



# **Family Firms, Corporate Governance, and Export**

**Raoul Minetti**  
**Michigan State University**

**Pierluigi Murro**  
**Luiss University**

**Susan Zhu**  
**Michigan State University**

**Istituto Bruno Leoni, February 2014**

# Motivation

- ❑ The Economist: successful experience German and Northern European family firms in international markets. These firms led export boom of their countries.
- ❑ Although family businesses account for large fraction of economic activity in many countries, very few studies on their internationalization.
- ❑ Ownership, through agency problems and shareholders' preferences may have both positive and negative effects on internationalization.

## **This paper**

- ❑ This paper relates to broad theoretical literature on impact corporate governance on firm performance. In particular, we focus on impact of ownership structure on firms' export decision.
- ❑ To address question, exploit rich survey of over 20,000 Italian manufacturing firms. Data set unusually detailed information on firms' export activity based directly on firms' responses to survey questions.
- ❑ Italy provides ideal testing ground for isolating link between family firms and export.

## Main results

- ❑ Family ownership appears to positively affect probability that firms enter foreign markets (extensive margin of export).
- ❑ Nonlinearities in effect of family ownership: effect on export weakens as ownership concentration increases. Also, family ownership especially benefits export when families retain control rights (ownership aligned with control) and hire external managers (ownership partially separated from management).
- ❑ Above results robust to using different estimation methods, including OLS and probit with province fixed effects as well as IV techniques

# Outline

- ❑ Related literature
- ❑ Theoretical predictions
- ❑ Data and Empirical methodology
- ❑ Results
- ❑ Conclusions

# Prior Literature

- ❑ Recent studies find that family-owned firms perform better than widely held ones:
  - For US: Anderson and Reeb (2003); Villalonga and Amit (2006)
  - For Europe: Favero, Pagano and von-Thadden (2010); Maury (2006)
  
- ❑ Other papers question benefits of family ownership:
  - Perez-Gonzales (2006): family firms less efficient
  - Caselli and Gennaioli (2012): external managers more competence and skills than family descendants
  
- ❑ Very scarce evidence on family firms' internationalization:
  - Zahra (2003) highlights the important role family ownership plays in increasing managers' willingness to expand internationally
  - Gallo and Garcia Pont (1996) suggest family firms tend to have a more local culture

# Export properties

- ❑ Higher fixed costs, some of which sunk
  - Firms need to invest
  
- ❑ Higher riskiness (more intense competition)
  - Foreign sales more volatile than domestic sales
  
- ❑ Low verifiability
  - May be harder for firms to obtain funds to finance foreign expansion

# Ownership and Export

## *Negative Factors*

- ❑ **Dynastic transmission:** Family may appoint family members to positions of responsibility instead of recruiting external professional managers (Bertrand, Johnson, Samphantharak and Schoar, 2008)
- ❑ **Conservatism/diversification:** Family firms often niche firms, tend to protect niche position sticking to same activities over time (Sraer and Thesmar, 2007). International expansion implies, instead, dealing with new customers, competitors and markets weakly connected to original activity.
- ❑ **Risk aversion:** family firms may be more risk averse than non-family firms because families have large share of wealth invested in their company (Bolton and von-Thadden, 1998; Villalonga and Amit, 2006). Thus, family firms may be less likely to take risk by expanding internationally.



# Ownership and Export

## *Positive Factors*

- ❑ **Long-termism:** Family businesses may have longer horizon (Sraer and Thesmar, 2007). Their links with future generations can lead family owners to focus on long-run returns and pursue investment opportunities that widely held firms may neglect (Bertrand and Schoar, 2006).
- ❑ Since export involves high fixed costs of entry, long-termism of family firms may make them more likely than non-family ones to pursue international expansion.
- ❑ **Social networking:** Through personal connections and social networks, family firms can start and consolidate international activities.

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# Data

- ❑ Main source of information, 4 pooled waves of Capitalia-Unicredit survey of manufacturing firms (1997, 2000, 2003, 2006)
- ❑ All firms with more than 500 employees and stratified random sample of smaller firms. Total 12,135 firms
- ❑ Information on export, share of export on total sales, countries where firms export
- ❑ Data on equity share and type three largest shareholders, control, recent changes in ownership structure
- ❑ Firm demographics, characteristics, balance sheet information, financial and industrial diversification

## Empirical Model

- Entrepreneur's decision to export can be modeled as:

$$y_i^* = \begin{cases} 1 & \text{if } y_i^* > 0 \\ 0 & \text{otherwise} \end{cases}$$

$$y_i^* = x_i' \beta + z_i' \gamma + u_i$$

- Moreover, we complement OLS and Probit estimates with an instrumental variable approach.

