Role Budget Participation and Budget Slack on Supply Chain Operational Performance: Evidence from Indonesian Textile Industry

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Abstract--- Budgets are instruments that managers can use to help them in completing their business activities. Now various countries are focusing budget participation to boost supply chain activities. Objective of the current study is to examine the role of budget participation in supply chain operational performance among Indonesia textile industry. Moreover, moderating role of management control system was also examined. Interactive control system and boundary control system taken as moderating variable. For this purpose, data were gathered from textile companies of Indonesia. Employees of these companies were selected as respondents. Total 500 questionnaires were distributed to collect the data. Partial Least Square (PLS) were utilized as statistical tool to analyse the data. Results shows that budget participation increases the supply chain operational performance. Moreover, management control system also has significant role in supply chain operational performance.

Keywords: Supply chain, budget participation, budget slack, management control system, operational performance.

1. Introduction

Budgets are instruments that managers can use to help them in completing their business activities [1]. For accomplishing the objectives of a firm, budgets are fundamental for giving data for planning, controlling and deciding strategies [2-4] and for anticipating events [5]. In the competitive worldwide market, budgets are becoming more critical to encourage the performance and accomplishment of business objectives [6], particularly in textile industry, where both supply chain and budget participation is important. In the contest of textile companies, supply chain is most important element [7-9] which requires better budget participation.

Involvement of many employees in budget preparation called budget participation. It can include various junior employees [10] with all levels of management which generally considered to be one of the best way for budget preparation. Budget participation is significant role in supply chain practices of a company. Better budget participation shows positive effect on the operations of supply chain.

As indicated by [11], making budget slack (in the future called budget slack) is one of the systems, and for the acknowledgment of the destinations of the budget, 80% of managers consent to utilize slack in their budgets [5]. [12] expressed that the production of budget slack is related with the capacity of the subordinates to disparage their business capacity. Budget slack is the difference between the performance a subordinate intends to do and their genuine capacity [13, 14]. Budget slack are likewise made when the costs are exaggerated, and income devices are under assessed, and, once in a while, directors tend to downplay their incomes and overestimate their expenses to deliver slack in their budget [15]. [16] detailed that the slack in the budget for the budgetary and different assets that are controlled by directors which surpass their objectives to accomplish the ideal sum. Subsequently, budget slack is a procedure by which managers purposefully

make focuses that are effectively attainable [17]. It is too for security against sudden vulnerabilities and for expanding the likelihood of meeting the objectives of the budget [18-60].

Various countries are focusing budget participation to boost supply chain activities. This study examines the role of budget participation in textile industry of Indonesia. Different countries show good progress textile industry through better company supply chain activities. Comparison of textile exports of various countries are given below in Figure 1. Bangladesh is on the top in Asian countries following by the Vietnam.

Budget participation has two inverse consequences for the dimension of budget slack. It builds the dimension of association during the time of budget making, while, in the meantime, it gives directors an expanded possibility of making effectively feasible budget targets so that the budget participation could be expanded. This implies budget participation affects budget slack [17-58]. In any case, interest during the time spent on budget making can inversely affect the procedure of budget making since it gives data to representatives, through which they can make increasingly exact devices about the budget [19, 20]. This can likewise increment administrative responsibility towards the accomplishment of the objectives of the budget [21].

However, in both budget participation and budget slack, management control system is important. It is relationship with supply chain activities [22, 23]. Therefore, the current study considered the moderating role of management control system. It has influence on the relationship of budget participation and budget slack.

Therefore, objective of the current study is to examine the role of budget participation in supply chain operational performance among Indonesia textile industry. The relationship between budget participation, budget slack and supply chain operational performance are given in Figure 2. The other sub-objectives are listed below;

1. The role of budget participation in budget slack.
2. The role of budget slack in supply chain operational performance.
3. The moderating role of interactive control system.
4. The moderating role of boundary control system.

2. Literature Review

A budget is an administrative instrument which is recognized for its capacity to support for financial elements as far as support effectiveness and economy [1]. It is utilized to make ideal conditions for firms to empower them to accomplish their destinations and objectives in the manner in which they need to perform in worldwide dynamic condition [6,59]. The term 'support' can be clarified as a procedure that happens inside an organization that supports singular investment and effects straightforwardly on the representatives [24-26]. Interest is a procedure in which the sort of remuneration is chosen by the manager, and the value for every indicator in the contract is assigned by the employee himself. Budget participation example is given in Figure 2.

