

Bifurcation Bias and Exporting: Can Foreign Work Experience be an answer? Insight from European Family SMEs

Short Running Title:

Family Bifurcation Bias and Exporting

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ABSTRACT

We develop hypotheses from a “bifurcation bias” approach involving the asymmetric treatment of family and nonfamily assets, and we test them on a sample of 6,893 European family SMEs. Our findings reveal two asymmetries relating to actions designed to reduce bifurcation bias. First, exporting is indeed positively associated with the presence of outside owners and managers, and from the interaction between them. However, this interaction replaces any separate positive impact from outside ownership. Second, the international work experience of managers has a positive impact on exporting, but this experience seems relevant only in the case of firms with family-managers only.

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1. Introduction

What enables some family firms to export while others are content with local markets? Most answers provided by the literature have involved binary comparisons between family and nonfamily firms and the application of competing theories of corporate governance, i.e. agency, socio-emotional-wealth and stewardship perspectives. With such contested governance terrain, it is no surprise that empirical results reviewed in meta-studies of family firm performance (e.g. Arregle, Duran, Hitt & van Essen, 2017; O'Boyle, Pollack & Rutherford, 2012) have also proved to be inconsistent.

Recently however, the focus has switched (Gomez-Mejia, Campbell, Martin, Hoskisson, Makri & Sirmon, 2014) from a binary view of family vs nonfamily firms to the analysis of subtle variations among them, i.e. a “heterogeneity view” (Chua, Chrisman, Steier & Rau, 2012). This has highlighted the importance of the role in family firms' internationalization played by different governance structures (George, Wiklund & Zahra, 2005), organizational configurations (Kraus, Mensching, Calabrò & Filser, 2016; Stewart & Hitt, 2012) and business models (Hennart, Majocchi & Forlani, 2017). In particular, the role played by external managerial as well as financial capital resources has increasingly captured attention in the current debate (Arregle, Naldi, Nordqvist & Hitt, 2012; D'Angelo, Majocchi & Buck, 2016), though studies have hitherto been restricted to single countries. Besides their independent influence on internationalization, the importance of interaction between outside ownership and management has been proposed (De Massis, Kotlar & Frattini, 2013), but

studies have not so far embraced the particular importance to exporting of the foreign work experience among family and nonfamily members of the management team (Love, Roper & Zhou, 2016). Rather than adopt one of the competing governance theories to nonfamily ownership, nonfamily management and foreign work experience, we use a theoretical framework in this paper that can integrate the various perspectives on family firms: bifurcation bias (BB). BB was developed from a transaction cost analysis (TCA) of family firms proposed by Pollak (1985) and extended by Gedajlovic and Carney (2010) and Verbeke and Kano (2010; 2012) who argue that family firms represent a distinct governance mode where family assets are dedicated to the firm, and dysfunctionalities are generated by the *asymmetric* treatment of family and nonfamily assets and liabilities. In this paper we discuss the conditions under which family small and medium-sized enterprises (SMEs) are suited or unsuited to managing dedicated family assets in order to export. Our findings reveal that the foreign sales intensity of family SMEs is positively influenced by the *independent* presence of nonfamily investors and managers, but there is also positive interaction between them, providing support for D'Angelo et al. (2016) using a wider sample of SMEs. Without a coherent policy of openness towards external capital *and* external managers, exporting is less effective in family SMEs. However, the significance of this *joint* presence of external managers and external capital is *asymmetrical* in the sense that the independent influence of outside capital (but not outside managers) disappears. Thus, our results confirm and complement previous findings (Anderson & Reeb, 2004) that family firms with external shareholders (defined here as “family influenced firms” to distinguish them from family owned firms where ownership is exclusively in the hand of a family) can achieve “...the ‘best of both worlds’, where management harnesses the advantages of family involvement (e.g. patient capital) while avoiding its disadvantages (e.g. myopic traditions) by allowing ‘other voices at the table’” (Sirmon, Arregle, Hitt & Webb, 2008: 980).

Besides these findings concerning nonfamily capital and managers, we demonstrate for the first time *another asymmetry* in the effect of foreign work experience for family and nonfamily managers. While the foreign work experience of family managers has a positive impact on foreign sales intensity, this experiential contribution disappears for outside managers. This outcome is consistent with the explanation that international experience may be already embodied in hired outside managers, whereas

family managers may be able to increase their contribution to exports by seeking foreign work experience themselves.

Our paper claims to contribute theoretically to the literature in a number of ways. First, it cuts through the contested terrain of various theories of family firm ownership and control by adopting and applying the BB to develop more nuanced versions of well-established hypotheses already present in the literature concerning dimensions of family firm heterogeneity, i.e. nonfamily ownership, nonfamily management, and interaction between these variables. These more nuanced versions of hypotheses are tested on a large sample of family firms across four EU countries in order to remove the possible effects of heterogeneous national institutional environments and local assets (Arregle et al., 2017; Filatotchev, Stephan & Jindra, 2008; Hennart, 2009), at the same time addressing sample bias and endogeneity concerns.

Second, we develop and test new hypotheses in relation to how family firms may mitigate BB and achieve higher level of export sales by promoting the professionalization of family management through international work experience. In this way, we claim to contribute to the nascent (Gedajlovic & Carney, 2010; Pollak, 1985; Verbeke & Kano, 2010, 2012) and ongoing effort by management scholars to develop a unifying theory of family firms in the International Business (IB) context (Kano & Verbeke, 2018; Narula & Verbeke, 2015).

The structure of the paper comprises theoretical framework and hypothesis development, followed by methodology, results and conclusions where we discuss the main theoretical and practical implications.

2. Theoretical Framework

Bifurcation Bias in Family Firms and Internationalization.

Gedajlovic and Carney (2010) and Verbeke and Kano (2012) claim that seemingly incompatible theories and frameworks of family firms research (i.e. agency, stewardship and socio-emotional wealth) are reconcilable by reference to TCA, originally based on Williamson's (1996) behavioural assumptions of opportunism, bounded rationality and asset specificity, i.e. the dedicatedness or non-tradability of certain family assets, such as the long-term orientation or the emotional attachment to

the firm. Family firms are seen as institutions that govern the specific assets unique to this kind of firm. This specificity is the result of the idiosyncratic bundle of resources and capabilities generated by the interactions between the family owners, the business entity, and the individual family members involved (Sirmon et al., 2008). These assets are by definition specific to the family firm because their value outside the firm is much lower. “Classical” TCA combines the assumption of asset specificity with those of bounded rationality and opportunism to explain the binary perception of family and nonfamily assets, liabilities, ownership and managers in family firms. However, Verbeke and Kano (2012) justify BB in family firms, building their theoretical framework not only on the assumption of opportunistic behaviour but also on the more comprehensive concept of bounded reliability (Verbeke & Greidanus, 2009). This concept includes also all those cases of failed human commitments without intentional deceit as in the case of preference reversal when previous commitments are scaled back because of family events that may change the order of priorities. This approach is particularly effective in the realm of family firms where altruism is a relevant feature of many members’ behaviour and where opportunism is too narrow a concept to explain all possible contingencies. This combination of assets that are family specific with bounded rationality and reliability generates the potential for BB in family firms. For example, in relation to managerial assets, the family firm has a “...tendency to amass relational assets over an extended period of time” (Gedajlovic & Carney, 2010: 1154). This raises managerial entry barriers for outsiders and exit barriers for family members, but may also lead to dysfunctional decisions over performance evaluation and compensation for family members treated as stewards and long-term assets. This raises the problem of family firms neglecting the “...letting go or reallocation of individuals who contribute little to economic value” (Verbeke & Kano, 2012: 1188).

