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## Are inertia and calculative commitment distinct constructs? An indirect test in the financial services sector

### Abstract

Both inert and calculatively committed customers express somewhat similar behaviours that include repeat purchasing despite having negative perceptions and associating in opportunistic behaviours. These characteristics have however resulted in some researchers conceptualising interchangeably the related yet distinct constructs. This paper aims to extend the knowledge on inertia and calculative commitment by examining the extent to which they are distinct. An analysis of data collected online from 376 businesses using a key informant approach indicate that these two constructs demonstrate discriminant validity. Whilst switching costs impact both inertia and calculative commitment, they have differential effects. The implications of these findings are discussed.

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# **Are Inertia and Calculative Commitment Distinct Constructs? An Indirect Test in the Financial Services Sector**

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## **Abstract**

Both inert and calculatively committed customers express somewhat similar behaviours that include repeat purchasing despite having negative perceptions and associating in opportunistic behaviours. These characteristics have however resulted in some researchers conceptualising interchangeably the related yet distinct constructs. This paper aims to extend the knowledge on inertia and calculative commitment by examining the extent to which they are distinct. An analysis of data collected online from 376 businesses using a key informant approach indicate that these two constructs demonstrate discriminant validity. Whilst switching costs impact both inertia and calculative commitment, they have differential effects. The implications of these findings are discussed.

Keywords: calculative commitment, financial services, inertia, switching costs.

## **Background to the Research and Research Objectives**

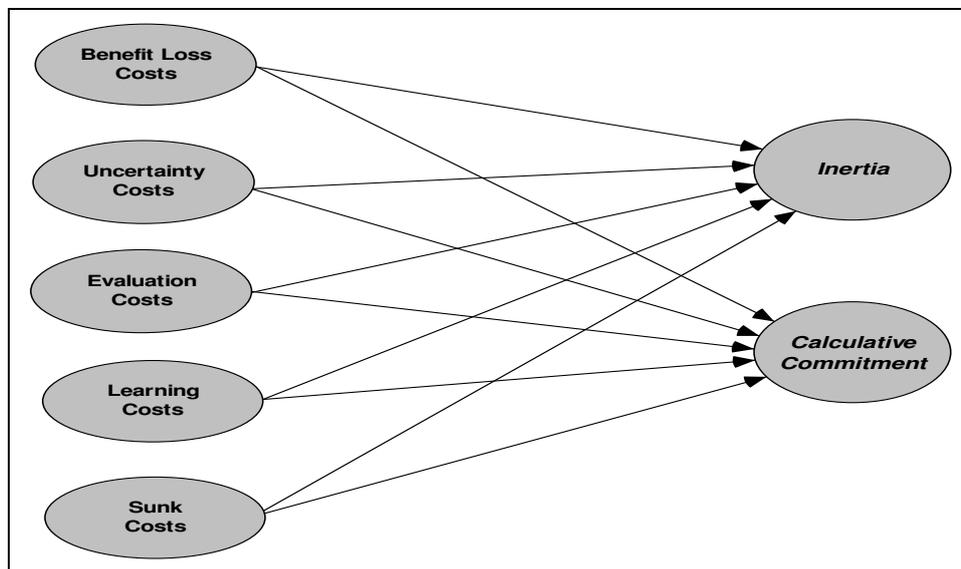
It is common for customers to be dissatisfied with the relationship they have with their service providers (Colgate and Lang, 2001), but *how* customers react to dissatisfaction is the crucial issue for marketing managers (Richins, 1987). Although some defections are caused by dissatisfaction, customers may simply choose to remain with the service provider when dissatisfied. This is evidenced in the financial services sector where only a relatively small number of customers exit from their main bank annually (Colgate, 1999) because the nature of financial services may hinder the migration on financial markets (Akerlund, 2005). Such customers become inert and/or calculatively committed (Colgate and Lang, 2001; Colgate and Norris, 1999; Jones *et al.*, 2007; White and Yanamandram, 2004). Inertia is described as a condition where a customer repeat purchases the same brand passively without much thought and reflects a non-conscious process (Huang and Yu, 1999), and there is an experienced absence of goal-directed behaviour (Zeelenberg and Pieters, 2004). Calculative commitment is described as a condition where a customer perceives the need to maintain a relationship (Bansal, Irving and Taylor, 2004), and there is a dispassionate, though rational evaluation of the costs and penalties associated with switching (Sharma, Young and Wilkinson, 2006). While both inert and calculatively committed customers may repeat purchase despite having negative perceptions and associate themselves with opportunistic behaviours (Gilliland and Bello, 2002; Huang and Yu, 1999), these characteristics have however resulted in some researchers conceptualising interchangeably the related yet distinct constructs. For example, Zeelenberg and Pieters (2004) argued that a customer's inertia "could be caused...due to simple cost/benefit reasoning in which the costs outweigh the benefits" (p.453), which captures the meaning of calculative commitment. Evanschitzky *et al.* (2006) proposed that a customer's intention to remain in a relationship that is influenced by switching costs is because of an emotional attachment – continuance commitment – that develops out of inertia. Furthermore, some researchers have examined the effect of switching costs on inertia (Perera and Kim, 2007), while others have examined the effect of switching costs on calculative commitment (Bansal, Irving and Taylor, 2004; Gilliland and Bello, 2002), resulting in the widespread misunderstanding of these constructs.

