A DOUBLE-EDGED SWORD: PROCEDURAL JUSTICE CONSTRAINS HARMFUL AND BENEFICAL HEADQUARTERS INTERVENTION

Christian Geisler Asmussen, Nicolai J. Foss and Phillip C. Nell
Department of Strategic Management and Globalization
Copenhagen Business School
Kilevej 14, 2nd floor; 2000 Frederiksberg; Denmark
cga.smg@cbs.dk; njf.smg@cbs.dk; pcn.smg@cbs.dk

Jan. 31, 2013; word count (main body): 8,224

Keywords: Corporate headquarters, parenting, multi-business firms, procedural justice, psychological game theory.
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Abstract

Multi-business firms should design the task portfolio of their headquarters (HQ) and the way HQ tasks are carried out so that net value creation results. While the strategic management literature has emphasized such parenting benefits, less attention has been paid to the costs that may inadvertently be caused by HQ actions. Using a simple game theory model, we analyze the motivational costs that may result from HQ intervention in subunits. Along the lines of the procedural justice literature, we identify the conditions under which these costs may be influenced by the existence of fairness expectations among subunit managers. Our analysis of the dynamic game between HQ and subunits has novel and non-intuitive results. For example, we find that good parenting may involve forgoing opportunities for value-creation, and that procedural justice systems may sometimes be counterproductive. Our findings contribute to both the HQ and the procedural justice literatures.
INTRODUCTION

Multi-business firms face the challenge of designing their headquarters activities (HQ) in such a way that net value creation results, and hence a “parenting advantage,” result (Chandler, 1991; Campbell, Goold & Alexander 1995; Foss, 1997; Adner & Helfat, 2003; Poppo, 2003; Parmigiani & Holloway, 2011; Nell & Ambos, forthcoming). For example, HQs can create value through identifying and realizing synergies across businesses. However, they may also destroy value through their interventions, for example, due to managerial opportunism (e.g., HQ managers pursuing their own opportunistic goals to the detriment of the firm), misperceptions of potential synergies (Goold & Campbell, 1998; 2001; Collis et al., 2007), or through a negative impact on the motivation of lower-level managers and employees (Robinson, 1996; Aghion & Tirole, 1997; Baker, Gibbons & Murphy, 1999) which may harm efforts, productivity and innovativeness. The purpose of this article is to focus on the impact of intervention on motivation, and to show how HQ interventions can be managed to avoid harming motivation at lower echelons in the firm. To simplify, we assume away managerial opportunism, bounded rationality and lack of information, demonstrating the surprising fact that these are not necessary conditions for HQ to be a cause of value destruction.

The procedural justice (“PJ”) literature suggests that PJ is a tool that allows HQ managers to pursue their strategies, while keeping motivational problems under control as subunit managers experience a fair process (Kim & Mauborgne, 1991, 1993, 1995, 1996; Ellis, Rent & Reus, 2009; Konovsky, 2000). However, this literature neglects that the effectiveness of PJ may depend on environmental conditions, since PJ may lead to strongly held justice expectations which HQ managers may not always be able or willing to meet. Thus, increasingly complex and turbulent environments, requiring fast decisions, may challenge PJ to the extent that it involves lengthy, formalized decision processes that take involved subunit managers into account (Kim & Mauborgne, 1993; Foss, Foss & Nell, 2012).
A further gap in the extant literature is that it does not place PJ and reactions to particular HQ interventions in a dynamic context. Recent evidence in psychology suggests that individuals develop justice expectations (Wiechmann & Ryand, 2006) (or “anticipatory justice,” Shapiro & Kirkman, 1999, 2001) prior to organizational change brought about by managers (Shapiro & Kirkman, 1999, 2001; Rodell & Colquitt, 2009). Per implication pre-existing justice expectations may moderate the impact of HQ intervention on the motivation of subunit managers, possibly in detrimental way. Relatedly, interventions by HQ may shape future justice expectations, so that subunit managers assess future HQ interventions in the light of past interventions. For example, if perceptions take hold among subunit managers that past interventions were procedurally unjust, future interventions may be seen in the same light, even though they are carried out in conformity with the firm’s rules of procedural justice. As the success of HQ intervention is partly dependent on such dynamics aspects, it is problematic that very little is known about them in the research literature.

In order to fill this gap, we integrate key ideas from the HQ and PJ literatures in a simple game theoretical model. We analyze the implications for value creation of HQ intervention in a dynamic setting that draws on psychological game theory literature and the solution concept of a “fairness equilibrium” (Rabin, 1993; Battigalli & Dufwenberg, 2008; Geanakoplos, Pearche & Stacchetti, 1989). In this approach, agents’ (e.g., subunit managers’) choice of strategies depends not on the direct payoff, as in standard game theory, but also on beliefs concerning other players’ intentions (are they helpful or harmful?), and on whether the chosen actions do harm or help these other players. This makes it possible to model justice expectations in a dynamic context.

Analyzing our model allows us to make several contributions. First, we identify the boundary conditions under which a) headquarters will and will not intervene, and b) PJ is a valuable tool for the firm. Second, we add to the parenting literature as we highlight that value destruction from HQ activities
can occur under conditions of perfectly informed and benevolent (non-opportunistic) HQ managers. This extends previous parenting literature that mainly focuses on the bounded rationality and opportunism of HQ managers (e.g., Goold & Campbell, 1998; Ciabuschi, Forsgren & Martin Martin, 2011). Third, we show that, paradoxically, good (i.e., value-maximizing) parenting involves the HQ forgoing some opportunities for value creation because realizing these opportunities (through intervention) will be too costly in terms of harming subunit motivation. This contrasts with the parenting literature that has recently argued in favor of an activist HQ role (e.g., Poppo, 2002; Goold & Campbell, 2002). In sum, the unique contribution of this article is to examine the dynamic game being played between HQ and subunits in order to understand important costs and benefits of HQ in multi-business firms, and to derive non-intuitive insight in optimal HQ behavior and the role that PJ and resulting justice expectations plays in influencing HQ behavior.