## Summary Statistics (1/2)

	All firms		Ownership			Export status		
	Mean	Std. Dev.	Family	Non-family	<i>t</i> -test	Exporter	Non-exporter	<i>t</i> -test
<i>Export participation and sales</i>								
Export participation	0.66	0.47	0.64	0.71	-9.06			
Export / Sales	42.22	27.80	41.67	43.54	-2.95			
Log(Export)	12.62	1.71	12.33	13.33	-24.19			
<i>Ownership structure</i>								
Family	0.75	0.43				0.73	0.79	-9.04
Share_family			0.52			0.40	0.42	-3.83
Financial institution	0.09	0.29				0.11	0.06	12.07
<i>Corporate governance</i>								
Family with control			0.93			0.68	0.73	-6.67
Family without control			0.07			0.05	0.06	-3.54
External managers	0.48	0.50	0.41	0.66	-26.50	0.54	0.34	21.59

## Summary Statistics (2/2)

	All firms		Ownership			Export status		
	Mean	Std. Dev.	Family	Non-family	<i>t</i> -test	Exporter	Non-exporter	<i>t</i> -test
<i>Firm characteristics</i>								
Log(Total assets)	8.79	1.37	8.52	9.55	-38.97	9.02	8.32	31.56
Log(Number of employees)	3.72	1.11	3.52	4.31	-37.10	3.92	3.33	38.45
Log(Capital intensity)	5.17	3.01	4.93	5.83	-14.57	5.18	5.15	0.44
Log(Labor productivity)	5.38	2.84	5.18	5.92	-12.53	5.41	5.30	2.09
Age	24.30	17.67	24.09	24.97	-2.68	25.26	22.52	10.14
Corporation	0.93	0.25	0.93	0.94	-1.68	0.95	0.91	10.07
Consortium	0.09	0.28	0.09	0.08	2.49	0.10	0.07	5.76
Leverage	0.00	0.01	0.00	0.00	0.56	0.00	0.00	-1.97
Financial concentration	0.92	0.18	0.93	0.91	3.59	0.91	0.95	-9.49
ATECO 5-digit	0.31	0.46	0.32	0.27	6.47	0.33	0.27	9.51
ATECO 4-digit	0.42	0.49	0.42	0.43	-1.67	0.39	0.49	-12.53
North	0.68	0.47	0.67	0.72	-7.04	0.72	0.61	15.20
Center	0.18	0.38	0.19	0.16	4.20	0.17	0.19	-2.92
South	0.14	0.35	0.14	0.12	4.57	0.11	0.20	-16.40
<i>Pavitt's taxonomy</i>								
Traditional sector	0.49	0.50	0.51	0.42	10.53	0.47	0.52	-6.53
Scale-intensive sector	0.21	0.40	0.19	0.24	-6.76	0.17	0.27	-15.12
Specialized sector	0.26	0.44	0.26	0.27	-2.12	0.31	0.16	23.11
High-tech sector	0.05	0.21	0.04	0.06	-5.53	0.05	0.04	1.20

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# Baseline estimates (Extensive margin)

	OLS	Probit	OLS	Probit
Family	0.031*** (0.011)	0.037*** (0.013)	-0.040*** (0.010)	-0.043*** (0.011)
Log(Total assets)	0.101*** (0.007)	0.124*** (0.009)		
Log(Capital intensity)	-0.025*** (0.009)	-0.029*** (0.010)	0.024*** (0.007)	0.026*** (0.007)
Log(Labor productivity)	0.009 (0.012)	0.004 (0.014)	0.042*** (0.012)	0.047*** (0.013)
Age	0.0003 (0.0003)	0.000 (0.000)	0.001*** (0.000)	0.002*** (0.000)
Corporation	0.129*** (0.027)	0.144*** (0.029)	0.126*** (0.026)	0.133*** (0.027)
Consortium	0.055*** (0.016)	0.062*** (0.016)	0.052*** (0.016)	0.056*** (0.017)
ATECO 5-digit	0.045*** (0.014)	0.052*** (0.016)	0.032** (0.015)	0.036** (0.016)
ATECO 4-digit	0.005 (0.014)	0.009 (0.015)	-0.003 (0.015)	-0.002 (0.016)
Leverage	1.357** (0.637)	3.249 (3.473)	1.218* (0.719)	3.875 (3.439)
Leverage*Rajan-Zingales index	-14.649*** (4.265)	-38.707*** (14.181)	-13.504*** (4.854)	-37.432** (16.882)
Rajan-Zingales index	-0.059*** (0.019)	-0.063*** (0.024)	-0.051** (0.020)	-0.044* (0.023)
Observations	12,368	12,367	12,368	12,367
R <sup>2</sup>	0.181		0.133	



