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Does Managerial Ability Lead to Different Cost Stickiness Behavior? Evidence from ASEAN Countries

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Abstract: This study aims to test cost stickiness behavior under different managerial ability levels. Managerial ability plays an important role in resource-related decision making. Previous cost stickiness research assumes that managers exhibit similar abilities to manage resources. However, managers with different managerial abilities may make different resource decisions, which leads to different cost stickiness levels. More able managers can manage resources efficiently and deal with resource shortages. This study also tests the effects of environmental uncertainty on cost stickiness under different managerial ability levels. Managers' resource decisions must consider environmental uncertainty to generate optimal returns. More able managers are more willing to take risks and manage resources efficiently to deal with uncertainty. Meanwhile, less able managers tend to retain resources to cope with environmental uncertainty. We ran the panel regression analysis of 19,612 listed firm-year observations in ASEAN countries from 2013 to 2019. The results show that firms led by less able managers exhibit cost stickiness. Less able managers cannot manage resources efficiently and are more likely to retain resources than make costly adjustments. Further, the effect of environmental uncertainty on cost stickiness is stronger in firms led by less able managers. Less able managers tend to retain resources when sales decline.

Keywords: cost stickiness; managerial ability; environmental uncertainty; ASEAN



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1. Introduction

Traditional cost behavior argues that costs change symmetrically with activity changes. However, more recent cost studies demonstrate that costs are sticky because they do not change symmetrically with activity changes. More specifically, cost stickiness refers to the fact that costs respond more to an increase in activities than a similar decrease in activities (Anderson et al. 2003).

The cost stickiness literature has analyzed the determinants of cost stickiness, mostly related to firm-specific operations. However, prior studies have also examined the relationship between managerial characteristics and cost stickiness. Managers' behaviors play an important role in explaining cost stickiness because managers make resource adjustment decisions, such as holding idle resources or incurring adjustment costs (Anderson et al. 2003; Banker and Byzalov 2014). Furthermore, the magnitude of cost stickiness is related to managerial expectations and managerial incentives, as well as behavioral and agency factors (Banker et al. 2014).

Bertrand and Schoar (2003) document that different managers' personalities result in different firm decisions and performance. Previous cost stickiness research also assumes that managers are rational and exhibit similar competence on average. The underlying logic of prior research is that managers have expertise in estimating adjustment costs, predicting future demand and current capacity, and then using that information when

making resource adjustments to respond to sales change (Choi et al. 2018). However, managers can have different abilities and likely make different operating decisions.

Managers' decisions are arguably affected by their managerial ability. Managerial ability refers to managers' knowledge, skills, and experience. More able managers are more willing to take risks and manage resources more efficiently. They also have more knowledge and experience in efficiently managing firms' resources based on their firms' competitive advantage. They can also manage resources better and address resource issues caused by demand growth. Hence, retaining resources is not their goal (Banker et al. 2022). When sales decline, a more able manager tends not to retain resources because they can adjust resources more easily. Reducing resources when sales decline leads to lower cost stickiness. Meanwhile, managers with lower managerial abilities fail to utilize slack resources and include adjustment costs effectively, so they cannot maintain adequate resource levels (Choi et al. 2018). Thus, they tend to retain resources when sales decline, leading to greater cost stickiness.

Managers also consider environmental uncertainty when making resource adjustment decisions because environmental uncertainty will pose greater risks. Environmental uncertainty motivates more able managers to take more risks than less able managers to demonstrate their better ability to handle risks. In this respect, managers use their abilities to deal with uncertainty. Meanwhile, less able managers are less willing to take risks and look for easier ways to deal with uncertainty. They tend to retain resources because it is easier than adjusting resources, especially when confronted with greater environmental uncertainty.

This study tests whether firms led by less able managers exhibit greater cost stickiness than those led by better able ones. Furthermore, to deal with uncertainty, we test whether managerial ability strengthens the relationship between environmental uncertainty and cost stickiness, especially with low managerial ability. More able managers tend to reduce resources to cope with environmental uncertainty because they can manage resources efficiently. By contrast, less able managers likely retain resources to meet resource requirements and anticipate increasing future sales.

This research analyzes non-financial firms in five ASEAN countries (Indonesia, Malaysia, the Philippines, Thailand, and Vietnam). We excluded Singapore from the analysis because this country is the only developed country in Southeast Asia. In particular, we run the panel data regression on 19,612 firm-year observations from 2013–2019. Like their East Asian counterparts, ASEAN firms tend to exhibit concentrated ownership and are mostly family owned (Claessens et al. 2000). Family firms tend to exhibit greater cost behavior than non-family firms (Prabowo 2019). Family ownership is also related to lower managerial ability. Simamora (2021) find that family ownership negatively affects managerial ability. Furthermore, family firms have good reputations and have good relationships with suppliers, customers, and other outside stakeholders. Hence, they are more likely to hire less able managers (Simamora 2021).

Furthermore, ASEAN countries also have cultural similarities, such as low uncertainty avoidance, low masculinity, and a low long-term orientation, likely influencing cost stickiness (Kitching et al. 2016). Also, Asian countries' rapid economic growth arguably encourages their managers to have more optimistic future expectations than developed economies (Banker et al. 2011), increasing ASEAN firms' cost stickiness. Further, Ibrahim et al. (2022) indicate that only 24% of cost stickiness studies use developing countries as their research setting. They advise future cost stickiness research to focus on developing countries due to weaker regulatory quality and unstable financial and economic conditions.

This study uses a sample of non-financial industries. According to the Global Industrial Classification Standard (GICS classification), this study includes the following industries: energy (GICS code: 10), materials (GICS code: 15), industrial (GICS code: 20), consumer discretionary (GICS code: 25), consumer staples (GICS code: 30), health care (GICS code: 35), information technology (GICS code: 45), communication service (GICS code: 50), utilities (GICS code: 55), and real estate (GICS code: 60). ASEAN contributes significantly

to global economic outputs. In 2019, the total GDP (the value of all goods and services produced in an economy during a given period) of ASEAN countries was estimated at US\$3.2 trillion, making it the fifth largest economy in the world, after the United States, China, Japan, and Germany (ASEAN Secretariat 2020). The value of its exports contributed to the -0.3% decline in merchandise trade growth at the end of 2018 compared to 2019. This decline persisted until 2020 due to the COVID-19 pandemic. The movement restrictions due to COVID-19 significantly affected global trade and supply chains, including ASEAN, resulting in weakened international trade. Total ASEAN trade in goods decreased 8.0% in 2020 compared to 2019 due to a decline in exports and imports (ASEAN Secretariat 2020, 2021a). The total ASEAN export of services in 2019 was US\$444.8 billion, while the total ASEAN import of services was US\$399.8 billion (ASEAN Secretariat 2020).

The contribution of this study is twofold. First, we demonstrate that ASEAN firms exhibit cost stickiness. ASEAN firms arguably offer a unique research setting because they are mostly family owned, share a similar culture, and are located in developing countries, which can lead to different cost behavior than those in other regions. Furthermore, unlike prior studies that document that managerial ability increases cost stickiness, our findings suggest that for ASEAN firms, firms led by less able managers exhibit cost stickiness. In contrast, those led by more able managers do not exhibit cost stickiness. Managerial ability also strengthens the relationship between environmental uncertainty and cost stickiness, mainly in the less able manager subsample. As reflected in managerial ability, the results indicate that managers' rationality plays an important role in ASEAN firms' resource adjustment decisions. Less able managers are more risk-averse and retain their resources to deal with future uncertainties.

The remainder of the paper is organized as follows. Section 2 presents the literature review. The next section develops the hypotheses. Section 4 explains the research method. Section 5 demonstrates and discusses the findings and robustness checks. Lastly, Section 6 concludes.

