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Article

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Heirs, corporate aristocrats and 'Meritocrats': the social space of top CEOs and Chairmen in India

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Abstract

This article proposes an analysis of the social space inhabited by the CEOs and Chairmen of the top 100 Indian companies in 2012, using a Multiple Correspondence Analysis (MCA). The analysis aims to understand the internal divisions to be found in the field of economic power, by looking at the divisions along the lines of educational capital, inherited capital (family capital), caste and social capital (drawing on a network analysis of interlocking directorates). Our results point to a very peculiar structuration of the economic field; we find that credentialism has a very weak influence, there is a clear and massive cleavage between owners and managers of capital, social capital carries decisive weight and the actors closest to the state apparatus occupy a marginal role. We argue that it is possible to identify three poles among business leaders: the multipositional family business owners, the unipositional family business owners and the managerial galaxy.

Key words: family, capitalist systems, social capital, power, corporate governance

JEL classification: P51

Sociologists studying economic elites have often tried to identify the competing fractions of this privileged section of society. From Berle and Means' (1932) initial work, to the present, the tension between owners and managers has in this regard, remained a question central to most research on top business leaders. This binary has become somewhat redundant with the opposition between *nouveaux riches* and old money (Burris, 2000). While some have argued that owners of capital are bound to be supplanted by high-skilled managers (Burnham, 1941), Mills (1956), Scott (1997), Domhoff (1967) and others like Bourdieu and Saint-Martin (1978) have insisted on the enduring role of the capitalist bourgeoisie and argue that 'credentialism' does not necessarily imply the decline of the power of capital. If CEOs and chairmen are indeed increasingly chosen among a pool of people highly endowed with so-called 'human capital', Bourdieu and Saint-Martin argue that, rather than being mutually exclusive, the capital received by birth and the capital provided by educational credentials are complementary and reinforce each other. Their reading of the power dynamics within the firm thus go against the teleological vision of Alfred Chandler who suggests the unavoidable empowerment of managers within organizations (Chandler, 1990).

This article intends to interrogate this opposition between owners and managers in the Indian context, where the rise of managers is taking place in a context where capital is still very largely controlled by the biggest business families, rather than by institutional investors. The capital ownership of Indian publicly traded firms is indeed marked by the predominance of business groups and individual investors, the comparatively weaker role of financial institutions and the growing strength of state-owned firms. In such a context, we can legitimately wonder what space is left to *credentials* in the access to top business positions.

A lot of the research on the Indian business class has been based on specific castes or communities (see, for example, Timberg, 1978; Rudner, 1994; Markovits, 2000; Birla, 2009), specific industries (see, for example, Engelshoven, 1999; Upadhya, 2004; Lardinois, 2017), specific localities (see, for example, Hazlehurst, 1966; Harriss, 2003; Oonk, 2014) or, more often and much less rigorously, on the innumerable biographies of top industrialists. Attempts at systematically addressing the sociological profile of Indian business leaders remain very rare (Jodhka and Naudet, 2017). In 1971, S.C. Jain had proposed a first description of the demographic characteristics of Indian managers that did not take into account the owners of companies (Jain, 1971). More recently, Capelli *et al.* (2010) studied more than one hundred executives but their research lacks systematic criteria in the sample selection and the authors mainly try to assess the differences between management styles in the USA and India. Gandhi and Walton (2012) tried to study Indian billionaires using data extracted from the *Forbes* list, but offering a very limited number of variables. Ajit *et al.* (2012) analysed the caste diversity of board members among top Indian groups, showing that the Indian corporate network remains an 'old boys club' based on caste affiliation.

This article proposes the first systematic pan-Indian analysis of all the top CEOs and chairmen in the contemporary period. Here, we have chosen to analyse the social space inhabited by the CEOs and Chairmen of the top 100 Indian companies in 2012, using a Multiple Correspondence Analysis (MCA). We will draw on this analysis to understand the internal divisions among top Indian property owners and top company managers. We will look more specifically at the divisions along the lines of educational capital, inherited capital (in the form of family capital), symbolic capital (awards, non-business board positions), caste and social capital (drawing on a network analysis of the interlocking directorates among the top 250 Indian firms). By combining a network analysis and a MCA, this article intends to extend the effort to combine these two methodologies undertaken by Mach *et al.* (2011). It thus aims at reinforcing their endeavours to integrate social capital into the prosopographic study of business leaders, while most studies so far have principally focused on their cultural and economic capital. We also believe that a study of such a wide panorama of the Indian business elite should facilitate international comparisons and help locate India among the variety of national configurations.

Our article thus addresses a fairly simple research question. We try to assess to what extent the cultural, social, symbolic and economic capital the members of the business elite have access to can help understand their relative position in the economic subfield of power. Given that most of the literature on the trajectories of top business leaders revolves around the issue of their education, we will more specifically discuss the role played by cultural capital and use it as a touchstone to comparatively assess the role played by other forms of capital. Is access to leadership positions mainly school-mediated or are educational credentials overridden by access to other forms of capital? If other forms of capital take predominance over education, how can one appreciate the comparative role of economic and social capital as measured by variables such as caste, family ties, the position in the corporate network, the position outside the economic field or the ownership of the company?

As this article will show, we argue that top Indian business leaders are generally compared along the lines of capital ownership, and particularly family ownership. Our research points to a particularly vivid contrast between owners and managers that is certainly stronger than the observations made by similar studies in other countries. Our article further suggests that among those who own capital, the type of social capital possessed is the most structuring division, with an opposition between those who are corporate-oriented and those who seek resources outside the economic field. Finally, the most surprising result is that educational capital does not represent a major dividing line and this suggests the low weight of credentialism in the Indian business system. We draw on these results to identify three poles that can help understand the diversity of Indian business leaders: the multipositional family business owners (who accumulate capital outside the economic field), the unipositional family business owners (who are corporate-oriented) and the managerial galaxy. These three poles subsequently allow for a discussion of the internal struggles within the business class. Our article thus makes an important contribution to the sociology of elite reproduction by showing that traditional typologies of the paths to the elite are strongly centred on European and American case studies and consequently fail to grasp the reality of the global South. India offers a thought-provoking example of a situation in which the structure of the economic subfield of power is vastly different from the structure of its Western counterparts: not only are educational credentials still structurally dominated by inherited wealth and privilege, but the relationship between the state and the realm of business operates in a far more subterranean manner. We believe that the analysis presented here contributes to provincializing Europe and North America (Chakrabarty, 2008) in the field of elite studies. If it is often taken for granted that these societies should be the framework of reference to analyse elite dynamics in the world, the results presented in this article reveal limits on the epistemological suitability of western models for other cultural contexts such as, in this case, India. As it happens, those 'other contexts' are some of the largest, most economically consequential, and most aggressively developing economies, such as Russia, India, Brazil, China, South Africa and countries of the Middle East to name a few.

In order to discuss the internal struggles of the Indian business elite, our analysis follows six steps. First, we review the literature on the social space of the economic elite and try to precisely highlight the recurrent patterns that can be identified across borders, insisting on the role of social capital in the structuration of the field of business leaders. This comparative review is followed, by a discussion of the specific role educational degrees play in gaining access to top positions in India as well as abroad. Descriptive statistics of the educational paths followed by Indian business leaders indeed point to a lower level of qualification than their Western counterparts. This leads us to postulate that educational degrees play a different role in the field of the Indian economic elite than they do in other countries. In the third and fourth steps, we detail our methodology and present the database we created, as well as the variables we selected. In a fifth step, we analyse the results of the Multiple Correspondence Analysis of our database. Finally, we identify three poles that help differentiate Indian leaders. We conclude by discussing the sharp contrast between owners of capital and managers in the Indian context, as well as the specific role played by educational and social capital in the structuration of the business elite.

1. Integrating social capital into a study of the structure of the economic elite

Scholarship on the structure of the business elite has expanded over recent years and it now covers many countries, mainly drawing on two different methodologies: network analysis of interlocking directorates and Multiple Correspondence Analysis (MCA) of the social space of business leaders (see Table 1 for a presentation of Geometric Data Analysis and MCA). The latter research is mainly found in Europe with studies of France (Dudouet *et al.*, 2014), Norway (Denord *et al.*, 2011; Hjellbrekke and Korsnes, 2013), Denmark (Ellersgaard *et al.*, 2013) and Switzerland (Mach *et al.*, 2011). The use of network analysis to study the various fractions of the elite, is more common on the American continent and is often centred around a discussion of who is, or is not, part of the 'inner circle' as well as attempts to identify the contours of this powerful clique (Useem, 1984; Caroll and Carson, 2003; Domhoff, 2006). This type of network analysis has also been conducted in Europe (Windolf, 2002) with, for example, more detailed studies of France (Comet and Finez, 2010; François and

Table 1. The choice of geometric data analysis and multiple correspondence analysis

Geometric data analysis is a branch of multivariate statistics, especially well-suited to analyse observational data. The method is *geometric* in the sense that data are represented as clouds of points in a multidimensional Euclidean space. Contrary to regression models which strive to underline *causal effects*, GDA is description-oriented—'a tool to make patterns emerge from data' (Benzécri, 1969).

Multiple correspondence analysis is the subdivision of GDA developed to analyse *Individuals* × *Categorized Variables* tables. It has a long tradition within sociology, and was most famously used by Bourdieu, for example, in *Distinction: a social critique of the judgement of taste* (1984). It is on the basis of such a methodology that he drew his famous graph providing an overview of cultural tastes within French society.

The use of MCA rather than regression methods overlaps with the contrast between a 'sociology of variables' and 'constructing a social space', with the distinction between reasoning in terms of *causal effects* or *elective affinities*. Once the social space has been constructed, the MCA nevertheless provides instructive insights to explain individual positions by external factors (set as *supplementary variables*).

The *rationale* to use the former rather than the latter method in our study was the fact that it represented a first step into a yet to be studied social space – Indian elites. Carrying out a MCA, an inductive and data-driven technique, to visualize the most structuring oppositions of this social space seemed more cautious and accurate than employing regression models that require *prior knowledge* about the social space (in order to avoid biased estimates resulting from *omitted variables* or *overfitting*).