THEORETICAL BACKGROUND: CORPORATE HEADQUARTERS AND PROCEDURAL JUSTICE

Corporate Headquarters: Creators of the Positive and Avoiders of the Negative

Scholars have long been concerned with the roles and functions of the HQ, particularly in the context of the diversified corporation (Penrose, 1959; Chandler, 1962, 1991; 1994; Williamson, 1975, 1985; Goold & Campbell, 1987). Foss (1997) argued that the literature on HQ manifests a diversion between two conceptually distinct views of the HQ, namely as either a creator of the positive, such as the discovery and exploitation of opportunities from linkages across subunits (Penrose, 1959; Goold & Campbell, 1987), or an avoider of the negative, such as morally hazardous sub-goal pursuit (e.g., Williamson, 1975). In the positive view, the top-management team discovers new productive opportunities, and the corporate staff helps implement subsequent resource allocation decisions. The rationale of the HQ is a matter of its abilities to identify, generate and exploit synergies among assets,
functions and divisions—in short, a matter of fostering the development of new knowledge and new opportunities, rather than allocating a given array of skills, capabilities and other assets within an administrative structure that allows for their best possible exploitation (Prahalad & Hamel, 1994). In this view, parenting advantage (Goold, Campbell & Alexander, 1994) obtains when the HQ can discover and exploit complementarities between assets in more cost-efficient ways than the market. In contrast, the negative view builds from the idea that the rationale of economic organization is to keep opportunism and moral hazard at bay, so that, for example, efficient investments in specific assets can be undertaken or input-owners will work toward the organization's goals (Alchian & Demsetz, 1972; Williamson, 1975, 1985; Holmström, 1982; Grossman & Hart, 1986). The HQ is viewed in exactly the same light. Thus, the rationale of the HQ lies in designing incentive and sanction systems that induce organizational members to contribute to the maximization of surplus across the multi-business firm.

While the imagery of “creating the positive” or “avoiding the negative” may be a useful lens on the HQ literature, in actuality HQ seeks to do both. Notably, a key focus of the literature of the last two decades has been that HQ engages in strategic planning, assists the subsidiaries with various support functions, transfers useful knowledge to the subsidiaries, orchestrates lateral knowledge transfers across the corporate network, and reduces latent or manifest incentive problems by deploying coordination and control mechanisms according to the specific subsidiary situation (e.g. Ghoshal & Bartlett, 1989; Goold & Campbell, 1998; O’Donnell, 2000; Poppo, 2003; Parmigiani & Holloway, 2011). However, the HQ literature assumes that, when the HQ is entirely benevolent in its intentions in the sense that it seeks to maximize firm-level value creation, this benevolence is recognized by the subunits. In actuality, however, even the benevolent interventions of the HQ may have harmful, non-intended consequences,
namely when subsidiaries perceive HQ interventions of the HQ as a violation of an implicit or psychological contract (Camerer, Heath & Knez, 1993; Rousseau, 1989; Robinson, 1996).¹

The possibility that intervention by HQ may have negative consequences is recognized in a small stream of literature in the economics of the firm that relates to Williamson’s (1985, 1996) notion of the “impossibility of selective intervention” (e.g., Baker, Gibbons & Murphy, 1999; Foss, Foss and Vazquez, 2006).² In an ideal world, the HQ should selectively intervene in subunits and relations between subunits whenever doing so results in net value creation, and otherwise let the subunits mind their own business. However, Williamson points out, the option to intervene “… can be exercised both for good cause (to support expected net gains) and for bad (to support the subgoals of the intervenor)” (Williamson 1996: 150-151), and it may be difficult for lower levels in the organization to verify the nature of the cause.³ Thus, good cause intervention may likely be mistaken for bad cause intervention (i.e., blatant managerial opportunism), harming the motivation of subunits. However, Williamson does not explain how firms may be able to remedy such problems. In general, the literature on HQ and the parenting advantage that HQ may bring is silent on the destructive motivational consequences that HQ intervention may give rise to. As a result it does not answer the question of how harmful HQ intervention can be kept at bay, what we call the “intervention problem.”

¹ Of course, there is also the possibility that HQ may be ill-informed about what should be done on the level of subunits to increase net value creation, or have the wrong perceptions of their own discretion with respect to carrying out such value-increasing interventions (Hambrick & Finkelstein, 1987; Carpenter & Golden, 1997).

² While the agency literature on value-destroying empire building (e.g., Jensen, 1986) does allow for the possibility of value destroying managerial action, it plays out in the context of manager/shareholder relations rather than in the context of managers (HQ)/employees (subsidiaries).

³ Williamson casts this in terms of a credible commitment when he notes that there may be problems of “… credibly [promising] to respect autonomy save for those cases where expected net gains to intervention can be projected” (Williamson, 1993: 104; emphasis in orig.).
Harmful Managerial Intervention and the Role of Procedural Justice

The PJ literature potentially provides an answer to the problem. This literature points to the potentially detrimental consequences of HQ intervention that clash with the justice expectations held by organizational members. Rational, well-informed HQ will seek to avoid such consequences, and choose interventions in the light of the possible negative consequences.

As a construct, PJ refers to the perceived fairness of formal procedures that govern decisions in firm settings. It belongs to the broader literature on organizational justice which covers also distributive justice, informational justice, and interpersonal justice (Colquitt, Conlon, Wesson, Porter & Ng, 2001). We focus on procedural justice in this article since procedural justice has been identified as one of the most important justice dimensions (Colquitt et al., 2001), and since we are particularly focused on the process of HQ intervention instead of examining how individual employees are treated (interpersonal justice) or how specific decision outcomes differ between different units (distributive justice).

The PJ construct originated from legal research (Thibaut & Walker, 1975), but has since become a heavily researched topic in psychology (Colquitt et al., 2001; Konovsky, 2000). It is also increasingly used in strategy research such as in research on alliances and joint ventures (Luo, 2005, 2007, 2008; Johnson, Korsgaard & Sapzienza, 2002), innovation (Li, Bingham & Umphress, 2007), and global strategy (Kim & Mauborgne, 1991, 1993, 1995, 1996; Korsgaard et al., 2002). PJ emerges when high-level decision-makers apply procedures consistently across time and employees, when decisions are accompanied with extensive bilateral communication between the HQ and the subunit, and when there is an opportunity for subunits to challenge HQ views. PJ has been found to increase not only satisfaction with the outcome of certain decisions, but also higher-order attitudes of employees, such as trust (Folger & Konovsky, 1998), compliance (Kim & Mauborgne, 1991) and organizational citizenship behavior (Kim & Mauborgne, 1996). PJ has these effects because employees experiencing fair procedures feel
respected, recognized, and valued, which in turn influences their willingness to cooperate and to change behaviors (cf. Colquitt et al., 2001; Konovsky, 2000).

