



Research article

The effect of human capital and physical capital on regional financial condition: the moderating effect of management control system

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ABSTRACT

This study examines the effect of Human Capital and Physical Capital on Regional Financial Condition with a Management Control System as moderator. Participants were employees of the Regional Financial and Asset Management Directorates located in three major cities in the province of South Sulawesi, Indonesia. The participants were recruited from three different regions resulting in 75 participants in a three-wave data collection procedure. Four measures were developed (i.e. Human Capital, Physical Capital, Management Control System, and Financial Condition), which were constructively valid and reliable for research purposes. The results showed that Human Capital and Physical Capital directly influenced the Financial Condition. The effect of Human and Physical Capital was moderated by the Management Control System. Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study collected participant's perceptions towards the study variables without any further investigation to the objective measures. Although some scholars may find this as the lack of evidence against the actual Financial Condition, acknowledging experts' perceptions should provide a better understanding of the experienced Financial Condition. Various studies have investigated some factors which may affect Financial Condition. However, this study proposed an examination of the role of the Management Control System. In this case, a capital that is owned by the financial organisations cannot provide a direct impact on the Financial Condition without the role of the Management Control System.

1. Introduction

Financial Condition is determined by the ability of an area to fulfil an obligation for prospering or serving a community. In this regard, there are three core dimensions to evaluate the Financial Condition they are environmental, institutional and financial dimensions (DiNapoli, 2011). These three dimensions will be interconnected to produce a proper Financial Condition. By fulfilling all these dimensions, the government will be able to bring more stable Financial Condition.

Firstly, the environmental dimension is the assessment of Financial Condition based on how a government supports or impedes regulations, especially on bringing innovations to the community. Secondly, the institutional dimension is a management practice and legislative policy which guides financial decision making. Its function is often as a response to environmental or political factors (DiNapoli, 2011). Lastly, the financial dimension is most related to financial performance. This particular dimension includes potential tax or incomes in a particular

region and a debt limit and legality of expenditure from a region. For some countries, it also consists of fiscal decentralisation management in which each region will obtain a budget for the funds to be managed.

One of the most important questions to this issue is that what are variables may potentially predict Financial Condition. Research in this area has investigated some determinants of Financial Condition and performance. In Indonesia, the type of firm, independent board, gender diversity, and location of director can determine financial distress (Kristanti et al., 2016). On the other hand, a study also revealed that the Capital Adequacy Ratio, Credit Interest Income, and size of the organisation or corporate had a positive effect on financial performance (Elshaday et al., 2018). In some public organisations, the political system played a significant role in financial Condition (Garcia-Sanchez et al., 2012). Some scholars also suggested that cost-efficiency and effective financial management could determine Financial Condition (Cuadrado-Ballesteros and Bisogno, 2018); (Zafra-Gómez et al., 2009, 2010). Although some predictors of financial Condition have been revealed,

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these studies merely focused on the system and management of financial performance. Human resources and other resources have not received much attention, even though organisations demand a certain level of resources to perform effectively.

Considering the important roles of resources, the Resource-Based Theory (Barney, 1991) supports the notion that Human Capital and Physical Capital provides significant resources for maintaining Financial Condition. Human capital becomes considerably important because it is a source of innovation and strategy renewal. Human Capital is related to any knowledge, skills, abilities and attitudes owned by personnel in organisations that are highly supportive for organisational success (Perrotta, 2018). Further, it can be fostered from applied research, management objective, reengineering process and improvement or development of workforce skills. Furthermore, Human Capital creates incremental values to organisations daily via motivation, commitment, competence and effectiveness of teamwork. However, each organisation offers distinctive approaches to managing Human Capital, which also means different values (Lepak and Snell, 2002). Thus, human capital provides unique contributions to Financial Condition based on unique approaches given by the organisations.

In addition to Human Capital, Physical Capital also adds incremental variance to the successful Financial Condition. The notion of Physical Capital includes natural resources and other technological devices (Galor and Moav, 2004). The existence of Physical Capital supports the improvement of the Financial Condition of an area. To illustrate, the development of the primary physical conditions such as sanitation, clean water, and electricity in an area will also help foster the services and welfare for the community, which may later improve Financial Condition. Physical Capital is also helpful for creating additional values to producing desired input. Thus, it is reasonable to conclude that both human and physical resources act together to influence a region financial condition.

The direct effect of these two capitals (i.e. human and physical) may have been moderated by the level of control performed by the organisations. In Indonesia, some empirical investigations conducted by Chandra (2017) and Sari and dan Fitriani (2009) found that the management control system improved Financial Condition. In these two studies, Human Capital and Physical Capital directly impacted financial performance where the organisations had sufficient control over the resources. As a result, the organisations performed better and showed expected Financial Condition.

The concept of Control theory in strategic human resource management from Snell (1992) has provided a clear argument on how high control facilitates the positive effect of human capital and physical capital on desired Financial Condition. According to the theory, Human Capital and Physical Capital will leverage financial performance only if an organisation implement a certain degree of control over human capital inputs, behavioural controls, and desired outputs. This further suggests that possessing a management control system favours Human and Physical Capital's effect on Financial Condition.

Accordingly, management control system becomes a moderating variable in creating good Financial Condition for one particular region. In a developing country like Indonesia, the management control system is one of the most vital foundations of good governance (Budiawan and Purnomo, 2014). The internal control system includes various management tools that aim to achieve a broad range of objectives. Besides, Riawan (2016) stated that the management control system could improve an organisation's Financial Condition. Meanwhile, Masyur (2015) postulated that local governments encounter difficulties implementing a good control system strategy because of the absence of synergy between Human Capital and the control strategy. Subsequently, this made the public services became less efficient. Control becomes a crucial element to ensure that Financial Condition is achieved as expected.

