THE IMPACT OF ENVIRONMENTAL PERFORMANCE AS REALIZATION OF ENVIRONMENTAL REGULATION ON FINANCIAL PERFORMANCE

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Abstract:

The purpose of this study is to assert the impact of environmental performance as realization of environtmental regulation on financial performance for the span of one to three years (2010-2013) after the publication of environmental performance ratings. Environmental performance was measured by the ratings given by PROPER program, and financial performance was measured based on ROA and ROE. This study also examined if there is significant difference on financial performance among the group of companies on each rating. The research finding shows that there was no significant impact of environmental performance on financial performance on the first year announcement of the financial ratings, however there was a significant impact on the second and third year. Different tests using ONE WAY ANOVA indicated that there was significant difference on financial performance of companies in different rating, in each year. The result suggested that companies with green rating had the highest financial performance followed by gold rating.

Keywords: environmental performance, return on asset, return on equity.

INTRODUCTION

Along with the increasing of globalization, the awareness of issues related to management risk, continuity as well as the growth of a business compels a company or organization to remain stable yet still responsible for the social and environmental matters (Owen, 2005). In connection with its responsibilities toward the environment, Cramer (2006) said that a company will not be able to be well-publicized if the working conditions are poor, scandals involving the environment exist, as well as violations of human rights. Further, it was mentioned that these things will ruin a company's reputation, which in turn will result in the declining of sales up to the declining of employee's motivation.

The concepts that the purpose to gain profit is simply by increasing shareholder profits in the form of distribution of dividends and the increasing of stock price are narrow perspectives if they ignore the contribution of other things, which are also affected the success of a business (Sharma, 2009). That is the reason why there are companies that look at issues concerning social and the environment as an opportunity to position themselves in public as companies that are responsible for the social and environment. This is intended to increase the value of their shares, to motivate their employees to work innovatively for the company (Cramer, 2006). Ravi and Anupam (2011) stated a similar case, where in a company or organization with a good image in the social and environmental fields will increase its reputation and reduce government intervention as well as other stakeholders. Moreover, it is said that with the increasing of a company's reputation, hence it will attract more consumers, which later on will increase sales, and the company will eventually enjoy more profits, and also good relations with the stakeholders could be established.

To achieve these goals, some companies apply the Corporate Social Responsibility (CSR) concept. CSR is a concept in which a company integrates social and environmental matters in its operational activities and interactions with stakeholders (Aras and Crowther, 2010). Ravi and Anupam (2011) stated that if a company implements CSR, the company will find more new business partner and that it will give many new opportunities.

Companies that implement CSR do not wait until the government sets some rules or laws. Instead, they will find and decide for themselves the social and environment measurements for them to apply. Furthermore, it is said that the measurements would not only be adjusted according to their vision and strategy but also be adjusted to the concerns observed from other parties outside the company (Cramer, 2006). However, there are companies that will only react after they are being required by the laws or regulations set by the government.

In Indonesia, the government has issued a regulation, which is the law No. 32 of 2009, concerning the protection and management of the living environment. In order to realize the implementation of this law, the Office of the Ministry of Living Environment has a program, namely the PROPER Program, which aims to assess the environmental performance of each company. Although the PROPER Program was developed by the Ministry of Environment as early as 1995, but in relation to the law No. 32 of 2009 the Ministry of Environtment has updated the environmental performance assessment that is adjusted with law No. 32 of 2009. In other words, the PROPER Program is also an implementation of Legislation No. 32 of 2009 about environmental protection and management. The Ministry for Environment Decree Number 97 of 2005 stated that in order to maintain the credibility of the PROPER Program, there should be an advisory, consisting of representatives from universities, environmental NGOs, mass media, banks, international institutions, and other institutions with environmental interest. Therefore, the assessment for environmental performance of companies would be appropriately comprehensive. This is also in accordance with what was mentioned by Gomez (2008), that the multidimensional factors are considered simultaneously when formulating and assessing environmental performance of a company.

In connection with the laws made by the government, Walley and Whitehead (1994) stated that most managers perform environmental management as a result of obedience to the effective laws and regulations. Environmental management is a company’s strategy that will be reflected in the environmental performance based on a certain evaluation standard. Further, it is said that a good environmental management strategy will produce a good environmental performance, and a good environmental performance will have a good impact towards a company's financial performance (Klassen & McLaughlin, 1996).

The result of a research conducted by Arafat, Warokka and Goddess (2012) proved that there was a positive relationship between environmental performance and financial performance. In other words, superior environmental performance will obtain better financial performance. Other studies also proved that there is a positive relationship between environmental performance and financial performance are the following studies conducted by (Orlitzky, 2001),(Subroto, 2003), (Allouche & Laroche, 2005), (Van Beurden & Gossling, 2008), (Andersen & Olsen, 2011), (Quazi & Richardson, 2012), (Sun, 2012) and (Rodriguez, Gallego, & Perez, 2014).

The purpose of this study is to assert the impact of environmental performance on financial performance for the span of one to three years after the publication of environmental performance ratings. The study period was from 2010 – 2013, with the consideration that the management changes their environmental management strategy to obtain rating in the PROPER Program, whose assessment is adjusted with the mentioned legislation. In 2010, the announcement of PROPER rating a year after the law No. 32 of 2009 was made. Moreover, the impact of environmental performance on a company’s financial performance a year after the announcement of the environmental performance, which is in 2011, the impact for two years after that, which is in 2012, and the impact of three years after, which is in 2013, will also be analysed.

The purpose of this study is to prove whether environmental performance as a realization of compliance to environmental laws have significant impact on financial performance (ROA and ROE) after first to three years environmental performance rating was announced by the Ministry of Environment through the PROPER Program. Further, this study also examine if there is any significant difference of company's financial performance among a group of companies in environmental performance rating.

RESEARCH METHOD

Purposive Sampling Method was used in this study. A linear regression analysis was used in order to examine the impact of environmental performance on a company’s financial performance. Environmental performance is the independent variable, which was measured by the rating given by the PROPER Program. The dependent variable is the company’s financial performance, measured by ROA and ROE. The samples of this study consist of companies that are listed and had received rating according to the PROPER Program year 2010.

FINDINGS AND DISCUSSION

The regression test result revealed that there was no significant impact of environmental performance on ROA and ROE first year after the announcement of the environtment performance rating. However,a significant impact shown in the second and third year after announcement. Different testz results using the ONE WAY ANOVA reveal that there was a significant difference from the year 2011 to 2013 on financial performance of both ROA and ROE based on each category of environmental performance rating. Moreover, we found that companies with green rating category had the highest financial performance followed by gold rating category. The details of the result are presented on the table 1 below and on the appendix .

