



Workshop on the Culture of Dysfunctional Institutions World Bank 6-7 February 2016

# The Old Boy Network: The Impact of Professional Networks on Remuneration in Top Executive Jobs

Paul SEABRIGHT, Toulouse School of Economics (TSE) and Institute for Advanced Study in Toulouse (IAST)

# Summary of presentation:

- The big question: are networks of prior contacts causally important in explaining professional advancement in modern societies?
- If yes, does differential access to networks explain differences in professional advancement of women (and other minorities)?
- The empirical difficulty: correlation between networks and advancement is strong but may be due to unobserved characteristics (eg talent)
- Our contribution: analysis of > 20,000 US and EU executives from > 5,000 firms (>90% of S&P 500, Nasdaq 100 and European indices), with an identification strategy: the use of placebo networks
- Our answers to the questions: 1)Yes, very important, and 2) Yes, partly

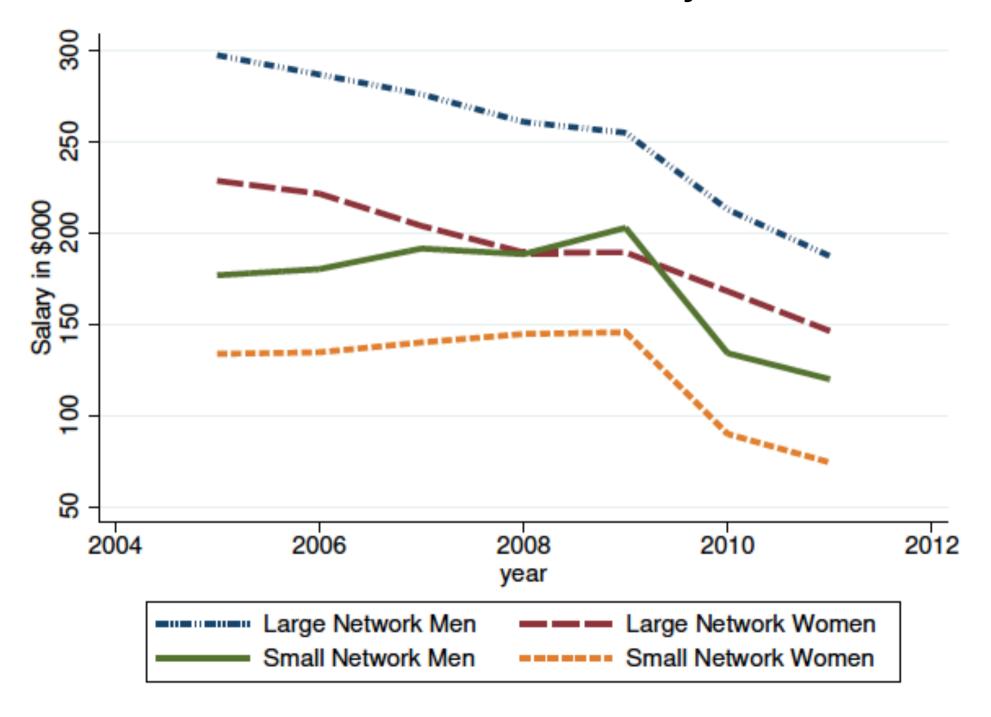
## Other related research

- This is part of a program of work on gender and network differences with Nicoletta Berardi, Guido Friebel, Marie Lalanne, Bernard Richter and Peter Schwardmann
- A experimental study of network formation: making links in the lab and the world (Friebel et al 2016)
- A field study of network maintenance: phone communication strategies (Friebel and Seabright 2011)
- Studies of network use: professional networks and executive pay (Lalanne & Seabright, 2015; Berardi & Seabright, 2012)

