UMS
UNIVERSITI MALAYSIA SABAH

ACCOUNTING CENTRE
ACCOUNTING RESEARCH SERIES

(Volume 1, 2019)

EDITORS

Jainurin Justine
Sharifah Milda Amirul
Andy Lee Chen Hiung
Junainah Jaidi
Mohd Allif Anwar Abu Bakar
Nur Shahida Ab. Fatah

ACCOUNTING CENTRE ACCOUNTING RESEARCH SERIES
(Volume 1, 2019)

EDITORS
Jainurin Justine
(*Accounting Centre, Faculty of Business, Economics and Accountancy, Universiti Malaysia Sabah*)
Sharifah Milda Amirul
Andy Lee Chen Hiung
Junainah Jaidi
Mohd Allif Anwar Abu Bakar
Nur Shahida Ab. Fatah
(*Faculty of Business, Economics and Accountancy, Universiti Malaysia Sabah*)

ACCOUNTING CENTRE ACCOUNTING RESEARCH SERIES
(Volume 1, 2019)

Table of Contents

Does Management Accounting Matters for Effective Flexible Working Arrangements Strategic Plan?

Sharifah Milda Amirul[1], Sharifah Rahama Amirul[2], Mohd Aliff Anwar Abu Bakar[3], Rasid Mail[4] & and Jakaria Dasan[5]

[1,2,3,4,5]*Faculty of Business, Economics & Accountancy, Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia*

[1]sma@ums.edu.my

Abstract

Flexible working arrangement (FWA) has become a workplace global trend in the fastest world economies and more of developing countries are working toward promoting FWA as their business practices. Conventionally, most of the FWA research is focusing on management and human resource perspective. In this paper, we are converging the standpoints of management accounting (MA) into FWAs strategic plan and implementation. In this paper, we have discussed how the information of MA, particularly on the use of the Balance Score Card (BSC) works as an important mechanism to achieve FWAs efficacy. We highlight the connection between FWA and BSC for a strategic plan when managing FWAs. This paper is expected to contribute to the awareness of MA roles to the adoption of FWAs and how flexibility strategy can be improved through the lens and value of MA.

Keywords: Flexibility working strategy, Management accounting, Balanced Score Card, Strategic plan

Introduction

Managing employees is one of the most challenging issues faced by organizations as human resource management (HRM) needs to deal with more complex human behavior due to globalization, technology advancement, diversity and cultural differences, and event changes in human rights legislation (Kotey & Sharma, 2019). The central issue is on the work-life balance of employees (Chung, 2019; Kotey & Sharma, 2019), as more and more organizations are providing flexible working arrangement (FWA) (Avgoustaki & Bessa, 2019; Chung, 2019), which is commonly used as a tool to enable employees flexibility (Avgoustaki & Bessa, 2019) to enhance employees well-being, work-life balance, and thus increasing firm performance (de Menezes & Kelliher, 2011; Kotey & Sharma, 2019; Ortega, 2009; Schieman, Milkie, & Glavin, 2009).

FWA means the employees shall have the sufficient control and autonomy on how they work and where they will be working from which enables them to accomplish their work responsibilities (Chung & van der Horst, 2018; de Menezes & Hegewisch, 2009; Kelliher, 2017; Kossek & Lautsch, 2018; Visser & Williams, 2006). Some of the examples of FWA include telework, home-based work, flexitime, job sharing and compressed hours (Kelly & Moen, 2007; Kossek & Lautsch, 2018). HRM plays a significant role in ensuring this FWA working effectively and efficiently in such a way that not only to motivate employees but also to increase organizational performance.

Despite this FWA has the potential to be used as strategies to attract unique capabilities and build competencies for competitive advantage (Kotey, 2017) which may in turn positively affect financial performance (Kotey & Sharma, 2019). Nevertheless, there seems a lack of study on how this FWA can be strategically managed. Moreover, it is found that studies on the link between FWAs and organizational performance in the academic literature are almost absent (Bloom, Kretschmer, & Van Reenen, 2011; Kotey & Sharma, 2019; Lilian M. de Menezes and Clare Kelliher, 2011). The existing works of literature documented that most of FWA studies focusing more on qualitative performance such as employees satisfaction, employees' burnout, absenteeism and employees' qualities of life,(Avgoustaki & Bessa, 2019; Chung, 2019; Muna & Mansour, 2009; Wilkinson, Tomlinson, & Gardiner, 2018).

While HRM has been facing a pressure on how to develop FWA strategies that leads towards betterment not only for employees, but also for organization in terms of financial, nonfinancial, and perceptual indicators of performance (Bell, Lee and Yeung, 2006), therefore, there is need to manage FWA strategically with more applicable organizational performance measurement. Regarding organizational performance, one of the most prominently used to measure organizational performance both from quantitative and qualitative perspective is the Balance Score Card (BSC), which is under the umbrella of Managerial Accounting (MA).

The used of BCS as performance measurement for HRM is not something new in the academic literature, see for examples (Gabcanova, 2012; Gesuele, 2015; Kaplan, 2009; Muna & Mansour, 2009; Prakash & Pant, 2014; Torres-coronas & Arias-oliva, 2010; Vienni & Bachtiar, 2017) which shows that BSC has been used as a performance indicator to improve business strategic positioning. However, the existing literature does not delve far to discuss the possible connection between FWA and BSC. It is therefore, worth discovering the potential intersection between these two dimensions as it is expected to result in strategic formulation of FWA for organizations.

Hence, this study is motivated to explore the interconnectedness between HRM and MA, specifically between FWA and BSC, from the angle of business strategic planning. This paper will be organized as follows; firstly, the study will present literature on FWA and followed by BSC. Secondly, the study will discuss the possible integration between FWA and BSC which essential for strategic business planning. Lastly, is to conclude this study.

Flexible Working Arrangement (FWA)

The model of FWA was first established by Karasek in 1979. As of now, this FWA has gain considerable attention for its implementation as it has been proved to result in enhancing the life quality of employees (e.g. Allen, Johnson, Kiburz & Shockley, 2013; Kelly et al., 2014). Moreover, it is also found that FWA results in high-performance strategies and allow workers to have more discretion and influence over their work, and therefore increase their performance (Appelbaum, 2000). In this regard, literatures have shown that most of existing studies have discussed on the greater benefits of FWA particularly on qualitative perspectives. The FWA is seen as a driver for ambidexterity between career and family as it allows workers to adapt their work demands to the demands of their family (Golden, 2001; Jacobs & Gerson, 2004; Lott, 2015). Therefore, FWA has a great implication towards the well-being and career progression of the employees (Avgoustaki & Frankort, 2018).

While most of existing literatures have evidenced the qualitative implication of FWA such as fairness of work–life balance policies (Wilkinson et al., 2018), employee job satisfaction, health care, retention, productivity, safety and mistakes at work, and personal satisfaction, work commitment and reduced turnover, (Cegarra-Leiva, Sanchez-Vidal, & Cegarra-Navarro, 2012; Galinsky, Kim & Bond, 2001; Kossek, Lautsch & Eaton, 2006; Posthuma, Campion, Masimova & Campion, 2013; Wang, Yi, Lawler & Zhang, 2011). However, the implication of FWA on quantitative performance is still scars (Kotey & Sharma, 2019). Significantly, there is very limited performance measurement for FWA that combined both as qualitative and quantitative performance which are essential for strategic planning. Since the BSC covers both performance measurement, therefore, BSC can be integrated with FWA.

Balanced Score Card (BSC)

BSC was first invented by Robert S. Kaplan and David Norton in the year 1992 as a tool to measure firms' performance following the firm's mission and vision, taking into consideration both shareholders and stakeholders of firms in the USA. The BSC comprises of four (4) components, with financial metrics as the outcome measures for company success. While the remaining three (3) components which are customer metrics, internal process metrics, and learning and growth metrics, are supplemental to the financial metrics (Kaplan, 2009). The used of BSC's framework enables managers to have a fast but comprehensive view of the business as the four metrics are interrelated to one another. Thus facilitates communication, information and learning systems within an organization (Ayoup, 2018).

Financial metrics mainly focus on the quantitative performance of firms which can be measured through numbers such as profitability, returns on capital and return on investment as well as income for the shareholders. Customer metrics, on the other hand, involve external stakeholders which are mainly to measures customer satisfaction, customer retention, and focusing on prospects with new customers, thus qualitative measurement in nature. As for the internal process part, this metric allows a firm to examine the business process within the firm such as improving firms' productivity, enhancing cost efficiencies, creating innovation, value creation, service quality and so on. The last metric which is the learning and growth enables the firm to monitor the stakeholders within the firm which are the employees. This covers employees' growth and ability, employees' satisfaction, system availability and flexibility, teamwork and performance information group and any others that relate to employees' personal development (Kaplan, 2009).

Each metric has its criteria or key performance indicator (KPI) which can be used by firms in analyzing whether the objectives of each metric has been achieved. Although the metrics of BSC are constant up to now, nevertheless the criteria or the KPI can be changed and it is flexible enough to further suit the firms' aims. The following table 1 provides an overview of the metrics of BSC.

Table 1: Overview on the Metrics of BSC

BSC metrics	Criteria/ KPI
Financial	The return on capital and value-added Economically, the level of business efficiency, market share, profitability
Customer	Customer satisfaction and retention, market shares, ability to attract new customers, etc
Internal Business	Innovation, quality, after-sales service, efficiency costs of production and introduction of new products, productivity, etc
Learning and growth	Employees growth and ability, satisfaction, and system availability, teamwork and performance information group, personal development, support, etc

Integration Between FWA And BSC For Strategic Planning

Strategic planning is a process of formulating prospects of organizations that involves making appropriate decisions on what strategies to be implemented to achieve long- term objectives (Chavan, 2009). FWA has been introduced to tackle issues with work-life balances with the main objective to sooth the internal process of organizations that specifically deal with employees. It is hoped that, with sound and effective FWA, it would enhance employees' productivity and performances, motivations, lessen the burnout, mitigate absenteeism and many more. These outcomes shall therefore positively affect organizations' performance both in financial and non-financial performance.

BSC has been implemented by organizations for various purposes such as performance measurement and management tools to strategic management tools (Ayoup, 2018). The most essential features of BSC is that it emphasizes the critical indicators which are chosen as a basis for an organization's business strategy and competitive demands (Anwar, Djakfar, & Abdulhafidha, 2012). The integrating role of BSC as a key organizational enabler of strategy execution is seen as organizational capabilities (Kaplan & Norton, 2008). As such, it is proposed to integrate FWA and BSC on the ground basis of setting upon the objectives of FWA and thus measuring the achievement of those objectives by utilizing the BSC metrics.

To synergize FWA and BSC, it shall be the function of HRM and MA as HRM plays a significant role in the BSC where one part of the BSC is about employees (Anwar et al., 2012) that can be related to the internal process and learning and growth directly and also towards customer and financial metrics on the firms indirectly. Since the FWA focusses on well- being of employees, thus the criteria or KPI for FWA can be set against the BSC metrics which are learning and growth and internal business process. BSC has highlighted the need for employees' growth which can be done through learning and training, flexibilities and greater autonomy towards their jobs. This is expected to enhance the business process, where employees' productivity will increase as a result of effective FWA setting. Consequently, it improves business operations through an increase in employees' productivity, value creation, and service quality.