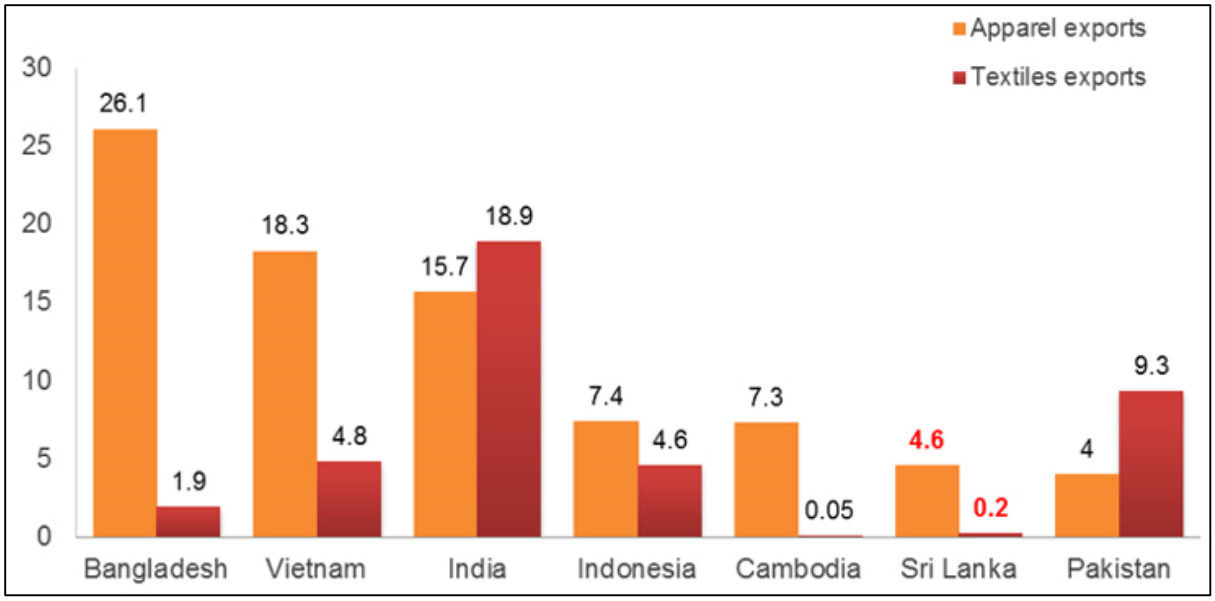

Figure 1. Major textile and apparel exports in Asia excluding China (US$Billion)
Source: UN Comtrade, World Trade Organization

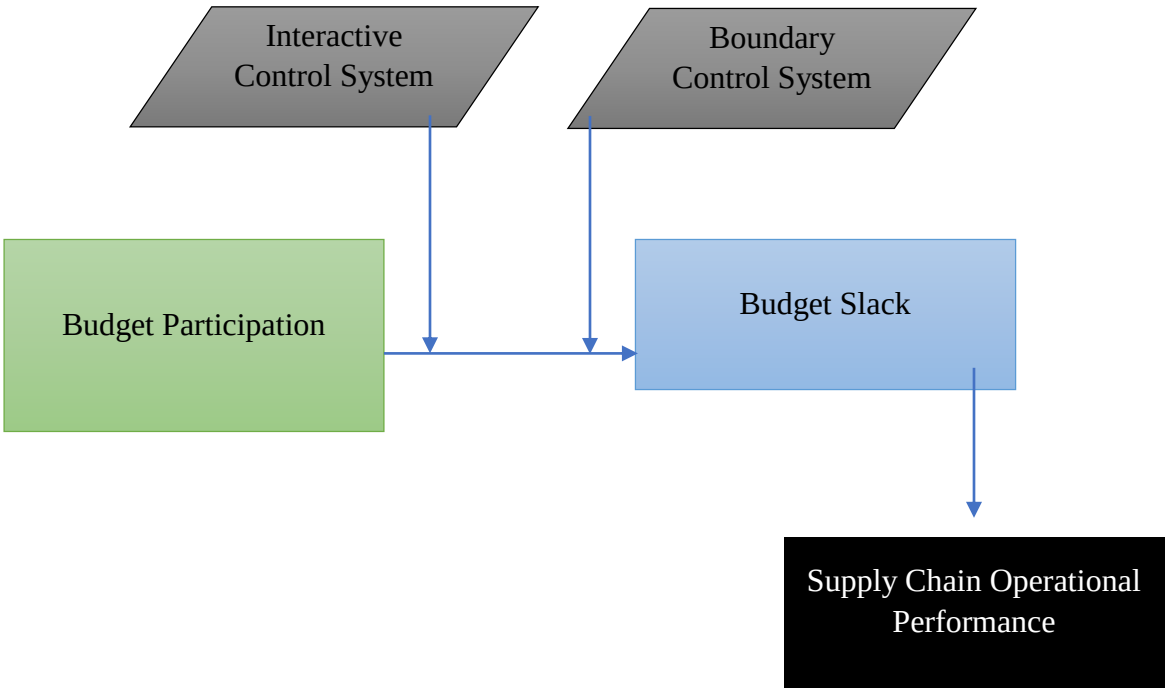

Figure 2. Theoretical Framework

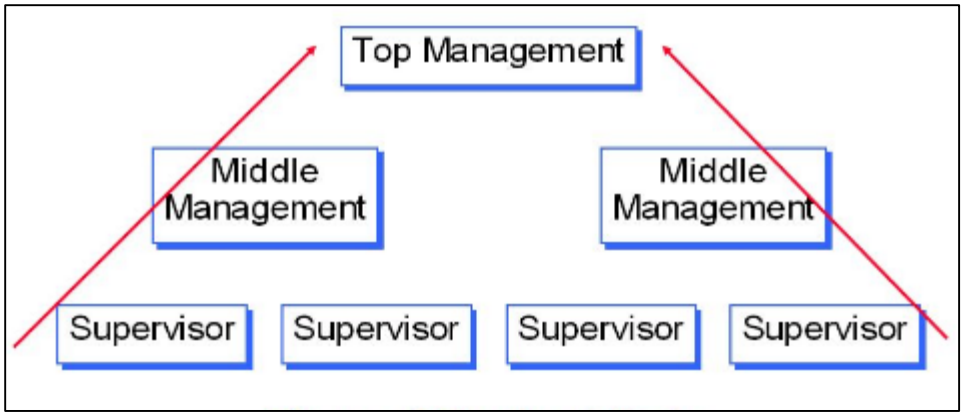

Figure 3. Budget Participation

Participation in budgeting is significant in light of the fact that it enables managers to private information. In the meantime, participative budgeting additionally gives managers with monetary motivators to work in budgetary slack amid budgeting to build their asset assignments. Accordingly, organizations regularly execute budgeting that limits directors' effect on their endorsed budgets to oblige worked in budgetary slack [27, 28].

As indicated by the literature, budget participation in a budget setting is imperative. Two additions come from the participation of centre and lower level directors in the budget procedure. Initially, it advances the abuse of the learning of subordinates in their field of specialization into the basic leadership process, which in the long run prompts choices of high quality. Furthermore, it makes important data accessible to centre and bring down employees to encourage cooperation with their bosses and different offices [29].