The management control system consists of management control structures and processes (Halim et al., 2003). The control structure is centred on a variety of responsibility, while the management control

process includes budget preparation, implementation and measurement, reporting, and analysis. In management control, the decisions are made based on the procedures and other schedules carried out repeatedly year after year. Those procedures usually start from programming. The program is translated into a budget, and then the company operates based on a predetermined budget, procedure and policy. The final results are then compared with the budget after being evaluated and improved if necessary. Since the procedure is carried out repeatedly every year, then management requires a management control system to improve its performance so that the company's goals can be achieved.

By applying the Resource-Based Theory and Control theory in Strategic Management, one should capture that the presence of high management control will leverage the effect of human and physical capital on financial Condition. However, some contextual conditions may also influence this argument. For instance, as a developing country, Indonesia implements a decentralisation policies that also include financial autonomy for its provinces. Consequently, some experts and practitioners have questioned some antecedents related to regional financial performance.

Indonesia's Regional Law No. 23 of 2014 states the implementation of regional government directed to accelerate the realisation of community welfare through improving services, empowerment, and community participation, as well as enhancing regional competitiveness by taking into account the principles of democracy, equality, justice, and uniqueness of the area in the system of the Unitary State of the Republic of Indonesia. Regional autonomy is a part of decentralisation. It constructs each region to have the right and obligation for regulating their area but with the control of the central government and following the law. Fiscal decentralisation is implemented in order to encourage several levels of government that can control each region. The local governments will accommodate the aspirations of a community. The success of regional autonomy is integrated with the ability of a region to manage the funds. Also, the local governments should be able to utilise the resources that are already owned by the region. Therefore, the success of a regional autonomy significantly is related to the Financial Condition of the region.

Unfortunately, contrasting views emerged regarding Human Capital and Physical Capital's effect on Financial Condition in Indonesia. For instance, Nirwana et al. (2014) found that Human Capital and Physical Capital had a non-significant influence on Financial Condition. However, they found it emerged after intervening through the culture. At the same time, Zulkifli et al. (2018) found contrasting findings where Human Capital and Physical Capital positively affected Financial Performance. Another finding suggested that the differences were caused by the influence of Indonesia's national culture. The level of uncertainty was higher in Indonesia than in Australia, which later reduces any resources on financial performance (Graham and Sathye, 2017).

Additionally, pressure from the central government has imposed some policies in managing the budget in local government. Although provincial governments had adapted a new accounting system, the local officials found it difficult to maintain a well-controlled and structured system (Harun and Kamase, 2012). In a similar vein, Mir and Sutiyono (2013) have discovered that the demand, supply, and quality of Indonesia's local accounting system lacked parity, which also means the financial system implemented less effective control. This, then, causes a subsequent effect on the local financial performance as effective decision-making and efficient management would be difficult to implement. Thus, in this situation exhibiting an effective control in managing resources lead to better financial performance.

This investigation is necessary to understand further the antecedents of Financial Condition and the role of effective management control. This study will also shed light on the importance of human and physical capital in developing regional financial Condition. Local governments in Indonesia may have undergone less effective control over the accounting system and failed to address the issue since their financial reports were in a category of acceptable without exceptions. Sulawesi Selatan, in this case, acted as the main gate of Eastern Indonesia, where many essential

businesses happen. Despite the prestigious Financial Condition, this local government was imposed to implement regulation from the central government. Additionally, some resources may have been used to support the financial performance. However, more empirical information is necessary to explore whether those resources influence Financial Condition or not.

Then, the theory and empirical evidence led this study to exert a management control system as its moderating variable on observing the influence of Human Capital and Physical Capital on the Financial Condition of the area chosen in this study. Fiscal decentralisation is a government policy to increase the ability of an area to manage its region. The local governments faced difficulties implementing effective control system strategy because they were unable to link the relationship between Human Capital and the control strategy. As a result, it caused the public services became less efficient.

Having considered the above discussions, the research objectives are formulated as follows;

1. To examine the effect of Human Capital on Regional Financial Condition
2. To examine the effect of Physical Capital on Regional Financial Condition
3. To examine the moderating effect of the Management Control System on the effect of Human Capital and Physical Capital on Regional Financial Condition.

2. Literature review and hypotheses

The Public Sector Accounting Board (2007) defined the Financial Condition as the health of government financial performance indicated by their ability to fulfil the financial obligations and the service commitments to the public, creditors, employees and others. According to DiNapoli (2011), Financial Condition is the ability of the local governments to comply with the expenditure budget by taking the source of local revenue and continue providing services to the community.

Financial factors in Nirwana et al. (2014) are a financial distribution run by the financial system. The financial system seeks to ensure sound financial judgment and cover-up liquidity. According to DiNapoli (2011), the indicators of financial factors are the debt limits, the tax potential, and the legality of expenditure. According to DiNapoli (2011), institutional factors are management practices and the existence of policies or regulations of local governments that guarantee the implementation of healthy governance. Furthermore, the institutional indicators are the budget and financial variance, the timeliness and accuracy of financial transactions, and the quality and timeliness of financial reporting.

In addition, DiNapoli (2011) stated that the Financial Condition are determined by a combination of government environment, institutional and financial factors. For example, when there is a decrease in the population, so there will be a reduction in the tax revenue (negative environmental factors). However, the government can overcome this by reducing services, increasing the tax rate, and striving to develop economic resources, which ultimately determine the Financial Condition of the local governments.

