Paper to be presented at  DRUID17  
NYU Stern School of Business, New York, June 12-14, 2017  

What do we know about Strategic Exit?  

Amit Kumar  
ESSEC Business School  
Management  
amit.kumar@essec.edu  

Abstract  
Though it determines firm’s scope, strategic firm-exit has not attracted much attention from scholars. It’s partly because exit has been conceptualized primarily by nature of the domain exited rather than as a strategic or organizational problem. Consequently, we have literature on corporate divestiture, foreign divestment and plant-closures, which denote firm’s exit respectively from industries, countries and regions, but are wider concepts. We reviewed the works on antecedents and consequences of firm-exit across three domains, viz. industries, countries and regions, and discovered the findings strikingly similar. We argue that exits across domains are ontologically similar, and thereby propose a synthetic conceptualization. Integrating the literature on exits at three levels, we put together what we know about the exit and set an agenda for future research.

Jelcodes: M10.A19
WHAT DO WE KNOW ABOUT STRATEGIC FIRM EXIT?

ABSTRACT

Though it determines firm’s scope, strategic firm-exit has not attracted much attention from scholars. It’s partly because exit has been conceptualized primarily by nature of the domain exited rather than as a strategic or organizational problem. Consequently, we have literature on corporate divestiture, foreign divestment and plant-closures, which denote firm’s exit respectively from industries, countries and regions, but are wider concepts. We reviewed the works on antecedents and consequences of firm-exit across three domains, viz. industries, countries and regions, and discovered the findings strikingly similar. We argue that exits across domains are ontologically similar, and thereby propose a synthetic conceptualization. Integrating the literature on exits at three levels, we put together what we know about the exit and set an agenda for future research.

Keywords:
Strategic exit, divestiture, divestment, dissolution, plant-closure, opportunity-selection.

INTRODUCTION

Way back in 2002, Dranikoff, Koller & Schneider eloquently asked why “smart apple farmers routinely saw off dead and weakened branches to keep their trees healthy… – those that are blocking light from the rest of the tree or otherwise hampering its growth”, but the executives fail to look beyond the stigma associated with selling of businesses and use strategic divestiture (exit) to strengthen and rejuvenate their firms (p.75). Even in 2014, Elfenbein & Knott argued with the data that compared to entry, exit had received significantly less attention in both management and economics journals (p. 957-958). The moot question is: why do practitioners miss the importance of exit as a strategic option, and what stops us, as an academic community, from generating scientific knowledge on such an important and ubiquitous phenomenon?
The existing literature has conceptualized the phenomenon of firm-exit in terms of the nature of opportunity-domain exited. For instance, we have streams of literature on corporate divestiture, foreign divestment and plant-closure. These streams take a very narrow, event perspective to the phenomenon of exit, and take a very agnostic approach towards exits taking place at other levels. For example, when STMicroelectronics decided to exit chip-manufacturing and focus sharply on design (de-diversify vertically), it exited certain countries where they were primarily into manufacturing. Non-manufacturing processes and units, which were too small to carry out independently, were relocated to other locations where STM had bigger establishments (de-diversified geographically). More recently, when GE decided to exit financial services (de-diversified horizontally), by implication, it also divested its affiliates and subsidiaries in several national markets (de-diversified geographically). However, we have hardly any multi-level analysis, studying interactions between exits from multiple domains. Literature on exit from distinct domains are in their own silos. Scholars studying exits from industries, countries and regions have strong identities and they seldom build upon one another’s work (can be observed from patterns of their citations).

Currently, there is no literature as such on strategic firm-exit; it has to be culled out from the body of literature on corporate divestiture, foreign divestment and plant-closures. Comprehending exit as a mélange of the three phenomena however has its own problems. Divestiture, which conceptually includes firm’s exit from an industry, indeed denotes firm’s adjustment of ownership and business portfolio structure not only through asset-divestment (sell-off) but also through spin-offs, split-ups and equity carve-outs (Brauer, 2006; Mulherin & Boone, 2000). The organizational antecedents and strategic intents behind divesting an asset and creating a corporate spin-off are radically different. In case of asset-divestment, the firm normally doesn’t pursue economic opportunities in that industry or market, whereas spin-offs are created to minimize negative synergies in the organizations. Rather than relinquishing, conglomerates create spin-offs to pursue the opportunities more effectively (Rubera & Tellis, 2014). Similarly, IB scholars have used the concept of divestment in two ways. One, firm’s complete exit from an economy through divestment or dissolution of its subsidiary (Berry, 2010). Second, a shift of production from the subsidiary in one country to others (Belderbos & Zou, 2006). In this case, the
subsidiary still operates but it is no more a production unit. Thus, divestment is not identical to firm’s
country-exit. We think that conceptualization of strategic firm-exit by the nature of domains exited and
in terms of corporate divestitures and foreign divestments not only gives us an incoherent understanding
of the phenomenon but also inhibits us from appreciating it as an organizational and strategic problem
and framing relevant research problems.

This paper conceptualizes exit in context of the larger problem of opportunity-selection. We
argue that exit should be comprehended as a strategic option that helps the firm adapt itself better to the
environmental dynamics and thereby survive longer and perform better. Thus, exits are closely related
to firm’s strategic renewal and corporate restructuring (Bowman & Singh, 1993). Second, we review
the literature on exit from three domains, viz. industry, country and region (cluster), and come across
strikingly similar findings. This shows that exits across these three domains are ontologically similar.
We humbly try to break the silos between the three streams of works, which runs counter to the
development of scientific knowledge (Pfeffer, 1993). At the end, we set an agenda for future research.