Lemercier, 2015) or the Netherlands (Heemskerk, 2007). The opposition between these two methodologies is now waning and an increasing number of authors (Mach *et al.*, 2011) is trying to combine them. The research presented here also attempts to contribute to this reconciliation of network analysis and geometrical analysis, drawing on a previous analysis of the Indian corporate network (Naudet and Dubost, 2017). Mobilizing both SNA (Social Network Analysis) and MCA, as suggested by Denord (2015), indeed allows us to avoid the shortcomings of both methods. While studies of the field of power have rarely been able to include social capital as a structuring dimension, the analysis of interlocking directorates through SNA has the opposite drawback, as it makes it difficult to take the agents' social properties into account. Here, centrality scores revealed by SNA allow us to objectify the social capital of directors within the field and can be used as an active variable that usefully completes the analysis of other dimensions of capital.

In their seminal study of business elites using MCA, Bourdieu and Saint-Martin (1978) underscored that the French business elite was structured by two strong oppositions: one between the public and private sectors, and the other between old money and *nouveaux riches*. The latter has recently been re-emphasized in the case of Denmark (Ellersgaard *et al.*, 2013) and Norway (Hjellbrekke and Korsnes, 2013) where inheritors richly endowed with economic capital are opposed to highly qualified 'outsiders'. Nonetheless, evidence of a homophilous recruitment system (Bourdieu and Saint-Martin, 1978; Ellersgaard *et al.*, 2013; Flemmen, 2012; Maclean *et al.*, 2014) incites us to nuance this opposition: even 'outsiders' have inherited, either 'institutionalized cultural capital' (Bourdieu and Saint-Martin, 1978; Hjellbrekke *et al.*, 2007) or distinctive manners rooted in 'a class-specific habitus' (Hartmann, 2000) that could later be converted into economic capital.

The first opposition outlined by Bourdieu and Saint-Martin could be deemed to be specific to a period when publicly supported firms led the field of business, we could thus postulate that the wave of privatizations over the last decades has led to a resorption of this opposition. Yet, Dudouet and Joly (2010) underscore the persistence of a cleavage between former civil servants and other members of the business elites. Moreover, the cases of the Swiss and the Norwegian business elites, partially structured by the opposition between those who served in the army and the others (Mach *et al.*, 2011) for the former, and where the 'inner group' of industrialists, trade union leaders and politicians are seen in opposition to the rest of the business elite (Hjellbrekke and Krosnes, 2013) for the latter, show that the public/private distinction is not restricted to France. Top civil servants and executives from the private sector do not differ only in terms of professional status but also in terms of command over strategic resources as the proximity to the state allows people to influence the normative frame or the direction of public investments (Emerson, 1962). Being a member of the 'inner circle' (Useem, 1984) provides access to a powerful and cohesive network that crosses the different subfields of power.

Thus, the structuring public/private sector distinction is, to a certain extent, enwrapped in a larger distinction, opposing individuals in terms of the amount of symbolic or social capital at their disposal. Social capital defined as 'the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition' (Bourdieu and Wacquant, 1992) has a performative effect on other forms of capitals—cultural, educational or economic. Investments in different forms of capitals being equal, individuals having a higher social capital are likely to get higher returns (Bourdieu, 1980).

Differences in amounts of social capital therefore structure the social space of business elites. In Switzerland for instance, the subfield of economic power is primarily structured by the opposition between central and marginal firms in the network of the top 250 Swiss firms (Mach *et al.*, 2011). In France, the core of the top firms' network is delimited by former bureaucrats converted into powerful 'interlockers' who thus play a role of cohesion and coordination among the inner circle (Comet and Pizarro, 2011).

High volumes of social capital are however not the monopoly of those at the core of a cohesive network; outlying positions allied with the ability to bridge 'structural holes' (Burt, 1992) sometimes also provide a tremendous advantage and studies of the rise of the Medici family have highlighted how bridging positions can constitute a decisive resource (Padgett and Ansell, 1993). This role of bridging is best captured by Bonacich's centrality measure, which, is mobilized in this article, as we will see below.

2. The recruitment of business leaders and the structure of the business elite: when the Indian case does not fit the Western model

As explained above, schooling impacts academic credentials and the structure of networks: not only does it impact what you know, it also has an impact on whom you know. Education has an engulfing influence and studies dedicated to business elites often demonstrate its crucial importance in accessing top positions. It is widely acknowledged today that the education system determines differentiated access to economic, cultural and social capital (Bourdieu and Passeron, 1990). Academic degrees are often depicted as certificates of accumulated knowledge—or 'human capital' (Becker, 1964)—or as signals of intelligence or hard work (Spence, 1973): the labour market would thus naturally reward the most qualified or hard working individuals with the highest occupations. And yet, this common sense interpretation overlooks the role of networking or loyalty to a firm in career trajectories and cannot make sense of cases of unqualified or poorly qualified CEOs.

In addition, the strength of the link between economic situation and education vary from one country to another. Hartmann (2009) distinguishes three ideal-types in the modes of recruitment of the elite. The first two are both based on an elite school-mediated mode of recruitment, the first displaying porous borders between business, political and cultural subfields of power and the latter presenting less intertwined business, political and cultural elites. In the third model, business, political and cultural subfields of power are seldom interlinked with one another and—in contrast to the first two types—there is no such thing as a common elite education provided by special institutions.

The selection process for business elites is thus extremely institutionalized in France, where prestigious diplomas are paramount on the labour market. The *Grandes écoles* exert a monopoly over business elites and three institutions (the ENA, HEC and X) provide half the CEOs of the top 40 companies (Dudouet and Joly, 2010). Within the *Grandes écoles*, the path to becoming a part of the business elite is further curtailed by a second level of selection; the 'Grands Corps' system. Among the ENA or X graduates, only those ranked in the first places are likely to gain access to the top executive occupations. Dudouet and Joly underscore a winner takes all logic, where minor differences in ranking engender vast differences in terms of job opportunities. Finally, a third level of filtering plays out in the race for access to the 'inner circle' (Useem, 1984) with inherited capital playing the decisive role (Comet and Finez, 2010) along with having worked in a ministerial cabinet (Dudouet and Joly, 2010).

The UK is another place where elite schools play a central role in the recruitment of the business elite (Hartmann, 2009). Access to the British business elite is indeed jealously guarded by few highly selective institutions—renowned public schools (Eton in particular) followed by prestigious universities (Hartmann, 2009). However, there is no such institution as the French *Grands Corps* to further control access to the core of the British business elites. The 'inner circle' of business elites prefers to recruit top executives who have demonstrated outstanding dedication, hard work and creativity on the labour market (Maclean *et al.*, 2010). Career path is the decisive factor and yet, career has a 'disintegrating effect' (Hartmann, 2009). Compared to France, the core of the UK business elites is therefore more heterogeneous in terms of experience, careers and backgrounds. Thus, the group of 'interlockers' in the UK is less cohesive (Windolf, 2002), and the economic subfield of power less concentrated (Maclean *et al.*, 2010) and—in contrast to France—clearly distinguished from cultural and political subfields of power (Hartmann, 2009).

American business elites differ from those in France and the UK, not so much in terms of qualifications, but rather in terms of recruitment with a wide range of institutions providing access to top executive positions (Naudet, 2014). While the share of CEOs in the USA holding at least an undergraduate degree, attained 93% in 2008 (Martelli and Abels, 2010), about half of the top 50 American companies' CEOs graduated from state colleges, city colleges or community colleges (Sowell, 2008), and less than a third of the Fortune 500 CEOs hold master's degrees from Ivy League Universities (Martelli and Abels, 2010).

The USA therefore seems unfamiliar with elite school mediated modes of selection: access to the 'inner circle' is less institutionalized than in France or in the UK and rests on other variables than education (Mayo *et al.*, 2006). Similarly, in Germany—where CEO/chairmen hold at least a Bachelor's degree, and for 52%, even a doctorate (Hartmann, 2000)—or in Denmark (Ellergaard *et al.*, 2013), business elites are highly qualified but recruited from a broad range of institutions. For instance, 22 of the 50 German universities had at least one alumnus among the CEOs/chairmen of the top 100 German firms in 1970 (Hartmann, 2000). In these three countries, the educational system thus delivers diplomas that vouch for a technical competence rather than filtering access to elites.

Similarly to the *Grandes écoles* system in France, the Indian education system has some institutions like IITs, NITs, and IIMs that recruit through highly competitive exams (Henry and Ferry, 2017). However, according to our data, only 21% of the CEOs and chairmen of the top 100 Indian companies graduated from one of these institutions. Most of them thus obtained their educational degrees at other Indian universities or, for a minority, abroad. In total, 64% of them hold a bachelor's degree, while 28% pursued their studies up to a master's level and 6% up to a PhD. Only 3% of the CEOs and Chairmen of the top 100 Indian companies do not hold any academic degree. Moreover, a large share of these individuals supplemented their academic background with an MBA (20%), an accountancy diploma (17.8%), or a PGDM or AMP (15.7%). While the American business elite largely privileges business degrees, the hierarchy of disciplines is reversed among the Indian business elite, with Science/Engineering degrees in first place (57%) followed by Business/Commercial degrees (26%).

Knowing the vast importance of family dynasties in Indian businesses, it would seem legitimate to wonder if this large share of highly qualified CEOs and chairmen underscore a 'meritocratic', education based logic or if diplomas play the role of 'ornaments' (Mayo *et al.*, 2006, p.121) for the heirs of long-established business empires. Simple bivariate statistics reveal a first theme: crossing individuals' highest level of university degree with the number of family members holding shares in the company (a variable measuring family capital) shows that the share of unqualified CEOs and Chairmen rises with the number of family members participating in the capital. Only 1.1% of CEOs/Chairmen with no family involvement in the capital have no degree while this is the case of 7.14% of those with 1–3 family members involved in the capital and the case of 9.52% of those with more than 3 members in the capital. A look at the link between making it to the Forbes ranking of the 100 richest Indians and university degrees reveals that 9.68% of the 'Forbes' list has no degree, while this is the case of only 1.83% of the 'non-Forbes'.

Clearly, academic degrees are not evenly distributed among top Indian CEOs and Chairmen and the strength of the link between education and access to business elites in India could very well be counterbalanced by other variables such as family involvement in the capital. Following the classification established by Hartmann (2009), the Indian business elites—who graduate from a wide range of institutions—seem to diverge from the elitist education based types of business elites (the best examples of which are France and the UK). Whether they can be identified with the third ideal-type (as found in Germany)—has yet to be determined.