Financial Condition at a regional level can be influenced by several factors such as CEO power (Daily and Johnson, 1997), environmental and operational management (Sueyoshi and Goto, 2010), and technical performance (Kristensen et al., 2008). These antecedents can be grouped into two types of resource, namely human capital and physical capital. The former was workforce competencies (e.g. knowledge and skills), while the latter is more related to technology, devices, and equipment used to perform tasks in organisations. The human and physical capital will be the most two precious antecedents of an organisation's Financial Condition.

The notion of human and physical capital as critical antecedents of financial Condition has been supported by a theoretical perspective. A resource theory or commonly called Resource-Based Theory (RBT), uses

a resource-based approach to analyse competitive advantages (Barney, 1991, 2001). The theory is used as a supporting theory in this study to see the effect of Human Capital and Physical Capital on regional Financial Condition. The key to the RBT approach is a strategy of understanding the relation between valuable resources, organisation capabilities, competitive advantage, and profitability. In the end, all those resources should particularly provide supports for maintaining the competitive advantage over time.

The theory was first introduced by Wernerfelt (1984) in his work entitled "A Resource-based View of the Firm". However, most of the researches referred to Barney's (1991) seminal work. The firm resources explained how to help the company in improving the efficiency and effectiveness of operations. Furthermore, the competitive advantage can be understood by instilling an understanding of the company consists of heterogeneous and immovable elements. The steps in maximising the company's competitive advantage should fit into the four criteria: valuable, awareness, inimitability, and non-substitutability.

According to RBT, the resources can be generally defined by including the assets, organisational processes, organisational attributes, information, or knowledge controlled by the organisations that can compile and imply the strategies. Regardless of the number of resources, the RBT categorises the resources into three major types;

- a. Physical Capital (e.g. technology, manufacturing, and equipment)
- b. Human Capital (e.g. training, experience, insight)
- c. Organisational capital resources (e.g. formal structural)

Using the framework of the RBT, both Human and Physical Capital can maintain the quality of Financial Condition in an organisation, including public organisation such as provincial governments. Human Capital would provide the organisation with desired human resources, directly influencing the quality of Financial Condition. Financial Condition needs skilful personnel and experts to secure the accountability of the reporting system, for example. The existence of these expected workforces will sustain the quality of Financial Condition. The same case applies to Physical Capital. An organisation with ready-to-use tools, devices, and equipment will be more likely to exert those tools to support the organisation's achievement and provide support for Financial Condition.

The concept of RBT, in this case, also asserts that Human Capital and Physical Capital are able to create an organisation's competitive advantage to generate incremental values for the organisation. The value referred to the better performance in an organisation, including financial performance. Throughout the application of adequate Human Capital and supportive Physical Capital, provincial offices can provide more sufficient and complete information towards better Financial Conditions (dan Ghozali and Chariri, 2007). Thus, the first two hypotheses are as follows:

Hypothesis 1. (H1): Human Capital has a positive effect on the Regional Financial Condition

Hypothesis 2. (H2): Physical Capital has a positive effect on Regional Financial Condition

The supports from the two resources may not always provide desired effect on Financial Condition due to some conditions. For instance, previous studies have documented that organisational culture (Yesil and Kaya, 2013) and gender (Campbell and Mínguez-Vera, 2008) determined financial performance. Certain cultures may hinder the implementation of supportive human and physical capital. Likewise, gender-related injustice also impedes effective Human Capital management. It appears that there is some degree of control that may potentially influence the effect of some resources on an organisation's financial achievement. It is plausible that the level of control presumably moderates the two key resources' effect on Financial Condition.

Human Capital and Physical Capital depend on the degree of control applied by organisational management. Management Control becomes much more critical in ensuring that the human and physical resources are in place to support Financial Condition. Anthony et al. (2005) stated that “Management control is a process by which managers influence other organisational members to imply the organisational strategies”. It is also a process of detecting and correcting errors for accidental or intentional work. Since its focus is on humans and implementing plans, management control requires strong psychological resources. Activities such as communication, advising, encouraging and criticising are essential parts of this process. Management control utilises task control to ensure effective and efficient work by considering three critical areas: budgeting, economic value-added, and balance scorecard (Otley, 1999).

Control Theory of Strategic Human Resource Management (Snell, 1992) proposed that as an organisation expects a certain level of performance, it must implement a high degree of control over human resource management, particularly when the goals and incentives are less clear. This theory also suggests that control depends on the degree of standard exhibited by organisations. As goals and incentives are less known and the cause-effect knowledge of management seems a blur, high control is highly needed. Organisations may suffer from underachievement performance or serious issues related to organisational attainment.

The same case also applies to the Financial Condition. Using this Control theory perspective, public sector financial condition at the regional level potentially requires some control in managing Human Capital and Physical Capital. The control should start from input, behavioural, and finally outputs. Human Capital management could support financial Condition when the input (e.g. recruitment and selection) is practised with systematic control. Behavioural control is related to personnel's behaviours which also require control to direct personnel towards targeted goals. Output control means organisation, stakeholders, and employees should have a crystalised standard of the desired output, and this standard is deemed to guide human capital management. Thus, the higher control implemented by the organisations, the more positive the effect of Human Capital on Financial Condition.

Physical capital also demands specific control in order to bring a positive impact on Financial Condition. As proposed by the Control theory (Snell, 1992), a clear and crystalised standard is vital in developing control. Thus, a certain degree of control is essential to ensure that the physical resources are utilised to attain organisational goals. According to the theory, input, behavioural, and output control are three control systems elements. Physical Capital should also be controlled using this concept. Organisations with a high degree of physical resource control would carefully consider physical input, control personnel behavior in using physical assets or resources and evaluate physical utility output with caution. By implementing this system, the positive effect of Physical Capital on Financial Condition will be considerably improved.