2. Literature Review

2.1. Cost Stickiness

Traditional cost accounting assumes fixed costs are independent of activity levels, at least in the short run. Meanwhile, the relationship between variable costs and changes in activity is generally considered symmetrical and proportional (Baumgarten et al. 2010). However, these assumptions are challenged because costs do not always respond symmetrically and proportionally to activity changes. Furthermore, changes in costs depend not only on the magnitude of activity changes but also on the direction of the changes. Previous research has documented asymmetric cost behavior inconsistent with the traditional view (Anderson et al. 2003; Balakrishnan et al. 2004; Dierynck et al. 2012; Weiss 2010). Cost stickiness is defined as an increase in costs because an increase in activity volume is not followed by a symmetrical decrease in costs with a decrease in activity volume at the same level.

This study uses the cost asymmetry theory approach. Cost asymmetry theory argues that costs respond asymmetrically to activity change because managers make deliberate decisions in adjusting resources (Ibrahim et al. 2022). Cost stickiness occurs when an increase in costs due to an increase in activity is greater than a decrease in costs due to an equivalent decrease in activity (Anderson et al. 2003). Cost stickiness is related to resource adjustment costs, i.e., costs to reduce unused resources and restore them when activities return to their previous levels. For example, firms can provide severance pays to lay off employees when sales decline. When sales rebound, they have to incur costs and time in recruiting and training new employees. When sales decline, eliminating idle resources with high adjustment costs is arguably more costly than preserving them. Hence, resources with higher adjustment costs lead to greater cost stickiness (Anderson et al. 2003). Costs are sticky because reducing capacities is more difficult than increasing them, particularly those associated with committed resources. Cost stickiness is based on the premise that managers

have contracts for resources and that it is costly to terminate or renegotiate those contracts (Calleja et al. 2006). Managers' resource-related decisions depend not only on current sales but also on: (1) prior-period resource levels that affect current adjustment costs, (2) expected future sales that affect future adjustment costs, and (3) agency and behavioral problems that drive the differences between firms' optimal decisions and managers' actual decisions (Banker and Byzalov 2014).

Cost stickiness arises because of rational and irrational management decisions (Reimer 2019). Rational management decisions include adjustment costs and expected future sales, and firms that consider retaining unused resources less costly than adjustment costs prefer to retain these resources. Managers retain unused resources to meet expected increases in future sales and retaining resources when sales decline leads to cost stickiness. Meanwhile, overconfident behavior, empire-building motives, and earnings management incentives explain managers' irrational decisions.

Research on cost stickiness is based on the assumption of resource asymmetry to predict changes in sales and costs. Anderson et al. (2003) initiated cost stickiness research by examining whether selling, general, and administrative costs are sticky. This study documents cost stickiness in selling, general, and administrative expenses. Villiers et al. (2013) observed that audit fees are sticky. Via and Perego (2014) investigated the stickiness of various costs among Italian small and medium-sized firms. They revealed that only labor costs are sticky. Further, Subramaniam and Watson (2016) analyzed whether selling, general, and administrative costs and costs of goods sold are sticky in four major industrial groups (manufacturing, merchandising, finance, and service). The manufacturing industry exhibits the most sticky costs, while the merchandising industry has the least sticky costs. Previous research has also documented cost stickiness in certain Southeast Asia countries such as Indonesia (Warganegara and Tamara 2014; Widyasari 2018), Malaysia (Kontesa and Brahmana 2018), the Philippines (Uy 2016), and Vietnam (Huong 2018), as well as several Southeast Asian countries, including Singapore, Malaysia, and Indonesia (Krisnadewi and Soewarno 2019), and Malaysia, Philippines, Thailand, and Indonesia (Kresnawati et al. 2017).

Previous cost stickiness literature has largely focused on single determinants of cost stickiness, such as expected future sales (Anderson et al. 2003; Banker et al. 2014; Banker and Byzalov 2014), and firms' operational variables, including asset intensity (Anderson et al. 2003; Banker and Byzalov 2014), employee intensity (Anderson et al. 2003; Banker and Byzalov 2014), inventory intensity (Subramaniam and Watson 2016), and organizational capital (Mohammadi and Taherkhani 2017; Venieris et al. 2015). One of the cost stickiness determinants is active management behavior (Anderson et al. 2003). Personal considerations and agency problems also likely affect the decisions to maintain unused resources (Mojdehi 2017). Managers who are under pressure to increase profits tend to reduce costs aggressively for their firms' long-term goals (Xue and Hong 2016).

Previous literature underscores the role of managerial ability in explaining cost stickiness. Choi et al. (2018) compared cost stickiness in high and low managerial ability subsamples. They documented that firms led by more able managers exhibit greater SG&A cost stickiness. Rezaei and Barandagh (2016) also tested the relationship between managerial ability and cost stickiness. They empirically demonstrated that managerial ability increases cost stickiness because more able managers have better knowledge and intelligence of their business and make better resource-related judgments and decisions.

Uncertainty also likely affects cost stickiness. Banker et al. (2014) examined demand uncertainty and cost behavior. They found that increased demand uncertainty leads to a more rigid cost structure that relies less on more variable costs. Lee et al. (2019) explored whether cost stickiness is greater in election years due to political uncertainty. They found that costs are more asymmetric during election years than in non-election years, even after controlling for other firm-level and country-level determinants. Jin and Wu (2021) examined the effect of aggregate economic policy uncertainty (EPU) on cost stickiness. After controlling for election years, they documented that EPU negatively affects cost

stickiness and cost stickiness is greater during election years. Lastly, cost stickiness is arguably affected by competition. [Cheung et al. \(2018\)](#) examined whether competition factors affect cost stickiness. They found that cost stickiness is higher in industries with higher product differentiation, higher entry costs, and higher market size. Overall, they documented that external competition affects cost stickiness. [Li and Zheng \(2017\)](#) explored the effect of product market competition on cost stickiness; they documented that cost stickiness exists because of competition and increases when firms exhibit better financial performance. [Krisnadewi and Soewarno \(2019\)](#) explored the relationship between competitiveness and cost stickiness in the retail industry. They found that cost stickiness is higher due to competition pressure. [Lee et al. \(2021\)](#) explored the relationship between banking competition and cost stickiness. They revealed that banking competition increases the cost stickiness of non-financial firms by intensifying competitive pressure and providing credit facilities.

2.2. Managerial Ability

Managerial ability is broadly defined as a manager's knowledge and experience of the firm's activities and its business environments that enable them to use resources more efficiently ([Demerjian et al. 2012](#)). Managerial ability refers to a manager's knowledge, skills, and experience. Managerial ability, including the ability to analyze the markets and determine strategies and technology used to carry out the strategies, is acquired through experience in managing firms ([Kor 2003](#)). More able managers tend to have broader business knowledge, more ability to assess the situation and estimate product demands, a better understanding of technology and industry trends, and a better ability to manage employees efficiently ([Demerjian et al. 2012, 2013](#)). Firms led by more able managers will arguably be able to align resources with their operating environments, resulting in higher internal profitability than their growth opportunities because the ability can facilitate sustainable investment, especially when firms cannot easily find external financing.

[Demerjian et al. \(2012\)](#) defined managerial ability as the efficiency of managers in converting available resources into revenues relative to other firms in the same industry. This definition implies that firms led by managers with higher abilities produce greater outputs than similar firms using comparable inputs. Managers with higher abilities have better knowledge, understand business and technology trends, and have better abilities to choose and implement the appropriate strategies for their firms. Firms' internal management, such as strategy selection, the accuracy of decision making, and system improvement, contribute to greater outputs with the available resources. [Demerjian et al. \(2012\)](#) used two stages to measure managerial ability. The first stage was estimation using Data Envelopment Analysis (DEA). DEA is a constraint function that calculates the outputs that should be generated based on the input constraints and then compares the results with the actual outputs. The efficiency value is the difference between the maximum output values and the actual outputs. They then disentangled firm efficiency into firm-specific characteristics and managerial capabilities. In particular, they measured managerial ability by reducing firm efficiency with firm-specific characteristics.

2.3. Environmental Uncertainty

Environmental uncertainty is defined as the level of, or variability in, changes that characterize environmental activities relevant to a firm's operations, such as the unpredictable actions of consumers, suppliers, and regulators, which may not be attached due to continuous changes ([Ghosh and Olsen 2009](#)). These changes are stochastic and cannot be easily predicted. Environmental uncertainty reflects (1) the inability to predict the likelihood of future events, (2) the lack of information to predict causal relationships, and (3) the inability to predict the outcomes of previously made decisions ([Milliken 1987](#)).