Along this process, firms' may also increase customer satisfaction and retention and ultimately improving the overall financial performance of the firms. In other words, this integration is expected to enable firms to innovate and build the right strategic capabilities of FWA and thus resulting in more efficiencies (learning and growth and the internal processes) thus delivering specific value to the market (customer) and eventually lead to create values for shareholders (financial) (Kaplan and Norton, 2001).

Conclusion

This paper provides insight into the possibility to create a synergy between HRM and MA, through integrating both FWA and BSC for the strategic planning of organizations. We converge the standpoints of BSC into FWAs strategic plan and implementation, as we discuss how FWA can be set up and measure by utilizing the four metrics of BSC. The information flow from these metrics is an important mechanism to achieve FWAs efficacy. We also highlight the connection between the FWA and BSC particularly on the internal process and learning and growth, of which along the process it is believed that it may have a great influence on both customer and financial metrics of organizations in formulating and achieving the strategic plan when managing FWAs. This paper is expected to contribute to the awareness of MA roles to the adoption of FWAs and how flexibility strategy can be improved through the lens and value of MA.

References
Anwar, M. R., Djakfar, L., & Abdulhafidha, A. K. (2012). Human Resources Performance and Competency of Management by Using a Method of Balanced Scorecard . (Case Study : The Experience of The Tanjung Perak Port-Surabaya). International Journal of Civil & Environmental Engineering, 12(04), 1–5.

Avgoustaki, A., & Bessa, I. (2019). Examining the link between flexible working arrangement bundles and employee work effort. Human Resource Management, 58(4), 431–449. https://doi.org/10.1002/hrm.21969

Ayoup, H. (2018). The Application of Strategy Map in the Balanced Scorecard Implementation: A Case of a Public Organization. International Journal of Academic Research in Business and Social Sciences, 8(8), 725–737. https://doi.org/10.6007/ijarbss/v8-i8/4628

Chavan, M. (2009). The balanced scorecard: A new challenge. Journal of Management Development, 28(5), 393–406. https://doi.org/10.1108/02621710910955930

Cegarra-Leiva, D., Sanchez-Vidal, M.E. and Cegarra-Navarro, J.G. (2012), "Work life balance and the retention of managers in Spanish SMEs", The International Journal of Human Resource Management, Vol. 23 No. 1, pp. 91-108

Chung, H. (2019). 'Women's work penalty' in access to flexible working arrangements across Europe. European Journal of Industrial Relations, 25(1), 23–40. https://doi.org/10.1177/0959680117752829

Gabcanova, I. (2012). Human Resources Key Performance Indicators. Journal of Competitiveness, 4(1), 117–128. https://doi.org/10.7441/joc.2012.01.09

Galinsky, E., Kim, S. and Bond, J. (2001), Feeling Overworked: When Work Becomes Too Much, Families and Work. Institute, New York, NY

Gesuele, B. (2015). Human Resource Measurement: A Balanced Scorecard Approach. Journal of Human Resource Management, 3(2), 28. https://doi.org/10.11648/j.jhrm.s.2015030201.14

Kaplan, R. S. (2009). Conceptual Foundations of the Balanced Scorecard. Handbooks of Management Accounting Research, 3, 1253–1269. https://doi.org/10.1016/S1751-3243(07)03003-9

Kossek EE, Lautsch BA and Eaton SC (2006) Telecommuting, control, and boundary management: Correlates of policy use and practice, job control, and work–family effectiveness. Journal of Vocational Behavior 68(2): 347–367

Kotey, B. A., & Sharma, B. (2019). Pathways from flexible work arrangements to financial performance. Personnel Review, 48(3), 731–747. https://doi.org/10.1108/PR-11-2017-0353

Muna, F. A., & Mansour, N. (2009). Balancing work and personal life: The leader as acrobat. Journal of Management Development, 28(2), 121–133. https://doi.org/10.1108/02621710910932089

Prakash, G., & Pant, R. R. (2014). Performance measurement of a dairy supply chain: A balance scorecard perspective. IEEE International Conference on Industrial Engineering and Engineering Management, 196–200. https://doi.org/10.1109/IEEM.2013.6962402

Posthuma, R.A., Campion, M.C., Masimova, M. and Campion, M.A. (2013), "A high performance work practices taxonomy: integrating the literature and directing future research", Journal of Management, Vol. 39, No. 5, pp. 1184-1220.

Torres-coronas, T., & Arias-oliva, M. (2010). Encyclopedia of Human Resources Information Systems. Encyclopedia of Human Resources Information Systems, (January 2008). https://doi.org/10.4018/978-1-59904-883-3

Vienni, & Bachtiar, M. (2017). Analysis of performance measurement at HR-GR Department using the balance scorecard method. IOP Conference Series: Materials Science and Engineering, 277(1). https://doi.org/10.1088/1757-899X/277/1/012006

Wang, S., Yi, X., Lawler, J. and Zhang, M. (2011), "Efficacy of high performance work practices in Chinese companies", International Journal of Human Resource Management, Vol. 22 No. 11, pp. 2419-2441

Wilkinson, K., Tomlinson, J., & Gardiner, J. (2018). The perceived fairness of work–life balance policies: A UK case study of solo-living managers and professionals without children. Human Resource Management Journal, 28(2), 325–339. https://doi.org/10.1111/1748-8583.12181

Efficient Asset Management and Firms' Growth in Construction Sector, Malaysia

Nazaria Binti Md. Aris[1], Mohammad Bin Jais[2] & Suzila Bt Mohamed Yusof[3]

[1,2,3]*Faculty of Economics and Business. Universiti Malaysia Sarawak, Kota Samarahan, Sarawak, Malaysia*

[1]*manazaria@unimas.my*

Abstract

Construction sector has a remarkable role in cultivating wealth to economic growth and development in Malaysia. The increasing volume of growth in Malaysian construction firms in the sector lead to more competitive intensity among the existing players. This made construction sector encountering more severe challenges in optimization the level of managing assets for sustainability in the industry. The performance measurements for construction sector have received substantial attentiveness with regard to reduce investment costs and improve utilization of resources for revenue generation purpose. This paper sought to propose a conceptual framework for measuring the growth performance that can be used by the construction sector. Several independent variables are examined including cash management, inventory management, account receivable management, non-current assets management and firm size with the dependent variable of return on assets ratio. Using a sample of 82 construction firms listed in Bursa Malaysia over a five year (2010 to 2015) period, several research methodologies were employed, that are, descriptive analysis, correlation analysis, Pooled Ordinary Least Square (OLS) regression, Breusch-Pagan (BP) Lagrange Multiplier test, and Hausman test. The result from this study is a conceptual framework for measuring the growth performance for construction sector where each variables has a significant correlation to the return on assets. This research is expected to contribute as the literature used by academics and serves as an important reference to the top-management for strategic planning for competitive advantage. This research also provides guidance to the authority to plan for policies related to asset management without damaging others in the supply chain. In other words, asset management should help the firms in construction sector to identify the right amount of money to be spent on the right assets, at the right time.

Keywords: Asset management, Construction sector, Return on assets, Firms' growth

Introduction

The scope of this research will involve analysis of the efficient asset management and firms' growth for construction sector listed in Bursa Malaysia. The general objective of this study is to evaluate both the current assets and non-current assets management and its impact on the firms' growth for construction sector listed on Bursa Malaysia. The specific objectives of this research tend to investigate the firms' cash management, inventory management, accounts receivable management and non-current asset management on the firms' growth.

Construction Sector and Return On Asset (ROA)

Today, there are eight primary sectors that contributed to the GDP growth of Malaysia's economic namely mining, agriculture, manufacturing, construction, transportation, wholesale

and retail trade, forestry and fishing, finance and insurance and government services. Based on The Stars, the construction industry is expected grow by 8% contributed by lots of big infrastructure projects in Malaysia (CIDB, 2017). Moreover, many researchers found that contribution of construction industry to national economic development (Myers, 2013). Therefore, this study only focus on construction industry in Malaysia and one dimension in measuring growth or firm performance is by using the financial ratios. The financial ratios derived from financial data to objectively evaluate firm's performance. In this area, Return on Asset (ROA) is used as a proxy for firms' growth measurement.

Cash Management

In the previous literature, the cash conversion cycle was found associated with these three variables (Ebben & Johson, 2011). Efficiency of cash conversion cycle giving impact of more liquidity, decrease the debt and financing in equity. First, the efficiency will come out with higher of returns. Second, the owners or managers may be proactive in organizing the cash management and third, the study signifies that of cash conversion cycle as a positive or essential management apparatus for company's owner. In another study, cash flow management have a positive relationship to firm's profitability (Aftab Hameed Memon, 2010). The finding indicates firm that can smoothly plan their cash flow will reduce difficulty in financial management. In fact, increasing in cash will increase the profitability of a company (Malik, Waseem & Kifayat, 2011). Bhutto, Abbas, Rehman & Shah, (2011) confirmed the finding that there is positive relationship between cash conversion cycle with company's profitability.

Inventory Management

A study was conducted entitle of the effect of inventory management on business performance of companies in Nigeria (Anichebe & Agu, 2013). The study found that there is significant link between inventory management and effectiveness of the companies. There is significant impact on productivity of companies and inventory management and also strong positive correlation between the two variables. It can be concluded that effective inventory management is one way to successful and growing companies. However, based on study by Panigrahi (2013), she conducted the association between inventory conversion period and profitability of top 5 listed companies in India in 2001 to 2010. The test used was regression analysis. The study found that the inventory and profitability of the companies have opposite relationship. Thus, the variables move in different direction.

Account Receivables Management

A study was examined the association between account receivable management and profitability for 131 listed firms in Athens Securities Exchange (Lazaridis & Tryfonidis, 2006). The finding can be summarized that utilization of CCC by upper management could rise the shareholder value. There was positive significantly association between the company's profitability and the efficiency of the company's account receivables. However, another study found that there is no statistically significant association between firm's profitability and average inventory days (Gill, 2010). Further, there is negative association between profitability and the number of day's debtor and cash conversion cycle (Garcia & Martinez, 2007). This is supported with another finding that there is negative association between inventory in days, CCC, ACP and firm's value (Waweru,2011).

Non-Current (Fixed) Asset Management

The fixed asset (non-current assets) has the major role in the profit ratio determination and the evaluation of risk involved (Smith, 1980). Effective organization of non-current assets is the most important part of the entire corporation and in creating the value of shareholders. It includes the land, equipment of manufacturing and other assets which last for longer periods of time. The non-current assets are more revenue generators than the current assets but the risk involvement is more than the current assets as it is difficult to convert them into cash and the value also differ in different point of times than the current assets (Scott, 2003). Muritala (2012) in the study recommended that asset tangibility should be a driven factor to capital structure because firms with more tangible asset are less likely to be financial constrained. In the other hand, he sampled firms used in Taiwo, 2012 study were not able to utilize the fixed asset composition of their total assets to gives positive impact on their firms' profitability.