In contrast with the retention of family members, family firms are commonly “lean and mean” in their hiring and lay-offs of nonfamily professional managers, with training viewed as a short-term expense, not an investment (Gedajlovic & Carney, 2010: 1158), and this dysfunctional treatment may apply to liabilities as well as assets. The well-documented preferences of families (Hutchinson, 1995) against raising external capital, given family aversion for capital dilution, implies that family firms could forgo profitable projects opportunities for a lack of resources thus reducing overall performance.

Overall, when BB is present it generates dysfunctional decision-making leading to inefficiencies. However, the extent of the damage produced by this bias is not uniform and tends to be greater, the more complex and volatile is the context, as is the case of firms expanding in new geographic markets (Verbeke & Kano, 2012: 1197). Therefore, we investigate the potential dysfunctional effects of BB in the context of family SME internationalization in general, focusing on exporting in particular.

According to an EU Commission's (2010) study, exporting is by far the preferred internationalization mode of European SMEs: more than 30% of European SMEs are involved in exporting while only 6% use higher commitment operating modes such as joint ventures and FDI. As the large majority of SMEs in the world are family businesses (IFERA, 2003), exporting represents the most frequent internationalization mode for family SMEs (Fernández, & Nieto, 2005).

According to BB theory, family firms that do not implement specific policies to reduce BB will show sub-optimal levels of internationalization that could be eliminated only in the long-run (Verbeke & Brugman, 2009). Clearly, these sub-optimal levels could be in either direction, i.e. taking the form of either insufficient or excessive exports compared to the optimum level. For example, family heirs could favour international investment to fulfil personal ambitions in a particular foreign market or excessive international sales could be the result of personal global ambitions¹.

In general, however, we argue that in the case of family SMEs, BB tends to generate lower and not higher than optimal levels of foreign sales as a consequence of "localness" reinforced by "smallness". Explanations of low exporting by SMEs – both family and nonfamily – have generally been proposed in terms of their shortage of resources, difficulties in accessing physical assets, the risk averse of undiversified family members and the costs of foreignness to pursue international expansion (Leonidou, 2004; Zaheer, 1995). It is argued here however that it is BB that lies at the heart of the relative smallness of family SMEs, e.g. a firm biased against external sources of financial capital seems destined to disregard sources of cheap external capital and profitable growth opportunities, thus invoking resource constraints on exporting and other strategies.

In addition, family SMEs' embeddness in networks of various nontradable and local intangible assets

¹ We thank an anonymous referee for raising this point.

(e.g. bonding and bridging social capital, the firm's reputation among customers, employees and lenders, and tacit family knowledge of market circumstances, etc.) implies a general bias towards local (or domestic) assets and liabilities (Baschieri, Carosi & Menegolo, 2017). In turn, this can result in a more specific bias against exporting, as supported by empirical evidence (Hennart et al. 2017). Of course nonfamily SMEs also have such assets, but lack the solidarity whereby family members may collectively value local family assets more highly, often with a concern for future family generations (Miller, Le Breton-Miller, Lester & Canella, 2007). This may result in family SMEs' relative disregard for export market opportunities and consequently lower foreign sales compared with unbiased non-family SMEs.

It is important to note, however, that family SMEs do not automatically exhibit BB. Rather, it is only an inevitable default status *unless* specific corrective actions are taken. Kano and Verbeke (2018) list six specific "economizing mechanisms" that could be exploited by family firms to mitigate the distortions generated by BB: meritocracy, family members' education, structured decision processes, rigorous performance measurement, external scrutiny and the introduction of higher standards of valuation for family assets.

Of course, BB is not observable, but may be expected to vary in relation to fixed internal resources and additional external ones. For example, with fixed resources the degree of BB plotted against nonfamily ownership and/or control may be expected to follow an inverted-U relation, since at zero nonfamily ownership and control, there are no fixed assets to be biased against! Indeed the development of the BB approach began with the analysis of fixed family/nonfamily managers (Verbeke & Kano, 2012). Recently, however, BB has been extended to non-human assets and the family firm's additional investments e.g. internationalization patterns involving location choice, operating mode and value chain configuration (Kano & Verbeke, 2018). With these investment decisions, the likely shape of the BB function in relation to nonfamily ownership and control may be more complex, e.g. a family firm with zero nonfamily involvement may exhibit maximum hostility (the opposite of zero BB) towards such a foreign venture.

This paper addresses BB indirectly by simply analyzing strategies designed to alleviate BB in relation to outcomes in terms of exporting. The degree of BB (negatively related to exporting) must depend to

some extent on which economizing strategies are deployed by family firms to reduce it. The next section therefore develops hypotheses around the likely impact on reduced BB (and hence on higher exporting) of four economizing strategies: the recruitment of external capital (H1), the recruitment of outside managers (H2), combinations of each of these strategies (H3), and the accumulation of foreign experience in managers (H4a, H4b).

3. Hypothesis development

Outside ownership and exporting

The BB approach unambiguously identifies a disregard for underperforming family assets as the default condition for bifurcation-biased family firms, and this condition also applies to exporting. Such a disregard does not see family members as being opportunistic but boundedly reliable, e.g. family members publicly declaring their interest in profits may find themselves behaving guilelessly "...in line with their personal identity or with past, prevailing practices they identify with..." displaying what BB theorists call family "identity-based discordance" (Kano & Verbeke, 2015: 98). As noted above, families as groups may also experience collective changes in family circumstances (e.g. an event that damages the family's local reputation) - or "benevolent preference reversal" in the language of BB theorists (Kano & Verbeke, 2015: 98) – that reinforces the local *status quo*, rather than exporting. Generally, the firm's long-term assets (e.g. family managers, relationships, reputations), that are given priority by families (and may actually be a strength of family-owned SMEs) are likely to be local and unconnected with exports. Outside shareholders, on the other end, can promote the legitimacy of firms in foreign markets and provide additional intangible resources such as new procedures or network contacts (Wiklund & Shepherd, 2003).