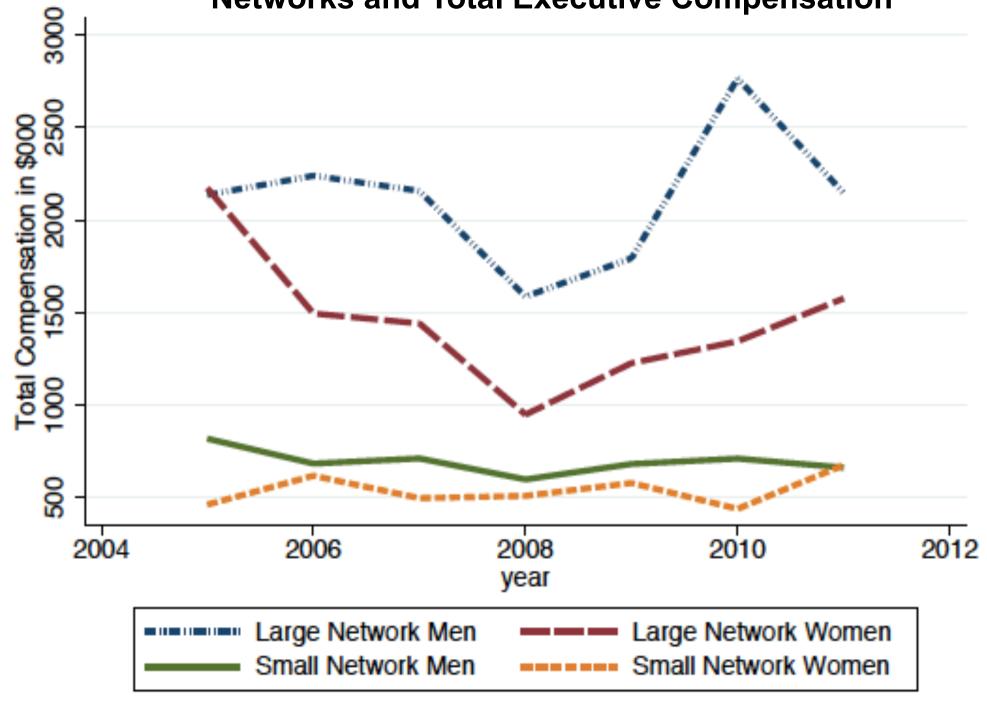
# Data description and methodology:

- Our dataset: over 22,000 top executives and board members working for over 5000 US, UK, French and German companies from 1999 to 2011, inc. >90% of main indices; whole BoardEx dataset: roughly 380 000 individuals:
- Demography, education, employment history
- Social network information from: universities, non for profit organizations and previous companies. We use previous employment links to current members of whole Boardex dataset
- Links should be interpreted as opportunities for interactions; we do not observe actual investment in social interactions.

#### **Networks and Executive Salary**



#### **Networks and Total Executive Compensation**



# How do we know networks are the cause?

- We use a placebo method (by analogy with clinical trials)
- Maybe successful executives are also ones who are hired by firms that give them large networks
- So we construct for each person their placebo connections those who worked at the same firm at a different time
- Real connections have a much bigger impact on salary than do placebo connections – placebo connections have negative sign!
- So the impact of unobserved characteristics is the opposite of what we expected...

Table 6: Determinants of salary in 2008 for executives in 2004

	i	II	III
Ln connections (2004)	0.123***		0.198***
· ·	(0.00958)		(0.0142)
Ln placebo connections (2004)		0.0253***	-0.0578***
		(0.00549)	(0.00806)
Female	-0.424***	-0.407***	-0.419***
	(0.0383)	(0.0385)	(0.0382)
Constant	32.64***	34.79***	32.70***
	(3.299)	(3.318)	(3.291)
Controls	Yes	Yes	Yes
Observations	10737	10737	10737

OLS estimation, standard errors in parentheses

Controls include time in role, time in role squared, age, age squared, degree level, degree field

<sup>\*</sup> p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

Table 7: Pooled regressions of salary for executiv

		II
Ln lagged connections	0.201***	0.171***
	(0.00956)	(0.0102)
	` /	` ′
Ln lagged weighted connections		
Ln lagged placebo connections	-0.0441***	-0.0348***
	(0.00535)	(0.00547)
Female	-0.362***	-0.376***
	(0.0275)	(0.0272)
Constant	78.78***	70.71***
	(5.656)	(5.777)
Controls	Yes	Yes
Country and sectoral dummies	No	Yes

Table 8: Pooled regressions of non salary remuneration for executives

To	tal compensation	Total compensation	Total wealth	Total wealth
Ln lagged connections	0.510***		0.708***	
	(0.0149)		(0.0228)	
	` ′		` ′	
Ln lagged weighted connections		0.416***		0.613***
		(0.0103)		(0.0157)
Ln lagged placebo connections	-0.104***	0.0196**	-0.241***	-0.0769***
	(0.00856)	(0.00605)	(0.0130)	(0.00910)
Female	-0.470***	-0.488***	-0.630***	-0.662***
	(0.0407)	(0.0404)	(0.0578)	(0.0570)
Constant	170.5***	147.3***	264.2***	231.5***
	(8.397)	(8.363)	(12.06)	(12.02)
Controls	Yes	Yes	Yes	Yes
p-value for equality of coefficients	0.000	0.000	0.000	0.000
Observations	66991	66991	64093	64093

How important economically are these effects?

