Examining the relationship between organizational change and financial loss

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Abstract

Purpose – Research on the effectiveness of organizational change initiatives tends to focus primarily on the positive benefits of organizational change including improved financial performance. Rarely are negative outcomes examined, such as financial losses resulting from change initiatives. However, negative outcomes are possible, common, and understudied. The purpose of this paper is to examine the relationship between organizational change and financial loss.

Design/methodology/approach – The research used a database of insurance losses from a global reinsurance company over a 30-year period. Each loss event was examined to determine the cause of the loss, the amount of loss, and type of organizational change if any that preceded the loss.

Findings – The results indicate that losses attributed to the organization and its employees are preceded by an organizational change initiative more often than not. In particular, the occurrence of losses attributable to the organization and its employees were preceded more often by organizational changes involving mergers, acquisitions and changes to ownership, changes involving downsizing, changes involving restructuring, but not changes to reporting relationships.

Originality/value – This research represents one of the few studies to examine financial loss from a wide variety of different types of organizational change and the only that has examined these questions using data from insurance losses. Findings support the growing theoretical movement focussing on the risks of organizational change.

Keywords Organizational change, Change management, Costs of change, Financial loss, Organizational failure

Paper type Research paper

Organizational change and financial performance

Organizational change has become part of most organizations' efforts to adapt and thrive in today's business environment. Despite the prevalence of organizations' change initiatives (Beer, 2009), there is surprisingly little data on their impact on organizational financial performance. Most research examining the impact of organizational change has focussed on employee-level data including employee performance (e.g. Creasy *et al.*, 2009; Giessner, 2011) or perceptions of the work environment (e.g. Chaudhry *et al.*, 2011). The focus of studies that do assess financial performance is often restricted to positive outcomes such as profit. For example, Nicholas' (1982) review of the impact of organizational change initiatives on organizational outcomes does not include studies reporting financial losses and Porras and Berg's (1978) review only includes studies showing improved financial performance. Neither review reports on findings regarding decreases in financial performance. Porras and Robertson's (1992) review

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declares that negative organizational outcomes occur rarely and these detrimental outcomes are small when they do happen. Based on the research published regarding the effects of organizational change initiatives, it would be easy to conclude that these initiatives pose little risk for financial loss.

We argue that such a conclusion is premature for several reasons. First, it is clear that change efforts do fail (Beer and Nohria, 2000; Kotter, 1995; Sturdy and Grey, 2003) and failure has negative consequences for the organization (Hannan and Freeman, 1984; Roberto and Levesque, 2005). Second, very few studies report the impact of organizational change on financial performance and there are very few data points overall on which to base conclusions. Third, studies finding negative results are likely underrepresented in the population of published articles (i.e. file drawer problem). The findings are less likely to be published as they would not support the typical hypothesis that organizational change "works" (Sturdy and Grey, 2003; Woodman and Wayne, 1985). Fourth, data on financial loss is likely less accessible and available to researchers. Few organizations and sponsors of change initiatives would be eager to have the failure of their change initiatives and loss of financial resources publicized.

The lack of research reporting financial loss is in line with what many call the pro-change bias in organizational change management research (Sorge and van Witteloostuijn, 2004; Sturdy and Grey, 2003). These authors argue that the field should pursue alternative perspectives beyond the common unquestioning viewpoint that "change is good." This unquestioning viewpoint has resulted in the field's almost exclusive focus on how to make change initiatives "work" as opposed to thoroughly studying the risks involved. This paper explores those risks and the possible relationships between organizational change and financial loss. We examine the prevalence of organizational change initiatives before financial losses that were caused by the decisions, actions, and behaviors of the organization and its employees as well as before losses that were caused by technical factors (e.g. defective equipment). We examine these questions overall and for different types of change. This study examines these questions using a database of insured organizational losses over a 30-year period. To our knowledge, no prior research has examined these questions using this type of data.

Impact of organizational change on financial loss

Although organizations were once thought to be fairly constant entities, currently it is common knowledge that significant changes regularly occur in present day organizations and this process of change is in fact often expected throughout its lifetime as well as planned (Weick and Quinn, 1999). Planned organizational changes are designed to enhance organizational performance by improving adaptation to the environment and preparing for future changes (e.g. Porras and Silvers, 1991). These changes can take a variety of forms including changes to the organizational structure, process, social environment, and people.