Despite the fact that the budgetary slack had been talked about since 1953 by Aygris, the issue of budgetary slack is still under discussion [30-32]. Meanings of budget participation are different, however, they all offer shared opinion. Budget participation is the inclination of the supervisors to under-gauge benefits and capacities to perform beneficially or potentially overestimate the assets that would be required for the finishing of a specific errand of the budget [12, 15, 33, 34]. In this way, budget participation is the unjustified assets and endeavours put resources into exercises as for their real job that impacts the accomplishment of authoritative objectives.

Management control system (MCS) give data to managers to help them in settling on choices concurring to their plans and targets. Many definitions of MCSs given by prior studies, for example, [35], [36], [37], [38]. Control is an exceptionally vague term, which has an alternate significance in various settings furthermore, is extremely hard to characterize [39]. Earlier research, such as [35], found systematic contrasts between control at the corporate dimension, management level and operational dimension. As indicated by [37], [40], the control system is fundamental for both the structure of the firm and for procedure usage. Better MCS increases the supply chain adoption performance. Moreover, satisfaction level of employees and enterprise risk management also influence [41, 42] by better MCS. Additionally, Figure 4 shows MCS.

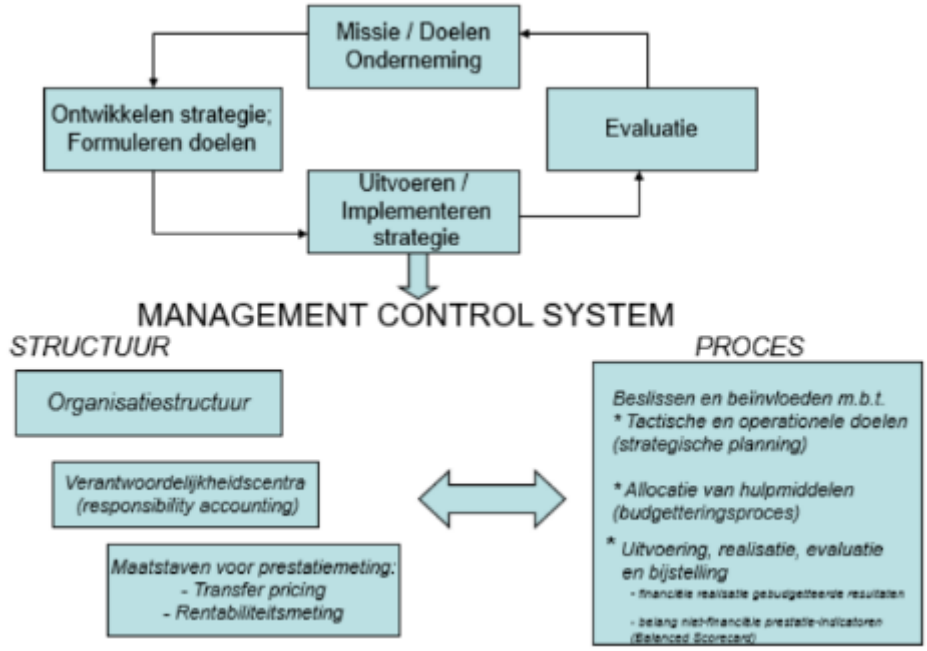

Figure 4. Management Control system

MCS has two major dimensions, 1) interactive control system (ICS) and, 2) boundary control system (BCS). Both dimensions have significant positive relationship with supply chain operational performance. [38] characterized an ICS as a system that the managers execute for the individual involvement of the lesser representatives in the basic leadership process. ICSs are unique from DCSs in four different ways. They give more consideration regarding the conflicting information, which is considered by the senior administrators to be deliberately imperative. Also, the information could be considered as sufficiently critical to get efficient consideration from directors at whole dimensions of an organization. Thirdly, the information from the interactive system can be best depicted and examined amid the gathering among managers, subordinates, and companions in the organization. Fourthly, the current situation about the basic information, theories and activity designs considers ICSs as a driver.

Henceforth, the utilization of new learning can help administrators to wind up dynamic members also, screens in the basic leadership exercises of the lesser workers and will make the MCSs progressively interactive [56]. Along these lines, this examination contends that information asymmetry is represented to by ICS, in which administrators take an interest in the basic leadership exercises of the subordinates.

Regarding second dimension, [38], [40] clarified that motivation behind boundary system is to convey explicit dangers to be stayed away from. The most fundamental business direct limits are those that characterize and convey codes of business lead for all representatives. Restricting opportunity-seeking behaviour is a notable element of MCSs. The boundary switch of control is a clear portrayal, in negative terms, of the organization norms and definitions. The boundary procedure helps to abuse of the resources of the company by the workers by transparently illuminating passable and non-allowable practices. Also, the boundary system advises the workers about things that they can't prepare [43]. The objective behind this is to offer opportunity to workers to improve, investigate, make and accomplish certain benchmarks. The BCS is a system that contains the guidelines, limitations and restrictions [57].

Finally, from the above discussion, it is found that supply chain operational performance is important to enhance overall supply chain performance. Better operational performance has relationship with budget participation. Better ideas from all workers help to allocate better budget. Budget participation increases the supply chain operational performance. Moreover, management control system also has significant role in supply chain operational performance. Therefore,

from above discussion, below hypotheses are proposed;

H1: Budget participation has positive effect on budget slack.

H2: Budget slack has positive effect on supply chain operational performance.

H3: Interactive control system (ICS) moderates the relationship between budget participation and budget slack.

H4: Boundary control system (BCS) moderates the relationship between budget participation and budget slack.

