

Ever since the advent of China's economic reforms in 1978, which triggered China's reintegration into the global market system (Taube 2003, pp. 9–10; Tian 2007, p. 3), the Chinese economy has grown for more than 30 years at an astonishing average annual rate of nearly 10 % (Guojia tongji ju [National Bureau of Statistics] 2011; Zhonghua renmin gongheguo zhongyang renmin zhengfu [The Central People's Government of the People's Republic of China] 2008a).¹ With this ascent to one of the largest economies in the world (United Nations Statistics Division 2008),² China has created enormous opportunities for both domestic Chinese firms and foreign multinationals (McGregor 2005, pp. 2, 272; Pascha 1998, p. 57). In order to capitalise on this potential, firms initially devoted much of their attention to designing entry mode strategies into the Chinese market (Hexter and Woetzel 2007a, p. 2, Hexter and Woetzel 2007b, pp. 3–5; Kaufmann et al. 2005, pp. 29–40). However, given that many global players have already entered China and competitive pressures continue to mount, it has been argued that being in China per se no longer offers a competitive advantage (Aminpour and Woetzel 2006, pp. 41–42; Hexter 2006, p. 1). On the

¹ The accuracy of gross domestic product (GDP) growth statistics published by the National Bureau of Statistics (NBS) has been questioned. Some private institutions have put forward alternative measures of economic activity that exhibit more volatile growth rates. For example, according to the Goldman Sachs China Activity Index (GSCAI, which includes industrial production, transportation and electricity consumption) growth in real economic activity fell to 5.4 % in 1998 (vs. NBS: 7.8 %) and reached 13.1 % in 2004 (vs. NBS: 10.1 %). Although this would imply that China followed a less smooth development path than the NBS statistics suggest, the growth in real economic activity in China remains undeniably strong. From 2002 to 2007 the growth rates of the GSCAI have even exceeded the growth rates published by the NBS in every year (Gaosheng jituan quanqiu touzi yanjiu [Goldman Sachs Group Global Investment Research] 2008, p. 4).

² The Chinese economy achieved the world's second largest gross domestic product (GDP) at market exchange rates in 2010, only outranked by the United States of America (BBC News 2011; Businessworld 2011; Xinhua 2011). Moreover, China has been projected to possibly become the world's largest economy between 2035 and 2040 (Goldman Sachs 2005, p. 7; as cited by Macartney and Duncan 2005).

contrary, succeeding in China increasingly requires Chinese firms and multinationals to attain excellence in execution along the various stages of the value chain, which entails adopting best practices for management ranging from research and development over procurement to production and distribution (Grant 2006, pp. 24–25; Hexter and Woetzel 2007a, pp. 3–4, Hexter and Woetzel 2007b, pp. viii–xi).

Attaining this excellence in execution along the value chain requires top management to appropriately manage the middle managers responsible for the different stages of the value chain, who in turn need to appropriately manage their subordinates (Lassen et al. 2009, pp. 20–22; Raes et al. 2011, p. 102; Rao and Rastogi 1997; Willcocks and Griffiths 2010, p. 177). For the stage of production, for example, it is necessary that top management manage their plant managers at the firm's production sites, which involves deciding on how much *managerial discretion* (Hambrick and Finkelstein 1987) or decision-making autonomy to grant to the plant managers for e.g. making capital investments, hiring workers or introducing new products (e.g. Acemoglu et al. 2007; Caza 2007; Chang and Wong 2003; Cheng et al. 2006; Colombo and Delmastro 2004; Glaister et al. 2003; Marin and Verdier 2006). Whereas additional discretion (e.g. allowing the plant manager to undertake larger capital investments without requiring prior approval from top management) clearly gives the plant manager a greater latitude to influence the organisation's performance, it is unclear whether the plant manager will use this discretion to the benefit of the organisation (discretion increases performance; stewardship theory; e.g. Corbetta and Salvato 2004; Davis et al. 1997b, pp. 25–26; Donaldson and Davis 1991, p. 52; Eddleston and Kellermanns 2007, p. 547; Khanchel 2009, pp. 98–99; Liu and Cai 2004, p. 4; Mills and Keast 2009, pp. 14–15; Tosi et al. 2003, p. 2054; Van Slyke 2007, pp. 165–167; Vargas Sánchez 2004, p. 3, 2005, pp. 18–19) or rather abuse it to pursue his/her own interests at the expense of the organisation (discretion decreases performance; principal-agent theory; e.g. Caza 2007, p. 10; Caza 2011; Chang and Wong 2003, p. 7; Davis et al. 1997b, p. 38; Eisenhardt 1989; Fama 1980; Hutzschenreuter and Kleindienst 2007, p. 4; Jensen and Meckling 1976; Jensen and Murphy 1990; Spremann 1987; Zhao et al. 2010). Given that the middle manager's discretion thus potentially has a positive or negative impact on performance (e.g. Adams et al. 2005; Crossland and Hambrick 2007; Finkelstein and Hambrick 1990; Hambrick and Finkelstein 1987; Misangyi 2002; Quigley and Hambrick 2009; Tang 2008; Zhao et al. 2010), the middle manager's discretion is a potential success factor for the top management of Chinese firms and multinationals to actively adjust in order to optimise the company's performance along the value chain.

However, despite this potential impact of managerial discretion on performance, the empirical and theoretical literature to date fails to provide a conclusive answer as to whether granting a manager additional discretion will tend to increase, not alter or decrease performance. This question remains unresolved not only for the managerial discretion of middle management in China, but also in general for the

discretion of different levels of management (e.g. top management) in different countries.³ It is this contradictory evidence that gives rise to the present study's research gap, which is termed the *discretion puzzle* (see Sect. 1.1).⁴

This study aims to work towards resolving the discretion puzzle (see Sect. 1.2) and proceeds according to the research design outlined in Sect. 1.3. In so doing, various contributions are made for research and practice. For instance, the present study demonstrates that none of the existing theories can unequivocally explain the impact of managerial discretion on performance and builds a new empirically-validated model for future research on investigating discretion's performance impact. Moreover, the present study generates implications for the top management of Chinese firms and multinationals on harnessing the success factor of managerial discretion so as to effectively manage their middle managers in China.

1.1 Research Gap (Discretion Puzzle)

Managerial discretion, defined as the 'latitude of managerial action' (Hambrick and Finkelstein 1987, pp. 371–378; see Sect. 2.1.1), measures the extent to which a manager has multiple courses of action across various domains of his/her work that he/she is aware of and that are acceptable to the parties that possess power to constrain the manager. For example, the managerial discretion of a plant manager measures the extent to which the plant manager has multiple choices across such domains as making capital investments or hiring workers that he/she is aware of and that are acceptable to corporate headquarters in China. In particular, a plant manager with the discretion to undertake small and large capital investments without prior authorisation from corporate headquarters in China has greater latitude of action (i.e. discretion) in the domain of making capital investments than a plant manager who is constrained to making only small capital investments. Given that managerial discretion thus measures the leeway of a manager to take action and therefore to influence performance, adjusting the discretion granted to middle managers is a potentially significant lever for top management to pull when managing their middle managers in China (e.g. Adams et al. 2005; Crossland and Hambrick 2007; Finkelstein and Hambrick 1990; Hambrick and

³ (e.g. Agarwal et al. 2009; Barnabas and Mekoth 2010; Caza 2011; Chang and Wong 2003; Gammelgaard et al. 2010; Groves et al. 1994; He et al. 2009; Heinecke 2011; Khanchel 2009; Yougen Li and Zhao 2004; López-Navarro and Camisón-Zornoza 2003; Stano 1976; Venaik 1999; Williamson 1963; Xu et al. 2005).

⁴ The present study's discretion puzzle relates to the managerial discretion of managers in organisations and is therefore distinct from the puzzle of discretion (Pratt and Sossin 2009) that concerns judicial discretion in law.

Finkelstein 1987; Misangyi 2002; Quigley and Hambrick 2009; Tang 2008; Zhao et al. 2010).⁵

However, despite this potential impact of managerial discretion on performance, the empirical and theoretical literature to date does not conclusively resolve whether granting additional discretion tends to increase, not alter or decrease performance. This gives rise to the present study's research gap termed the *discretion puzzle*, which is defined at the end of this section (i.e. Sect. 1.1).⁶

As to the *empirical literature* (see Sect. 2.2), studies have produced divergent results on the impact of managerial discretion on performance, ranging from *positive* (e.g. Agarwal et al. 2009; Barnabas and Mekoth 2010; Chang and Wong 2003; Gammelgaard et al. 2010; Khanchel 2009) to *neutral* (e.g. Caza 2011; Groves et al. 1994; Yougen Li and Zhao 2004; López-Navarro and Camisón-Zornoza 2003; Venaik 1999) and even *negative* (e.g. He et al. 2009; Heinecke 2011; Stano 1976; Williamson 1963; Xu et al. 2005). The empirical literature is therefore conflicting as concerns the impact of managerial discretion on performance, since it finds evidence that discretion increases, does not alter, and decreases performance. This contradictory evidence as to whether discretion tends to increase, not alter or decrease performance spans different levels of management (e.g. top management and middle management) and different geographies (e.g. United States of America, European countries, and China). Even for a given level of management in a given country, such as top management in China, empirical studies have found positive, neutral, and negative impacts of managerial discretion on performance (e.g. Chang and Wong 2003, 2004; Yougen Li and Zhao 2004; Xu et al. 2005; Zhang 1997).