Table 1: Regression Test Result

Independent Variable	Dependent Variable	Sig.	Correlation	Significant/Not Significant
Ranking Environmental Performance	Return on Asset One Year After (2011)	0.283	Positive	Not Significant
Ranking Environmental Performance	Return on Asset Two Year After (2012)	0.002	Positive	Significant
Ranking Environmental Performance	Return on Asset Three Year After (2013)	0.012	Positive	Significant
Ranking Environmental Performance	Return on Equity One Year After (2011)	0.508	Positive	Not Significant
Ranking Environmental Performance	Return on Equity Two Year After (2012)	0.002	Positive	Significant
Ranking Environmental Performance	Return on Equity Two Year After (2013)	0.011	Positive	Significant

Table 2: Different Test Result

Financial Performance	**Difference Sig.**	**Significant/Not Significant**
ROA 2011	0.104	Not Significant
ROA 2012	0.001	Significant
ROA 2013	0.000	Significant
ROE 2011	0.001	Significant
ROE 2012	0.002	Significant
ROE 2013	0.000	Significant

Findings of this study support the theory by Klassen and McLaughlin (1996) wich stated that a good environmental performance will have a good impact towards a company's financial performance. This findings also supports previous studies conducted by Arafat, Warokka & Goddess (2012) ;Van Beurden & Gossling (2008); Rodriguez , Gallego, and Perez (2014), Allouche and Laroche (2005); Orlitzky (2001); Quazi & Richardson (2012); Subroto (2003); Andersen and Olsen (2011); Sun (2012); Stanwick and Stanwick (1998). Nevertheless, the results of research this shows that it takes more than one year for companies with good environmental performance, to enjoy favorable financial performance.

Different tests results shown in Table 2 were all significant except ROA 2011, this study found that there was a significant difference to the company's financial performance both ROA and ROE each year from 2010 to 2013 in each environmental performance rating category, where the green rating class had a higher financial performance compared with other environmental performance rating class (For more details see appendix)

CONCLUSIONS

The result of this study shows that in the case of Indonesian companies, compliance to environtmental regulation (PROPER program) significantly impact the financial performance. The impact was significantly shown after 2 years after the announcement of environtmental performance rating. Furthermore, companies that implement compliance toward environtmental regulation, had a significant effect on finacial performance.

Theoretically, this study provides empirical evidence support the impact of compliance to environmental legislation that became the basis for determining environmental performance and its relationship to the company's financial performance. This research provide a reference for development of environmental regulation, accounting practices, and company’s environmental management and strategy.

Practically, the results of this study provide information for the financial company or fun provider in analyzing company's credit applications. In addition, this study provides information to investors about all factors related to the environment as a consideration in determining investment decisions.

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APPENDIX

Environmental Performance → ROA 2011

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.142[a]	.020	.003	12.80310

a. Predictors: (Constant), Ranking Environmental Performance

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	192.243	1	192.243	1.173	.283[b]
	Residual	9343.410	57	163.919		
	Total	9535.653	58			

a. Dependent Variable: Return on Asset 2011
b. Predictors: (Constant), Ranking Environmental Performance

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.483	8.615		.172	.864
Ranking Environmental Performance	3.122	2.882	.142	1.083	.283

a. Dependent Variable: Return on Asset 2011

Environmental Performance → ROA 2012

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.402[a]	.162	.147	9.08535

a. Predictors: (Constant), Ranking Environmental Performance

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	909.526	1	909.526	11.019	.002[b]
	Residual	4704.982	57	82.544		
	Total	5614.508	58			

a. Dependent Variable: Return on Asset 2012
b. Predictors: (Constant), Ranking Environmental Performance

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-12.378	6.113		-2.025	.048
	Ranking Environmental Performance	6.790	2.045	.402	3.319	.002

a. Dependent Variable: Return on Asset 2012

Environmental Performance → ROA 2013

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.326[a]	.106	.090	12.95105

a. Predictors: (Constant), Ranking Environmental Performance

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1134.744	1	1134.744	6.765	.012[b]
	Residual	9560.592	57	167.730		
	Total	10695.336	58			

a. Dependent Variable: Return on Asset 2013
b. Predictors: (Constant), Ranking Environmental Performance

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-15.257	8.714		-1.751	.085
	Ranking Environmental Performance	7.584	2.916	.326	2.601	.012

a. Dependent Variable: Return on Asset 2013

Environmental Performance → ROE 2011

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.088[a]	.008	-.010	23.84177

a. Predictors: (Constant), Ranking Environmental Performance

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	252.027	1	252.027	.443	.508[b]
	Residual	32400.500	57	568.430		
	Total	32652.526	58			

a. Dependent Variable: Return on Equity 2011
b. Predictors: (Constant), Ranking Environmental Performance

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.046	16.042		.689	.494
	Ranking Environmental Performance	3.574	5.368	.088	.666	.508

a. Dependent Variable: Return on Equity 2011

Environmental Performance → ROE 2012

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.394[a]	.155	.140	31.04959

a. Predictors: (Constant), Ranking Environmental Performance

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10097.852	1	10097.852	10.474	.002[b]
	Residual	54952.381	57	964.077		
	Total	65050.233	58			

a. Dependent Variable: Return on Equity 2012
b. Predictors: (Constant), Ranking Environmental Performance

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-55.820	20.892		-2.672	.010
Ranking Environmental Performance	22.624	6.990	.394	3.236	.002

a. Dependent Variable: Return on Equity 2012

Environmental Performance → ROE 2013

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.328[a]	.108	.092	24.49210

a. Predictors: (Constant), Ranking Environmental Performance

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4129.812	1	4129.812	6.885	.011[b]
	Residual	34192.180	57	599.863		
	Total	38321.991	58			

a. Dependent Variable: Return on Equity 2013
b. Predictors: (Constant), Ranking Environmental Performance

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-32.506	16.480		-1.972	.053
	Ranking Environmental Performance	14.468	5.514	.328	2.624	.011

a. Dependent Variable: Return on Equity 2013

Different Test Result ROA 2011

Descriptives

Return on Asset 2011

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Red	11	10.9209	8.77506	2.64578	5.0257	16.8161	-5.09	19.84
Blue	42	8.9988	12.68214	1.95690	5.0468	12.9508	-59.00	29.42
Green	5	23.9500	17.10770	7.65080	2.7080	45.1920	.77	39.73
Gold	1	9.7100	.	.	.	.	9.71	9.71
Total	59	10.6363	12.82216	1.66930	7.2948	13.9777	-59.00	39.73

ANOVA

Return on Asset 2011

	Sum of Squares	df	Mean Square	F
Between Groups	1000.640	3	333.547	2.149
Within Groups	8535.013	55	155.182	
Total	9535.653	58		

Different Test Result ROE 2011

Descriptives

Return on Equity 2011

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max
					Lower Bound	Upper Bound		
Red	11	29.8000	23.53054	7.09473	13.9920	45.6080	4.40	62.57
Blue	42	15.3369	13.30270	2.05265	11.1915	19.4823	-38.97	49.86
Green	5	56.7900	52.97621	23.69168	-8.9887	122.5687	1.97	113.13
Gold	1	14.1300	.	.	.	.	14.13	14.13
Total	59	21.5259	23.72709	3.08900	15.3426	27.7092	-38.97	113.13

ANOVA

Return on Equity 2011

	Sum of Squares	df	Mean Square	F
Between Groups	8634.305	3	2878.102	6.591
Within Groups	24018.221	55	436.695	
Total	32652.526	58		

Different Test Result ROA 2012

Descriptives

Return on Asset 2012

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Red	11	3.2900	10.42391	3.14293	-3.7129	10.2929	-11.69	20.93
Blue	42	6.6483	6.55234	1.01105	4.6065	8.6902	-8.21	18.85
Green	5	23.5640	17.60024	7.87107	1.7104	45.4176	-.99	40.38
Gold	1	11.1000	.	.	.	.	11.10	11.10
Total	59	7.5312	9.83879	1.28090	4.9672	10.0952	-11.69	40.38