The objective of the paper is to address this important concern and extend the knowledge on inertia and calculative commitment by examining the extent to which inertia is distinct from calculative commitment. Our study proposes and empirically analyses a research model that considers switching costs as an antecedent to inertia and calculative commitment in a business services context. The rest of the paper describes the research model and the hypotheses of the study based on relevant literature, the methodology that guided the research effort, the analysis used to test the hypotheses, and the interpretation and implications of the findings.

### Research Model and Hypotheses

Figure 1 illustrates the various constructs and their linkages in the proposed research model.

**Figure 1: Research Model**



Switching costs were conceptualised as the perceived economic and psychological costs associated with the process of switching from one service provider to another (Jones, Mothersbaugh and Beatty, 2002). The term ‘switching costs’ is used in the research model to indicate: (1) benefit-loss costs; (2) uncertainty costs; (3) evaluation costs; (4) learning costs; and (5) sunk costs. Inertia was conceptualised as a non-conscious form of retention, consisting of passive service patronage without true loyalty (Huang and Yu, 1999). Calculative commitment was conceptualised as “the state of attachment to a partner cognitively experienced as a realisation of the benefits sacrificed and losses incurred if the relationship were to end” (Gilliland and Bello, 2002, p.28).

### Hypotheses

Several models proposed by economists (see Weiss and Anderson, 1992), and status quo bias theory (Samuelson and Zackhauser, 1988) have explained that switching costs incurred by customers result in proactive, rational managers resisting changing from perceived unsatisfactory suppliers. Regarding the type of switching costs that would lead to inertia, Inder and O’Brien (2003) argued that because uncertainty costs are likely to cause an

unpleasant psychological reaction, customers would be more averse to losing something they own than they are pleased to make a gain, and therefore lead to status quo inertia. Similarly, transition costs such as the time and effort costs associated with the search and analysis of potential alternate service providers prior to switching (evaluation costs), and the time and effort costs associated with learning and adapting to new procedures and routines in order to use a service effectively (learning costs), make any switch from the status quo costly in itself and then lead to status quo bias (Perera and Kim, 2007; Samuelson and Zackhauser, 1988). In addition to these procedural costs, the presence of benefit-loss costs and sunk costs are also posited to contribute to status quo bias in behaviour and decision-making (Perera and Kim, 2007). Benefit-loss costs would favour status quo bias because of loss aversion, where customers, while making decisions, weigh potential losses from switching more heavily than potential gains (Kahneman and Tversky, 1979). Increasing sunk costs at the firm-level should lead to an increase in resistance because idiosyncratic investments lose their value if the relationship were to be terminated (Ping, 1993). Thus, the following hypotheses are advanced:

**H1<sub>a</sub>**: As benefit-loss costs increase, inertia will increase.

**H1<sub>b</sub>**: As uncertainty costs increase, inertia will increase.

**H1<sub>c</sub>**: As evaluation costs increase, inertia will increase.

**H1<sub>d</sub>**: As learning costs increase, inertia will increase.

**H1<sub>e</sub>**: As sunk costs increase, inertia will increase.

Switching costs ultimately compel people to commit to a certain line of behaviour (Geyskens, Steenkamp and Scheer, 1996). Regarding the type of switching costs that would lead to calculative commitment, Jones *et al.* (2007, p.341) argued that procedural switching costs that derive from “negative sources of constraint” escalate perceptions of calculative commitment. However, Gilliland and Bello (2002, p.28) contended that while “there is no indication that relational forms or other pro-social behaviours exist between the two firms” when there is calculative commitment, it nonetheless suggests a binding that “is experienced as an understanding of the sacrifices associated with termination, including lost current and future benefits from existing customers; the disruption and difficulty of moving to another [service provider]; and the loss of sunk idiosyncratic investments”. These contentions suggest that not only the different types of procedural switching costs such as evaluation costs, learning costs, and economic risk costs drive up perceptions of calculative commitment, but also benefit-loss costs and sunk-costs. It is thus apparent that each dimension of switching costs leads to calculative commitment, and the following hypotheses are thus advanced:

**H2<sub>a</sub>**: As benefit-loss costs increase, calculative commitment will increase.

**H2<sub>b</sub>**: As uncertainty costs increase, calculative commitment will increase.

**H2<sub>c</sub>**: As evaluation costs increase, calculative commitment will increase.

**H2<sub>d</sub>**: As learning costs increase, calculative commitment will increase.

**H2<sub>e</sub>**: As sunk costs increase, calculative commitment will increase.

## Methodology

Recruitment emails were sent to 2,083 prospective participants who were identified from a database of Australian business managers. A key informant approach was used to collect data from responding organisations, which ultimately resulted in a final sample of 376. Since the set of services that the key informants chose to discuss represented a variety of industries, only the findings from those aspects of the survey that are relevant to the financial services

sector are presented in this paper. Nearly 30% of the informants reported on their dissatisfaction with financial services and this resulted in the retention of 124 cases. Data characteristics indicate that the key informant, on average, had personally interacted with the service provider for approximately 4 years. Key informants reported moderate to high overall dissatisfaction (mean = 4.8 on a seven-point scale anchored by “dissatisfaction is extremely low” and “dissatisfaction is extremely high”;  $\sigma = 1.17$ ). All customers considered switching but did not switch their financial institutions. Participants viewed the service described in the survey as important to their overall profitability (mean = 5.8 on a seven-point scale anchored by “not at all important” and “extremely important”;  $\sigma = 1.3$ ). Responding organisations included small, medium and large firms. A five-dimensional switching cost scale was developed by adapting switching costs that were previously conceptualised and validated by Jones, Mothersbaugh and Beatty (2002) and Burnham, Frels and Mahajan (2003), along with new items. A new measure of inertia was developed based on conceptual insights gleaned from the studies by Bozzo (2002), Colgate and Lang (2001), Huang and Yu (1999), and Ranaweera and Neely (2003). The measure of calculative commitment for this study consisted of items that were derived from the scale used by Gilliland and Bello (2002).

### Analysis

A two-step approach was selected for the measurement model and structural model (Anderson and Gerbing, 1988) using AMOS 7.0 with maximum-likelihood (ML) estimation. The results of the measurement model analysis indicated high levels of construct reliability, convergent validity and discriminant validity. The squared multiple correlations of all items was greater than 0.51. The construct reliability (C.R.) and variance extracted (V.E.) for all the measures exceeded the threshold values of 0.70 and 0.50 respectively, and are listed in Table 1. The critical ratio (*t* values) of all measurement items were significant (values varied between 7.72 and 14.13) and each measurement item loaded significantly ( $\geq .72$ ) on its respective construct, thus providing strong evidence of convergent validity (Bagozzi and Yi, 1988). Discriminant validity was evident as the correlation between any two constructs were lower than 0.80 (with the highest correlation being .58 between uncertainty costs and learning costs). In addition, the average of the variance extracted for any two constructs exceeded the square of the correlation between those two latent constructs, thus providing further evidence of discriminant validity (Fornell and Larcker, 1981). These assessments established that inertia and calculative commitment are distinct constructs. Following the removal of items that showed inadequate psychometric properties, several widely used goodness-of-fit indices demonstrated that the measurement model fit the data well:  $\chi^2 = 190.88$ ;  $df = 131$ ,  $p = .00$ ;  $\chi^2/df = 1.46$ ; CFI = .96; TLI = .95; RMSEA = .06; SRMR = .06.