Environmental uncertainty is a fundamental problem that must be faced by organizations' high-level administrators ([Huang et al. 2017](#)). Because the external environment constantly changes, managers must embrace change to succeed. Although the external

environment imposes numerous constraints on organizations, managers still have the option to respond strategically to overcome uncertainty (Ghosh and Olsen 2009). In other words, when confronted with an uncertain environment, managers have the discretion and flexibility to devise different survival strategies to obtain maximum returns for shareholders and themselves.

According to Xue et al. (2011), the three environmental dimensions that contribute the most to uncertainty are dynamism, munificence, and complexity. Dynamism results in volatile and unpredictable changes that firms must contend with in the business environment. For example, industries with high demand uncertainty are more dynamic. Munificence leads to growth opportunities in the industry. Munificent environments motivate firms to adopt strategies and structures that can help them seize growth opportunities. Lastly, complexity refers to the quantity and heterogeneity of task-environment elements that firms must manage. The environment becomes more complex as the number and heterogeneity of the entities (e.g., competitors) that a firm must contend with increase. Xue et al. (2011) further argue that the three dimensions of environmental uncertainty are interconnected but orthogonal constructs that describe firms' uncertain environments. Dynamism can be viewed from the demand-side uncertainty (consumers), complexity as the supply-side uncertainty (competition), and munificence as uncertainty driven by long-term industry trends.

2.4. Overview of ASEAN Economics

In 2020, the GDP of ASEAN countries was US\$3.0 trillion, making ASEAN one of the top five largest economies in the world after the United States, China, Japan, and Germany (ASEAN Secretariat 2021a). ASEAN experienced a positive trend in GDP from 2013–2019 but declined due to the COVID-19 pandemic in 2020. In terms of the disparity in economic size between ASEAN nations in 2020, Indonesia has the largest share at 35.3% of the region's total GDP, followed by Thailand (16.7 per cent), the Philippines (12.1 per cent), and Singapore (11.3 per cent), (ASEAN Secretariat 2021a). During the COVID-19 pandemic, only Vietnam and Brunei Darussalam experienced positive GDP growth in 2020; all other ASEAN member states experienced negative GDP growth. During the 2005–2020 period, the service sector dominated the ASEAN economy, as evidenced by the regional GDP growth from 46.6% in 2005 to 50.6% in 2020. In 2005, the manufacturing sector contributed 39.5% of the total GDP; by 2020, this percentage decreased to 35.8%. Additionally, the agriculture sector (farming, fishing, and forestry) decreased from 12.9% in 2005 to 10.5% in 2020 (ASEAN Secretariat 2021a).

ASEAN's top ten destinations for exports of goods in 2020 were intra-ASEAN trade (21.3%), China (25.7%), the United States (15.2%), EU-27 (9.4%), Japan (7.2%), Hong Kong (6.9%), the Republic of Korea (4.3%), Taiwan (2.8%), India (3.0%), and Australia (2.2%). Meanwhile, China (23.5%), ASEAN (21.2%), Japan (7.8%), USA (7.7%), Republic of Korea (7.7%), EU-27 (7.6%), Taiwan (6.7%), India (2.1%), Australia (1.9%), and Saudi Arabia (1.4%) were ASEAN's top ten origins of imported goods in 2020.

Table 1 displays the GDP share of major economic sector groups in ASEAN member countries during the 2018–2020 period. In 2018, 2019, and 2020, Myanmar had the highest share of the agriculture industry because agriculture is an important sector in this country. Brunei Darussalam had the highest share of the industrial sector during that period. All ASEAN members, excluding Brunei Darussalam, had the largest service sector shares.

Table 2 shows the percentage of employment in ASEAN countries by economic activity. Brunei Darussalam was dominated by employment in the public sector. Agricultural activities dominated Myanmar's employment structure, accounting for nearly half of all employment activities. Agricultural activity also dominated employment in Lao PDR, Cambodia, Thailand, and Vietnam. In Indonesia and the Philippines, two industries (agriculture and wholesales & retail trade; restaurant & hotel) dominated employment. In both industries, the employment rate is nearly identical. In Malaysia, employment is

dominated by the wholesale and retail trade, restaurant, and hotel industries. Lastly, the wholesale and other industries dominate employment in Singapore.

Table 1. ASEAN GDP Share of Major Group of Economic Sectors ⁽¹⁾, 2018–2020 (in per cent).

Country	2018			2019			2020		
	Agriculture	Industry	Services	Agriculture	Industry	Services	Agriculture	Industry	Services
Brunei Darussalam	0.8	62.9	38.2	0.8	63.1	37.9	0.8	64.2	36.8
Cambodia	18.0	35.3	39.3	16.7	36.6	39.0	17.3	37.3	37.7
Indonesia	12.5	39.8	43.6	12.4	39.4	44.1	12.4	39.4	44.1
Lao PDR	14.5	35.7	39.6	14.0	35.9	39.9	13.9	35.7	40.2
Malaysia	7.3	37.5	54.0	7.1	36.7	55.0	7.1	36.8	54.9
Myanmar	24.6	32.1	43.2	22.3	36.0	41.7	22.0	36.3	41.8
Philippines	9.7	30.6	59.8	9.2	30.2	60.6	10.2	29.2	60.7
Singapore	0.0	25.0	64.6	0.0	24.7	64.8	0.0	25.9	74.1
Thailand	6.3	35.2	60.5	6.2	34.5	61.7	6.2	34.2	59.6
Viet Nam	14.3	35.6	38.8	13.7	36.2	38.9	13.6	36.6	38.7

Note: ⁽¹⁾ Major economic sector groups: **Agriculture**, consisting of Fishing, Forestry. **Industries**, consisting of Mining and Quarrying, Manufacturing, Construction, and Utilities. **Services**, consisting of Wholesales & Retail Trade, Transportation & Storage, Accommodation & Food Services, Information & Communications, Finance & Insurance, Business Services, and Other Services Industries. Source: ASEAN Statistical Year Book 2021 ([Asean Secretariat 2021b](#), p. 44).

Table 2. Proportion of Employment in ASEAN by Economic Activity (in per cent).

Country	Year	Industry							
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Brunei Darussalam	2018	1.1	4.0	10.2	21.0	5.0	2.3	29.3	27.1
	2019	2.0	4.3	8.4	25.6	5.0	8.6	31.2	14.8
	2020	1.3	4.3	12.0	22.3	5.1	9.1	32.6	13.1
Cambodia	2011	58.5	9.2	2.7	11.3	2.9	0.4	2.6	12.4
	2012	49.2	11.8	4.5	15.3	4.0	0.4	2.9	11.9
	2019	33.1	16.7	10.0	20.2	5.0	2.5	5.9	6.7
Indonesia	2018	29.0	14.7	6.7	24.7	5.1	3.1	10.1	6.6
	2019	27.5	14.9	6.7	25.4	5.1	3.2	10.4	6.7
	2020	29.8	13.6	6.3	25.9	5.1	2.9	9.8	6.7
Lao PDR	2010	76.5	5.4	2.5	9.5	1.1	0.3	4.7	-
	2015	78.9	3.9	3.3	5.8	0.9	0.4	7.0	-
	2017	45.4	11.5	6.8	27.1	3.2	0.9	2.0	3.0
Malaysia	2018	13.3	21.2	10.7	34.1	7.8	3.7	6.1	3.0
	2019	12.1	21.0	10.0	32.5	6.9	6.4	6.3	4.9
	2020	12.4	19.9	9.3	34.2	7.3	6.6	6.4	3.9
Myanmar	2017	50.6	10.5	4.2	17.3	4.8	-	5.7	6.0
	2018	48.2	11.1	5.2	18.3	5.3	2.0	3.9	6.0
	2019	48.9	10.4	5.6	20.0	5.8	2.1	3.4	3.8
Philippines	2018	32.0	12.4	13.3	26.6	12.4	2.7	-	0.7
	2019	22.9	8.5	9.8	24.4	9.1	1.9	-	16.8
	2020	26.0	8.1	10.6	25.9	8.7	2.8	6.5	11.4
Singapore ⁽¹⁾	2018	-	10.4	4.7	22.1	13.2	24.7	23.9	1.0
	2019	-	9.6	4.4	21.9	13.7	25.2	24.2	1.1
	2020	-	9.6	4.4	20.9	14.7	25.5	24.0	1.0
Thailand	2018	35.8	18.4	6.2	26.8	4.3	3.2	1.6	3.8
	2019	35.0	18.1	6.5	26.9	4.4	3.2	1.8	4.0
	2020	35.0	17.7	6.6	27.1	4.6	3.4	1.6	3.9
Viet Nam	2018	41.2	20.2	8.6	20.2	4.2	1.9	0.7	3.0
	2019	37.5	22.5	9.2	20.0	4.6	2.2	0.7	3.3
	2020	35.7	23.1	9.6	20.5	4.7	2.3	0.7	3.2