Although the goal of change initiatives aimed at these aspects of organizations is to improve adaptation in order to improve competitiveness, efficiency, and performance (McGreevy, 2009), that goal may not always be realized (Kotter, 1995) as at times, change initiatives do not lead to financial betterment (Roberto and Levesque, 2005). In fact, Sturdy and Grey (2003) estimate that for organizations which do attempt change, 66 percent result in failure, while the failure estimate is even higher (70 percent) according to Beer and Nohria (2000). As March (1981) notes, change is inevitable, but its effects can easily become unsavory or at minimum may lead to unexpected results or outcomes.

Based on the ecological theory of organizational change, Hannan and Freeman (1977) explain that organizations often have structural inertia and therefore may have much difficulty in successfully implementing change because of various deterrents or obstacles both within the organization as well as from the environment. Later research by Hannan and Freeman (1984) suggests this structural inertia is an outcome of selection, in that organizations that fit the environment survive and those that do not are selected out of the population of organizations. Their later work states that this structural inertia occurs after this selection process. They further argue that while changes may be commonplace, organizations that maintain stability, or minimize large-scale changes tend to have a better chance of survival and success because of the unexpected nature involved in change. As part of their structural inertia theory, they argue that organizational change initiatives often involve changes to the core features of the organization such as the mission of the organization, the authority structures, the nature of the interaction between the organization and its employees, or the technology employed to perform work. Hannan and Freeman's (1984) theory suggests that the types of organizational change initiatives that are common today increase the chance of the organization experiencing negative outcomes as they are often attempts at core changes. Supporting this notion are data from Singh *et al.* (1986) that show core organizational changes are more likely than non-core changes to result in organizational death.

Although theories of organizational change and development have acknowledged the risk of failure involved in organizational change for some time (e.g. ecological theory of organizational change, Hannan and Freeman, 1984; random organizational action theory, Starbuck, 1983), the prior and much of the current research on organizational change tend to downplay or ignore the possibility of change leading to negative outcomes, particularly negative financial outcomes. Instead, organizational change research focusses almost exclusively on the possible benefits from change initiatives and how to maximize those benefits.

For example, Porras and Berg (1978) review 35 studies that report on the result of organizational change initiatives. They grouped the studies into those that reported statistically significant positive change, statistically significant negative change, or no change. Based on this classification of studies, they concluded that substantial negative change was infrequent and no patterns were apparent in the data. They found that in the studies where organizational-level outcomes were reported (e.g. profits, return-on-investment, and return-on-direct labor), the outcomes improved after change in over 50 percent of the studies.

Nicholas (1982) reviewed 65 studies that included objective performance outcomes. In his review, Nicholas examined a number of financial outcomes including profits, sales volume, and operating costs as well as a number of different types of change. The changes on these outcomes were coded as significant positive, positive, no change, negative, or significant negative. However, the review ultimately only reported significant positive changes. Nicholas notes that the number of studies reporting negative change was small and no patterns were apparent in the data.

More recently, Porras and Robertson (1992) reviewed 63 published studies and found that change initiatives lead to positive organizational outcomes (both financial and non-financial outcomes) about 48 percent of the time. There was no change about 46 percent and negative organizational outcomes about 5 percent of the time. In the cases where there was negative change, they report that degree of negative change was small.

There is some literature focussing on mergers and acquisitions (M&As) that has examined the possibility of negative financial outcomes (e.g. Hackbarth and Morellec, 2008; Morck *et al.*, 1990). For example, Carper's study (1990) showed acquisitions had a negative impact on shareholder wealth. In a meta-analysis of acquisitions, King *et al.* (2004) found overall post-acquisition performance does not improve and, on average, performance was modestly negatively impacted by M&As. Additionally, Cloodt *et al.* (2006) reported findings regarding innovation performance (i.e. number of patents granted) after M&As in high-tech organizations, showing non-technical M&As have a detrimental impact on performance due to disruption of procedures and routines More recently, Correia *et al.* (2013) found a relationship between changes of ownership (M&As) and company performance, but the nature of the relationship depended on the human resource practices on the type of change in ownership (e.g. positive impact on organizational performance for acquisitions but negatively impact for mergers). Although there is some research examining negative financial outcomes, M&As represent a very particular and extreme form of organizational change. As noted earlier, the possibility of negative outcomes is typically not explored with more typical forms of organizational change.