Firms' Growth

Asset structure significantly influences company growth. The influence of both is positive, this means that asset structure affect company growth. According to Bambang Riyanto (2001), most industrial companies in which majority of capital is embedded in non-current assets will give priority to meeting the needs of capital from permanent capital, namely equity, while foreign capital as a complementary. It can be connected with the rule that horizontal conservative financial structure which states that the amount of own capital should at least be able to cover the amount of non-current assets plus other assets that are permanent. And companies that own most of its assets in current assets will give priority to meeting the needs of their funds with short-term debt. Firms that achieve growth will subsequently go on to contribute more actively towards the development of Malaysia's economy and social elements. According to Autio (2007), growing firms have long attracted the attention of policy makers worldwide and high growth enterprises are seen as important contributors to employment, innovation, and competitiveness. However, firm with growth ambitions should rationally evaluate the overall capabilities of the firm instead of only rely on a competitive strategy. Right and appropriate decisions are crucial for construction companies to remain active and grow in today's challenging business environment.

Based on the literatures by the prior researchers, this research study is motivated by three main factors. Firstly, asset management is very crucial and valuable components owned by a firm or any businesses. The assets were purchased and owned by the firm to manage the business to maximize the profit of shareholders and generate profitability income. For examples, buildings, cash in bank, prepayments, machines, debtors and motor vehicles. These assets are reported in firm's balance sheet and the common types of assets include current, non-current, physical, intangible, operating, and non-operating. Secondly, assets have significant role in determining the role and the profit ratio of a firm (Smith, 1980). The non-current assets are about half of the total assets of the manufacturing firm and in a distribution firm. A greater return on investment can be obtained by having huge level of assets which are not current. However, Van Horne and Wachowicz (2004) claimed that there can be negative effect of profit of a firm on the current assets of the firm, while the deficiency of current assets may drop down the stock outs and the liquidity of a firm so that the liquidity of firms could not be disturbed. Finally, the performance of construction industry as a high-risk business due to the high level of business failures which is far beyond those in many other industries. Then, this failure result from the combination of several factors and financial-related causes considered as one of them. Thus, this study aims to analyse both the current

and non-current asset management issues to construct the best-suited model of asset management and firms' growth based on the asset management theory.

Methodology

Data Descriptions

In order to gather enough data for this research, the secondary sources of data were obtained from the published annual reports and audited financial statements of the sampled local construction firms. This study empirically analyses the association between efficient asset management and firms' growth by using a sample size of 82 construction firms listed in Bursa Malaysia, to cover the period from 2010 - 2015.

Conceptual Framework

The following figure is the conceptual framework for this study. The exogenous or independent variables are cash management, inventory management, account receivable management and non-current asset management. The endogenous or dependent variable in this study is Return on Asset (ROA) is used as a proxy for firms' growth measurement.
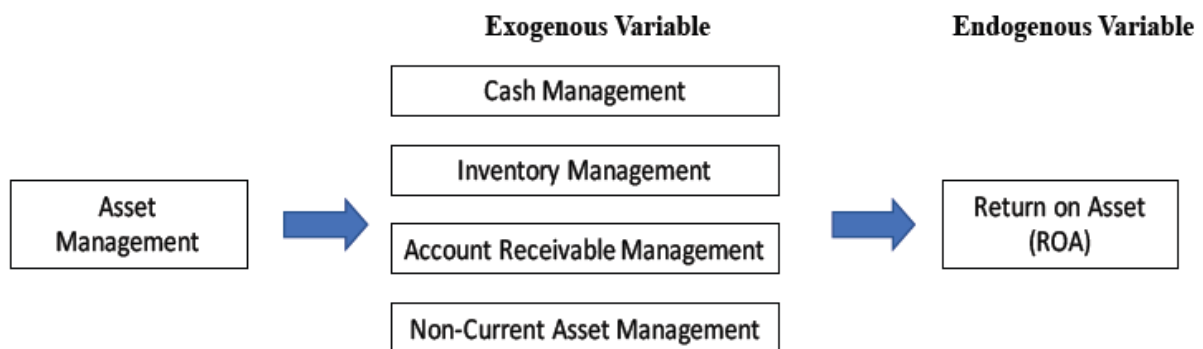
Figure 1: Conceptual Framework for the relationship between asset management variables and firms' growth in Malaysia.

Estimation Model

The relationship between firms' growth with the chosen asset management variables was tested using panel data regression model. The regression model as follows:

$$ROA_{it} = \beta_{1i} + \beta_2 CM_{it} + \beta_3 IM_{it} + \beta_4 ARM_{it} + \beta_5 NCM_{it} + \beta_6 SIZE_{it} + \varepsilon_{it} \qquad (1)$$

where ROA represents Return on Asset. *i* represents the cross-sectional unit (firms) while *t* represents the period of time (2010-2015), β_1 is the intercept or constant term while β_2, β_3, β_4, β_5 and β_6 are estimated coefficient of the independent and control variables. Also, ε refers to the random error term. The set of independent and control variables include:
CM = Cash Management
IM = Inventory Management
ARM = Account Receivable Management
NCM = Non-Current Asset Management
SIZE = Firm size

Hypothesis Development

This study purposed to examine the relationship between asset management variables and firms' growth for construction industry in Malaysia. After conducting a literature review, the researcher will propose some hypothesis based on the existing constructs. There are four hypotheses to be proposed in this study which describes the relationship between the independent variables and dependent variables. Here are the hypotheses proposed:
H1: There is relationship between cash management and firms' growth.
H2: There is relationship between inventory management and firms' growth.
H3: There is relationship between account receivables management and firms' growth.
H4: There is relationship between non-current asset management and firms' growth.

Data Analysis

In order to test the relationship among each variable, several research methodologies were employed, that are, descriptive analysis, correlation analysis, Pooled Ordinary Least Square (OLS) regression, Breusch-Pagan (BP) Lagrange Multiplier test, and Hausman test.

Descriptive Analysis

Measures of central tendency depict the center of a distribution for a set of data, which include mean and median. Meanwhile, measures of variability describe how spread out a distribution is for a data set, or in other words, how data points diverge from the average value. These measures include standard deviation, minimum and maximum values. When a sample is obtained in the study, the descriptive statistics are applied to make inferences about the characteristics of the firms' growth measures, asset management variables, and also the control variables for the sample.

Correlation Analysis

The value of correlation coefficient, r, can ranges from +1.0 to -1.0. The value of +1.0 denotes a perfect positive relationship exists, while the value of -1.0 denotes a perfect negative relationship exits. No relationship between the variables is indicated if the value of r is zero. The closer the value is to +1.0 or -1.0, the linear relationship among variables is strong. Isik and Ince (2016) states that multicollinearity problem may arise due to the high correlation coefficient. Generally, there is no multicollinearity problem if the correlation between independent variables does not more than 0.8 (Jadah et al., 2016). It is conducted to determine the relationship between the five independent variables namely cash management, inventory management, account receivable management, non-current asset management and firm size with the dependent variable of return on assets ratio.

Pooled Ordinary Least Square (OLS) Regression

This model assumes that the ROA will depend on various asset management variables and control variables. The common Pooled OLS model can be written as follow:

$$Y_{it} = \beta_{1i} + \Sigma \beta_k X_{it} + \varepsilon_{it} \qquad (2)$$

where Y is dependent variable (ROA) of construction firm i for time period t, β_i is the intercept, β_k represents the regression coefficients of the X_{it} variables, while X_{it} represents

the independent variables (CM, IM, ARM, NCM and SIZE) of construction firm (*i*)for time period (*t*).

Breusch-Pagan (BP) Lagrange Multiplier Test

In BP test, the null hypothesis is that the variance of the random effects is equal to zero while the alternative hypothesis is that the variance of the random effects is not equal to zero. Therefore, the null and alternative hypotheses can be stated as follows:

H_0: Pooled Ordinary Least Square model
H_a: Random Effects model

If the p-value is less than a level of significance, the null hypothesis is rejected and therefore the random effects model is the more suitable model to be used in the study. However, we do not reject the null hypothesis when the p-value is greater than a level of significance, indicating that the pooled OLS is the more preferred model as compared to the random effects model (REM).

Hausman Test

Besides BP test, the Hausman Test is used to test the hypothesis that whether Fixed Effect Model (FEM) or Random Effects Model(REM) should be the choice for this research study. The null and alternative hypotheses underlying the Hausman Test are stated as below (Isik and Ince, 2016):
H_0: There is no correlation between individual intercept and independent variables.
H_a: There is correlation between individual intercept and independent variables.

The null hypothesis is rejected when the p-value is less than level of significance at 1%, 5%, and 10%. Meanwhile, if the p-value is larger than a level of significance, therefore we do not reject the null hypothesis. If the null hypothesis is rejected, it can be concluded that the REM is not appropriate as there is correlation between individual intercept and independent variables and therefore FEM is preferred to REM.

Results and Discussion

The main purpose of this research is to investigate the relationship between asset management and firms' growth of 82 construction firms listed in Malaysia over 5 years period from 2010 to 2015. This study also attempts to analyze evidence regarding which theory would be appropriate to explain the relationship between firms' growth and asset management. The hypotheses are finally formulated to examine the relationship between asset management and firms' growth which is measured by return on assets. The following discussion of the result is expected based on the Fixed Effect Model Regression.

H1: There is relationship between cash management and firms' growth.
The empirical result suggests that the log of cash conversion cycle (CCC) which is used to measure the liquidity of firms is found to have no effect over the firm's growth. Therefore, this hypothesis is believed to be rejected as CCC is not significant at all in affecting firms' growth.

H2: There is relationship between inventory management and firms' growth.
It is expected that this hypothesis will not be rejected because the log of inventory conversion period (ICP) used to measure the liquidity of firm is positively correlated to firms' growth in this study. This suggest that firms can create the value and increase the performance by increasing the inventory conversion period.

H3: There is relationship between account receivables management and firms' growth. The log of average collection period (ACP) used to measure the firm's liquidity and is expected to have a significant and positive relationship with the firms' growth. This hypothesis is will not rejected suggesting that longer collection period is creating increased profitability.

H4: There is relationship between non-current asset management and firms' growth.
This hypothesis will not be rejected as the non-current asset management is significantly and positively associated with the firm's growth. This result means greater use of non-current assets turnover, firms generate higher revenue for growth and expansion.

Conclusions

Several implications can be observed from the findings of this study about the relationship between the asset management and the firms' growth. Firstly, the empirical results imply that the log cash conversion cycle is insignificantly and negatively correlated to firms' growth. This indicates that the firms' growth would not be affected despite of shorter collection of accounts receivable, fast-moving inventory or longer payments to suppliers. Secondly, the results from the regression analysis also showed that the log average collection period has a significant positive relationship with the firms' growth. Thus, the longer the credit period granted by the firms to their customer, the higher the firms gain their profitability. In many cases, this form of results implies that the company is experiencing over-trading. Third, the finding also exhibited that the log inventory conversion period is significantly and positively related with the firms' growth. This means when the number of days of the inventory turnover period increases, the profitability of a firm increases (vice versa). This implies that the contractors will be influenced to report longer period of inventory so as to elevate the firms' growth. Finally, the results from the regression analysis also indicated that the non-current assets have positive relationship with firms' growth. In other words, effective use of non-current assets like land, building, plant and machinery, fixtures and fittings and motor vehicles enhance productive capacity of firms. Thus, ensure long term profitability and growth. Furthermore, the firm size showed positive relationship with the firms' growth suggesting when the firm size increases, more profit is expected to increase too. This concludes that the larger firms would often grow and survive as compared to smaller firms.