Note: ⁽¹⁾ a. Data for Singapore refers to the residents only. b. Data for Agriculture, Fishery & Forestry of Singapore are subsumed under “Others (Mining & Quarrying, Electricity, Gas & Water, Unknown)” ‘-’ not available at the time of publication. Industry: (1) Agriculture, Fishery & Forestry, (2) Manufacturing, (3) Construction, (4) Wholesales & Retail Trade, Restaurants, & Hotels, (5) Transportation, Storage, Information and Communication, (6) Finance, Insurance, Real Estate, and Business Services, (7) Public Services, (8) Others (Mining & Quarrying, Electricity, Gas & Water, Unknown). Source: ASEAN Statistical Year Book 2021 ([Asean Secretariat 2021b](#), p. 34).

3. Hypothesis Development

3.1. Managerial Ability and Cost Stickiness

Managerial ability is broadly defined as managers' firm-related knowledge and experience to utilize resources more efficiently (Demerjian et al. 2012). Managerial ability refers to managers' knowledge, skills, and experience. Managers obtain abilities from their experience in managing firms, including assessing the markets, developing strategies, and deploying technology based on the strategies (Kor 2003). More able managers have better knowledge of business and technology trends to assess situations, estimate product demands better, and manage their employees more efficiently. Consequently, firms led by more able managers likely align resources with their operating environments and exhibit high internal profitability. Internal profitability is important for growth opportunities to provide continuous investment facilities, mainly when firms cannot access external funds easily.

Previous cost stickiness studies mostly examine the effects of various operational variables on cost stickiness. They have not explored the possibility that managers have different abilities in making decisions to utilize resources effectively in various economic conditions. They assume that managers generally can internalize adjustment costs in resource management. Managers need to make decisions about resource capacity to achieve production efficiencies when operating their firms. For this reason, managers rely on their abilities, such as understanding the operating environment, predicting future demand, and analyzing possible demand realizations. These abilities differ between individual managers because managers' innate ability develops through experiential learning (Demerjian et al. 2012, 2013). These abilities enable managers to assess the benefits and risks of each option and determine the optimal level of committed resources.

Economic conditions do not always automatically increase cost stickiness but reflect management actions. Hence, managers must understand these implications and use slack resources effectively (Choi et al. 2018). They need their expertise and ability to use relevant information when assessing adjustment costs and slack resources value. More able managers better understand how to utilize resources that will increase future value. However, less able managers do not fully incorporate market conditions into their resource adjustment decisions, and they likely undervalue slack resources or ignore adjustment costs, making costs less sticky.

More competent managers can manage resources efficiently and address resource shortage problems due to increasing demands. Thus, retaining resources is not their goal (Banker et al. 2022). They can manage resources efficiently and assess slack resources to identify resource adequacy levels that allow them to avoid holding excessive resources. Reducing resources when demand increases reduces cost stickiness. Meanwhile, less able managers may lack the ability to assess the adjustment costs, preventing them from maintaining sufficient slack resources. They cannot effectively mitigate resource congestion problems that motivate them to retain resources. In this respect, retaining resources when demand decreases leads to greater cost stickiness.

ASEAN firms are mostly family owned and place family members in top management teams. They have greater concerns about owning families' interests (reputation) than their business interests or best management practices (Simamora 2021). Furthermore, Simamora (2021) found that founding-family ownership negatively affects managerial ability because family firms hire less able managers. Tabor et al. (2018) revealed that the family firms' managers prioritize maintaining owning families' reputations over firms' performance. Lemos and Scur (2018) explained that family firms' managers tend to follow family rules, such as not firing underperforming employees, to preserve owning families' reputations rather than implementing best management practices.

Family firms may perform better not because of higher managerial abilities but because of their strong characteristics. Family firms with strong characteristics can increase their efficiencies, such as strong market positions, positive cash flows, and lower business

complexity. Hence, they do not need managers with higher managerial skills to exhibit better performance (Simamora 2021).

Founding families' involvement on boards also arguably leads to lower managerial ability. Family firms' top managers tend to prioritize family shareholders' interests over firms' interests because preserving founding families' reputations is considered more important than managers' business skills (Simamora 2021).

This study proposes that ASEAN firms led by less able managers exhibit greater cost stickiness than those led by more able managers. Managers with different managerial ability levels tend to make different resource adjustment decisions, leading to different cost behavior. Prior studies also document that managerial ability increases cost stickiness (Choi et al. 2018; Rezaei and Barandagh 2016). We take a different position from these papers with the following arguments. Firstly, more able managers can manage their resources efficiently and solve problems due to sales growth-induced resource shortages (Banker et al. 2022). They understand their firms better, predict future conditions more reliably, and manage business model changes more efficiently. These superior capabilities enable them to resolve resource-related problems and motivate them not to retain resources, thus leading to lower cost stickiness.

More able managers take the initiative to adjust within the firm in response to changing environments and take innovative measures to increase their resources to survive in the long term. They use their professional and academic knowledge to ensure the optimal utilization of scarce firm resources in changing environments. In addition, they use their skills and experience to achieve sustainable growth. Managers' personality traits and competence are the most crucial factor in maximizing resource utilization (Inam Bhutta et al. 2021). By maximizing the utilization of resources, more able managers improve their firms' basic performance. Their capabilities and competence enable them to manage resources optimally to ensure their firms' long-term survival. They tend to reduce resources when sales decline, resulting in lower cost stickiness.

Due to potential opportunity costs in terms of future compensation and personal reputation, more able managers are better equipped and more motivated to allocate firm resources efficiently (Inam Bhutta et al. 2021). They use their abilities to increase profits and avoid losses to earn higher compensation. When managers have incentives to avoid losses or meet analysts' earnings forecasts, they will accelerate downward resource adjustments when sales decline, reducing cost stickiness (Kama and Weiss 2013).

Concerning risk-taking, more able managers accept risk-taking while less able managers avoid it. Less able managers are associated with lower firm risk-taking activities and values (Yung and Chen 2018). Consequently, they tend to retain slack resources because they do not wish to run the risk of a future resource shortage. These managers also tend to avoid the risk of resource shortage caused by reducing resources when sales decrease and being unable to recover resources when sales return to their original levels. Retaining slack resources when sales decline results in an increase in cost stickiness.

Secondly, ASEAN firms are mostly family owned. These firms' managers are more concerned with firms' reputations than best management practices, implying that managerial ability is considered less important. Family firms also tend to hire less able managers (Simamora 2021). These managers are arguably less able to manage resources efficiently, estimate slack resources, convert slack resources into future values, and respond more to negative signals about future sales. They also tend to retain resources to run their firms continuously. In this respect, these managers tend not to adjust resources because resource adjustments are costly and require higher expertise. Retaining resources leads to higher cost stickiness.

H1: *Firms led by less able managers exhibit greater cost stickiness than those led by more able managers.*

3.2. Environmental Uncertainty, Managerial Ability, and Cost Stickiness

Environmental uncertainty refers to the magnitude or variability of changes associated with environmental activities relevant to firms' operations, such as the stochastic actions of consumers, suppliers, and regulators that cannot be predicted easily due to continuous changes (Ghosh and Olsen 2009). Environmental uncertainty reflects: (1) the inability to predict the likelihood of future events; (2) the lack of information to predict causal relationships; (3) the inability to predict the outcomes of decisions made (Milliken 1987).