Latham and Locke (1979) also have strengthened the argument that a high degree of control may cause the financial resources (i.e. human and physical capital) are even impactful. The goal-setting theory (Latham and Locke, 1979; Locke et al., 1981; Tosi et al., 1991) postulates that clear and specific goals are proven to be more effective than “do your best” goals. The goals impact organisation as the degree of clarity is high, which also applies to Financial Condition. An organisation could perform a better Financial Condition as the control over Human and Physical Capital are more standardised and crystalised. Similarly, Snell (1992) found that clear standard played an essential role in developing a better control system (see Figures 1 and 2).

Given the vital role of control, this study proposes a management control system to control how the strategy in the company runs according to plans and objectives. According to Purnamasari (2009), to encourage companies to compete in increasingly fierce global competitions, professional managers must perform Management Control System. It is a process and structure systematically arranged by management in controlling activities so that the company's goals and objectives can be

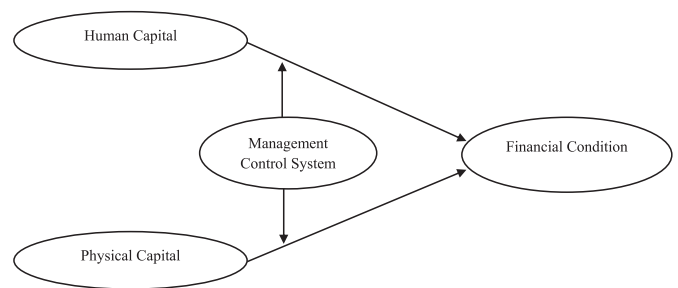


Figure 1. Theoretical framework.

achieved. Therefore, Management Control System will moderate the effect of Human Capital and Physical Capital on Financial Condition. The last two hypotheses will be:

Hypothesis 3. (H3): Management Control System moderates the relationship between Human Capital and Financial Condition

Hypothesis 4. (H4): Management Control System moderates the relationship between Physical Capital and Financial Condition

3. Method

3.1. Participants

Participants were employees of the Regional Financial and Asset Management Agency who served as the member of the Financial Report Compilation team in the Golden Triangle area of South Sulawesi. According to the human resource department, more than 100 employees worked in this team, and their jobs were related to financial evaluation and audit. Researchers had limited access to some information due to confidentiality reasons. The study was advertised to the three organisations, and participation was voluntary. The South Sulawesi Golden Triangle region was formed from a path connecting the capital city and two big cities in South Sulawesi (Makassar, Gowa and Maros). Some participants worked as Secretary, Budgetary, Treasury, Accounting and Information Technology and Regional Assets. This study recruited five people in each division to obtain a sufficient sample, resulting in 25 participants in each region. Since there were three regions, this study received responses from 75 participants in total. By implementing the G^2 Power analysis, the number of participants ($n = 75$) had enough power to eliminate the type II error (Faul et al., 2007). The number of female participants was 53%, and male 47%, with most participants, had bachelor degrees (81%) and some post-graduate degrees (19%).

3.2. Measures

This study employed measures which the researchers developed following the theory of each variable (Brislin, 1970; Hinkin et al., 1997). There are four measuring instruments in this study. The following Table 1 describes the construction of the measure:

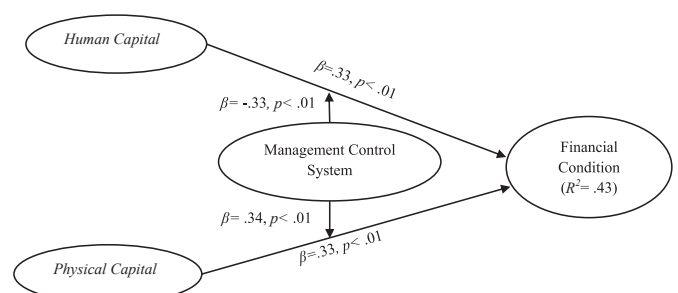


Figure 2. Empirical model and coefficients.

Table 1. Operational variable.

Variable	Dimension	Indicator
Human Capital (Mignone and dan O'Neill, 2005)		1. Special Competence
		2. Work Experience
		3. Skill
Physical Capital (Baldi, 2013)		1. Availability of Natural Resources and the Environment
		2. Government Investment
		3. Facilities and Infrastructure (e.g., Computer and Internet Networks)
Management Control System (Prabawati, 2010)		1. Strategic Planning
		2. Implementation and Measurement
		3. Evaluation
Financial Condition (DiNapoli, 2011)	Environment	1. Community needs
		2. Population
		3. Property Value
		4. Inflation
		5. Individual income
		6. Budgeting
	Organisation	1. Budget Cost
		2. Timeliness and accuracy of financial transactions
		3. Quality and timeliness of financial reporting
	Financial	1. Limitation of Debt
		2. Potential Taxes
		3. Legality of Expenditures

All the measures were developed in Bahasa Indonesia using a 5-point Likert-type scale (1 = Strongly Disagree to 5 = Strongly Agree). Human Capital Scale, Physical Capital Scale, and Management Control System Scale consisted of three items, while the Financial Condition Scale had 12 items. The items included “the organisation has many employees with special competence to accomplish challenging tasks” and “the organisation has implemented a well-designed evaluation system.” The measurement model, including construct validity and reliability, was examined to provide adequate support for the measurement model.