There are some limitations that could not be avoided during this study was conducted. Certain data which are available in the databases does not cover a long period and therefore not adopted in this research. For example, the data available for construction cost in several legal databases available from year 2005 onwards which is inconsistent with other data used in this research and thus this particular variable failed to be included in this study. The construction sector is still developing and will always face various challenges from various factors that are either natural or independent depending on the circumstances surrounding it. Therefore, the information received must be screened and observed in detail so that the data analyzed give a reasonable and acceptable decision. Moreover, it shows the real picture of a firm and therefore, the importance of cash flow details and its relationship with firm profits should be disclosed and displayed perfectly as it can be a major factor in hosting firms'

growth. Faced with volatile environment, this study serves as an important reference for the real estate industry to plan for strategy and the authority to plan for policies related to asset management. In other words, asset management should help the firms in property sector to identify the right amount of money to be spent on the right assets at the right time. This research has signposted areas in which future research may reveal the effects of different outcomes by extending the research to consider all other potential types of both current and non-current assets.

Acknowledgment

References

Akinlo, Olayinka and Asaolu, Taiwo. (2012). Profitability and Leverage: Evidence from Nigerian Firms Global Journal of Business Research, Vol. 6, No. 1, pp. 17-25, 2012.

Anichebe, N. & Agu, O. (2013). Effect of Inventory Management on Organisational Effectiveness. Information and Knowledge Management, 3(8), 92-101.

Ashok, K. P. (2013). Relationship Between Inventory Management And Profitability: An Empirical Analysis Of Indian Cement Companies. Asia Pacific Journal of Marketing & Management Review, 2 (7)

Autio, E. (2007). Global Entrepreneurship Monitor: 2007 Global Report On High Growth Entrepreneurship. Wellesley, MA/London: Babson College and London Business School

Bambang Riyanto. (2001). Dasar-Dasar Pembelanjaan Perusahaan, Edisi Keempat, Cetakan Ketujuh, Yogyakarta : BPFE

Bhutto, N. A., Abbas, G., Rehman, M. U., & Shah, S. M. (2011). Relationship of Cash Conversion Cycle with Firm Size, Working Capital Approaches and Firm's Profitability: A Case of Pakistani Industries. Pakistan Journal of Engineering Technology and Science, 45-64.

Ebben, J. J., & Johnson, A. C. (2011). Cash conversion cycle management in small firms: Relationships with liquidity, invested capital, and firm performance. Journal of Small Business & Entrepreneurship, 3, 381–396.

Garcia-Teruel. P.J., and P. Martinez-Solano. (2007). Effect of working capital management on SME profitability, International Journal of Management Finance 3, 164-177

Gill A, Biger N, Mathur N. (2010). The relationship between working capital management and profitability: Evidence from the United States. Business and Economics Journal 10: 1-9.

Lazaridis I, Tryfonidis D. (2006). Relationship between working capital management and profitability of listed companies in the Athens stock exchange. Journal of Financial Management and Analysis 19: 26-35.

Malik, M., Waseem, J. U., and Kifayat, U. (2011). Working capital management and profitability analysis of firms of textile industry of Pakistan. Journal of Managerial Sciences, 6(2):155-165.

Memon, A. H., Abdul Rahman, I., Abdullah, M. R., & Abdu Azis, A. A. (2010). Factors Affecting Construction Cost in Mara Large Construction Project: Perspective of Project Management Consultant. International Journal of Sustainable Construction Engineering and Technology, 1(2), 41-54.

Myers S, Majluf N. (1984). Corporate Financing and Investment Decision When Firms Have Information That Investors Do Not Have. Journal of Financial Economics 13: 187-221.

Smith, K. (1980). profitability versus liquidity tradeoffs in working capital management, in: K. V. Smith , ed., readings on the management of working capital (West publishing company, St Paul, MN), 549-62.

Van Horn., J. C., and W.chowicz, J. M. (2004). Fundamentals of Financial Management (12 ed.). New York: Prentic. Hall.

Waweru, N., Prot Ntui, P. and Mangena, M. (2011). "Determinants of different accounting methods choice in Tanzania", Journal of Accounting in Emerging Economies, Vol. 1 No. 2, pp. 144-159.

W.R. Scott, Financial Accounting Theory (Third ed.), Pearson Education Canada Inc. (2003) [xii+509 pp.]. " The International Journal of Accounting, Elsevier, vol. 39 (4), pages 431-434.

Muritala, T.A. (2012). "An Empirical Analysis of Capital Structure on Firms' Performance in Nigeria". International Journal of Advances in Management and Economics. 1(5). 116-124.

Examining Students' Sustainability Awareness, Sustainability Knowledge, Behavioural Attitude and Sustainability Information Sources

Frederica Mojilis

Faculty of Management and Entrepreneurship, University College Sabah Foundation, Kota Kinabalu, Sabah, Malaysia

dr.frederica@ucsf.edu.my

Abstract

This study examines the relationship of sustainability awareness with sustainability knowledge, behavioural attitude and sustainability information in an institution of higher learning. The study is quantitative in nature, using questionnaire survey to draw samples of students from six programmes at University College Sabah Foundation (UCSF), labelled as a boutique green university. The research is motivated by the UN sustainable development goals through the green campus concept. The green campus concept endeavours to extend learning beyond the campus learning settings to develop responsible attitudes and commitment to the environment, both at home and in the wider community. Quantitative research using questionnaire survey was used to measure the level of sustainability awareness of the students and to examine the relationship of variables that influence sustainability awareness. Data collected is analysed using SPSS. Results from the study showed that sustainability knowledge and sustainability information have a significant influence in determining the level of sustainability awareness of the students. Based on the results obtained in this study, it can be deduced that efforts to further increase the awareness of the students can come from formal education and through the use of online websites to obtain sustainability information.

Keywords: Students, Green campus, Sustainability awareness, Sustainability knowledge, Sustainability information.

Introduction

Many organisations have adopted the concept of sustainable development and due to its pervasiveness, sustainability has almost become a household topic. Institutions of higher learning have also jumped on the bandwagon where sustainability is known by the green campus concept. This is especially so after the United Nations (UN) made climate change a defining issue because its impacts are global in scope and unprecedented in scale (UN, n.d.). As a result of the issue of climate change, sustainable development has become synonymous with every facet of developed as well as developing societies.

According to Foo 2013, the government of Malaysia is highly committed to promote sustainable development through the country's education system at all education levels with the objective to educate and to bring about awareness to the young generation on the importance of sustaining human needs and preserving the environment for the future.

Public universities such as Universiti Sains Malaysia (USM), Universiti Kebangsaan Malaysia (UKM) and Universiti Teknologi Mara (UiTM) have played active roles in

sustainable development through their various programmes (Foo, 2013; Ahmad, Noor & Ismail, 2015).

University College Sabah Foundation (UCSF), established in the late 2014 and located at Kota Kinabalu, Sabah, Malaysia has taken a lead role in cultivating the culture and practice of sustainable development through its green campus concept. A study to examine sustainability awareness of its students is therefore timely and will contribute to new knowledge.

Motivation of study, research objectives and research question

UCSF made a bold move to embrace the green concept through the labelling of its new institution as a boutique green university. UCSF made some concerted efforts to live up to its name by incorporating green concept and philosophy in all its programmes, through its green talk series and numerous student activities conducted within and outside the campus grounds. However, no study has been conducted to determine the level of sustainability awareness of the students. A research study to conduct a survey on the students' knowledge and attitudes toward the environment is therefore timely. The findings from this study would be used as a guide by the university to further enhance their greening efforts.

The purpose of this study is firstly, to determine the level of sustainability awareness of UCSF students, and secondly, to examine the association of sustainability knowledge, behavioural attitude and sustainability information to sustainability awareness of UCSF students.

The key research question therefore is: *'Is sustainability awareness of UCSF students associated to sustainability knowledge, behavioural attitude and sustainability information?'*

Scope of research

This study uses sustainability awareness index to determine the level of awareness of UCSF students and further examine the association of three independent variables, namely, sustainability knowledge, behavioural attitude and sustainability information and their influence on sustainability awareness. These variables have been examined in prior studies (Sivamoorthy, Nalini, & Kumar, 2013; Ahmad et al., 2015; Mahat & Idrus, 2016; and Fu, Zhang, Xiong & Bai, 2018), to name a few. This research is therefore limited by the variables under study.

A sustainability awareness research has never been conducted on UCSF students before and this study will build on the limited understanding on this subject. Findings from this study is significant in providing a platform where the university can build on to further enhance their sustainability programmes.

Literature Review

Definition and concept of sustainable development

The World Commission on Environment and Development (WCED), 1987, defines sustainable development as development that meet the needs of the current world's population without compromising the needs of the world's population in the future. This

definition is paramount to any study on sustainability because this definition is the starting point where every organisation and every concern and responsible citizen of the world will assess their actions whether they are in sustainable mode.

Agenda 21 is a blueprint that sets out actions that can be taken to contribute to global sustainability in the 21st century which was release by the United Nations in 1992. It recognises that most environmental challenges have their roots in local activities and therefore encourages Local Governments to promote local environmental, economic and social sustainability by translating the principles of sustainable development into strategies that are meaningful to local communities (UN, 2002).

Agenda 2030 also known as the Sustainable Development Goals (SDGs) is the successor to the Millennium Development Goals (MDGs). 2030 refers to the year by which the SDGs should have been attained globally. The issues on sustainable development will thus continue (UN, 2018).

Sustainable development and education

The UN believe that education will encourage changes in behaviour to shape a more sustainable future in terms of environmental integrity, economic and fair society for present and future generations (UNESCO, 2007). The United Nations (UN) through its declaration of 2005-2014 as the Decade of Education for Sustainable Development (DESD) aims to integrate the principles, values and practices of sustainable development into all aspects of education and learning.

Many researchers agree that education changes values, attitudes, skills and behaviour and the practice of sustainable development in the academic community can bring about these desired changes (Scott, 2013; Tilbury, Stevenson, Fien, & Schreuder, 2013).

Sustainability awareness

Sustainability awareness of university students is a very popular research topic. Among these studies are Tikka, Kuitunen & Tynys (2000) – Finland; Sivamoorthy et al (2013) – India; Heyl, Moyano Diaz, & Cifuentes (2013) – Chile; Chaplin and Wyton (2014) – UK; Zwickle, Koontz, Slagle, & Bruskotter (2014) – USA; Ahmad et al Ismail (2015) – Malaysia; Jeong, Jung, & Koo (2015) – USA; Mahat & Idrus (2016) – Malaysia; Garcia & Luansing (2016) – Philippines; and Fu et al (2018) – China. The literature on sustainability is vast but there is still plenty of room for new knowledge in view of the pervasiveness of the topic.

Methodology

A very simple quantitative approach was adopted for this research study. Responses were collected using questionnaire survey. Survey forms were distributed to UCSF students using Google Docs but the response was very slow. The use of printed forms yielded better results when the forms were completed in the classroom.

The data were analyzed descriptively in terms of measures of central tendency and measures of variability using SPSS. Correlations and regression analysis were conducted to measure the relationships between the dependent and independent variables.

Research framework and model

Sustainability Awareness index (SAi) = Sustainability Knowledge (SK) + Behavioural Attitude (BA) + Sustainability Information (SI)

where Sustainability Awareness index (SAi) is the dependent variable, while Sustainability Knowledge (SK), Behavioural Attitudes (BA) and Sustainability Information (SI) are the independent variables.