Top managers have to deal with environmental uncertainty as one of their organizations' fundamental problems. Because external environments change continuously, managers must consider changes critical to managing their organizations successfully (Huang et al. 2017). Although external environments impose significant constraints on firms, managers can still respond strategically to overcome uncertainty (Ghosh and Olsen 2009). In other words, when confronted with uncertain environments, managers retain the discretion and flexibility to develop different strategies to survive the environments and then generate maximum returns for shareholders and themselves.

In uncertain environments, managerial abilities play an important role in making resource-related decisions. High uncertainty reduces one's ability to predict future conditions because it involves more complex, changing, and heterogeneous environments (Milliken 1987). Consequently, managers often find it difficult to analyze conditions and respond to these uncertainties accurately. Such situations distinguish more and less able managers. More able managers exhibit better risk-taking abilities (Chen et al. 2015). They are also motivated to demonstrate their superior abilities in highly uncertain environments to build their reputations and increase their well-being (Srivastava 2013). More able managers can use relevant information to determine adjustment costs and slack resource values. More knowledgeable managers understand better how to use resources to create future value. They believe that their decisions will improve firms' performance and consequently are willing to consider signals about favorable (optimistic) demands when adjusting resources. Demerjian et al. (2012) explain that managers with higher managerial skills understand their industries and technological trends better, predict sales more accurately, invest in projects with higher net present values, and manage resources more efficiently than those with lower abilities.

Environmental uncertainty increases risks that more able managers can control. These managers can also manage resources efficiently and better understand business and technology trends. Higher managerial skills are crucial to managing unrelated segments with different operational styles and corporate cultures (Bushman et al. 2004). Thus, more able managers can manage different segments and slack resources to enhance future profits, predict future sales more accurately, provide optimistic signals about future sales, and manage resources efficiently so that retaining resources is not their goal. Particularly, to cope with uncertainty, the more able manager tends to keep their resources as needed. More able managers can cope with changing sales growth, which reduces uncertainty in their operating environment and generates more stable profits. More able managers can handle environmental uncertainty with their ability by adjusting resources when demand falls and returns to the previous level. Hence, managers tend not to retain resources when demand decrease, leading to lower cost stickiness.

Conversely, less able managers do not appreciate business market conditions and may undervalue slack resources or ignore adjustment costs. They are also less responsive to optimistic demand information but are more sensitive to pessimistic signals. Less able managers are less efficient in managing resources and cannot add adjustment costs so they cannot maintain sufficient slack resource levels (Choi et al. 2018). Managers with low managerial ability manage uncertainty by selecting less risky options, such as retaining resources when sales decline to deal with uncertain future demand. These managers choose not to adjust resources because resource adjustments are more difficult, riskier, and costly. Retaining resources when demands decline leads to greater cost stickiness.

Family firms, the most common firms in ASEAN countries, face environmental uncertainty with reputational competitive advantages. Their shareholders' commitments to maintain reputations increase their financial performance because reputations offer long-term solid relationships with suppliers and creditors. Simamora (2021) argues that family firms do not need more able managers to deal with suppliers and creditors effectively in such conditions. Conversely, non-family firms need more able managers to deal with suppliers and creditors because they have less reputational competitive advantages.

This study predicts that lower managerial ability strengthens the effect of environmental uncertainty on cost stickiness. More able managers can handle environmental uncertainty better by managing resources and avoiding sales growth-induced resource shortages. Consequently, retaining resources is not their goal. Reducing resources when demand decreases leads to lower cost stickiness. Meanwhile, less able managers cannot manage limited resources effectively. They prefer maintaining idle resources to incurring adjustment costs. They also cannot handle environmental uncertainty effectively. Consequently, slack resources cannot be exploited for future profits. Less able managers also tend to ignore optimistic sales information and respond more to pessimistic signals that their sales predictions are likely inaccurate. They tend to maintain idle resources to obtain resources easily under uncertain conditions and are reluctant to incur adjustment costs. Lastly, family firms use their reputational and relational competitive advantage to cope with environmental uncertainty, implying that they consider managerial ability less important. Hence, their managers tend to retain resources to maintain their reputations. Retaining resources when demand declines lead to higher cost stickiness

H2: *The effect of environmental uncertainty on cost stickiness is stronger in firms led by less able managers than by more able managers.*

4. Methods

This study uses data from non-financial listed firms in five ASEAN countries (Indonesia, Malaysia, Philippines, Thailand, and Vietnam) from 2013–2019. We excluded Singapore because this country is the only developed country in Southeast Asia. We excluded Cambodia, Lao PDR, and Myanmar due to a lack of data (data is not available in the Thompson Reuters database). Lastly, Brunei Darussalam was excluded because they have no stock exchange. We obtained financial data from the Thompson Reuters database and GDP growth data from the World Bank.

Following Anderson et al. (2003) and Banker et al. (2013), we eliminated missing, zero, or negative data for SG&A costs for t and the $t - 2$. This study also deletes observations with $SGA_t > Sales_t$ or $SGA_{t-1} > Sales_{t-1}$. The final sample was 19,612 firm-year observations. Table 3 explains our sample selection procedure.

Table 3. Sample Selection Procedure.

Sample Selection Criteria	Total Observations
Firm-year observations (non-financial firms in Indonesia, Malaysia, Philippines, Thailand, and Vietnam)	28,539
Deleting observations with $SG\&A_t > Sales_t$	27,783
Deleting observations with missing and negative financial data (sales, SG&A cost)	20,841
Deleting observations with missing data (managerial ability-related data)	20,201
Deleting observations with extreme values in the change in SG&A cost, sales, and asset intensity	19,612

We focused on SG&A costs because these costs represent a significant proportion of total operating and indirect costs (C. X. Chen et al. 2012). SG&A costs are closely related to the procurement and development of organizational capital, such as information

systems, employee training, research and development, consulting, and promotion costs (Lev et al. 2009).

Following Anderson et al. (2003) and Chen et al. (2012), we employed the following model to test hypothesis 1 and ran the equation for the high and low managerial ability subsamples.

$$\begin{aligned} \Delta \text{LnSGA}_{i,t} = & \gamma_0 + \gamma_1 \Delta \text{LnSales}_{i,t} + \gamma_2 \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \gamma_3 \text{AsInt}_{i,t} * \text{Dec}_{i,t} \\ & * \Delta \text{LnSales}_{i,t} + \gamma_4 \text{SucDec}_{i,t} * \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} \\ & + \gamma_5 \text{Growth}_{i,t} * \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \gamma_6 \text{AsInt}_{i,t} \\ & + \gamma_7 \text{SucDec}_{i,t} + \gamma_8 \text{Growth}_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (1)$$

To test the second hypothesis, we followed Anderson et al. (2003) and Chen et al. (2012) by employing the following model and running the equation for the high and low managerial ability subsamples.

$$\begin{aligned} \Delta \text{LnSGA}_{i,t} = & \beta_0 + \beta_1 \Delta \text{LnSales}_{i,t} + \beta_2 \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \beta_3 \text{EU}_{i,t} * \text{Dec}_{i,t} \\ & * \Delta \text{LnSales}_{i,t} + \beta_4 \text{AsInt}_{i,t} * \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} \\ & + \beta_5 \text{SucDec}_{i,t} * \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \beta_6 \text{Growth}_{i,t} * \text{Dec}_{i,t} \\ & * \Delta \text{LnSales}_{i,t} + \beta_7 \text{EU}_{i,t} + \beta_8 \text{AsInt}_{i,t} + \beta_9 \text{SucDec}_{i,t} + \beta_{10} \text{Growth}_{i,t} \\ & + \varepsilon_{i,t} \end{aligned} \quad (2)$$

SGA and Sales are deflated SG&A costs and net sales, respectively. The i and t subscripts refer to firm i and year t , respectively. Dec is a dummy variable that equals one if sales decrease in the current year and zero otherwise.