# Baseline estimates (Intensive margin)

	OLS	OLS	OLS	OLS
Family	0.043 (0.030)	0.041 (0.030)	-0.654*** (0.043)	-0.662*** (0.042)
Log(Total assets)	1.070*** (0.015)	1.049*** (0.027)		
Log(Capital intensity)	-0.229*** (0.026)	-0.223*** (0.027)	0.351*** (0.038)	0.340*** (0.036)
Log(Labor productivity)	0.220*** (0.033)	0.219*** (0.032)	0.458*** (0.063)	0.434*** (0.062)
Age	-0.004*** (0.001)	-0.004*** (0.001)	0.006*** (0.001)	0.006*** (0.001)
Corporation	0.096 (0.066)	0.075 (0.078)	0.136 (0.108)	0.071 (0.134)
Consortium	0.043 (0.038)	0.026 (0.039)	-0.028 (0.052)	-0.063 (0.059)
ATECO 5-digit	0.033 (0.042)	0.023 (0.044)	-0.165** (0.066)	-0.183*** (0.067)
ATECO 4-digit	-0.015 (0.042)	-0.017 (0.042)	-0.078 (0.071)	-0.077 (0.072)
Leverage	16.774 (15.097)	17.836 (15.384)	13.767 (27.164)	14.254 (27.094)
Leverage*Rajan-Zingales index	-33.66 (42.367)	-29.17 (43.243)	-29.728 (63.624)	-10.74 (70.589)
Rajan-Zingales index	0.002 (0.079)	0.016 (0.082)	0.008 (0.128)	0.031 (0.129)
Inverse Mill's ratio		-0.161 (0.140)		-0.351 (0.262)
Observations	5,876	5,834	5,876	5,834
R <sup>2</sup>	0.679	0.679	0.212	0.212

# Family control and management

	Extensive margin			Intensive margin		
	(1)	(2)	(3)	(4)	(5)	(6)
Share_family	0.144*** (0.051)			0.075 (0.120)		
Share_family <sup>2</sup>	-0.144*** (0.051)			0.059 (0.117)		
Family with control		0.033*** (0.011)			0.043 (0.030)	
Family without control		0.008 (0.020)			0.039 (0.049)	
Family with external managers			0.045*** (0.010)			0.085** (0.037)
Family without external managers			-0.016 (0.015)			0.017 (0.036)
Observations	11,672	12,368	8,600	5,529	5,876	4,954
R <sup>2</sup>	0.180	0.181	0.197	0.680	0.679	0.692

# Family ownership and export: channels of influence

Channel	Expected impact on export	Test	Support hypothesis?
Long-termism	G 8/9	Firm age	Y
		Financial institutions subscribing shares and intention to go public	Y
Risk aversion	H	Financial diversification	N
Lack of competence and knowledge	H	Presence of external managers	Y
		Human capital investment	Y
		Industry sophistication	Y
		Export market sophistication	Y
		International high-tech activities	Y
Excess of narrowness	H	Niche markets	N

# Financial diversification, firm age, and size

	Financial diversification				Age		Human capital investment		Size	
	All firms		Total assets € €17.8 million		Old	Young	High	Low	Big	Small
	Fin. Conc ↑ 1	Fin. Conc € 1	Fin. Conc ↑ 1	Fin. Conc € 1	Age ↑ 21 yrs	Age € ↑ 21 yrs	Investmen t ↑ 0	Investment ↑ 0	Total assets € €5.4 million	Total assets € ↑ €5.4 million
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>Panel A. Extensive margin</i>										
Family	0.043**	0.011	0.036	0.014	0.034***	0.026	-0.015	0.056***	0.014	0.054**
	(0.017)	(0.027)	(0.022)	(0.053)	(0.011)	(0.016)	(0.019)	(0.017)	(0.011)	(0.021)
Observations	3,307	887	2,390	411	6,754	5,614	1,609	6,817	6,746	5,622
R <sup>2</sup>	0.210	0.303	0.223	0.373	0.209	0.175	0.219	0.187	0.163	0.182
<i>Panel B. Intensive margin</i>										
Family	0.062	0.056	0.043	0.004	0.070*	0.028	-0.007	0.072	0.044	0.055
	(0.055)	(0.091)	(0.073)	(0.221)	(0.039)	(0.041)	(0.057)	(0.051)	(0.031)	(0.061)
Observations	1,881	548	1,148	200	3,437	2,439	976	2,879	4,161	1,715
R <sup>2</sup>	0.615	0.746	0.433	0.699	0.690	0.682	0.767	0.607	0.631	0.322