3. Research Methodology

This study is based on quantitative research method. After examining the key objectives of the study, a cross-sectional research design was selected. Consequently, data were collected at one point of time. In this direction, a survay was conducted and all the questionnaires were distributed among the employees of textile companies in Indonesia. Those employees were selected having direct relationship with supply chain activities [55].

Method selection in any research study is central question. It must be accordance with the research objectives and nature of the study [44]. Unsuitable method of research lead towards different results. Therefore, it is crucial element of each reseach study and researchers need to be careful while selecting.

In this study, all the questionnaires were close ended from 5-point Likert scale. Questionnaire was based on three major parts. First part was based on profile of respondents. Second part was based on items related to independent and moderating variables. The third part was based on the items related to the dependent variable. Sample size was selected by using the [45] inferantial statistics. According to him, 500 sample size is excellent. Therefore, 500 questionnaires were distributed. Nevertheless, this study used Structural equation modeling (SEM) through PLS. Various steps are recommended by [46] of PLS-SEM as complied by [47] in Figure 5.

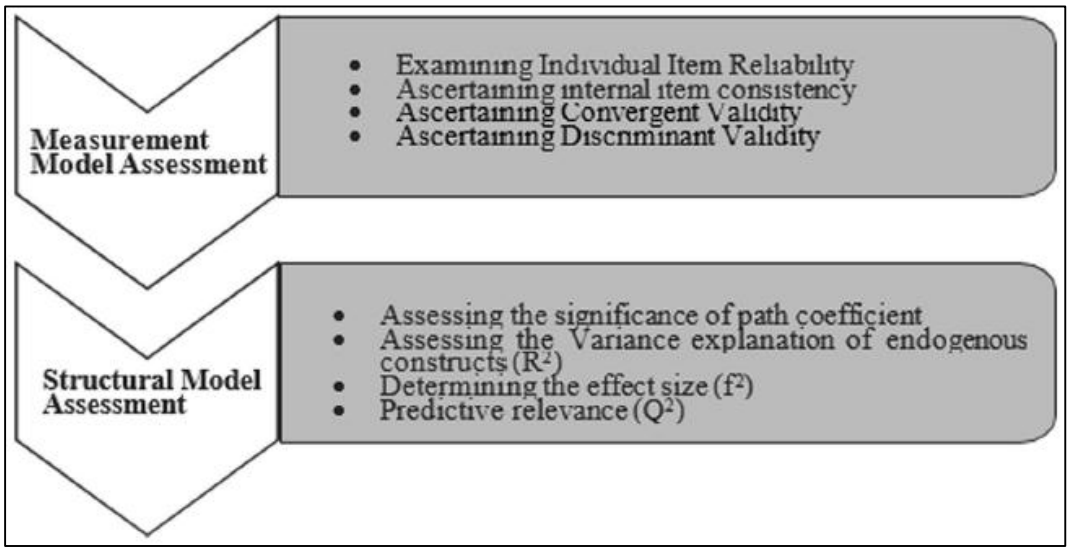

Figure 5. PLS-SEM steps
Source: [47]

4. Analysis and Findings

In the social sciences research, Partial Least Square (PLS) is most famous and commonly used statistical software to analyse the data. Structural equation modeling (SEM) through PLS is most common in social sciences research. As it is recommended by various prominent studies such as [46], [48] and [49]. Therefore, in this study, Partial Least Square (PLS) structural equation modeling (SEM) is used to achieve the end results. It is clear from the Figure 6, all the factor loadings are above 0.5, composite reliability is above 0.7, AVE is also above 0.5. Discriminant validity is shown in Table 3.