Furthermore, empirical evidence on the impact of discretion on performance has remained particularly scarce for both middle management (see Caza 2007, p. 1) and for China (see Yougen Li and Zhao 2003, p. 6; Zhang and Li 2008a, pp. 37–38). It follows that given the abundance of middle managers in organisations⁷ and the importance of China for domestic Chinese firms and foreign multinationals (Aminpour and Woetzel 2006, p. 41; Grant 2006, p. 25; Hexter 2006, p. 1; Hoover

⁵ In addition to potentially impacting on performance, it has been empirically demonstrated that discretion may significantly affect managerial power (Carpenter and Golden 1997), managerial compensation (Finkelstein and Boyd 1998; Magnan and St-Onge 1997; Rajagopalan and Finkelstein 1992; Werner and Tosi 1995; Wright and Kroll 2002; Zhang and Xie 2008), workers' incentives (Groves et al. 1994), a successor chief executive officer's age (Wang 2009), top management team tenure, trust (Perrone et al. 2003), strategic attention (Abrahamson and Hambrick 1997), environmental commitment (Aragon-Correa et al. 2004), pricing (Cameron 2000), organisational knowledge creation (Oh 2002), and research and development (Zhang et al. 2006a, b).

⁶ See footnote 4.

⁷ As explained in Chap. 3, there are tens of thousands of plant managers in China alone (Guojia tongji ju [National Bureau of Statistics] 2007, 14–1, 14–2, 14–18). With plant managers being but one example of middle managers, this translates into an even larger number of middle managers in organisations worldwide.

2006, p. 92; Kaufmann et al. 2005, p. 21; McGregor 2005, pp. 2, 272; Pascha 1998, p. 57; Taube 2008, p. 186; Tian 2007, pp. 7–8), this limited evidence on the impact of discretion motivates the choice of middle management in China as the unit of analysis of the present study (see Chap. 3).

In addition to the inconclusiveness of the empirical literature regarding the impact of discretion on performance, turning to the *theoretical literature* (see Sect. 2.3) provides no complete answer as to whether discretion tends to increase, not alter or decrease performance—neither when treating the three relevant theories *individually*, nor when treating them *collectively*. Individual theories exist that are consistent with an unspecified (managerial discretion theory), a negative (principal-agent theory), and a positive (stewardship theory) impact of discretion on performance, but none of the theories alone explains why certain empirical studies have found a positive, others a neutral, and yet others a negative impact of discretion on performance:

- *Managerial discretion theory*⁸ (see Sect. 2.3.1) specifies the theoretical context of managerial discretion by defining the construct of discretion, postulating its antecedents (i.e. its causes, determinants or sources), and postulating its consequences (i.e. what outcomes discretion may affect). While it thereby specifies that discretion can have an impact on performance, the nature of this impact (e.g. positive versus negative) remains unspecified (e.g. Abrahamson and Hambrick 1997; Berman et al. 2005; Carpenter and Golden 1997; Caza 2007, 2011; Huiyuan Chen 2006; Crossland 2007; Crossland and Hambrick 2007; Datta et al. 2003; Finkelstein and Boyd 1998; Finkelstein and Hambrick 1990; Finkelstein and Peteraf 2007; Halebian and Finkelstein 1993; Hambrick and Abrahamson 1995; Hambrick and Finkelstein 1987; Hambrick et al. 1993; Hutzschenreuter and Kleindienst 2007; Keegan 2006; Keegan and Kabanoff 2008; Key 2002; Yougen Li and Zhao 2004; Magnan and St-Onge 1997; Quigley and Hambrick 2009; Rajagopalan and Finkelstein 1992; Thomas and Peyrefitte 1996; Zhang and Li 2008b; Zhang et al. 2006a, b).
- *Principal-agent theory* (see Sect. 2.3.2), by contrast, does not fully specify the theoretical context of managerial discretion in terms of defining discretion, its antecedents, and its consequences. Instead, the theory postulates that managers (agents) tend to use discretion to pursue their own interests at the expense of the principal and thus in most cases at the expense of performance (e.g. Agrawal and Knoeber 1996; Baysinger and Butler 1985; Berger et al. 1997; Brush et al. 2000; Chang and Wong 2003; Childs and Mauer 2008; Denis et al. 1997; Eisenhardt 1989; Fama 1980; Fama and Jensen 1983a, b; He et al. 2009; Jensen 1986; Jensen

⁸ As described in Sect. 2.3.1, managerial discretion theory was developed as a reconciliation of *population ecology* (e.g. Aldrich 1979; Baum 1996; Baum and Amburgey 2002; Carroll 1988; Freeman et al. 1983; Hannan and Freeman 1977, 1984; Singh and Lumsden 1990; Tushman and Romanelli 1985; Zohar and Luria 2005) and *strategic choice theory* (e.g. Child 1972, 1997, 2002; Child et al. 2003; Elbanna and Child 2007; Hitt and Tyler 1991; Hrebiniak and Joyce 1985; Judge and Zeithaml 1992; Marlin et al. 1994; Miles and Snow 1978; Stienstra et al. 2004).

and Meckling 1976; Jensen and Murphy 1990; Jensen and Ruback 1983; Laffont and Martimort 2002; Lang et al. 1995; Levinthal 1988; Ongore 2011; Shleifer and Vishny 1997; Spremann 1987; Thépot 2007; Thomsen and Pedersen 2000; Walters 1995; Wang et al. 2008; Weidenbaum and Jensen 1993; Werner and Tosi 1995, p. 1673; Xu et al. 2005; Zou 1989). Principal-agent theory therefore mostly implies a negative impact of managerial discretion on performance.⁹

- *Stewardship theory* (see Sect. 2.3.3) likewise does not focus on specifying discretion's theoretical context. Instead, it contends that managers (stewards) 'are good stewards of the corporations and diligently work to attain high levels of corporate profit and shareholder returns' (e.g. Albanese et al. 1997; Arthurs and Busenitz 2003; Corbetta and Salvato 2004; Davis et al. 1997a, b; Dicke and Ott 2002; Donaldson 1990; Donaldson and Davis 1991, 1993, 1994, 1989, p. 159; Eddleston and Kellermanns 2007; Fox and Hamilton 1994; Lane et al. 1999; Liu and Cai 2004; Miller and Le Breton-Miller 2006; Mills and Keast 2009; Muth and Donaldson 1998; Salvato 2002; Tian and Lau 2001; Tosi et al. 2003; Van Slyke 2007; Vargas Sánchez 2001, 2004, 2005; Zahra 2003). In contrast to principal-agent theory, stewardship theory therefore specifies a positive impact of managerial discretion on performance.

It follows that none of the existing theories can individually fully account for why certain empirical studies find a positive, others a neutral, and yet others a negative impact of discretion on performance. In fact, the leading theories have yielded such disparate results for positive to negative impacts of discretion on performance that currently not one of them can be chosen with confidence to study discretion or used unequivocally to derive recommendations for practitioners on whether to increase or decrease discretion in quest of strengthening performance. While treating the three relevant theories *individually* does not, therefore, resolve the nature of discretion's impact, the existing reconciliations for treating the theories *collectively* have not offered a complete resolution either. Attempts to reconcile the theories have generally focused on integrating only two of the three relevant theories, and thus have omitted potentially relevant theoretical content (see Sect. 2.3):

- *Combining managerial discretion theory and principal-agent theory*. Some 20 years after the seminal work by Hambrick and Finkelstein (1987) on managerial discretion theory, scholars have begun to integrate principal-agent theory into managerial discretion theory. In one approach, Finkelstein and Peteraf (2007, pp. 237–243) integrate principal-agent theory into the antecedents (i.e. causes)

⁹ As explained in Sect. 2.3.2, it is possible to assume that the principal is less performance-maximising than the agent, in which case managerial discretion may positively affect performance (Chang and Wong 2003, pp. 1–7). However, this assumption is rarely made in principal-agent theory (Thomsen and Pedersen 2000, p. 690). The literature on principal-agent theory therefore generally contends that managerial discretion has a negative direct effect on performance (e.g. Caza 2007, p. 10; Caza 2011; Chang and Wong 2003, p. 7; Davis et al. 1997b, p. 38; Hutzschenreuter and Kleindienst 2007, p. 4; Jensen and Murphy 1990; Zhao et al. 2010).

of managerial discretion on qualitative grounds. They postulate that different characteristics of managerial activities affect the ability of key stakeholders to pre-specify and monitor the manager's work and thereby create or constrain the manager's discretion (see Sect. 2.3.2). However, this approach integrates principal-agent theory in terms of explaining when a manager may have lower or greater discretion rather than in terms of explaining whether lower or greater discretion improves or reduces performance. Furthermore, this approach is open to empirical verification and omits stewardship theory. Alternative approaches have begun to integrate principal-agent theory into the consequences of discretion on quantitative grounds (e.g. Caza 2007, 2011). Yet again these approaches have omitted stewardship theory as well as important aspects of managerial discretion theory, such as the potential multidimensionality of managerial discretion (see Sect. 2.1.2).

