Bringing Politics Back In: The Role of Power and Coalitions in Organizational Adaptation

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## ABSTRACT

The discussions of organizational politics and processes of organizational adaptation have developed as largely independent streams of work. However, we suggest that organizational politics-in particular, the power dynamics of the dominant coalition-can be a driver for both patterns of "continuity and change" within organizations. Continuity is maintained by two inertial forces. First, a corporate strategy that conforms to the interest of the dominant coalition will tend to reinforce the power of that dominant coalition - an entrenchment effect. Second, even organizational units that were not initially part of the dominant coalition adapt their policies to that corporate strategy and, as a consequence, may come to support this status quo strategy. However, the political dynamics within the organization can also facilitate strategic change as shifts in the environment can alter the power structure of the organization, resulting in a new dominant coalition with a different agenda. The underlying basis is that organizations are multi-level systems in which subunits adapt to the organization's strategy and that strategy, in turn, adapts to the subunits' current policies. We find that a self-interested political process can help "unfreeze" the alignment between subunit policies and an organization's strategy in a changing environment, facilitating a more timely adaptive response than a strategy process based on the perceived collective interest of the organization as a whole. However, under high levels of goal conflict among subunits, coalitional power inhibits, rather than facilitates, adaptive change due to the entrenchment effect of power.

Keywords: Organizational learning, organizational coalitions, organizational politics, complex adaptive systems, computational modeling.

## Introduction

The discussions of organizational politics and processes of organizational adaptation have developed as largely independent streams of work. There is some irony in this fact given that some of March's initial publications both suggested that firms could be understood as political systems (March, 1962) and helped lay the foundation for the literature on organizational learning (March and Simon, 1958; Cyert and March, 1963). Indeed, Gavetti et al. (2007) view power and politics as a missing pillar of the subsequent "Carnegie School". Power and politics can be mechanisms by which dominant organizational actors and subunits sustain and reinforce their positions (Pfeffer, 1981; Pfeffer and Salancik, 1978). However, building on earlier work by Ocasio (1994) and Ocasio and Kim (1999), we suggest that power is not only an entrenchment and inertial force, but can also serve as a catalyst for change and adaptation when shifts in the external strategic environment occur.

In terms of entrenchment and inertial forces, we point to two mechanisms by which the influence of a dominant coalition on the strategy process can be self-reinforcing. The first is a power-based argument (Pfeffer, 1981): The existing power structure, by shifting the organization's strategy to favor the dominant coalition, will tend to strengthen the performance of the dominant coalition, which will further reaffirm its relative power. The strategic choices more consonant with the dominant coalition's market positions and priorities will be prioritized, and those choices will in turn tend to further enhance the power and position of the dominant coalition.

A second mechanism that reinforces a given corporate strategy and therefore entrenches the existing power structure is the multi-level process of mutual adaptation within the organization. Subunits adapt their own policies to be in line with the corporate strategy. If a given performance metric or organizational goal, such as current profit or sales growth, is set as key for the organization, subunit policy choices that result in higher performance on that metric will be preferred. Similarly, given an overall corporate policy choice, such as an investment in some core technology, certain subunit policies will appear more attractive than others. As a result, subunits may support the persistence of the current corporate strategy because their policies have been configured to be aligned with it. One can think of this dynamic as

a manifestation of what Levinthal and March (1993) termed learning substitutes: The adaptation of lowerlevel subunit policies to a given corporate strategy can obscure the need for higher-order corporate strategy to adapt. In the context of organizational politics, this potential pathology of mutual adaptation across organizational levels can be thought of as a political version of a competence trap: Subunits conform to a corporate strategy that may not be in their ultimate interests, but, having adapted to it, view the strategy favorably.

However, the dynamics within the organization's political structure, and in particular the reconfiguration of its dominant coalition, may also facilitate the process of organizational change and adaptation. The contestation among coalitions of interest groups can provide an impetus for combating the inertia resulting from the mutual adaptation between corporate strategy and subunit policies. A self-interested political process only requires a shift in the relative power of one coalition over another to change the dominant coalition and, in turn, the overall strategic direction of an organization. On the other hand, a process that addresses the organization's collective interest changes strategy only when there is a sufficient shift in the perceived interest of the organization as a whole.

We find that despite the entrenchment and inertial forces of organizational power, under settings of low to moderate goal conflict within the organization, a power-based coalitional politics process can lead to a more dynamic and adaptive organization than a collective-interest process. We specify the collective interest benchmark by replacing the power-based coalition process with the decision-making of a boundedly rational leader who tries to identify the corporate strategy that would be best for the overall organization. While such a process lacks the entrenchment and inertia stemming from the power of a dominant coalition, there remains the inertia that stems from processes of mutual adaptation of subunits and corporate strategy. In contrast to the collective interest process, which necessitates a stark degree of misalignment to surface a need for strategic change, the threshold for change is more modest for a power-based process of contestation among coalitions. In such a self-interested coalitional process, an incremental shift in power can lead to a new dominant coalition that can dictate a new corporate strategy. We explore these processes in the context of a computational model that allows us to examine the interplay among the dynamics of power and organizational strategy. As Perrow (1970: 59) observed "in complex organizations, tasks are divided up between a few major departments or subunits, and all of these subunits are not likely to be equally powerful". Building on strategic contingency theory (Hickson et al., 1971) and Pfeffer's (1981) foundational work on organizational power, we treat a subunit's power within the organization to be a function of the subunit's contribution to the organization's overall profitability. The organization is modeled as an M-form organization (Chandler, 1962; Joseph and Ocasio, 2012) of subunits operating in distinct market niches whose strategy needs and sizes may differ. We treat the corporate level as making strategic choices that guide the overall organization (Rhee, Ocasio, and Kim, 2019), while individual subunits, or divisions, search for a set of subunit policy choices that are appropriate both for the niches in which they operate and the overall corporate strategy. This analysis allows us to address the question of how an organization's power dynamics can constitute both a source of organizational inertia and an impetus for organizational change.

#### **Theoretical Background**

Gavetti et al. (2007: 525) identify four pillars of the Carnegie School that underlie this line of work: "bounded rationality, the role of specialized decision-making structures, the role of conflict of interest and cooperation among organizational members, and routine-based behavior and learning." While the concept of bounded rationality tends to be ubiquitous, some of the other "pillars" have been more developed than others as "the learning literature has focused attention on a subset of the basic pillars of the Carnegie School—in particular, the role of search and aspiration levels, and the importance of routine-based behavior" (Gavetti et al., 2007: 524). In recent years, there has been increasing attention on how decision processes operate within larger organizational structures, what Gavetti et al. (2007) term specialized decision-making structures (cf., Knudsen and Levinthal, 2007; Joseph and Ocasio, 2012; Csaszar, 2013; Piezunka, Aggarwal, and Posen, 2022). However, the "pillar" of conflict of interest and its possible link to processes of organizational adaptation has been less developed. This chasm between the literature on power (cf., Pfeffer, 1981) and work on organizational learning is puzzling given the central role that March played in both conversations. While March's contributions to organizational learning are well recognized (Levitt and March, 1988; March, 1991), it is worth noting that his academic training, along with Simon's, was as a political scientist. In one of his earliest publications, March (1962) considered the complexity of the construct of an "organizational goal" in the context of divergent interests among organizational members and pointed to the role of coalitions in influencing the decision-making process within an organization. Further, March and Simon (1958), as well as Cyert and March (1963), point to the fact that the distinct roles and agendas of subunits may generate subgoal conflict. To the extent that organization is likely to provoke conflict among subunits. For instance, a manufacturing division may have a different perspective on the desired product life cycle than the product development or marketing unit. Similarly, a business unit pursuing one market niche may prefer a different underlying technological approach than a unit pursuing a different niche, for instance, a TV versus a smartphone market niche may have different preferences regarding screen display technology.