3. Data collection

Our data set originates from our own prosopographic collection of information (Broady, 2002), focusing on the top 100 companies listed on the Indian National Stock Exchange (NSE). We focus on the year 2011–2012 ending on March 30, the companies' rank being based on their market capitalization. We can note that this criterion places a premium on the market capitalization of firms, which is consistent with preceding studies (Dudouet and Joly, 2014). This also indirectly implies that we do not hold the number of employees in companies to be a coherent measure of economic power, since it varies a lot among economic sectors. Moreover, this variable is undermined by the common subcontracting strategies of Indian companies, which is the reason why we have not retained it for our analysis.

Data collection was a laborious, 6-month long process, using a wide spectrum of biographical and corporate information, including NSE reports, companies' annual reports and the Executive record sheet generator for IAS officers,[1] among others. The difficulty of gathering information on Indian business elites might actually explain why very few quantitative sociological studies of this group have been conducted so far. There is indeed no source such as the *Who's Who* or any other such exhaustive survey or directory available in India.

Our data set includes 165 chairmen and CEOs. After removing foreign directors and other individuals, for whom essential information was missing, we came up with a data set of 140 different individuals.

4. Methodology

We chose to analyse our dataset using the multiple correspondence analysis (MCA; Lebaron, 2006; Leroux and Rouanet, 2010), which allows us to construct the subfield of economic power in India, and to locate the chairmen and CEOs within it. We also use the

1 See http://persmin.gov.in/ersheet/StartQryERS.asp.

ascending hierarchical clustering (AHC) method to identify clusters of individuals (Denord *et al*., 2011). We tested several MCA models, through various combinations in the choice of active and supplementary variables. These different versions do not provide substantially different outcomes, and here we present the most consistent model.

We thus constructed the social space of the economic elite using 14 active variables, which include 42 different modalities (Table 2). These variables can be divided into six categories. A first set of variables highlights the position of directors in the economic field and includes the individuals' percentage of shareholding in the company as well as a dichotomous variable mentioning whether or not they are on the Forbes list.

A second set of variables apprehends the position outside the economic field, by looking at responsibilities in international organizations and in other administrative, educational and political institutions. Sitting on the board of an international organization or a university, or having held a political mandate, are indeed all signs of an effort to develop positions of influence outside the corporate network. We also added a 'prestige' variable that records business, civil and academic awards (Padma Bhushan, Honorary doctorate, 'best entrepreneur of the year', etc.).

A third set of variables aims at measuring the position in the corporate network, based on the number of directorships in the other top 250 NSE companies. The centrality in the network is apprehended using the connection index. The centrality of each firm is calculated by dividing the number of its links in the network by the maximum possible quantity of ties (Freeman, 1979).

The fourth category focuses on education and includes the highest degree, whether or not the individual followed a management programme (MBA, Advanced Management Programme or Postgraduate degree in management), whether or not they obtained an accountancy diploma (ACA, FCA) and whether or not they followed Indian selective studies [i.e. whether or not they have a degree from an Indian Institute of Technology (IIT), a National Institute of Technology (NIT) or an Indian Institute of Management (IIM)].

The fifth category looks at the weight of family, with a variable indicating the number of family members who own shares in the company. This information was retrieved from annual reports, which have to mention such shareholding.

Finally, we incorporate information on the firm itself, such as its NSE ranking (based on market capitalization) and whether the company is a business group or a public sector undertaking (PSU). Since 1991, PSUs have indeed gradually opened their capital to private investors and started selling minority shares on the equity market (Baijal, 2002; Leelavathi, 2002). In 2012, 20% of the top 250 NSE companies were PSU companies, as against 11.2% in 2000.

We then project the 12 supplementary variables (subdivided into a total of 56 modalities), which do not figure in the construction of the axes (Table 3). These include a set of variables dealing with personal characteristics, such as the age, the sex and the caste of each individual. The caste coding was carried out by cross-checking various elements of available information. The practice of using the surname as a proxy for caste has recently been employed by many researchers (Chen *et al*., 2015; Mani and Moody, 2014, pp. 1644–1645), and it was therefore our main source of information for identifying the caste. The whole process was extremely time-consuming as we cross-checked the information with all the other sources we could access: printed or online biographies, caste association websites, and academic books mentioning the communities business leaders belong to. Considering the

Table 2. Frequencies and contribution of active categories to the MCA

Heading	Variable	Modality	%	Dim. 1 (59%)	Dim. 2 (21%)	Dim. 3 (7%)
Information on the firm	Firm ranking Market capitalization on Indian NSE	1–25	25	0.5	0.2	2.0
		26–50	26.43	2.9	0.0	0.1
		51–75	25	0.0	1.4	5.2
		76–100	23.57	1.1	2.6	1.5
		Total	100	**4.5**	**4.2**	**8.8**
	PSU	Not a PSU	80.71	1.8	0.1	0.7
		PSU	19.29	7.6	0.4	2.9
		Total	100	**9.4**	**0.5**	**3.6**
	Business group	Not a business group	58.57	3.0	3.3	1.4
		Business group	41.43	4.2	4.7	2.0
		Total	100	**7.2**	**8.0**	**3.4**
				21.1	***12.7***	***15.8***
Position in the economic field	Shareholding Number of shares of company held	Nil	45	4.2	0.1	0.3
		Low	27.14	0.2	2.6	1.1
		Medium	17.86	6.6	0.7	0.5
		High	5	1.8	3.4	4.3
		Very high	5	1.1	8.1	1.4
		Total		**13.9**	**14.9**	**7.6**
	Forbes Billionnaire in Forbes ranking	Not in ranking	77.86	3.5	1.2	0.1
		In ranking	22.14	12.4	4.2	0.3
		Total	100	**15.9**	**5.4**	**0.4**
				29.8	***20.3***	***8.0***
Position in the corporate network	Directorship Number of directorships held in 250 NSE companies	Nil	54.29	2.9	0.1	0.5
		One	13.57	0.3	0.9	9.3
		Two to five	20.71	3.5	1.7	0.1
		More than five	11.43	3.4	11.6	2.2
		Total		**10.1**	**14.3**	**12.1**
	Connection index Centrality in the corporate network	Nil	5.71	0.0	4.3	5.3
		Low	29.29	1.5	1.5	7.2
		Medium	29.29	0.8	0.7	0.1
		High	25.71	3.2	1.6	1.6
		Very high	10	0.4	9.5	0.1
		Total		**5.9**	**17.6**	**14.3**
				16.00	***31.90***	***26.40***
Position outside the firm	Responsibilities Positions on boards of international, academic institutions, etc	No responsibilities	80.00	0.2	1.2	0.4
		Responsibilities	20.00	0.9	4.7	1.6
		Total	100	**1.1**	**5.9**	**2.0**
	Prestige Civilian, business or academic award	Nil	53.57	1.9	0.0	4.0
		One	33.57	1.3	0.1	1.0
		Two	12.86	0.9	0.5	6.0
		Total	100	**4.1**	**0.6**	**11.0**
				5.20	***6.50***	***13.00***
Family		No Family	65	6.2	1.2	0.2
		One to three	20	4.6	0.1	3.5

continued

Table 2. *Continued*

Heading	Variable	Modality	%	Dim. 1 (59%)	Dim. 2 (21%)	Dim. 3 (7%)
	Family in capital Number of family members holding shares in the company	More than three	15	7.4	6.3	1.7
		Total	100	**18.2**	**7.6**	**5.4**
				18.20	***7.60***	***5.40***
Education	Highest degree	No degree	3.57	0.7	2.0	5.4
		Bachelor	61.43	0.9	2.1	0.1
		Master	27.14	2.9	1.1	0.2
		PhD	7.86	0.0	1.3	10.4
		Total		**4.5**	**6.5**	**16.1**
	Management MBA, AMP or PGDM	No management programme	64.29	0.0	1.1	2.9
		Management programme	35.71	0.1	1.9	5.3
		Total	100	**0.1**	**3.0**	**8.2**
	Accountancy ACA, FCA, ACWA or CPA	No accountancy diploma	82.14	0.1	1.7	0.3
		Accountancy diploma	17.86	0.4	7.7	1.3
		Total	100	**0.5**	**9.4**	**1.6**
	Selective studies IIT, IIM or NIT	No selective studies	78.57	1.0	0.5	1.2
		Selective studies	21.43	3.5	1.7	4.3
		Total	100	**4.5**	**2.2**	**5.5**
				9.60	***21.10***	***31.40***

varying precision of the available information, we chose to create 7 different caste codes: Brahmins, traditional merchant high castes (Vaishyas, Marwaris, Agarwals, Parsis, etc.), other high castes (Kayasths, Rajputs, Khatris, etc.), agriculturists and artisans (Jats, Reddys, etc.), Muslims, others (Christians, Scheduled Castes and Scheduled Tribes) and 'caste unknown'. Although Jains can be considered as a separate religious group, we chose to code them in the traditional merchant categories, as all the Jains we could identify belong to merchant castes and subcastes. For the same reasons, we also decided to include Parsis in this group, as they have traditionally occupied dominant trading positions in Gujarat and Maharashtra. Although they have largely specialized in business, Khatris were not coded as traditional merchant castes as their emergence on the business scene is more recent than that of Marwaris or Sindhi Baniyas (Damodaran, 2008). This manner of coding relies on interweaving an approach in terms of varna, jati, religion and official categories (for Scheduled Castes and Scheduled Tribes). This necessarily implies a certain degree of simplification as it relies on broad categories and, as Surinder Jodhka notes, 'every region ha[s] a large number of jatis and its subunits, ranging between 200 to 300 or even more' (Jodhka, 2012, p. 9). By focusing on such large units, we are aware that our approach is 'only useful to the extent of being a model, a framework of hierarchy' (Jodhka, 2012, p. 9). But given the issues raised here, this appeared to us to be the best option for a quantitative approach.

Our supplementary variables also encompass the exact status of each director in the firm (CEO or Chairman) and whether or not they have been selected because they are Indian civil servants (IAS). Variables which would have been redundant with active ones have also been set as supplementary: the 'influence index', which is a Bonacich measure of centrality[2]; the 'Family in firm' variable, which includes the number of family members who are directors of the firm (these ties have to be mentioned in annual reports); and a variable on the market capitalization of the firm. These variables are used to confirm what is observed from their active counterparts. For statistical reasons, we have also included as supplementary variables those variables for which modalities had a low weight[3] (the economic sector), or for which information was sometimes missing (academic discipline). Finally, we also used remuneration as a supplementary variable, as it is possible that some information regarding this variable remains incomplete (it was not possible for us to corroborate remuneration as declared in annual reports with other possible declarations of income).