In spite of its many advances, there are at least two significant gaps in the PJ literature. First, there is a strongly optimistic tone to the literature, which means that it seldom considers the costs associated with PJ, and therefore fails to confront relevant tradeoffs. For example, just decision-making procedures might run counter to the need for speed and flexibility in increasingly dynamic and complex environments. Thus, Ellis et al. (2009) report negative effects of PJ on the financial performance of acquirers, and argue that this is due to an inappropriately lengthy and complex decision processes. Similarly, Kim and Mauborgne (1991: 140) caution (in the discussion section of the article) that a “potential cost of the procedural justice approach is that fair procedures may introduce inefficiencies in the decisionmaking process.” However, these costs of PJ system have not received much attention and most studies seem to generally endorse procedurally just decision-making. This is at odds with evidence that today’s environments are increasingly complex and turbulent and it raises the question of the boundary conditions of PJ. Specifically, it remains unclear if HQ should intervene under such circumstances or if HQ should reduce their efforts in ensuring a PJ system so that justice expectations are less strong.

A second gap in the PJ literature is that most of it focuses on experienced justice only while it has recently been found that individuals develop justice expectations also prior to organizational change. The antecedents and consequences of justice expectations are generally under-researched but seem to have implications on employee attitudes and behaviors (Shapiro & Kirkman, 1999, 2001; Rodell & Colquitt, 2009). This criticism is related to the fact that extant PJ literature does not place PJ and

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Justice expectations may be influenced by many things, other than HQ intervention, such as the type of individuals that are hired and promoted by the firm, national culture, HQ communication strategy, etc. Because little is known about their antecedents, we treat justice expectations as exogenous, and discuss their influence on HQ intervention. However, as we
reactions to decisions in a dynamic context. For example, it is realistic to assume that HQ managers think thoroughly through the consequences of their decisions before intervening and that subunit managers know this. In turn, this might lead the HQ to change its originally intended intervention because it knows that it cannot meet the justice expectations among subunit managers.

In sum, the default solution to the intervention problem based on mainstream PJ literature is intervention using fair procedures. However, the inappropriateness of lengthy decision processes for many decisions, the lack of research using dynamic settings including justice expectations prior to actual decisions, and the fact that actual interventions steer the formation of new justice expectations warrant more research. Therefore, in the following we build a game theoretical model of the interplay of HQ actions and subunit reactions, focusing on the above perceptual and motivational issues, and the consequences thereof in terms of value creation.

A MODEL OF HEADQUARTERS-SUBUNIT INTERACTION

Basic Set-up

We model the dynamics of interaction between two players, namely a HQ and a representative subunit (subsidiary) in the context of a Multinational Corporation (MNC). We choose this particular kind of multi-business firm as our research setting mainly for expositional reasons: MNC organization and behavior starkly illustrates the HQ-subunit interaction we focus on. Specifically, MNCs have to balance the forces of integration (which may call for frequent HQ intervention) and responsiveness (which pulls in the direction of delegating considerable autonomy to subsidiaries) in a context of geographical, national and cultural diversity which may hamper communication efforts between MNC units. Our results, however, generalize to other multi-business firms.

clarify in the Concluding Discussion our approach may have implications for modeling the emergence (and particularly maintenance) of justice expectations.

5 For the sake of simplicity, we suppress the issue that these units (as well as the HQ) are composed of many individuals with different preferences, motivations, etc. In other words we follow modeling practice in the game theory literature and treat organizational units as unitary actors.
The model builds on two key characteristics of organizations. The first one is *incomplete delegation*. HQ may delegate a set of decision rights to subsidiaries, for example, rights to use specific corporate resources, make local decisions with respect to marketing, formulate HRM policies that reflect the local cultural environment, formulate business strategies for local markets, etc. Because subsidiaries often have superior knowledge about such things, it often makes sense to provide “real authority” (Aghion & Tirole, 1997) to them by means of delegating a set of rights to make decisions within more or less precisely defined domains (Caza, 2012). However, by definition, because HQ retains ultimate decision rights and can overrule the decisions made by subsidiaries (Baker, Gibbons & Murphy, 1999), this delegation remains incomplete. This is captured in our model by the HQ’s option to intervene and overrule the subsidiary’s strategy.

The second observation is that, as a consequence of delegation, an *interest conflict* is built into the relationship between HQ and its subunits. Often, subsidiaries are evaluated mainly on their own “local” performance, while the role of the HQ is to maximize the performance of the whole firm, including all subsidiaries. This implies that HQ and subsidiary goals may diverge to the extent that there exists externalities—positive or negative spillovers—from subsidiary actions to the profits of the (rest of the) MNC. For example, positive spillovers exist when a subsidiary invests its scarce resources into an innovative product development project and the newly developed product can be profitably used in the rest of the MNC (for examples, see Birkinshaw & Fry, 1998). Negative spillovers from subsidiary actions can occur when a subsidiary positions the corporate brand in its market in a way so that it damages the brand equity in other markets. For example, in the subsidiary’s market, consumers might like a more sports-oriented image of the brand which, however, could have negative repercussions in other markets. Similarly, the choice of a subsidiary in a developing country to operate with a cheap local “sweatshop” supplier may not create any harm for the Vietnamese subsidiary (on the contrary, it
increases profits), but might be picked up by media in more developed country markets and lead to legitimacy issues and brand equity destruction. Such interest conflicts have important implications for our model as it (a) creates an economic rationale for HQ intervention; (b) explains why subunit managers may perceive such intervention negatively (i.e., it is detrimental to their objectives); and (c) explains why they may pass on projects that would have been profitable for the firm, making it crucial for HQ to manage (a) and (b) in a smart way.

The timing of the model is as follows:

1. The subsidiary chooses whether or not to undertake a project based on its granted decision-rights. A “project” is basically anything a subunit can do on the basis of decision rights that have been granted to it; for example, it may develop a new product for its local market.

2. The subunit chooses a “strategy” for that project, defined as one approach among the set of alternative approaches that could potentially be taken to implement that project. As we frame the project in the context of the MNC, the project’s strategy can either be “globally standardized” or “locally adapted”. For example, the product may be designed using standardized MNC components (produced internally or procured from a supplier that supplies the whole MNC) or locally sourced ones.