DEFINITION: STRATEGIC FIRM-EXIT

When a firm takes a deliberate decision to discontinue its operations in a specific opportunity-
domain, such as industry, country, technology area or region, and dissolve or sell off the associated
corporate assets, we call it strategic firm-exit. Generally, such decisions are an outcome of firm’s
Irrespective of the nature of domain exited, strategic exit fulfils three conditions. First, it involves choice
or deliberation; the firm is not forced by regulation or mortality (failure). Second, the decision is a
significant and irreversible. Exiting firm discontinues all its operations in the exited domain. Third, it is
an organization-level phenomenon; it should not be confused with entrepreneurial (Cefis & Marsili
2011; DeTienne, 2010) or managerial exit (Broschak & Block, 2014).

Let us situate the concept of strategic firm-exit vis-à-vis those of corporate divestiture, foreign
divestment and establishment-closure, on which the literature on exits respectively from industries,
countries and regions are hinged. Corporate divestiture has been defined as a firm's adjustment of its
business portfolio and ownership structure through spin-offs, equity carve-outs, split-ups and business-unit sales (Brauer, 2006; Buckley, 1991; Mulherin & Boone, 2000; Woo, Willard & Daellenbach, 1992). The concept has been used exclusively in context of industries. Strategic firm-exit from industry through asset-sale falls under the definition of corporate divestiture. However, creating spin-offs, split-ups and equity carve-outs falls are not necessarily the instances of strategic exit. In these cases, a divesting firm (conglomerate) does not abandon the opportunities; it rather pursues them even more effectively by creating new organizations and reducing the negative synergies (Rubera & Tellis, 2014; Semadeni & Cannella, 2011). Divestment refers to a firm’s exit from a country, whether through asset-sales or dissolution (Berry, 2010; Mata & Portugal, 2000). Some scholars also consider production-shift from a firm’s subsidiary to its multinational production network (i.e. a change in the mandate of a subsidiary: from a production and commercial unit to, for instance, solely a commercial unit) as a case of divestment (Belderbos & Zou, 2006; Pennings & Sleuwaegen, 2000). The concept of strategic exit from countries comports with subsidiary divestment only through asset-dissolution or sales. Plant-closure or plant death refers to the full (Baldwin & Yan, 2011; Bernard & Jensen, 2007) as well as partial (Mick 1975) shutdown of production facilities. We define strategic exit from a region, when the firm decides not to exploit the productive resources specific to the region and fully closes down (irreversible) its establishment.

Thus, although related, strategic firm-exit is not identical to the concepts of corporate divestiture, divestment and establishment-closures. The concept of exit emphasizes upon the content and strategic nature of the decision whereas the latter emphasize more upon the nature of domains exited and the type of assets divested or dissolved.

**STRATEGIC EXIT ACROSS DOMAINS: ONTOLOGICALLY SIMILAR PHENOMENON**

We reviewed the literature on exit across three domains: industries, countries and regions. We take these domains as levels of analyses. Table 1 introduces them. There are two modes of strategic exit at each level: asset-dissolution and asset-sale. The table also lists the research areas in which exits from each domain have been studied. We systematized the findings along the analytical framework used by Brauer (2006), which has four quadrants: (1) firm-specific antecedents, (2) environment-specific
antecedents, (3) firm-specific consequences and (4) environment-specific consequences. When we compared the findings, viz. variables, direction of relationships and theoretical explanations to the relationships, we find a striking similarity across levels, which help us argue that strategic firm-exit across domains are indeed ontologically similar phenomena, and therefore should be conceptualized and studied in an integrated, rather than in a fragmented manner.

---

Insert Table 1 about here.

---

Figure 1 depicts the analytical framework (Brauer, 2006). It informs which categories of variables are empirically established as the independent or dependent variable, and whether the studies are conducted at one or more levels. For example, foreignness is a firm-specific antecedent of exit; this antecedent is empirically established for firms’ exits from countries and regions. Similarly, accounting performance is a firm-specific consequence of the strategic exit, and this relationship is empirically established for exits from all three domains - industries, countries and regions.

---

Insert Figure 1 about here.

---

**Article Selection**

I first extracted the list of high-impact journals (h-5 index and h-5 median; date of access: December 12, 2016) in management and allied disciplines from Google Scholar. I searched for relevant articles on Web of Science (1996-2016) with the following keywords: firm exit, divest*, plant closure, industry exit, country exit, cluster exit, technology exit, and strategic exit. I did away the duplicate articles, and then manually removed the articles which didn’t address the problem of strategic exit (such as entrepreneurial or managerial exits, spinoffs, and firm-failure etc.). Subsequently, we also removed those articles which didn’t study the antecedents or consequences of the strategic exits. While reviewing
the selected articles, we added some more articles from the lists of references (generally older or from lower ranked journals), which dealt with the antecedents or consequences of exit. Thus, we created a database of 236 articles, which we refined further and finally focused on 103 articles for in-depth review.

**FINDINGS OF THE REVIEW**

Findings of the review are briefly outlined in the four subsections, each corresponding with a quadrant in the analytical framework. Tables in each subsection present the findings separately for the three levels, which we integrate in the text. The fifth table synthesizes the findings across levels.