- *Combining principal-agent theory and stewardship theory.* There have been attempts to reconcile the competing predictions of principal-agent theory and stewardship theory outside of the theoretical context of managerial discretion theory. In particular, Davis et al. (1997b, pp. 27–43) recognise that a manager can act either as a steward, using discretion to improve the organisation's performance, or as an agent, potentially abusing discretion to pursue their own interests at the expense of the organisation's performance. Further, it is postulated that whether a manager acts as a steward (discretion improves performance) or as an agent (discretion reduces performance) depends on the manager's and the principal's psychological characteristics, perceptions of the organisation's situational characteristics, and expectations (see Sect. 2.3.3; e.g. Davis et al. 1997b, pp. 27–43; Lane et al. 1999, p. 1079; Vargas Sánchez 2001, 2004, 2005). However, as this reconciliation is thus based on the individuals' psychologies, which are difficult to evaluate both in empirical research and in practice, it is inherently difficult to verify this approach empirically or apply it in practice.¹⁰ Moreover, even if these psychological factors could determine stewardship versus agency behaviour of a manager, they could at best explain whether or not a given manager will choose to *work diligently* towards the organisation's performance and not whether the manager's actions will strengthen or weaken performance, which can also depend on such factors as the manager's ability, knowledge or information (e.g. Caza 2007, p. 13, 2011, p. 9; Chang and Wong 2003, p. 24; Davis et al. 1997b, pp. 23–24; Xiaoyang Li 2007). Finally, this reconciliation does not integrate managerial discretion

¹⁰ Empirical support has been found for a subset of these factors in the literature (see Sect. 2.3.3.2; e.g. Caza 2007, 2011; Mills and Keast 2009; Van Slyke 2007; Vargas Sánchez 2001, 2004). Nevertheless, even if it were empirically proven that certain psychological characteristics, perceptions, and expectations predicted whether a given manager acted as a steward versus an agent, it would be intricate for a principal in practice to observe these factors and thus evaluate ex ante whether or not the manager would act as a steward or an agent (Davis et al. 1997b, p. 22; Williamson 1985). Therefore, from this reconciliation attempt alone, it is difficult to recommend whether to increase or decrease the discretion of managers in practice.

theory, such as the potential multidimensionality of discretion. By integrating all three relevant theories into a new empirically-validated model, the present study demonstrates that this reconciliation postulating that a manager is either a steward or an agent is not empirically applicable (see Sect. 7.4.2).

The above discussion of both the empirical and the theoretical literature to date delineates a research gap, which the present study terms the discretion puzzle. *The term discretion puzzle is coined for the ostensible paradox that empirical evidence coexists for positive, neutral, and negative impacts of discretion on performance that the existing theories do not unequivocally explain, neither individually nor collectively* (i.e. managerial discretion theory, principal-agent theory, and stewardship theory). In other words, the discretion puzzle refers to the conundrum that there is contradictory empirical evidence on the impact of managerial discretion on performance that cannot be fully explained by the existing theories. Despite the potential importance of managerial discretion in affecting a manager's performance, the existing literature therefore exhibits a research gap in that it provides no clear answer as to whether and under what circumstances granting a manager additional discretion can be expected to increase, not alter or decrease performance.

As explained in the next section (see Sect. 1.2), this study aims to work towards resolving the discretion puzzle by testing the postulate that the impact of discretion on performance can granularly differ by dimensions of discretion and influences on managers. This is a new approach that helps to narrow the aforementioned research gap, since thus far neither the existing theories nor many of the empirical studies have fully differentiated the impact of discretion on performance by this proposed greater granularity (e.g. by dimensions of discretion, firm type, and firm size):

- *Theories.* As to dimensions of discretion, the existing theories have tended not to make differentiated predictions for the impact of distinct dimensions of discretion on performance. While managerial discretion theory indicates that discretion might be multidimensional (e.g. Carpenter and Golden 1997, p. 195; Caza 2007, pp. 26–82; Chen 2006; Finkelstein and Peteraf 2007, p. 245; Hambrick and Abrahamson 1995, p. 1439; Hambrick and Finkelstein 1987, pp. 371–402; Hambrick et al. 1993, p. 409; see Sect. 2.1.2), it leaves the impact of discretion on performance unspecified (see Sect. 2.3.1; e.g. Adams et al. 2005; Crossland and Hambrick 2007; Finkelstein and Hambrick 1990; Hambrick and Finkelstein 1987; Misangyi 2002; Quigley and Hambrick 2009; Tang 2008; Zhao et al. 2010). By contrast, principal-agent theory and stewardship theory make specific predictions regarding a negative and positive impact of discretion on performance, respectively, but they tend not to differentiate discretion by dimensions (e.g. Chang and Wong 2003; Dicke and Ott 2002, p. 468; Fox and Hamilton 1994, p. 74; He et al. 2009; Spremann 1987, p. 18; Vargas Sánchez 2005, p. 19; Xu et al. 2005). As noted above, existing reconciliations of principal-agent theory and stewardship theory likewise do not consider the potential multidimensionality derived from managerial discretion theory, instead contending that a manager can act as either a steward (using discretion to improve organisational performance) or as an agent (using discretion at the expense of organisational performance; Davis et al. 1997b, pp. 27–43). Moreover, as regards

differentiating the impact of discretion on performance by influences that may moderate the way in which managers make use of their discretion, there are indeed a number of moderators that can be derived from the existing theories (see Sect. 2.3).¹¹ Nonetheless, in spite of the specification of these moderator variables in existing theories, the moderation of discretion's impact on performance by firm type and firm size has rarely been investigated in the existing theories.

- *Empirical studies.* The existing empirical studies that have found the impact of discretion on performance to be positive, neutral or negative (see above) have differed from each other in terms of the adopted degrees of granularity. Most of these studies have tested models with limited granularity, meaning they have rarely differentiated the impact of discretion on performance by e.g. dimensions of discretion, firm type, and firm size (see Sects. 2.1 and 2.2). In particular, many existing empirical studies have tended to make the simplifying assumption in their research designs that discretion is unidimensional. They have thus often combined a manager's discretion in different areas of his/her work into a single unidimensional discretion construct (e.g. Barnabas and Mekoth 2010; Bloom et al. 2008; Caza 2011, 2007; Chang and Wong 2003; Cheng et al. 2006; Gammelgaard et al. 2010; Marin and Verdier 2006).¹² Likewise, empirical studies have seldom differentiated the impact of discretion on performance by

¹¹ Specifically, the influences derived from principal-agent theory include the manager's natural predisposition to performance maximisation, compensation control mechanisms, the nature of managerial activities, monitoring control mechanisms, and the manager's ability, knowledge, and information (see Table 2.9 in Sect. 2.3.2.2; e.g. Caza 2007, 2011; Chang and Wong 2003; Cheng et al. 2006; Davis et al. 1997b; Eisenhardt 1989; Fama and Jensen 1983b; Finkelstein and Peteraf 2007; Jensen and Meckling 1976; Xiaoyang Li 2007; Wang et al. 2008; Zhang and Li 2008b). Likewise, stewardship theorists have argued that the principal's and manager's psychological characteristics, perceptions of the organisation's situational characteristics, and expectations may act as potential influences (i.e. moderators) on whether managers use their discretion so as to increase or decrease performance (see Sect. 2.3.2.2; e.g. Argyris 1973a, b; Brown 1969; Caza 2007; Davis et al. 1997b, pp. 27–43; French and Raven 1959; Gibson et al. 1991; Hofstede 1980, 1991; Katz and Kahn 1978; Khanchel 2009, p. 98; Lane et al. 1999, p. 1079; Lawler 1986, 1992; Maslow 1970; McGregor 1960; Mills and Keast 2009; Simon 1957a, b; Triandis 1990, 1995; Triandis et al. 1993; Turner 1981; Van Slyke 2007, p. 164; Vargas Sánchez 2001, 2004, 2005; Walton 1980, 1985).