Most of the literature on the role of external ownership in promoting exporting in family firms argues that external shareholders can supply the additional funds that allow the development of those international projects that were not realized owing to the BB of family owners. However, we argue that the role of external, nonfamily shareholders is more profound. We propose that external shareholders have a direct interest in promoting strategies to dilute dysfunctional BB. For example,

external shareholders, in order defend their investments, would tend to support further internal policies to introduce meritocracy and unbiased scrutiny of company strategies (Kano & Verbeke, 2018). Empirical studies support these arguments. For example, Arregle et al. (2012), using a sample of Swedish firms, demonstrate how external shareholders can serve as a catalyst for internationalization. D'Angelo et al. (2016) report similar results using a large sample of Italian SMEs, as do Fernández and Nieto (2006) with Spanish firms. Calabrò, Torchia, Pukall and Mussolino (2013) argue that foreign investors have a positive impact on internationalization for Norwegian firms. Gomez-Mejia, Makri and Kintana (2010) find that family-owned firms diversify less, both domestically and internationally, than nonfamily firms, and when they do diversify, tend to opt for domestic rather than international diversification. Based on a TCA-based BB approach supported by most of the empirical evidence, we propose:

H1 – There is a positive relationship in family SMEs between external capital and exporting.

Outside managers and exporting

With BB, it is argued that the default status of family firms involves prejudice against exporting by favoring local, long-term assets, thus disregarding weakly-performing family employees, merit-based managerial appointments and profitable international opportunities. Besides classic succession problems, family members with guaranteed lifetime employment may under-invest in training (Bloom & van Reenen, 2007) and this could in turn weaken international opportunity awareness.

However, this BB does not mean that all family firms automatically have lower exports. Aware of the damage caused by bias, they may apply corrective strategies, and one of these remedies is the basis for our second hypothesis involving the professionalization of the family firm through hiring outside managers. External managers with less-bounded reliability can provide family firms with international bridging networks, specialized knowledge of international markets, and with new management procedures and techniques that complement the family firm's own strengths (Arregle, Hitt, Sirmon & Very, 2007; Kontinen & Ojala, 2011), e.g. outside managers may reduce the priority given under BB by family firms to local, long-term assets.

Beside these arguments that have been deployed in previous studies, the BB approach provides an additional powerful explanation of why external managers may be so important in the context of SMEs in order to achieve higher export levels. For external managers, the best insurance against the differential treatment of family members is the introduction of rigorous monitoring measurements (Madison, Daspi, Turner & Kellermanns, 2017), both at the domestic and international level, so that they can be fairly assessed. This means that family SMEs with external managers will tend to promote, or at least will have individuals supporting, policies that mitigate the dysfunctionalities of BB.

The empirical evidence in relation to outside managers (e.g. Calabrò et al., 2013; D'Angelo et al., 2016; Kraus et al., 2016; Majocchi & Strange, 2012) has indeed reported that exclusively family management is detrimental to firm performance in general, and to internationalization in particular. Consequently, the hiring of outside managers should help family firms to avoid managerial entrenchment (Gallo & Vilaseca, 1998) and also provide a new, diverse source of managerial knowledge in the form of additional experience, expertise, contacts and relationships (Arregle et al., 2007) gained in other firms, sectors, markets, thus enhancing internationalization. Therefore, we propose our second hypothesis:

H2 – There is a positive relationship in family SMEs between external managers and exporting.

Interaction between outside ownership and outside management

In the context of our analysis, and developed from the two previous hypotheses, dysfunctional consequences of the bifurcated treatment of family and nonfamily assets regardless of their productivity could result from family barriers to the attraction and retention of external capital and managers. This bias favors long-term family assets, and family managers may be associated with a blinkered approach to exporting. From our previous discussion it is clear that both external shareholders and outside managers are likely to favor policies that are targeted at mitigating the effects

of BB inefficiencies, so that external shareholders can protect their investments and external managers can safeguard their jobs and rewards.

In family SME studies, the idea that the impact of nonfamily managers on internationalization may positively interact with low concentrations of family ownership is increasingly finding empirical support (Calabrò et al., 2013; D'Angelo et al., 2016; Sciascia & Mazzola, 2008; Yang, 2010). Our adoption of a BB approach helps to explain and support these findings and offers clear predictions of the relationships between external shareholders, managers and exporting. In addition to the internal effect of the combined voices of outside shareholders and managers, increasing outside ownership may act as a signal to potential managerial recruits from outside the family SME that BB may be falling. Otherwise, outside managers may prefer not to be hired by family firms because they assume that, generally, their career perspectives will be subordinated to those of family members regardless of their roles, merits and achievements. By the same token, family SMEs with existing outside investors and professional managers may become more attractive to external investors. Thus, hiring external managers and attracting external capital may be two mutually reinforcing strategies in reducing BB, and we propose:

H3 – There is a positive relationship in family SMEs between exporting and combinations of external capital (H1) and external managers (H2).

International experience

As mentioned above, BB is not an inevitable feature of family SMEs but simply a default condition that can be mitigated by economizing strategies. In relation to exporting, this could mean investing in the education of family members (Verbeke & Kano, 2012: 1188) and obtaining international experience via foreign work experience or hiring managers with international knowledge. A seminal paper by Reuber and Fischer (1997: 809) analyzed "...the extent to which the manager had engaged in foreign travel; the number of languages spoken by the manager; and whether the top decision maker was born abroad, lived abroad or worked abroad." They investigated whether Canadian managers had overseas work experience and experience with international sales, and indeed concluded that

internationally experienced management teams achieved foreign sales quicker and were associated with a higher degree of internationalization.

More recently, Verbeke, Zargarzadeh and Osiyevskyy (2014: 248) argued that the "...lack of knowledge about opportunities and risks in foreign markets... .. represents a major obstacle to full-fledged internationalization", concluding that the "...the necessary knowledge can be acquired by experience". Confirming previous studies (Zolin & Schlosser, 2013), they found that high levels of exporting by SMEs were associated with at least one founder being an immigrant, bringing knowledge of foreign languages, international market knowledge, international experience and international network ties. In other words, work experience overseas is seen as a way of reducing foreign uncertainties (Dow & Larimo, 2011) and the "liability of foreignness" (Zaheer, 1995) in doing business internationally. In addition, hiring managers with international experience or obtaining international experience via foreign work experience of family members may be considered to be a signal to potential investors and managers of a family's efforts to reduce BB against exporting. We propose that:

H4a – There is a positive association in family SMEs between the international experience of all managers and exporting.