Based on the majority of the past literature, the conclusion is that organizational change rarely leads to financial loss. There are a number of reasons not to accept this conclusion. Organizational change efforts can and do fail (Beer and Nohria, 2000; Kotter, 1995; Sturdy and Grey, 2003) and failure has negative consequences for the organization (Hannan and Freeman, 1984; Roberto and Levesque, 2005). In line with this thinking, Jacobs *et al.* (2013) argue that organizational change is very risky and often an organization implementing change does not reach their goals. Change can lead to enhanced costs for an organization instead. For example, in one of the few studies that examined the negative financial impact of organizational change, Hannan *et al.* (2006) found that in technology start-ups, changes to the nature of relationships between the organization and the employees had a negative impact on IPO valuation and market capitalization. Moreover, the research on M&As reports similar findings.

There is likely a large missing data problem in this literature. There are few studies reporting the impact of organizational change on the organization overall and studies finding negative change are likely underrepresented in this already limited population of published articles. This underrepresentation creates upwardly biased results in summaries of the previous research. As Porras and Robertson (1992) note, "the low rate of negative change might reflect more the fact that researchers have a tendency to find what they are looking for and fail to find what they do not want to find […]" (p. 787).

We hypothesize that organizational change is associated with financial loss. Financial losses can occur for reasons that are beyond the control of the organization and its employees (e.g. defective machinery), but can also occur because of the actions, decisions, and behaviors of an organization and its employees. Given the potential negative impact change can have on the actions, decisions, and behaviors of an organization and its employees, our first hypothesis is that organizational change will be more frequent before losses attributable to the organization and its employees than losses attributable to technical or external factors (e.g. defective equipment, vandalism).

As has been found in previous research (e.g. Nicholas, 1982; Porras and Berg, 1978; Porras and Silvers, 1991), the impact of organizational change may depend on the specific change initiative undertaken. Therefore, in this study, we examined the relationship of several different categories of organizational change with the occurrence of financial

losses. These include changes involving mergers, acquisitions and changes to ownership, those involving downsizing and layoffs, changes involving processes of restructuring, and those involving changes to reporting relationships, which are all considered core changes in the organizational change literature (e.g. Hannan and Freeman, 1984; Singh *et al.*, 1986). Thus, our second hypothesis is that losses produced by the actions, decisions, and behaviors of the organization and its employees will be associated with the occurrence of changes involving mergers, acquisitions and changes to ownership; changes involving layoffs (e.g. layoff, outsourcing, downsizing, delayering); and changes involving processes of restructuring that precede the financial loss. Our third hypothesis is that for losses produced by the actions, decisions, and behaviors of the organization and its employees, there will be an association between the loss amount and the occurrence changes to ownership; changes involving layoffs (e.g. layoff, outsourcing, downsizing, delayering); and changes involving processes of restructuring that precede the financial loss.

Present study

The present study examines the relationship between organizational change and financial loss using a database of insurance losses from a global reinsurance company. The insurance losses were examined over a 30-year period. Each loss event was examined to determine the cause of the loss, the amount of loss, and type of organizational change if any that preceded the loss. This database provides a unique opportunity to examine how organizational change is related to insured financial loss.

Method

Database of insurance losses

The data used in this study were drawn from a database of large-scale insurance losses from a global reinsurance company. The database includes: loss events attributable to the organization and its employees or technical factors that were fully insured by the reinsurance company with over one million Swiss francs in losses; loss events that were partially insured by the reinsurance company with over one million Swiss francs in losses; and loss events that were not insured by the reinsurance company, but exceed ten million Swiss francs. The losses in the database span the timeframe of 1978-2008. The database captures crucial information about the loss event including the date, name of the organization, location of the loss, loss amount, and a short description of the loss event. The descriptions of the loss events include information that would be needed to determine the cause of their cause.