Once the supplementary and active variables are selected, we run the MCA on our data and identify a multidimensional Euclidean space. Based on the decrease of eigenvalues we decide to interpret the first three axes. The modified rate of axis 1 is equal to 59%; adding axis 2 gives a cumulated rate of 80%, further adding axis 3 brings it to 87%. The inertia rates of the Burt table are, respectively, 11.9%, 8.6% and 6.5% for axis 1, 2 and 3. As suggested by Benzécri (Le Roux and Rouanet, 2004, p. 200), the modified rates allow for a better appreciation of the relative importance of the first axis: 59%, 21% and 7%.

Only the active variables with a contribution value above average are plotted on the Figures 1, 3 and 5 (here 100/42 = 2.38% baseline criterion). We also projected the significant supplementary variables on Figures 2, 4 and 6 (Lebart *et al.*, 2000, p. 184), on the condition that their coordinate is significant at a 5% level on the retained axis (this corresponds to the bold values in Table 3). Furthermore, to interpret the positions of these modalities, we use the 'rule of thumb' presented in Le Roux and Rouanet (2010, p. 46), which states that if the deviation between two modalities of the same variable is greater than 0.5, it is considered 'notable' (lines on the figures help to check whether two categories of the same variable or block variable have a deviation greater than 0.5).

These variables help in the interpretation of the axes. Then, we also compute the barycentres (or medoids) of the modalities opposed on the axis. They are then projected onto the clouds of individuals along axis 1–2 and 1–3 and they represent landmarks of typical patterns for each opposition. We further identify the agent located the closest to each barycentre as it can be seen representing the typical individual for each opposition.

2 Whereas the connection index measures centrality by counting the number of direct links for each node of a network, Bonacich centrality is better for measuring influence in a network, as, in addition to one's own connections, it takes the connections of one's connections into account. It relies on the notion that power arises from connection to weak others, as opposed to strong others (Hanneman and Riddle, 2005).

3 It is usually assumed that a modality should encompass at least 5% of the sample survey.

Table 3. Frequencies of the supplementary categories of the MCA

Heading	Variable	Modality	Size (%)
Information on the firm	Market capitalization	Very low	25.71
		Low	26.43
		Medium	22.86
		High	15.71
		Very high	9.29
	Business sector	Banking, insurance and financial services	12.14
		Cement, construction and real estate	7.14
		Chemicals and Pharmaceuticals	10.71
		Conglomerate	6.43
		Food-processing and beverages	2.86
		Heavy industry	10
		Information technology, telecommunication and mass media	12.86
		Light industry	3.57
		Mining and Metal Production	12.14
		Transport and Shipping	1.43
		Electricity, Oil, Gas and Water supply	14.29
		Banking, Insurance and Financial Services (PSU)	6.43
Position in the economic field	Status in the firm	CEO	41.43
		CEO and Chairman	7.14
		Executive chairman	24.29
		Non executive chairman	27.14
	Remuneration	First quartile	25
		Second quartile	25
		Third quartile	25
		Fourth quartile without last decile	15
		Last Decile	10
Position in the corporate network	Influence index	Nil	5.71
		Low	28.57
		Medium	40.71
		High	17.14
		Very high	7.86
Personal characteristics	Sex	Man	97.14
		Woman	2.86
	Age	Less than 45	5.71
		45 to 59	58.57
		60 to 69	25.71
		More than 70	10
	Caste	Agriculturist and artisan caste	5.00
		Brahmins	31.43
		Merchant high caste	31.43
		Non merchant high caste	23.57
		Muslims	4.29
		Others (Christians and Scheduled tribes)	0.29

continued

Table 3. *Continued*

Heading	Variable	Modality	Size (%)
		Unknown caste	3.57
Family	Family in firm	Nil	62.14
		One to three	31.43
		More than three	6.43
Education	Discipline of highest degree	No academic field	5
		Humanities	10
		Law	1.43
		Business	26.43
		Science/Engineering	57.14
	Foreign studies	No foreign studies	50.71
		Foreign studies	49.29
	IAS	Not IAS	96.43
		IAS	3.57

5. The three dimensions of the Indian business elite

5.1 Axis 1: Family versus public institutions

The contrast along the first axis is clearly between agents who benefit from their family connections to reach their directorship position (as confirmed by the variable *Family in firm*) and those who rely on public institutions. The first agents are among the richest; they figure in the Forbes' billionaires ranking and are also associated with firms in which they own important shares of the company's capital, they tend to be chairmen of business groups, and also hold other board positions in associated companies. Their developed family network and high economic capital seem to go hand in hand with a high social capital within the corporate network.

It is tempting here to consider the family resource as inherited capital, as both the youngest and the eldest directors are on the right side of the axis, and also because, on this side of the axis, we also find the presence of the variable 'trading caste', typical of people belonging to well-established business families. This configuration could possibly also be the result of newcomers who promoted their family after having achieved success.

Looking at the barycentre calculated for this side of the axis, we observe that Keshub Kailash Mahindra and Anand Gopal Mahindra are the closest to this landmark. They are respectively the Chairman and CEO of Mahindra & Mahindra Ltd., ranked 31 on the NSE. They are both billionaires, who belong to the same family, managing their own business group, with other family members also holding capital in the company.

On the left side of the axis, low economic capital is compensated by higher levels of education. Numerous agents have completed a master's degree and others have graduated from selective Indian institutions. Notably, they do not tend to study abroad, a feature that is fairly characteristic of the agents located on the right side. The high level of Indian educational capital is linked here to the presence of directors of PSUs, who hold exclusively executive positions, and have no shareholding in the company. We can also notice the variable 'Brahmins'

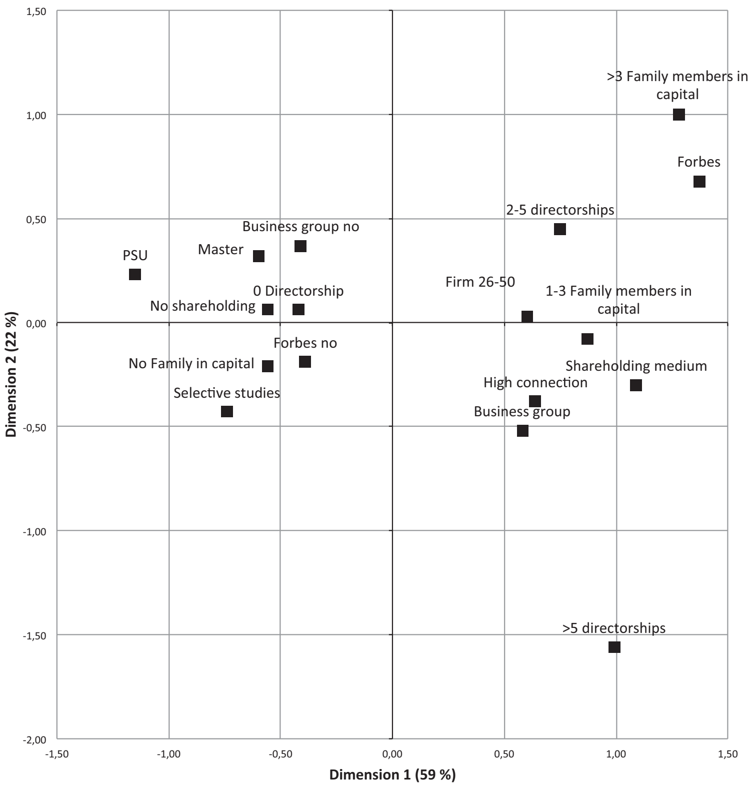

Figure 1. Contributing active categories to dimension 1, plan 1–2.

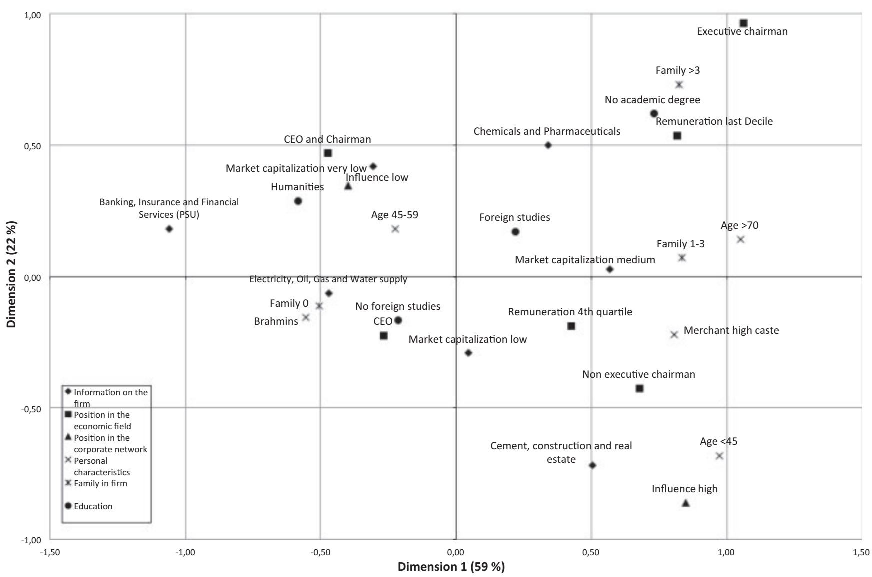

Figure 2. Supplementary categories significant on axis 1, plan 1–2.

on this side of the axis. In short, the left side of the first axis associates selective and high-level paths in the Indian educational system with positions in public-owned companies.

The landmark on this side can be associated with Krishna Kumar Aravamudan and Shakeel Ahmed who are, respectively, the CEO of the State Bank of India (ranked 7) and the CEO of Hindustan Copper Ltd. (ranked 54); both companies are PSUs.

5.2. Axis 2: Social capital inside or outside the economic field

We notice that in Figures 3 and 4 variations in the variables are observed mainly on the right side of the graph, showing that agents who rely on Indian public institutions (universities and companies) are less concerned by these variations. They are indeed mainly located in a median position on this axis. On the other side of the axis, the large expansion helps to more precisely specify the diversity within the group of those who embody family capitalism. It is clear that this second axis is mainly characterized by variations in the type and amount of social capital held.