We followed Demerjian et al. (2012) in measuring managerial ability. Demerjian et al. (2012) measure managerial ability as managers' efficiency in converting resources into income relative to other firms in the same industry. More able managers produce greater outputs than others using the same input levels. Specifically, they use DEA to estimate industrial efficiency by comparing each firm's sales (output) with seven criteria (inputs): cost of goods sold, selling and administrative expenses, net fixed assets, net operating leases, net research and development expenses, goodwill purchases, and other intangible assets. Furthermore, the efficiency measure incorporates managerial and firm performance. Consequently, the efficiency score is then regressed against the following firm-specific characteristics: size, market share, positive free cash flow value, age, business segment, and country currency rate indicator using the Tobit approach. The residual values of the Tobit regression represent managerial ability score. This study classifies the observations into high and low managerial ability subsamples based on the median value of managerial ability scores.

The environmental uncertainty (EU) variable consists of three factors: munificence, dynamism, and complexity. Munificence is measured using sales growth and operating income growth. Sales growth (operating income) is the antilog of the regression coefficient of the natural logarithm of total sales (operating income) regression against a year variable index over a five-year period (Xue et al. 2011). Dynamism is operationalized using the volatility of sales and operating income. Sales volatility (operating income) is the antilog standard error of the natural logarithm of total sales (operating income) against a year index variable over a five-year period (Xue et al. 2011). Complexity is measured using the business and geographical segments' Herfindahl indexes (Bushman et al. 2004). The multi-item measures of each dimension are then converted into single-item measures by taking a weighted average (weighted by loading factor value in the underlying principle component analysis) (Xue et al. 2011).

This study uses the following control variables: asset intensity, successive decrease, and GDP growth. Asset intensity (AsInt) is measured by dividing total assets by net sales (Prabowo et al. 2018). We operationalize the successive decrease variable (SucDec) with a dummy variable that equals one if $\text{Sales}_{it} < \text{Sales}_{it-1} < \text{Sales}_{it-2}$ and zero otherwise

(Anderson et al. 2003). We run Equation (2) in the more able managers and less able managers sub-samples to test H2.

5. Empirical Results

5.1. Descriptive Statistics

Table 4 presents the descriptive statistics. Our main variables are ΔLogSGA , $\Delta\text{LogSales}$, and the interaction term of Dec and ΔLogSGA . The mean value of ΔLogSGA is 0.037, implying that the log value of changes in selling, general and administrative costs is 3.7%. The mean value of $\Delta\text{LogSales}$ is 0.019, indicating that the log value of sales change is 1.9%. The Dec variable (a decrease in sales) is a dummy variable that equals one if current sales decline and zero otherwise. The mean value of Dec is 0.443, suggesting that 44.3% of observations experienced a sales decrease. The mean value of the environmental uncertainty (EU) variable is 0.726 and the highest and lowest values are 1.698 and 0.038, respectively. For the managerial ability (MA) variable, the more able managers subsample consists of 10,251 observations, representing 52.3% of total observations. Meanwhile, the less able managers subsample consists of 9361 observations (47.7% of total observations). Table 5 displays the correlation matrix between the variables.

Table 4. Descriptive statistics.

Variable	Mean	Std. Dev.	Median
ΔLnSGA	0.037	0.395	0.031
$\Delta\text{LnSales}$	0.019	0.383	0.022
EU	0.726	0.191	0.725
MA	0.523	0.499	1
Dec	0.443	0.498	0
AsInt	2.872	5.063	0.014
SucDec	0.211	0.408	0
Growth	0.052	0.014	0.010

Notes: ΔLnSGA = Ln changes in SGA cost; $\Delta\text{LnSales}$ = Ln changes in sales; EU = environmental uncertainty; MA = managerial ability dummy; Dec = decrease dummy; AsInt = asset intensity; SucDec = successive decrease; Growth = GDP growth.

Table 5. Correlation matrix.

Variables	ΔLnSGA	$\Delta\text{LnSales}$	EU	MA	Dec	AsInt	SucDec	Growth
ΔLnSGA	1							
$\Delta\text{LnSales}$	0.414 ***	1						
EU	0.148 ***	0.170 ***	1					
MA	0.009	0.0974 ***	0.0874 ***	1				
Dec	−0.247 ***	−0.579 ***	−0.140 ***	−0.0845 ***	1			
AsInt	−0.0411 ***	−0.183 ***	−0.0465 ***	−0.128 ***	0.0947 ***	1		
SucDec	−0.160 ***	−0.343 ***	−0.156 ***	−0.0914 ***	0.579 ***	0.0834 ***	1	
Growth	−0.0155 **	0.00392	−0.0179 **	0.0268 ***	−0.0178 **	0.0444 ***	−0.0150 **	1

ΔLnSGA , Ln changes in SGA cost; $\Delta\text{LnSales}$, Ln changes in sales; EU, environmental uncertainty; MA, managerial ability dummy; Dec, decrease dummy; AsInt, asset intensity; SucDec, successive decrease; Growth, GDP growth. *** significance at the 1%; ** significance at the 5%.

5.2. Regression Result

Column (1) in Table 6 (all sample analysis) shows that our sample exhibits cost stickiness behavior, with a significantly positive value of $\Delta\text{LnSales}$ (γ_1) (0.484, $t = 9.40$) and a significantly negative value of $\text{Dec} \times \Delta\text{LnSales}$ (γ_2) (−0.157, $t = -1.87$). On average, SG&A costs increase by 0.484% for every 1% increase in net sales, but only decrease by 0.327% (0.484−0.157%) for every 1% decrease in net sales.

Table 6. Results of the Regression Analysis: Hypothesis 1.

Variable	Dependent Variable: ΔLnSGA		
	(1) All Sample	(2) More Able	(3) Less Able
	Coefficient (t)	Coefficient (t)	Coefficient (t)
$\Delta \text{LnSales}(\gamma_1)$	0.484 *** (9.40)	0.359 *** (7.30)	0.641 *** (6.10)
$\text{Dec} * \Delta \text{LnSales}(\gamma_2)$	−0.157 * (−1.87)	0.106 (0.81)	−0.409 *** (−2.76)
$\text{AsInt} * \text{Dec} * \Delta \text{LnSales}(\gamma_3)$	0.003 (1.62)	−0.001 (−0.22)	0.004 ** (2.14)
$\text{SucDec} * \text{Dec} * \Delta \text{LnSales}(\gamma_4)$	−0.072 (−1.20)	−0.09 (−0.78)	0.008 (0.11)
$\text{Growth} * \text{Dec} * \Delta \text{LnSales}(\gamma_5)$	−4.840 ** (−1.97)	0.074 (0.02)	−7.224 *** (−2.63)
AsInt	0.005 * (1.90)	0.004 (0.74)	0.005 (1.58)
SucDec	−0.019 * (−1.72)	−0.015 (−0.93)	0.003 (0.15)
Growth	0.097 (0.22)	0.678 (1.07)	−0.78 (−1.23)
Constant	−0.017 * (−1.89)	0.0009 (0.08)	−0.037 (−2.08) **
N	19612	10251	94361
R-sq	0.173	0.112	0.227
Fixed effect	yes	yes	yes
Hettest	robust	robust	robust

Notes: ΔLnSGA = Ln changes in SGA cost, $\Delta \text{LnSales}$ = Ln changes in sales, MA = managerial ability dummy, Dec = decrease dummy, $AsInt$ = asset intensity, $SucDec$ = successive decrease, $Growth$ = GDP growth. ***, **, * denote significance at the 1%, 5%, and 10% levels, respectively. Model: $\Delta \text{LnSGA}_{i,t} = \gamma_0 + \gamma_1 \Delta \text{LnSales}_{i,t} + \gamma_2 \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \gamma_3 \text{AsInt}_{i,t} * \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \gamma_4 \text{SucDec}_{i,t} * \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \gamma_5 \text{Growth}_{i,t} * \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \gamma_6 \text{AsInt}_{i,t} + \gamma_7 \text{SucDec}_{i,t} + \gamma_8 \text{Growth}_{i,t} + \varepsilon_{i,t}$.