To test the measurement model, this study performed a Confirmatory Factor Analysis (CFA) with four measures (i.e., Human Capital, Physical Capital, Management Control System, and Financial Condition). The hypothesised model was tested against other alternative models. The fit indices confirmed that the hypothesized model showed a better fit ($cmin/df = 1.2, p > .05, RMSEA = .05, \text{ and } SRMR = .04$) than the two-predictor model where Human and Physical Capital were combined ($cmin/df = 2, p > .05, RMSEA = .08, \text{ and } SRMR = .08$) and the single-predictor model where all predictors and Management Control System were combined in the model ($cmin/df = 4, p > .05, RMSEA = .09, \text{ and } SRMR = .10$). These results suggested that the data had four independent constructs confirming the proposed theoretical model. Outer loading value indicated that the convergent validity of the data had coefficients above .50 for each item and the t -value for each item above 1.96. Also, the Average Variance Extracted (AVE) value in each construct variable was greater than .50. Based on the results, all constructs in the proposed theoretical model fit into the convergent validity criteria. Those can be seen in the following Table 2:

The reliability test aims to examine the composite reliability of each measurement construct. The results suggested that the constructs had

Table 2. Average variance extracted (AVE).

Variable	AVE
Human Capital	0.62
Physical Capital	0.60
Management Control System	0.53
Financial Condition	0.70

Source: Primary data.

composite reliability coefficients above .70 (see Table 3), confirming all the constructs had acceptable reliability.

3.3. Procedure

This research was part of a larger research program conducted by the regional financial institution. Data collection was conducted using a three-wave data collection technique to avoid common method biases (MacKenzie and Podsakoff, 2012). The survey booklets were delivered to the Human Resource Department (HRD) Office, and the HRD personnel sent the booklets to the potential participants. In the first phase, researchers collected demographic, human capital and physical capital data. After a week, researchers collected data for the Management Control System and the following week the Financial Condition data. Participants were asked to complete the questionnaire from the beginning to the end of the data collection, which lasted for one month. All participants ($n = 75, 100\%$) fully participated in the study from the beginning to the end of the data collection. Informed consent was obtained from each participant in the beginning of the data collection. This study followed and obeyed the ethical standards of the institutional and national research committee of Indonesia. Study protocol number UH.EB.005.01.03.20 was reviewed and approved by the Research Ethics Committee at Universitas Hasanuddin in Indonesia.

4. Results and discussion

4.1. Results

This study conducted several stages in the data analysis. First, the data were analysed using descriptive statistics and the bivariate correlation technique. Secondly, the relationship between variables was tested using Pearson Product-moment Correlation. Lastly, the Hierarchical Moderated Regressions test (Anderson, 1986) was conducted to answer hypotheses.

Table 4 showed the means and standard deviations for each variable in the study. In addition, the relationship between variables was presented. Generally, all variables in the study were positively and significantly correlated. The level of relation between these variables ranged from $r = .34 (p < .01)$ to $r = .86 (p < .01)$. The Human Capital had a

Table 3. Composite reliability.

Variable	Composite Reliability
Human Capital	0.83
Physical Capital	0.82
Management Control System	0.93
Financial Condition	0.98

Source: Primary data.

strong correlation with the Financial Condition ($r = .50, p < .01$), and so did the Physical Capital ($r = .53, p < .01$). The relation between the Management Control System and the Financial Condition was even stronger with the correlation coefficient of $r = .76 (p < .01)$. The results indicated that the two independent variables (i.e. Human Capital and Physical Capital) and Management Control System had a strong positive relationship with Financial Condition.

After performing the descriptive statistics and bivariate correlation, the Hierarchical Moderated Regressions analysis was performed. In this study, the regression technique was considered appropriate to examine the contribution of each predictor in different regression models (de Jong, 1999). The following were the results of the analysis:

This analysis technique allowed researchers to capture the incremental contribution of each predictor in the models. Before running the analysis, all predictors and the moderating variable were mean-centred to eliminate the risk of multicollinearity (Hayes, 2013). With Human Capital as the only predictor, the first model showed a significant impact on the Financial Condition ($Adj. R^2 = .25, p < .001$). In the second model, Physical Capital was entered, and it contributed a positive and significant added value to the Financial Condition ($\Delta R^2 = .10, p < .01$). In model 3, the interaction between Human Capital and Management Control System did not significantly increase the variance of the Financial Condition ($\Delta R^2 = .01, p > .05$). Model 4 was the regression model that gave the highest contribution to the variance of the Financial Condition ($\Delta R^2 = .06, p < .01$). In model 4, all predictors and the two interactions significantly predicted Financial Condition. However, the interaction between Human Capital and Management Control System contributed a negative effect on Financial Condition (please see Table 5).

The analysis showed that the impact of Human Capital on Financial Condition was positive and significant across all regression models. When there were no other variables in the model, the impact of Human Capital on Financial Condition tended to be strong ($Adj. R^2 = .24, \beta = .50, p < .001$). The impact of Human Capital on Financial Condition remained positive and significant across all the regression models, including in model 4 ($Adj. R^2 = .40, \beta = .33, p < .001$). Based on these results, Human Capital had a positive effect on the Financial Condition, which provided support for H1. The presence of Physical Capital to predict Financial Condition also had a positive impact on all regression models. In model 4, Physical Capital had the same effect as Human Capital ($Adj. R^2 = .40, \beta = .33, p < .001$). The results also provided support for H2.

Table 4. Descriptive statistics and bivariate correlations.