Initially, there were 2,652 loss events in the database. We excluded weather-related losses (e.g. hurricanes) and transportation-related losses (e.g. rail, aerospace) from the sample. This left 626 loss events. From this population of events, the reinsurance company wanted to examine the 500 largest loss events. Among the sample of the 500 largest loss events, the loss amount ranged from 55 million to over 70 billion Swiss francs. All amounts were inflation - adjusted to 2008 Swiss francs.

In the initial sample of 500 loss events, there were some events that containing insufficient information to classify the cause (technical or organization/employee causes). For example, only general information was provided or a determination of the cause of the loss was not made. Also, the loss amounts for some of the loss events were outliers. Specifically, losses of over two billion were considered outliers. The events with insufficient information or the ones that were outliers were removed from the sample. The final sample included 414 loss events. These loss events were distributed

over 54 countries and many industries. They ranged between 55 million to two billion Swiss francs in total loss amounts.

Coding source of loss event

For each loss event in the database, the cause of the loss was coded as attributable to technical factors or the organization and its employees. The loss events were coded using archival information about the event, which included any newspaper or magazine article, business press release or report, or accident and investigation report on the loss event. A single, trained coder coded all of the loss events in the database for its source.

Events were coded as attributable to the organization and its employees if the loss database and archival information clearly identified the decisions, actions, or behavior of the organization and its employees as being responsible for the event. Events were coded as attributable to technical/external factors if the loss database and archival information clearly identified factors such as defective equipment, or events outside the control of the organization (e.g. earthquakes, vandalism) as responsible for the event or if the source of the loss could not be determined. This coding strategy leads to a conservative estimate of the ratio between losses attributable to technical factors and those attributable to the organization and its employees. It is very likely, that in the group of technical factors there are some loss events which are due to the organization and its employees, but could not be identified based on the information available.

Coding of organizational change

Each loss event in the database was coded to indicate whether an organizational change initiative had occurred at some point in the two years before the loss event. The choice of the two-year timeframe was based on previous research examining the impact of organizational changes (e.g. Romanelli and Tushman, 1994; Virany *et al.*, 1992; Wischnevsky, 2004). To gather information on the occurrence of organizational change, archival information was used including any newspapers, magazine articles, government reports, organization-produced press releases or reports, or accident and investigation reports on the loss event.

Each loss event was dichotomously coded to indicate whether or not an organizational change had occurred. For those events where an organizational change did occur, the type of change was then coded. The organizational changes that were coded included: changes involving mergers, acquisitions and changes to ownership (e.g. merger, privatization, nationalization); changes involving layoffs (e.g. layoff, outsourcing, downsizing, delayering); changes involving processes of restructuring (restructuring, reorganization); processes involving changes to reporting relationships and management structure (e.g. changes to reporting relationships, changes to communication systems, introduction of self-managed teams); and other changes (e.g. change in top leadership). These include changes that can be considered core changes, which are those most likely to be involved in negative outcomes from change (e.g. Hannan and Freeman, 1984; Singh *et al.*, 1986). It was possible that more than one type of organizational change was identified for each loss event (e.g. restructuring and layoffs). All identifiable organizational changes were coded for each loss event. A single, trained coder coded all of the loss events in the database for the occurrence of an organizational change and the type of change involved when change did occur. The frequency of each type of change is reported in Table I.

Results

To test our first hypothesis that organizational changes are more strongly associated with losses resulting from the organization and its employees than from technical/external factors, we examined the φ coefficient between these variables. The results indicated a statistically significant relationship, $\varphi = 0.33$, $p < 0.05$. Overall, about 48 percent of all of the losses were preceded by some form of organizational change (see Table II). Of the losses that could be attributed to the organization and its employees, 61 percent of them were preceded by some form of organizational change. For the losses resulting from technical/external factors, organizational change preceded the loss events in only 29 percent of the cases. Thus, organizational change is more strongly associated with losses resulting from the organization and its employees in support of the first hypothesis. Although no formal statistical significance tests were conducted, it is interesting to note that the mean loss was $399 million for losses attributable to the organization and its employee that were preceded by organizational change. As a point of comparison, the mean loss amount was $295 million for losses attributable to the organization and its employees that were not preceded by organizational change and $152 million for losses attributable to technical/external factors that were preceded by an organizational change. Overall, the economic impact of losses attributable to the organization and its employees that were preceded by organizational change is considerable and far greater than losses that were not preceded by organizational change or losses attributable to technical/external factors.