While Gavetti et al. (2007) term the consideration of power as a missing pillar of the Carnegie School tradition, it is a pillar not without many important contributions in which our own work is situated. In the remainder of this section, we discuss work that has addressed two aspects of power: first, its role as a source of entrenchment and the reinforcement of dominant units and current policies, and second, its potential to shift and circulate among different units within the organization. These processes jointly contribute to the dynamics of "continuity and change" within organizations. Power can have many bases, the one on which we focus is that of resource dependence (Pfeffer and Salancik, 1978) and strategic contingency (Hickson et al., 1971). Critical to power and the dynamics of power is the role of coalitions (March, 1964). In the context in which we focus, the contestation over which power exerts itself is in the strategic choices of a business enterprise. As March (1994) emphasizes, when strategic choices are contested, actors may have shared and complementary interests, which in turn can set the stage for coalitional politics. Lastly, we examine work that has used computational modeling to consider processes

of organizational adaptation and in particular the interplay between self-interest, expressed at the level of organizational subunits, and collective organizational interest.

# Institutionalization and Circulation of Power

Organizational politics can help us understand the dynamics of "continuity and change" within organizations (Ocasio, 1994; Ocasio and Kim, 1999) with the possible shifting of dominant coalitions playing an important role in such processes (Zhang and Greve, 2019). Power can be institutionalized, as Pfeffer and Salancik (1978: 235) observe that "while in power, a dominant coalition has the ability to formulate constitutions, roles, procedures, and information systems that limit the potential power of other, and ensure their own, continuing control." However, they go on to note that the institutionalization of power is not absolute, and, when confronted with persistent failure, no dominant coalition is permanently secure. Building on this argument, they (Pfeffer and Salancik, 1978: 235) suggest "that a measure of the extent to which power is institutionalized is the magnitude of the problem that must occur before the organization responds." Ocasio (1994) builds on this argument and suggests the possibility of some degree of loose coupling between the organization's power structure and environmental contingencies as a consequence of the institutionalization of power.

Blending these logics of institutionalization of power, or entrenchment, and strategic contingencies, Ocasio and Kim (1999: 535) argue that "at any one time, the prevalence of entrenchment versus political change, and thus, the degree of circulation [of power] among functional units, is contingent on environmental circumstances." Thus, power offers the possibility of entrenchment, but ultimately power cannot be fully decoupled from environmental contingencies. In sum, discussing the circulation of power, Ocasio (1994: 288-9) notes that power "is subject to contestation, with periods of stability being only temporary interruptions of an underlying pulling and tugging of contestants for power ... [and] ... economic adversity provides a particularly fertile condition for triggering political contests."

# Resource dependence as a base of power

In considering the bases of power, a long tradition has considered the capacity to manage uncertainty as a critical basis of power (Crozier, 1964; Lawrence and Lorsch, 1969; Pfeffer and Salancik, 1978). In addition to coping with uncertainty, researchers have also pointed to power deriving from the capacity to extract resources from an organization's environment. In this spirit, Pfeffer and Salancik (1978: 232) note that "it seems reasonable that those who contribute most to maintaining organizational resources would develop power in the organization." For instance, Pfeffer and Salancik (1974) found that the power of academic departments was best predicted by the proportion of outside grant and contract money the department brought to the University. This ability to acquire funding externally led to their power within universities and hence to their ability to obtain large shares of internal budget allocations (Pfeffer and Salancik, 1974).

We consider in our formal model a single, basic contingency --- the capacity for a subunit to contribute to a firm's profitability. In this regard, our structure is similar to Christensen and Bower (1996) who make a resource dependence argument regarding the drivers of a firm's resource allocation and technology strategy. Christensen and Bower (1996) view a firm's strategy and resource allocation as being market-driven, with this market force being, in turn, a function of the size and profitability of different customer niches. They argue that there "seems to be a powerful linkage from: (1) the expectations and needs of a firm's most powerful customers for product improvements; to (2) the types of innovative proposals which are given or denied impetus within the firm and which therefore are allocated the resources necessary to develop the requisite technological capabilities" (Christensen and Bower, 1996: 199).

# Power of Coalitions

Power typically adheres not to a single actor or unit within an organization, but to a coalition of actors and units. Further, March (1994: 144) argues that power often "comes from the relationship between one's own wishes and the wishes of others" and that "considerable advantage comes from having wishes that lie close to the 'center of gravity' of the rest of the system. Conversely, individuals who have wishes that lie far from the 'center of gravity' will experience persistent powerlessness." March (1994: 155)

elaborates on the role of potential complementarity in demands on coalition formation, observing that: "When a coalition is built in order to secure and distribute monetary winnings, it is usually assumed that the demands of coalition members are strictly opposing" but he goes on to argue that "Decision making, however, often involves the crafting of a policy decision, such as a decision to purchase an array of equipment, to approve a budget, to pursue a particular set of advertising strategies, or to enact a piece of legislation. In these cases, the demands of potential coalitional members are ordinarily not strictly opposing" and might in fact be complementary. The extreme case of complementarity he notes is of congruence (March, 1994: 156): "The most natural coalition imaginable in decision making is a coalition of persons all of whom want the same policy. Each additional coalition member adds strength to the coalition without exacting any 'cost'." While complete congruence may be rare, "the principle extends to demands that overlap without being identical" and "the likelihood of any particular individual being on a winning coalition depends on the degree of complementarity between his or her own preferences and identities and those of others. Complementarity may come from either congruence of demands or mutual indifference." (March, 1994: 156-157)

# Coalitions and the process of organizational change

If one conceives of politics as reflecting a central tendency of some possibly shifting distribution of preferences, then the associated shift in preferences might be expected to be gradual. However, if one conceives of politics as the formation of a dominant coalition, then a reconfiguration of that coalition could lead to a discrete shift in priorities and objectives. In a political process, what perspective forms a majority in the boardroom, who is the CEO, and the possible shift in such a majority or role occupant could foreshadow a distinctly new trajectory for the organization.

This perspective on organizational politics and organizational change, and in particular the role of dominant coalitions, provides a way of interpreting the punctuated equilibrium model that has been proposed as a characterization of organizational change (Gersick, 1991; Miller and Friesen, 1980; Romanelli and Tushman, 1994; Tushman & Romanelli, 1985). Organizations are described as evolving

through relatively long periods of stability that are punctuated by relatively short bursts of fundamental change: "periods of dramatic revolution in which there are reversals in the direction of change across a significantly large number of variables of strategy and structure" (Miller and Friesen, 1980: 593). Dwindling performance and major changes in the environment or firm leadership (e.g., CEO succession) have all been noted as potential "triggers" to overcome organizational inertia and stimulate fundamental transformations. We argue that the shift in the composition of the dominant coalition provides another important addition to such "triggers." While the organization's environment may undergo some protracted period of change, the shift in the dominant coalition may act as the proximate catalyst for organizational change.

## Computational models of decision-making structures and collective action:

There have been a number of computational modeling efforts that examine the process of organizational adaptation driven by, in some instances, subunit self-interest and in other cases by local actors' beliefs regarding the collective interest of the organization. While we are not attempting a full overview of this broad literature, it is useful to highlight some key points of commonality and distinctiveness with respect to our model. Figure 1 highlights two key dimensions that differentiate different lines of inquiry within this research. The first dimension concerns the presence of self-interest, meaning whether decision-makers are guided by their local self-interest or by their sense of what is best for the collective. The second dimension concerns the presence of power, meaning whether there exist some dominant actors that can disproportionately influence collective action or whether the basis of influence is delegated via voice or action.