Knowledge of international markets can be acquired either through the recruitment of outsiders or the direct experience of existing managers (Fletcher & Harris, 2012). The prior literature (Benavides-Velasco, Quintana-Garcia & Guzmàn-Parra, 2013; Graves & Thomas, 2006; Stewart & Hitt, 2012), has underlined the importance of hiring talented nonfamily managers who contribute their skills (e.g. knowledge of customer attitudes, business practices, distribution channels, languages, marketing strategies and exporting documentation and procedures) and apply information and knowledge from their previous experience (Ganotakis & Love, 2012). External professional managers are likely to be equipped with international experience and knowledge gained in other competitive business contexts (Zahra, 2003) that may compensate for the inexperience and more local orientations of family members (Menon & Pfeffer, 2003).

However, promoting family managers' work experience in foreign countries may be an effective policy to reduce the negative impact of BB, and we argue here that foreign experience may have an asymmetric effect for family and nonfamily managers. One of the more evident forms of BB is the asymmetric selection criterion applied to family and nonfamily managers, whereby family managers may be hired on the basis of blood connections and external managers on their professional knowledge. This means that investments in international experience should be more effective for family managers, where selection criteria are weaker (Banalieva & Eddleston, 2011), providing a stronger signal to outsiders by family SMEs that BB is being reduced. We therefore propose that hirings of external managers and the promotion of the international experience of family managers may be alternative strategies. Nonfamily managers, may already have internationally-focused experience derived from other firms, sectors and markets, thus reducing BB. However, increasing the foreign work experience of family members may be an option for family SMEs to acquire international knowledge for successful exporting. We, therefore, posit:

H4b – There is a positive association in family SMEs between the international experience of family managers and exporting.

4. METHODOLOGY

4.1 Data

The baseline sample used in this paper is from a 2010 survey of almost 15,000 firms in the EFIGE project, sponsored by the European Commission and covering the period 2007-2009 (Altomonte & Aquilante, 2012)². This dataset offers the advantages of archival data claimed by Barnes, Dang, Leavitt, Guarana and Uhlmann (2015), i.e. it embraces a range of different socio-political contexts across the EU and offers a large sample with statistical power. It also reports both quantitative and qualitative data with detailed information on firms' international activities, ownership and

² The full test of the questionnaire with a brief description of the sampling procedure is available at: <http://bruegel.org/2012/10/the-eu-efigebruegel-unicredit-dataset/>

management characteristics, and has already been used in different studies such as Barba Navaretti, Castellani and Pieri (2014) and Cingano and Pinotti (2016).

From the full sample, we selected SMEs with fewer than 250 employees from the four largest countries of Continental Europe: France, Germany, Italy and Spain, excluding foreign-owned firms, firms with R&D expenditures greater than revenues, and “micro-firms”, i.e. firms with less than €100,000 in sales and fewer than 10 employees. Finally, we focused on firms declaring themselves to be family firms that reported full data on exports, ownership and management characteristics, giving a final sample of 6,872 firms, evenly distributed across the four countries, see Table 1.

Table 1 goes about here

The definition of the family firm represents a familiar challenge in this kind of research (De Massis, Kotlar, Chua & Chrisman, 2014; Feldman, Amit & Villalonga, 2016). We therefore checked self-declared family firms against a widely accepted measure of family control (Anderson & Reeb, 2004; Villalonga & Amit, 2010), i.e. firms whose CEO was a member of the family who owned the majority of shares. The correlation between our two measures was high at 72.85%, suggesting that the self-reported measure is reliable.

4.2 Variables and measures

Our main dependent variable representing exporting was the ratio of foreign to total sales (*Foreign sales intensity*). This variable has been used extensively (e.g. Lu & Beamish, 2001) as a measure of internationalization. Alternative measures, such as entropy and extra-EU foreign sales, were used for robustness tests.

Our four main independent variables, all lagged two-years, comprised *Influence*, *External managers*, the *Interaction* between these two variables (i.e. *Influence*External managers*) and *Managers with foreign experience*³.

³ Given data constraints in the EFIGE dataset we could lag our independent variables by two years. While we acknowledge that a three years lag would have been a better choice, we argue that also a two year period is sufficient for the variables studied to generate their effects. This

We measured outside ownership with the variable *Influence*, based on the theoretical distinction between family-controlled and family-influenced firms (Arregle et al., 2012; Sirmon et al., 2008). In family-controlled firms the family has majority (>50%) ownership and this majority provides the family with ultimate control of the firm. In family-influenced firms, the family remains as the main owner, having a substantial ownership stake and managerial presence in a firm but without ultimate control (Chua, Chrisman & Sharma, 1999). A dummy variable *Influence* took a value of unity when the family was either the first shareholder but with <50% of equity, or when the largest shareholder was not a family member but where the family maintained control through multiple ownerships by family members, e.g. an institutional investor may be the biggest owner with a 30% share but two brothers may have 25% and 20% while the remaining ownership is dispersed. In this case even if neither brother is the largest shareholder, we consider the firm to be a family firm, though family influenced rather than controlled. Following this definition, family-influenced firms were 37.95% of our sample.

The second variable was *External managers*. This variable took the value of unity when firms had hired external managers in their top management team and zero otherwise. The number of firms with at least one external manager in the sample was 4,393, i.e. 63.73%.

Managers with foreign experience was based on a question taken from the EFIGE survey asking if at least one of the firm's executives had worked abroad for at least one year, comprising 16.73% of the sample⁴. This low percentage confirmed the general lack of specific internationally-oriented resources, typical of SMEs (D'Angelo, Majocchi, Zucchella & Buck, 2013). To accommodate H4b, the survey would ideally have identified the foreign experience of each manager, whether a family member or not. Unfortunately, we only knew if any managers had foreign experience. However, the survey did provide the percentage of family managers in each firm. Consequently, we selected two sub-samples of family firms: one that had *only* family managers (see M5a in Table 4 below) and a second with *only* external managers (M5b). Running our regression for the two subsamples allowed us to identify the

is particularly true taking in account that our sample comprises exclusively SMEs that react relatively quickly to internal and external changes (Bougrain & Haudeville, 2002). Other studies that investigate SMEs samples (Lu & Beamish; 2001) or export determinants (Shinkle & Kriaciunas, 2010) lag the independent variable by just one year.