3. The HQ chooses whether or not to intervene (overruling the subunit’s original choice and changing the strategy to be applied to the project), and

4. The subunit carries out the project, choosing an effort or quality level.

We first analyze steps 1-3 to show under which circumstances HQ intervention appears under the assumption that the intervention has no psychological impact on the subsidiary’s motivation to execute its business projects. We then analyze the situation in which this assumption no longer holds, and where

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6 Hence, we do not restrict the word strategy to mean corporate, business unit, or subunit strategy, but instead acknowledge that managers can have “strategies” to carry out individual projects as well.
the HQ intervention influences the subunit’s motivation to supply an effort or quality level under different degrees of PJ (captured by the subunit’s preferences which may or may not include reciprocity).

**The Integration-Responsiveness Tradeoff and Headquarters Intervention**

The intervention decision of the HQ might be modeled by considering the performance implications at both the subunit and the MNC level of the strategic choice related to the project. We start with specifying the subunit’s payoffs. The choice between the locally adapted and globally standardized strategy poses a classic integration-responsiveness dilemma on both the subunit and the MNC level (Bartlett & Ghoshal, 1989). For example, if the project is a new product, the locally adapted strategy may generate higher revenue in the local market as it is better adapted to local tastes. On the other hand, it may also be more expensive to produce than the globally standardized strategy because it does not exploit MNC-wide economies of scale. For example, after Acer America designed the Aspire for the US market, they found that the cost of producing was 10-15% higher than for other similar products because it did not use the standard Acer parts (Bartlett & St. George, 2000).

Hence, we assume that the subunit’s payoff from undertaking the project, denoted $\pi_{SUB}$, consists of a base payoff of $y$ minus either 1) a cost due to divergence from MNC standards, $d_s$, if the locally adapted strategy is used, or 2) a cost due to maladaptation to local conditions, $m_s$, if the globally standardized strategy is used. The subunit will choose the standardized strategy if $y - m_s > y - d_s \Leftrightarrow d_s > m_s$. We assume that the HQ has full ownership of the subsidiary, so that HQ payoffs include, as a component, the subunit payoffs. However, the HQ also internalizes the effect of the project, and of the subunit strategy, on other units in the MNC. Suppose that the project itself confers a positive externality of $x$ onto the rest of the MNC, but that, if the project is performed with a locally adapted strategy, the rest of the MNC also incurs a negative externality of $d_M$ due to lost economies of
scale and scope. This means that HQ gets a payoff of $\pi_{HQ} = (x-d_{st}) + (y-d_s)$ from the locally adapted strategy, and $\pi_{HQ} = (x) + (y-m_s)$ from the globally standardized one.

A Numerical Example

Based on this simple model it is possible to derive subgame-perfect Nash equilibrium strategies for both the subunit and the HQ. It is useful first to consider a numerical example.

--- Figure 1 here ---

Figure 1 shows the game tree consisting of stages 1 to 3, and for each outcome the payoffs to the two players based on numerical values of the parameters $(y=10\frac{1}{4}, x=7\frac{1}{4}, d_s=4\frac{1}{4}, d_{st}=7\frac{1}{4}, m_s=11\frac{1}{4})$. To solve this game in terms of a prediction of the outcome, the use of backwards induction is necessary. Hence, we start by analyzing the HQ decision of whether or not to intervene to overrule the subunit’s chosen strategy. Since the globally standardized strategy is preferred from an MNC-wide perspective (yielding a payoff of $6\frac{1}{4}$), the HQ will choose not to intervene if the subunit has chosen this strategy on its own account. However, it will intervene in the case when the subunit pursues the locally adapted strategy, as this strategy only yields 6 to the HQ. Moving one stage backwards, the subunit will expect this selective intervention behavior from the HQ and, accordingly, realize that the globally standardized strategy will prevail irrespective of the subunit’s strategy choice. Furthermore, since the globally standardized strategy gives the subunit a negative payoff (-1), it will prefer not to undertake the project at all in the first stage (as $0 > -1$). Hence, the subgame-perfect Nash equilibrium of this game has the subunit deciding to abandon the project. Clearly, from the HQ perspective, that outcome is less than

--- Figure 1 here ---

Suppose that the subsidiary is considering developing a new product for its host country market, at a fixed cost of 10, and that it can choose between a local supplier (the LA strategy) and the MNC’s global supplier (the GS strategy). Using the local supplier results in a product better adapted to local tastes and thus enhances the demand for the product, so that the demand function is $P=13-Q$ with the local supplier and $P=10-Q$ with the MNC supplier. On the other hand, using the global MNC supplier exploits economies of scale in purchasing and secures better terms for the entire MNE, so that $MC=4$ for both the subsidiary and the rest of the MNE if the subsidiary uses the global MNC supplier and $MC=5$ if the MNC uses the local supplier (or if the project is not undertaken). The rest of the MNC is assumed to face a demand function of $P=20-Q$. It can be shown that these assumptions lead to the exact parameter values in our numerical example.
ideal: the MNC foregoes profits of either $6\frac{1}{4}$ (the first-best solution) or 6 (a solution that both parties can live with) because it cannot constrain its own intervention behavior and because the subunit knows this. Hence, there is a credible delegation problem where the HQ, tempted to intervene in order to improve MNE performance by $\frac{3}{4}$, ends up losing 6 because the subsidiary managers anticipate this intervention and prefer not to invest in the new product to begin with$^8$.

**Solutions for general parameter values.** The problem described in the numerical example only occurs for some values of the parameters. These values occur in the star-denoted grey area in Figure 2, which presents the outcomes of the game consisting of stages 1-3 for general parameter values. The figure is based on a solution of the model in which we assume that $d_{st} \leq x$—in other words, the negative externality to the rest of the firm if the subsidiary chooses the LA strategy is no larger than the positive externality of the project. In practice, this means that if the subsidiary chooses a LA strategy and would earn a non-negative payoff from this strategy $y \geq d_s$, the HQ would also earn a non-negative payoff from this strategy $(x + y - d_s - d_{st} \geq 0$, which is implied by the previous two inequalities)—although it could of course intervene to get an even higher payoff if the GS strategy is more attractive $(d_{st} > m_s - d_s)$. In this way, we intentionally limit the potential goal conflict between HQ and subsidiary since the subsidiary’s choices may be suboptimal, but never totally unacceptable to the HQ. Arguably, it is this in gray zone of moderate goal conflict where the most interesting and nuanced strategizing occurs. If we relax this assumption, on the other hand, certain combinations of the other