To test our second hypothesis that certain types of organizational change are more strongly associated with losses resulting from the organization and its employees than from technical/external factors, we examined the φ coefficient between these variables (see Tables III and IV). We found that the occurrence of losses attributable to the organization and its employees were preceded more often by organizational changes involving mergers, acquisitions and changes to ownership ($\varphi = 0.25$, $p < 0.05$), changes involving downsizing ($\varphi = 0.17$, $p < 0.05$), changes involving restructuring ($\varphi = 0.20$, $p < 0.05$), and other types of changes ($\varphi = 0.26$, $p < 0.05$), but not changes to reporting relationships ($\varphi = 0.10$, $p > 0.05$). In all cases, organizational change is more strongly associated with losses attributable to the organization and its employees in support of the second hypothesis. Additionally, several of the different types of organizational

Type of organizational change	*f*
Changes involving mergers, acquisitions, and changes to ownership	76
Changes involving layoffs	58
Changes involving processes of restructuring	87
Changes involving reporting relationships and management structure	6
Other changes	97

Table I. Frequency of each category of organizational change

Source of loss	Organizational change	No organizational change	Total
Organization and its employees	155	98	253
Technical/external factors	45	116	161
Total	200	214	414

Table II. Cross-tabulation of source of financial loss and occurrence of organizational change

change were correlated indicating that the occurrence of one type of change was associated with the occurrence of another type of change.

To test our third hypothesis that the type of organizational change would be associated with the loss amount for losses attributable to the organization and its employees, we examined the point-biserial correlations between loss amount and the occurrence of each type of organizational change. For all types of organizational change, the results were not statistically significant (see Table V). Table VI presents the mean severities for each type of organizational change. As can be seen in the table, losses tend to be greater for changes related to restructuring and changes in ownership as well as other changes compared to those related to changes in reporting relationships and management structure.

Table III.
Correlations between the source of financial loss and type of organizational change

	Source of loss	Type 1	Type 2	Type 3	Type 4	Type 5
Source of loss	1.00					
Type 1	0.25*	1.00				
Type 2	0.17*	0.18*	1.00			
Type 3	0.20*	0.16*	0.44*	1.00		
Type 4	0.10	0.13	0.05	0.11	1.00	
Type 5	0.26*	0.26*	0.31	0.40*	0.10	1.00

Notes: Source of loss: 0, technical/external factors; 1, organization and its employees. Type 1, changes involving mergers, acquisitions and changes to ownership; Type 2, changes involving lay-offs; Type 3, changes involving processes of restructuring; Type 4, processes involving changes to reporting relationships and management structure; Type 5, others changes. *$p < 0.05$

Table IV.
Cross-tabulation of source of financial loss and the type of organizational change

Source of loss	Type 1	Type 2	Type 3	Type 4	Type 5	Total
Organization and its employees	76	58	87	6	97	324
Technical/external factors	14	16	26	0	23	79
Total	90	74	113	6	120	403

Notes: Type 1, changes involving mergers, acquisitions and changes to ownership; Type 2, changes involving lay-offs; Type 3, changes involving processes of restructuring; Type 4, processes involving changes to reporting relationships and management structure; Type 5, others changes

Table V.
Correlations between the loss amount and type of organizational change

	Loss amount
Type 1	−0.04
Type 2	−0.02
Type 3	0.07
Type 4	−0.03
Type 5	0.01

Notes: Type 1, changes involving mergers, acquisitions and changes to ownership; Type 2, changes involving lay-offs; Type 3, changes involving processes of restructuring; Type 4, processes involving changes to reporting relationships and management structure; Type 5, others changes