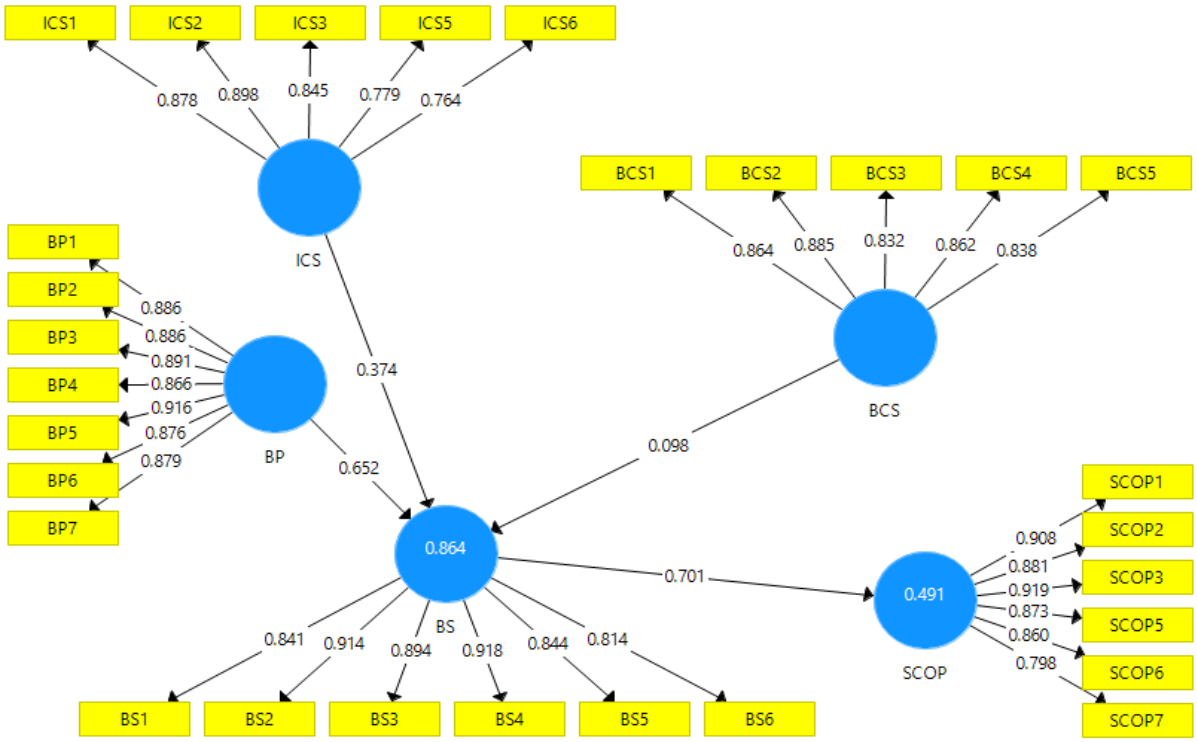

Figure 6. Confirmatory Factor Analysis

Table 1. Factor Loadings

	BCS	BP	BS	ICS	SCOP
BCS1	0.864				
BCS2	0.885				
BCS3	0.832				
BCS4	0.862				
BCS5	0.838				
BP1		0.886			
BP2		0.886			
BP3		0.891			
BP4		0.866			
BP5		0.916			
BP6		0.876			
BP7		0.879			
BS1			0.841		
BS2			0.914		
BS3			0.894		
BS4			0.918		
BS5			0.844		
BS6			0.814		
ICS1				0.878	
ICS2				0.898	

ICS3	0.845	
ICS5	0.779	
ICS6	0.764	
SCOP1		0.908
SCOP2		0.881
SCOP3		0.919
SCOP5		0.873
SCOP6		0.86
SCOP7		0.798

Table 2. Reliability and Convergent Validity

Variables	Cronbach's Alpha	rho_A	Composite Reliability	(AVE)
BCS	0.909	0.912	0.932	0.734
BP	0.954	0.956	0.962	0.785
BS	0.936	0.938	0.95	0.76
ICS	0.892	0.91	0.919	0.696
SCOP	0.938	0.943	0.951	0.764

Table 3. Discriminant Validity

	BCS	BP	BS	ICS	SCOP
BCS	0.857				
BP	0.666	0.886			
BS	0.648	0.921	0.872		
ICS	0.832	0.891	0.874	0.834	
SCOP	0.907	0.682	0.701	0.82	0.874

Structural model was analysed to test the hypotheses developed in literature review of this study. In this regard, bootstrapping was carried out through PLS 3. It was found that both direct hypotheses have t-value greater than 1.96 which is the evidence of significant relationship. It was also found that beta value for both relationship is positive which indicates a positive relationship.

Therefore, results show that budget participation has significant positive relationship with budget slack and budget slack has significant positive relationship with supply chain operational performance. Therefore, increases in budget participation and budget slack will automatically contribute positively in supply chain operational performance. It is shown in Figure 7.

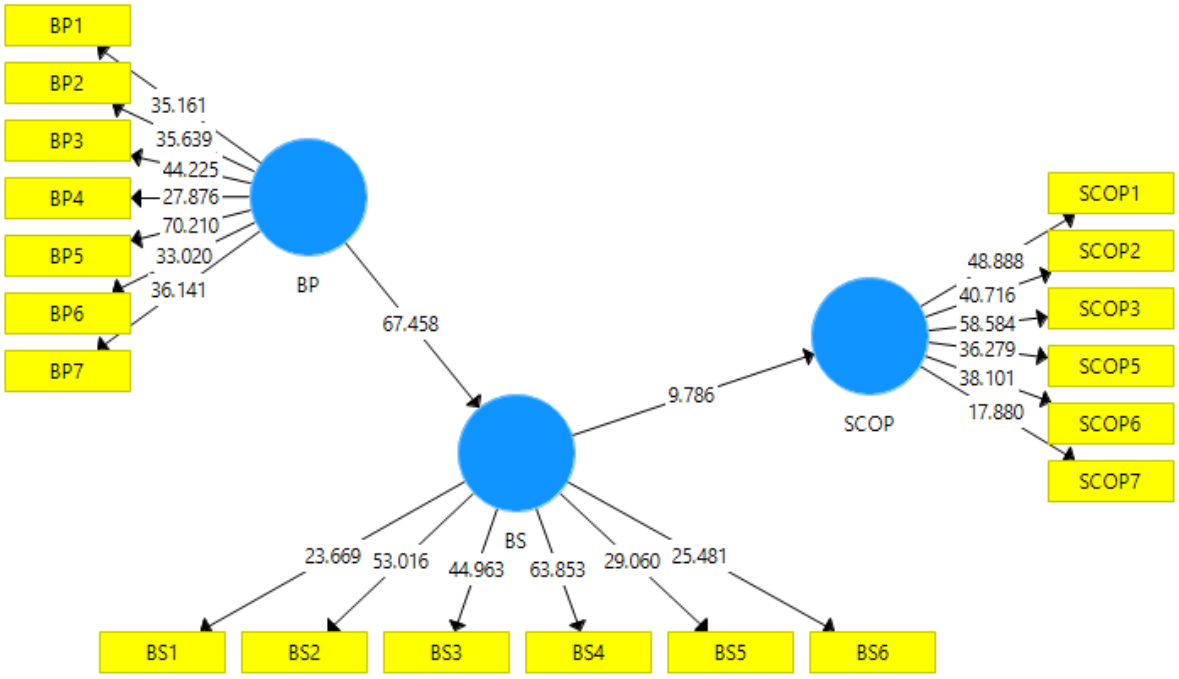

Figure 7. Direct Effect

Table 4. Hypotheses results

	Original Sample (O)	Sample Mean (M)	(STDEV)	T Statistics (|O/STDEV|)	P Values
BP -> BS	0.921	0.922	0.014	67.458	0
BS -> SCOP	0.7	0.703	0.072	9.786	0

Moderation effect is shown in Table 0. The moderation effect of interactive control system and boundary control system is significant. As the value is above 1.96 for both moderation effect. It is found that both moderation effect strengthens the positive relationship of budget participation and supply chain operational performance as the beta value for both relationship is positive. Moreover, the r-square value is 0.491. It is weak R^2 effect as mentioned by [50,51]. Thus, all the variables are expected to bring 49.1% change in supply chain operational performance. Additionally, it was also revealed that budget slack is playing a mediating role between budget participation and supply chain operational performance. As it is shown in histogram through Figure 8.