**Firm-specific Antecedents**

Firms undertaking strategic exits are large and overly diversified, with high opportunity costs and operational flexibility (Berry, 2010; Colombo & Delmastro, 2000, 2001; Hoskisson et al, 1994; Wood, 2009). Their performance is poor, primarily because of ineffective internal control and agency problem (Berry, 2010; Hoskisson et al, 1994; Markides, 1992; Vidal & Mitchell, 2015). As overly diversified firms tend to operate in some domains in which they lack competence, their overall competitive positioning is unfavorable (Elfenbein & Knott, 2015; Johnson et al, 1993). If such firms undertake strategic renewal, corporate restructuring or production reorganization, they exit multiple domains (Bowman & Singh, 1993; Wood, 2009). Putting effective control system or aligning managerial interests with their stock-owners’, which lower managers’ ability and incentives to diversify overly, increases the likelihood to such firms to undertake exits (Elfenbein & Knott, 2015; Johnson et al, 1993; Shimizu & Hitt, 2005).

Divested or dissolved assets are normally unrelated, non-core and not integrated with rest of the organization. Therefore, they do not leverage parent’s learning, assets and core competences (Bergh, 1995, 1998; Berry, 2013; Chang, 1996; Duhaime & Grant, 1984; Li, 1995; Song 2014). They are small (Bergh, 1995, 1998; Colombo & Delmastro, 2000, 2001; Mitchell, 1994; Fortune & Mitchell, 2012; Song, 2014), less resourceful and competitive (Duhaime & Grant, 1984; Mata & Portugal, 2000; Song, 2014), and hence poorly performing (Bergh, 1998; Berry, 2013; Doms et al, 1995; Duhaime & Grant, 1984; Wood, 2009). Firm’s sunk costs in such assets are low (Doms et al, 1995; Colombo & Delmastro,
Table 2 presents the findings on firm-specific antecedents for each of the three opportunity-domains. It lists variables, direction of effects on exit, theoretical explanations of the relationship, and representative references.

Insert Table 2 about here.

Environment-specific Antecedents

Firms exit those opportunity-domains which have adverse environmental conditions. If an industry or market has low aggregate demand (Berry, 2010, 2013; Harrigan, 1982; Hopkins, 1991; Knott & Elfenbein, 2015) and excess capacity, and hence intense competition and incidents of price-wars (Harrigan, 1982), firms are more likely to exit. Domains with low barriers to entry and exit witness more exits (Harrigan, 1985; Knott & Elfenbein, 2015; O’Brien & Folta, 2009). Firms exit domains with high macroeconomic volatility (Bergh, 1998; Bergh & Lawless, 1998; Berry, 2013; Song, 2014); they shift production from regions and countries if wages and other costs increase (Berry, 2010; Lee & Song, 2012; Pennings & Sleuwaegen, 2000; Song, 2014). Technological disruptions and institutional changes unleashing the forces of competition create exit waves (Belderbos & Zou, 2006; Bowen & Wiersema, 2005; Georgopoulos & Preusse, 2006; Jovanovic & MacDonald, 1994; Østergaard & Park, 2015). Foreign firms are more likely to fail and exit, if faced with learning and adaptation challenges (Barkema et al, 1996; Hennart et al, 2002; Kim et al, 2010; Mata & Freitas, 2012; Pattnaik & Li, 2014; Zaheer & Mosakowski, 1997).

Quality and access of knowledge resources determines whether technology firms exit from a cluster (Krafft, 2004) or an economy (Berry, 2010). However, if a cluster loses its comparative advantage due to technological disruptions in the industry, incumbent firms phase out their operations
and exit (Duranton, 2007; Kerr, 2010; Østergaard & Park, 2015). Findings on industry- and region-specific antecedents are presented in Table 3.

Firm-specific Consequences

Strategic exit has a positive effect on firm’s performance. As the firm gets rid of loss-making assets, its accounting performance improves (Gleason, Mathur & Singh, 2000; Lee & Madhavan, 2010; Montgomery & Thomas, 1988). Its valuation increases as the exit signals its de-diversification and focus on core competencies and opportunities (Gleason et al, 2000; Meschi, 2005; Coakley et al, 2008; Markides 1992; Mulherin & Boone, 2000; Zuckerman, 2000; Lee & Madhavan, 2010; Feldman et al, 2016). However, if the exit is perceived as a distress-sale of the assets, an imitative move or adversely affecting firm’s competitiveness, it has negative effects on firm-valuation (Brauer & Wiersema, 2012; Tsetsekos & Gombola, 1992; Kalra et al, 1994; Wright & Ferris, 1997).

Performance of a divested unit improves. When transferred from an inefficient firm-management to an efficient one, the corporate assets perform better because of managerial discipline (McGuckin et al, 1998; Maksimovic & Phillips, 2001). When a firm acquires high-performing assets to improve its operational efficiency, performance of the acquired assets improves due to positive synergies (McGuckin et al, 1998). Gains in asset’s performance is however moderated by the quality of divestment process (Moschieri, 2011) and whether the acquirer firm invests further in the assets or robs it of its key resources (Capron & Mitchell, 1998). Findings on firm-specific consequences are presented in Table 4.