The hypotheses that support the theoretical framework of the study are:

H1:   There is a positive relationship between sustainability awareness and sustainability knowledge.
H2:   There is a positive relationship between sustainability awareness and behavioural attitude
H3:   There is a positive relationship between sustainability awareness and sustainability information

Measurement of the Variables

SAi is measured using a twenty (20) yes-no response to general questions related to sustainability. The number of correct responses is converted to percentages to derive the sustainability awareness index.

SK requires the respondents to answer twenty (20) multiple-choice questions that test the respondents' knowledge on sustainability related issues.

BA aims to identify the attitude of the respondents toward various aspects of the environment using ten (10) sustainability related statements.

SI examines the type of medium of communication that has helped the respondents to become aware of sustainability issues and initiatives.

Results and Discussion

A total of 276 students, both at the diploma and degree level, out of about 600 students participated in the survey. This corresponds to 46% sample size.

Descriptive statistics and analyses

Based on the results obtained (refer to Table 1 below), the level of sustainability awareness of the students is over 70% regardless of gender, age, level of study, programme and residence.

Table 1: Sustainability Awareness by Age, Gender, Level of Study, Programme and Residence

Descriptive analyses		Sustainability Awareness (Mean)
Age (Years)	18-20	73
	21-23	74
	24+	75
Gender	Male	74
	Female	74
Level of study	Diploma	73
	Degree	76
Programme	Accounting	80
	Business & Entrepreneurship	72
	Tourism & Hospitality	71
	Arts & Creative Media	76
	Social Sciences	78
	Sciences	77
Residence	City	72
	Urban	75
	Rural	75

Figure 1 below shows that the most popular source of sustainability information comes from the internet (94%), social media (89%), television (86%) and UCSF (78%).
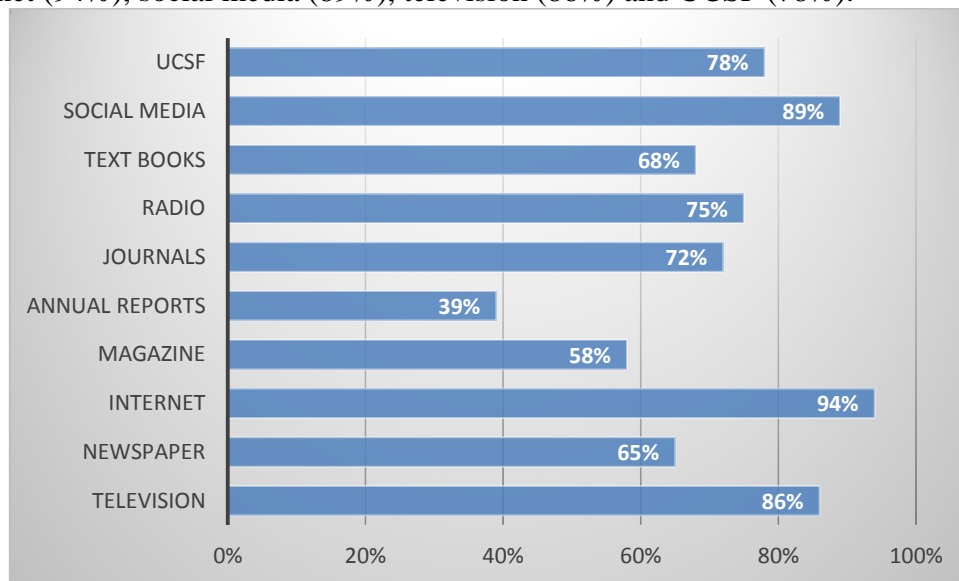

Figure 1: Sustainable Information Sources

Correlations analysis

The correlations analysis (refer to Table 2 below) shows that sustainability knowledge and sustainability information are significant predictors of sustainability awareness at the P < .05 and P < .001 levels respectively.

Table 2: Pearson Correlations

		SA	SK	BA	SI
SAi	Pearson Correlation	1	.142[*]	.057	.209[**]
	Sig. (2-tailed)		.018	.343	.000
	N	276	276	276	276

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Regression analysis

Based on the regression analysis (refer to Table 3 below), sustainability knowledge and sustainability information are significantly related to sustainability awareness at the $P < .05$ and $P < .001$ levels respectively. The data also do not have any collinearity problem. Tolerance is > 0.1 and VIF < 10 for all variables.

Table 3: Regression analysis

	Standardized Coefficients	t	Sig.	Collinearity Statistics	
	Beta			Tolerance	VIF
(Constant)		15.027	.000		
SK	.121	2.044	.042	.986	1.014
BA	.021	.357	.721	.977	1.024
SI	.194	3.254	.001	.972	1.028

Adjusted R^2=0.59   F=5.69   P<0.001

T-test analysis

An independent sample T-test was conducted to compare the level of sustainability awareness and the self-ranked sustainability awareness (S) where respondents rate themselves on their level of sustainability awareness.

There were significant differences in the scores for level of sustainability awareness (M = 73.79, SD = 14.99) and the self-ranked sustainability awareness (S) (M = 59.79, SD = 18.73), t (276) = 11.05, P = 0.000. One possible reason may be that the respondents are not aware of their sustainability level due to lack of practical applications.

Table 4: Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	SAi - SAi (S)	13.931	20.994	1.264	11.443	16.419	11.024	275	.000

Conclusion

The findings from the study showed that sustainability awareness of UCSF students is high with sustainability knowledge and sustainability information being the most significant influencing factors. The level of sustainability awareness also does not differ by gender, age, level of study, programme and residence. This implies that caring behaviour towards the environment and towards the future can be nurtured through education regardless of background. High sustainability awareness is also expected considering the fact that UCSF had been making a great effort in greening the university through its green talk series and incorporating a course in green concept and philosophy into all its programmes.

Limitations

This study, however, suffers a few limitations: the first limitation is the lack of generalisability because the study only covers UCSF students; the study is also limited by the variables being examined – other variables may produce different results; and lastly, response bias may have affected the accuracy of the data and thus, the results.

The research framework and model, however, may still be useful to measure sustainability awareness from other settings.

Implications and future directions

Being sustainability aware does not imply that an individual practises sustainability but being aware should make them more responsible for their actions especially where it concerns the environment. In fact, the implication is more serious if people are highly aware yet the tell-tale signs of irresponsible actions are glaring. The practice of sustainability can be very simple or it can also be very complicated and expensive to implement.

At the university level, the green campus concept which endeavours to extend learning beyond the campus learning settings to develop responsible attitudes and commitment to the environment is therefore an effective platform for a life-long learning experience which students can bring with them to their homes and into the wider community.

In this respect, UCSF's bold move in going green has yielded some positive results coming from the findings of this study; Mojilis (2019) study is also relevant. The more challenging

action would be to transform the mind-set of students to become full fledge advocate of sustainability in practice.

Acknowledgments

References

Ahmad, J., Noor, S.M. & Ismail, N. (2015). Investigating Students' Environmental Knowledge, Attitude, Practice and Communication. *Asian Social Science, 2*(16), 284-293.

Chaplin, G. and Wyton, P. (2014). Student engagement with sustainability: understanding the value–action gap. *International Journal of Sustainability in Higher Education, 15*(4), 404-417.

Foo, K.Y. (2013). A vision on the role of environmental higher education contributing to the sustainable development in Malaysia. *Journal of Cleaner Production 61*, 6-12.

Fu, L., Zhang, Y., Xiong, X. & Bai, Y. (2018). Pro-Environmental Awareness and Behaviors on Campus: Evidence from Tianjin, China. *EURASIA Journal of Mathematics, Science and Technology Education, 14*(1), 427-445.

Garcia, E.C. & Luansing, B. (2016). Environmental Awareness among Select Graduating College Students in Region IVA. *LPU-Laguna Journal of Multidisciplinary Research, 5(1), 1-10.*

Heyl, M., Moyano Díaz, M. & Cifuentes, L. (2013). Environmental attitudes and behaviors of college students: A case study conducted at a Chilean University. *Revista Latinoamericana de Psicología, 45*(3), 487-500.

Jeong, M.M., Jung, Y., & Koo, D.D. (2015). College Students' Perceptions of Sustainability: A Regional Survey. *Journal of Building Construction and Planning Research, 3,* 209-220.

Mahat, H. & Idrus, S. (2016) Education for sustainable development in Malaysia: A study of teacher and student awareness. *GEOGRAFIA OnlineTM Malaysian Journal of Society and Space 12*(6), 77 - 88.

Mojilis, F. (2019). Sustainability Awareness of Students from a Green University in Sabah, Malaysia. *Journal of Tourism, Hospitality and Environment Management,* 4(13), 24-33.

Scott, W. (2013) Developing the sustainable school: Thinking the issues through. *The Curriculum Journal 24*(2), 181-205.

Sivamoorthy M., Nalini R., & Kumar, C.S. (2013). Environmental Awareness and Practices among College Students. *International Journal of Humanities and Social Science Invention*, *2*(8), 11-15.

Tikka, P.M., Kuitunen, M.T., & Tynys, S.M. (2000). Effects of educational background on students' attitude, activity levels and knowledge level concerning the environment. *The Journal of Environmental Education*, *31*(3), 12-19. 33

Tilbury, D., Stevenson, R.B., Fien, J., & Schreuder, D. (Eds.). (2002). *Education* and *Sustainability*: *Responding* to the *Global Challenge*. *UK: IUCN Commission on Education and Communication*.

UN. (1992). *Agenda 21*. Retrieved from https://sustainabledevelopment.un.org/outcomedocuments/agenda21

UNESCO. (2007). *The UN Decade for Education for Sustainable Development* (DESD 2005-2014): The DESD at a glance. Retrieved from https://en.unesco.org/themes/education-sustainable-development/what-is-esd/un-decade-of-esd

UN. (2018). *About the Sustainable Development Goals*. Retrieved from https://www.un.org/sustainabledevelopment/sustainable-development-goals

UN. (n.d.). *Climate Change*. Retrieved from https://www.un.org/en/sections/issues-depth/climate-change/

Zwickle, A., Koontz. T.M., Slagle, K. M., & Bruskotter, J. T. (2014). Assessing Sustainability knowledge of a student population. *International Journal of Sustainability in Higher Education, 15*(4), 375-389.

Perception Factors: An Examination of Student's Performance in Introductory Accounting Subject in Universiti Malaysia Sabah

Mohd Allif Anwar Abu Bakar[1], Sharifah Milda Amirul[2], Nur Shahida Ab Fatah[3], Noraizan Ripain[4] & Mathew Kevin Bosi[5]

[1,2,3,4,5]*Faculty of Business, Economics & Accountancy, Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia*

[1]allif@ums.edu.my

Abstract

Researchers worldwide argue that student information is especially pertinent in the first year of study when the transition from high school to university may have an influence on student performance. Public and private university in Malaysia have make it compulsory for example business, economic and social science discipline to enrol accounting as their core faculty subject in their first- and second-year studies. These students have no choice unless to pass this introductory accounting course for their graduation. Students' pre-conceive perception of accounting as difficult, unpalatbale neither unrealizeable has created a great challenge for the accounting educators in their attempt to increase their passing rate. Hence, this study attempts to investigate the perception factors in achievement levels of non-accounting students in an introductory accounting subject in Universiti Malaysia Sabah. A purposive sample consisted of students registered for the particular module of Introductory Accounting Subject in Universiti Malaysia Sabah will be investigated, with the exception of student with majoring in accounting. This study provides valuable information to the university (including lecturers, staff administrators and faculty) in establishing a best platform to promote best learning environment particularly the accounting subject among non-accounting student. Nevertheless, factors that influence their success rate will be highlighted so as to provide references to other higher education institution in Malaysia

Keywords: Perception factors, Student's performance, Introductory accounting subject

Introduction

Past research demonstrated that age, gender and prior academic achievement in secondary level and college have direct effects on students' approaches to learning and their academic performance and progression in university. Public and private universities in Malaysia have made it mandatory for students to enrol accounting as their core faculty courses in their first and second year studies (i.e. business, economics and social science disciplines) herein referred to as non-accounting students. These students have no choice unless to pass their introductory accounting course for their graduation. The unsatisfactory success rate in accounting subject reminded the lecturers to think about the possible causes for students' failure. If these different perceptions can be identified, it may be possible to improve students' chances of success.