¹² Among the many empirical studies resorting to proxy measures for gauging managerial discretion, discretion has prevalently been modelled as unidimensional as well. Empirical studies have modelled unidimensional discretion constructs by measuring one or several proxies related to e.g. ratings of managerial power, internal representation on the board of directors, managerial stock ownership, and financial ratios (e.g. Huiyuan Chen 2006; Khanchel 2009; Yougen Li and Zhao 2004; Zhang and Li 2008b; Zhang et al. 2006a, b) as well as multiple antecedents mainly drawn from the task environment (e.g. Agarwal et al. 2009; Berman et al. 2005; Cameron 2000; Finkelstein and Boyd 1998; Finkelstein and Hambrick 1990; He et al. 2009; Magnan and St-Onge 1997; Rajagopalan and Finkelstein 1992; Williamson 1963). In addition, industry-level discretion has been frequently proxied in existing studies (e.g. Abrahamson and Hambrick 1997; Datta et al. 2003; Finkelstein and Hambrick 1990; Hambrick and Abrahamson 1995; Hambrick et al. 1993; Keegan 2006; Keegan and Kabanoff 2008; Thomas and Peyrefitte 1996).

influences (e.g. Agarwal et al. 2009; Barnabas and Mekoth 2010; Bowen et al. 2008; Chang and Wong 2003; Gammelgaard et al. 2010; Groves et al. 1994; He et al. 2009; Khanchel 2009; Li 2007; Stano 1976; Venaik 1999; Werner and Tosi 1995; Zhang 1997)—and those studies that have tested moderators have tended to consider influences other than firm type and firm size (e.g. Caza 2011, 2007; Cheng et al. 2006; Yougen Li and Zhao 2004; López-Navarro and Camisón-Zornoza 2003; Wang et al. 2008; Xu et al. 2005; Zhang and Li 2008b; Zhao et al. 2010; see Sect. 2.2.4).

In sum, the lack of granularity in the theoretical and empirical literature motivates the present study's attempt to test for potential differences in the impact of discretion on performance by dimensions of discretion and by influences on managers (i.e. firm type and firm size)—as is explained further in the next section (see Sect. 1.2).

1.2 Research Objective

In order to narrow the research gap defined above as the discretion puzzle,¹³ the present study's research objective is set to work *towards resolving the discretion puzzle* created by the contradictory empirical evidence on the impact of managerial discretion on performance that cannot be fully explained by the existing theories. More specifically, the research objective is to establish that the failure of the extant literature to account for granularity in the way that managers use discretion is a potential cause of the discretion puzzle—and that theories and empirical studies must therefore differentiate discretion's impact by this granularity (i.e. by dimensions of discretion and influences on managers) to resolve the discretion puzzle. As described below, this research objective is attained by testing the present study's new postulate.

The motivation to work towards resolving the discretion puzzle has both academic and practical roots. From the point of view of academia, the discretion puzzle yields contradictory evidence in two regards. First, theories make conflicting predictions regarding the impact of discretion on performance (i.e. positive in stewardship theory versus mostly negative in principal-agent theory; see Sect. 2.3). Second, the theories cannot unequivocally explain why some empirical studies find a positive, others an insignificant, and yet others a negative impact of discretion on performance. Resolving the discretion puzzle would therefore take an important step towards reconciling existing theories and empirical evidence and

¹³ The discretion puzzle described in Sect. 1.1 denotes the ostensible paradox that empirical evidence coexists for positive, neutral, and negative impacts of discretion on performance that the existing theories do not unequivocally explain, neither individually nor collectively (i.e. managerial discretion theory, principal-agent theory, and stewardship theory). It relates to the managerial discretion of managers in organisations and is therefore distinct from the puzzle of discretion (Pratt and Sossin 2009) that concerns judicial discretion in law.

thereby strengthen the understanding of the phenomenon of managerial discretion. From the point of view of practitioners, the leading theories have yielded such disparate results for positive to negative impacts of managerial discretion on performance that currently not one of them can be chosen with confidence to derive unequivocal recommendations for practitioners on whether to increase or decrease discretion. Resolving the discretion puzzle may then help inform practitioners faced with the challenge of managing their managers as to whether and under what circumstances granting managerial discretion to managers can be expected to strengthen performance substantially.

This study's starting point is the *postulate that managers may use managerial discretion (i.e. the latitude of managerial action; Hambrick and Finkelstein 1987, pp. 371–378) differently depending on the area of their work in which discretion is granted (i.e. the dimension of discretion) and the influences on managers in place (e.g. firm type and firm size)*. For example, a given manager might use additional discretion for making capital investments in a way that improves performance but use additional discretion for hiring workers in a way that reduces performance. Under this postulate, discretion could have positive, neutral, and also negative impacts on performance depending on the dimensions of discretion (e.g. capital investment discretion versus hiring discretion), firm type (e.g. domestic Chinese firms versus foreign multinationals), and firm size (e.g. 150 versus 5,000 employees).

If the present study's postulate is true, it would be fruitless to theoretically predict and empirically estimate a single overall impact of managerial discretion on performance as done in much of the existing research (see Sect. 1.1; e.g. Bowen et al. 2008; Chang and Wong 2003; Dicke and Ott 2002, p. 468; Fox and Hamilton 1994, p. 74; Gammelgaard et al. 2010; Groves et al. 1994; He et al. 2009; Xiaoyang Li 2007; Spremann 1987, p. 18; Stano 1976; Vargas Sánchez 2005, p. 19; Venaik 1999; Werner and Tosi 1995; Xu et al. 2005; Zhang 1997). In fact, assuming that discretion has a single overall effect on performance and thus failing to account for the granularity that its effect differs by dimensions of discretion and by influences on managers could produce misleading results: When failing to account for this granularity, discretion's performance impact could arbitrarily be found to be positive, neutral or even negative simply depending on how discretion is measured (i.e. by which dimensions) and how the managers investigated are differentiated (i.e. by which influences; see Sect. 7.1). The literature's lack of granularity could then be responsible for the contradictory overall impacts of discretion on performance (i.e. the discretion puzzle; see Sect. 1.1) when there might be a consistent granular landscape showing which discretion dimensions under which influences on managers systematically improve, not alter, and reduce performance.

In sum, if the present study's postulate is true, one potential explanation towards resolving the discretion puzzle (i.e. the theoretically unexplained contradictory evidence that discretion has been found to have positive, neutral, and even negative impacts on performance) is that existing research has often fallen short of differentiating the impact of discretion by the area of the manager's work

(i.e. dimensions of discretion) and by influences on managers (e.g. firm type and firm size). Discretion would simply not have a single overall impact but rather increase, not alter or reduce performance depending on this granularity. If the present study can successfully prove this new postulate, it could fulfil the research objective of working towards resolving the discretion puzzle by making *five major contributions* to the literature:

1. *A proof of the importance of granularity for resolving the discretion puzzle* (see Sect. 7.1). This study aims to show that the lack of granularity in the literature may be a potential cause of the discretion puzzle and that future research must thus account for granularity to resolve the discretion puzzle—i.e. recognise that managers can use their discretion differently depending on the area of work in which discretion is granted (i.e. dimension of discretion) and the influences on the managers in place (e.g. firm type and firm size).
2. *A new empirically-validated discretion model that accounts for granularity for future research* (see Sect. 7.2). The study further aims to equip scholars with a new discretion model that can be used to resolve the discretion puzzle. The model granularly integrates the three relevant existing theories, namely managerial discretion theory,¹⁴ principal-agent theory,¹⁵ and stewardship theory.¹⁶ It can be used to synchronise empirical and theoretical research.
3. *For empirical research: an appraisal of existing research designs and recommendations for future research designs that account for granularity* (see Sect. 7.3). To avoid the arbitrary results of the discretion puzzle in the future, this study aims to scrutinise how research designs need to change to distinguish between dimensions of discretion and influences on managers.

¹⁴ Managerial discretion theory (e.g. Abrahamson and Hambrick 1997; Berman et al. 2005; Carpenter and Golden 1997; Caza 2011, 2007; Huiyuan Chen 2006; Crossland 2007; Crossland and Hambrick 2007; Datta et al. 2003; Finkelstein and Boyd 1998; Finkelstein and Hambrick 1990; Finkelstein and Peteraf 2007; Halebian and Finkelstein 1993; Hambrick and Abrahamson 1995; Hambrick and Finkelstein 1987; Hambrick et al. 1993; Hutzschenreuter and Kleindienst 2007; Keegan 2006; Keegan and Kabanoff 2008; Key 2002; Yougen Li and Zhao 2004; Magnan and St-Onge 1997; Quigley and Hambrick 2009; Rajagopalan and Finkelstein 1992; Thomas and Peyrefitte 1996; Zhang and Li 2008b; Zhang et al. 2006a, b).