Environment-specific Consequences
Macroeconomic effects of exits are positive. Asset-sales generate positive synergies; adapted assets are transferred to efficient firms. Dissolution represents selection of the inefficient assets (Fortune & Mitchell, 2012). Strategic exits resulting from corporate restructuring mean that the firm redeploy its organizational resources to pursue high value opportunities, especially in those domains where it is competent. At the systemic level, hence, exits enhance efficiency and social welfare (Melitz, 2003).

Plant-turnover leads to productivity gains (Hahn, 2000). However, exit of a major firm from a cluster through establishment-closure may have dire consequences for the regional economy (Pike, 2005; Tomaney et al, 1999) and society (Mick, 1975; Kinicki, 1985), especially for the displaced employees (Eliason & Storrie, 2009; Browning & Heinesen, 2012). However, in response to such exits, the local agencies are also known to formulate policies and bring in institutional changes that increases welfare and region’s competitiveness in the long run (Charles & Benneworth, 1999; Ohlsson & Storrie, 2012). Exit of technology leaders can also lead to the diffusion of specialized skills and knowledge across firms and industries in the region through the mobility of displaced, high quality human resources (Sofka, Preto & Faria, 2014). Findings on industry- and region-specific antecedents are presented in Table 5.

As the tables 2, 3, 4 and 5 clearly show that there are strong similarities in empirical findings and their theoretical underpinnings between exits across levels, indicating that irrespective of the nature of opportunity-domains, these exit phenomena are ontologically the same. We can observe more variations in findings about the macro-level consequences of firms’ strategic exit, which depend much on the nature of domains. Table 6 synthesizes the findings across levels and in a generalized manner indicates what lead firms to undertake strategic exit decisions, and to what consequences.
DISCUSSION AND RESEARCH AGENDA

We emphasize that we need to conceptualize strategic firm exit across opportunity-domains. Similarities of findings in the literature review strengthens our argument. In this paper, we define the concept of strategic firm exit, situate it vis-à-vis other similar concepts such as divestiture, divestment and establishment-closures, and present what we already know about the exit phenomenon. It is a conceptual paper, grounded in an extensive literature review. This paper differs from the literature reviews on corporate divestiture (Brauer, 2006; Moschieri & Mair, 2008) and meta-analyses on the antecedents and consequences of divestiture (Dickler & Bausch, 2016; Kolev, 2016; Lee & Madhavan, 2010).

We notice certain untenable assumptions in the existing literature. Works on exit are deeply entrenched into the domains and assume complete independence of one type of exit from another. For example, if we study a work on firms’ industry exit (corporate divestiture), we don’t find a mention of or control for (in empirical works) firm’s exits from economies. Similarly, works on foreign divestment focus primarily on the problems of adaptations and managing risks while operating in multiple economies. However, they seldom consider the possibility that a divesting firm is more likely to divest certain subsidiaries if it is undertaking strategic renewal. It is intuitive that the entry and exit decisions across domains are interdependent – firms exit from multiple domains simultaneously. However, few, if any, multilevel studies guide the practitioners through the complexities of such exits. Multilevel studies is one promising area of research.

The literature on exit has a strong assumption of rationality among decision-makers. Large firms are complex systems, in which decision-making is not guided entirely by the economic rationale; it also has strong social, political, cognitive and institutional dimensions (Burgelman, 1994; Cyert & March, 1963; Eggers & Kaplan, 2009; Gavetti & Levinthal, 2000; Landier, Nair & Wulf, 2009; Monteiro, 2015; Sah & Stiglitz, 1986). These dimensions become all the more dominant when attractiveness of the opportunity-domains and quality of the assets are uncertain, and there exist multiple, competing
cognitive frames – both at individual and collective levels – in the organization about a complex reality (Elfenbein & Knott, 2015; Kaplan, 2008; Shimizu, 2007). For example, in 2008-09, when Nokia could decide whether to continue with the Symbian platform and retain its development units or quickly switch to Android or Windows platforms, the existing academic research on divestiture or exit could be of little help. In many such cases, actors involved in the decision-process are themselves impacted by the decision-outcomes. They are not to choose between two options – whether to exit a domain, divest the assets and disband the team or not – they themselves are the options. The decision-problem translates to them as, “Should our firm continue with the domain in which I specialize in?” In a way, it becomes the problem of deciding about their own destiny in the organization. Overall, it is not the objective quality of opportunities and objective performance of assets but their political and cognitive conceptions in the organization that determine firms’ exit decisions. Future research may fruitfully examine the variance in quality of firms’ strategic exit decisions, and identify the factors that may systematically drive the decision errors (Csaszar, 2012; Sah & Stiglitz, 1986).

Some recent works have studied the micro-foundations of exit decisions, which is another promising area of research. Scholars have recently examined how factors operating at the level of individual decision-makers affect the quality of firms’ strategic choices (Shimizu, 2007; Elfenbein et al, 2015; Elfenbein & Knott, 2015; Feldman et al, 2016). Landier et al (2009) underline how social factors affect firms’ exit decisions. Earlier, Burgelman (1994) found how social processes in the organization (strategic action by the middle managers) led to Intel’s exit from memory business. Although bulk of the studies on exit use archival data, the field will benefit immensely from studies employing qualitative and experimental methods. Process studies on firm-exit with rich description of the organizational and strategic context also hold much promise.