### <Insert Figure 1 about here>

In the upper left quadrant, in research on voting processes as characterized by Csaszar and Eggers (2013) and Piezunka et al. (2022), individuals may differ in their opinions about what actions are more or less appropriate for the organization, but their opinions are guided by their belief as to what is the

organization's best interest - what we term the collective interest. Further, how these individual opinions are aggregated does not incorporate a role for differential power. In addition to voting, which treats individual preferences in a discrete fashion, Csaszar and Eggers (2013) and Piezunka et al. (2022) examine the aggregation of beliefs by averaging these beliefs; but, as Csaszar and Eggers (2013: 2259) note, individual actors are treated with what they term, "unit" or equal weights and hence there is no role for differential power. These models also consider the implications of a "benign dictator", a mechanism indicated in the upper right quadrant of Figure 1. While a benign dictator is clearly a manifestation of power, it is power being exercised in the pursuit of the collective interest --- hence the term benign dictator. A different body of work on screening functions and organizational choice architectures (Christensen and Knudsen, 2010; Csaszar, 2013; Knudsen and Levinthal, 2007) also broadly fits within this upper left cell. While decision-makers in these models evaluate decisions on the basis of their view of the collective interest, row 1 of the Figure, the degree to which authority is delegated is a key structural element that is varied in this work. In particular, this work considers the sequential evaluation of initiatives and the degree to which approval of an initiative at one level of the organization is sufficient for a decision to be adopted, or if other layers of a decision hierarchy need to consent as well.

The second row of Figure 1 adds the role of self-interest, where self-interest is typically expressed as the interest of the diverse subunits within an organization. In the lower left quadrant, self-interest expressed in the absence of power, there are a number of papers that have considered the implications of subunit goal pursuit in the context of non-fully decomposable task environments (cf., Ethiraj and Levinthal, 2004; Rivkin and Siggelkow, 2003; Marengo and Pasqueli, 2012). These models incorporate the delegation of decision rights to subunits and these subunits exercise those rights in pursuit of their subunit goals. Rivkin and Siggelkow (2003), Siggelkow and Rivkin (2006), and Dosi et al. (2003) model a hybrid structure in which alternative formation is left to individual subunits and then a benign dictator CEO chooses among those proposed alternatives. In considering the implications for organizational adaptation, the basic mechanism is that self-interest seeking by one unit in its local environment may have some useful impact on the adaptive dynamics of the organization as a whole, as moderate levels of conflict among the units

12

may facilitate search by dislodging the organization from potentially inferior local peaks in their performance landscapes. In addition, the CEO/benign dictator can help stabilize the organization on a possibly high-performing configuration of choices (Rivkin and Siggelkow, 2003).<sup>1</sup>

The Garbage Can Model (Cohen, March, and Olsen, 1972) can also be viewed as falling within this cell of self-interest and delegation, though in that case the "performance" of the system is analyzed with respect to the mode of the decision-making process (resolution, oversight and flight). Cohen (1984) builds on the Garbage Can Model and contrasts the performance of an organization in a complex learning task in which subunits vote on proposals based on their local subgroup interest, with proposals supported by a majority being enacted, versus an organization in which policy choice is driven by a sense of the collective interest. Ganz (2023) builds on both Cohen (1984) and the Garbage Can Model and introduces a more explicit political sensibility in his joint consideration of subgroup interest and organizational adaptation. In contrast to the work noted immediately above where conflict derives from the task structure associated with distinct groups in the organization, Ganz (2023) examines the role of divergent interests and agendas that are not simply an artifact of the division of labor within the organization. Similar to the potentially useful spillover effects from one subunit to another as a result of the imperfect task decomposition in displacing organizations from local peaks (cf., Ethiraj and Levinthal, 2004), Ganz shows that the political contestation of interest can enhance the degree of exploration. Further, the need for a sufficient number of subgroups to favor a non-status quo alternative introduces a force for stability, thereby potentially sustaining attractive policy choices.

A relatively unpopulated cell in Figure 1 is that which corresponds to the joint property of selfinterest and power. While work on modularity and task decomposition (cf., Ethiraj and Levinthal, 2004) incorporates self-interest, there is no consideration of power. And while Ganz models the contestation over policy issues, there is no power differential among actors in this contestation. We consider the implications

<sup>&</sup>lt;sup>1</sup> The introduction of a CEO/benign dictator in Dosi et al. (2003) and Rivkin and Siggelkow (2003) introduces the role of power in terms of hierarchy of authority, but treats those authority relationships as fixed properties not subject to contestation and change.

of self-interested subunits expressing their viewpoint in the form of coalitional power, with a dominant coalition being able to express its will with respect to the corporate strategy. As a useful contrast to this process of an adaptive dynamic that is driven by coalitional power, which we call a "political process", we also model a process whereby a central actor tries to achieve what is best for the organization as a whole (i.e., a benign dictator), which we call a "collective interest process". This later process allows us to "dock" with prior research and also helps illustrate some of the distinctive mechanisms and properties of a political, power-based process.

## **Model Structure**

#### Organizational task environment

To investigate how the process of coalitional power influences organizational adaptation, we develop a model that represents organizations as nested adaptive systems, facing both upper-level corporate strategy choices and lower-level subunit policy choices. The organization adapts its corporate strategy at the same time that subunits adapt their policies. The subunits adapt both to the particular circumstances of the niche in which they are operating and to the existing corporate strategy. Further, what constitutes a more or less effective corporate strategy depends on the subunits' current policies and the relative importance of the subunits to overall organizational performance, which is a function of the niche sizes in which the subunits are operating.

The corporate strategy consists of two distinct elements: a corporate policy C and a performance dimension D. The corporate policy C captures a strategic choice with firm-wide consequences, such as the decision to invest in a core technology that can be shared across subunits, similar to Gavetti (2005) and Levinthal and Workiewicz (2018). The choice of corporate policy C impacts the performance that subunits generate for a given set of subunit policy choices. The performance dimension D determines the key metrics by which subunit performance is evaluated, for instance, per Aghion and Stein (2008), growth or net income. For simplicity, we let the strategic choice be a single binary decision [0 or 1] on each of these two

corporate choices [C, D]. Therefore, the organization needs to choose among four configurations of strategic choices corresponding to the possible unique combinations of C and D values.

Although both components of the corporate strategy shape the local sub-landscapes that the subunits face, the impact of C and D on sub-landscapes are treated as distinct as depicted in Figure 2. A choice of corporate policy C, for instance the choice of R&D strategy, influences the *shape* of the subunit policy landscapes, while the choice of performance dimension D influences the absolute *level* of the payoff landscapes that can be realized for any set of subunit and corporate policies.

The subunit's policy choices P interact with the corporate policy C in a manner akin to an NK fitness landscape, resulting in the possibility of multiple peaks in these [C, P] sub-landscapes (for simplicity of presentation, Figure 2 shows two peaks in each of the subunit landscapes, represented by the two star shapes). What constitutes a local or global peak in these subunit landscapes is a function of corporate policy C. Further, different corporate policies C result in the subunit obtaining a higher or lower fitness, as the fitness of the same subunit policy set varies with the C value. The implication of this structure is that subunits at any time will have preferences regarding corporate policy C and, for any given C value, the subunit will adapt its policy choices P to be aligned with it.

The performance dimension D shifts the overall performance distributions for the subunits, creating different performance sub-landscapes for different values of D. The level of goal conflict  $\delta$  determines how much these sub-landscapes differ in their overall heights, as Figure 2 illustrates. For instance, a subunit serving a nascent niche will tend to be viewed as performing more poorly if it is evaluated on a measure of net income rather than a measure of sales growth, even if it attempts to adapt this measure. As a result, a performance goal D at odds with the latent opportunity represented by a given niche cannot readily be accommodated by means of adaptation of the subunits' policies. Goal conflict among subunits is reflected in the property that subunits may have different preferences for the performance dimension D. This is represented in Figure 2 by the different shading for the two performance landscapes of each subunit, for instance, while D=1 may be the preferred dimension of subunit 1, D=0 is the preferred one for subunits 2 and 3. A setting of modest conflict is one in which the payoff spaces do not differ markedly as a function

of the value of D (the two parallelograms in Figure 2 for each subunit would largely overlap), whereas a setting of high conflict is one in which payoffs diverge more significantly with the values of D, and in the limit conflict can be fully zero-sum when the payoffs are non-overlapping as D varies.