**Table 1: Reliability Test Values**

Latent Variable (Construct)	C.R.	V.E.
Benefit-Loss Costs (2 items)	0.82	0.70
Uncertainty Costs (3 items)	0.93	0.82
Evaluation Costs (3 items)	0.88	0.71
Learning Costs (3 items)	0.92	0.79
Sunk Costs (3 items)	0.92	0.79
Inertia (3 items)	0.82	0.60
Calculative Commitment (2 items)	0.79	0.66

A structural model specifying the hypothesised relationships among the latent constructs was estimated using AMOS 7.0. The results of structural analysis provide a good fit of the model tested to the data:  $\chi^2 = 191.19$ ;  $df = 132$ ,  $p = .00$ ;  $\chi^2/df = 1.45$ ;  $CFI = .96$ ;  $TLI = .95$ ;  $RMSEA = .06$ ;  $SRMR = .06$ . The structural estimates of this model are shown in Table 2. The results support three out of the 10 paths ( $H_{1c}$ ,  $H_{1d}$ , and  $H_{2e}$ ).

**Table 2: Structural Estimates**

	Structural Path		$\beta$	$t$
$H_{1a}$	Inertia	← Benefit Loss Costs	-.14	-1.25
$H_{1b}$	Inertia	← Uncertainty Costs	.01	0.05
** $H_{1c}$	Inertia	← Evaluation Costs	.36	2.88
** $H_{1d}$	Inertia	← Learning Costs	.34	2.73
$H_{1e}$	Inertia	← Sunk Costs	.03	0.33
$H_{2a}$	Calculative_Commitment	← Benefit Loss Costs	.17	1.52
$H_{2b}$	Calculative_Commitment	← Uncertainty Costs	.05	0.37
$H_{2c}$	Calculative_Commitment	← Evaluation Costs	.22	1.78
$H_{2d}$	Calculative_Commitment	← Learning Costs	.15	1.31
** $H_{2e}$	Calculative_Commitment	← Sunk Costs	.36	3.61

\*\*  $p < .01$

### Implications of the Findings

This research provides indirect empirical support to the contention that inertia and calculative commitment are distinct constructs. First, the variance-extracted test established discriminant validity between inertia and calculative commitment. Second, switching costs impacted both inertia and calculative commitment differently, which suggests that they are different constructs. The findings imply that corporate customers may not be ready to put forth the effort required to change their banks if they perceive that it may take too much time and effort to seek out information about available alternatives and evaluate their viability to switch, or it may take too much time and effort to acquire and adapt to the new procedures and routines, and may develop a negative cognitive attachment to the service provider because of the potential loss of idiosyncratic investments. Managers should be cautious in employing such barriers as mechanisms for customer retention because calculatively committed customers might be behaviourally loyal only for as long as it is instrumentally rewarding to be so (Samuelsen and Sandvik, 1997). Given that the customer firms of this current research did not afford the time or effort to evaluate the information on alternative service providers, this research recommends that service providers minimise the work required of the potential customers during the switching process in an attempt to overcome concerns expressed or experienced and win the prospective switchers of the offending firms. This is especially important given that dissatisfied customers often can become involved in inert buying patterns. A limitation of the study is that whilst both benefit-loss costs and calculative commitment were measured using previously validated measures (Jones et al., 2002; Gilliland and Bello, 2002), the process of psychometric analysis in this current study did yield two-item scales for these measures. Therefore, the measurement scales should be subjected to further assessment before drawing conclusions on their construct validity.

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