Geiger and Ogilby (2000) tabled the importance of the first accounting course in its ability to present useful accounting information in steering to a better decision-making for all business major. However, they also claimed that the first accounting course would also attract or discouraging individuals from becoming accounting majors. Some of the students performed

well in this subject even though they do not have any background in accounting. Yet, others students experienced difficulties to understand the basic principles of double entries, then not able to record ledger entries properly. Additionally, it's getting worse for student to grasp the concept of adjustment needed at the end of accounting period after few weeks of lesson. The main purpose of the introductory accounting courses is to exposed students the ways of basic of accounting and have them understand how accounting information are used by various users such as investors, creditors, companies, government agencies, etc. If we are able to examine their perception towards these courses, this indirectly will allow the lecturers to instill student's acceptance as accounting not too rigorous, boring, and trivial.

Hence, the research will highlight a wide range of factors that can influence non-accounting student perception towards introductory accounting course offered by Universiti Malaysia Sabah. The research also provide accounting educators with a recommendation or ground platform to increase their passing rates. It is in the best interest of the university, educator, staff administrator and faculty to hopefully grab the desired result so that both students and universities benefit from the implementation of teaching and learning. After all, lecturers and academic institutions have to find out ways to increase student performance, and to motivate students for the better performance.

Literature Review

Student's transition from high school to university may have an influence on student performance (Howe & Briguglio, 2006). Researchers claimed that student's learning experience in the introductory accounting classes were moderately negative although the student perceptions were positive regarding the profession. They gave moderate to high rankings of their agreement to the following learning experience items: rigorous, overload, bookkeeping, boring, and trivial (Stivers & Onifade, 2014).

This paper is motivated to find ways to assist students, who are majoring in non-accounting disciplined, in passing their introductory accounting course. In University Malaysia Sabah, students for example with background of Business and Economics disciplined from Faculty of Business, Economics and Accountancy for cohort year 2016/2017 are required to enroll BT12203 Business Accounting in semester 1 or semester 2 of their first-year/second-year studies. Similarly, social science and science stream disciplined students from another faculty has to enroll accounting subject as part of their core faculty or elective course. After all, these students are made compulsory to pass this subject for their graduation process. Since then, there are quite number of failure rate among them. Moreover, the unsatisfactory success rate of first/second-year students in accounting subject prompted the relevant accounting lecturers to consider any possible causes for their failure.

The transition and increasingly diversified student population especially in Malaysia with multi-racial races (for example Malay, Chinese, India, Native people of Sabah, Mainland China, etc.) in higher education in our case UMS amplify the need for accounting lecturers to take note of their students' assumptions, motives, intentions and previous knowledge which may influence student success (Byrne & Flood, 2005). Additionally, studies have found that higher levels of social engagement are related to increased probability of student success, while higher levels of academic engagement when not accompanied by high-level social engagement are negatively related to the probability of success (Hu, 2011). Besides, confident, well-prepared lecturers have strong positive effects on student success, particularly in accounting education, at least partly because teaching and learning in this discipline has a

tendency to provoke anxiety in educators and students alike (Buckhaults & Fisher, 2011). Meanwhile, Diller-Haas (2004) claimed that the old curriculum emphasizing memorization and transaction recording gives the student a distorted view of accounting and may discourage them from majoring in accounting.

Yet, successful completion of introductory financial accounting improves when high school GPA (grade point average), collegiate maturity, as well as combined prerequisites of math and English are taken into consideration (McCarron & Burstein, 2016). Nevertheless, another plausible factor that need to be considered was whether the students had previous (i.e prior to their first-year accounting subject) exposure to accounting at secondary level. There are factors which may influence students' success at univeristy specifically accounting and some of these factors was considered in previous studies as follows:

- whether students are repeating the module, compared to first-time enrolments (Müller et al., 2007);
- motivation (Müller et al., 2007);
- reading ability (Pretorius & Bohlman, 2003).
- the impact of English-medium instruction on university student academic achievement, particlualry accounting subjects (Dafouz & Camacho-Miñano, 2016)

The purpose of the introductory accounting courses is to teach students the principles of accounting and have them understand how accounting information is used by investors, creditors, and other users. Lecturers in UMS can be successful with these students if we can understand the major influence on their success or failure in introductory accounting subject at first or second-year level and at the same time, not turn them off from accounting by having them perceive accounting as rigorous, boring, and trivial. Their level of performances will be investigated as well so that any valuable feedback from them will be looked into in order to promote best learning environment.

Objectives of the Study

This proposed study embarks to investigate the following three objectives as follows:

- To investigate the perception factors in achievement levels of non-accounting students in an introductory accounting course (ie. Principle of Accounting, Management Accounting, Business Accounting) in Universiti Malaysia Sabah
- To assess the level of interest among non-accounting students towards accounting subject
- To make recommendation for improvement to find ways for educators to assist students in their passing rates and hence job employment in the future

Methodology and Sampling

The research involves few stages of data collection. Firstly, a purposive sample will be collected comprising of all students registered in BT12203 Business Accounting, for the 1st and 2nd semester of first-year/second-year studies. These students come from Business and Economics disciplined only, with the exception of Accounting disciplined. On average, this sample represent a total number 500 students from Faculty of Business, Economics and

Accountancy. Additionally, a sample of non-accounting student whom enrolled accounting subject from another faculty (i.e Faculty of Sciences and Natural Resources) will be collected as well. This inclusive sample of student registered accounting as their elective course.

Secondly, a structured design questionnaire will be distributed to the student using a five-point Likert-scale. The survey intended to investigate their own perceptions of possible factors that could hamper or facilitate their success in introductory accounting subject (i.e exposure, motivation, English proficiency, etc.). The result of the survey will be analysed using the Statistical software.

Finally, semi-structured interviews will be conducted with identified respondent to directly obtain fundamental information regarding students' perception on factors in determining their success/failure rate in accounting subject. Among the respondent include UMS management (including deans, deputy deans, head of department and lecturers), Ministry of Education officials, students and where applicable, the public.

Discussion

The proposed study expected to provide results of understanding how non-accounting students in UMS perceived introductory accounting subject. There will be 5 main statements to address the student's perception. Those 5 statements comprise of student's factor, lecturer's factor, assessment factor, program structure factor and external factor. Students will be required to answer specific questions within the five-point Likert scale in demonstrating their perception. Achievement in any subjects is dependent on the students themselves. Student's factor for instance ability to read in English, student's basic knowledge in accounting during their secondary level, consultation with the lecturer, studying time, love to numbers, senior impression towards the subjects, etc. will be investigated. Similarly, lecturer's factor which comprise of effort to assist students, availability to provide academic guidance after lecture/tutorial hours, teaching method, etc. will also have a direct impact towards their perception. Hence, it is interesting to examine both of these main factors in providing a holistic picture of the actual causes of why sometimes failure rate in this introductory accounting subject become priority in UMS.

In assessment factor, students will be asked to provide an overall picture of how they perceive and sought to address the assessment aspect. The criterion to investigate the assessment aspect is important to examine how student perceive for example the type, format, language used, marks given, and time allocated for all of the assessment tested which comprise quizzes, mid -term examination and final examination for BT12203 Business Accounting. Nevertheless, program structure factor focuses on areas such as appropriateness of topics, load of assignment and topics to be covered, jargon/ unfamiliar terms used in accounting and consideration whether the topics of financial accounting and management accounting should be integrated into one subject (i.e business accounting) in one semester. Investigation towards external factors is to table results for example whether financial, family, facilities, transportation and relationship problems considered to be important in determining their acceptance and perceptions.

Conclusion

The result from this research is expected to provide valuable information to the university (including lecturers, staff administrators and faculty) in establishing a best platform to

promote best learning environment particularly the accounting subject among our non-accounting student. Nevertheless, factors that influence first-year/second-year success rate in our student achievements can be highlighted so as to provide references to other higher education institution in Malaysia.

Acknowledgement

References

Buckhaults, J. and Fisher, D. (2011). Trends in accounting education: Decreasing accounting anxiety and promoting new methods. Journal of Education for Business, 86(1), 31-35.

Byrne, M. and Flood, B. (2005). A study of accounting students' motives, expectations and preparedness for higher education, Journal of Further and Higher Education, 29(2):111-124.

Dafouz, E., & Camacho-Miñano, M. M. (2016). Exploring the impact of English-medium instruction on university student academic achievement: The case of accounting. English for Specific Purposes, 44, 57-67.

Diller-Haas, A. (2004, April). Time to change introductory accounting. The CPA Journal, 74(4), 60-62.

Geiger MA and Ogilby SM (2000) The first course in accounting: student perceptions and their effect on the decision to major in accounting, Draft Paper pp 11-25.

Howe, J. and Briguglio, C. (2006). Anticipating the experience of learning: Students' expectations of difficulties they may face in undertaking their degree. Paper presented at the 2006 Teaching and Learning Forum, Perth: 1-2 February 2006.

Hu, S. (2011). Reconsidering the relationship between student engagement and persistence in college. Innovative Higher Education, 36(2), 97-106.

McCarron, K. B., & Burstein, A. N. (2016). The Importance of Mathematics as a Prerequisite to Introductory Financial Accounting. Community College Journal of Research and Practice, 1-8.

Müller, H. Prinsloo, P. and Du Plessis, A. (2007). Validating the profile of a successful first-year accounting student, Meditari Accountancy Research, 15(1):19-33.

Pretorius, E.J. and Bohlman, C.A. (2003). A reading intervention programme for mathematics students, South African Journal for Higher Education, 17(2):226-236.

Stivers, B. P., & Onifade, E. (2014). Student Perceptions of Introductory Accounting and the Accounting Profession. Academy of Educational Leadership Journal, 18(3), 49.

The Influence of Governance, Transparency and Tax Literacy towards Tax Compliance among Individual Taxpayer in Malaysia

Mohd Allif Anwar Abu Bakar

Faculty of Business, Economics and Accountancy Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia

allif@ums.edu.my

Abstract

Nowadays, citizens are concerned about how their tax monies is to be spent. The most common crime being heard of among countries are corruption and misuse of public moneys. This raises awareness on the importance to have a good public governance and greater degree of transparency in government institution to increase confidence in tax compliance. This study aims to provide the results of the influence of governance, transparency and tax literacy, in addition to tax morality and public trust towards tax compliance behaviour of self-assessment system (SAS) in Malaysia. A collective sample of middle-class group (M40) individual taxpayer earning income both from their employment and other non-business income will be examined. Findings from this study will enlighten tax administrators as to further come out with the most appropriate and effective tax mechanism to increase taxpayers' compliance. The results can also be used as references for any tax regime to improve their tax management system.