On the upper part, we find directors who hold no positions on other company boards and who have a poor centrality in the corporate network. But these same directors are characterized by other features of social capital as they are associated with responsibilities in fields other than the economic field, such as international institutions, government commissions and boards of universities. They can also rely on their family, not as a network but as support within the firm, and they generally possess a high economic capital provided by the ownership of shares in the company.

As a landmark, Sajjan Kumar Jindal, executive chairman of J S W Steel Ltd. (ranked 76), and Kalanithi Maran, CEO and Chairman of Sun TV Network (ranked 98), are the closest to the barycentre. Jindal is from a very active, high merchant caste family involved in different companies owned by the family business group founded by his father, Om Prakash Jindal, a former Power minister of Haryana. His son has pursued this tradition of holding positions in the political field and is now also a member of different political and advisory boards, such as the Indian Council for sustainable development, the Confederation of Indian Industry and the Indian Institute of Metal. As for Kalanithi Maran, he owns 77% of his media company. His father, Murasoli Maran, was a journalist as well as a Union minister of Commerce, which certainly helped to develop his social capital outside the economic field.

On the lower part of the axis, we observe that the kind of social capital held is more directly related to the corporate network. Directors occupy a high centrality in this network, both in terms of connection and in terms of influence (Bonacich index) and are generally slightly less endowed in economic capital than their counterparts from the upper side of the axis. These agents often belong to business groups that are highly connected thanks to the cluster of companies they are embedded in. Deepak Shantilal Parekh, Chairman of HDFC Ltd. (ranked 13), is typical of this side of the axis. He is one of the most central and influential agents in the corporate network and holds no less than seven directorships in the other top 250 NSE companies.

This axis therefore clearly reveals an opposition between private sector agents who draw upon social resources that are available within the corporate network and agents who are less unilaterally corporate-oriented and who rely on social resources outside the economic field, while benefiting from extremely high levels of economic capital. This also points to a difference in family capitalism, with an opposition between those who lead a group that is

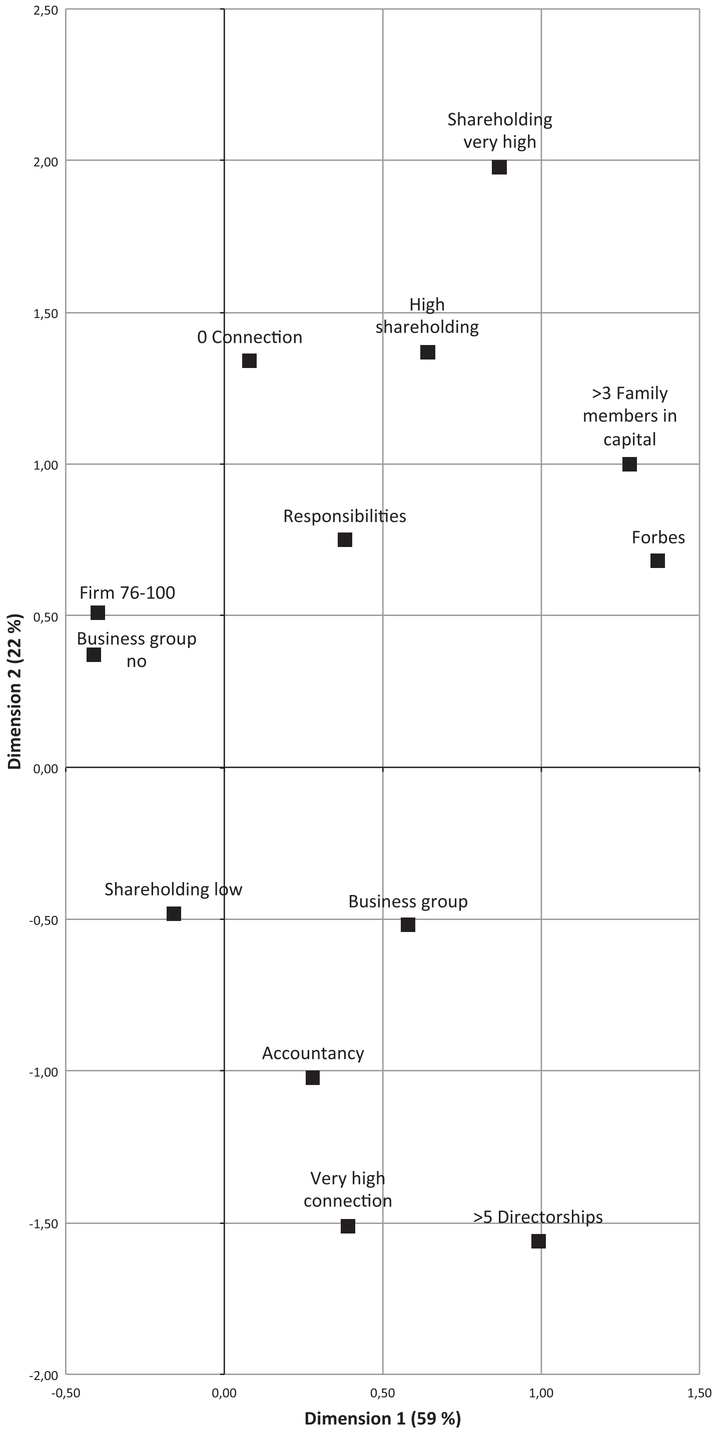

Figure 3. Contributing active categories to dimension 2, plan 1–2.

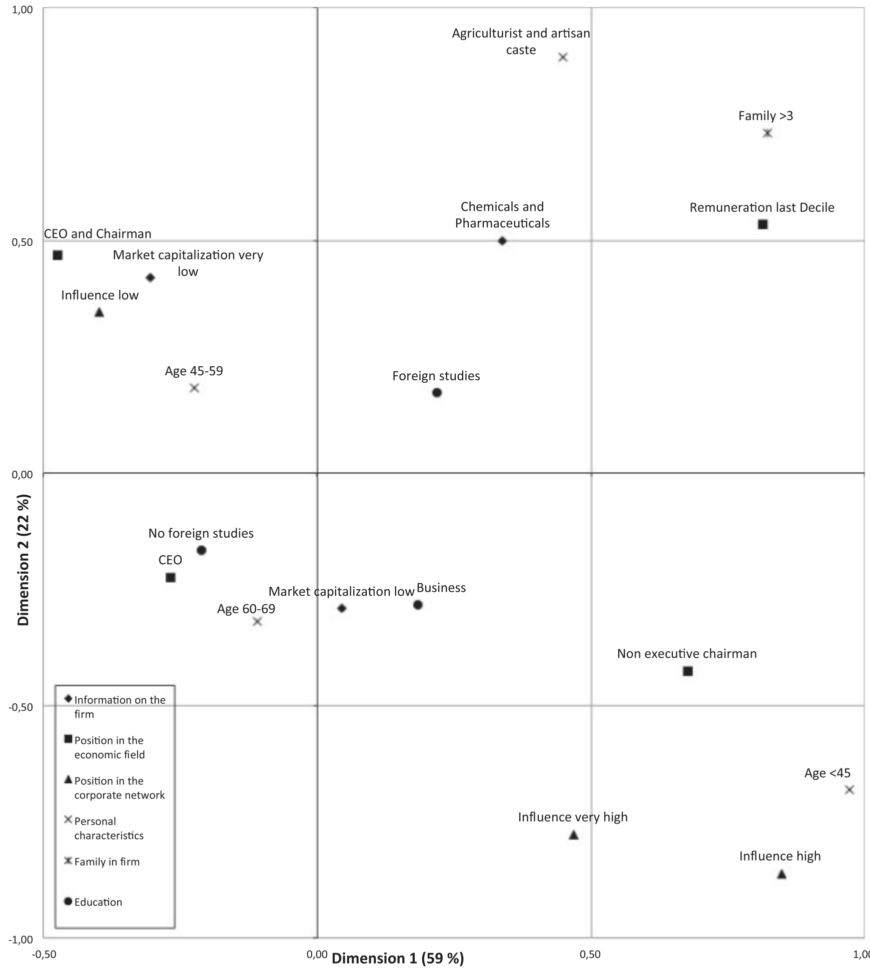

Figure 4. Supplementary categories significant on axis 2, plan 1–2.

still tightly controlled by a family and other groups that have adopted a type of corporate governance more influenced by the Anglo-Saxon standards (Naudet and Dubost, 2017), with the family less obviously (or sometimes not at all) present in the shareholding. This also finally suggests that managers are absent from this side of the field and that they are thus deprived of the most prestigious positions and of the power offered by an influent position within the corporate network. The owners have a clear and uncontested monopoly over the symbolic resources necessary to be dominant in the field.

5.3. Axis 3: Educational capital versus prestige

The third axis appears more difficult to interpret since many variables contribute equally to its inertia. It is also to be noticed that it is the only axis of the three where education plays a key role. It opposes little connected and highly educated directors to well-connected and

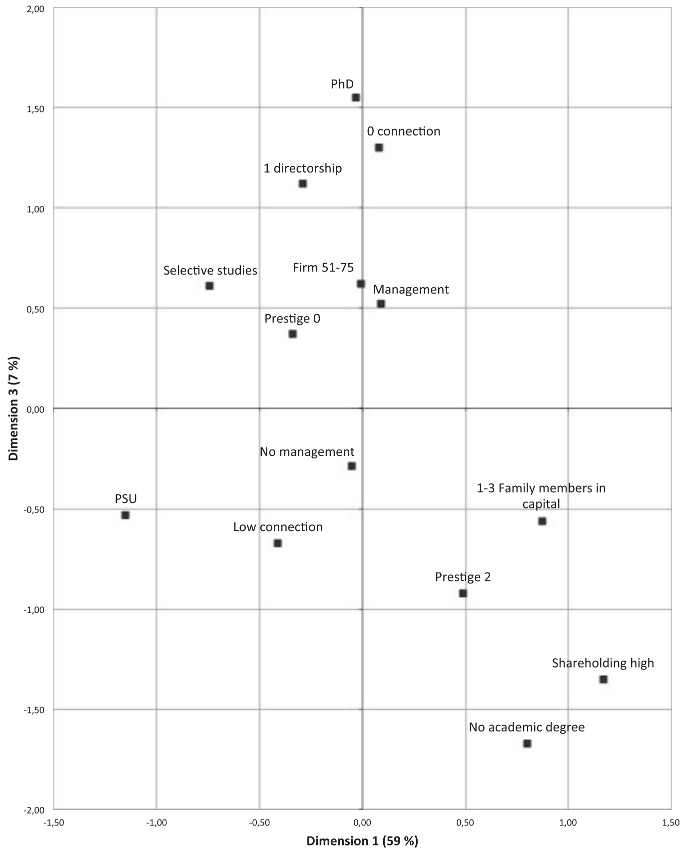

Figure 5. Contributing active categories to dimension 3, plan 1–3. Supplementary modalities are plotted if their coordinate is significant at a 5% level on the retained axis. Furthermore, to interpret the positions of these modalities, we use the 'rule of thumb' presented in Le Roux et Rouanet (2010: p. 46), which states that if the deviation between two modalities of the same variable is greater than 0.5 it is considered 'notable' (lines on the figures help to check whether two categories of the same variable or block variable have a deviation greater than 0.5).

prestigious, but little educated directors. The upper part is characterized by a high contribution of PhDs and management programmes, with agents having followed selective studies, whereas the lower part is mainly populated by agents without academic degrees or management programmes.