Table 6, column (2) displays the regression result for the more able managers subsample. The result suggests a significantly positive coefficient of $\Delta \text{LnSales}$ (γ_1) (0.359, $t = 7.30$) and an insignificant value of $\text{Dec} * \Delta \text{LnSales}$ (γ_2) (0.106, $t = 0.81$). Hence, firms led by more able managers do not exhibit cost stickiness. Meanwhile, the less able managers subsample exhibits cost stickiness. Specifically, Table 6 column (3) shows the regression result for the less able managers subsample. The result suggests a significantly positive coefficient of $\Delta \text{LnSales}$ (γ_1) (0.641, $t = 6.10$) and a significantly negative coefficient value of $\text{Dec} * \Delta \text{LnSales}$ (γ_2) (−0.409, $t = -2.76$). Thus, hypothesis 1, predicting that firms led by less able managers exhibit greater cost stickiness than those led by more able managers, is empirically supported.

Table 7 demonstrates the regression results for H2. The test results show that the coefficient of $\text{EU} * \text{Dec} * \Delta \text{LnSales}$ (β_3) is not significant in the more able managers subsample (−0.363, $t = -1.18$) but significantly negative in the less able managers subsample (−0.348, $t = -2.81$). The Chow test produces a significant result ($F = 11.69$, $p = 0.000$), indicating that the effect of environmental uncertainty on cost stickiness is stronger in firms led by less able managers than in those led by more able managers. In sum, hypothesis two (H2) is empirically supported.

Table 7. Results of the Regression Analysis: Hypothesis 2.

Dependent Variable: ΔLnSGA		
	More Able	Less Able
Variables	Coefficient (t)	Coefficient (t)
$\Delta \text{LnSales}$ (β_1)	0.361 *** (7.59)	0.645 *** (6.17)
$\text{Dec} * \Delta \text{LnSales}$ (β_2)	0.099 (0.79)	−0.426 *** (−2.89)
$\text{EU} * \text{Dec} * \Delta \text{LnSales}$ (β_3)	−0.363 (−1.18)	−0.348 *** (−2.81)
$\text{AsInt} * \text{Dec} * \Delta \text{LnSales}$ (β_4)	0.0003 (0.04)	0.005 ** (2.47)
$\text{SucDec} * \text{Dec} * \Delta \text{LnSales}$ (β_5)	−0.119 (−0.96)	−0.0008 (−0.01)
$\text{Growth} * \text{Dec} * \Delta \text{LnSales}$ (β_6)	0.600 (0.13)	−7.933 *** (−3.01)
EU	0.147 *** (3.00)	0.058 (1.46)
AsInt	0.007 (1.25)	0.006 * (1.92)
SucDec	−0.016 (−0.92)	0.002 (0.12)
Growth	0.547 (0.86)	−0.753 (−1.21)
Constant	−0.106 *** (−2.70)	−0.079 ** (−2.15)
Chow test	11.69 ***	
N	10251	9361
R-sq	0.141	0.2314
Fixed effect	Yes	Yes
Hettest	robust	robust

Notes: ΔLnSGA , Ln changes in SGA cost; $\Delta \text{LnSales}$, Ln changes in sales; EU, environmental uncertainty; MA, managerial ability dummy; Dec, decrease dummy; AsInt, asset intensity; SucDec, successive decrease; Growth, GDP growth. *** significance at the 1%; ** significance at the 5%; * significance at the 10%. Model: $\Delta \text{LnSGA}_{i,t} = \beta_0 + \beta_1 \Delta \text{LnSales}_{i,t} + \beta_2 \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \beta_3 \text{EU}_{i,t} * \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \beta_4 \text{AsInt}_{i,t} * \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \beta_5 \text{SucDec}_{i,t} * \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \beta_6 \text{Growth}_{i,t} * \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \beta_7 \text{EU}_{i,t} + \beta_8 \text{AsInt}_{i,t} + \beta_9 \text{SucDec}_{i,t} + \beta_{10} \text{Growth}_{i,t} + \varepsilon_{i,t}$

5.3. Robustness Test

We ran the robustness test for the first hypothesis testing results by collapsing the managerial ability variable into a dummy one that equals one for more able managers and zero for less able managers. We then interacted the dummy variable with $\text{Dec} * \Delta \text{LnSales}$ in the following regression equation:

$$\begin{aligned} \Delta \text{LnSGA}_{i,t} = & \alpha_0 + \alpha_1 \Delta \text{LnSales}_{i,t} + \alpha_2 \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \alpha_3 \text{MA}_{i,t} * \text{Dec}_{i,t} \\ & * \Delta \text{LnSales}_{i,t} + \alpha_4 \text{AsInt}_{i,t} * \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} \\ & + \alpha_5 \text{SucDec}_{i,t} * \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \alpha_6 \text{Growth}_{i,t} * \text{Dec}_{i,t} \\ & * \Delta \text{LnSales}_{i,t} + \alpha_7 \text{MA}_{i,t} + \alpha_8 \text{AsInt}_{i,t} + \alpha_9 \text{SucDec}_{i,t} \\ & + \alpha_{10} \text{Growth}_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (3)$$

The test results can be seen in Table 8. Table 8 shows that our sample exhibits cost stickiness behavior, with a significantly positive value of $\Delta \text{LnSales}$ (α_1) (0.498, $t = 11.56$) and a significantly negative value of $\text{Dec} * \Delta \text{LnSales}$ (α_1) (−0.113, $t = -1.75$). On average, SG&A costs increase by 0.498% for every 1% increase in net sales, but only decrease by 0.385% (0.498−0.113%) for every 1% decrease in net sales. Furthermore, $\text{MA} * \text{Dec} * \Delta \text{LnSales}$ (α_3) shows a significantly positive coefficient (0.183, $t = 1.84$). The results show that more able managers significantly reduces cost stickiness. In other words, firms led by more able

managers exhibit lower cost stickiness than those led by less able managers. The results for our robustness test support the main results.

Table 8. Robustness test H1.

Dependent Variable: ΔLnSGA	
Variables	Coefficient (t)
$\Delta \text{LnSales}(\alpha_1)$	0.498 *** (11.56)
$\text{Dec} * \Delta \text{LnSales}(\alpha_2)$	−0.113 * (−1.75)
$\text{MA} * \text{Dec} * \Delta \text{LnSales}(\alpha_3)$	0.183 * (1.84)
$\text{AsInt} * \text{Dec} * \Delta \text{LnSales}(\alpha_4)$	0.002 (1.40)
$\text{SucDec} * \text{Dec} * \Delta \text{LnSales}(\alpha_5)$	−0.048 (−0.94)
$\text{Growth} * \text{Dec} * \Delta \text{LnSales}(\alpha_6)$	−2.958 (−1.33)
MA	−0.0418 ** (−2.26)
AsInt	0.0018 (1.44)
SucDec	−0.0329 *** (−3.35)
Growth	−0.901 *** (−3.91)
Constant	−0.00586 (−0.93)
N	19621
R-sq	0.1798
Hetteest	robust

Notes: ΔLnSGA , Ln changes in SGA cost; $\Delta \text{LnSales}$, Ln changes in sales; MA, managerial ability dummy; Dec, decrease dummy; AsInt, asset intensity; SucDec, successive decrease; Growth, GDP growth. *** significance at the 1%; ** significance at the 5%; * significance at the 10%. Model: $\Delta \text{LnSGA}_{i,t} = \alpha_0 + \alpha_1 \Delta \text{LnSales}_{i,t} + \alpha_2 \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \alpha_3 \text{MA}_{i,t} * \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \alpha_4 \text{AsInt}_{i,t} * \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \alpha_5 \text{SucDec}_{i,t} * \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \alpha_6 \text{Growth}_{i,t} * \text{Dec}_{i,t} * \Delta \text{LnSales}_{i,t} + \alpha_7 \text{MA}_{i,t} + \alpha_8 \text{AsInt}_{i,t} + \alpha_9 \text{SucDec}_{i,t} + \alpha_{10} \text{Growth}_{i,t} + \varepsilon_{i,t}$.