Table 5. Moderation effect

	Original Sample (O)	(STDEV)	T Statistics (|O/STDEV|)	P Values	Decision
BP* ICS -> BS	0.511	0.08	6.311	0	Moderation
BS* BCS -> BS	0.254	0.056	4.495	0	Moderation

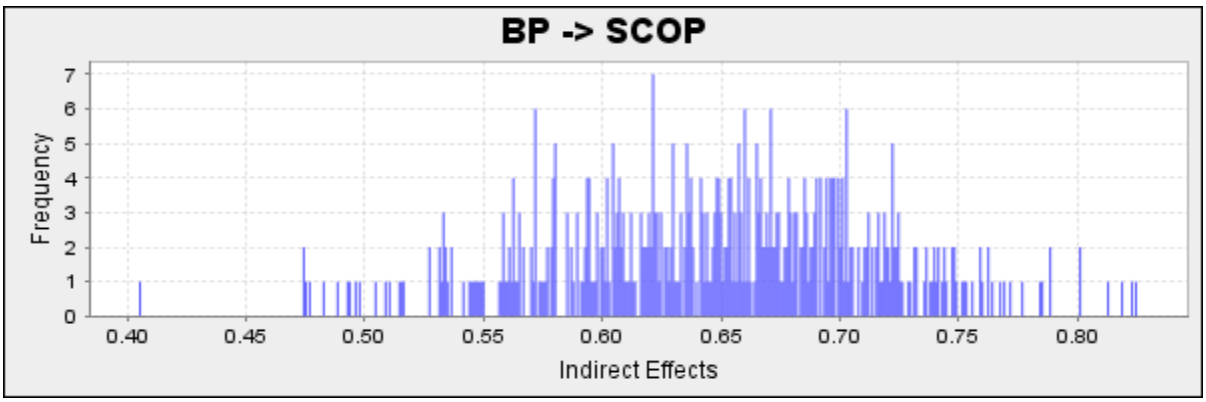

Figure 8. Mediation effect histogram

5. Conclusion

This study carried out to examine the relationship between budget participation and supply chain operational performance among the textile industry of Indonesia. Moreover, the moderating role of management control system through interactive control system and boundary control system was also examined. Additionally, the role of budget slack was also investigated.

It is found that budget participation has major contribution in supply chain operational performance. Better participation of employees in budget increases the operational performance of supply chain among textile companies of Indonesia. Moreover, budget slack also performing important role between budget participation and supply chain operational performance. Budget slack carries the positive effect of budget participation on supply chain operational performance [52, 53, 54]. Additionally, it was found that management control system increases the positive effect of budget participation on supply chain performance through budget slack. Therefore, textile companies should encourage budget participation, budget slack and management control system.

Reference

[1] G. L. Tanase, "An Overall Analysis of Participatory Budgeting Advantages and Essential Factors for an Effective Implementation in Economic Entities," Journal of Eastern Europe Research in Business & Economics, vol. 2013, p. 1, 2013.

[2] M. Triana, "Yuliusman, dan Wirmie Eka Putra.“," Pengaruh Partisipasi Anggaran, Budget Emphasis, dan Locus of Control Terhadap Slack Anggaran (Survei Pada Hotel Berbintang di Kota Jambi). e-Jurnal Binar Akuntansi, vol. 1, no. 1, pp. 51-60, 2012.

[3] A. Maksum, "Peran Ketidakpastian Lingkungan dan Karakter Personal dalam memoderasi pengaruh Partisipasi anggaran terhadap Senjangan Anggaran," Jurnal Keuangan & Bisnis Program Studi Magister Manajemen Sekolah Tinggi Ilmu Ekonomi Harapan, vol. 1, no. 1, pp. 1-17, 2009.

[4] C. Ramdeen, J. Santos, and H. K. Chatfield, "An Examination of Impact of Budgetary Participation, Budget Emphasis, and Information Asymmetry on Budgetary Slack in the Hotel Industry," Article. William F. Harrah of Collage of Hotel Administration University of Nevada, Las Vegas, 2007.

[5] M. Onsi, "Factor analysis of behavioral variables affecting budgetary slack," The Accounting Review, vol. 48, no. 3, pp. 535-548, 1973.

[6] C.-L. Huang and M.-L. Chen, "The effect of attitudes towards the budgetary process on attitudes towards budgetary slack and behaviors to create budgetary slack," Social Behavior and Personality: an international journal, vol. 37, no. 5, pp. 661-671, 2009.

[7] Habib, A., & Mucha Sr, M. (2018). The Lifecycle and Effective Communication of CSR to the Stakeholder and the Public. *International Journal of Economics, Business and Management Studies*, *5*(1), 1-8.

[8] C. Chandra and S. Kumar, "An application of a system analysis methodology to manage logistics in a textile supply chain," supply chain management: An international journal, vol. 5, no. 5, pp. 234-245, 2000.