$^8$ It could be argued that the delegation problem could also be solved if the HQ bribed the subsidiary, e.g. by financing the fixed costs or offering a non-monetary reward for undertaking the project, to change the calculus of subsidiary managers. However, this assumes that the HQ is aware of the project already in the first stage when the subsidiary chooses whether or not to initiate it, an assumption which is not necessary (our model does not require the HQ to learn about the project before stage 3) and may not be realistic given the locally embedded nature of subsidiary initiatives (indeed, the identification of local projects could be seen as the raison d’être of delegation in the first place). Subsidiary managers could present their project to HQ and ask for financing, but this would likely be a costly and slow process that, again, counters the idea of having entrepreneurial subsidiary managers acting quickly on local opportunities. Finally, giving necessary bribes may inspire subsidiary managers to ask also for unnecessary bribes (for projects that they would in any case undertake), and HQ may thus have an interest in committing to a non-bribery policy.
parameters will lead to situations where the subsidiary undertakes the project and chooses the LA strategy, and the HQ cannot profitably intervene and therefore has an incentive instead to shut down the project entirely, thus requiring the addition of a third HQ strategy to our model.\(^9\) This would not change our main conclusions in the sense that our propositions would still remain valid, but their boundary conditions would become much more complicated, thus adding unnecessary complexity to the model. In the interest of parsimony we therefore focus on the situations where incentives for intervention defined as overruling of strategies, rather than incentives for shutdown, exist.

---- Figure 2 here ----

Below the lowest diagonal line, when \(d_s > m_s\), the subunit spontaneously chooses the globally standardized strategy (GS), and the HQ therefore sees no need to intervene. Similarly, above the highest diagonal line, when \(m_s > d_s + d_M\), the subunit chooses the locally adapted strategy (LA) and the HQ supports that choice by not intervening. However, between the two diagonal lines the subunit chooses the locally adapted strategy because \(d_s < m_s\), but is overruled by the HQ because \(m_s < d_s + d_M\). This is not a problem as long as \(m_s < y\), because in that case even the globally standardized project yields a positive payoff to the subunit managers and therefore they will undertake the project despite their expectation to having their strategy overruled by the HQ. However, if \(m_s > y\), the expectation of HQ intervention will lead the subunit not to undertake the project in the first place. If in this situation the HQ could commit not to intervene, it would be better off, because the subunit would then undertake the project (as long as \(d_s < y\))—which is good for the HQ (as long as \(d_s < x + y - d_M\), which it will be by implication of the former inequality in combination with our earlier assumption that \(x \geq d_M\)). Hence, in

\(^9\) A fully developed model of this special case is available from the authors upon request.
the grey area marked with a star, the HQ’s inability to refrain from intervention has real costs for the MNC as in the numerical example.

**Solving the Intervention Problem: The Role of Procedural Justice**

The above analysis highlights a problem of credibly committing (on the part of the HQ) to delegation to subunits (cf. Williamson, 1993): Because in the above analysis, the HQ cannot tie its hands and commit itself to stay out of the subunit decision process (even if this is to the common good of the MNC), the actions of subunit managers will be suboptimal (e.g., they will invest too little in projects that the MNC might have benefitted from, such as sourcing external knowledge or developing new markets).

How might the MNC solve this problem? Adding a fourth stage of project implementation to the model casts light over this. Suppose that in this final stage subsidiaries can choose between a “good citizen” (or “organizational citizenship”, LePine, Erez & Johnson, 2002) approach, investing a high level of effort and providing a honest attempt to succeed, and a “bad citizen” approach in which they shirk, cheat, or even downright sabotage the project (Ambrose, Seabright & Schminke, 2002; for an overview, see Vardi & Weitz, 2004). We normalize the payoff of the good citizen approach to 0, and assume that the bad citizen approach provides an additional negative payoff of $b_S$ to the subunit as well as a negative externality, $b_M$ to the rest of the firm (e.g., the damage to the MNC brand caused by the subunit’s behavior), resulting in a total additional negative payoff of $b_S + b_M$ to the HQ\(^{10}\). Clearly, with subunits that are rational in a subgame-perfect Nash equilibrium sense, the good citizen approach is always chosen in the final stage—that is, any threats to sabotage the project are incredible because it also diminishes the payoff to the subsidiary itself. In the star-denoted area, the HQ knows this and therefore intervenes in the project. The subunits, in turn, expecting the HQ to intervene, choose not to undertake the project in the first place, leaving the firm in the same situation as described above.

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\(^{10}\) It can be shown that normalizing the ”bad citizen” payoff to 0 and assuming a ”good citizen” benefit instead yields exactly the same results.
However, suppose that the MNC has implemented a PJ culture in the firm so that subunit managers hold strong justice expectations regarding future decisions. While previous literature has not yet produced much knowledge regarding the antecedents of justice expectations (Rodell & Colquitt, 2009; Franke et al., 2013), Roberson and Colquitt (2009: 991) argue based on fairness heuristic theory that fairness expectations are driven by “global perceptions of fairness” that are “akin to a sort of justice reputation.” Global fairness perceptions are typically linked to an entity such as an organization and are based on past justice-relevant experiences. Similar to their reasoning we argue that the implementation of a PJ system results in subunit employees’ global perceptions of fairness increasing gradually over time, making it more likely that they hold strong fairness expectations and therefore will react emotionally (positively or negatively) to the experienced fairness of HQ actions.

To formally capture this idea, we rely on what is known in the game theory literature as “Rabin fairness” after the modeling approach in the seminal Rabin (1993) paper. Rabin models the situation where individuals may sacrifice their own material well-being to help (punish) those other individuals who are being kind (unkind), where these motivations become stronger as the implied material sacrifice becomes smaller (i.e., altruism is neither unconditional, nor unlimited).

We assume that subsidiary motivations can be described in terms of Rabin preferences. Thus, in case the HQ intervenes without following a due process (e.g., because of time constraints) the subsidiaries will perceive HQ intervention as hostile because PJ expectations by the subsidiary managers are not met. Subunit managers subsequently realize a psychological utility of \(-\beta \pi_{HQ}\), where \(\pi_{HQ}\) is the additional payoff to the HQ and \(0 \leq \beta \leq 1\) is the preference for fairness, or the “strength” of the reciprocity culture. In this case, the bad citizen approach will give a payoff (relative to the alternative) of \(\beta b_M - (1 - \beta) b_S\) to the subunit—consisting of a real economic loss of \(b_S\) and a psychological gain of \(\beta(b_M + b_S)\)—and will therefore be chosen as long as \(\frac{\beta}{1-\beta} b_M > b_S\), that is, if the interaction of the fairness
expectations and the bad citizen externality are strong enough to compensate for the cost of the bad citizen approach to the subunit manager. In the following we assume that is indeed the case, since that is the only meaningful conceptualization of PJ (otherwise, psychological payoffs will always be dominated by economic ones and PJ thus loses its power to influence actual behavior).