Exit can be juxtaposed with entries, and understood in context of firms’ diversification and de-diversification strategies. In case of entries, scholars distinguish between the vertical, horizontal and lateral entries (for example, Ansoff, 1957; Gemba & Kodama, 2001; Laursen, 1996). Firm’s intent behind and hence the strategic actions and implications of each type of entries are distinct. We assume that in case of exit decisions also, the firm considers whether to exit from an upstream or downstream
business (exit vertically) or an unrelated business in which it operates because of common competencies and knowledge & resource-base (exit horizontally or laterally). Future research may go deeper in this regard to understand the strategic rationale, antecedents and consequences of each type of exits, and study how exits across such axes interact.

Firms’ exit is an important theme from policy perspectives. Firm-exit – both through divestment and dissolution – has positive effects on productivity and welfare at the systemic level. However, as the negative effects of establishment-closures are spatially concentrated, the governments and stakeholders often intervene in firms’ exit decisions. Such interventions range from extending generous subsidies and bail out plans to the firm to pressurizing and arm-twisting it. For instance, French government stalled Alstom’s proposed closure of Belfort site in 2018 by doling out new contracts to the firm. On the other hand, the federal (German) and regional (N. Rhine-Westphalia) governments put immense political pressures on Nokia and threatened to demand previously offered subsidies when the firm decided to close down its manufacturing unit at Bochum in 2008. Future research can investigate how real or expected government-interventions play out with firms’ decision of exiting a region or an industry, and to what system-level effects. In my opinion, when larger technological or economic trends dictate such exits, policy-makers should not intervene to save organizations of low competence or yesteryears’ technologies. Such exits may ignite the processes of creative destruction at the local level and end up benefiting the region (Pe’er & Vertinsky, 2008). Instead, the policy-makers should focus on improving the dynamic adaptability of their regions, by modernizing the infrastructure, bringing in institutional reforms, encouraging innovation and entrepreneurship, and investing in emerging technologies and industries (Martin & Sunley, 2015; Simmie & Martin, 2010). They should also strengthen the social security system for the displaced employees and invest in their re-training and re-employment.

Can there be positive outcomes for the regions when a major incumbent firms decides to close down its operations? What are the potential effects of such closures on local innovation & entrepreneurial ecosystem and regional development? One can argue that such a closure unleashes high-quality human capital from an organization (which essentially acts as a template of organizing, knowledge-generation and value-creation) that had become redundant due to technological disruptions.
Through mobility of the displaced employees, rare and valuable technological and organizational skills and knowledge embedded in the individuals get diffused in the region and get redeployed across firms and industries. There are instances of displaced employees transitioning to entrepreneurship, which is virtually a virgin area of research. Researchers may raise several questions such as: does exit of major incumbents from a region increase exploratory learning and knowledge recombination, fueling related diversification in the region’s specialization? Why regions like Silicon Valley and Cambridge are resilient to technological disruptions in their focal industries; how do they successfully overcome incumbent exits and renew their regional advantage while others fade away (Martin & Sunley, 2015; Saxenian, 1996; Simmie & Martin, 2010)? Does exit of major incumbents from a region hinder its specialization in emerging industries and technologies? These are some very important questions from a policy perspective.
REFERENCES


FIGURES AND TABLES

FIGURE 1

Literature Review of Strategic Firm Exit: Analytical Framework and Finding

Firm-specific antecedents
- Exiting firm
  - Characteristics\textsuperscript{ABC}
  - Performance\textsuperscript{ABC}
  - Foreignness\textsuperscript{BC}
  - Managerial factors\textsuperscript{ABC}
  - Strategic factors\textsuperscript{ABC}
- Divested assets
  - Characteristics\textsuperscript{ABC}
  - Performance\textsuperscript{ABC}

Firm-specific consequences
- Exiting firm
  - Accounting performance\textsuperscript{ABC}
  - Market valuation\textsuperscript{ABC}
  - Innovation\textsuperscript{BC}
- Divested assets
  - Performance\textsuperscript{ABC}
  - Moderators\textsuperscript{A}

Environment-specific antecedents
- Industry’s, country’s or region’s characteristics\textsuperscript{ABC}
- Environmental change\textsuperscript{ABC}
- Industry’s or country’s image\textsuperscript{AB}

Environment-specific consequences
- On macroeconomic efficiency, productivity & social welfare\textsuperscript{AC}
- On knowledge-diffusion\textsuperscript{B}
- On displaced workers\textsuperscript{C}
- On local economy, social & public policy formulation\textsuperscript{C}
### TABLE 1

Strategic Firm Exit across Levels of Analysis

<table>
<thead>
<tr>
<th>Domain</th>
<th>Industry</th>
<th>Country</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change</td>
<td>Firm’s corporate scope</td>
<td>Firm’s geographical scope</td>
<td>Firm’s scale/scope of production</td>
</tr>
<tr>
<td>Mode</td>
<td>Sell-off or dissolution of business unit or division.</td>
<td>Sell-off or dissolution of subsidiary, joint venture or affiliates.</td>
<td>Closure or change in ownership of plant (manufacturing, services and R&amp;D etc.)</td>
</tr>
</tbody>
</table>

### TABLE 2

Firm-specific Antecedents of Strategic Firm-exit: Variables, Direction of Effect, Mechanism and References