ANOVA

Return on Asset 2012

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1528.592	3	509.531	6.859	.001
Within Groups	4085.916	55	74.289		
Total	5614.508	58			

Different Test Result ROE Tahun 2012

Descriptives

Return on Equity 2012

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Red	11	-6.6636	52.52864	15.83798	-41.9529	28.6256	-161.46	24.53
Blue	42	9.0214	14.27965	2.20340	4.5716	13.4713	-53.72	33.13
Green	5	59.7740	58.29809	26.07170	-12.6126	132.1606	-2.54	121.94
Gold	1	16.0500	.	.	.	.	16.05	16.05
Total	59	10.5173	33.48964	4.35998	1.7898	19.2447	-161.46	121.94

ANOVA

Return on Equity 2012

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15502.734	3	5167.578	s5.736	.002
Within Groups	49547.499	55	900.864		
Total	65050.233	58			

Different Test Result ROA 2013

Descriptives

Return on Asset 2013

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max
					Lower Bound	Upper Bound		
Red	11	4.7718	7.20874	2.17352	-.0711	9.6147	-.37	18.84
Blue	42	4.5614	5.84819	.90239	2.7390	6.3839	-15.36	17.41
Green	5	32.2820	36.30704	16.23700	-12.7991	77.3631	.64	71.51
Gold	1	6.3900	.	.	.	.	6.39	6.39
Total	59	6.9808	13.57948	1.76790	3.4420	10.5197	-15.36	71.51

ANOVA

Return on Asset 2013

	Sum of Squares	df	Mean Square	F
Between Groups	3500.619	3	1166.873	8.920
Within Groups	7194.717	55	130.813	
Total	10695.336	58		

Different Test Result ROE 2013

Descriptives

Return on Equity 2013

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Red	11	5.1855	9.45256	2.85005	-1.1649	11.5358	-5.46	21.81
Blue	42	5.6226	14.99428	2.31367	.9501	10.2952	-56.84	25.59
Green	5	56.2180	64.16755	28.69660	-23.4565	135.8925	1.72	125.81
Gold	1	10.8600	.	.	.	.	10.86	10.86
Total	59	9.9176	25.70455	3.34645	3.2190	16.6163	-56.84	125.81

ANOVA

Return on Equity 2013

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11740.617	3	3913.539	8.098	.000
Within Groups	26581.375	55	483.298		
Total	38321.991	58			

MULTI FACTOR EXPLANATION TO IPO LONG RUN UNDERPERFORMANCE ANOMALY: SRI LANKAN EVIDENCE

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Abstract:
This paper focuses on IPO long run underperformance anomaly and the application of calendar time techniques to dissect anomalous behavior of IPO stocks. More specifically this paper will provide fresh evidence on how multi factor models work on a specific type of security (IPO stocks in this scenario) in an emerging market like Sri Lanka. It is analyzed IPOs over a period from 2000 to 2012 on Colombo Stock Exchange (CSE). Main finding of the study is that traditional market beta still remains strong despite the employment of latest multi factor models.

Keywords: CSE, Initial public offerings, long run underperformance, Sri Lanka

1. INTRODUCTION

Capital market plays an important role in the modern economy of any country, hence the economic development of the country. Colombo Stock Exchange (CSE) which was founded in 1896 as Colombo Share Brokers Association under the British rule significantly contributes to the development of Sri Lanka's capital market. Given the context that country's bond market was not much active, equity market through CSE acted as the principal platform for public and private firms to participate in capital market activities over past few decades. However performance of the equity market became highly volatile due to number of macroeconomic factors and most noteworthy one out of them was three decade long ethnic conflict. Even though Government of Sri Lanka (GOSL) defeated Liberation Tigers of Tamil Ealam (LTTE) in 2009, more sustainable peace is yet to be achieved in the island. Initial Public Offerings (IPOs) emerged as fastest and easiest mechanism for both foreign and local investors to participate in the growing Sri Lankan capital market. However IPO related anomalies, mainly initial under-pricing and long run underperformance appeared in big time to frustrate ordinary investors in such scenarios as anywhere in the world. Even though watch dogs of the Sri Lankan capital market, Securities and Exchange Commission of Sri Lanka (SECSL) and Colombo Stock Exchange (CSE) issued timely directives, it is difficult to control these anomalies 100% to pass the benefit to ordinary investors. This study focuses on long run underperformance anomaly. Peter (2007) analysed this situation in Sri Lankan context with event study approach and identified the requirement of better measures to control this long run anomaly. So this paper intends to search the application of calendar time techniques to sample of Sri Lankan IPOs from year 2000 to 2012. This study will cover only calendar time techniques and intends to find out what is the best factor model for IPO stocks in an emerging market like Sri Lanka. Study findings indicate that market beta is still powerful for IPO stocks in CSE. Section 2 of the paper describes the prior literature related to the study and sections 3 and 4 discuss data and methodology used in the paper respectively. Finally section 5 discusses the results before the conclusion.

2. LITERATURE REVIEW

2.1 Past studies on IPO anomalies

As mentioned in the introduction, it can be identified that there are two main anomalies regarding IPOs in recent finance literature namely initial under-pricing and long run underperformance of IPO stock price.

IPO long run underperformance is known as subsequent step of under-pricing anomaly. Ritter (1991) documented this first time using US data. Then many supporting studies emerged from various markets including developed and emerging economies. Brown (1999) for UK and Bossin and Sentis (2012) for France are few examples for IPO underperformance in developed markets. Peter (2007) found similar evidence on CSE where negative performance in IPO share price is reported in third year from the listing. However first two years' IPO share price performance is positive in Sri Lankan context according to Peter (2007).

There are two broad approaches in measuring long run IPO returns which are event study approach and calendar time approach. Main methods under event study approach are Cumulative Abnormal Return (CAR) method and Buy and Hold Abnormal Return (BHAR) method. Most of the studies have followed event study approach and few can be mentioned here as evidence. Leleux (1993) and Levis (1993) are good examples for CAR approach and Stehle, Ehrhardt and Przyborowsky (1999); Brau, Couch and Sutton (2012) have followed BHAR method. Calendar time approach uses mainly single factor and multi factor models to assess the IPO long run performance. However there is less number of studies reported under this paradigm compared to event study approach. Further there is a third approach called mixed approach which uses both event study and calendar time techniques. In this approach widely used technique was Fama and French three factor model (FF3) which will be discussed in detail later. However now there are more advanced multifactor models augmented other factors such as momentum, liquidity, profitability and investment capability. Some of the calendar time and mixed approach IPO studies are mentioned in table 1.

Table 1: Mixed and Calendar time studies conducted to assess long run IPO anomaly

Author(s)	**Period**	**Country / Countries**	**Long run assessment method**[1]
Gompers and Lerner (2003)	1935-1972	USA	BHR, CAR, CAPM & FF3

[1] Mixed approach includes both event study and calendar time techniques both. Event study techniques include BHR (Buy and Hold returns), CAR (Cumulative Abnormal returns) and WR (Wealth Relatives). Calendar time techniques include CAPM (Capital Asset Pricing Model) and FF3 (Fama and French three factor model).