Discussion

Previous research examining the impact of organizational change on organizational-level financial outcomes has focussed primarily on positive outcomes from change and has tended to ignore negative outcomes such as financial loss. We believe as do other scholars (e.g. Jacobs *et al.*, 2013) that there has been inadequate attention to the risks associated with organizational change. Organizational change initiatives need to conduct serious cost-benefit analyses which explicitly include the potential for negative outcomes of organizational change. In this study, we used a unique data set of reinsurance losses to examine the relationships between organizational change and financial loss. We found that financial losses attributable to the organization and its employees were associated with an organizational change occurring within the two years before the loss. In general, the losses preceded by an organizational change are large and greater in magnitude than when an organizational change did not occur before the loss. We also found that changes to the structural aspects of the organization were more strongly associated with a financial loss than other forms of change. These finding are consistent with the theoretical proposition that changing core features of an organization can lead to negative outcomes (e.g. Hannan and Freeman, 1984). However, there were no associations between the loss amounts and the type of change indicating that the loss amount is not necessarily more or less depending on the type of change. Nevertheless, when losses occurred that were preceded by organizational change, the mean loss amount was considerable at $399 million.

Study implications

The results of this study are consistent with and support a growing body of organizational change literature that is more directly acknowledging and focussing on the risky nature of change for organizations. For example, Jacobs *et al.* (2013) have developed a new more cohesive and encompassing theoretical framework for understanding organizational change. They strongly state that the attempts at organizational change is more involved, more difficult, and more complicated than previous literature alludes. They also criticize the simplicity of prior organizational change theories regarding their minimal explicit study of when and how change initiatives go awry. The results of this study support their perspective in that substantial financial loss can be associated with organizational change initiatives.

These findings have a number of implications for understanding the risk involved in change and research on the outcomes associated with organizational change. Although there is a need to understand what "works" and how organizational changes can be successful, what does not "work" may not simply be the opposite. Research is needed

	Mean loss amount
Type 1	$328,305,477
Type 2	$335,094,384
Type 3	$411,599,897
Type 4	$231,628,779
Type 5	$364,742,803

Notes: Type 1, changes involving mergers, acquisitions and changes to ownership; Type 2, changes involving lay-offs; Type 3, changes involving processes of restructuring; Type 4, processes involving changes to reporting relationships and management structure; Type 5, others changes

Table VI. Average loss amounts for each type of organizational change

that specifically examines the aspects of change initiatives that can lead to financial losses. Such research would allow for stronger tests of existing organizational theory that explicitly acknowledge the possibility of loss as well as help practitioners develop and implement organizational change initiatives that avoid the failure points. This research would also aid decision makers in determining if certain types of organizational changes offer more benefit than risk and choose appropriate courses of action.

Potential study limitations

All research has potential limitations. One potential limitation of this study is that it relied heavily on public reports and sources to identify the occurrence of organizational change. It is possible that there was insufficient reporting to detect organizational change as the occurrence for some of the loss events in the database. However, if it was the case that some instances of organizational change went undetected, the results of this study would be an underestimate of the relationship between organizational change and financial loss.

It may also be the case that some losses attributable to the organization and its employees were not reported to the reinsurance company due to concerns about claims being denied and premiums increased. However, given that this study limited the analyses to large losses, this type of missing data problem is less likely to have occurred. One can question if the database over-represents losses triggered by organizational change. In general, losses will be paid to the insured party regardless of whether the loss was due to technical, external, or organizational factors. As for the determination of the trigger, there is also no advantage to stress organizational over technical factors. Therefore it is unlikely that technical failure is underreported.

Most serious is that this study uses a non-experimental design which precludes strong causal statements. Obviously, experimental research where organizations are randomly assigned to experience change will never be possible. Thus, no organizational change research will be able to fully rule out all alternative explanations. In this study, a number of features support the conclusions about the nature of the relationship between organizational change and financial loss. First, only changes that occurred before the loss were examined. Nevertheless, we cannot completely rule out the possibility of the opposite relationship of financial loss leading to organizational change. However, given that we examined organizational changes that occurred up to two years before the loss, it is less likely that the opposite relationship holds for the majority of the cases. Second, the coding of the studies relied on investigative reports on the reasons for the loss. The goal of these reports is to identify the underlying causes for the loss event and make determination related to insurance payments. Thus, the factors identified in these reports are the most probable causes of the loss. Third, losses were examined from multiple industries, multiple countries, and multiple time periods. If there are alternative explanations, it is unlikely that they would be operating across all of these contexts.