[9] S. S. Panigrahi and N. S. Rao, "A stakeholders' perspective on barriers to adopt sustainable

practices in MSME supply chain: Issues and challenges in the textile sector," Research Journal of Textile and Apparel, vol. 22, no. 1, pp. 59-76, 2018.
[10] M. Sholihin, R. Pike, M. Mangena, and J. Li, "Goal-setting participation and goal commitment: Examining the mediating roles of procedural fairness and interpersonal trust in a UK financial services organisation," The British Accounting Review, vol. 43, no. 2, pp. 135-146, 2011.
[11] S. C. Hansen, D. T. Otley, and W. A. Van der Stede, "Practice developments in budgeting: an overview and research perspective," Journal of management accounting research, vol. 15, no. 1, pp. 95-116, 2003.
[12] J. L. Hobson, M. J. Mellon, and D. E. Stevens, "Determinants of moral judgments regarding budgetary slack: An experimental examination of pay scheme and personal values," Behavioral Research in Accounting, vol. 23, no. 1, pp. 87-107, 2011.
[13] C. W. Chow, J. C. Cooper, and K. Haddad, "The effects of pay schemes and ratchets on budgetary slack and performance: A multiperiod experiment," Accounting, Organizations and Society, vol. 16, no. 1, pp. 47-60, 1991.
[14] 1. Hassan, H. S., & Alanazi, T. M. (2018). Roles of Islamic Business Ethics in the Formation of Internal Organisational Culture: A Qualitative Approach of Muslims' SMEs in the UK. International Journal of Economics, Business and Management Studies, 5(1), 16-30.
Hassan, H. S., & Alanazi, T. M. (2018). Roles of Islamic Business Ethics in the Formation of Internal Organisational Culture: A Qualitative Approach of Muslims' SMEs in the UK. *International Journal of Economics, Business and Management Studies*, *5*(1), 16-30.
[15] M. Schiff and A. Y. Lewin, "The impact of people on budgets," The Accounting Review, vol. 45, no. 2, pp. 259-268, 1970.
[16] L. Kren and J. L. Kerr, "The effect of behaviour monitoring and uncertainty on the use of performance-contingent compensation," Accounting and Business Research, vol. 23, no. 90, pp. 159-167, 1993.
[17] K. Lukka, "Budgetary biasing in organizations: theoretical framework and empirical evidence," Accounting, Organizations and Society, vol. 13, no. 3, pp. 281-301, 1988.
[18] W. A. Van der Stede, "The relationship between two consequences of budgetary controls: budgetary slack creation and managerial short-term orientation," Accounting, Organizations and Society, vol. 25, no. 6, pp. 609-622, 2000.
[19] C. Cammann, "Effects of the use of control systems," Accounting, Organizations and Society, vol. 1, no. 4, pp. 301-313, 1976.
[20] N. Magner, R. B. Welker, and T. L. Campbell, "Testing a model of cognitive budgetary participation processes in a latent variable structural equations framework," Accounting and Business Research, vol. 27, no. 1, pp. 41-50, 1996.
[21] R. J. Parker and L. Kyj, "Vertical information sharing in the budgeting process," Accounting, Organizations and Society, vol. 31, no. 1, pp. 27-45, 2006.
[22] P. M. van Veen-Dirks and P. J. Verdaasdonk, "The dynamic relation between management control and governance structure in a supply chain context," Supply Chain Management: An International Journal, vol. 14, no. 6, pp. 466-478, 2009.
[23] D. P. Jeschonowski, J. Schmitz, C. M. Wallenburg, and J. Weber, "Management control systems in logistics and supply chain management: a literature review," Logistics Research, vol. 1, no. 2, pp. 113-127, 2009.
[24] A. Dakhli, "Budgetary Participation, Locus Of Control And Job Satisfaction In Tunisia," in La place de la dimension européenne dans la Comptabilité Contrôle Audit, 2009, p. CD ROM.
[25] M. Shield and P. Galbraith, "The analysis of student expository writing in mathematics," Educational Studies in Mathematics, vol. 36, no. 1, pp. 29-52, 1998.
[26] P. Brownell, "Participation in budgeting, locus of control and organizational effectiveness," Accounting Review, pp. 844-860, 1981.
[27] S. Gallani, R. Krishnan, E. Marinich, and M. D. Shields, "Budgeting, Psychological Contracts, and Budgetary Misreporting," 2018.
[28] S. Gallani, R. Krishnan, E. J. Marinich, and M. D. Shields, Budgeting, Psychological Contracts, and Budgetary Slack. Harvard Business School, 2016.
[29] M. Eker, "THE AFFECT OF THE RELATIONSHIP BETWEEN BUDGET PARTICIPATION AND JOB-RELEVANT INFORMATION ON MANAGERIAL PERFORMANCE," Ege Academic Review, vol. 10, no. 1, 2010.
[30] B. K. Church, R. L. Hannan, and X. J. Kuang, "Shared interest and honesty in budget reporting," Accounting, Organizations and Society, vol. 37, no. 3, pp. 155-167, 2012.