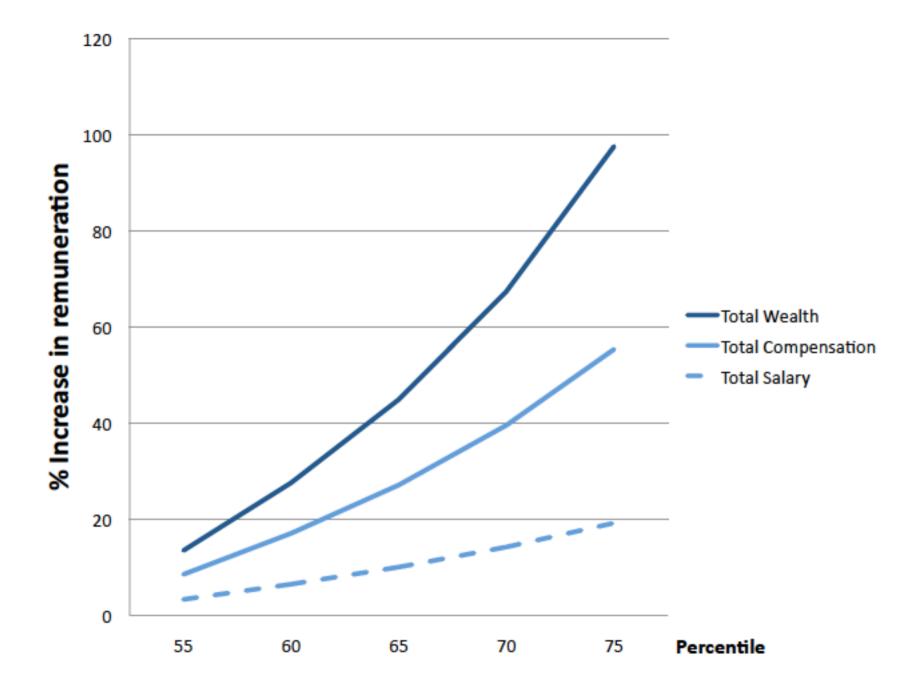


Figure 3: Percentage increase in remuneration implied by percentile increases in connections above the median

# What about women's networks?

- At first sight women's networks appear to be only about half as effective as men's in promoting professional advancement
- But the story is more subtle than that the selection effect (as evidenced by placebo networks) operates differently for women and for men.
- The firms that reward and advance talented women are less likely than for men to be firms that give them access to a network of influential contacts
- Why?

Table 10: Pooled regressions of salary for execu

	I	II	Ш
Ln lagged connections	0.152***	0.208***	0.203***
	(0.00687)	(0.00966)	(0.00984)
Female*In lagged connections	-0.0968***	-0.0950***	-0.0284
	(0.0253)	(0.0253)	(0.0391)
Ln lagged weighted connections			
Female*In lagged weighted connections			
Ln lagged placebo connections		-0.0439***	-0.0407***
		(0.00534)	(0.00550)
Female*In lagged placebo connections			-0.0492*

# What are the mechanisms?

- The main mechanism is that networks help women to be employed by the kind of firm that pays better
- It also helps women to have more women in their networks
- Is it having more women in your network or working for a Female-Friendly Firm (FFF) that matters?
- Paradox: Working for FFFs helps women but also helps men!
- And women's networks don't help them be employed by FFFs
- A possible explanation: FFFs are just "well-managed firms"

## Conclusions

- The use of the placebo method suggests networks of past colleagues are highly influential in explaining professional advancement for top US and EU executives
- The selection effects on unobservables are negative: more talented individuals are, on average, being recruited early in their career by firms that give them less access to influential networks
- The effects are economically large
- The negative selection effects are stronger for women