Nonetheless, education only depicts one part of the picture since prestige (i.e. business, academic or civilian awards) also contributes significantly to the construction of the axis, along with high shareholding for directors on the lower part, and poor connections on the upper part. The level of recognition outside the firm and centrality in the corporate world is inverted with respect to the educational capital. Agents who hold no academic degree and have not legitimized their position by way of a management programme have obtained more awards in the fields of business, academics (honorary PhDs) or official titles like the

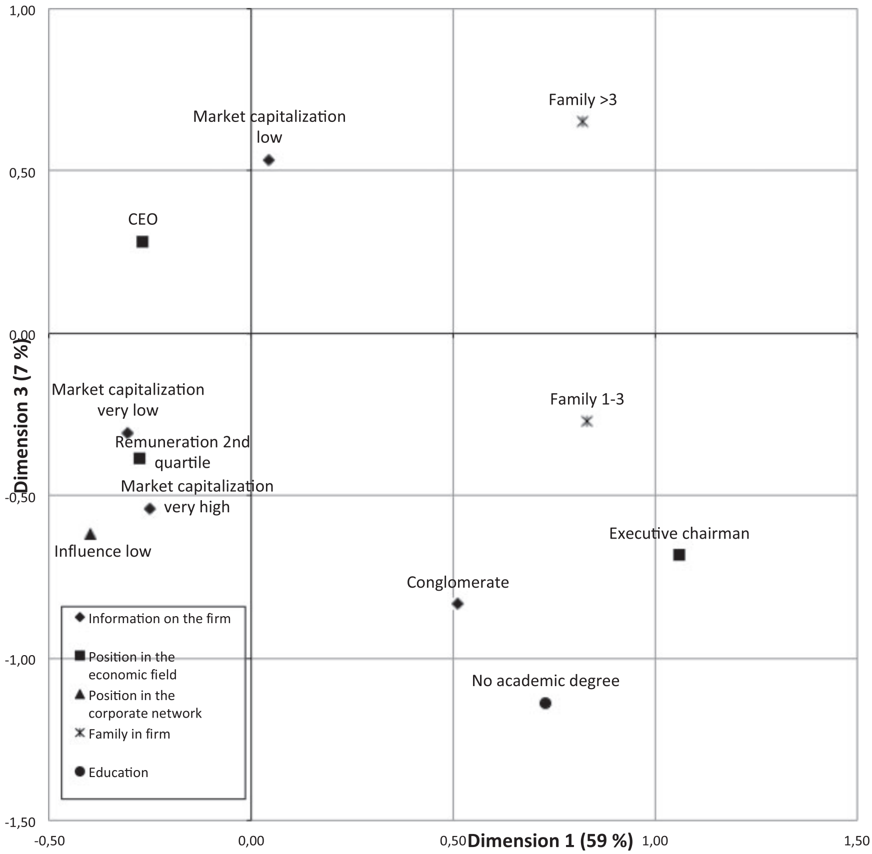

Figure 6. Supplementary categories significant on axis 3, plan 1–3.

Padma Bhushan. This suggests that awards can sometimes be used as a kind of ersatz for educational degrees, in order to fill the void of academic and cultural legitimacy. Agents with high educational capital, even if they hold important shares in their company, are on the contrary very poorly connected in the corporate network and tend to be granted less marks for prestige. Educational capital is thus inversely associated with symbolic and social capital, whether it is social capital outside the firm or within the corporate network. The fact that it only appears on the third axis, which has a modified inertia, more than eight times lower than that of the first axis, clearly shows the lower importance of educational capital in the structuration of business elites.

As symbols of the upper part of this third axis, we have Ardash Kishore, Chairman of Axis Bank (28) who holds a PhD in Political economy and is an IAS officer. Opposite him, we have Punit Subhash Chandra Goenka, CEO of Zee entertainment Ltd., who holds a B.com degree from Bombay University and who is the son of Subhash Chandra Goenka, the founder of the company. Nevertheless, at the age of 36 he already holds two business awards.

Table 4. Using ascending hierarchical classification on multiple correspondence analysis

Ascending Hierarchical Classification (or Clustering) is a GDA technique that builds a partition of the population into clusters (or classes). The *Ward Method*, performed in our study, is a *bottom up* partitioning approach based upon the decomposition of the cloud of points inertia. Each of the n observations starts in its own cluster, and as the hierarchy moves up, pairs of clusters are merged. This method therefore produces sequences of nested partitions of n, $n-1$, …, 1 classes. The final repartition in K classes is the *optimal partition*, obtained by merging two classes of the partition in $K+1$ classes. A *good* partition of the population has homogeneous clusters (low within-variability), which differ from each other (high between-variability).

Suppose $P=[C_1 \ldots C_k \ldots C_K]$ is a partition of a set $I=[1 \ldots i \ldots n]$ of n individuals, over which quantitative and categorical variables are measured. We aim to identify the variables that

(1) best *characterize* each class C_k (i.e. the variables with distribution significantly different in C_k and in the total population I); (2) most *discriminate* between classes (i.e. the levels significantly over or underrepresented in the different classes).

We implemented our AHC on SAS, using the CAHQUAL MACRO. The classification is performed on the observations (i.e. the rows of the contingency table). The metric to measure the distance between different observations is the χ^2 *distance*. To describe the resulting classes, we used the DESQUAL MACRO. It edits the contingency table, crossing each class id with each qualitative variable, as well as tables and statistical tests to characterize the classes of the partition by the levels of the explanatory variables.

6. The three poles of Indian capitalism

Having analysed the structuration of the three first axes, we further conduct an Ascendant Hierarchical Classification (AHC) to more precisely identify subgroups within the structure of the Indian business elite (see Table 4 for more details on the methodology). The joint use of MCA and AHC is quite natural since MCA clouds of points provide a visual clustering: performed on the MCA cloud of individuals, AHC thus becomes a heuristic complement for interpretation as it helps delineating homogeneous groups of individuals (clusters) in the population.

This type of classification analysis necessitates finding a compromise between the need for high inter-inertia of the clusters and the conflicting need to have a low intra-inertia between clusters, with respect to active and supplementary modalities. In other words, the aim is to arrive at homogenous clusters, well differentiated from each other, in terms of the variables and the different modalities that the agents represent. We also compute the barycentres of the clusters in order to identify their typical landmarks.

The classification allows us to identify three clusters of directors, projected on Figure 4: the family business owners, who benefit from their family and their material capital, the highly connected family business owners, who mobilize both their family and their corporate network to ensure their position, and finally the PSU and other marginal companies' managers, who form a larger and less cohesive group with more diverse sources of position legitimation.

6.1. The multipositional family business owners: accumulating social capital outside the economic field

The 36 members of this cluster are located at the top right-hand corner of Figure 7. They are characterized by a high economic capital (they are among the highest paid directors) and about 70% of them are in the Forbes' ranking. They also hold large numbers of shares in the company, where they generally control both the executive and the non-executive boards,

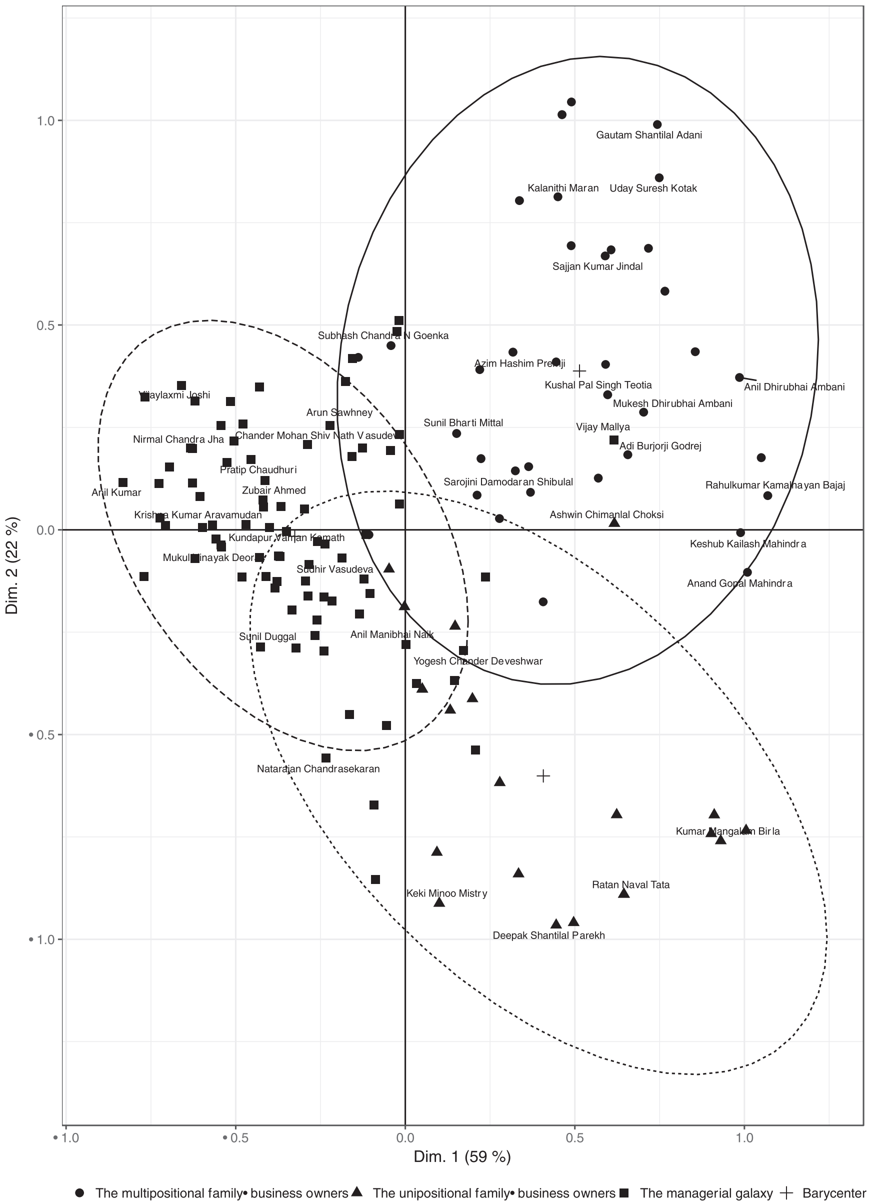

Figure 7. Individuals and clusters (with concentration ellipses) on plan 1–2.