De silva Rosa, Velayuthen & Walter (2003)	1991-1999	Australia	BHR, WR & FF3
Boabang (2005)	1990-2000	Canada	CAR & FF3
Ahmad-Zaluki, Campbell & Goodacre (2007)	1990-2000	Malaysia	CAR, BHR & FF3
Pukthuanthong-Le & Varaiya	1993-2002	USA	BHR & FF3
Chi, Wang & Yong (2010)	1996-2002	China	CAR, BHR & FF3
Moshirian, Ng & Wu (2010)	1991-2004	China, Hong Kong, Japan, Korea, Malaysia and Singapore	BHR & FF3
How, Ngo & Verhoeven (2011)	1992-2004	Australia	BHR, CAR & FF3
Liu, Uchida & Gao (2012)	2000-2007	China	BHR, WR & FF3
Thomadakis, Nounis & Gounopoulos (2012)	1994-2002	Greece	BHR, CAR & CAPM
Brau, Couch & Sutton (2012)	1985-2003	USA	BHR & FF3

Source: Perera and Kulendran (2013)

2.2 MULTIFACTOR MODELS AND IPO ANOMALY

Even though discipline of finance got the distinction from mother subject, Economics with the classical work of Markowitz (1952) and single factor models laid its foundation with the studies of Sharpe (1964) and Lintner (1965). Their model assumed stock returns are linearly related to volatility in market index. But their assumptions were criticized by subsequent scholar claiming they are very rigid. As examples, assumptions like no tax, no transaction cost, all agree on return distributions, investors worry only about mean and variance are bit too beyond on the reality. However Sharpe and Lintner capital asset pricing model (CAPM) became the key benchmark model in all performance evaluation studies and studies on financial market anomalies including IPO studies. However Fama and French (1992, 1993, 1996) came up with their famous three factor model and it got the crown from CAPM in the world of calendar time techniques. Later many scholars added different factors and tested it with different securities in different markets. This paper focus on how multi factor models work with IPO stocks in an emerging market like Sri Lanka. However still there is no universally accepted model in empirical asset pricing.

First it should be asked whether Sri Lankan market is an emerging capital market or not. Li and Toll (2011) generally defines emerging market is an economy that in the process of growth and industrialization. They further elaborate that emerging economies are not countries troubled by non-functioning capital markets but at the same time they are not fully efficient developed markets. So Sri Lanka roughly can be defined as an emerging market according to the GDP growth rate (7.3% in 2013) published by Central Bank of Sri Lanka (CBSL). Then why is it IPO stocks? IPO stocks are generally new businesses to the market with higher growth as well as higher risk as per Ritter (1991). So it is interesting to see how IPO stocks in emerging Sri Lankan market respond to the multi factor models. As per the best of knowledge of authors, it provides fresh insights to the Sri Lankan capital market where no one have explored earlier. This study is different from Randeniya and Wijerathna (2012), since this study tests IPO stocks specifically unlike the earlier.

As summarized above, multifactor models have evolved from 1960's to the present and it is difficult to test each and every model. So purpose of this study it is selected below versions of single factor and multifactor models in the context of Sri Lankan IPOs.

Table2: Six models used for the assessment

Model	**Original Authors and Year**
Sharpe-Lintner CAPM (Basic CAPM)	Sharpe (1964), Lintner (1965)
Zero Beta CAPM (ZCAPM)	Black, Jensen and Scholes (1972)
Fama & French 3 factor model (FF3 model)	Fama & French (1992, 1993, 1996)
Carhart's 4 Factor model (C4F model)	Jagadeesh & Titman (1993), Carhart (1997)
3 Factor model augmented by liquidity (3FL model)	Acharya & Pederson (2005) Marcelo, Quiros & Oliveira (2011)

Fama & French 5 factor model (FF5 model)	Fama & French (2014)

Source: Authors' construction

3. DATA

The data used in this study consist of 51 initial public offerings issued in CSE between 2000 and 2012. The data are collected from variety of sources. The issue dates and offering prices of IPOs are taken from CSE web site and listing prospectuses. Monthly stock prices are taken from CSE and adjusted by authors to dividends and other corporate actions. All Share Price Index (ASPI) data are taken as market index and obtained from CSE.

It is employed six models described in table 2 to adjust long run IPO returns for the level of systematic risk as well as the factors such as size, book to market, momentum, liquidity, profitability and investments. Factor data mainly obtained from individual company annual reports and CSE web site. Annual average gold prices are required to estimate uncorrelated portfolio to the market portfolio in zero beta CAPM and it is obtained from www.kitco.com. Risk free rate is taken as 3 month Treasury bill rate published by Central Bank of Sri Lanka (CBSL).

4. METHODOLOGY

4.1 Sharpe-Lintner CAPM (Basic CAPM)

A CAPM describes the relationship between risk and expected return and that is used in the pricing of risky securities. Gompers and Lerner (2003) used CAPM to evaluate IPO long run performance. This is calculated by taking a risk measure (beta) that compares the returns of the asset to the market over a period of time and to the market premium (*Rm-Rf*). CAPM is calculated as follows.

$$R_{pt} - R_{ft} = \alpha + \beta\,(R_{mt} - R_{ft}) + \dot{\varepsilon} \dashrightarrow \quad \textbf{(1)}$$

Where R_{pt} denotes the monthly return of IPO portfolio at time *t*, R_{ft} is the risk free return at time *t* and R_{mt} is the monthly return of ASPI at time *t*. $\dot{\varepsilon}$ denotes random error term.

4.2 Zero Beta CAPM (ZCAPM)

Black, Jensen and Scholes (1972) introduced a major change to basic CAPM. Change was the replacement of risk free rate by return of a portfolio called Z which is uncorrelated with the market index. There are many options for Z where some are exchange rates, gold prices, corporate debentures rates etc… Authors preferred to use gold prices as the uncorrelated portfolio for this study.

$$R_{pt} - R_{zt} = \alpha + \beta\,(R_{mt} - R_{zt}) + \dot{\varepsilon} \qquad \text{(2)}$$

Where R_{zt} denotes the rate of change of gold prices for period *t* and others are same as equation (1).

4.3 Fama and French three factor model (FF3 model)

The Fama and French three factor model (FF3) is an extension of the original CAPM style approach. Gompers and Lerner (2003) is one of the early studies which used FF3 to assess IPO long run performance. FF3 model can be written as:

$$R_{pt} - R_{ft} = \alpha + \beta\,(R_{mt} - R_{ft}) + s\,\mathrm{SMB}_t + h\,\mathrm{HML}_t + \dot{\varepsilon} \qquad \text{(3)}$$

Where SMB_t denotes the return difference between small and big stocks for period *t*, HML_t denotes the return difference between high book to market firms and low book to market firms for period *t*. Others remain the same as in equation 1.

SMB_t (small minus big) is the average return on the three small portfolios minus the average return on three big portfolios for period *t*.

SMB_t = 1/3 (small value + small neutral + small growth) – 1/3 (big value + big neutral + Big growth) **(4)**

HML_t (high minus low) is the average return on two value portfolios minus the average return on the two growth portfolios for period *t*.

HML_t = 1/2 (small value + big value) – 1/2 (small growth + big growth) **(5)**

4.4 Carhart Four factor model (C4F model)

Carhart (1997) developed a further extension to FF3 model by adding the momentum factor (winners minus losers – WML) and it is known as four factor model. Eckbo and Norli (2005) added momentum to their study of IPO long run price performance. Four factor model is stated below.

$$R_{pt} - R_{ft} = \alpha + \beta\,(R_{mt} - R_{ft}) + s\,\mathrm{SMB}_t + h\,\mathrm{HML}_t + w\,\mathrm{WML}_t + \dot{\varepsilon} \qquad \text{(6)}$$

Where WML_t is the return difference between winner and loser stock portfolios for period *t*. WML_t is estimated as follows.