# Industry characteristics

	Pavitt's taxonomy				Industry specialization	
	Traditional	Scale-intensive	Specialized	High-tech	5- or 4-digit ATECO	3-digit ATECO
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A. Extensive margin</i>						
Family	0.038*	0.049**	0.017	-0.090**	0.033***	0.023
	(0.020)	(0.020)	(0.016)	(0.041)	(0.012)	(0.019)
Observations	6,064	2,554	3,183	546	8,985	3,383
R <sup>2</sup>	0.171	0.262	0.164	0.299	0.196	0.202
<i>Panel B. Intensive margin</i>						
Family	0.010	0.158**	0.008	0.001	0.032	0.040
	(0.046)	(0.076)	(0.048)	(0.209)	(0.040)	(0.070)
Observations	2,683	1,101	1,840	237	4,161	1,715
R <sup>2</sup>	0.622	0.772	0.727	0.819	0.675	0.719

# Switch in export markets between 2003-2006

	Entering new markets <sub>2003-06</sub>			Exiting from old markets <sub>2003-06</sub>		
	(1)	(2)	(3)	(4)	(5)	(6)
Family <sub>2003</sub>	0.055*	0.058**	0.053*	-0.033	-0.037	-0.039
	(0.028)	(0.028)	(0.029)	(0.047)	(0.047)	(0.047)
Fin. institution subscribe <sub>2001-2003</sub>		-0.178***			0.118	
		(0.044)			(0.137)	
Intention go public <sub>2001-2003</sub>			-0.091			-0.235
			(0.093)			(0.189)
Observations	778	776	745	778	776	745
R <sup>2</sup>	0.127	0.131	0.136	0.199	0.201	0.217

# Endogeneity Issues

- ❑ Endogeneity issues due to:
  - Reverse causality
  - Omitted variables (e.g., informational transparency, production efficiency, local market conditions)

# Instrumental Variables

- ❑ Exogenous restrictions on local financial markets affecting ownership (but not internationalization)
- ❑ Access to bank financing affects need and incentive to open participation to new shareholders, issue new equity, go public, etc.
  - Access to bank financing affects possibility to obtain funds to purchase equity in firms (Caselli and Gennaioli, 2007)
  - Access to bank financing affects the need to issue equity (Mayers, 1984)
  - Access to bank loans also affects price at which new equity can be issued (Shockley and Thakor, 1992)



# Instrumental Variables

- ❑ 1936 Italian banking law affected local credit markets through limits on the creation and location of new branches
- ❑ Instruments based on number of bank branches and type of banks in Italian provinces in 1936 (Guiso, Sapienza and Zingales, 2003, 2004).

## IV estimates

	Extensive margin				Intensive margin	
	OLS	2SLS	Probit	Biv Probit	OLS	2SLS
	(1)	(2)	(3)	(4)	(5)	(6)
Family	0.033*** (0.011)	-0.678 (0.816)	0.039*** (0.013)	0.188*** (0.062)	0.042 (0.030)	1.609 (1.496)
<i>Instrumental Variable</i>						
Number of savings banks in 1936		-0.034** (0.016)		-0.104* (0.062)		-0.044** (0.019)
Observations	12,368	12,368	12,368	12,368	5,876	5,876
R <sup>2</sup>	0.163				0.666	

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# Conclusion

- ❑ Theoretical literature yields ambiguous predictions on whether family firms have more incentives and ability to export than non-family ones.
- ❑ We find family firms significantly more likely to export and enter multiple markets than non-family firms. Positive effect especially pronounced when family owners retain control rights and hire external managers.
- ❑ Yet, family ownership less beneficial when export has more sophisticated nature, involves entry into farther markets or is associated with high-tech activities.