¹⁵ Principal-agent theory (e.g. Agrawal and Knoeber 1996; Baysinger and Butler 1985; Berger et al. 1997; Brush et al. 2000; Chang and Wong 2003; Childs and Mauer 2008; Denis et al. 1997; Eisenhardt 1989; Fama 1980; Fama and Jensen 1983a, b; He et al. 2009; Jensen 1986; Jensen and Meckling 1976; Jensen and Murphy 1990; Jensen and Ruback 1983; Laffont and Martimort 2002; Lang et al. 1995; Levinthal 1988; Ongore 2011; Shleifer and Vishny 1997; Spremann 1987; Thépot 2007; Thomsen and Pedersen 2000; Walters 1995; Wang et al. 2008; Weidenbaum and Jensen 1993; Werner and Tosi 1995, p. 1673; Xu et al. 2005; Zou 1989).

¹⁶ Stewardship theory (e.g. Albanese et al. 1997; Arthurs and Busenitz 2003; Corbetta and Salvato 2004; Davis et al. 1997a, b; Dicke and Ott 2002; Donaldson 1990; Donaldson and Davis 1991, 1993, 1994, 1989; Eddleston and Kellermanns 2007; Fox and Hamilton 1994; Lane et al. 1999; Liu and Cai 2004; Miller and Le Breton-Miller 2006; Mills and Keast 2009; Muth and Donaldson 1998; Salvato 2002; Tian and Lau 2001; Tosi et al. 2003; Van Slyke 2007; Vargas Sánchez 2001, 2004, 2005; Zahra 2003).

4. *For theoretical research: evidence on the applicability of principal-agent theory and stewardship theory, and recommendations for future theory development* (see Sect. 7.4). The study aims to test whether the existing theories can explain the granular impacts of discretion on performance. The finding that no theory is universally true would provide a new starting point for developing theories to resolve the discretion puzzle: Moving from predicting an overall impact of discretion on performance towards explaining how a manager might use distinct discretion dimensions under differing influences.
5. *For practice: recommendations to the top management of Chinese firms and multinationals regarding managing managers in China* (see Sect. 7.5). Based on the granular impacts of discretion estimated for a representative sample of 467 detailed 'double-blind' interviews with plant managers in China, this study aims to generate far-reaching recommendations that show practitioners how to harness the success factor of managerial discretion so as to effectively improve the performance of their middle managers in China.

Before turning to the research design that is chosen to fulfil the research objective (see Sect. 1.3), this section draws attention to the delimitations of the research objective (i.e. the boundaries set for reasons of scope; see Garson 2002). As explained in Box 1.1, the research objective is not to conclusively resolve the discretion puzzle in the present study but rather to make the five contributions to the literature described above that can help resolve the discretion puzzle in future studies.

Box 1.1: Delimitations of Research Objective

The present study's research objective of working towards resolving the discretion puzzle (instead of conclusively resolving the discretion puzzle) entails the following delimitations that sharpen the study's scope. These delimitations are further scrutinised in Sect. 7.6 in terms of limitations:

1. *The study focuses on the aforementioned granularity-based resolution of the discretion puzzle, which leaves alternative approaches open to be explored in future research.* There might be other approaches to resolving the discretion puzzle that are not investigated in this study, as noted in Sects. 2.2 and 7.6.
2. *The study tests only a subset of dimensions of discretion and influences on managers, requiring future studies to find a suitable degree of granularity.* Granularity is analysed in terms of differentiating by four dimensions of discretion (i.e. capital investment discretion, hiring discretion, new product introduction discretion, and sales & marketing discretion) as well as by two influences on managers (i.e. firm type and firm size). This differentiation is shown to be sufficient for establishing the importance of granularity. Nevertheless, the required degree of granularity (i.e. by which discretion dimensions and influences on managers to distinguish) remains to be identified in future research (see Sect. 7.6).

(continued)

3. *The study does not aspire to offer a theoretical explanation for why granularity is important, which may be pursued in future theory development.* While aiming to establish the importance of granularity, this study does not attempt to explain why managers use discretion in certain dimensions of their work under certain influences to improve performance but use discretion in other dimensions to reduce performance. Beyond the scope of the research objective, this study shows how scholars might use granularity as a new starting point for developing granular theories in the future (see Sect. 7.4.3).
4. *The study does not aim to investigate the dynamics of discretion or causality, which may be explored in future studies.* The dynamics of discretion (i.e. the analysis of discretion over time, e.g. differentiating between short-term and long-term effects) are still at an early stage of research in the literature (e.g. Finkelstein and Peteraf 2007, pp. 243–245; Hutzschenreuter and Kleindienst 2007, p. 1; Kayhan 2008, pp. 1–6). Yet these dynamics are not addressed within this study, given that data on the unit of analysis is collected at only one point in time (see Sect. 3.2.5). The ensuing cross-sectional static design limits the study’s ability to draw conclusions on causality—i.e. to determine whether an observed relationship (e.g. between discretion and performance) is causal rather than spurious, and if so, what the direction of causality is (e.g. whether discretion impacts on performance; see Sect. 5.4; e.g. Caza 2007, p. 46; Finkelstein and Hambrick 1990, p. 500; Sánchez 2008, p. 5; Simon 1954, pp. 477–478; Wagner 2002, pp. 287–292). Future research with data on discretion and performance over time might seek to analyse the impact of discretion in a dynamic rather than a static model in an effort to explore the dynamics of discretion and support the establishment of causality (e.g. Granger 1969; see Box 3.2 in Sect. 3.2.5).

1.3 Research Design

The starting point for fulfilling the research objective is the postulate that managers may use managerial discretion (i.e. the latitude of managerial action; Hambrick and Finkelstein 1987, pp. 371–378) differently depending on the area of their work in which discretion is granted (i.e. the dimension of discretion) and the influences on managers in place (e.g. firm type and firm size; see Sect. 1.2). If this postulate is confirmed, then the impact of discretion on performance could be positive, neutral or negative depending on the dimensions of discretion and the influences on managers. Theories and empirical studies would then have to differentiate the impact of discretion on performance by this greater granularity (i.e. by dimensions of discretion and influences on managers) in order to work towards resolving the discretion puzzle.

As explained below, this postulate is developed based on a review of the empirical and theoretical literature (see Chap. 2). It motivates the building of a new discretion model that takes granularity into account and integrates the literature on managerial discretion theory, principal-agent theory, and stewardship theory (see Chap. 4). The new discretion model is calibrated with a database of 467 plant managers in China¹⁷ (see Chap. 3) so as to empirically estimate the impact of discretion on performance. This empirical application vindicates the new model in three ways: by demonstrating the model's validity and reliability (see Chap. 5), by establishing the importance of its granularity, and by confirming that one cannot rely on any one of the existing theories to explain the impact of discretion on performance (see Chap. 6). The study concludes by generating far-reaching implications for research and practice on the importance of granularity for resolving the discretion puzzle (see Chap. 7).

Chapter 1 (Introduction) derives the research gap (i.e. the discretion puzzle) from the extant literature and consequently defines the research objective (i.e. working towards resolving the discretion puzzle) as well as the research design.

Chapter 2 (Literature Review and Hypotheses) conducts a thorough, in-depth review of the empirical and theoretical literature on the impact of managerial discretion on performance. The literature review is used for multiple purposes within the present study: deriving the research gap and research objective (see Sects. 1.1 and 1.2), formulating the postulate and hypotheses (see Sects. 2.4.2 and 2.4.3), selecting the unit of analysis (see Chap. 3), and developing the study's model (see Chap. 4). In particular, the reviews of the empirical literature, managerial discretion theory, principal-agent theory, and stewardship theory collectively define Hypotheses 1 to 3, which culminate in the present study's postulate that managers may use managerial discretion differently depending on the area of their work in which discretion is granted (i.e. Hypothesis 1: dimension of discretion) and the influences on managers in place (i.e. Hypothesis 2: firm type; Hypothesis 3: firm size). The three hypotheses refer to granularity in terms of differentiating the impact of discretion on performance by dimensions of discretion (e.g. capital investment discretion versus hiring discretion), firm type (e.g. Chinese firms versus multinationals), and firm size (e.g. 150 versus 5,000 employees). Together the three hypotheses can test the study's postulate that granularity greater than that employed in existing theories and many empirical studies will yield a better explanation of the impact of discretion on performance and thereby contribute to the resolution of the discretion puzzle. Each hypothesis is deliberately phrased below as a testable question of whether a non-granular assumption as made in many

¹⁷ The author would like to express his gratitude to McKinsey & Company, especially John Dowdy and Stephen Dorgan, for allowing this study to use the database of 467 plant managers in China (McKinsey and Company—London School of Economics—Stanford University 2008) that was created as part of a large-scale, long-term cooperation between academics and practitioners from the London School of Economics and Stanford University as well as McKinsey & Company (see Bloom et al. 2005, 2007, 2008, 2009a; Bloom and Van Reenen 2007; Dorgan and Dowdy 2004).