WML_t = 1/2 (small winners + big winners) – 1/2 (small losers + big losers) **(7)**

4.5. Three factor model augmented by liquidity factor (3FL model)

Another factor to be added to FF3 is liquidity. But here it becomes more complex since stock market liquidity has many facets. Some of them are monthly trading volume, turnover rate, average ratio of daily absolute return and monthly proportion of zero returns. Authors of this study selected only turnover rate as liquidity measure and it is calculated as follows.

Turnover rate = Monthly trading volume / number of shares outstanding ………… **(8)**

Acharya and Pederson (2005) as well as Chan and Faff (2005) pioneered this model as a multi factor model with a liquidity premium and it is shown below. In simply liquidity premium, LMH (low liquidity minus high liquidity) substituted as the fourth factor. Ramlee and Ali (2012) used three factor model augmented by liquidity to analyze long run returns of IPO stocks in Malaysian context. LMH_t is calculated as follows.

$R_{pt} - R_{ft} = \alpha + \beta\,(R_{mt} - R_{ft}) + s\,SMB_t + h\,HML_t + l\,LMH_t + \dot{\varepsilon}$ …… **(9)**

Where, LMH_t is the return difference between low liquid portfolios and high liquid portfolios for period *t*.

LMH_t = 1/2 (Small high liquid stocks + big high liquid stocks) – 1/2 (Small low liquid stocks + big low liquid stocks) ------------ **(10)**

4.6 Fama and French five factor model (FF5 model)

Fama and French (2014) added two more factors to their FF3 model and expect it provides better explanation to average long run returns. Two new factors represent profitability and investment capability. The new five factor model can be explained by below equation.

$R_{pt} - R_{ft} = \alpha + \beta\,(R_{mt} - R_{ft}) + s\,SMB_t + h\,HML_t + r\,RMW_t + c\,CMA_t + \dot{\varepsilon}$ **(11)**

The method of calculating SMB in FF5 is different than method of calculating SMB in FF3. It is as follows.

SMB_t = 1/3 (SMB B/M + SMB OP + SMB INV) ------ **(12)**

RMW_t (Robust minus Weak) is the factor to represent profitability and it is calculated as follows. It is the return difference between robust profitability stock portfolios and weak profitability stock portfolios for period *t*.

RMW_t = 1/2 (Small Robust + Big Robust) – 1/2 (Small Weak + Big Weak)………… **(13)s**

CMA_t (Conservative minus Aggressive) is the factor to represent investment capability and method of calculating is given below. It is the return difference between low investment and high investment portfolios for period *t*.

CMA_t = 1/2 (Small Conservative + Big Conservative) – 1/2 (Small Aggressive + Big Aggressive) **(14)**

However it should be noted that five factor model has not tested for IPO stocks in any market yet up to the best of knowledge by authors. Ordinary least square (OLS) regressions will be conducted for all six models on both value weighted and equal weighted basis.

5. RESULTS AND ANALYSIS

5.1 Descriptive statistics

Descriptive statistics of the variables of discussed models are given below.

Table 3: Descriptive statistics

Variable	Mean	Median	Maximum	Minimum	Standard Deviation
R_p (Value weighted)	-0.000	0.006	0.037	-0.049	0.026
R_p (Equal weighted)	0.003	0.001	0.066	-0.057	0.036
R_m (Value weighted)	0.018	0.019	0.055	-0.025	0.023
R_m (Equal weighted)	0.042	0.028	0.259	-0.027	0.074
R_f	0.116	0.100	0.213	0.072	0.046
R_z	0.157	0.143	0.357	0.001	0.106
SMB (FF3)	0.001	-0.001	0.045	-0.067	0.030
SMB (FF5)	0.025	0.007	0.287	-0.025	0.081
HML	0.001	0.006	0.048	-0.066	0.031
WML	0.085	0.057	0.414	-0.004	0.104
LMH	0.020	0.017	0.106	-0.024	0.033
RMW	0.014	0.007	0.129	-0.043	0.039
CMA	0.003	0.006	0.046	-0.055	0.026

Source: Authors' construction using E-views 6.0 software

5.1 Results on value weighted basis

OLS regression results of all six models are given in below table 4. It is computed on value weighted basis.

Table 4: Value weighted calendar time portfolio regressions

	CAPM	**ZCAPM**	**FF3 model**	**C4F model**	**3FL model**	**FF5 model**
α	-0.019 (-1.652)	-0.019* (-1.953)	-0.014 (-1.183)	-0.014 (-0.835)	-0.014 (-0.975)	-0.011 (-0.727)
$R_m - R_f$	0.990*** (9.655)		1.036*** (9.789)	1.037*** (8.967)	1.036*** (9.167)	1.074*** 7.663
$R_m - R_z$		0.994*** 17.892				
SMB			-0.122 (-0.588)	-0.132 (-0.458)	-0.119 (-0.452)	0.084 (0.867)
HML			-0.301 (-1.451)	-0.306 (-1.270)	-0.297 (-1.009)	-0.326 (-1.332)
WML				-0.004 (-0.051)		
LMH					-0.006 (-0.019)	
RMW						-0.084 (-0.295)
CMA						-0.186 (-0.428)
Adj. R^2	0.885	0.963	0.888	0.874	0.874	0.870
F-stat.	93.21***	320.13***	32.62***	21.75***	21.75***	17.06***

Source: Authors' construction using E-views 6.0 software

Note 1: Comments marked with *, ** and *** indicate significance at 10%, 5% and 1% level. Note 2: t statistics are reported in parentheses.

Value weighted IPO portfolios are underperforming compared to relevant benchmarks in all 6 models in period of 2000 to 2012. However those are statistically insignificant and only ZCAPM intercept is significant at 10% level. Traditional market beta fluctuates around 1 which is the general finding for equity only portfolios and remains statistically significant at 1% level in all 6 value weighted models. None of the additional factors are statistically significant. However F statistic remains significant at 1% level in all cases indicating all factors are jointly explaining the variation of IPO stock returns. Adjusted R^2 is above 87% for all six value weighted models indicating that it is an adequate estimation of IPO stock return variation in studied period.

5.2 Results on equal weighted basis

OLS regression results on equal weighted basis are given in table 5.

Table 5: Equal weighted calendar time portfolio regressions

	CAPM	**ZCAPM**	**FF3 model**	**C4F model**	**3FL model**	**FF5 model**
α	-0.085*** (-4.761)	-0.071** (-2.561)	-0.084*** (-5.314)	-0.087*** (-3.525)	-0.092*** (-4.907)	-0.052* (-2.231)
$R_m - R_f$	0.378** (2.610)		0.411** (3.170)	0.407** (2.904)	0.429** (3.212)	0.474** (2.958)
$R_m - R_z$		0.722*** (4.508)				
SMB			0.908 (2.043)	0.958 (1.605)	0.660 (1.223)	-0.071 (-0.380)
HML			0.470 (1.109)	0.494 (1.026)	0.119 (0.198)	0.352 (0.760)
WML				0.025 (0.137)		
LMH					0.517 (0.841)	
RMW						-1.366 (-2.111)
CMA						-1.532 (-1.708)
Adj.	0.326	0.617	0.471	0.406	0.453	0.404

R^2						
F-stat.	6.81**	20.326***	4.56**	3.05*	3.49*	2.63

Source: Authors' construction using E-views 6.0 software
Note 1: Comments marked with *, ** and *** indicate significance at 10%, 5% and 1% level. Note 2: t statistics are reported in parentheses.