# < Insert Figure 2 about here >

In sum, the organization is considered to be an M-form firm, comprising M subunits operating in distinct product market niches. The organizational task environment consists of four key elements: niche size S in which each of the M subunits operates, the subunit policies P, and the corporate strategy (corporate policy C and performance dimension D). The subunits adapt to a given corporate strategy (corporate policy C and performance dimension D), but at the same time in a power-based political process, subunits influence what constitutes the corporate strategy. The more specific modeling details are outlined below.

**a.** Niche size *S*: The niche that each subunit serves may differ in size, reflecting the scale of the business opportunities in the respective niche. The set of all *M* market niches in which the organization has businesses is denoted formally as  $S = \{s_1, ..., s_M\}$ , where  $s_i$  is the size of the niche served by subunit *i*. In the initial analysis, we consider a setting in which the market sizes of these niches are treated as equal and fixed over time. In the subsequent analysis, we introduce dynamics in the organization's environment by incorporating change in niche size, more specifically systematic growth in a randomly specified niche. This dynamic in the organization's environment can pose a challenge for the organization to adapt its corporate strategy and business unit policies, which emerged in the initial setting, to possibly new choices that suit the new circumstances better.

**b.** Subunit policy *P*: The individual subunits need to make decisions on their subunit policies. The policy choices for a subunit *i* are represented by a set of *N* binary decision variables,  $P_i = \{p_{i,1}, p_{i,2}, ..., p_{i,N}\}$ . Since the decisions are binary,  $P_i$  can be represented by a string of *N* 0's and 1's. The payoff *v* for each *p* value is a function of the corporate policy *C* and is drawn from a uniform distribution whose range is determined by performance dimension *D*, which is explained in subsections (c.) and (d.) below. The fitness of a given policy vector  $P_i$  is the average payoff of its *N* policy choices (see subsection (e.)).

c. Corporate policy C: Corporate policy C influences the payoff to subunit policies in the manner of an NK fitness landscape. In particular, each value of p in a subunit policy vector  $P_i$  takes on two possible payoffs depending on whether C=0 or 1.<sup>2</sup> Interdependence between  $P_i$  and C can create multiple peaks consisting of different subunit policies  $P_i$  that best fit different corporate policies C and vice versa. The payoff for a given ( $p_{i,j}$ , C) pair is drawn from a uniform distribution. However, rather than drawing from a uniform distribution from zero to one as is standard in NK modeling, the range of the distribution is determined by the corporate strategy choice regarding performance dimension D.

**d. Performance dimension** D: Performance dimension D determines the range of the distribution for payoff v of each (p, C) pair. One value of D is systematically favorable to the performance in a particular niche, while the other value of D is systematically unfavorable. Whether a D value of 0 (or 1) is favorable or not for a given subunit is specified at random. As a result, some subunits' favorable D setting may be 0, while for others it may be a setting of 1. This possible divergence creates the potential for a conflict of interest among the subunits, in addition to the potential conflict that may emerge regarding the preferred corporate policy C in conjunction with the subunit's policy choices  $P_i$ .

e. Goal conflict  $\delta$ : The model has a key parameter  $\delta$  that tunes the degree of asymmetry between favorable and unfavorable settings of the corporate strategy D. The higher the value of  $\delta$ , the more salient the contrast between favorable and unfavorable D values for each subunit, while the smaller the value of  $\delta$ the more negligible the difference. As a result,  $\delta$  amplifies or diminishes the degree of conflict in interest among subunits regarding the choice of D. We thus interpret  $\delta$  as capturing the latent goal conflict among subunits. More formally, the payoff  $v_{i,j}$  to any decision  $p_{i,j}$  for a given corporate policy C is drawn from  $v_{i,j} \sim U(0, 1 - \frac{\delta}{2})$  when D takes a value unfavorable to the subunit, and  $v_{i,j} \sim U(\frac{\delta}{2}, 1)$  when D takes a value favorable to the subunit.

<sup>&</sup>lt;sup>2</sup> In the baseline analysis, we postulate full interdependence between the corporate policy C and the choice of subunit policies. However, in the baseline setup, we do not consider interdependence within subunit's policies (the values of p) nor across M subunit policies (the  $P_i$  vectors). We consider the implications of interdependence among a subunit's policies and across subunit policies in our robustness analysis and find that the qualitative results hold.

We examine the full range of latent goal conflict  $\delta$  from 0 to 1. When  $\delta = 0$ , the value of *D* has no systematic impact on the performance of the subunits, as payoffs are drawn from the uniform distribution [0,1] regardless of the value of *D*. In contrast, when  $\delta = 1$ , the payoffs in the unfavorable setting range from [0,0.5] and in the favorable setting range from [0.5,1], so that the sub-landscapes when evaluated on these different dimensions are fully divergent. In the extreme setting of  $\delta = 1$ , the maximum fitness on one dimension is less than or equal to the minimum fitness on the other dimension, and as a result, the contestation over the corporate strategy *D* is fully zero-sum. Intermediate values of  $\delta$  lie between these extreme settings of no systematic differences versus an impassable gap across the sub-landscapes under alternative *D* values (*D* = 0 or 1).

**f. Subunit policy fitness:** As outlined above, the subunit's policy fitness  $f_i$  is a function of its policy choices  $P_i$  and the corporate strategy [C, D]. As noted above, for each of the N subunit policy choices and the two possible values of C (C=0 or 1), there is a draw from a uniform distribution U(0,  $1 - \frac{\delta}{2}$ ) when D takes a value unfavorable to the subunit and U  $(\frac{\delta}{2}, 1)$  when D takes a value favorable to the subunit. The realization of this draw is labeled  $v_{i,j}$  where the subscript j represents one of the N subunit policies and i refers to the particular subunit. What we term the "raw" value of subunit fitness is simply the average of these N  $v_{i,j}$  values:

$$f_{i,raw} = \frac{1}{N} \sum_{j=1}^{N} v_{i,j}(p_{i,j}, C, D)$$
(1)

g. Subunit performance, organizational performance, and normalization: We wish to understand how conflict and power dynamics influence the adaptive dynamics of the organization. Given that conflict changes what might constitute the achievable level of performance, we normalize payoffs so that the adaptive challenge can be considered on a "level playing field" independent of the value of  $\delta$  the level of conflict. We carry out this normalization at both the subunit level as well as at the organizational level.

#### Normalization at the subunit level:

At the subunit level, we identify the combination of *C*, *D* and *P<sub>i</sub>* at which the subunit would reach its maximum fitness:  $f_{i,max}$  and the *C*, *D*, *P<sub>i</sub>* combination where the subunit is at its minimum fitness  $f_{i,min}$ . We normalize the subunit landscapes as follows:  $f_i = \frac{f_{i,raw} - f_{i,min}}{f_{i,max} - f_{i,min}}$ , where  $f_{i,raw}$  is the non-normalized fitness value specified above. This rescaling reduces the chances that a subunit exhibits greater power over other subunits simply due to the artifact of the stochastic realization of a particular fitness landscape, without changing the relative subunit fitness across combinations of [*C*, *D*, *P<sub>i</sub>*].

Given this normalization of subunit fitness, subunit performance,  $\pi_i$ , is simply this fitness level  $(f_i)$  scaled by the niche size in which the subunit is operating  $(s_i)$ . More formally:

$$\pi_i = f_i \cdot s_i \tag{2}$$

### Normalization at the organizational level:

The second element of normalization is to address how the level of latent goal conflict ( $\delta$ ) impacts what constitutes the achievable level of organizational performance. Since increasing goal conflict entails a larger trade-off as to how a given corporate strategy may benefit one subunit to the detriment of another, higher values of  $\delta$  tend to lower the highest achievable absolute organizational performance. For the purpose of comparability across  $\delta$  levels, we report the normalized organizational performance so that alternative decision-making processes are evaluated on the basis of their effectiveness at adaptation relative to what is possible in the organizational task environment.