existing studies is tenable (i.e. null hypothesis) or rather needs to be rejected in favour of more granularity (i.e. is not universally tenable; alternative hypothesis):

- *Hypothesis 1 (dimensions of discretion)*. Is managerial discretion unidimensional or multidimensional in its impact on performance?¹⁸
- *Hypothesis 2 (firm type)*. Is the impact of managerial discretion on performance equal between different firm types or does it differ between different firm types (i.e. domestic Chinese firms versus foreign multinationals)?
- *Hypothesis 3 (firm size)*. Is the impact of managerial discretion on performance equal between firms of different sizes or does it differ between firms of different sizes?¹⁹

The final hypothesis is *Hypothesis 4*. Whereas Hypotheses 1 to 3 test whether greater granularity is important for resolving the discretion puzzle, Hypothesis 4 tests whether the existing theories can explain the resulting granular impacts of discretion. Hypothesis 4 therefore tests the applicability of the theories for investigating the impact of managerial discretion on performance after taking granularity into account. If it is empirically found that none of the existing theories is consistent with the impact of discretion on performance for plant managers in China, this could serve as a proof-by-counter-example that no theory can be universally applicable to discretion. Such evidence that the theories are individually inapplicable would vindicate the new discretion model (see Chap. 4) in its granular approach to combine managerial discretion theory, principal-agent theory, and stewardship theory. It would furthermore provide a new starting point for advancing theories on managerial discretion in future research so as to resolve the discretion puzzle (see Sect. 7.4).

Chapter 3 (Unit of Analysis) specifies, evaluates, and profiles the unit of analysis of the present study, which is ‘the entity about which one is trying to draw conclusions’ (Johnson et al. 2007, p. 58). A concrete unit of analysis (i.e. manager for whom the impact of discretion on performance is to be investigated) must be defined in order to collect empirical data for testing the above hypotheses. As discussed in Sect. 1.1, the nature of the impact of discretion on performance remains unresolved for different levels of management and for different

¹⁸ For example, whereas previous studies have tended to make the simplifying assumption in their models that discretion is unidimensional, managerial discretion theory indicates it may be multidimensional (e.g. Carpenter and Golden 1997, p. 195; Caza 2007, pp. 26–82; Chen 2006; Finkelstein and Peteraf 2007, p. 245; Hambrick and Abrahamson 1995, p. 1439; Hambrick and Finkelstein 1987, pp. 371–402; Hambrick et al. 1993, p. 409; see Sect. 2.1.2). Whether or not this assumption is universally tenable is examined by testing the null hypothesis of unidimensionality against the alternative hypothesis of multidimensionality. Rejecting such a null hypothesis in the instance of the present study would serve as a proof-by-counter-example that the assumption of limited granularity is not justifiable in all cases (i.e. that it is not universally tenable).

¹⁹ It should be noted that in addition to empirically verifying the study’s postulate, these hypotheses can potentially test for the importance of granularity as incorporated into the study’s new discretion model and thereby potentially vindicate the granular design of the new discretion model.

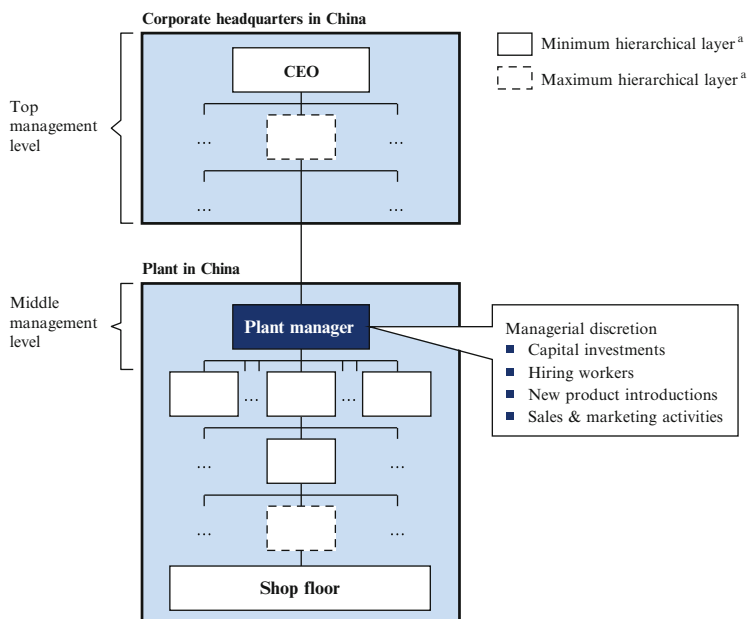


Fig. 1.1 Unit of analysis (plant manager in China)

Source: Computed from this study's database with 467 firms

^aFor example, on average there are two to three hierarchical layers between the plant manager and the shop floor

countries—yet there is a particular need to clarify the performance impact of discretion at the middle management level in China, where evidence to date has been scarce (see Caza 2007, p. 1; Yougen Li and Zhao 2003, p. 6; Zhang and Li 2008a, pp. 37–38). This study therefore chooses middle management in China as the unit of analysis, or more precisely, the plant manager of small and medium-sized enterprises in the manufacturing sector throughout mainland China in the latter half of 2007, which covers plant managers in both domestic Chinese firms and foreign multinationals.²⁰

Figure 1.1 schematically depicts the organisational structure of this unit of analysis. The plant manager is the most senior manager at a plant of a firm who is not simultaneously the firm's CEO (chief executive officer) in mainland China. He/she reports to top management at corporate headquarters in China and in turn

²⁰ The empirical data on the unit of analysis (McKinsey & Company—London School of Economics—Stanford University, 2008; see above) is a representative sample of 467 Chinese firms and multinationals in China, which was collected using a standardised scoring system during 467 detailed 'double-blind' interviews with plant managers of approximately 45 min each by specially-trained native Chinese graduate students from top business schools (see Sects. 5.2 and 5.5).

manages a plant with several hierarchical layers. While thus generally being in charge of the daily operations of the plant (e.g. A.O. Smith Corporation 2011; CareerStrides 2011; Damewood 2010; HRVillage 2011; Joseph 2011; Tan Xin 2011; Zhongguo fuzhuang rencai wang [China Apparel Talent Net] 2011), there are certain domains of the manager's work in which a plant manager may not possess the full discretion to make all decisions without involving top management. For example, some plant managers may have been granted the discretion to hire full-time permanent shop floor workers without involving top management, whereas others may be required to seek prior authorisation from corporate headquarters. In addition to hiring workers, the plant manager's managerial discretion may vary in such domains as making capital investments, introducing new products, and sales & marketing activities (e.g. Acemoglu et al. 2007; Caza 2007; Chang and Wong 2003; Cheng et al. 2006; Colombo and Delmastro 2004; Glaister et al. 2003; Marin and Verdier 2006). Investigating the impact of discretion on performance with the model below thus examines the impact on performance that results when top management at corporate headquarters in China (e.g. the CEO in Fig. 1.1) adjust the degree of discretion granted to their plant managers in China.

Chapter 4 (Model Specification) builds on the literature reviewed in Chap. 2 so as to theoretically develop a new discretion model for investigating how adjustments to the plant manager's managerial discretion impact on performance (i.e. the theoretical discretion model). A new model that synthesises the three aforementioned theories and takes greater granularity into account is required for working towards resolving the discretion puzzle, since neither the existing theories nor many of the empirical studies fully incorporate the proposed higher granularity (e.g. Agarwal et al. 2009; Barnabas and Mekoth 2010; Bloom et al. 2008; Bowen et al. 2008; Caza 2011, 2007; Chang and Wong 2003; Cheng et al. 2006; Davis et al. 1997b, pp. 27–43; Dicke and Ott 2002, p. 468; Fox and Hamilton 1994, p. 74; Gammelgaard et al. 2010; Groves et al. 1994; He et al. 2009; Khanchel 2009; Xiaoyang Li 2007; Marin and Verdier 2006; Spremann 1987, p. 18; Stano 1976; Vargas Sánchez 2005, p. 19; Venaik 1999; Werner and Tosi 1995; Xu et al. 2005; Zhang 1997).

The resulting theoretical discretion model (tailored to the present study's hypotheses and unit of analysis)²¹ is shown in Fig. 1.2, which is a graphical representation of the various constructs and structural relationships that are modelled for analysing the managerial discretion of plant managers in China in the present study based on the three relevant theories (i.e. managerial discretion theory, principal-agent theory, and stewardship theory). In line with the above hypotheses, the theories are woven into the model with more fine-grained granularity than in many previous studies. By simultaneously differentiating the impact of

²¹ A more general version of the theoretical discretion model is presented in Sect. 4.1.2, which additionally includes variables derived from the theories that are not empirically investigated within the present study.