	M	SD	1	2	3	4	5	6
Human Capital	11.43	1.21	-					
Physical Capital	11.79	1.23	.52**	-				
MCS	12.12	1.15	.45**	.54**	-			
FC(Environment)	22.90	2.52	.53**	.56**	.73**	-		
FC(Institution)	12.17	1.22	.30**	.34**	.62**	.78**	-	
FC(Financial)	12.26	1.35	.46**	.46**	.67**	.72**	.64**	-
FC Total	47.33	4.63	.50**	.53**	.76**	.86**	.87**	.85**

Note: N = 75, M = Mean, SD = Standard Deviation, MCS = Management Control System, FC = Financial Condition, ** $p < .01$.

In model 4, the interaction between Human Capital and Management Control System contributed negatively to Financial Condition ($\beta = -.33, p < .01$). The impact of Human Capital on Financial Condition depended on the level of the Management Control System. The higher the Management Control System, the lower the impact of Human Capital on Financial Condition, and vice versa. This finding supported H3 that stated the Management Control System moderated the relationship between Human Capital and Financial Condition. However, one should note that Management Control System could weaken the effect of Human Capital on Financial Condition.

The interaction between Physical Capital and Management Control System also significantly impacted the Financial Condition ($\beta = .34, p < .001$). The impact of this interaction was positive, indicating that the effect of Physical Capital on the Financial Condition would increase when the Management Control System was high. Conversely, if a low Management Control System could reduce the impact of Physical Capital on the Financial Condition, these results provided support for H4.

The last regression model (model 4) showed $R^2 = .43 (p < .01)$, or the model explained 43% of the variance in the Financial Condition. This finding considerably explained a large portion of Financial Condition in the organisations.

Figure 3 below illustrates the interaction between Human Capital and Management Control Systems in predicting Financial Condition. The graph explained that the value of the prediction model was higher when the Management Control System was at a low level ($R^2 = .16$), compared to when it was at a high level ($R^2 = .13$). The existence of a high Management Control System could reduce the impact of Human Capital on Financial Condition.

The interaction between Physical Capital and Management Control System can be seen in Figure 4. Unlike the previous interaction model, the interaction in Figure 4 showed that the impact of Physical Capital on Financial Condition was stronger when the Management Control System was also at a high level ($R^2 = .22$) compared to low levels ($R^2 = .07$). A high Management Control System could support the positive impact of Physical Capital on Financial Condition.

5. Discussion

5.1. The effect of human capital on financial condition

The analysis showed that Human Capital had a positive influence on Financial Condition. Based on the analysis, the higher Human Capital (e.g., competencies, work experience and skills), the more likely Financial Condition leverages in the golden triangle areas. This suggests that Human Capital affects environmental, institutional, and Financial Conditions. In this study, a successful Financial Condition referred to the environment, institution and financial dimensions.

Firstly, within the environmental dimension, there were community needs, populations, property values, inflation, individual income, and budgeting, all of which were necessary to establish a stable Financial Condition. Secondly, human resources also contribute to institutional financial performance. Human Capital aspects support the organisation

Table 5. Moderated regressions with financial condition as dependent variable.

Model		R ²	Adj. R ²	ΔR ²	ΔF	β
1	Human Capital	.25***	.24	-	24.81	.50***
2	Human Capital	.35**	.33	.10**	10.86	.31**
	Physical Capital					.37**
3	Human Capital	.36**	.34	.01	1.47	.32**
	Physical Capital					.37**
	HC*MCS					-.12
4	Human Capital	.43**	.40	.06**	7.98	.33**
	Physical Capital					.33**
	HC*MCS					-.33**
	PC*MCS					.34**

Note: N = 75, Δ = change, β = Standardized Beta Weight, HC = Human Capital, PC = Physical Capital, ***p < .001, **p < .01.

strategy, including the availability of budget, timeliness and accuracy of financial transactions, quality, and timeliness of financial reporting. Lastly, the workforce competence also supports the financial dimension, including debt limits, tax potential and legality of expenditure. Successful financial dimension, in this regard, relied upon the workforce competence. Human capital serves as a means to monitor debt limits and tax management, for example. The increase (or decrease) in Human Capital will influence the regional Financial Condition. This notion has been previously supported by Zulkifli et al. (2018), Ramli et al. (2014), Nimtrakoon (2015), Ervina et al. (2008).

The RBT (Barney, 1991, 2001) has explained the importance of valuable and rare resources in fostering organisation competitive advantages. Human Capital also acted as a valuable resource for organisational success, including financial achievement within the organisation. As the organisation maintains sufficient quality of Human Capital, the workforce will strive to facilitate sustainable financial performance. Thus, according to this study, the RBT successfully explained the role of Human Capital in predicting Financial Condition.

Special competence, work experience, and skills became important points in improving Financial Condition because those could be an essential part of improving the organisation's innovation, strategies, and objectives. In this study, participants perceived that the development of Human Capital increased the regional government's ability to improve the economy and maximise its potential. This research postulated that the role of Human Capital in a regional government needed to be

reconsidered because Human Capital can strengthen the goal attainment of a regional government.

5.2. The effect of physical capital on financial condition

The results showed that Physical Capital had a positive effect on Financial Condition. The level of Physical Capital in terms of the availability of natural resources and the environment, government investment, facilities and infrastructure (e.g. computers, internet access) had a significant impact on Financial Condition in the three regional areas. Physical Capital contributed positively to Financial Condition, including fostering environmental, institutional, and financial aspects.

As mentioned earlier, there are three distinct dimensions of Financial Condition, namely the environment, institutions and finances. These three dimensions depict the local government's financial performance in South Sulawesi (i.e. Makassar, Gowa and Maros). In improving Financial Condition, the regional governments should take into account the community needs, populations, property values, inflation, individual income and budgeting. The second dimension was the institution, which covers budget availability, timeliness and accuracy of financial transactions, and the quality and timeliness of financial reporting. The third dimension was finance which covered debt limits, tax potential and legality of expenditure.