⁴ A question specifically targeted to measure the managers experience in exporting would have been helpful to test our hypothesis but unfortunately was not available.

effect of the variable *Managers with foreign experience* for each of these sub-samples, thus establishing whether it was family or nonfamily managers that possessed the foreign work experience. In order to control for industry or nation-specific effects we included both industry and country dummies. In addition, as usual in studies on the determinants of internationalization, we included a set of firm-specific controls: firm age (*Age*), size (*Size*), R&D intensity (*R&D intensity*), productivity (*Productivity*) and number of affiliates (*Affiliates*). *Age* was the natural logarithm of the firm in years, while *Size* was the natural logarithm of the number of employees (Majocchi, Bacchiocchi & Mayrhofer, 2005). Entering foreign markets is a long and complicated process that requires dedicated and significant resources. SMEs, by definition, lack these resources and larger firms are better equipped to address these complexities (Mudambi & Zahra, 2007). The controls *R&D Intensity* and *Productivity* represented respectively innovation efforts measured by the ratio of R&D expenditure to total sales, and labour productivity measured by value-added per employee. A substantial literature (e.g. Bernard & Jensen, 1999; Cassiman & Golovko, 2011) has theoretically argued and empirically validated the notion that innovation and productivity promote foreign sales. According to this literature, accessing foreign markets generates additional costs and consequently only innovative and high-productivity firms can afford to export (Golovko & Valentini, 2011). Finally, we included a dummy variable *Affiliates* to represent organizational and management capabilities, assuming that the ability to manage affiliates is a proxy for skills that are necessary to implement successful exporting (Ganotakis & Love, 2012). The variable took the value unity if the SMEs had at least one affiliate either domestically or internationally.

Table 2 presents descriptive statistics for the continuous (untransformed) variables, while Table 3 reports the correlations matrix for our independent variables. The low level of correlation in the matrix indicates that multi-collinearity was not a significant concern. Further confirmation of the unimportance of multi-collinearity was the low value of all the VIF values (average 1.66), significantly lower than the standard threshold values.

Tables 2 and 3 go about here

4.3 Methods

In order to test our hypotheses, we had to take into account the particular nature and distribution of our dependent variable, *Foreign sales intensity*, bounded between zero and 100. Moreover, our sample contained a high proportion of zero values (48.8%), so we adopted a Tobit regression methodology and set zero as a lower bound (Bowen & Wiersema, 2004). This methodological approach has been used frequently in similar contexts in order to deal with the censored nature and peculiar distribution of a dependent variable (Merino, Monreal-Pérez & Sánchez-Marín, 2015; Sanchez-Bueno & Usero, 2014). To account for possible asymmetric shocks that could affect firms located in the same country, we clustered standard errors at the national level, and our estimating equation took the following form:

$$\begin{aligned} \text{Foreign Sales Ratio} = & \alpha_0 + \beta_1(\text{Influence}) + \beta_2(\text{External Managers}) + \beta_3(\text{Influence} * \text{External Managers}) \\ & + \beta_4(\text{Managers with foreign experience}) + \beta_5(\text{Age}) + \beta_6(\text{Size}) + \beta_7(\text{Affiliates}) + \beta_8(\text{R\&D experience}) \\ & + \beta_9(\text{Productivity}) + \lambda_s + \phi_c + \varepsilon_i \end{aligned}$$

Here, the parameters β_i are the coefficients to be estimated, λ_s is a set of industry dummies and ϕ_c a set of country dummies, while ε_i is the usual error term.

5. RESULTS

5.1 Main results

Our main results are reported in Table 4 with five models based on our full sample, plus two additional models to test H4b, distinguishing family firms with only family managers (M5a) from those with only external managers (M5b).

Table 4 goes about here

Model 1 is our baseline model that includes only controls, with interesting results. All the coefficients in the baseline model are significant and have the expected signs. This result confirms previous findings on size (Majocchi et al., 2005), the role of affiliates (Ganotakis & Love, 2012), R&D expenditure (Golovko & Valentini, 2011) and productivity (Cassiman & Golovko, 2011). The only

controversial finding involved the firm's age. Recently, in addition to the born-global literature (e.g. Knight & Cavusgil, 2004; Oviatt & McDougall, 1994), some scholars have pointed to the contradictory role of age in promoting exports. For example, Love et al. (2016) have challenged the idea that age is a proxy for experience and have argued that the role of age should be considered in a wider context including international experience. This is exactly one of the tasks that we addressed in the following models.

In Model 2 we add the variable *Influence* in order to assess the role of external capital in family firms. The coefficient is positive and significant ($p < 0.05$), confirming our H1 for the whole sample (D'Angelo et al., 2016). Similarly, in Model 3 we include the variable *External Managers*. This variable is also positive and highly significant ($p < 0.01$), confirming H2.

These findings are further extended by the results of Model 4 where we include an *Interaction* term between the variables *Influence* and *External Managers*. This model allows us to test H3 that foreign sales are positively affected by the joint impact of external managers and external capital, and H3 is confirmed. However, attention is drawn to the asymmetrical impact of this significant interaction term on the results for our individual independent variables. While the variable *Influence* now loses significance, *External Managers* remains significant ($p < 0.01$). This confirms H3 that there is synergy between external capital and external managers, but this synergy exhausts the positive impact of nonfamily ownership, while outside managers still have an independent effect. This could indicate the possibility that external managerial hires are a more significant indicator than external capital of actions taken to deal with BB, a possibility to which we comment on later.

Model 5 adds the dummy *Managers with international experience*. This is our full model and allows us to test H4a, which is confirmed. The positive and significant ($p < 0.01$) coefficient suggests that prior international experience does promote exporting in family firms, although this result does not distinguish the experience of family and nonfamily managers (see below).

The last two lines of Table 4 report the AIC and BIC criterion test. Both values suggest that the best model is M5 (the AIC and BIC for the baseline model are 39799.62 and 39826.97, respectively).

Besides, the AIC and BIC from Models 5a and 5b are not comparable because computed on a samples of different size.

Given the nonlinear nature of the Tobit model, the coefficients reported in the first four models cannot be interpreted as marginal effects (Wiersema, & Bowen, 2009). Therefore, for Model 5 alone, we also report the margins computed at the censored means. The marginal effects are an approximation of how much the dependent variable is expected to change for a unit change in the explanatory variables and allows us to discuss the economic significance of our results. The role of external managers in promoting exporting is confirmed: the marginal effects reported in Table 4 for this variable suggest that firms with external executives are associated with an average export intensity level higher by 58.7%, while the joint presence of external capital and managers adds 21.9%. Following Hoetker (2007), we also report the graphical representation of the interaction term in Figure 1.

Figure 1 goes about here

Figure 1 clearly shows that the role of external managers on foreign sales intensity is always positive, since the continuous line is always positive. More interestingly, it shows also that the effect on foreign sales intensity is close to zero when there is no external capital (*Influence* variable=0) but it is much stronger for firms that have external investors (*Influence* variable=1). Therefore, the graphical representation of the interaction further confirms H3.

As a development of Model 5 we distinguish international experience for family/nonfamily managers, and run two additional Tobit regressions reported as Models 5a and 5b. Excluding 3,559 firms with a mix of family/nonfamily managers, in M5a we repeat M5 for a sub-sample of firms (n=2,495) with just family managers and no external managers. In M5b we investigate another sub-sample (n=839) that had just external managers, i.e. family firms that were owned, but not managed, by a family. In M5a and M5b, the variable *External managers* is always zero in the first sub-sample (M5a) and equals unity in the second, so consequently the interaction term was dropped.