[31] M.-L. Yang, A. M.-L. Wang, and K.-C. Cheng, "The impact of quality of IS information and budget slack on innovation performance," Technovation, vol. 29, no. 8, pp. 527-536, 2009.
[32] A. S. Maiga and F. A. Jacobs, "Extent of ABC use and its consequences," Contemporary Accounting Research, vol. 25, no. 2, pp. 533-566, 2008.
[33] 1. Houndjo, T. (2018). The Double Failure of the Master and the Slave Highlighted in Selected Works by Chinua Achebe and Amma Darko. International Journal of Social and Administrative Sciences, 3(2), 91-104.
[34] E. Kilfoyle and A. J. Richardson, "Agency and structure in budgeting: thesis, antithesis and synthesis," Critical Perspectives on Accounting, vol. 22, no. 2, pp. 183-199, 2011.
[35] R. Anthony and V. Govindarajan, "Management Control Systems (eight ed.). Richard D. Irwin," ed: Inc, 1995.
[36] 1. Hassan, K. H., Razak, M. F. A., Nordin, R., & Rahim, R. A. (2018). Malaysia with the Trans-Pacific Partnership Agreement: Aftermath of the United States Withdrawal From the TPPA. International Journal of Asian Social Science, 8(10), 868-880.
[37] Abdulrasheed, B. Causality between government expenditure and government revenue in Nigeria. Asian Journal of Economics and Empirical Research,vol. 4,no.2,pp. 91-98, 2017.
[38] Adedoyin, O., & Okere, E. The Significance of Inclusion Concept in the Educational System as Perceived by Junior Secondary School Teachers: Implications for Teacher Training Programmes in Botswana. Global Journal of Social Sciences Studies,vol. 3,no.1, pp.13-28, 2017.
[39] Ahmad, S. D. Legal Protection Carried Out by the Financial Service Authority in a Dispute between Consumers and Insurance Companies in Indonesia. International Journal of Social and Administrative Sciences, vol.3,no.1, pp.55-61, 2018.
[40] Akhir, R. M., Ahmad, S. N. B., Ahmad, H., & Hashim, N. A. Staying or Leaving? The Influence of Employees' Engagement towards Turnover Decision Among Employees of A Semi-Government Organization in Malaysia. American Journal of Social Sciences and Humanities, vol.3,no.1, pp.55-622018.
[41] Aktaş, M. IDENTIFYING THE EFFECTS OF MERGERS AND ACQUISITIONS ON TURKISH BANKS'PERFORMANCES. Asian Journal of Economic Modelling,vol. 6,no.3, pp.235-244, 2018.
[42] Al-Ahmad, Z., & Al-Ali, S. Does the Holiday Effect Differ from Religious to Non-Religious Holidays? Empirical Evidence from Egypt. The Economics and Finance Letters, vol.3,no.3, pp.39-56, 2016.
[43] R. Simons, "The role of management control systems in creating competitive advantage: new perspectives," in Readings in accounting for management control: Springer, 1990, pp. 622-645.
[44] R. Simons, Levers of control: How managers use innovative control systems to drive strategic renewal. Harvard Business Press, 1994.
[45] S. Schaltegger, R. Burritt, and H. Petersen, "An introduction to corporate environmental management: Striving for sustainability," Management of Environmental Quality: An International Journal, vol. 14, no. 4, pp. 541-542, 2003.
[46] R. Simons, "Accounting control systems and business strategy: an empirical analysis," Accounting, organizations and society, vol. 12, no. 4, pp. 357-374, 1987.
[47] Haseeb, M., Iqbal-Hussain, H., Ślusarczyk, B., Jermsittiparsert, K. (2019). Industry 4.0: A solution towards technology challenges of sustainable business performance. Social Sciences, 8(5), 154; doi: https://doi.org/10.3390/socsci8050154
[48] W.-U. Hameed, F. Hashmi, M. Ali, and M. Arif, "Enterprise Risk Management (ERM) System: Implementation problem and role of audit effectiveness in Malaysian firms," Asian Journal of Multidisciplinary Studies, vol. 5, p. 11, 2017.
[49] Jermsittiparsert, K., M. Siam, M. Issa, U. Ahmed, & M. Pahi. 2019. "Do Consumers Expect Companies to Be Socially Responsible? The Impact of Corporate Social Responsibility on Buying Behavior." Uncertain Supply Chain Management 7(4) (In press), doi: 10.5267/j.uscm.2019.1.005.
[50] S. M. M. Shah, R. Ali, A. S. Dahri, N. Ahmed, and Z. A. M. Brohi, "Determinants of Job Satisfaction among Nurses: Evidence from South Asian Perspective," Journal of Academic Research in Business and Social Sciences, vol. 8, no. 5, pp. 19-26, 2018.
[51] R. Simons, A. Dávila, and R. S. Kaplan, Performance measurement & control systems for implementing strategy. Prentice Hall Upper Saddle River, NJ, 2000.
[52] W. Ul-Hameed, H. Mohammad, H. Shahar, A. Aljumah, and S. Azizan, "The effect of integration between audit and leadership on supply chain performance: Evidence from UK

based supply chain companies," Uncertain Supply Chain Management, vol. 7, no. 2, pp. 311-328, 2019.

[53] Ali, A., & Haseeb, M. (2019). Radio frequency identification (RFID) technology as a strategic tool towards higher performance of supply chain operations in textile and apparel industry of Malaysia. Uncertain Supply Chain Management, 7(2), 215-226.

[54] 1. Hye, Q. M. A., & Lau, W. Y. (2015). Trade openness and economic growth: empirical evidence from India. Journal of Business Economics and Management, 16(1), 188-205.

[55] J. Henseler, C. M. Ringle, and R. R. Sinkovics, "The use of partial least squares path modeling in international marketing," in New challenges to international marketing: Emerald Group Publishing Limited, 2009, pp. 277-319.

[56] W. U. Hameed, M. F. Basheer, J. Iqbal, A. Anwar, and H. K. Ahmad, "Determinants of Firm's open innovation performance and the role of R & D department: an empirical evidence from Malaysian SME's," Journal of Global Entrepreneurship Research, vol. 8, no. 1, p. 29, 2018.

[57] Ahmed, U., Khalid, N., Ammar, A., & Shah, M. H. (2017). Assessing moderation of employee engagement on the relationship between work discretion, job clarity and business performance in the banking sector of Pakistan. Asian Economic and Financial Review, 7(12), 1197-121. Doi:10.18488/journal.aefr.2017.712.1197.1210

[58] 1. Hsiao, C. M., Zhang, W. F., Chiu, C. C., Huang, J. C., & Huang, Y. L. (2017). The Enterprise Risk Management of Foreign Exchange Exposures: Evidence from Taiwanese Hospitality Industry. Asian Journal of Economics and Empirical Research, 4(1), 32-48.

[59] J. F. Hair Jr, G. T. M. Hult, C. Ringle, and M. Sarstedt, A primer on partial least squares structural equation modeling (PLS-SEM). Sage Publications, 2016.

[60] W. W. Chin, "The partial least squares approach to structural equation modeling," Modern methods for business research, vol. 295, no. 2, pp. 295-336, 1998.