Keywords: Governance, transparency, tax literacy, tax morality, public trust, tax compliance

Introduction

The self-assessment system (SAS) has been widely practiced around the world. Yet, one prominent issue that has been highlighted in SAS is the non-compliance behaviour. Malaysia for example has firstly introduced SAS back in year 2004 with presumption that it will raise taxpayer compliance, accelerate the processing of assessments, minimized compliance costs and finally to increase the collection of revenue. In light with progressive Malaysian taxation system up to a maximum rate of 28% in year assessment 2018, this surprisingly will indirectly result of underreporting of income neither over reporting of deduction to reduce tax liability. The approach in SAS emphasis the taxpayer's accountability in reporting their income and compute their tax liability. However, the more vital questions are what makes people to comply or to evade tax reporting. Past studies acknowledge the elements of transparency, governance and tax literacy become essential to determine the tax compliance behaviour among the taxpayer (Kiow, Salleh & Kassim, 2017).

Literature Review

Taxation system in Malaysia was firstly introduced in the year of 1947 by the British into the Federation of Malaya (Singh, 1999:138). After that, the gazetted Income Tax Ordinance 1947 has become the primary taxation act but then subsequently replaced to Malaysia Income Tax Act 1967 (ITA) effective on 1st January 1968. As for now, the ITA 1967 has been continuously become the main act to administer direct taxes in Malaysia, specifically for individual and corporate tax. Tax authority which govern direct tax in Malaysia is *Lembaga*

Hasil Dalam Negeri (LHDN) or Inland Revenue Board (IRB). Malaysian taxation system is rather dynamic, added with its first implementation of Goods and Services Tax (GST) in 2015 by the previous government to replace Sales and Services Tax (SST), but then being reintroduced again the SST in 2018 by the new government. Throughout four years GST implementation into the Malaysian taxation system, it was initially aimed to improve and stabilize nation's revenue collection and reduce continuous growing fiscal deficit (Margaret & Khorana, 2011).

Notwithstanding the success and increasing popularity of GST implementation, Malaysian citizen were not entirely happy and raises question about its effectiveness. Ling et al. (2016) found that income inequality driven by GST reduce the people's acceptance including their tax compliance. This, however, in fact has increased the burden of low and middle-class workers since they have to pay for GST for everything that they bought or consumed. Therefore, the transition of indirect taxes from GST to SST in September 2018 could have a direct impact towards individual income, and it is interesting to observe these changes in tax system towards their voluntary reporting of SAS. Tax compliance is one of the main problems for many tax authorities and it would be difficult to convince taxpayers to comply with tax requirements. It is the extent to which a taxpayer complies or fails to comply with the tax rules of its respective country (Marziana et. al., 2010). It is also synonym with the willingness of taxpayer's compliance towards tax laws, reporting the right income and pays the correct amount of taxes on time. Contrarily, non-compliance on the other hand is the failure on the part of the taxpayer for whatever reason to file, compute, report and pay tax on time. This for instance includes intentional or unintentional errors due to the taxpayer's lack of tax knowledge or even carelessness in preparing the tax return. Surprisingly, taxpayer's may no longer be afraid of evading tax due to their perception of tax evasion as a non-serious misconduct (Karlinsky, Burton, & Blanthorne, 2004). Statistically, the number of tax defaulter in Malaysia had dramatically rose just within two years from 25,160 cases recorded in year 2003 to 239,666 in year 2005 (Krishnamoorty, 2006). Recently, it was reported that till May 2016, 120,000 Malaysians had been barred from travelling abroad for owing the IRB a total of Ringgit Malaysia RM2.55 billion (Focus Malaysia, 2018). Yet, the acceptance and perception of people against tax compliance was contributed by many factors.

One of the reasons is governance. Governance imply interaction between the formal institutions and those in civil society. A research by Alabede, Ariffin, and Idris (2012) suggested that improvement in the quality of public governance in some developing countries was the best approach of reawakening the culture of tax compliance. Meanwhile, Fjeldstad et. al. (2012) and Moore (2004) advocates that the Fiscal Exchange Theory in explaining the role of government to be caution in using the tax monies which will motivate compliance whenever people get the returns for the taxes in respects of public goods and social amenities made available to them. Taxpayers' perception of tax to be fair, ruling political power, government performance, treatment and exchange between them and tax authorities affect their compliance (Modugu, Eragbhe & Izedonmi, 2012). Aronmwan, Imobhio, and Izedonmi (2015) found that taxpayers' assessment of the government integrity, accountability, transparency, better management and other virtues become a mechanism for them to consider tax compliance. Additionally, controversial government expenditures in healthcare, military and social welfare will compromise tax compliance (Alm, Jackson, & McKee 1993). Similar study also indicated that if the interest of taxpayer aligns with the interest of tax collecting agency (goal congruence), then it will also have greater effect on taxpayer compliance decision. This highlights the importance of policymakers' attempts to gain taxpayer support for government programs.

Linked to governance is the issue of transparency. High transparency will not result from the weak governance. Transparency is essential in the context of local taxation, as if taxpayers lose confidence in the system, they start to react in the opposite way by means of illegal practices such as tax evasion or even fraud. (Lachheb, Bouthanoute, & Bendriouch, 2016). Ortega, Ronconi and Sanguinetti (2016) claimed that taxpayers are more likely to pay taxes if they notice that the government does better job. If the relationship between governance and transparency are not clear, there are chances that taxpayer will view as less likely as a means of reciprocating to the government. Government not only provide information to the public particularly on their spending, instead the information must be readily accessible with public participation. Lack of transparency creates opportunities for government corruption and inefficiency in the delivery of public sector services. Besides, citizens tend to pay more taxes when they see government is using the tax monies to promote the welfare of the population, which at the end will goes back to taxpayer in terms of country's development.

Tax literacy is also important for people to manage their personal finances effectively, including their tax obligation and tax entitlements because any disturbances, misunderstanding and misconception of the taxation system may affect their level of chargeable income, disposable income, personal expenditure, saving and even their investment decision. Cvrlje (2015) found that if individuals have never been taught basic tax concepts and never acquired the numeracy skills, they may be prone to problems such as indebtedness or non-compliance. As a self-reported citizen, tax morality relates to the concept of do and reports the right thing. Ortega, Ronconi & Sanguinetti (2012) in their studies reported that if an individual thinks it is right to pay taxes irrespective of how the government spend the money and irrespective the tax behaviour of others, the person is said to has tax morale. Several studies also demonstrated that tax morale affects compliance (Alm, McClelland and Schulze, 1992; Torgler, 2001 & Frey, 2003).

Meanwhile, trust is the general view that the authorities are benevolent and work for the common good of its citizen. High trust and high power were found to be the plausible reason for highest level of tax compliance and the lowest level of tax evasion, which indicate more voluntary compliance (Kogler et al., 2013). Trust in the governmental institutions also positively affect tax morale (Torgler, 2005; Fjeldstad, 2004; Torgler & Schneider, 2004). The trust of a person over the authorities is closely linked with his/her obligation as taxpayer. Tax compliance is said to increases only in a condition of high trust in which authorities act in favour of taxpayers. Thus, the acceptance of high tax compliance may not result from high tax literacy, high transparency and strong governance if people do not have sense of being ethics in their tax reporting. As such, level of trust also differs across individuals and these differences might influence their compliance decision.

Objectives of the Study

It is plausible to study compliance of individual taxpayers as the prime objective because of the greater likelihood that perceived characteristic and differences in the level of governance, transparency and tax literacy among taxpayers, including their tax morality and trust will influence their level of tax compliance.

Therefore, there are five (5) specific objectives that I intend to highlight:
To examine the influence of governance, transparency and tax literacy towards individual tax compliance in Malaysia.

To examine whether governance, transparency and tax literacy influence tax morality in Malaysia.

To examine the influence of governance, transparency and tax literacy mediated by tax morality and moderated by public trust towards individual tax compliance in Malaysia

To examine whether public trust moderates tax morality towards individual tax compliance in Malaysia

To examine whether transparency moderates governance towards individual tax compliance in Malaysia.

Theoretical Framework

This study examines the influence of three (3) independent variables (IVs) namely governance, transparency and tax literacy mediated by tax morality (MedV) and moderated by public trust (MV) and its influence on individual tax compliance in Malaysia. Tax compliance will be the dependent variable (DV).
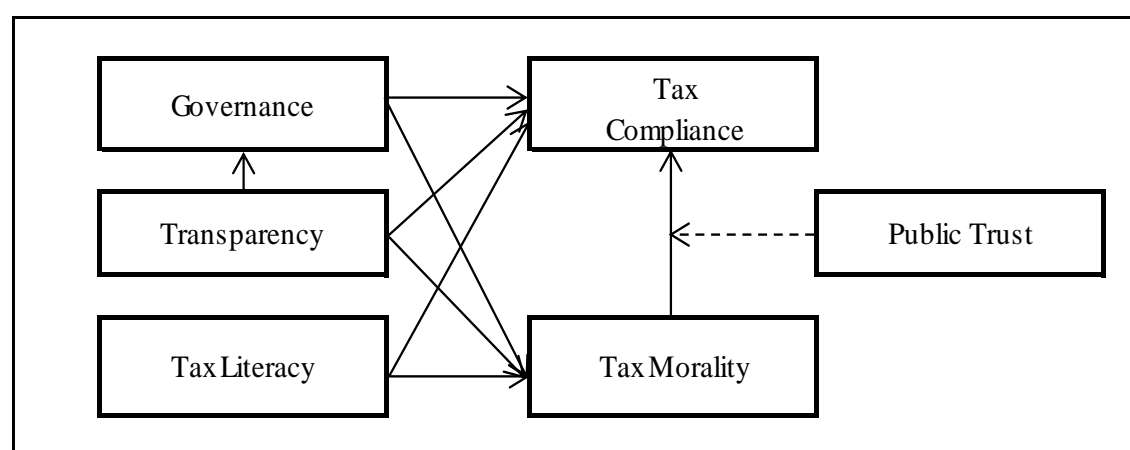
Framework for tax compliance behaviour

Methodology & Sampling

Applying quantitative research methods, the study will distribute questionnaire to individual taxpayers selected throughout Malaysia. A group sample of taxpayers from M40 (medium income) whom file in their individual tax return for a number year of assessment will be identified. This represent individual taxpayer earning employment income both from public and private sector under Section 4(b) Malaysia Income Tax Act 1967 (ITA 1967) as well as other income under Section 4(c), 4(d) and 4(e). Section 4(a) Malaysia Income Tax Act 1967 of gain and profits from business such as company, limited liability partnership, trust body and co-operative society are excluded from this study since the focus is to observe the behaviour of individual tax compliance.

Individual taxpayers of middle (M40) class of income will be chosen as the main sample for the study. It is believed that this group of Malaysians is the one who struggles with rising living costs for example transportation, education, healthcare and interest charges on housing and car loans. M40 groups median household are those whom have a median household income of Ringgit Malaysia RM6,725 (Department of Statistics Malaysia, 2017). The names M40 represent percentages of the countries' population of Middle 40%. According to Ong Wooi Leng, a senior analyst at think tank Penang Institute (iMoney.my, 2017), M40 groups are those largely belongs to the tertiary education and faces two challenges. Firstly, they are

facing a tougher time to buy first homes, and secondly, their pattern of expenditures tends to be more cautious and softer due to the fuel prices. Therefore, findings from these group of income categories towards their tax compliance would be interesting.