<table>
<thead>
<tr>
<th>Domain</th>
<th>Industries</th>
<th>Country</th>
<th>Clusters (regions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm-characteristics</td>
<td>• Diversification (+) [Opportunity costs; poor control; possibilities to minimize agency problem] (Hoskisson et al, 1994).</td>
<td>• Diversification (+) [Opportunity costs] (Berry, 2010).</td>
<td>• Diversification (multi-unit) (+) [Opportunity costs] (Wood, 2009).</td>
</tr>
<tr>
<td></td>
<td>• Financial performance (-) [Pressure to minimize agency costs, bureaucratic costs, debts and information &amp; control losses; distress divestiture] (Duhaime &amp; Grant, 1984; Montgomery &amp;</td>
<td>• Geographic scope; access to global network (+) [Operational flexibility; opportunity cost] (Pennings &amp; Sleuwaegen, 2000; Berry, 2010; Mata &amp; Freitas, 2012).</td>
<td>• Multi-plant (+) [Operational flexibility; internal market to re-deploy sunk resources] (Colombo &amp; Delmastro, 2000, 2001).</td>
</tr>
</tbody>
</table>

- Poor productivity/competitive positioning (+) (Hopkins, 1991; Melitz, 2003)
- Ability/cost uncertainty (-) [Rational delay] (Elfenbein & Knott, 2015)
- Family ownership (-) [Non-economic value] (Feldman et al, 2016)

- Financial performance (-) [Pressure to cut losses & lower debt; distress divestment] (Berry, 2010).
- Foreignness (+) [Liability of foreignness; footloose] (Zaheer & Mosakowski, 1997; Hennart et al, 2002; Mata & Freitas, 2012).
- Innovativeness (+) [Transferable technologies to relocate production from home country and compensate for liability of foreignness in host country] (Pennings & Sleuwaegen, 2000). (-) [In technology-intensive industries, synergies between global units] (Berry, 2010)
- Entry mode: JV/acquisition (+) [Double layered acculturation] (Barkema et al, 1996; Pattnaik & Li, 2014). Greenfield (-) [Decision irreversibility] (Li, 1995; Barkema et al, 1996; Song, 2014)

Managerial factors

- Alignment of managerial interests with investors’ (+) [Resolves agency

- Foreignness of owners/managers (+) [No cognitive biases/social preferences for host
<table>
<thead>
<tr>
<th>Strategic factors</th>
<th>Country; liability of foreignness (Colombo &amp; Delmastro, 2000).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm’s international strategy. (a) Transnational (+) [Firm optimizes production globally] (b) multi-domestic (-) [Production not rationalized globally] (c) Global: global units (-) [Integrated in MN network; high exit barriers] (Benito, 2005).</td>
<td></td>
</tr>
<tr>
<td>Change in ownership at firm level (+) [Corporate restructuring &amp; production reorganization] (Wood, 2009)</td>
<td></td>
</tr>
<tr>
<td>Strategic renewal &amp; corporate restructuring (+) [Divestiture of irrelevant assets] (Bowman &amp; Singh, 1993).</td>
<td></td>
</tr>
<tr>
<td>Intensity of acquisition (+) [Search &amp; selection process: assets/industry not fitting the firm divested/exited; failed acquisitions; redundant assets after integration/resource redeployment] (Capron et al, 2001; Chang, 1996).</td>
<td></td>
</tr>
<tr>
<td>Strategic factors</td>
<td></td>
</tr>
<tr>
<td>• CEO-turnover (+) [Strategic renewal; breaks cognitive inertia and psychological sunk costs] (Shimizu &amp; Hitt, 2005; Sandri et al, 2010).</td>
<td></td>
</tr>
<tr>
<td>Effective control system; primacy of strategic controls; appointment of outside directors (+) [Checks agency problem] (Johnson, Hoskisson &amp; Hitt, 1993; Shimizu &amp; Hitt, 2005).</td>
<td></td>
</tr>
<tr>
<td>Firm’s international strategy. (a) Transnational (+) [Firm optimizes production globally] (b) multi-domestic (-) [Production not rationalized globally] (c) Global: global units (-) [Integrated in MN network; high exit barriers] (Benito, 2005).</td>
<td></td>
</tr>
<tr>
<td>Change in ownership at firm level (+) [Corporate restructuring &amp; production reorganization] (Wood, 2009)</td>
<td></td>
</tr>
</tbody>
</table>
  - Industry-relatedness; interdependency (-) [Synergy; leveraging parent’s competence & knowledge] (Duhaime & Grant, 1984; Bergh, 1995, 1998).
  - Resourcefulness (-) [Competitiveness of unit; even if exits, via divestment and not by dissolution] (Duhaime & Grant, 1984).
  - Integrated to parent’s multinational network (-) [Sunk costs/exit barriers; can shift production in adversity and remain profitable] (Song 2014).
  - Industry-relatedness; related human resource base with parent (-) [Synergy; leverages parent’s competence & knowledge] (Li, 1995; Chang, 1996; Berry, 2013).
  - Size (-) [Embedded organizational resources; scale] (Song, 2014)
  - Resourcefulness; quality of human capital (-) [Competitiveness] (Mata & Portugal, 2000; Song, 2014)
  - Ownership stakes (-) [Full/majority: irreversible] (Mata & Portugal, 2000; Song, 2014).
  - Option value (-) (Kogut & Kulatilaka, 1994; Chung et al, 2010) | - Performance; productivity; relative cost structure (-) [Competitiveness] (Doms et al, 1995; Wood, 2009).
  - Size (-) [Embedded organizational resources; sunk costs; scale] (Colombo & Delmastro, 2000, 2001).
  - Technology-use and resourcefulness (-) [Competitiveness] (Doms et al, 1995; Colombo & Delmastro, 2001).
  - Sunk costs; closure-irreversibility (-) [exit barrier] (Colombo & Delmastro, 2001) |
### TABLE 3