Equal weighted IPO portfolios in all 6 models are underperforming in the period of 2000 to 2012. However unlike value weighted scenario, there is a varying degree of statistical significance among 6 models. 4 models are statistically significant at 1% level (CAPM, FF3, C4F and 3FL) and ZCAPM and FF5 are statistically significant at 5% and 10% respectively. Similar to value weighted scenario, traditional market beta remain statistically significant in all equal weighted cases. However it is different from value weighted scenario, factor loadings are below 0.5 in 5 equal weighted models out of 6. Further other factors are not statistically significant. F statistic is also significant at varying degrees. For an example ZCAPM is significant at 1% level, CAPM and FF3 are at 5% level and C4F and 3FL are at 10% level. F statistic of FF5 is insignificant. Adjusted R^2 is below 50% except ZCAPM and it indicates that equal weighted models are poor approximations of IPO return variation unlike value weighted models.

6. CONCLUSION

This paper analyses long run IPO underperformance anomaly with calendar time techniques from year 2000 to 2012. More specific purpose of this study is to find out which factor models explain the return variation of IPO stocks in an emerging market like Sri Lanka. As a summary, market beta remains significant in all 6 models and IPO stock portfolio underperforms in all value weighted scenarios. Even though additional factors remain insignificant, F statistic is significant in all value weighted models. So it can be said that these factors are jointly explaining the variation of IPO stock returns in value weighted models. However equal weighted scenarios were proved to be poor approximations while value weighted scenarios are more suitable for performance evaluation purposes in consistent with the Fama (1998).

This result, more specifically the results of value weighted scenarios are different from Randeniya and Wijerathna (2012) where they found FF3 is better than basic CAPM in explaining the behaviour of general equity market in Sri Lanka. However this study found out that market beta is the most important factor in all 6 models while newly added factors remain insignificant. This may be due to the characteristics of the sample IPO stocks which are risky in nature and usually new and small firms compared to well established companies. Griffin (2002) commented that practical applications of multi factor models (specially FF3) are successful on conditions of the market and type of the security. Even though FF3 is successful in US context, situation of the Asian markets can be different. For an example, Daniel, Titman and Wei (2001) rejected FF3 in Tokyo Stock Exchange. So it should be concluded that success of multi factor models depended on the type of the security and the country and this conclusion is similar to the Griffin (2002).

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TACTICAL DECISION MAKING IN TERMS OF BUYING FROM SUPPLIER OR SELF-PRODUCING USING RELEVANT COST IN "MISS A" FASHION BUSINESS

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Abstract:

This research discusses about tactical decision making using relevant cost analysis as a basis for make-or-buy decision making in MISS A Company. This study aims to determine the decision that should be made by MISS A in order to grow and face the fierce rivalry in the fashion industry. MISS A company faces options to keep buying from supplier or start building home industry and self-producing. This study uses documentation, interview, and observation to collect the data. The method used in this study is relevant cost analysis which compares relevant costs and benefits in the decision making process. The findings of this study indicate that relevant cost analysis can be used in short-term decision making. The company should also consider the long-term impacts of the decisions made. The best decision for the company to make is to keep buying from supplier for Bangkok dresses line and to self-produce for local tops, Bangkok tops, and Hongkong dresses lines. This study is limited and conducted as short-term decision making based on the company's internal data between 2012 and 2013.

Keywords: relevant cost analysis, make-or-buy, alternative, decision making, short-term decision

CHAPTER 1. INTRODUCTION

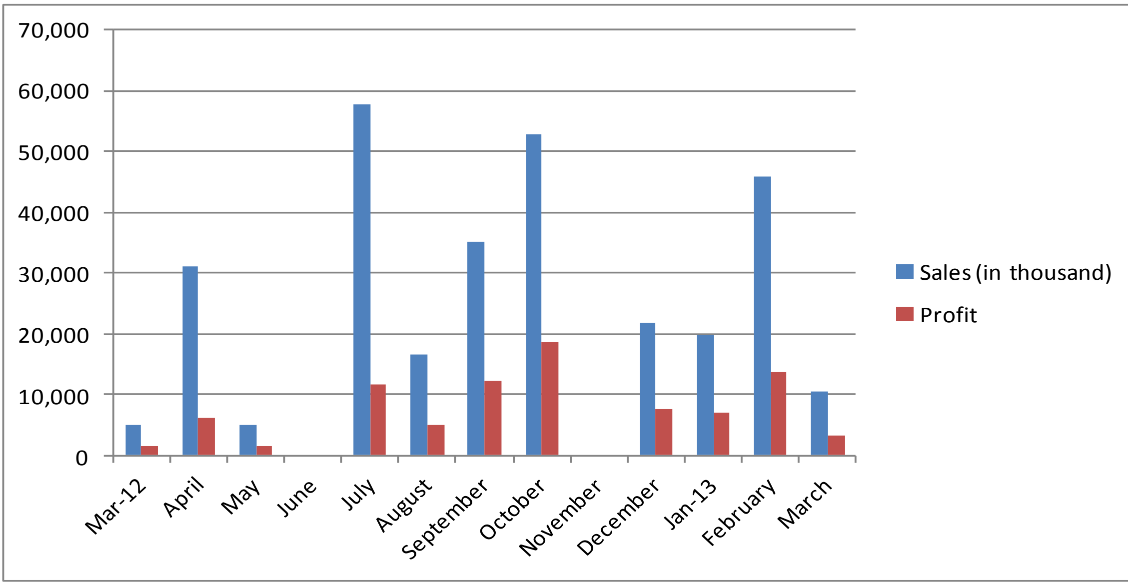
In the current modern era, business grows and innovates in fast pace to fulfil people's need. Since a long time ago, business has taken a crucial part in our society and simply cannot be separated from our economy. In order to grow bigger and survive, decision making holds the biggest part in a business' sustainability. No matter how small or big the businesses are, they should make the best decisions in order to keep running the business, compete with the competitors, and serve customers' needs. Above all, every business needs to think and take decisions wisely in order to reach the company's goal. To keep up with the reasons, a business should consider its decisions carefully, because every decision affects the company.

According to Harvard Center for Textile and Apparel Research, fashion industry is one of the timeless business types besides food and beverage, technology, entertainment, and property. These business types will remain because people always need them.

According to Mari Pangestu (2009), fashion industry is one of the industries that belongs to creative industry. In 2011, creative industry contributed 7,2% to Indonesia's GDP. It also absorbed around 2,6 million workers. There are huge opportunities in fashion industry, both domestic and international. In general, fashion industry gives significant contribution towards Indonesia's economy. It creates positive climate for business, strengthens Indonesia's image and identity, and acts as the center of innovation and creativity. With those reasons, there is an urgency to develop fashion industry (Pangestu, 2009:20).

The rise of modern technology also brings opportunity for fashion industry. Currently, Indonesia's fashion industry revolves in online media, such as the use of 'Blackberry Messenger', Facebook, and Instagram to sell products. Based on Kominfo data on April 2012, Indonesian users in social media are significant, reaching 65,1 million in total. Consequently, online business becomes a new way to reach this limitless market size.