Hence, in a fairness equilibrium it may be optimal for the subunit to “punish” the HQ if the HQ intervenes (because of the subunit’s fairness expectations)—even if that makes the subunit objectively worse off (i.e., when not taking the punishment utility $-\beta \pi_{HQ}$ into account). The HQ, expecting this, rationally chooses not to intervene as long as $b_s + b_M > d_s + d_M - m_s$. The subunit, in turn, foresees this and feels confident in undertaking the project in the star-denoted area in the first place.

--- Insert Figure 3 here ---

To illustrate how this disciplining effect changes the dynamics of the game, we may reconsider the numerical example by adding stage 4 to it (assuming $b_M = 1, b_s = 1 \frac{1}{2}, \beta = \frac{2}{3}$). This is shown in Figure 3. The agent’s payoffs now consists of two components, where the first term is an economic component and the second one a psychological component (the agent seeks to maximize their sum). As seen in the figure, the economic component is similar to the one from Figure 1 as long as the agent chooses the good citizen approach. However, if the subunit chooses the bad citizen approach, the subunit’s economic payoff is reduced by $b_s = 1 \frac{1}{2}$. The psychological payoff from the good citizen approach is 0 since, as mentioned before, the payoffs from this strategy is normalized to 0. However, in the two instances where the HQ intervenes, the subunit will internalize a positive psychological benefit of $\beta(b_s + b_M) = 1 \frac{2}{3}$ from harming the HQ by retaliating. This is sufficient to compensate for the economic loss, and thereby makes the bad citizen behavior a credible threat. Realizing this, the HQ chooses not to intervene in the locally adapted strategy, because the gain from changing that strategy to a globally
standardized one \((d_s + d_M - m_s = \frac{1}{4})\) is smaller than the costs of the resulting bad citizenship \((b_s + b_M = 2\frac{1}{2})\). The subunit, choosing the locally adapted strategy and knowing now that its behavioral response will deter the HQ from intervention, expects to gain 6 and therefore undertakes the project in stage 1. Hence, the motivation-destroying effect of non-credible delegation is subdued and the HQ can now obtain the second-best solution.

The Limitations of Procedural Justice

Do the findings so far mean that PJ and the resulting justice expectations among subunit managers are always beneficial? Perhaps surprisingly, this is not the case. In the model there are in fact two scenarios in which the performance of the firm is lower under the fairness equilibrium, both of which occur in the area where the HQ intervenes but the subunit chooses the project anyway (denoted LA→GS). In the rational economic model, as shown in Figure 4, the firm could obtain the first-best solution (yielding \(x + y - m_s\)) in this area.

\textit{--- Figures 4, 5, and 6 here ---}

However, as demonstrated by the two cases in Figures 5 and 6, this might no longer be possible if PJ prevails. First, if the bad citizenship penalty, from the perspective of HQ, is sufficiently small compared to the difference between the two strategies \((b_s + b_M < d_s + d_M - m_s)\), as is the case in Figure 5, HQ will intervene even in spite of the expectation of the ensuing bad citizenship, and subunits will actually carry out their implicit threat, resulting in MNC performance of \(x + y - m_s - b_s - b_M\). Hence, the right strategy will be chosen, but it will be carried out by disgruntled subunits to the detriment of subunit and MNC performance. Second, if the bad citizenship penalty becomes larger than this difference, as in Figure 6, the HQ will avoid intervention and prefer the second-best solution provided by the locally adapted strategy (resulting in \(x + y - d_s - d_M\)). Hence, PJ prevents intervention like it did
in the credible delegation scenario; only here the intervention of the HQ would have improved the performance of the organization, because the HQ internalizes the negative externalities of the locally adapted strategy and the subunit would have carried out the project even in the expectation of intervention. Therefore, if fairness expectations prevent the HQ from intervening, it hurts the MNC by allowing the subunit to go through with its suboptimal locally adapted strategy.

**Model-based Propositions**

The results of our analysis are summarized in the following propositions:

**Proposition 1:** PJ will only have an effect on project performance if there is goal conflict between the subunit and the HQ, meaning that the subsidiary prefers the LA strategy to the GS strategy \( S_{md} > S_{yd} \), and the project is attractive enough to make the LA strategy profitable for the subsidiary \( y > d_s \), while at the same time the economies of scale and scope are strong enough to make the GS strategy better than the LA strategy from the HQ perspective \( d_{yd} > m_s - d_s \).

In Figure 2, these inequalities bound the area consisting of the area marked with a star and the area marked “LA→GS”. As can be seen from the figure, the size of this area is proportional to \( d_{yd} \) (the distance between the diagonal lines) and disappears when \( d_{yd} = 0 \) (because then the first and the third inequality cannot be fulfilled simultaneously). Hence, it is the presence of externalities between the units, and in particular the loss of corporate economies of scale and scope that the subsidiary managers confer onto the rest of the MNE, that generates the goal conflict mentioned in the proposition. Furthermore, it is only when such goal conflict exists that PJ will matter, either positively because it prevents HQ from intervening in cases when that would have led an attractive project not to occur, or negatively because it may lead subunit managers to respond badly to intervention or lead the HQ to not intervene in order to avoid such bad reactions. These two scenarios are captured by the two following propositions:
**Proposition 2a:** Given that the conditions described in Proposition 1 are fulfilled, PJ will matter negatively if the project is attractive enough from the subsidiary perspective to be undertaken even in the expectation of intervention \((y > m_s)\). It will decrease performance by the cost of foregone intervention \(d_M + d_s - m_s\) if the cost of bad citizenship is strong enough to prevent an otherwise beneficial act of intervention \((b_s + b_M > d_s + d_M - m_s)\), or by the cost of bad citizenship \(b_s + b_M\) if this cost is not strong enough to prevent the intervention \((b_s + b_M < d_s + d_M - m_s)\).

**Proposition 2b:** Given that the conditions described in Proposition 1 are fulfilled, PJ will matter positively if the project is not attractive enough to be undertaken in the expectation of intervention \((y < m_s)\) and the cost of bad citizenship is strong enough to deter intervention \((b_s + b_M > d_s + d_M - m_s)\), in which case PJ will increase\(^{11}\) performance from 0 to \(x + y - d_s - d_M\) by allowing the second-best project to be carried out. If the cost of bad citizenship is not strong enough to deter intervention \((b_s + b_M < d_s + d_M - m_s)\), PJ will have no effect on performance in the \(y < m_s\) case because then the project will not be undertaken to begin with.