which makes them more involved in the running of their companies. These agents often share their firm's capital with other family members. They mainly come from well-established trading communities (50%) or agriculturist and artisan castes (16.7%). Regarding their education, we notice that the five individuals who do not hold any academic degree belong to this cluster, while 60% of the cluster holds only a bachelor's degree (See Figure 8).

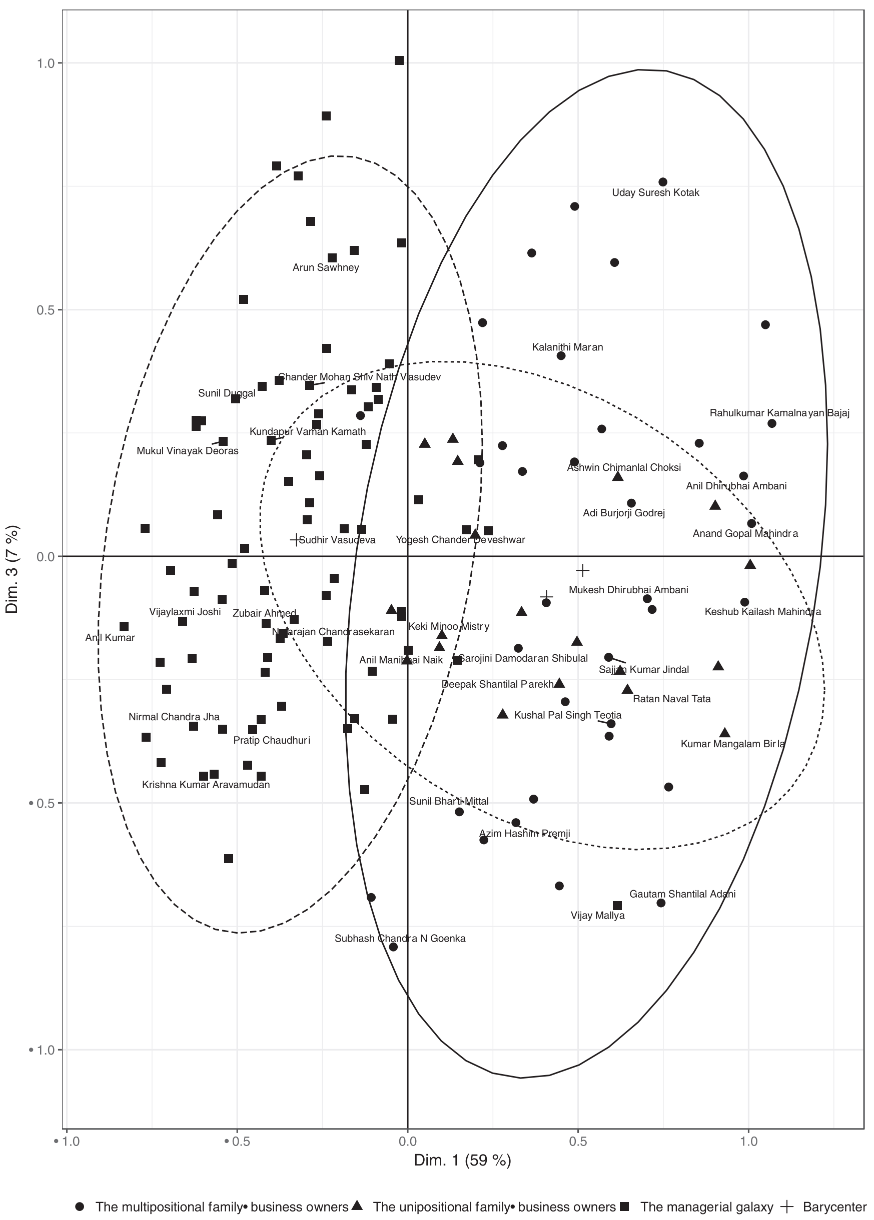

Figure 8. Individuals and clusters (with concentration ellipses) on plan 1–3.

This reveals a pattern similar to that of our second type of business leaders (the *unipositional family business owners*, see below), with the difference being that this latter group relies only on their company’s estate and does not have many connections in the corporate network. The multipositional family business owners stand out by holding positions outside the economic field, at universities or on government boards, which allows them to cultivate their social capital outside the economic field.

Gautam Shantilal Adani and his younger brother Rajesh Shantilal Adani are the references in this cluster. Gautam Adani is the Chairman of Adani Enterprises Ltd. (ranked 39) on the NSE, he is also the CEO and Chairman of Adani Ports & Special Economic Zone (49) and finally the Chairman of Adani Power Ltd. (81). Rajesh Adani is the CEO of Adani Enterprises Ltd. The two brothers come from a Gujarati merchant community. Gautam Adani does not hold an academic degree, he is the founder of the Adani conglomerate, in which his siblings and other family members are also involved. He has relatively low social capital within the corporate network, but he figures in the Forbes list of billionaires. His younger brother holds a BCom and an important share of the Adani Enterprises capital (though smaller than his brother's).

6.2. The unipositional family business owners: the highly connected corporate aristocracy

They constitute the smallest (21 individuals) and most cohesive cluster. In the projection of the clouds of individuals on axis 1 and 2, these agents are located in the bottom right hand corner. They are characterized by very high levels of social capital within the corporate network, both in terms of centrality and influence. They also hold a large number of directorships on other boards. Furthermore, they also benefit from more recognition than other agents (in terms of awards), which contrasts with the fact that almost all of them have a Bachelor's degree as their highest qualification (in the field of business for more than 60% of them). We must also note that 57% of them have a diploma in accountancy, which further reinforces their 'corporate-oriented' profile and suggests a strong preference for financial expertise over other types of knowledge. Three thirds of them are only chairmen of their companies and nearly all of them come from trading communities, and can therefore be identified as belonging to business dynasties, holding capital control positions in their family business groups. The fact that they do not occupy positions outside the economic field (political mandate, seat on the boards of international institutions or universities, etc.) leads us to characterize them as 'unipositional', in the sense that they hold all their positions only within the economic field. They are solidly grounded within the corporate network and seldom venture outside of it. Finally we can note that 8 of these individuals hold their positions in the cement, construction and real estate sectors (10 companies in the sample), establishing this particular economic sector as a central family-run sector.

Here, Deepak Shantilal Parekh is the individual closest to the barycentre. He is the chairman of four firms among the top 100 NSE companies, HDFC Ltd. (ranked 13), Siemens Ltd. (ranked 50), IDFC Ltd. (ranked 65) and Glaxosmithkline Pharmaceuticals Ltd. (ranked 69). Interestingly, none of his family members are involved in the capital of the firms he holds positions in, but he is the nephew of Hasmukhbhai Parekh who founded HDFC Bank and he comes from a Gujarati trading caste. He also holds seven directorships in Indian listed companies and has one of the highest centrality indices in the whole corporate network. He was awarded the Padma Bhushan in 2006. He holds a BCom from Mumbai University and an accountancy diploma. A second landmark individual is Ratan Naval Tata who is the chairman of four companies that belong to his ancestor's conglomerate: Tata Consultancy services Ltd. (ranked 3), Tata Motors Ltd. (17), Tata Steel Ltd. (29) and Tata Power Co. Ltd. (60). He is the son of Naval Tata whom he succeeded as the head of the Tata Group. The Tata family belongs to the Parsi community, which can in a way, be considered a trading community. Ratan Naval Tata is very influential and central in the corporate network, through all the Tata companies. His family also holds positions in the conglomerate. Finally, he has been awarded the Padma Bhushan (2000) and the Padma Vibhushan (2008).

6.3. The managerial galaxy: PSU directors and other managers

With 83 individuals, the third cluster forms the largest and least cohesive group in this classification. Although this group is numerically dominant (almost 60% of the total sample), it is clearly dominated in terms of its power and influence within the field. It is located essentially towards the left of the graph, but is extremely dispersed along the vertical axis. Most often, these agents' family members do not own shares in the capital, and none of their relatives hold any position in the firm. The dispersion of this cluster shows the diversity of resources agents mobilize whenever they cannot benefit from capital and especially from family capital.

This subgroup is composed of agents who are predominantly CEOs (more than 50% of the cluster), who do not have very high economic capital (only one of them appears in the Forbes ranking) and generally they do not possess any shares in their companies (62% do not own any shares in the capital). As an alternative to their lack of inherited capital, many of these agents rely on studies at Indian selective institutions (all the 30 individuals who pursued selective studies are located in this cluster). The idea of education as an alternative resource is reinforced by the fact that 36.1% of the agents hold a master's degree, making them, on average, clearly more educated than their counterparts from the two other clusters. Furthermore, one can notice that all the IAS officers in the sample are to be found in this cluster (of which they constitute more than one third).

It would nonetheless be reductive to consider the opposition between the first two clusters and the third one as an opposition between privately owned and government-supported companies. This third cluster is indeed much more complex and includes PSUs and firms with more modest market capitalization. These privately owned companies are not very well integrated into the corporate network and rarely belong to major business groups.