The "raw", or unnormalized, level of organizational performance is treated as simply the sum of the subunit performances:

$$\Pi_{raw} = \sum_{i=1}^{M} \pi_i \qquad (3)$$

We then calculate the organizational payoff  $\Pi$  associated with all possible policy choices (*P* values for each of the subunits) and all combinations of corporate strategy (all possible *C* and *D* values). Similar to subunit fitness normalization, we then identify the lowest and highest performance an organization could achieve to normalize organizational performance, such that:

$$\Pi = \frac{\Pi_{raw} - \Pi_{min}}{\Pi_{max} - \Pi_{min}}$$
(4).

As a result, in the analysis, the organization is compared to the performance that it itself can reach with the optimal combinations of corporate strategy, C and D, and subunit policies  $P_i$ , i.e. when the normalized performance level equals 1. Note that the rank order of different combinations of corporate strategies and subunit policies for an organization is not impacted by this normalization.

**h. Power:** We assume that a subunit's influence on the internal political process of the organization is a function of its relative power. Power, in turn, is treated as being proportionate to the subunit's relative contribution to organizational performance (March, 1962; Pfeffer, 1981). Formally, we have:

$$w_i = \frac{\pi_i}{\sum_{i=1}^{M} \pi_i} = \frac{\pi_i}{\Pi}$$
 (5)

where  $w_i$  is the power of subunit *i* and  $\pi_i$  is its performance evaluated from Equation 2.

### Mutual adaptation process in a political system

The corporate strategy [C, D] provides the context to which subunits adapt their policies. Each subunit engages in local search and selects one of its  $N p_{i,j}$  policy decisions and evaluates the performance implication of a random one-bit flip in that policy. If the fitness  $f_i$  of the new position is greater than that of the status quo position, the subunit implements the change. If not, the subunit policy remains the same. A shift in the subunit's policy choice  $P_i$  may affect the subunits' perspective on what constitutes a more or less preferred set of corporate strategies C and D, and also may influence the relative power of the subunits as per equation (5) above.

Adaptation of the corporate strategy [C, D] also occurs incrementally, such that, at the end of each period, one of the two facets of corporate strategy is randomly selected for review while the other facet remains unchanged. For instance, if C (or D) is chosen for reconsideration, individual subunits will evaluate whether the status quo C (or D) value is preferred or a change in C (or D) is preferred. A subunit's preference for C (or D) simply reflects the relative performance of the subunit across the alternative C (or D) values, given its current policy choices  $P_i$  and the corporate's current D (or C) value. The power structure affects the course of adaptation in that, within a political process, more powerful subunits' preferences receive greater weight in the collective decision-making and thereby influence the rules of the game for other actors in the subunits' favor (Pfeffer, 1981). We model this powerbased collective decision-making as follows: for the chosen element of corporate strategy (C or D), subunits' preferences are aggregated, with each subunit's preference being weighted by their relative power  $w_i$  as suggested by March's (1962) "force" model of power. If the aggregation of these power-weighted preferences suggests a change in the strategy (C or D), that change is made, otherwise that strategic choice is kept at the current value. This aggregation of subunit interests can be considered a coalition in the sense of a set of actors who "want the same policy" on a particular issue (March 1994: 156).<sup>3</sup>

### Mutual adaptation under a collective interest process

In addition to examining the determination of corporate strategy on the basis of power and coalition interest, we examine an alternative decision-making process that reflects the collective interest of the organization as a whole. Under this process, instead of being politically contested by self-interested subunits, corporate strategy is determined by an assessment of the profitability of the entire organization (i.e. evaluation is based on organizational payoff  $\Pi$  instead of individual subunit performance  $\pi_i$ ). However, that assessment is still treated as boundedly rational and evaluated on the basis of incremental moves in the space of corporate strategies, meaning assessing one decision (*C* or *D*) at a time given the current set of *M* subunit policies *P*. Thus, what distinguishes the collective interest process from the power-based process is that in a regime driven by power and politics, the corporate strategy is determined by a dominant coalition, the chosen corporate strategy is preferred by this dominant group and the potential deleterious impact on other subunits is not part of their decision calculus.<sup>4</sup> In contrast, the collective interest process evaluates

<sup>&</sup>lt;sup>3</sup> March (1994) proposed several basics for coalition formation, including congruence (shared interest), mutual indifference, and policy logroll. Our structure incorporates the issue of shared, or indifferent, interests but not logrolling.

<sup>&</sup>lt;sup>4</sup> An alternative mechanism by which subunit preferences could be aggregated is a voting mechanism as in Piezunka et al. (2022). While voting expresses the self-interest of individual subunits, it does not incorporate a role for power whereby some subunits have greater "voice" than others. As a part of our robustness analysis (discussed at the end of the analysis section and included in a Technical Appendix), we carry out an analysis in which we examine a voting

alternative corporate strategies based on the implications for the overall organization, balancing the positive and negative implications of alternative corporate strategies on the different subunits. This structure is akin to the "hybrid" structures considered by Rivkin and Siggelkow (2003), Siggelkow and Rivkin (2006), and Dosi et al. (2003) as subunits are delegated authority with respect to their local policy choices and the corporate strategy is specified by a "benign dictator". A priori, it may seem natural that a collective interest process would lead to higher performance than a political process as the former is attuned to the compensatory tradeoffs that different corporate strategies imply for subunit performance. We confirm that intuition in a stable world, however, in a dynamic environment where the sizes of the niches change, we find — surprisingly — that a political process proves more adaptive for low to moderate levels of latent goal conflict.

#### Analysis

### Mutual adaptation of corporate strategy and subunit policies in a stable world

We begin the analysis by examining the effect of politics in a stable environment. We model an organization consisting of three subunits operating in niches of fixed equal sizes (i.e.,  $S = [s_1, s_2, s_3] = [1, 1, 1]$ ).<sup>5</sup> The initial values for corporate strategy [*C*, *D*] and subunit policies [*P*] are set at random and the number of individual subunit policies [*N*] is set to seven.<sup>6</sup> We run the adaptation process until it reaches an equilibrium state, which typically occurs after around 20 periods.<sup>7</sup> Figure 3 contrasts the equilibrium performance of a political system (the solid line) against that of a collective interest system (the dashed line), varying across

process as an alternative mechanism of determining the corporate strategy and show that it performs similar to that of the collective interest process in a stable setting, but performs much worse that the collective interest process or the political process in the context of a shifting environment.

<sup>&</sup>lt;sup>5</sup> We have examined the model with varying numbers of subunits [M], ranging from 2 to 10, and find that the results are robust. One might conjuncture that with an even number of subunits there might be an issue of ties in which there could be two coalitions of equal power. However, even in the baseline setting of the subunits operating in equal size niches, the random specification of performance values in each of the sub-landscapes will create some degree of asymmetry and thereby prevent a situation of "ties".

<sup>&</sup>lt;sup>6</sup> What is critical for the results is that there is some non-trivial role of subunit adaptation to a given corporate strategy. We find that our results are qualitatively similar when *P* consists of N = [3,5,7,9] decisions. The results do change markedly if there is no role for subunit adaptation and the subunits have some fixed policy value. We examine this setting in the analysis in order to clarify and highlight the role of mutual adaptation.

<sup>&</sup>lt;sup>7</sup> By an equilibrium, we refer to a situation in which, in the absence of a change in the organization's environment, the organization would not shift from its current configuration of C, D and P values.

a range of latent goal conflict levels ( $\delta \in [0,1]$ ). The figure conveys some basic contrasts between the learning dynamics of the collective interest and the political processes that we develop below.