*Environment-specific Antecedents of Strategic Firm-exit: Variables, Direction of Effect, Mechanism and References*

<table>
<thead>
<tr>
<th>Domain</th>
<th>Industries</th>
<th>Countries</th>
<th>Clusters (regions)</th>
</tr>
</thead>
</table>
| **Characteristics** | • Stable, high demand conditions (-) (Harrigan, 1982).  
• Demand; demand uncertainty (-) (Harrigan, 1982; Hopkins, 1991; Knott & Elfenbein, 2015).  
• Growth in core industries (+) [Exit from non-core industries; opportunity costs] (Bowen & Wiersema, 2005).  
• Excess capacity (+) [Price wars if high fixed costs] (Harrigan, 1982).  
• Entry barriers (-) [“Revolving door” if high rate of entry; high cost of re-entry] (O’Brien & Folta, 2009; Knott & Elfenbein, 2015)  
• Exit barriers (-) [Structural & strategic sunk costs] (Harrigan, 1985; O’Brien & Folta, 2009).  
• Product-market uncertainty (+) [Information processing theory; resource-based theory. Focus improves | **As a market:**  
• GDP growth (-) [High demand] (Berry, 2013; Chung et al, 2010).  
• Favorable real exchange rate (-) [Income repatriation] (Berry, 2013).  
**As a production platform:**  
• Stable macroeconomic & policy-variables (-) [Low risks] (Berry, 2013; Song, 2014).  
• Cost of production; wages (+) [Opportunity costs] (Pennings & Sleuwaegen, 2000; Berry, 2010; Lee & Song, 2012; Song, 2014).  
• Knowledge economy (for high-tech industries) (-) [Access to knowledge resources] (Berry, 2010).  
• Macroeconomic conditions correlated with other countries (+) [Erosion of switch option | • Productivity differential in economy (+) [Selection] (Hahn, 2000)  
• Industry life cycle; competition intensity (+) [Capacity rationalization in declining industries] (Wood, 2009).  
• Industry undergoing shakeout & region losing competitive advantage (+) [inefficient specialization lock-in of region] (Duranton, 2007; Kerr, 2010; Østergaard & Park, 2015)  
• Knowledge flow (-) [Access to knowledge-resources; Technology recombination] (Krafft, 2004). |
<table>
<thead>
<tr>
<th>Category</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>(Bergh, 1998; Bergh &amp; Lawless, 1998)</td>
</tr>
<tr>
<td>Value</td>
<td>(Kogut &amp; Kulatilaka, 1994; Chung et al, 2010).</td>
</tr>
<tr>
<td>Cross-country distance:</td>
<td>• Institutional &amp; cultural distance between home and host countries (+) [Adaptation challenges] (Barkema et al, 1996; Pattnaik &amp; Li, 2014)</td>
</tr>
<tr>
<td></td>
<td>• Geographical proximity of industry peers from home country (-) [Learning] (Kim et al, 2010)</td>
</tr>
<tr>
<td>Changes</td>
<td>• Technological disruptions (+) [Obsolescence; selection, exit waves] (Jovanovic &amp; MacDonald, 1994).</td>
</tr>
<tr>
<td></td>
<td>• Trade liberalization (+) [Import intensity: focus on core competencies/industries] (Bowen &amp; Wiersema, 2005)</td>
</tr>
<tr>
<td></td>
<td>• Institutional changes towards economic integration (+) [Firm strategy from multi-domestic to regional] (Belderbos &amp; Zou, 2006; Georgopoulos &amp; Preusse, 2006)</td>
</tr>
<tr>
<td>Image</td>
<td>• Stigmatized industry (+) [Impression management; public opinion; institutional pressure] (Durand &amp; Vergne, 2014).</td>
</tr>
<tr>
<td></td>
<td>• Rogue state or negative image (+) [Public opinion; institutional pressure] (Soule et al, 2014).</td>
</tr>
<tr>
<td>Domain</td>
<td>Industries</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Firm-performance</td>
<td>• Accounting performance (+) [Poorly performing units divested or dissolved] (Montgomery &amp; Thomas, 1988; Lee &amp; Madhavan, 2010).</td>
</tr>
<tr>
<td></td>
<td>• Market valuation (+) [Improved accounting performance; reduced agency problem; focus on core competencies/industries; reduced negative synergies; reduced “conglomerate discount” by stock analysts] (Markides 1992; Mulherin &amp; Boone, 2000; Zuckerman, 2000; Lee &amp; Madhavan, 2010; Feldman et al, 2016).</td>
</tr>
<tr>
<td></td>
<td>• Innovation (+) [Deep specialization &amp; resource-focus after de-diversification] (Hoskisson &amp; Johnson, 1992). (-) [During divestiture: primacy of financial controls; lower internal innovativeness] (Hitt et al, 1996)</td>
</tr>
<tr>
<td></td>
<td>Moderators:</td>
</tr>
</tbody>
</table>

TABLE 4
Firm-specific Consequences of Strategic Firm-exit: Variables, Direction of Effect, Mechanism and References
<table>
<thead>
<tr>
<th>Divested unit’s performance</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Process (+) [Employees’ perception of justice and opportunity/capabilities] (Moschieri, 2011).</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Ownership concentration; owner-influence (+) [Agency theory] (Bergh, 1995).
- Product-market uncertainties: De-diversification (+) [information processing] (Bergh, 1998).
- Position on “industry wave” of divestiture: Peak (-) [Imitative divestiture] (Brauer & Wiersema, 2012).