As shown in these propositions, the important contingency variable is the attractiveness of the project to the subsidiary \((y)\) and, in particular, whether this attractiveness is high enough to compensate for the costs of maladaptation to local markets \((m_s)\) which the HQ confers on the subunit by overruling the strategy. If \(y\) is too low, the subsidiary needs the guarantee that HQ will not intervene and this guarantee is provided by the threat of bad citizenship behavior, which is made credible by the PJ culture. If \(y\) is high enough, on the other hand, the subsidiary will undertake the project even in spite of an expectation of intervention, rendering PJ unnecessary as an instrument of credible delegation, and perhaps even detrimental (depending on the cost of bad citizenship behavior).

**CONCLUDING DISCUSSION**

**Contribution to Theory**

The main contributions of this article lie in identifying the conditions 1) under which HQ will and will not intervene, and 2) under which PJ is and it not a valuable tool for HQ managers. Our results hold implications for both the HQ literature, particularly the parenting literature, and the PJ literature.

---

\(^{11}\) This performance increase is positive since, by Proposition 1, \(d_s < y\), which together with the base assumption \(d_M \leq x\) implies that \(d_M + d_s < x + y\).
Traditionally, the literature on corporate parenting (e.g., Collis et al., 2007; Foss, 1997; Goold & Campbell, 1998; 2002; Parmigiani & Holloway, 2011) has focused on cases where HQ activities create value for the firm, for example, because the HQ can build synergies across business units. We show that even benevolent and well-informed interventions may destroy value because of subunit managers’ perceptions and motivational reactions. Our model does not assume biased estimates or opportunism by HQ managers, who may be entirely correct in their behavior and estimates of the intervention benefits at the time when they make their intervention choice. Hence, it is not the intervention itself which is value-destroying (in fact, it is never carried out in the equilibrium), but the subsidiary manager’s knowledge that the HQ has this option, which leads to suboptimal subsidiary behavior. Thus, entirely well-intentioned intervention can be damaging to firm performance through its effect on subsidiary incentives. Furthermore, we show that parenting often profits from procedurally just decision-making, but also that strong fairness expectations among subunit managers constrain HQ. The counter-intuitive implication is that good parenting practices might lead to situations in which the HQ may have to forego some instances of valuable parenting. In this sense, PJ is a double-edged sword in the sense that while PJ helps the firm avoid inefficient intervention, its very existence also implies that potential value creation will have to be sacrificed. In this sense, inefficiency is inherent to the hierarchy, as Williamson (1985, 1996) argues.

We extend the PJ literature in the context of corporate strategy and parenting in a number of ways. We contribute by modeling subunit reactions in terms of integrating the psychological utilities that subunit managers may gain from punishing the intervening HQ in the PJ literature. Our findings substantively qualify the extant PJ literature (e.g., Kim & Mauborgne 1991; 1993; Konovsky, 2000). We show formally that the impact of PJ on firm performance is proportional to the goal conflicts between the HQ and the subunit, and join previous research by finding that PJ might solve the
intervention problem. However, we find that PJ does not only help because it directly influences the motivational disposition of subunit managers (e.g. Kim & Mauborgne, 1996), but because it creates justice expectations which may deter HQ managers from implementing interventions, giving subunit managers stronger incentives to take on new and profitable projects to begin with. In that way, the beneficial effects of PJ are not just a matter of directly influencing the motivational disposition of subunit managers (cf. Kim & Mauborgne, 1991, 1993, 1995, Leventhal, 1980; Thibaut & Walker, 1975), but also of doing so by “tying the hands” of HQ managers and preventing them from implementing interventions. That is, we argue that justice expectations mediate the relationship between a PJ system and intervention behavior by HQ managers. Moreover, we qualify the optimistic tenor of the PJ literature by showing that PJ can be detrimental to firm performance by building fairness expectations that prevents the HQ from making value-increasing interventions. This adds to the literature raising concerns regarding the general appropriateness of PJ (e.g., Ellis et al., 2009; Scott, Colquitt & Paddock, 2009).

Our results also suggest, albeit indirectly, a novel answer to the question raised by Kim and Mauborgne (1993: 523): “Does the exercise of procedural justice in multinationals’ strategy-making process lead to or detract from the formation of high-quality strategy?” Our perspective on this question is to link PJ systems within firms to fairness expectations of subunit managers. Based on justice heuristics theory we argue that the installation of a procedurally just decision-making system will, over time, create fairness expectations among subunit managers which are an important determinant of interventions and their outcomes. However, under conditions of increased environmental complexity and volatility, it is more likely that HQs are increasingly unable to apply a decision-making process that is perceived as procedurally fair when they want to implement specific interventions. Under these circumstances, procedural justice expectations are a major constraint on HQ interventions, as an
intervention decision which cannot guarantee that the subunits’ fairness expectations are met will likely not be made. Thus, firms that have successfully applied PJ in the past (and thus created fairness expectations), but which are exposed to growing environmental complexity and turbulence, might therefore increasingly refrain from HQ intervention aimed at firm-wide integration. We thus also add to the emerging discussion on the antecedents of justice expectations (cf. Rodell and Colquitt, 2009).

**Future Research**

While it is important to clarify boundary conditions of PJ and to understand the nature of good parenting practices, our research also has limitations. First, while we can explain the chain of actions by HQ and subunits under certain circumstances, we focus on one specific project only. Of course, a firm comprises a multitude of such projects at any given point in time. One important avenue for future research might thus be to investigate the effect on subunit motivation and performance of different frequencies and magnitude of (forgone) interventions over time, and how this is reflected in the strategies of the HQ. This requires careful attention to modeling the strategies of the players (i.e., HQ and subunits). For example, in a dynamic context they may play tit-for-tat strategies or pursue “grim strategies” (which in our context imply that subunits’ justice expectations are irrevocably damaged even after just one important HQ decision that was not made in a procedurally just way). Endogenizing justice expectations may be advanced by drawing on both the management literature on trust (e.g. Whitener et al., 1998) and the economics literature on cooperation in repeated games (e.g. Kreps et al., 1982).