A similar concern is how reporting a loss and change may be related. Given that we have no instances of losses that were not reported, we were not able to examine these relationships. We believe, at least with these data and the loss amounts that we studied, that they are not related as it is unlikely that any organization would not choose to report an insured loss of these magnitudes. Thus, we expect no variance in the choice to report a loss at these magnitudes of loss. However, we would not generalize this logic to smaller loss amounts where it is possible that relationships between change

and reporting may exist. Future research should address this question. Nevertheless, we would not suspect that it is the choice to report that would be the key variable, but the actual loss that prompted the need to make a choice about reporting that is the key variable. Another concern related to reporting losses is a possible self-selection bias in the reporting of the loss to an insurance company. In this study, we do not believe that a considerable self-selection bias is operating. Given the magnitude of the losses that we are studying, it is unlikely that an organization would not make an insurance claim. The economic consequences of not reporting an insured loss of these magnitudes are too great.

Additionally, there are some potential concerns about the generalizability of the results. This study focussed on companies that had insurance and had losses of at least 55 million Swiss francs. Naturally, these are large companies and multinational companies given the use of insurance and the size of the losses. Thus, generalizations to small businesses which are less likely to have insurance or losses of this magnitude may not be supported. Moreover, small businesses are less likely to be engaging in the types of large organizational change initiatives considered in this study. Given the interest in large losses and large organizational change initiatives, large companies are the relevant population and we are therefore cautious against generalizations to small organizations until future research can replicate these findings with that population.

References

Beer, M. (2009), "Sustain organizational performance through continuous learning, change and realignment", in Locke, E. (Ed.), *Handbook of Principles of Organizational Behavior: Indispensible Knowledge for Evidence-Based Management*, 2nd ed., Blackwell/Wiley, London, pp. 537-554.

Beer, M. and Nohria, N. (2000), "Cracking the code of change", *Harvard Business Review*, Vol. 78 No. 3, pp. 133-141.

Carper, W.B. (1990), "Corporate acquisitions and shareholder wealth: a review and exploratory analysis", *Journal of Management*, Vol. 16 No. 4, pp. 807-823.

Chaudhry, A., Coyle-Shapiro, J.A. and Wayne, S.J. (2011), "A longitudinal study of the impact of organizational change on transactional, relational, and balanced psychological contracts", *Journal of Leadership and Organizational Studies*, Vol. 18 No. 2, pp. 247-259.

Cloodt, M.M.A.H., Hagedoorn, J. and van Kranenburg, H. (2006), "Mergers and acquisitions: their effect on the innovative performance of companies in high-tech industries", *Research Policy*, Vol. 35 No. 5, pp. 642-654.

Correia, M.F., Cunha, R.C. and Scholten, M. (2013), "Impact of M&As on organizational performance: the moderating role of HRM centrality", *European Management Journal*, Vol. 31, pp. 323-332.

Creasy, T., Stull, M. and Peck, S. (2009), "Understanding employee-level dynamics within the merger and acquisition process", *Journal of General Management*, Vol. 35 No. 2, pp. 21-42.

Giessner, S.R. (2011), "Is the merger necessary? The interactive effect of perceived necessity and sense of continuity on post-merger identification", *Human Relations*, Vol. 64 No. 8, pp. 1079-1098.

Hackbarth, D. and Morellec, E. (2008), "Stock returns in mergers and acquisitions", *The Journal of Finance*, Vol. 68 No. 3, pp. 1213-1252.

Hannan, M.T. and Freeman, J. (1977), "The population ecology of organizations", *American Journal of Sociology*, Vol. 82 No. 5, pp. 929-964.

Hannan, M.T. and Freeman, J. (1984), "Structural inertia and organizational change", *American Sociological Review*, Vol. 49 No. 2, pp. 149-164.