#### <Insert Figure 3 about here>

### Collective interest and the effect of multi-level adaptation

The first observation from Figure 3 is that the collective interest process fails to achieve, on average, an optimal outcome. This result stems from the mutual adaptation between corporate strategy [C, D] and subunit policies [P] and the possibility of a subunit policy/corporate strategy competence trap. Subunits adapt their policies to enhance performance for a given corporate strategy [C, D]. Given these subunit choices of P values, the current C and D values may look preferred, even though a different constellation of C and D and subunit policies P's might generate higher performance. We see that the gap between the realized performance of the collective interest process and the best possible performance of 1 decreases as  $\delta$  increases. As the level of goal conflict increases, the D value that is performance enhancing from the perspective of the organization as a whole becomes more apparent. In contrast, because of the possible mutual adaptation between subunit policies P and corporate policy C, regardless of the level of goal conflict, the optimal C value can be masked even in the process of adaptation guided by a desire to maximize the collective payoff.

Figure 4 confirms this argument by showing that the likelihood of converging to an inferior D value at equilibrium under a collective interest process decreases as  $\delta$  increases. With a modest value of  $\delta$ , the joint adaptation of subunit policies P and corporate strategy [C and D] can mask what constitutes the ideal D value. In that sense, the multi-level level adaptation of subunit policies [P] and corporate strategy becomes a learning substitute (Levinthal and March, 1993) for the adaptation of the basis of performance evaluation D. At greater levels of underlying goal conflict, the differential impacts of the choice of the performance dimension D on subunits are less likely to be obscured by a process of mutual adaptation, and thus will shine through to the calculus of the collective interest process. This does not mean that goal conflict is resolved, but rather that the tradeoff, or cost-benefit calculation, among choices that are helpful to one subunit and potentially hurtful to another becomes more apparent. Indeed, for  $\delta > 0.5$ , the collective interest process results in the identification of the optimal *D* value in almost all runs.

### <Insert Figure 4 about here>

Conversely, the probability that the collective interest process converges to the optimal value of the corporate policy *C* remains under 70% for all levels of goal conflict ( $\delta$ ). Recall that *C* shapes the performance surface for each of the units. For a given value of *C*, there are some constellations of subunit policy choices that are aligned with that facet of corporate strategy.<sup>8</sup> This capacity for mutual adaptation between the subunits' policies *P* and the corporate policy *C* results in the possibility of multiple ways in which subunits' policy and corporate policy *C* can be aligned, including those that are not optimal from a performance perspective.

## *Effect of politics on the adaptive dynamics*

The second observation from Figure 3 is that a political process leads to lower adaptive performance compared to a collective interest process. While the collective interest process assesses the compensatory tradeoffs as to how corporate strategy [C, D] impacts all subunits, the political process privileges the interests of the dominant coalition. The negative impact of this self-enhancing property of the political process is accentuated as the level of latent goal conflict increases. The self-enhancing orientation of the dominant coalition creates a self-reinforcing dynamic between the existing power structure and the performance of those subunits in the dominant coalition. By asserting their preferences with regard to the corporate strategy, subunits in the dominant coalition enhance their own performance, further adding to their power within the organization. Thus, we see a process of entrenchment (Ocasio and Kim, 1999) in which initial power enhances subsequent power and, as a result, a political process acts as a brake on adaptive change.

<sup>&</sup>lt;sup>8</sup> Recall that each of the 7 policy choices for each subunit is dependent on the value of C. Thus, there will generally be multiple "peaks" in a subunit's performance landscape for a given corporate strategy [C and D].

In this vein, Figure 5 shows a striking legacy effect of the initial performance dimension D under a political process.<sup>9</sup> When goal conflict is high ( $\delta > 0.5$ ), a randomly chosen initial corporate strategy of Dtends to become the stable equilibrium strategy D with a probability of about 85%. The reason for this legacy effect is that the subunit whose performance is enhanced by having an initial D value consonant with its niche will, as a result, have more power. This power advantage will give that subunit more influence during the subsequent contestation over the organization's choice of corporate strategy, and the selfinterested subunit will use that influence to maintain the status quo value of D. Since the level of goal conflict magnifies the effect of self-enhancement, this founding effect becomes more pronounced as  $\delta$ increases. In contrast, under a collective interest process, as the level of goal conflict among subunits increases, what constitutes the desired value of D from the perspective of the organization as a whole becomes clearer and not masked by stochastic elements in the payoffs or the adaptation of subunit policies or corporate strategy C to a less preferred D value.

### <Insert Figure 5 about here>

Another implication of adaptation within a political system is the potential for the dominant coalition to increase in size by being joined by previously opposing subunits.<sup>10</sup> Although the choice of joining the dominant coalition is based on preference alignment, preferences themselves are endogenous to the process of the subunit adaptation to the corporate strategy. As the subunit policy adapts to a given corporate strategy [C, D], the subunit develops a set of policies consistent with the current corporate strategy of C and D and may, in turn, come to prefer the current values of C and D to alternative values. The more subunits adapt to the corporate strategy, the more likely they are to come to prefer that strategy.

<sup>&</sup>lt;sup>9</sup> This legacy effect is much more pronounced in the case of the choice of D rather than C. As we have noted, while both D and C are facets of corporate strategy, they are very different instruments. D determines the "rules of the game," defining how performance will be judged, while C is a corporate strategy that interacts with the policy choices of the individual subunits. The choice of D is either a systematic "good" or "bad" for the subunit, while the choice of C provides greater room for subunit adaptation to that choice.

<sup>&</sup>lt;sup>10</sup> Consistent with the view of a coalition as subunits who have shared policy interests (March, 1994), membership in the dominant coalition in any particular time-period is identified by counting the number of subunits whose preferred corporate strategy corresponds to the chosen corporate strategy.

Consistent with these arguments, Figure 6 shows that as a result of the process of mutual adaptation of subunits' policies to corporate strategy [C, D], the average dominant coalition becomes larger. Further, an important subtlety is that there can be a distinct dominant coalition for the different facets of the corporate strategy: C and D. This property is reflected in the different sizes of the dominant coalition for C and D. Reflecting the possibility of subunits adapting to a given corporate policy C and the intrinsic conflict that can be associated with the choice of performance dimension D, we see that, at equilibrium, the dominant coalition for C is typically quite large — and nearly 80% of the time reaches a consensus of all three subunits with regard to the preferred C. In contrast, the equilibrium dominant coalition for D tends to be smaller, particularly as  $\delta$  increases. For low values of  $\delta$ , the dominant coalition for D increases with the adaptative dynamics, from 1.83 to 2.8 subunits out of a total of 3; in contrast, for higher values of goal conflict with  $\delta$ > 0.5, we observe a minimal frequency of subunits subsequently joining an existing dominant coalition as their preferences for D are less likely to shift in such settings. The contrast between the emergence of a consensus around C and a lack of consensus around D again reflects the distinction in the adaptive dynamics and the greater possibility of mutual adaptation between subunit policies P and corporate policy C than between subunit policies P and corporate choice of D — the dimension by which subunit performance is evaluated.

#### <Insert Figure 6 about here>

#### Politics and adaptation in a changing world

In order to examine the effect of politics in a changing environment, we model a systematic change in niche sizes in which the size of a randomly chosen niche increases incrementally by 0.1 unit per period, while the other two niche sizes remain constant. For instance, if the  $3^{rd}$  subunit experienced the increase in niche size, the niche sizes of the three subunits would be:  $S_t = [s_1, s_2, s_{3,t}] = [1,1,1+0.1 \cdot t]$ , with t = 1 being the point in time when the environment starts to shift.<sup>11</sup> This shift in relative size leads to a change in the relative

<sup>&</sup>lt;sup>11</sup> This approach to modeling the changing niche size increases the size of the overall market as well as changes the relative size of each subunit's market niche. Alternatively, we could have kept the overall size constant and just

importance of the subunits and potentially requires a shift in the firm's corporate strategy to suit the new context. We first run the analysis such that the organization establishes an equilibrium set of subunit policies and corporate strategy [*P*, *C*, *D*] in a stable environment with the three niches equal in size (S = [1,1,1]), before introducing the systematic environmental change. We then report the average organizational performance for 200 periods after the environmental change begins. At *t* = 200, one niche reaches the size of 21 from the original size of 1 and at that point represents more than 90% of the total market in which the organization is engaged.