"Miss A", a fashion business which was established to fulfil the Entrepreneurial Project course in Universitas Ciputra on December 2011, is currently an online business that sells women's clothing. Miss A provides local and imported clothes. Miss A utilizes online media such as BBM and Facebook. Here are the sales and profit data of Miss A between March 2012 and March 2013 (in thousand Rupiah):



Picture. 1 Graphic of Miss A's Sales and Profit
Source: Internal data of Miss A

From the graphic, it can be seen that Miss A's sales is fluctuating. There were huge sales in certain months such as July 2012, because people began to prepare for Eid Mubarak, and also in February 2013, when people welcomed the Chinese New Year. Meanwhile, there were no sales in June 2012 and November 2012. In these months, Miss A restocked, managed the remaining stock, and took care of pre-order problems.

Local clothes which have the lowest price contribute huge sales, but they give the lowest profit. Imported clothes (from Bangkok and Hongkong) which are currently new, contribute less sales but with higher profit margin. During the time, local clothes contribute the most for Miss A's growth. Local clothes have cheaper price and are fast-moving products. Miss A also started by selling local ones, then expanded to imported clothes. From the graph, we can see that after Miss A began to sell imported clothes, the profit was rising up (since September 2012).

Local and imported clothes have their own advantages. Because Miss A's strength is in local clothes, there are several problems that should be overcome. Basically, Miss A's local clothes' model and quality are almost the same with its competitors. This condition makes the rivalry in local clothes fierce. Customer loyalty is so low. They can easily move to other sellers which offer cheaper price.

During the time, Miss A gives good service to maintain buyers. That's why Miss A can still compete in local clothes market. However, local clothes' quality isn't always good. Sometimes, there are defect cloths that bring financial loss to the company. The profit for local clothes is also too low. This means if there are many defect products, the loss will be big. Brand awareness isn't of help either in local clothes rivalry. There are always some online businesses that go below the market price and cause loss to others. However, since the sales of local clothes are high, Miss A simply cannot abandon the local product.

Meanwhile, in imported clothes competition, especially Bangkok's, the price range is almost the same, but not as strict as local clothes. Imported clothes give more profit margins to Miss A. Although there are a few buyers and resellers for these lines, the two lines have a good prospect in the future. In fairness, the qualities of imported items are very good. With these products, Miss A does not need to worry about product defect. However, there will be a lot of competitors for imported clothes with the same product, even price, in the near future.

Considering the situation and the problems that appear, the management should devise a strategy that will help the company. Under the situation of having too many competitors with the same price, model, defect product, low loyalty, and also the desire to build brand awareness, Miss A is faced with several alternatives. It is Miss A's vision to be a world class apparel business, so in the end, it will be better if Miss A starts making its own clothing line. This is the first alternative. However, there is a question whether it is more profitable to self-produce or not. Can Miss A get more profit from producing than just rebranding and being a distributor? How much will it cost to establish a home industry, hire tailors and sewing machines? Wouldn't it be complicated to produce, market, and supervise workers?

Miss A faces an urgency to choose the best decision for the company, both for short-term and long-term purposes. A good decision can be made by considering future possibilities and other factors through analysis and calculation. In the end, the company can determine the best decision to keep buying from supplier or to produce clothes by itself.

Therefore, this paper will observe about **"Tactical Decision Making in Terms of Buying from Supplier or Self-Producing Using Relevant Cost in "Miss A" Fashion Business."** Moreover, this paper aims to:

1. Explore and explain the result of relevant cost and use the analysis result to decide between buying from supplier or self-producing for local and imported clothes.

2. Give consideration for company management about relevant cost as an alternative of decision making

1.1.Previous Research

There are three researchs used as sources in this paper. The first research created by Ishmael and Osamor I.P. (2012). This research is sourced from Australian Journal of Business and Management Research Vol.2, No.03, 2012. The journal aims to examine the concept of relevant cost, its relevance in decision making analysis, its advantage in both short and long-term planning, and its influence in the decision maker's preference. Based on related literature, it is revealed that relevant costs are costs that are appropriate for a specific management decision. They are estimated future costs that are different under alternative courses of action for a specific problem. Relevant cost should consist of both fixed and variable costs.

The analysis technique in the journal compares two decisions that can be chosen by noticing the variable and calculating the opportunity and profit. The result of the tactical decision making using relevant cost theory says that Decision 1 (X_1) should be compared with Decision 2 (X_2). The one that has more value (profit) and opportunity cost is the better decision to make.

Another resource comes from a research by Pachori and Karunesh Saxena (2012). The journal aims to help India's automotive industry keep up with the fierce competition in automotive industry with the help of relevant cost in the decision making process. Relevant cost is the solution in determining the area of material requirement, making or buying decision, accepting or rejecting special order, creating equipment replacement decision, making the best use of scarce resources, and adding or dropping a product line. The analysis technique compares the choices in cost, opportunity, and profit. The one that brings more advantages is the one that the decision maker must follow.

The last resource comes from an Indonesian research by Patarianto (2012). This research is sourced from the Journal Media Mahardika Vol. 10, No. 3, 2012. The journal uses cost accounting principle to decide whether to accept or reject orders with variable costing method. The journal uses least square method to separate fixed and variable cost, so that relevant cost can be used to determine the decision.

1.2.Cost

1.2.1. Definition of Cost

Cost is a sacrifice in economic resources measured in money unit that has happened or will happen for certain purpose. (Mulyadi, 2011:8). The term cost is very elusive. It has different meanings in different situations. A cost accountant examines each situation in depth to decide the type of cost concept that he will use and it is an important thing in a decision making to make precise and relevant data available to management. In cost studies, a cost accountant should always consider four points in the decision-making process, which are to:

1. Establish why a choice is necessary.
2. Analyze each available alternative separately.
3. Determine how every alternative alters or influences the decision maker's preference.
4. Choose a course of action from the alternatives.

1.2.2. Cost Behavior

Cost behavior refers to how cost will react to business activity (Garrison *et al*., 2010:189). Understanding cost behavior is the key to a decision making within a company. Managers who understand how cost behaves will be able to predict better regarding how much cost is involved in the business operation.

In general, there are 3 types of cost behaviors; which are fixed cost, variable cost, and semi-variable cost.

1. Fixed Cost
   A cost that does not change with an increase or decrease in the amount of goods or services produced. The amount of fixed cost in a period remains fixed. (Rich *et al*,. 1010:757). Example: salary
2. Variable Cost
   Variable cost is a cost that varies depending on a company's production volume. It rises as production increases and falls as production decreases (Rich *et al*,. 1010:760). Example: material cost
3. Semi-Variable Cost
   Semi-Variable cost is a cost composed of a mixture of fixed and variable components. Costs are fixed for a set level of production or consumption, and become variable after the level is exceeded (Rich *et al*,. 1010:762). This type of cost is variable in the sense that greater

levels of production increase total cost. If no production occurs, then a fixed cost is still incurred. Example: water and electricity

1.2.3. Relevant Cost

Relevant cost is the key in tactical decision making. These costs are appropriate for a specific management decision. Relevant costs are future costs that are different under alternative courses of action for a specific problem. A cost item is relevant to the decision if it influences the decision maker's choice (Ishmael, 2012).