Again, asymmetrical results were found in relation to external capital and managers, this time in the context of foreign experience. While the variable *Managers with international experience* remains significant (p<0.01) in M5a i.e. when family firms only have family managers, and the margin at the

mean - not reported in Table 4 - is equal to .087⁵, this same variable loses significance when family firms only hire external executives. These results confirm H4b, and, for family firms with no external managers, foreign experience increases the foreign sales intensity by almost 9%. However, foreign experience added to managers hired externally seems to be duplicative and superfluous in terms of exporting.

5.2 Robustness, sample bias and endogeneity tests

In order to ensure the robustness of the results presented in the previous section, we performed several additional tests. First, we ran the models using different econometric approaches. When we use a traditional OLS model the results of our Tobit model were confirmed. Since our dependent variable is a ratio bounded between 0 and 1, we also follow the approach suggested by Papke and Wooldridge (1996), and by Baum (2008) for modelling proportions. Using a generalised linear model (GLM), we find that the sign and the statistical significance of coefficients are unaffected so that the main conclusions hold⁶.

Then, we used two alternative measures of internationalization. The first was a measure of international diversification based on the entropy index of Jacquemin and Berry (1979). This measure was initially developed for measuring the degree of product diversification, but has lately been adapted to measure international diversification (Kim, 1989; Majocchi & Strange, 2012). Next, following D'Angelo et al. (2013), we used a more restricted measure of extra-regional foreign sales considering only those sales outside the EU. The results obtained by using these two different measures of internationalization as a dependent variable were very similar to those reported here using *Foreign sales intensity*.

We also controlled for both the possible non-random distribution of family managers and the endogeneity of manager selection (Reeb, Sakakibara & Mahmood, 2012). Our sample comprises exclusively family firms but within this sample we distinguished firms with managers appointed outside the family and firms with only family management. It could be argued that the selection of

⁵ In order to save space, we do not report marginal values in Models 5a and 5b but we report in the text the values for the two variables of interest *External managers* and *Managers with international experience*.

⁶ Results are available upon request from the authors.

managers within firms may not be random, e.g. firms which give higher priority to international markets may hire external managers. Moreover, other unobserved factors could determine the presence of external managers and affect exporting. We therefore face problems in measuring the effect of a non-random treatment (external managers), which could also be endogenous (i.e. correlated with unobserved factors).

Table 5 goes about here

To measure the effect of external managers, an ideal experiment would compare the export levels of a family-owned firm with external managers and the same firm without them. Clearly, such an experiment is infeasible but propensity score matching offers a viable solution (Cassiman & Golovko, 2011). We used as matching covariates the controls from the regression analysis and we added to these variables the level of per capita investment, assuming that higher level of investments would require greater capital inputs, pressing family firms to employ nonfamily managers (Demsetz & Lehn, 1985). Using Stata's *teffects psmatch* command we compared the different exporting measures for family firms with and without external managers. The results of this matching are reported in Table 5a, and column 1 reports that on average firms with external managers export more, confirming the central role of external managers in family firms. If we also consider the role of external capital (column 2, Table 5a), the effect is stronger for firms that are not open to external capital ("not influenced" in column 2) since being influenced already promotes further exporting. For example, in the case of not-influenced firms, the export share of firms with at least one external manager is 2.13% higher than firms without external managers. However, external managers could be endogenous, so that the estimated coefficient in Table 5a could be biased. Therefore, as a further check, we took into account the possibility that the presence of external managers is correlated with unobserved factors in the export equation. Using Stata's *teffects* command we compared the effect of endogenous external managers on foreign sales intensity, and the results are reported in Table 5b. The averages (average treatment effect) confirm the results reported in the main regressions (Table 4): family firms with external managers export more but the effect is statistically more significant for family firms with

external capital (influenced firms). The coefficient in the case of influenced firms is larger (16.4) than (8.2) for those not open to external capital.

6. CONCLUSIONS

6.1 Theoretical contributions

The ownership and control of family firms typically involves strong emotional attachments to the firm (Nicholson & Björnberg, 2012) due to the partial or total merging of two institutions, the family and the firm (Lansberg, 1983). The possibility of conflict between insiders and outsiders (Minichilli, Corbetta & MacMillan, 2010) often drives family firms' decisions to *not* open up their ownership structure to external capital and/or their managerial team to externally recruited executives. However, this conflict amounts to BB that may constrain the exporting of family SMEs.

Following the recent heterogeneity view of family firms (Chua et al., 2012; Nordqvist, Sharma, & Chirico, 2014), we focused on such external presence in family firms' organizational structures (Siebels & Knyphausen-Aufseß, 2012; Stewart & Hitt, 2012), i.e. nonfamily ownership, nonfamily management and interaction between them, supplemented by our new variable involving managers' international experience, and we investigated how they may act as specific corrective actions taken by family SMEs to lower BB (Kano & Verbeke, 2018) to generate higher level of exporting (Pukall & Calabrò, 2014).

We claim that our study makes four theoretical and *one* empirical contribution. First, we contribute to the nascent TCA theory of family firms by building on Kano and Verbeke (2018), by extending the notion of BB to exporting, particularly in the context of family SMEs.

This theoretical framework facilitates our second claimed contribution, involving more nuanced versions of hypotheses already present in the literature, developed by analyzing the effects of BB on family firm exporting, offering a response to the recent suggestion from Daspit, Chrisman, Sharma, Pearson and Long (2017) that "...future studies are needed on the mechanisms that are most effective in bridging the gaps created by bifurcation bias". Among these mechanisms and conditions we confirm that it is the *joint* presence of different "voices at the table" (Sirmon et al., 2008), i.e. the joint

presence of external managers and external capital, that influences exporting in European family SMEs, as well as nonfamily investors or managers independently. These results represent the broader confirmation of previous studies reporting not only the *independent* contributions to internationalization of hiring outside managers and opening the board to external owners (e.g. Calabrò et al., 2013; Majocchi & Strange, 2012), but also the additional positive influence that external managers may bring with an open ownership structure (e.g. Kraus et al., 2016; Yang, 2010), creating synergies (D'Angelo et al., 2016). The joint presence of external capital and nonfamily managers may be a signal that the family firm has overcome BB and a previous reluctance to allow nonfamily members to hold strategic positions and participate in decision-making (Claver, Rienda & Quer, 2009).