### <Insert Figure 7 about here>

Figure 7 reveals a striking result for the effect of power and coalitions in dynamic environments. At low to moderate levels of goal conflict, a process of power-based politics appears to facilitate adaptation to, and in turn performance in, a changing environment, despite its poor performance in environments with stable niches. By contrast, a collective interest process appears to be less effective in such settings. However, once  $\delta$  increases to a higher magnitude (above 0.5), the collective interest process results in a greater degree of adaptiveness and achieves a higher performance relative to the political process.

The explanation for this surprising result lies in the relative thresholds for change in corporate strategy under the collective interest process and a political process. Since the niche that experiences growth is randomly assigned, the subunit serving the growing niche may happen to be for or against preserving the status quo corporate strategy of C and D. Corporate strategy will be reconsidered only if the current strategy is not congruent with the interests of the expanding subunit. Given this necessary condition as to *whether* a strategic change will occur, *when* that strategic change will occur depends on the sensitivity of each structure (collective interest and political) to the changing environment.<sup>12</sup> Figure 8 shows the threshold at

changed the relative share. This latter approach would speed up the relative shift in niche sizes as one niche would grow while the other two would decline. Other than that effect, the two approaches provide similar results.

<sup>&</sup>lt;sup>12</sup> It is important to note that under both the collective interest and political process, there are instances in which adaptive change never occurs. This situation arises when the corporate strategy established in the initial epoch prior to the environment change happens to correspond to the preferences of the subunit whose niche size is expanding. The subunit's preference might be their true optimal 'first best' strategy. However, these preferences may also reflect a setting where the subunit whose niche now dominates the corporation's portfolio has previously adapted its policies

which the first change in either *C* or *D* takes place, with this threshold characterized both by the timing of change (panel a) and by the share of the dissenting niches in the overall corporate portfolio *S* at the point of change (panel b). As shown in panel 8a, for low to moderate levels of goal conflict ( $\delta$  ranging from 0 to 0.3), the strategic change events in the collective interest process take place from 47.5 periods to 34.7 periods after those in the political process. This leads to a lengthy period of strategic misalignment with the objective market potential in organizations under the collective interest process. Similarly, panel 8b shows that for low to moderate  $\delta$  levels, the collective interest process requires a much larger fraction of the organization to be misaligned with the current corporate strategy to prompt a strategic change compared to that of the political system. For instance, for  $\delta < 0.4$ , the aggregate niche size of the dissenting subunits (soppose) must account for more than 75% of the total portfolio S, three times the size of the currently prioritized niches, for a process guided by collective interest to recognize the need for change. In contrast, for  $\delta < 0.4$ , the soppose share needed for a change in the dominant coalition is around 60–65% of the total market, ranging from 1.55–1.88 times the niche size of the incumbent dominant coalition.

### <Insert Figure 8 about here>

One might reasonably expect that a calculation of collective interest would be more responsive to a changing environment than one based on the power of the dominant coalition. However, masking the calculation of the collective interest process is both the adaptation of the subunits' policies to the status quo corporate strategy and the fact that the evaluation of collective interest is based on a consideration of all the organizational subunits. This latter factor means that a proposal for strategic change must take into account not only the immediate benefit to the subunits that will gain from this change, but also the loss for those subunits that prefer the current corporate strategy. For low to moderate values of  $\delta$ , the immediate benefit of switching strategy [*C*, *D*] is modest compared to the immediate loss, given that all subunits have already

to be consonant with the corporate strategy and thus views the corporate strategy favorably, even though it is not in fact the ideal corporate strategy for that subunit. This inertia effect from mutual adaptation can occur for both the political and collective interest process.

adapted their policies to the current corporate strategy. As a result, the collective interest process is relatively inert. For high values of  $\delta$ , as discussed earlier, the latent conflict in interest among the subunits becomes clearer and the gain in switching strategy is made more obvious, thereby enabling the collective interest process to adapt more swiftly to the environmental change. As a result, in Figure 8 we observe a pronounced decrease in the threshold for strategic change in the collective interest process as  $\delta$  increases.

By contrast, a shift in corporate strategy in the political process happens with a more modest threshold when  $\delta$  has a low to moderate value. Change occurs not because there is an interest in change on average across subunits, but rather because a new dominant coalition favors change. However, a political process faces its own inertial forces. First, the power of the established coalition is amplified by the fact that the existing corporate strategy [C, D] has been chosen to boost the performance of those subunits belonging to the dominant coalition. As  $\delta$  increases, the power of the incumbent dominant coalition is further enhanced and potentially becomes more decoupled from the external strategic contingency of the objective niche sizes that the organization now faces – the entrenchment effect of power. As a result, the effect of goal conflict in the context of a political process works in an opposite direction than in a collective interest process. For a collective interest process, high levels of goal conflict make it more inert (Figure 8b).

Second, as is also true of the collective interest process, subunit policies in a political process adapt to conform to the existing corporate strategy. Thus, while the political process has a much lower threshold for strategic change than the collective interest process under moderate goal conflict, it is important to note that this threshold is still well above the optimal threshold for change, which corresponds to the point at which the disadvantaged niches (i.e., those outside the initial dominant coalition) reach 50% of the corporate portfolio S (see Figure 8b). Thus, the non-dominant coalition needs to represent significantly more than half the overall organization's business opportunity for there to be a shift in the dominant coalition.

The two factors that lead to inertia in dynamic environments are the entrenched power structure within a political process and, under both a political and a collective interest process, the adaptation of subunit policies to the existing corporate strategy. In the subsequent analysis, we tease apart these elements by eliminating the role of subunit adaptation and thereby highlight the effect of political power alone. To do so, we create an alternative setting in which there is a single possible action for each subunit, and therefore no opportunity for subunit adaptation.<sup>13</sup> Figure 9 shows the comparative adaptive performance of the two processes with and without mutual adaptation --- that is, comparing a setting in which the subunits adapt their policy choices to a given corporate strategy and a setting in which the subunits do not have a policy choice to vary. In the absence of subunit adaptation (N=0), the collective interest process is able in most instances to achieve the maximum organizational performance ( $\Pi = 1$ ) and correctly switches strategic prioritization once niches are sufficiently large (share threshold  $\approx$  50%). However, the political process experiences an inferior performance in this setting by privileging the preferences of the subunits in the dominant coalition. This exercise reveals that the superiority of the political process under modest goal conflict stems from its ability to "unfreeze" the alignment of corporate and subunit policies that occurs as a result of the mutual adaptation between subunit policies [P] and the corporate strategy [C and D]. In the absence of this mutual adaptation, which we eliminate in this side exercise, the political process is inferior to the collective interest process for all levels of goal conflict.

