufacturing	-0.12	-0.11	-0.15*	-0.029	-0.24
	(0.092)	(0.084)	(0.074)	(0.077)	(0.15)
Services	-0.012	-0.040	-0.079	-0.024	0.0090
	(0.053)	(0.054)	(0.040)	(0.057)	(0.066)
Number of Competitors	-0.37***	-0.42***	-2.70***	-0.55***	-0.33***
	(0.098)	(0.11)	(0.56)	(0.12)	(0.098)
Observations	3446	3446	3446	1326	1545
Pseudo R <sup>2</sup>	0.025	0.034	n/a	0.029	0.019
Countries	33	33	33	28	28

The dependent variable is Special Connections. The errors are clustered at the country level. Robust clustered standard errors are reported in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10, 5, and 1 percent level, respectively.