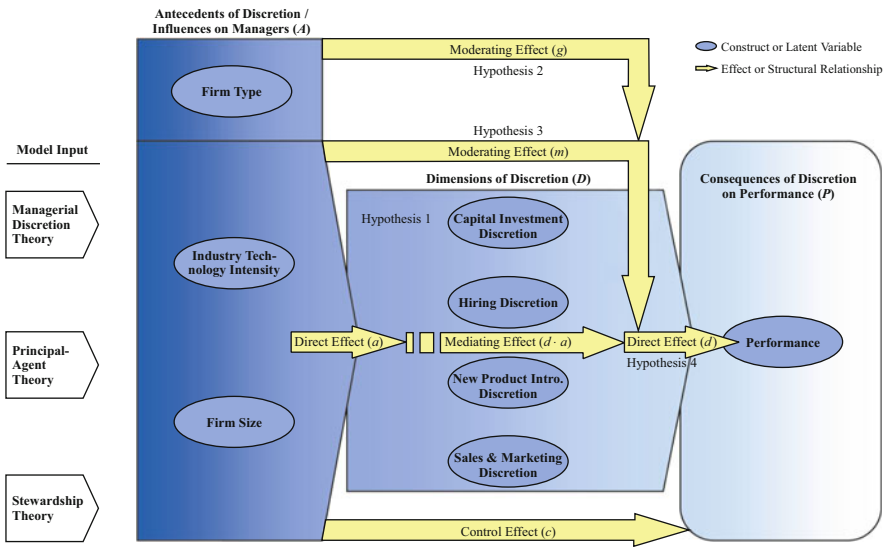


Fig. 1.2 Theoretical/empirical discretion model^a
Source: The author’s own synthesis based on managerial discretion theory, principal-agent theory, and stewardship theory
^a The graphical representation of the model is termed ‘theoretical discretion model’ whereas the empirical operationalisation of the model in Chap. 4 (i.e. in terms of equations) is termed ‘empirical discretion model’

discretion on performance by dimension of discretion, firm type, and firm size, the model can test the study’s hypotheses (see Hypotheses 1 to 4 above) and thereby work towards resolving the discretion puzzle.

Following the synthesis of the existing theories into the theoretical discretion model in Fig. 1.2, partial least squares path modelling (PLS; initially developed by Wold 1966, 1973, 1975, 1982) is used to translate this theoretical discretion model into the empirical discretion model. Using state-of-the-art modelling methodology, the empirical discretion model’s measurement model is specified for each construct (i.e. oval in Fig. 1.2) and its structural model is specified for each structural relationship (i.e. arrow in Fig. 1.2) in the theoretical discretion model. This includes a derivation of comparative statics in line with the research objective and a specification of hypothesis tests for generalising findings from the study’s sample of 467 firms to the entire population of all comparable Chinese firms and multinationals in China, which is possible due to the sample’s representativeness (Fogiel 2000, pp. 158–160; Garson 2002, pp. 139–196; Gliner and Morgan 2000, p. 148; Wooldridge 2002, pp. 298–299).

Chapter 5 (Validity and Reliability of Empirical Discretion Model) holistically assesses the validity and reliability of the empirical discretion model calibrated based on the study’s representative sample. A cascading hierarchy of five evaluation criteria and numerous assessment tests and thresholds is defined based on a

broad synthesis of the literature.²² It is harnessed to conduct a comprehensive assessment which finds that the empirical discretion model indeed fulfils every assessment test of statistical conclusion validity, reliability, construct validity,

²² See Sect. 5.1 on *statistical conclusion validity* (e.g. Albers and Hildebrandt 2006, pp. 2–33; Arteaga et al. 2010, p. 164; Backhaus et al. 2006, p. 97; Barroso et al. 2010, p. 437; Baumgartner and Homburg 1996; Bentler and Chou 1987; Bentler and Weeks 1980; Betzin and Henseler 2005, p. 50; Bliemel et al. 2005, pp. 10–11; Bollen 1989, pp. 1–9; Bollen and Davis 1994; Boßow-Thies and Albers 2010, pp. 595–596; Carte and Russell 2003, pp. 480–495; Chin 1995, pp. 315–319, 1998, pp. 318–320, 2000, pp. 1–2, 2001; 2002, p. 94, 2010, p. 670; Chin and Newsted 1999, pp. 309–314; Chow 1960, pp. 595–604; Cohen 1988, pp. 410–413; Coheris Spad 2007; Cortina et al. 2001, pp. 334–359; Diamantopoulos and Schlegelmilch 2006, p. 217; Diamantopoulos and Siguaw 2006, p. 271; Duarte and Raposo 2010, p. 463; Efron and Gong 1983, pp. 40–46; Efron and Tibshirani 1993, pp. 145–147; Eggert et al. 2005, pp. 102–108; Esposito Vinzi et al. 2010, pp. 48–66; Falk and Miller 1992, p. 5; Fassott 2005, pp. 24–29; Fassott and Eggert 2005, pp. 26–32; Finkelstein and Boyd 1998, p. 186; Fornell 1987; Fornell and Bookstein 1982a, pp. 289–302, 1982b, pp. 440–451; Fornell and Larcker 1981, pp. 45–46; Fu 2006; Gallese and Prugent 2007; Garson 2002, p. 144; Götz and Liehr-Gobbers 2004, pp. 727–731; Henseler and Fassott 2010, p. 721; Herrmann et al. 2006, p. 61; Homburg and Baumgartner 1995b; Homburg and Dobratz 1998, p. 450; Hsieh et al. 2008, p. 108; Irwin and McClelland 2001, p. 105; James et al. 1982, pp. 110–112; Jöreskog 1970, 1981; Jöreskog and Sörbom 1982, 1988; Kaplan 2000, pp. 1–12; Krafft et al. 2005, pp. 73–83; Krzanowski 2003, p. xv; Yuan Li 2005; Lohmöller 1987, 1988, p. 126, 1989; MacCallum and Browne 1993, pp. 533–540; Ping 2005, p. 2; Qureshi and Compeau 2009, p. 199; Ringle 2009; Ringle et al. 2005, 2010, p. 205; Rodgers and Pavlou 2003, p. 25; Sánchez 2009, p. 3; Satorra and Bentler 2001; Schepers et al. 2005, p. 504; Scholderer and Balderjahn 2005, pp. 88–94; Temme and Kreis 2005, p. 195; Temme et al. 2006, pp. 1–2; Tenenhaus et al. 2004, pp. 739–742; Tenenhaus et al. 2005, pp. 173–190; van Oppen et al. 2005, p. 19; Wold 1966, 1973, 1975, p. 351, 1980, pp. 70–71, 1982, 1985, 1989), see Sect. 5.2 on *reliability* (e.g. Albers 2010, p. 411; Albright and Malloy 2000, p. 349; Babbie 1990, p. 187; Bagozzi 1980; Bagozzi and Yi 1988, p. 82; Beyth-Marom 1982; Blalock 1964; Bloom and Van Reenen 2007, pp. 1365–1366; Bollen and Lennox 1991; Carmines and Zeller 1979, pp. 29–62; Chin 1998, p. 320; Churchill 1987; Coltman et al. 2008; Crocker and Algina 1986; Cronbach 1951, p. 297; Diamantopoulos 1999, pp. 447–453; Diamantopoulos and Siguaw 2006, pp. 270–271; Dillman 1978, p. 56; Esposito Vinzi et al. 2010, pp. 50–51; Fornell and Larcker 1981, p. 45; Garson 2002, p. 199; Gliner and Morgan 2000, pp. 312–316; Groves 1990, pp. 226–233; Herrmann et al. 2006, p. 30; Holbrook et al. 2003, pp. 81–86, 109–110; Krafft 1999, p. 124; Krafft et al. 2005, pp. 73–75; Krafft et al. 2003, p. 102; Lavrakas 2008, p. 250; Lichtenstein and Newman 1967; Manski 2004, p. 10; March and Simon 1958, pp. 140–141; Novick and Lewis 1967, pp. 1–13; Nunnally 1978, p. 245; Ping 2005, p. 2; Rossiter 2002, pp. 307–315; Sánchez 2009, p. 3; Scholderer and Balderjahn 2005, pp. 88–89; Schwester 2007, pp. 270–272; Spearman 1904; Tenenhaus et al. 2005, p. 164; Wallsten et al. 1986; Werts et al. 1974), see Sect. 5.3 on *construct validity* (e.g. Ahuja and Thatcher 2005, p. 446; Albers 2010, p. 411; Albright and Malloy 2000, p. 349; Arnold 1982; Arteaga et al. 2010, p. 164; Bagozzi and Yi 1988, p. 82; Balderjahn 1986, p. 236; Barroso et al. 2010, p. 437; Baumgartner and Homburg 1996; Bido 2007; Blalock 1964; Bohrnstedt 1970, p. 92; Bollen and Lennox 1991, p. 308; Boßow-Thies and Albers 2010, p. 596; Bromley 2002, p. 35; Campbell and Fiske 1959, p. 81; Carmines and Zeller 1979, p. 53; Carte and Russell 2003, pp. 493–494; Caza 2007, p. 40; Chin 1998, p. 318, 2000, pp. 1–2, 2010, p. 670; Chin et al. 2003, p. 194; Churchill 1979, 1987; Coltman et al. 2008; Cronbach and Meehl 1955; Diamantopoulos 1999, pp. 447–453; Diamantopoulos and Siguaw 2006, p. 271; Diamantopoulos and Winklhofer 2001, p. 272; Donsbach and Traugott 2008, p. 364; Duarte and Raposo 2010, p. 463; Eggert and Fassott 2003, pp. 5–9; Esposito Vinzi et al. 2010, pp. 50–51; Esposito Vinzi