- Productivity & performance (+) [Managerial discipline; operational efficiency] (McGuckin et al, 1998; Maksimovic & Phillips, 2001)
TABLE 5
Environment-specific Consequences of Strategic Firm-exit: Variables, Direction of Effect, Mechanism and References

<table>
<thead>
<tr>
<th>Domain</th>
<th>Industries</th>
<th>Country</th>
<th>Innovation &amp; production regions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects</td>
<td>• Macroeconomic efficiency (+) [Scale; synergies] (Melitz, 2003).</td>
<td>• Diffusion of knowledge, social capital (+) [Displacement &amp; mobility of high quality human capital] (Sofka et al, 2014).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Welfare (+/-) [Efficiency. Monopoly power] (Melitz, 2003).</td>
<td></td>
<td>Economy:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Productivity growth (+) [Turnover] (Hahn, 2000)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Region:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Regional economics (-) [Decline in employment, outputs, incomes, and expenditure] (Pike, 2005; Tomaney et al, 1999).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Regional society (-) [Human costs to displaced workers] (Mick, 1975; Kinicki, 1985; Eliason &amp; Storrie, 2009; Browning &amp; Heinesen, 2012).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Moderators: Firm’s policies: minimizes human costs; feeds entrepreneurship (Sucher &amp; Winterberg, 2015)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Public policy formulation (+) [Support displaced workers; regional industrial policy changes] (Ohlsson &amp; Storrie, 2012).</td>
</tr>
<tr>
<td>Table 6: Antecedents and Consequences of Strategic Firm-exit (Integrated)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Firm-specific antecedents</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Firm’s characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope/diversification (+) [opportunity cost; operational flexibility]. Size (+) [strategic incentives to de-diversify/rationalize production]. Foreignness (+) [liability of foreignness; footloose; no social preference for host country]. Moderator: Learning (-) [adaptation].</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Firm’s performance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial performance (-) [financial losses &amp; debts; distress asset-sale]. Productivity &amp; competitiveness (-) [defensive exit; selection]. Innovation (-) [competitiveness; technological capabilities compensate liability of foreignness].</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Managerial factors</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alignment of managers’ interests with investors’; effective internal control (+) [agency problem].</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Strategic factors</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in ownership &amp; CEO turnover (+) [cognitive inertia; psychological sunk cost; renewal, restructuring &amp; production-reorganization]. Intensity of search, selection &amp; asset-redeployment (+) [restructuring; unfitting &amp; redundant assets divested; failed acquisitions]. International strategy: transnational (+), multi-domestic (-), global (-) [scope of production rationalization; embeddedness of global units].</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Asset-characteristics &amp; performance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size (-) [resourcefulness, scale]. Industry-relatedness &amp; interdependence with parent (-) [Synergies, sunk cost]. Technology &amp; capital intensity, human capital [sunk cost; competitiveness]. Option value (-) [firm performance during uncertainties]. Financial performance, productivity, relative cost-structure (-) [opportunity cost].</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Environment-specific antecedents:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Domain’s (Industry’s, country’s or region’s) characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stable, high demand conditions (+) [growth]. Demand uncertainty (-) [cost of re-entry. Excess capacity (+) [price-war if high fixed costs; rationalization; selection]. Entry barriers (-) [“revolving door” if high entry; cost of re-entry]. Exit barriers (-) [structural &amp; strategic sunk costs]. Productivity differential &amp; intensity of competition (+) [selection]. Wages, real exchange rate (+) [costs]. Availability of knowledge resources (-) [competitiveness in innovation-led industries]. Domain-volatility and policy risks (+) [risk of failure, appropriation]. Adaptation challenges (+) [risks of failure/depressed performance].</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental changes</td>
<td>Technological disruptions [obsolescence; selection; exit waves]. Institutional changes toward economic integration (+) [firm-strategy from multi-domestic to regional] &amp; trade liberalization [focus on core industries]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image</td>
<td>Stigma (+) [Impression management; public opinion; institutional pressure]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm-specific Consequences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm’s performance</td>
<td>Accounting performance (+) [efficient resource allocation]. Market valuation (+) [Improved accounting performance; reduced agency problem; focus on core competencies and markets; reduced negative synergies; reduced “conglomerate discount” by stock analysts]. Innovation (+) [Deep specialization &amp; resource-focus after de-diversification]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divested asset’s performance</td>
<td>Productivity &amp; performance (+) [Managerial discipline; operational efficiency]. Wage, employment &amp; investment in technological &amp; human resources (+/-) [Operational efficiency]. Moderator: divestiture process [employees’ sense of justice &amp; opportunity]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment-specific Consequences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macro-economic</td>
<td>Efficiency, productivity &amp; social welfare (+) [scale, synergy, plant turnover]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge diffusion</td>
<td>Diffusion of knowledge (+) [Displacement &amp; mobility of high-quality human capital]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local society, economics &amp; policies</td>
<td>Regional economics (-) [Decline in employment, output, income, and expenditure]. Regional society (-) [Human costs to displaced workers]. Public policy formulation (+) [Support displaced workers; regional industrial policy changes]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>