5.4. Discussion

Cost stickiness research assumes that managers are equally rational and able when making resource adjustment decisions. However, managers have different abilities and likely make different resource adjustment decisions. Previous cost stickiness and managerial literature documents that firms led by more able managers exhibit greater cost stickiness than those led by less able managers (Choi et al. 2018). However, using data from ASEAN firms, we observe that only firms led by less able managers exhibit cost stickiness.

More able managers manage their resources efficiently and can solve problems due to sales growth-induced resource shortages. They can also invest more strategically and quickly deal with increased growth; retaining resources is not their goal. Previous research has documented that more able managers can generate higher income growth resulting in less fluctuating earnings (Bonsall et al. 2017). Prior studies have also shown that managerial ability positively affects earnings persistence (Demerjian et al. 2013) and income smoothing (Baik et al. 2019). Overall, previous research documents that more able managers understand their firms better, predict future conditions more accurately, and manage business model changes more efficiently. Their higher managerial ability enables them to resolve business problems, especially resource-related ones, and motivates them not to retain resources, leading to no cost stickiness.

Managers are also motivated to meet financial targets by increasing profits and avoiding losses. Due to potential opportunity costs in terms of future compensation and personal reputation, more able managers can allocate firm resources more efficiently (Inam Bhutta et al. 2021). They can manage resources to avoid losses. Reducing idle resources when sales decline will reduce costs, resulting in higher profits and avoiding losses. Eventually, reducing resources when sales decline also reduces cost stickiness.

Concerning risk-taking, more able managers accept risk-taking while less able managers avoid it. Less able managers are associated with decreased firm risk-taking activities and values (Yung and Chen 2018). Thus, they retain slack resources to mitigate the risk of a future resource shortage. These managers also tend to avoid the risk of resource shortage caused by reducing resources when sales decline and being unable to recover resources when sales return to their original level, leading to increased cost stickiness.

Meanwhile, less able managers cannot manage resources efficiently and predict future sales reliably. They are also less able to assess slack resources and convert them into future profits. Consequently, they tend to retain resources because doing so is easier than adjusting resources (reducing resources when sales decline and reacquiring them when sales return to the previous level).

Less able managers tend to avoid taking risks and thus are associated with decreased firm risk-taking activities and values (Yung and Chen 2018). They are less willing to take the risk of resource shortage. Hence, they retain resources even when sales decline. They also do not want to run the risk of being unable to reacquire resources when they have to reduce resources due to declining sales. Thus, they tend to retain resources to ensure their firms can meet future sales demands. Retaining resources when sales decline results in higher cost stickiness.

Less able managers adapt to changing environments less effectively. They cannot utilize their academic and professional knowledge to maximize firm resource utilization. Less able managers also tend to search for simpler problem solving strategies when the environment changes. They prefer retaining resources to making resource adjustments that require managerial competence. Retaining resources in declining sales periods leads to greater cost stickiness.

Additionally, ASEAN firms are mostly family owned and tend to hire less able managers because they are more concerned with their reputations. These managers are motivated to follow family firms' rules and prioritize maintaining firms' reputations over firms' economic interests. Hence, they do not reduce resources (such as the workforce) when sales decline because such actions will potentially harm firms' reputations and threaten founding families' socioemotional wealth. Retaining resources will increase cost stickiness.

Environmental uncertainty explains why the relationship between uncertainty and cost stickiness is stronger with lower managerial ability. This relationship exists because less able managers are less willing to take risks to face uncertainty and play safe by maintaining resources. Less able managers lack academic and professional capabilities to deal with environmental uncertainties. Managers may also have personal objectives to enhance their reputations, such as expanding firm size for an empire-building motive. Such motives also affect resource management. Less able managers cope with environmental uncertainty by retaining resources even when sales decline because they cannot manage resources efficiently. It is easier to retain resources than make resource adjustments. Retaining resources when sales decline leads to greater cost stickiness.

ASEAN firms are mostly family owned. They will use their reputational competitive advantages to cope with environmental uncertainty. Their reputations offer solid relationships with outside stakeholders, such as suppliers and creditors (Simamora 2021). Thus, these firms tend to employ less able managers (Simamora 2021) because higher managerial abilities are less important in dealing with uncertainty. Less able managers deal with environmental uncertainty by preserving family firms' reputations. They tend to retain resources, such as labor, when sales decline to protect founding families' reputations and socioemotional wealth. Socioemotional wealth motivates founding families to be less in-

volved in professional decision making to improve financial performance. Socioemotional wealth refers to the founding family's need for emotional attachment to the firm, family members' satisfaction, and reputation (Kalm and Gomez-Mejia 2016).

Previous managerial ability and cost stickiness studies reveal that managerial ability increases cost stickiness (Choi et al. 2018; Rezaei and Barandagh 2016). However, this study documents that ASEAN firms led by less able managers exhibit cost stickiness. Furthermore, the relationship between environmental uncertainty and cost stickiness is stronger in the less able managers subsample. Our results indicate that managerial ability plays an important role in resource adjustment decisions. Managers have significant control over firms' operations and make strategic decisions in determining resource capacities. Different managerial ability levels between managers, such as the ability to predict external demands and understand firms' input factors, affect their decisions in adjusting committed resources when sales decline. Managers need to make resource capacity decisions to achieve production efficiency. They use their capabilities, including the ability to understand the operational environment, predict future demand, and analyze the full range of demand realizations. Managers have different managerial ability levels because of their innate abilities developed through learning and experiences (Demerjian et al. 2012, 2013). Their capabilities enable them to evaluate the risks and benefits of each option and the optimal level of committed resources. Together with environmental uncertainty, managerial ability affects managers' resource adjustment decisions.

6. Conclusions

This study aims to examine cost stickiness under different managerial ability levels. Additionally, we also analyze the relationship between environmental uncertainty and cost stickiness under different managerial ability levels. Our study focuses on non-financial listed firms in five ASEAN countries from 2013–2019. The results show that firms led by less able managers exhibit cost stickiness, but not firms led by more able managers. Less able managers tend to retain resources because it is easier for managers to retain resources when sales decline than to make resource adjustment decisions (reducing resources when sales decline and reacquiring these resources when sales return to the previous level). Less able managers cannot manage resources efficiently and convert slack resources into future values. They are also less likely to take high risks. Hence, they are more likely to maintain resources despite a decline in sales to preserve their firms' resource availability. Furthermore, ASEAN firms are mostly family owned and tend to employ less able managers because they prioritize their reputations over good management practices. The findings also demonstrate that low managerial ability strengthens the effect of environmental uncertainty on cost stickiness. Costs are more sticky due to environmental uncertainty and less able managers. Less able managers are less able to deal with environmental uncertainty and utilize firms' resources optimally. Less able managers tend to utilize slack resources less effectively by retaining these resources, leading to greater cost stickiness.

Our study implies that managerial ability plays an important role in resource adjustment decisions. Different managerial ability levels lead to different cost stickiness levels. Managers' decisions to retain resources when sales decline increase cost stickiness. Thus, investors should consider managerial ability when making investment decisions. More able managers can manage resources efficiently but maintaining resources is not their objective. Conversely, less able managers tend to retain more resources to deal with environmental uncertainty, leading to greater cost stickiness. The difference in cost stickiness levels will affect firms' profits. In a period of high-cost stickiness, profits will decrease because firms incur the costs of maintaining resources. In a period of low-cost stickiness, profits will increase because resource costs decrease in response to the sales decline. However, investors may interpret increased cost stickiness as a signal that firms retain resources to meet future sales increases, indicating that these firms expect higher future sales, which will result in increased profits. Furthermore, greater cost stickiness increases the ratio of SG&A cost to sales that may be perceived negatively by investors. However, an increase in this ratio can

also be seen as a positive signal that indicates that managers retain resources to deal with environmental uncertainty and anticipate a future sales increase.

This study only uses five of the 10 ASEAN countries. We exclude Singapore because it is the only developed country in Southeast Asia. We do not include data from four other countries (Brunei, Cambodia, Laos, and Myanmar) due to a lack of data. Accordingly, future studies can use data from other Asian countries (specially developed ones). Furthermore, we use three dimensions to measure environmental uncertainty (munificence, dynamism, and uncertainty). We advise future studies to add other uncertainty-related variables, such as innovation, technological developments, and competition.

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