internal validity, and external validity, even when faced with particularly conservative thresholds from the literature. Therefore, in the context of the present study, the empirical discretion model is empirically-validated and its results can be used

et al. 2003, p. 5; Fassott and Eggert 2005, p. 32; Fornell and Cha 1994, pp. 71–73; Fornell and Larcker 1981, pp. 45–46; Fornell et al. 1990, p. 1252; Fritz 1995, p. 136; Garson 2002, pp. 195–196; Geisser 1975, pp. 320–328; Gliner and Morgan 2000, pp. 321–322; Götz and Liehr-Gobbers 2004, p. 727; Hahn 2002, p. 104; Helm 2005, pp. 249–252; Henseler and Fassott 2010, pp. 719–721; Herrmann et al. 2006, pp. 24–30; Hinkel 2001, p. 291; Homburg and Baumgartner 1995b, p. 1093; Homburg and Dobratz 1998, p. 450; Homburg and Giering 1996, p. 12; Hsieh et al. 2008, p. 109; Hu and Olshfski 2007, p. 207; Hulland 1999, pp. 198–199; Jarvis et al. 2003, p. 202; Jöreskog and Wold 1982, p. 270; Keil et al. 2000, pp. 312–315; Krafft 1999, p. 124; Krafft et al. 2005, pp. 73–75; Krafft et al. 2003, p. 102; Lohmöller 1989, p. 36; Mosier 1947; Nunnally 1978, p. 111; Ping 2005, p. 1; Qureshi and Compeau 2009, pp. 197–199; Reinartz et al. 2004, p. 298; Rigdon et al. 1998, p. 1; Ringle et al. 2005; Rodgers and Pavlou 2003, p. 25; Rossiter 2002, p. 315; Ruiz et al. 2010, pp. 546–548; Sambamurthy and Chin 1994, pp. 231–232; Sánchez 2009, p. 3; Schepers et al. 2005, p. 504; Seltin and Keeves 1994, p. 4356; Stone 1974; Tenenhaus et al. 2005, pp. 163–174; van Oppen et al. 2005, p. 19; Venkatesh and Morris 2000, p. 126; Venkatraman 1989, p. 426; Wold 1982, p. 10; Zhu et al. 2006, pp. 529–530), see Sect. 5.4 on *internal validity* (e.g. Abraham et al. 2007, pp. 10–21; Albors et al. 2008; Ang and Straub 1998, p. 544; Ang 2008; Arafat et al. 1999, p. 90; Arnold 1982; Bachman and Schutt 2010, p. 170; Backhaus et al. 2006; Baum 1996; Bloom and Van Reenen 2007, pp. 1375–1381; Bound et al. 1984; Campbell and Fiske 1959, p. 81; Caza 2007, p. 46; Corcoran 2001, p. 154; Davis 1985, pp. 63–64; Diamantopoulos and Sigauw 2006, p. 270; Diamantopoulos and Winklhofer 2001, p. 272; Dibbern and Chin 2005, p. 144; Donsbach and Traugott 2008, p. 364; Eckey et al. 2004, p. 92; Efron and Gong 1983, pp. 37–38; Esposito Vinzi et al. 2010, p. 56; Evans 1987, p. 659; Finkelstein and Boyd 1998, p. 187; Finkelstein and Hambrick 1990, p. 500; Fornell and Bookstein 1982a; Fornell and Cha 1994, pp. 71–73; Galavan 2005, p. 174; Geisser 1975, pp. 320–328; Götz and Liehr-Gobbers 2004, pp. 727–731; Granger 1969; Grant and Rice 2007, p. 367; Greene 2003, pp. 57–58; Griliches and Mairesse 1990; Gujarati 2004, pp. 342–363; Hair et al. 1998, p. 208; Hannan and Freeman 1977; Hanssens et al. 2003, p. 298; Hatzichronoglou 1997, pp. 12–13; Hausman et al. 1984; Hellevik 1988, p. 38; Helm 2005, pp. 248–249; Henseler and Fassott 2010, pp. 719–721; Herrmann et al. 2006, pp. 55–61; Hu and Olshfski 2007, p. 207; Jaccard and Turrisi 2003, pp. 1–2; Jackman 1975, p. 182; Keuzenkamp 2000, p. 261; Kleinbaum et al. 1998, p. 214; Krafft et al. 2005, pp. 72–80; Kutner et al. 2004; Loschky 2008, pp. 3–7; Motulsky 2003, p. 106; OECD 2005, pp. 167–172; Oliinik 2008, p. 19; Onkelinx and Sleuwaegen 2010; Poncet et al. 2008, pp. 10–12; Rigdon et al. 1998, p. 1; Ringle et al. 2005; Rosenbaum 1989, p. 341; Sánchez 2008, p. 5; Sarkar et al. 2006; Shaughnessy et al. 2005, p. 367; Simon 1954, pp. 471–478; Singh and Lumsden 1990; Stone 1974; Taube 2005, pp. 4–13; Taube and Ögütçü 2002, pp. 18–23; Temme et al. 2006, p. 18; Tenenhaus et al. 2005, pp. 174–177; Venkatraman 1989, p. 426; Wagner 2002, pp. 287–292; Wald et al. 1988, p. 72; Wooldridge 2002, p. 95), and see Sect. 5.5 on *external validity* (e.g. Abraham et al. 2007; Bureau van Dijk 2005, p. 2, 2006/2007, p. 2; Fogiel 2000, pp. 158–160; Garson 2002, pp. 139–196; Gliner and Morgan 2000, p. 148; Groves 1990, p. 233; Groves et al. 2009, pp. 54–56; Groves and Lyberg 2001, p. 195; Guojia tongji ju [National Bureau of Statistics] 2003, 2007, 14–1, 14–2, 14–18; McCarty 2003, p. 397; ISIC Rev.3.1; National Bureau of Statistics 2002; Northrop and Arsenaault 2007, pp. 235–236; Oliinik 2008; Poncet et al. 2008, p. 8; Ringle et al. 2005; Schofield 2006, pp. 28–29; Schwester 2007, pp. 272–273; Stuart 1984; Temme et al. 2006, pp. 7–8; The American Association for Public Opinion Research 2008, pp. 34–35; United Nations 2007, p. 63; Whyte 2000, p. 62; Wooldridge 2002, pp. 298–299).

with confidence so as to test the four hypotheses and thereby work towards resolving the discretion puzzle.

Chapter 6 (Empirical Results of Model) presents the empirical results of the calibrated empirical discretion model for Chinese firms and multinationals in China. The new model is calibrated with a database of 467 plant managers in China, meaning the various effects in the discretion-performance relationship (depicted as arrows in Fig. 1.2) are estimated empirically as concrete numbers. For the middle management in China in Fig. 1.1, the model thus empirically estimates how discretion impacts on performance while paying due attention to granularity. The aforementioned four hypotheses are tested for the study's particular instance of plant managers in China. By virtue of proof-by-counter-example, these hypothesis tests pave the way to far-reaching implications on the importance of granularity and the applicability of the existing theories for the impact of discretion on performance.

Chapter 7 (Conclusion) synthesises the empirical results on the impact of managerial discretion on performance into recommendations for research and practice that work towards resolving the discretion puzzle. In line with the research objective in Sect. 1.2, this study makes five major contributions to the literature: (1) a proof of the importance of granularity for resolving the discretion puzzle, (2) a new empirically-validated discretion model that accounts for granularity for future research, (3) for empirical research, an appraisal of existing research designs and recommendations for future research designs that account for granularity, (4) for theoretical research, evidence on the applicability of principal-agent theory and stewardship theory, and recommendations for future theory development, and (5) for practice, recommendations to the top management of Chinese firms and multinationals regarding managing managers in China. The present study concludes with a discussion of its limitations.

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