The RBT has supported that Physical Capital (e.g. technology) has provided valuable resources for the governmental organisations in South

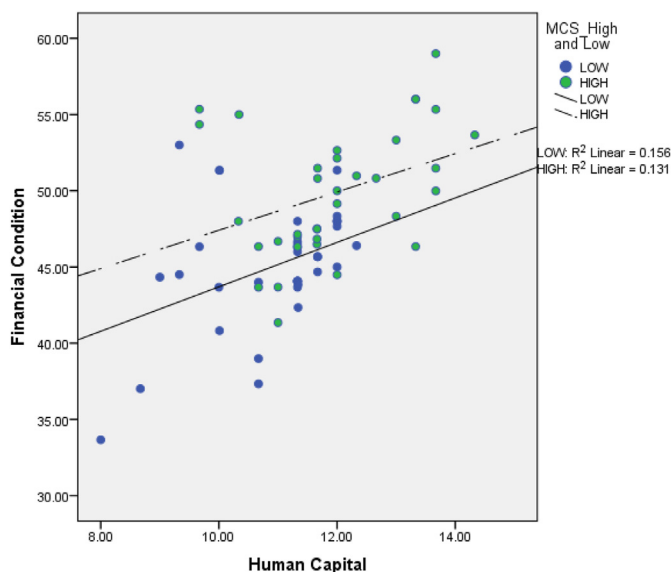


Figure 3. Interaction between human capital and management control system.

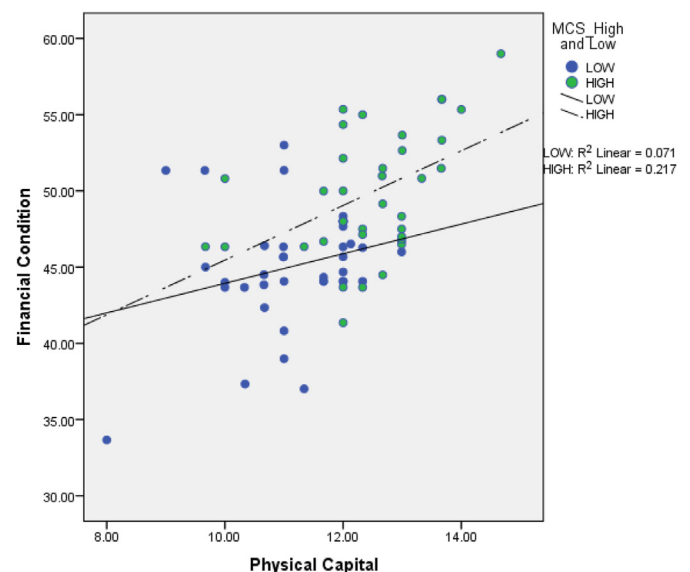


Figure 4. Interaction between physical capital and management control system.

Sulawesi, Indonesia. This empirical study has supported the theory and previous findings. Physical Capital had a significant positive influence on the regional government's Financial Condition in these three regions. Barney (2001) proposed that the competitive advantages of an organisation can be achieved by utilising the existing valuable and rare resources in the organisation. Consistently, in the case of local government organisations in Indonesia, it appeared that Physical Capital added a significant amount of incremental variances to the development of Financial Condition. Physical assets, technologies, devices and other facilities were viewed as the essential elements of a successful Financial Condition.

This study was also in line with research conducted by Zulkifli et al. (2018), Nimtrakoon (2015), Ervina et al. (2008). However, the effect could be indirect as other variables might influence the relationship. For example, Nirwana et al. (2014) discovered that Cultural Capital moderated the Physical Capital - Financial Condition relationship. Therefore, this study also considered testing the moderating effect of the Management Control System in the relationship.

Limitations of Physical Capital often became a problem of a local government regardless of the quality of Human Capital. Generally, regions with outstanding Human Capital would be more developed if juxtaposed with the availability of natural resources and the environment, adequate government investment, facilities and infrastructure. In this study, participants considered that Physical Capital, in the form of technologies, facilities, and infrastructures, provided significant support for the region's Financial Condition.

5.3. The moderation effect of management control system on the relation of human capital and financial condition

Apart from the direct effect of Human Capital on Financial Condition, this study also found that Management Control System moderated the effect of Human Capital on Financial Condition. This research was supported by the Control Theory (Snell, 1992) as the theory stated that managing human resources must be supported with input, behavioural, and output control. In addition, the Control Theory and the Goal Setting (Latham and Locke, 1979) postulated that clear and crystallised standard potentially emphasise the effect of resources. Besides, the goal-setting principles have stressed enough the importance of specific and clear goals. These theories have supported the notion that organisations with supportive human resources, but unspecified goals and rules would experience constraints to rise their Financial Condition.

This study discovered interesting findings related to the moderation effect of the Management Control System. The presence of a lower degree of Management Control System could trigger improvement in local government organisation. In contrast, a high degree of Management Control System would reduce the effect of Human Capital on Financial Condition. The theories have supported that Management Control System facilitated the Human Capital – Financial Condition relationship. The moderating effect seems to be more positive as the theories suggested that a clear and specific goal in human resource management could improve Financial Condition. However, this study showed opposing evidence as the moderating effect was found to be negative. This indicated that the existence of a Management Control System could weaken the role of Human Capital on Financial Condition.