### <Insert Figure 9 about here>

The critical role of thresholds of relative power in the organization's political dynamics provides a micro-analytic sense of the dynamics of organizational transformation around the reorientation event in a political system. One prominent argument in the organizational change literature is punctuated equilibrium

<sup>&</sup>lt;sup>13</sup> In the baseline model, there are  $2^7$  possible combinations of subunit policies for each subunit. To eliminate the challenge of subunit adaptation, we specify a single possible state for subunit policy, equivalent to reducing the size of the sub-landscapes from N = 7 to N = 0. The decisions on corporate strategy [C, D] remain. To facilitate comparison between the setting of N=7 and N=0, for each [C, D] pair we identify the fitness associated with the highest performing P values for the N=7 setting. This value is assigned as the fitness of subunits under the setting for N = 0 for each combination of corporate strategy [C, D] and therefore corresponds to the value realized by the subunit adapting to a give corporate strategy [C and D] under the N=7 setting.

theory (Romanelli and Tushman, 1994). This argument portrays a pattern of organizational evolution consisting of long, stable "equilibrium periods" of business as usual, occasionally disrupted by short bursts of "revolutionary periods" when "most or all key domains of organizational activity" change at once (Romanelli and Tushman, 1994, p.1143). Our analysis points to possible micro-level dynamics that may underlie these more macro-level discontinuities. In our model, the seemingly abrupt transformation point is the result of a gradual and continuous build-up of dissent in the political contestation process. As characterized by the model, the immediate catalyst for a change in organizational politics is not some discrete change in the environment, but rather a steady incremental shift that causes a threshold in the internal coalition politics to be reached. Second, the seemingly simultaneous changes described in the reorientation argument can in fact reflect a cascading sequence of events where one element of corporate strategy is changed only if triggered by a change in another.<sup>14</sup>

# **Robustness Analysis**

We have carried out a variety of robustness analyses of our basic model structure. First, we examine the potential role of interdependencies among a subunit's policies, as well as the possible impact of interdependencies across subunits. Interdependencies within a subunit correspond to the adaptation challenges illustrated by the basic *NK* fitness landscape (Levinthal, 1997), while the issue of cross-subunit interdependencies links to work on modularity and imperfect task decompositions (Ethiraj and Levinthal, 2004; Rivkin and Siggelkow, 2003). In contrast, what we feature in the main analysis is the vertical interdependence between the corporate strategy and subunit policies (Gavetti, 2005; Levinthal and Workiewicz, 2018). Incorporating horizontal interdependencies (within and across subunits) diminishes

<sup>&</sup>lt;sup>14</sup> Examining the micro-dynamics occurring of the change in strategy, we observe a clear sequence of cascading adaptation. For instance, for a moderate level of goal conflict ( $\delta$ =0.4), starting with the formation of a new dominant coalition, we see that over 75% of the instances of a change in the dominant coalition are with respect to *D*; rarely is the change in *C*, and even more rarely (some 6% of the observations) is it simultaneously *D* and *C*. This simultaneous change is the dynamic suggested by punctuated change theory which treats the simultaneity of change as one of its key empirical signatures. Rather than a simultaneous shift in both dimensions of corporate strategy, the typical patten generated by the model is a shift in *D*, the basis by which performance is evaluated, which may have a spillover effect and shift the dominant coalition with respect to *C*.

organizational performance, but does not impact the dynamics we have characterized or the contrast between the collective interest and political processes (the technical appendix provides our core results under the setting of within and across interdependencies). The challenge of multiple possible "local peaks" is present in our baseline analysis of the mutual adaptation of corporate strategy [C and D] and subunit policies [P] even in the absence of these horizontal, within-subunit and across-subunit, interdependencies. And, while cross-subunit interdependencies can create some further adaptive dynamics as policy shifts by one subunit might precipitate changes by other subunits, those dynamics do not impact in a systematic manner the preferences of subunits regarding the corporate strategies [C and D] and the coalition dynamics.

Another key structural robustness that we consider is voting as an alternative mechanism by which self-interested subunit preferences may be expressed. The behavior of a voting process and its contrast with both the collective interest mechanism and the power-based political process is provided in the technical appendix as well. Voting is a non-power-based manner by which the self-interest of subunits can be expressed. Voting performs similarly to that of the collective interest process in settings where subunits are symmetric in their importance, which is the case in the initial stable setting, but performs much worse than both the collective interest process and the political process in the shifting environment. When there are important asymmetries in the inherent importance of the different niches, the collective interest process can account for these differences via its compensatory tradeoff calculation and choose a corporate strategy that balances the benefits and costs across all subunits. The power-based political process can also reflect these differences by giving greater voices to subunits representing larger niches. However, a voting process incorporates neither of these considerations.

### Conclusion

While the *Behavioral Theory of the Firm* (Cyert and March, 1963) was anchored by both a consideration of organizational politics and organizational learning, the subsequent tradition building on this work has largely embraced the latter agenda (Gavetti et al, 2007). We argue that not only are both politics and learning important co-anchors of a behavioral theory of the firm, but they also interact in important respects. Power

and politics can be mechanisms by which dominant elites (Merton, 1968) or organizational actors and units (Pfeffer, 1981; Pfeffer and Salancik, 1978) sustain and reinforce their positions. However, shifting power dynamics can act as a catalyst for change (Ocasio, 1994; Ocasio and Kim, 1999). Collective action based on critical thresholds being reached (Granovetter, 1978) can lead to dramatic shifts in behavior, particularly in the political realm (Kuran, 1989). A coalition with 49% of the political power is a vastly different proposition than a coalition with 51% of the political power in democratic systems. Thus, while a collective interest process – one that shifts with the central tendency of actors' preferences within the system - will shift gradually with that sentiment, a political process may exhibit abrupt shifts.

These dynamics around power and politics have further implications as actors within a political system adapt to the current structure. In the business context, Burgelman (1991) has pointed to the importance of the strategic context of firms and its impact on induced adaptative behavior. Managers are keen observers of which initiatives are likely to get resourced and rewarded ---- effectively the firm's internal, artificial selection environment (Levinthal, 2017 and 2021). As subunits adapt to an organization's current strategy, their policy choices will become more aligned with that strategy. That adaptation by lower-level actors will tend to make the existing corporate-level strategy choices appear more attractive and, in that sense, there is an endogeneity to the preferences of organizational actors and subunits. Organizations are multi-level adaptive systems and adaptation at one level may serve as a substitute for adaptation at another (Levinthal and March, 1993). Alignment of lower-level units to a corporate strategy that is possibly misaligned with the external environment may lead to inertia. We find that the threshold to unfreeze such a system can be less for a political process than for a process guided by an understanding of collective interest.

Organizational politics and organizational learning are not merely key pillars in the same academic canon (Gavetti et al., 2007), they are joint mechanisms in an overall process of organizational adaptation. They may work at cross-purposes or they may work in a complementary manner, but much is to be learned by their joint consideration. Under moderate goal conflict, the dynamics of political coalitions act to facilitate adaptation in a multi-level adaptive system in which lower-level subunit policies have become

adapted to high-level corporate strategies. However, at high levels of goal conflict, the maladaptive effects of power-based entrenchment cause a power-based coalition system to become less adaptive. Thus, a fuller treatment of the key pillars of the Carnegie perspective offers us a richer perspective on the challenges and possibilities of organizational adaptation.



Figure 1: Perspectives on Collective Action

Figure 2: Model Structure - Corporate Strategy as a Nested and Mutually Adaptive System





Figure 3: Equilibrium Performance in Stable Environments

Figure 4: Challenge of Multi-level Adaptation under Collective Interest Process



Note: Results show the probability of finding the optimal corporate strategy [C and D] at equilibrium with a collective interest process.



Note: The y-axis shows the probability of the equilibrium corporate strategy *D* being the same as the random initial value, for the collective interest and the political processes.

Figure 6: Political Process and Coalition Growth with Multi-Level Adaptation



# (b) Number of Subunits in the Dominant Coalition with Regard to D



Note: Results show changes in the numbers of subunits in the dominant coalition under a political process from the initial period to the equilibrium state.



Figure 7: Average Performance over 200 Periods in a Changing Environment

Figure 8: Coalition Dynamics as Catalyst for Adaptive Change: Threshold of Strategic Change



Periods since the Beginning of

Environmental Change

a)

b) Share of Misaligned Niches in the Overall Corporate Portfolio





Figure 9: Adaptative Benefits of Politics: Multi-level Adaptation as a Necessary Condition

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