Third, we consider for the first time the asymmetric effects on exporting of interaction between nonfamily owners and managers. Specifically, nonfamily ownership loses its significance when interaction is considered, so outside shareholders only contribute to exporting when combined with outside managers, but nonfamily management continues to have an independent influence. The literature on BB emphasizes human resources (Verbeke & Kano, 2012) and so do our results, with nonfamily managers having a two-fold (independent and interactive) impact on exporting. This presence of outside managers in a family firm may itself be a physical manifestation of the attenuation of BB and its associated problems of family-based asset restrictions, socio-emotional wealth protection and principal–principal agency problems. In contrast to the human capital of externally-recruited managers, financial capital may be disembodied, inanimate, and there is a long, established literature (e.g. Shleifer & Vishny, 1997) on the non-involvement and lack of voice of minority outside shareholders in firm governance. This asymmetry could explain how the presence of outside managers may attenuate family owners' preferences, blur the constraints related to family-based human asset specificity and thus overcome the risks associated with internationalization (Gomez-Mejia et al., 2010; Sirmon & Hitt, 2003). On the other hand, inanimate outside ownership may need to be reinforced by outside managers in order to gain credibility as evidence of reduced BB.

Fourth, using the BB approach we develop and test new hypotheses concerning the effects of international work experience for family/nonfamily managers, thus confirming that the BB of family firms is merely a default condition that can be resolved by suitable strategies. Our results show for the first time that the international work experience of family and nonfamily managers has a positive impact on the foreign sales intensity of family SMEs, but this experiential contribution introduces another asymmetry in that it renders insignificant the independent influence of the presence of outside managers. External managers may be hired on merit by family firms, previously exhibiting BB, based on skills, abilities, experiences and knowledge gained in other firms, business context, sectors, and markets. On the other hand, family members, who may have been chosen from a restricted talent pool according to the family's power and path-dependent culture and traditions (Arregle et al., 2012) favoring blood relationships over merit, may be able to reduce BB and increase their contribution to internationalization by seeking international working experience themselves. Investing in the international experience and business-related education of family members is one option that families may choose to address this bias: this option may reduce the costs of the dysfunctional treatment of managerial resources (Verbeke & Kano, 2012), preserving family-specific endowments, but adding the targeted knowledge required to reduce the liability of foreignness and be successful in international markets.

Finally, our empirical contribution comprises a response to Arregle et al. (2016) by including controls for macro-level (i.e. country-level) data so as to gain an accurate understanding of the context-dependent relationships between family firms and exporting (Wright, Chrisman, Chua & Steier, 2014) and arguably produce generalizable results that single-country studies cannot achieve. Moreover, our results relating to family heterogeneity are consistent and strong enough to withstand different institutional pressures across four different EU countries. They are not only robust in the context of endogeneity tests but also pass a series of robustness tests using different measures of internationalization. Banalieva and Eddleston (2011) found that family firms prefer to select foreign markets in a firm's geographic home region, possibly because family managers have a better knowledge of, or expertise in, those proximate markets. Our robustness checks supplement earlier research, demonstrating that family SMEs can go beyond their home region if appropriate governance

structures are in place, admitting both external capital and managers or, as an alternative to hiring outsiders, investing in the foreign work experience of family managers.

6.2 Managerial relevance

Our results have interesting implications for practitioners. Internationalization through exporting generally requires capital and specialized management. The novel implication of this study is that if SMEs want to derive full value from externally-recruited managers, they should consider simultaneously opening up their equity to outside shareholders. Alternatively, if family SMEs currently lack the resources for international expansion, or if they value family control more than the value of exports, modest investments in the foreign experience of family managers may yield exporting gains. Nonfamily investors and managers will be only too aware of, and discouraged by, BB in family firms, and the simultaneous exposure of boards and management teams to nonfamily influence may act subsequently as a signal to external potential investors and managers that BB has been overcome.

6.3 Limitations and research opportunities

Besides these claimed contributions, our work has some limitations and thus ideas for future research. In relation to international experience, following the suggestions of Reuber and Fischer (1997), specific knowledge, skills and abilities acquired experientially as well as educational background could be investigated through primary research. The construct could be explored also in terms of breadth and depth as suggested by Kogut and Singh (1988) and Delios and Beamish (1999) to account for national culture. Further research could also investigate under which conditions family SMEs may develop international experience, e.g. locating within technological clusters or developing technology ties but without necessarily having their family members work overseas. Moreover, with longitudinal observations it would be interesting to know whether family members, once they have acquired the necessary international experience or other experientially acquired abilities, could heal conflicts with nonfamily executives and augment the firm's stock of international knowledge. Future research could also investigate whether, once appointed, outside managers transfer their knowledge and experience to

family managers or encourage them to focus on investing in knowledge- based resources for internationalization (Zahra, 2003). Ideally this could be done qualitatively or using multilevel methods, seeking to address the diversity and intensity of international experience (Clarke, Tamaschke & Liesch, 2013) in management teams within family firms and how they contribute to organizational learning. Additionally, it could be interesting to investigate the mitigating effects on BB when outside managers have a high or low strategic position. Finally, from a theoretical point of view, future research, from both qualitative and quantitative perspectives, could look into operationalizing the “identity-based discordance” and “benevolent preference reversal” concepts from BB.

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Table 1: Geographical distribution of the sample

Country	Freq.	Percent	Cum.
FRA	1,505	21.90	21.90
GER	1,579	22.98	44.88
ITA	2,069	30.11	74.99
SPA	1,719	25.01	100.00
Total	6,872	100.00	

Table 2: Descriptive statistics of continuous variables

Variable	Mean	Std. Dev.	Min	Max
<i>Foreign sales intensity</i>	15.12	24.077	0	100
<i>Age</i>	33.51	28.662	1	182
<i>Size</i>	37.41	36.973	10	250
<i>R&D intensity</i>	3.41	6.5628	0	80
<i>Productivity</i>	4.40	.89712	-.02	9.25

Table 3: Correlation matrix

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Influence (1)</i>	1							
<i>External managers (2)</i>	0.051***	1						
<i>Managers with foreign experience (3)</i>	0.023*	0.159***	1					
<i>Age (4)</i>	0.015	0.026**	0.004	1				
<i>Size (5)</i>	0.107***	0.284***	0.201***	0.153***	1			
<i>Affiliates (6)</i>	0.053***	0.133***	0.118***	0.085***	0.249***	1		
<i>R&D intensity (7)</i>	-0.016	0.056***	0.115***	-0.028**	0.057***	0.059***	1	
<i>Productivity (8)</i>	0.049***	0.009	0.045***	0.053***	0.002	0.067***	0.008	1

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 4: Tobit regression results