Compared to corporate taxpayers, individual taxpayers are more likely to self-complete their own tax returns rather than to engage a tax agent. (Trivedi et al., 2004). Besides, differences in tax literacy among taxpayers could lead to unintended non- compliance, thereby increasing tax gaps (Mohani, 2001 & Riahi-Belkaoui, 2004). Individual also tend to show their acceptance either becoming a self-complied citizen or not due to their perceived quality of governance and transparency of the current ruling government. A recent study by Faizal et al. (2017) revealed that individual perception of justice and trust in the Malaysian tax system could also increase tax compliance. Nevertheless, unlike company, different people also have different level of characteristic in terms of their morality, acceptance and trust.

Discussion

The combination of many factors has typically become the main barriers to achieving acceptable levels of voluntary compliance. Malaysia for example implements SAS in 2004 to replace the direct assessment system. The spirit of SAS is to educate taxpayers, making them aware of their tax responsibilities. (IRB, 2006 & Kasipillai, 2017). However, taxpayer currently being concerned about the issues of governance and transparency especially to where the tax collection money will be spent, and as a matter of fact, the public also demand accessible information of the government expenditures. Assuming that taxpayers are well converse with tax knowledge and morally integrated, still the level of tax compliance acceptance will be compromise if the elements of governance, transparency and public trust to the government institution has not been taken into well consideration.

The most common crime being heard of among countries are corruption and misuse of public moneys. This indeed raise awareness on the importance to have a good public governance and greater degree of transparency to increase confidence in tax compliance, otherwise the taxpayer will blame government even for small mistakes. Recently, Malaysia's 14th general election was nothing less than a revolutionary storm in a constitutional teacup, where there was a major transition to a new administration after six decades of rule by the previous government since Malaysia gained its independence from British in 1957.

Changes of government in Malaysia showed that public can raise their voices in general election especially when there is news for example misappropriation of public funds, improper spending of tax monies, scandal of money laundering, tremendous changes in tax system from SST to GST, etc. All of these also play a significant role to decide whether citizen are willingly comply with tax law or commit tax evasion and fraud. With these ideas in mind, it is interesting to find out the focal point about the influence of governance, transparency and tax literacy, in addition to tax morality and public trust towards individual taxpayer compliance in Malaysia.

Conclusion

This study expected to provide a holistic and clearer picture of individual taxpayers' compliance behaviour in Malaysia. By presenting the most comprehensive study of M40 taxpayers in Malaysia undertaken to date, this will in turn allow us to provide some broad ideas and detailing factors influencing this income category of tax compliance, thereafter to

discover the effects of governance, transparency and tax literacy, including tax morality and public trust. Findings from this study hopefully will enlighten tax administrators as to further come out with the most appropriate and effective tax mechanism to increase taxpayers' compliance. Additionally, the findings could also be used as references to any tax regime to improve their tax management system.

References

Ajzen, I. (1991). Theory of planned behaviour. Organizational Behavior and Human Decision Processes, 50, 179-211.

Alabede, J. O., Ariffin, Z. B. Z., & Idris, K. M. (2012). Public Governance Quality and Tax Compliance Behaviourin Nigeria: The Moderating Role of Financial Condition and Risk Preference. Issues in Social and Environmental Accounting, 5(1/2), 3-24.

Ali, M., Fjeldstad, O., and Sjursen, I. (2013). Factors Affecting Tax Compliant Attitude in Africa: Evidence from Kenya, Tanzania, Uganda and South Africa. Paper prepared for Centre for the Study of African Economies 2013 Conference Oxford, 17–19 March.

Alm, J. (1999). Tax Compliance and Administration, in W. Bartley Hildreth and James A. Richardson (eds.). Handbook on Taxation. New York, Marcel Dekker, Inc., 741–768.

Alm, J., B. R. Jackson, and M. McKee. 1993. Fiscal exchange, collective decision institutions, and tax compliance. Journal of Economic Behaviourand Organization 22(3): 285–303.

Alm, J., McClelland, G. H., & Schulze, W. D. (1992). Why do people pay taxes? Journal of public Economics, 48(1), 21-38.

Arrowsmith, S. (2009). EC Regime on Public Procurement. International Handbook of Public Procurement. K. Thai. Boca Raton, London, New York, CRC Press: 251-290.

Cvrlje, D. (2015). Tax literacy as an instrument of combating and overcoming tax system complexity, low tax morale and tax non-compliance. *The Macrotheme Review*, *4*(3), 156-167.

Department of Statistics Malaysia (2017, Oct 9). Report of Household Income and Basic Amenities Survey 2016. Retrieved 27 Aug, 2018, from https://www.dosm.gov.my

Faizal, S. M., Palil, M. R., Maelah, R., & Ramli, R. (2017). Perception on justice, trust and tax compliance behaviourin Malaysia. *Kasetsart Journal of Social Sciences*, *38*(3), 226-232.

Fishbein, M., and Ajzen, I. (1975). Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research. Massachusetts: Addison-Wesley.

Fjeldstad, O. H., Schulz-Herzenberg, C. S., & Sjursen, I. H. (2012). Peoples' views of taxation in Africa: A review of research on determinants of tax compliance. Chr. Michelsen Institute (CMI) Working papers 2012:7

Fjeldstad, O.-H. (2004). What's trust got to do with it? Non-payment of service charges in local authorities in South Africa. Journal of Modern African Studies, 42(4), 539–562.

Focus Malaysia. (2018, March 23). Make tax defaulters pay up. Focus Malaysia Online. Retrieved July 25, 2018, from http://www.focusmalaysia.my/Focus View/make-tax-defaulters-pay-up

Frey, B. S. (2003). The Role of Deterrence and Tax Morale in Taxation in the European Union, Jelle Zijlstra Lecture, Netherlands Institute for Advanced Study in the Humanities and Social Sciences (NIAS).

Inland Revenue Board (IRB) Malaysia (2006). Annual Report.

IMoney.my (2017, Apr 6). What Does It Mean To Be Middle Class In Malaysia In 2017. Retrieved 27 Aug, 2018, from https://www.imoney.my/articles/middle-class-malaysia

Karlinsky, S., Burton, H., & Blanthorne, C. (2004). Perceptions of Tax Evasion as a Crime. eJournal of Tax Research, 2(2), 226-240.

Kasipillai, J. (2017). A Guide to Malaysian Taxation-New Chapter on GST Budget 2017. Kuala Lumpur: McGraw-Hill.

Kiow, T. S., Salleh, M. F. M., & Kassim, A. A. B. M. (2017). The determinants of individual taxpayers' tax compliance behaviour in peninsular malaysia. *International Business and Accounting Research Journal*, *1*(1), 26-43.

Kirchler, E., Hoelzl, E., and Wahl, I. (2008). Enforced versus voluntary compliance: The "slippery slope" framework. Journal of Economic Psychology, 29, 210-55.

Kogler, C., Batrancea, L., Nichita, A., Pantya, J., Belianin, A., & Kirchler, E. (2013). Trust and power as determinants of tax compliance: Testing the assumptions of the slippery slope framework in Austria, Hungary, Romania and Russia. *Journal of Economic Psychology*, *34*, 169-180.

Krishnamoorty, M. (2006, August 26). 1.3 million Did not Pay Tax. The Star Online. Retrieved from http://www.thestar.com.my/news/ nation/2006/08/26/13-million-did-not-pay-tax/.

Lachheb, H., Bouthanoute, R., & Bendriouch, M. (2016). For a Local Tax System Dedicated to Sustainable Development Incorporating Governance, Transparency and Innovation. *International Journal of Economics and Finance*, *8*(5), 212.

Ling, S. C., Osman, A., Arman Hadi, A. B., Muhammad Safizal, A., & Rana, S. M. (2016). Public acceptance and compliance on Goods and Services Tax (GST) implementation: A case study of Malaysia. Asian Journal of Social Sciences & Humanities, 5(1), 1-12.

Margaret, A. G. H., & Khorana, L. (n.d.). An Assessment of the Introduction of Goods and Services Tax in Malaysia and its Implications on the Merchant Shipping Sector and Maritime Supply Chain. Maritime Economics Industries (MEI).

McKerchar, M. & C. Evans (2009). Sustaining Growth in Developing Economies through Improved Taxpayer Compliance: Challenges for Policy Makers and Revenue Authorities. eJournal of Tax Research, 7, 171–201.

Modugu, P. K., Eragbhe, E., & Izedonmi, F. (2012). Government accountability and voluntary tax compliance in Nigeria. Research Journal of Finance and Accounting, 3(5), 69-76

Mohamad AA, Mustafa H, Asri M (2007). The effects of knowledge on tax compliance behaviours among malaysian taxpayers. Int. Conf. Bus. Inf., Tokyo, Japan. Retrieved 2 Dec 2008, from http://ibacnet.org/bai2007/proceedings/Papers/2007bai7357.doc.

Mohani A (2001). Personal income tax non-compliance in Malaysia. PhD thesis. Victoria University: Melbourne, Australia.

Marziana Hj. Mohamad, Norkhazimah Ahmad, Mohmad Sakarnor Deris (2010) : Perceptions of Taxpayers With Level of Compliance: A Comparison in the East Coast Region, Malaysia: Journal of Global Business and Economics, vol.1, issue 1, pages 241-257.

Moore, M. (2004). Revenues, state formation, and the quality of governance in developing countries. International Political Science Review, 25(1), 297-319.

Ortega, D., Ronconi, L., & Sanguinetti, P. (2012). Reciprocity and willingness to pay taxes: evidence from a survey experiment in Latin America.Económía, 16(2), 55-87.

Palil, M. R. (2010). Tax Knowledge and Tax Compliance Determinants in Self-assessment System in Malaysia, Ph.D thesis, University of Birmingham.

Piaget, J. (1936). The origins of intelligence in children (M. Cook, trans.). New York: International Universities Press, 1952.

Riahi-Belkaoui A (2004). Relationship between tax compliance internationally and selected determinants of tax morale. J. Int. Account. Audit. Tax., 13: 135-143.

Sour, L. (2004). An Economic Model of Tax Compliance with Individual Morality and Group Conformity. Económía Mexicana NUEVA ÉPOCA, vol. XIII, núm. 1,

Torgler, B. (2001). What do we know about tax morale and tax compliance? Rivista internazionale di scienze economiche e commerciali, 48(3), 395-420.

Trivedi VU, Shehata M, Mestelmen S (2004). Impact on personal and situation factors on taxpayer compliance: An experimental analysis. J. Bus. Ethics, 47(3): 175-197.

Torgler, B. (2005). Tax morale and direct democracy. European Journal of Political Economy, 21(2), 525–531.

Torgler, B., & Schneider, F. (2004). Does culture influence tax morale? Evidence from different European countries. CREMA Working Paper No. 2004-17, Basel: Center for Research in Economics, Management and Arts.

Torgler, B (2003). Beyond Punishment: A tax Compliance Experiment with Taxpayers in Costa Rica: Revista de Analisis Economico, 18(1), 27–56.