We can further notice that more than half of these directors come from Brahmin families (43 in this cluster out of the 44 Brahmin individuals in the sample), and given that Brahmins have had a tradition of investing top government and managerial positions (Fuller and Narasimhan, 2010; Bairy, 2013), it is not entirely surprising to find them here. This actually suggests the importance of inherited capital in this cluster, not in the form of material or social capital as developed above, but rather in the form of inherited cultural capital. While the directors in the first two clusters take advantage of their 'family businesses', the individuals in this cluster seem instead to benefit from the fact they come from 'business families' (Dutta, 1997) and 'government families', by which we designate a family tradition of holding positions in government or major groups, without necessarily accumulating material capital. It thus appears that, in contrast to the other two clusters in which family ties mainly help to secure social capital and inherit capital ownership, for managers, family serves essentially to consolidate cultural capital. Although 'heirs' and 'corporate aristocrats' do not face the same constraints, it indeed remains that for most people in post-liberalization India, where an 'increasingly complex relationship [...] between schooling and social class' has developed (LaDousa, 2014, pp. 4–5), schools often serve as 'diploma-granting institutions which provide skills and credentials' (Fernandes, 2000, p. 90). For managers, family resources are thus mainly mobilized as a means of boosting educational achievement in a context where entering institutions like IITs and IIMs is an extremely competitive process (Subramanian, 2015; Henry and Ferry, 2017).

If members of this cluster could sometimes be described as mere products of a so-called 'meritocracy', as they have managed to convert their cultural capital (both acquired and inherited) into positions of economic power, one should not forget that their educational achievements have been tremendously favoured by the mobilization of family resources while they were engaged in the race for higher qualifications and education. Members of the 'managerial galaxy' find themselves in a sort of intermediary position: on the one hand they are undoubtedly part of the economic elite, given their large advantage over the rest of the Indian upper-middle-classes but, on the other, they are clearly unable to compete with the vast resources family business owners have at their disposal. Managers' economic power remains limited to decision making (or the capacity to influence the decisions of majority shareholders) and still falls short of the possession of capital.

Their profile is somewhat reminiscent of the portrait of the first French, late 19th century top-managers sketched by Odile Henry: 'Their social trajectories are based more on individual values (such as specific skills) than on the notoriety of a lineage, that is to say a social capital made up of relationships, regularly consolidated by family integration. In the absence of economic, social (family) or symbolic (name) capital, they owe their success to this 'intellectual' or 'professional' capital, which can be validated by a diploma and/or accumulated through an in-house trajectory' (Henry, 2012, p. 149).

As a reference point, we can identify Vineet Nayar who is the CEO and Vice-chairman of HCL Technologies Ltd. (ranked 40) and who comes from a Brahmin family. He was promoted to the position of CEO of his company after having proved his efficiency in another department of the same firm. He is recognized as an influential management advisor, thanks to his book *Employees First, Customers Second: Turning Conventional Management Upside Down* (2010). Despite being mentioned in different business magazines like *Fortune*, for this contribution, he has a low connection level in the corporate network and no family ties in NSE companies, which makes him relatively marginal among the top Chairmen and CEOs.

Finally, we can note that in Figure 7 the projected barycentre of foreign directors is clearly located in the middle of the third cluster, which hints at the marginal position these outsiders occupy in the social space of the Indian business elite. This does not come as a surprise, given that these individuals cannot mobilize (at least not directly) the economic and social capital of those who belong to families that own a large business group.

7. Conclusion

Our results point to a very peculiar structuration of the business elite in India. Contrary to the case of most Western countries, where credentialism has imposed itself as the norm, in India the inheritance of economic capital does not seem to require further legitimization by top credentials; at least not as massively as is the case in Western countries. Similar results have also been pointed by Roland Lardinois in his study of the IT sector (Lardinois, 2017). If some like Ratan Tata (who graduated from Cornell), Rahul Bajaj (Harvard) or other 'corporate aristocrats' combine the advantages of birth with those of having received a top level education (at an Ivy League university for the most part), not having a prestigious diploma does not disqualify one from entering the small world of top capitalists. Education can convey different social meanings. For top managers or for the aspiring upper-middle classes, education is the open sesame that provides access to top positions while for 'heirs' and 'corporate aristocrats', who predominantly come from trading communities, credentials are not a requirement though they often remain desired for the symbolic capital they enable. Some thus pursue education in foreign boarding schools or Ivy League Universities as part of an intergenerational family tradition. Other rich heirs feel compelled to compensate their lack of academic credentials and legitimize their status by securing awards, honorary PhDs, university board memberships, etc. Credentials and education are not meaningless for family business owners but are clearly mobilized and attained in a very specific fashion.

In his portrayal of Allahabad between 1880 and 1920, Christopher Bayly (1975, p. 276) describes an opposition between a very literate class of service and professional people, many of whom were Brahmins and Kayasths, and a class of far less educated banking and trading magnates, predominantly from traditional merchant communities. The latter actively sought to secure social prestige through their involvement in religious charity works and general philanthropy. The pattern of powerful and prestigious merchants hiring highly skilled Brahmins is thus not completely obsolete and our results can be interpreted as a certain remnant of this social division of labour in post-liberalization India.

The relative irrelevance of a strict and rigid equation between academic titles and position in the Indian context suggests that Hartmann's typology of the modes of elite recruitment might not be suitable to describe countries where educational credentials are still structurally dominated by inherited wealth and privilege. It might thus be important to add a fourth element to Hartmann's typology that could help make sense of situations—mainly found outside the Western world—in which inherited economic and social capital do not necessarily require the backing of educational capital. In this fourth type, the family internalizes the process of elite education and seldom worries about the need to enter the hyper-competitive educational race.

Our results further point to a clear and massive cleavage between the owners and managers of capital. This opposition is not surprising as it is to be found in most countries of the world. But it is worth noticing that contrary to what happens elsewhere, the people who manage capital and the people who own it share very few common social properties. They seem to live on very different planets, and have incommensurable lifestyles and contrasting social properties. If those who own capital in India can boast levels of wealth that compete with the world's richest, many managers of India's top companies have levels of remuneration that lie well below those of many Western non-executive corporate employees. Their incomes are far from offering access to the private jets, yachts and other kinds of conspicuous goods that are emblematic of outstanding economic achievement. The fact that the wealth accumulated is not always shared with the top executives of the company is certainly the sign of extremely high levels of wealth concentration in India. It must also be noted that given the weight of family ties in the manner of doing business, the opposition between managers and owners might be best replaced by an opposition between business families and managers, the family being the real locus of power of the Indian firm. This importance of family in the control of firms is further reinforced by the central role played by the institution of the Hindu Undivided Family (HUF) that encourages—via avenues for tax exemption and tax evasion—the dilution of ownership among kin (Das Gupta, 2010).

The clear separation between owners and managers (or between business families and managers) is further complicated by the fact that we can identify two different poles of owners of capital who benefit from two different types of social capital: those who seek their resources outside the economic field and those whose focus is on the corporate world. This very structuring opposition reflects the importance of social capital for an understanding of the internal divisions within the elite and interestingly echoes the work of Larsen and Ellersgaard (2012) who highlight, in the Danish case, the opposition between centrality in the network on one side and endowment in symbolic capital on the other side. Our results indeed reveal two different ways of being a dominant business leader. The first consists in seeking a dominant position within the subfield of economic power by occupying an encompassing position within the corporate network, while the second consists more in privileging social capital across the various subfields of the field of power (administration, international organizations, politics, academia, etc.). In both cases, the ownership of capital seems to be a major leverage for achieving large stocks of social capital. Our analysis does not allow us to argue that multipositionality provides greater power than unipositionality (Boltanski, 1973; Useem, 1984), and we will thus limit ourselves to saying that these positional differences reflect two different modes of domination among the economic elite. On the contrary, the 'managerial galaxy' is clearly far less endowed with social and symbolic capital and hence constitutes the dominated fraction of the economic elite.

Finally, it is also particularly interesting to note that civil servants (IAS officers) and Managing Directors of state-owned companies do not occupy a dominant position in the subfield of economic power. This differs from the frequently observed situation in which the 'inner circle' of the elite is very closely linked to the state apparatus, as is for example the case in France, Switzerland or Norway. This certainly suggests that it is far more difficult to objectify the nexus between the state and the private sector in India than in many Western countries and it probably exists at a less visible and more subterranean level. Monographies on groups such as Reliance (Thakurta *et al*., 2014; Mazumdar, 2016) or research on the nexus between politics and business (Kochanek, 1987, 1996) indeed remind us of the strong impact of crony capitalism in India. This suggests that the methodological tools traditionally mobilized by sociologists of the elites—in particular MCA analysis and interlocking directorates network analysis—are not sufficient to capture the ways in which the various subfields of the field of power are woven together in the Indian social fabric.

For Bourdieu, the logic of a field is 'the cumulative product of its specific history' (Bourdieu and Wacquant, 1992, p. 105). In a way, the positions occupied by individuals in a given field are nothing but crystallized and reified history (Henry, 2014). The history of Indian capitalism has led to the development of a field of economic power, in which the most dominant actors draw upon inherited wealth and subterranean links to the political and administrative elite and where the most dominated members are paradoxically often among the most highly educated. Cultural capital is indeed still far from being the key resource in India.

The Indian case is characteristic of what happens in many parts of the global South, where capitalism remains more structured by family ownership than by institutional investors. In these countries, the analysis is often misled by several Eurocentric biases. For one, the obsession with 'credentialism' leads to an exaggerated focus on degrees and consequently induces disregard for the dynastic dynamics in the reproduction of elites and the transmission of wealth and economic power. The other major bias is linked to the fact that social scientists of the Western world tend to rely too heavily on the fact that firms are under strict scrutiny and asked by regulation agencies to publically disclose many aspects of their activities. These sources have indeed made it possible for them to convincingly objectify how the connection between the state and firms operate. For instance, in France, Switzerland or Norway, former civil servants using their network to the benefit of the firm they now control are easily identified. What our results unveiled, in contrast, is that this type of ties are not always so easy to grasp. In many countries of the global South, these connections are often made possible by intermediaries such as power brokers and are therefore hidden from public scrutiny. The more the state–business nexus relies on such characters, the wider the blind spot is for the sociologist drawing upon public data. It is thus important that future studies—and in particular ethnographies of the business class—try to find alternative ways to objectify these indirect ties that cement the field of power.

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