	M1	M2	M3	M4	M5	Marginal effects	M5a Family managers only	M5b External managers only
<i>Influence</i>		2.189** (1.001)	1.944* (1.093)	-.1401 (1.384)	-.1733 (1.325)	.357	.2105 (1.706)	6.997 (5.309)
<i>External managers</i>			4.666*** (.9046)	3.386*** (.3143)	2.824*** (.2965)	.587***		
<i>Interaction</i>				3.496* (1.927)	3.325* (1.948)	.219*		
<i>Managers with foreign experience</i>					13.59*** (1.822)	.157***	9.214*** (1.681)	6.246 (5.842)
<i>Age</i>	3.444** (1.570)	3.442** (1.528)	3.507** (1.489)	3.524** (1.488)	3.732*** (1.383)	3.186***	5.438*** (1.624)	1.537 (3.02)
<i>Size</i>	9.633*** (0.811)	9.426*** (.8665)	8.674*** (.8988)	8.628*** (.9022)	7.587*** (1.099)	3.280***	7.072*** (2.18)	13.78*** (1.747)
<i>Affiliates</i>	4.804*** (0.743)	4.706*** (.7169)	4.344*** (.8262)	4.379*** (.8029)	3.457*** (.6898)	.130***	2.362 (1.657)	1.556 (4.884)
<i>R&D Intensity</i>	0.869*** (0.129)	.8727*** (.1278)	.8568*** (.1289)	.8571*** (.128)	.7818*** (.0965)	3.470***	.6867*** (.1888)	1.004*** (.2871)
<i>Productivity</i>	5.639*** (1.193)	5.557*** (1.144)	5.386*** (1.141)	5.36*** (1.135)	4.958*** (1.094)	4.449***	4.691*** (.6901)	7.556*** (1.959)
<i>Constant</i>	-77.80*** (7.278)	-77.91*** (7.155)	-79.22*** (6.865)	-78.31*** (6.606)	-77.79*** (7.652)		-87.66*** (11.47)	-88.6*** (13.87)
Sigma_cons	35.37*** (0.556)	35.36*** (0.5495)	35.31*** (0.5513)	35.3*** (0.5463)	34.97*** (0.5238)		36.39*** (0.6452)	38.08*** (2.805)
N	6,872	6,872	6,872	6,872	6,872		2,495	839
AIC	39,799.617	39,715.535	39,698.448	39,695.49	39,588.721			
BIC	39,826.97	39,742.876	39,725.789	39,722.83	39,616.062			0.0429

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ - Robust standard errors. Country and sector dummies were included but not reported.

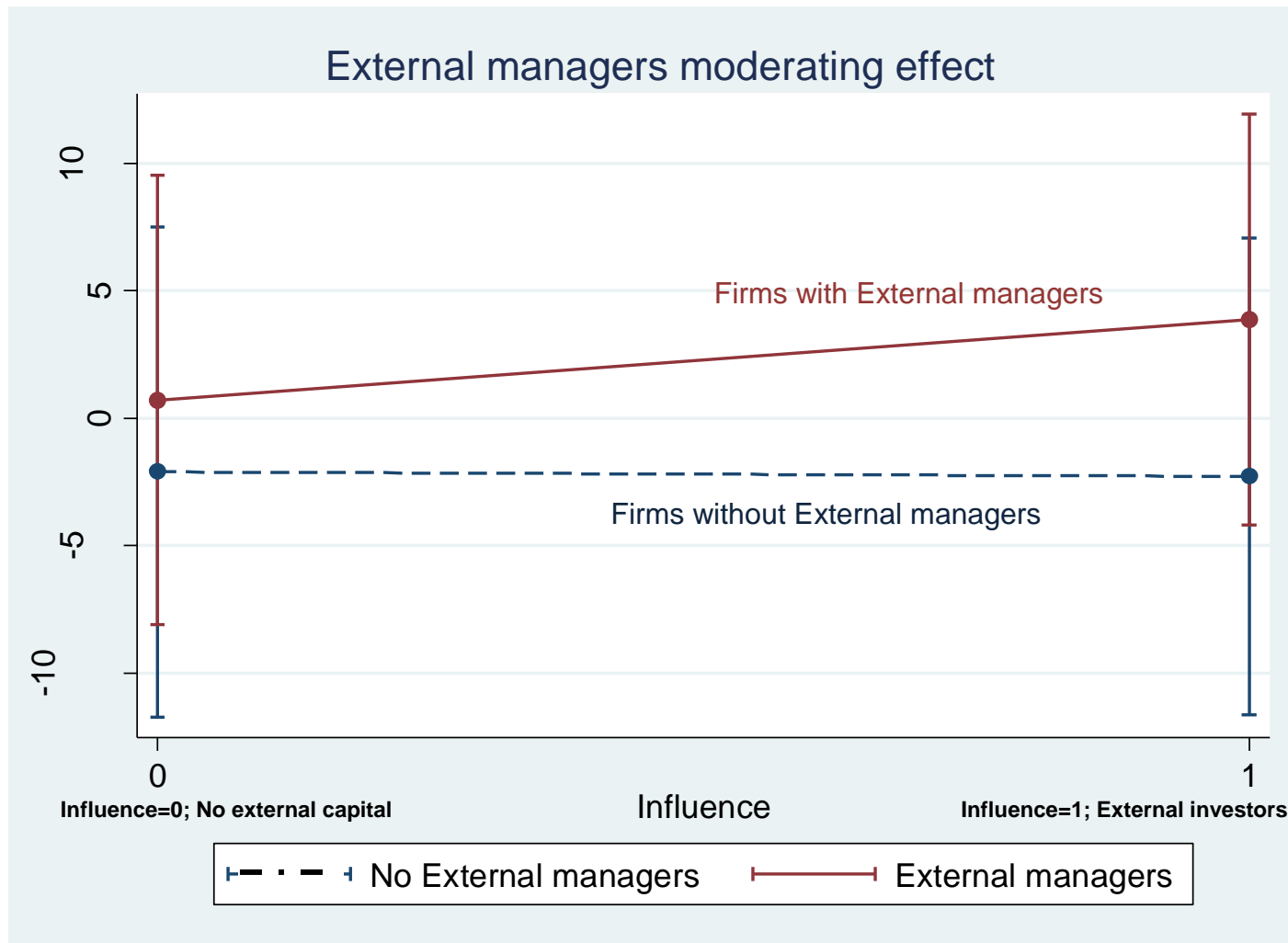
Table 5: Propensity score matching results (5a) and propensity score matching and endogenous treatment (5b)

Table 5a	(1)	(2)	(3)
	All Firms	Not Influenced	Influenced
External Managers	2.232*	Export Share 2.131**	-0.6537
	-1.142	-1.069	-4.555

Table 5b	(1)	(2)	(3)
	All Firms	Not Influenced	Influenced
External Managers	12.13***	8.248***	16.4*
	-2.547	-1.392	-9.594

Obs	6331	3881	2443
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Figure 1: Interaction effect: graphical representation



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