Hannan, M.T., Baron, J.N., Hsu, G. and Koçak, Ö. (2006), "Organizational identities and the hazard of change", *Industrial and Corporate Change*, Vol. 15 No. 5, pp. 755-784.

Jacobs, G., van Witteloostuijn, A. and Christe-Zeyse, J. (2013), "A theoretical framework of organizational change", *Journal of Organizational Change Management*, Vol. 26 No. 5, pp. 772-792.

King, D.R., Dalton, D.R., Daily, C.M. and Covin, J.G. (2004), "Meta-analyses of post-acquisition performance: indications of unidentified moderators", *Strategic Management Journal*, Vol. 25 No. 2, pp. 187-200.

Kotter, J.P. (1995), "Leading change: why transformational efforts fail", *Harvard Business Review*, Vol. 73 No. 2, pp. 59-67.

McGreevy, M. (2009), "Why change works sometimes", *Industrial and Commercial Training*, Vol. 41 No. 6, pp. 305-313.

March, J.G. (1981), "Footnotes to organizational change", *Administrative Science Quarterly*, Vol. 26 No. 4, pp. 563-577.

Morck, R., Shleifer, A. and Vishny, R.W. (1990), "Do managerial objectives drive bad acquisitions?", *The Journal of Finance*, Vol. 45 No. 1, pp. 31-48.

Nicholas, J.M. (1982), "The comparative impact of organizational development interventions on hard criteria measures", *Academy of Management Review*, Vol. 7 No. 4, pp. 531-542.

Porras, J.I. and Berg, P.O. (1978), "The impact of organizational development", *Academy of Management Review*, Vol. 3 No. 2, pp. 249-266.

Porras, J.I. and Robertson, P.J. (1992), "Organization development: theory, practice, and research", in Dunnette, M. and Hough, L. (Eds), *The Handbook of Industrial and Organizational Psychology*, Vol. 3, Consulting Psychologists Press, Palo Alto, CA, pp. 719-822.

Porras, J.I. and Silvers, R.C. (1991), "Organization development and transformation", *Annual Review of Psychology*, Vol. 42, pp. 51-78.

Roberto, M.A. and Levesque, L.C. (2005), "The art of making change initiatives stick", *MIT Sloan Management Review*, Vol. 46 No. 1, pp. 53-60.

Romanelli, E. and Tushman, M.L. (1994), "Organizational transformation as punctuated equilibrium: an empirical test", *Academy of Management Journal*, Vol. 37 No. 5, pp. 1141-1166.

Singh, J.V., House, R.J. and Tucker, D.J. (1986), "Organizational change and organizational mortality", *Administrative Science Quarterly*, Vol. 31 No. 2, pp. 587-611.

Sorge, A. and van Witteloostuijn, A. (2004), "The (non)sense of organizational change: an essay about universal management hypes, sick consultancy metaphors, and healthy organization theories", *Organization Studies*, Vol. 25 No. 7, pp. 1205-1231.

Starbuck, W.H. (1983), "Organizations as action generators", *American Sociological Review*, Vol. 48 No. 1, pp. 91-102.

Sturdy, A. and Grey, C. (2003), "Beneath and beyond organizational change management: exploring alternatives", *Organization*, Vol. 10 No. 5, pp. 651-662.

Virany, B., Tushman, M.L. and Romanelli, E. (1992), "Executive succession and organization outcomes in turbulent environments: an organization learning approach", *Organization Science*, Vol. 3 No. 1, pp. 72-91.

Weick, K.E. and Quinn, R.E. (1999), "Organizational change and development", *Annual Review of Psychology*, Vol. 50, pp. 361-386.

Wischnevsky, J.D. (2004), "Change as the winds change: the impact of organizational transforming on firm survival in a shifting environment", *Organizational Analysis*, Vol. 12 No. 4, pp. 361-377.

Woodman, R.W. and Wayne, S.J. (1985), "An investigation of positive-findings bias in evaluation of organization development interventions", *Academy of Management Journal*, Vol. 28 No. 4, pp. 889-913.

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