In the local government areas, Human Capital significantly determined the fluctuation of Financial Condition. However, as the Management Control System implemented with a considerably high degree of input, behavioural, and output control, Human Capital would be less influential. The Management Control System improves Human Capital management by standardising control over the input quality, specifying work behaviour, and directing control to attain desired output. The government officials could have perceived Human Capital as an insignificant resource as the human resources management was highly controlled. The regional governments could have discarded the

importance of Human Capital for Financial Condition as they perceived a high Management Control System.

The results of this study were in line with the research conducted by Chandra (2017), Ong et al. (2016), Utary (2014), where they all found that the Management Control System had a significant influence on Human Capital and Financial Condition. However, scholars and government officials should consider how the Human Capital and Management Control System interact to predict Financial Condition. As the Management Control System increases, the Human Capital impact on Financial Condition declines. Thus, organisations with a flawed Management Control System may require high quality of Human Capital to improve financial conditions.

5.4. The moderation effect of management control system on the relation of physical capital and financial condition

This study also indicated that the Management Control System moderated the effect of Physical Capital on Financial Condition. The relation between Physical Capital and Financial Condition increased as the Management Control System was included in the prediction model. As predicted previously using the Control Theory by Snell (1992), a high degree of control over input, behaviour, and output improved the quality of Physical Capital. In this respect, Physical Capital could be more influential as the Management Control System ensured its quality by controlling input of physical resources, controlling behaviours in utilising the resources, and directing the outputs of resources. This study suggested that as the Management Control System increases, it improves the effect of Physical Capital on Financial Condition.

Unlike the former moderating effect, Management Control System and Physical Capital went hand-in-hand in predicting Financial Condition. It indicated that the effect of Physical Capital on Financial Condition depended on the degree of the control system within the organisation. Organisations with abundant Physical Capital may not always lead to high performing Financial Condition unless they implement a favourable Management Control System. This sheds light on the importance of the Management Control System in facilitating the role of Physical Capital. Hypothetically, if the organisations aim to have fewer physical resources, managing the resources using the Management Control System principles will accentuate the effect of the resources on the organisations' Financial Condition.

The results were in line with some previous investigations conducted by Chandra (2017), Ong et al. (2016), and Utary (2014). In those studies, Management Control System was one of the predictors of Financial Performance in organisations. The Management Control System's effect is vital as it serves as control over resources availability and quality. Anthony et al. (2005) stated that Management Control System was also a process for detecting and correcting errors at work.

In the regional government offices, the three golden areas of South Sulawesi may have relied on the Management Control System to attain an expected level of Financial Condition. In this regard, the regional government should strive to optimise control over the physical resources. The control system should manage the selection of equipment, human behaviours related to the application of the equipment and monitor the effectiveness of specific technologies or devices on outputs. Physical Capital positively predicts the regional government Financial Condition as far as the physical resources controlled with systematic procedure starting from input to output.

5.5. Implications

This research empirically examined the influence of moderating effect of Management Control Systems on the two antecedents of the regional Financial Condition; Human Capital and Physical Capital. The results supported that the perceived Management Control System significantly determined Human Capital and Physical Capital's effect on Financial Condition. However, this moderator behaved differently

towards Human and Physical Capital in the regional government organisations. Management Control System tended to alter the low quality of Human Capital while at the same time strengthen the Physical Capital – Financial Condition Relationship.

If the regional governments implement a high Management Control System, the Physical Capital will be more likely to foster Financial Condition. Unfortunately, this condition will also reduce the Human Capital's effect on Financial Condition. Albeit the organisations have exhibited sufficient workforce competence, it will have less impact on the Financial Condition as the Control System is highly managed. Presumably, outstanding Human Capital can tolerate a flawed Management Control System and still positively impacts Financial Condition. Control System is vital for directing the effect of resources on Financial Condition. However, in this case, the local government officials should be aware that increasing control over Human Capital can reduce the effect of human resources on Financial Condition. Human Capital in the local government areas may not impact financial performance as the organisations implement high control system.

5.6. Limitations and future research directions

This study employed a set of questionnaire as valid and reliable measures of variables being studied. The initial attempt was to collect objective data. However, the existing objective data were not adequately standardised across different organisations. Accessing the data and information related to the objective financial record was also strictly prohibited. Likewise, researchers cannot find alternative objective data that measured the level of achievement of the whole existing variables, other than the perception of employees who work in the organisations. This study then used Subject Matter Experts (SMEs) perception of each variable, and this procedure had been permitted by the research ethics committees and the government officials. Therefore, future studies can repeat this method using objective data sources from government officials by establishing mutual collaborations.

Furthermore, although this research succeeded in involving representatives from all agencies with varying positions, the number of participants involved was still small compared to previous studies. By increasing the number of participants and involving more governmental organisations, future studies would provide more information regarding the effect of the control system in the regional government organisations.

6. Conclusions

This study has two folds. Firstly, it contributed new information about the effect of two key resources (i.e. Human and Physical Capital) on financial performance in governmental organisations. Secondly, this study broadens our understanding of the unique role of the Management Control System in the local government organisations in South Sulawesi, Indonesia. The first part of the findings was consistent with the RBT as both Human and Physical Capital significantly predicted Financial Condition. However, the second part of the findings was mixed as Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study highlighted the importance of improving the standard of the control system in managing the local government organisations. Although it potentially reduces Human Capital's effect, a high degree of control will help organisations maintain and improve desirable Financial Condition.

Declarations

Author contribution statement

Asri Usman: Conceived and designed the experiments; Performed the experiments.

Hillman Wirawan: Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Zulkifli: Performed the experiments.

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Data availability statement

The data that has been used is confidential.

Declaration of interests statement

The authors declare no conflict of interest.

Additional information

No additional information is available for this paper.

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