A second limitation is that we have only considered fully informed and non-opportunistic HQ. While this helps analyzing our already complex dynamics, it could be very interesting to investigate how bounded rationality interacts with PJ effects. That is, what if we assume that HQ managers do make
mistakes e.g. with regard to the potential and ease of realizing synergies. One could argue that PJ helps avoiding these mistakes as they become visible in the lengthy and thorough process of decision-making (cf. Kim and Mauborgne, 1993), but it could also mean that the development of justice expectations is harmed because subunit managers experience HQ interventions where counter arguments do not become visible during decision-making or where they are not taken into account by over-confident HQ managers. Third, our results may be interpreted as contrasting with recent parenting research that document that HQ are increasingly active in terms of hand-on management of subunits, especially in uncertain and complex environments (e.g. Poppo, 2003; Goold and Campbell, 2002). Perhaps the HQ in firms that prosper in such environments is particularly skilled at fine-tuning their PJ systems to the requirements of such areas. Future research should shed light on this idea.
REFERENCES


Figure 1: Expected intervention and subunit incentives

Parameter Values:
\( y = 10\frac{1}{4}, x = 7\frac{1}{4}, d_S = 4\frac{1}{4}, d_M = 7\frac{1}{4}, m_S = 11\frac{1}{4} \)

\( \pi_{SUB} \quad \pi_{HQ} \)

YES Subunit undertakes project
NO Subunit does not undertake project

LA Local adaptation strategy chosen by subunit
GS Global standardization strategy chosen by subunit

INT HQ intervenes to overrule subunit’s choice of strategy
DI HQ does not intervene

\[
\begin{array}{c|c|c}
& \pi_{SUB} & \pi_{HQ} \\
\hline
YES & (6) & (6) \\
NO & (6) & (6) \\
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\end{array}
\]
Figure 2: Project selection and outcomes under varying conditions

\[ m_S \]

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Figure 3: PJ and credible delegation

Parameter Values:
\[ y = 10 \frac{1}{2}, x = 7 \frac{1}{2}, d_1 = 4 \frac{1}{4}, d_2 = 7 \frac{1}{2}, m_2 = 11 \frac{1}{2} \]
\[ b_1 = 1, b_2 = 1 \frac{1}{4}, \beta = \frac{1}{2} \]

YES Subunit undertakes project
NO Subunit does not undertake project
LA Local adaptation strategy chosen by subunit
GS Global standardization strategy chosen by subunit

\[ \pi_{\text{SUB}} \]
\[ \pi_{\text{HQ}} \]

\( (6 + 0 = 6) \)
\( (6) \)
\( (4 \frac{1}{2} + 1 \frac{2}{3} = 6 \frac{1}{3}) \)
\( (3 \frac{1}{2}) \)
\( (-1 + 0 = -1) \)
\( (6 \frac{3}{4}) \)
\( (-2 \frac{1}{2} + 0 = -2 \frac{1}{2}) \)
\( (4 \frac{1}{4}) \)
\( (-1 + 0 = -1) \)
\( (6 \frac{3}{4}) \)
\( (-2 \frac{1}{2} + 1 \frac{2}{3} = -\frac{5}{6}) \)
\( (4 \frac{1}{4}) \)
\( (6 + 0 = 6) \)
\( (6) \)
\( (4 \frac{1}{2} + 0 = 4 \frac{1}{2}) \)
\( (3 \frac{1}{2}) \)
\( (0) \)
\( (0) \)

INT HQ intervenes to overrule subunit’s choice of strategy
DI HQ does not intervene
GC Subunit chooses “good citizen” behavior
BC Subunit chooses “bad citizen” behavior
**Figure 4**: Necessary and beneficial intervention

Parameter Values:

\[ x = y = 2, d_s = 1, d_w = 1 \frac{1}{2}, \ m_s = 1 \frac{1}{2} \]

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<tr>
<th>( \pi_{SUB} )</th>
<th>( \pi_{HQ} )</th>
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- **YES**: Subunit undertakes project
- **NO**: Subunit does not undertake project
- **LA**: Local adaptation strategy chosen by subunit
- **GS**: Global standardization strategy chosen by subunit
- **INT**: HQ intervenes to overrule subunit’s choice of strategy
- **DI**: HQ does not intervene
Parameter Values:
\( x = y = 2, d_x = 1, d_y = 1, m_x = 1, m_y = 1 \)
\( b_x = \frac{1}{2}, b_y = \frac{1}{2}, \beta = \frac{1}{2} \)

**Figure 5: PJ and de-motivation**

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**Legend:**
- YES: Subunit undertakes project
- NO: Subunit does not undertake project
- LA: Local adaptation strategy chosen by subunit
- GS: Global standardization strategy chosen by subunit
- SUB: Subunit
- HQ: Headquarters
- INT: HQ intervenes to overrule subunit's choice of strategy
- DI: HQ does not intervene
- GC: Subunit chooses "good citizen" behavior
- BC: Subunit chooses "bad citizen" behavior
Parameter Values:
\[ x = y = 2, d_x = 1, d_{\mu} = 1 \frac{1}{2}, m_x = 1 \frac{1}{2}, b_x = 1 \frac{1}{2}, \beta = \frac{1}{2} \]

**Figure 6**: PJ and HQ loss of control

Parameter Values:
- \[ x = y = 2, d_x = 1, d_{\mu} = 1 \frac{1}{2}, m_x = 1 \frac{1}{2} \]
- \[ b_x = 1 \frac{1}{2}, \beta = \frac{1}{2} \]

\[ \pi_{SUB} \]
- \(1 + 0 = 1\)
- \(-\frac{1}{2} + 1 \frac{2}{3} = 1 \frac{1}{6}\)
- \(\frac{1}{2} + 0 = \frac{1}{2}\)
- \((-1 + 0 = -1)\)
- \(\frac{1}{2} + 0 = \frac{1}{2}\)
- \((-1 + 1 \frac{2}{3} = -\frac{2}{3})\)
- \((1 + 0 = 1)\)
- \((-\frac{1}{2} + 0 = -\frac{1}{2})\)

\[ \pi_{HQ} \]
- \((1 \frac{1}{2})\)
- \((-1)\)
- \((2 \frac{1}{2})\)
- \((0)\)
- \((2 \frac{1}{2})\)
- \((0)\)
- \((1 \frac{1}{2})\)
- \((-1)\)

YES Subunit undertakes project
NO Subunit does not undertake project
LA Local adaptation strategy chosen by subunit
GS Global standardization strategy chosen by subunit

INT HQ intervenes to overrule subunit’s choice of strategy
DI HQ does not intervene
GC Subunit chooses “good citizen” behavior
BC Subunit chooses “bad citizen” behavior