Relevant cost, which is also named differential cost, is a cost that differs between the alternatives being considered (Hilton *et al*., 2008:520). It is often important for businesses to distinguish between relevant and irrelevant costs when analyzing alternatives, because considering irrelevant costs erroneously can lead to unsound business decisions. Also, ignoring irrelevant data in analysis can save time and effort. Non-cash items, such as depreciation and amortization, are frequently categorized as irrelevant costs, since they do not impact cash flows (Saxena,2012:220).

Two common types of irrelevant costs are sunk costs and future costs that do not differ between alternatives. Sunk costs are unavoidable because they have already been incurred. Future costs that do not change between alternatives are also essentially unavoidable with respect to the alternatives being considered.

1.3. Decision Making

Decision making is one of the major functions of a management. It is a very important and difficult task of management. Decision making can be defined as making a choice between uncertain future alternatives. A short-term practical decision making consists of choosing among alternatives with an immediate or limited end in view. It must be emphasized that all decision makings relate to the future and that a decision is a choice between alternatives in the pursuit of objectives.

1.3.1. Tactical Decision Making

Tactical Decision Making means of choosing among alternatives with an immediate or limited end in view (Hansen and Mowen, 2011:820). Tactical decisions are short term in nature. They are short-term actions which serve a larger purpose in the long run.

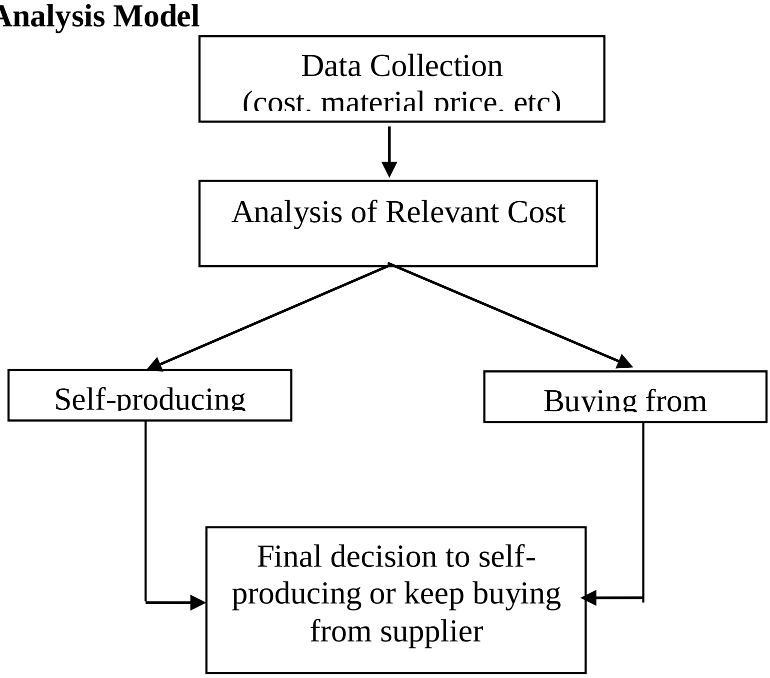
Tactical Decision Making involves recognizing and defining problems, identifying alternatives as possible solutions to the problem, identifying predicted costs and benefits associated with feasible alternative, comparing relevant costs and benefits for each alternative, relating each alternative to the overall strategic goals of the firm and other important qualitative factors and selecting the alternative with the greatest benefit which also supports the organization's strategic decisions.

1.4. Tactical Decision Making Application with Relevant Cost

Relevant cost is very useful in determining decisions for some cases, such as the decisions to accept or reject order, make or purchase, increase, decrease, or stop production, calculate opportunity cost, determine the price, sell or further production, and outsource decision (Oliver and Horngren, 2010:461).

Generally, decisions to manufacture or purchase are faced by companies that have many kinds of products. A company does not always have to produce the products by themselves. They can purchase it from other people if the cost is lower than producing it. Therefore, when other parties offer cheaper price, the company needs to reconsider their options. In conclusion, relevant cost concept can answer the main problem in Miss A, that lies between self-producing or buying from supplier.

1.5. Analysis Model



Picture 2.
Analysis Model
Source: Research result

CHAPTER 2. RESEARCH METHOD

2.1. Research Approach

The research approach used in this research is qualitative action research. Qualitative research refers to a research procedure that aims to understand the phenomenon of the subject that will result in descriptive data (Moleong, 2010:4). In this research, qualitative analysis is conducted by examining the company's alternatives using relevant cost concept to decide the best way that influence managerial decision.

The research type used in this research is descriptive method. Descriptive method aims to collect actual information in details that can bring better understanding on the research's object (Sanusi, 2011:15).

2.2. Research Object

This research used both qualitative and quantitative data. Quantitative data is related to the application of relevant cost, such as cost of goods sold of the clothes from various suppliers during March 2012-March 2013 and production cost in self-production. Quantitative data also emphasized on MISS A's financial report to measure the sales forecast in relevant cost analysis. Meanwhile, qualitative data is related to company history and structure, and production process.

2.3. Data Collection Procedure

The data sources for this proposal belong to primary data which come directly under original source and direct observation. The primary data come from Miss A's data of supplier's price and observation of production cost if Miss A self-produces. The research object used in this research is selected using non-probability sampling method with purposive sampling. The methods of data collection used are:

1. Documentation; refers to a way of collecting data using documents that are related to the problems, or finding data on variables such as transcript, note, book, etc (Arikunto, 2009:206)
2. Observation; a way to collect data with direct monitoring of the observation object, which is the company.
3. Interview; refers to a data collection method by interviewing the staff, owner, or people related to the subject.

After the data collected, triangulation method is used to validate the data between the writer as business owner and the source (from documentation and interview).

2.4. Scope of the Research

The scope of this research is divided into two limitations that consist of time and place (scope). The limitation of place is the online store (supplier) in Java, Surabaya. Meanwhile, the time limitation is between March 2012 and May 2013.

2.5. Data Analysis Technique

Tactical decision making is about choosing the best choice among others. In order to fulfill the purpose of the research, the analysis techniques involve:

1. Identifying the problem.
2. Determining the alternatives.
3. Collecting qualitative and quantitative information. The information sources are taken from Miss A's price data between 2012 and 2013, cost and price from convection, production cost, and production capacity.
4. Recording, summarizing, and making a brief description.
5. Classifying data into related alternatives and presenting them.
6. Processing data by conducting an analysis of relevant cost to find a pattern and category and presenting the finding. When the choice is between two alternatives, an emphasis should made to find out the advantages of taking a particular decision. The steps taken are:
   1. Identifying revenue for each alternative.
   2. Identifying cost for each alternative and taking in a particular care to include opportunity cost.
   3. Identifying profit for each alternative and profit (loss) of choosing one alternative over another.
7. Analyzing the financial aspects from the alternatives to know how the alternatives affect the company's activity, resources, and profit based on these indicators:
   1. *Making or buying* decision is made if differential cost of the decision alternative of buying is less, whereas if the differential cost in buying is higher, the company shouldn't make the product (Oliver and Horngren, 2010:480).
   2. A company should choose an alternative that contributes higher advantages in relevant cost analysis (Hansen and Mowen, 2011:820).

3. Tactical decision making is a small part in a company's strategy to reach higher profit in the future (Hansen and Mowen, 2011:820). Relevant cost concept is usually followed by forecasting method of 2 to 5 years to see the long-term effect. Financial analysis gives a picture of the company's financial condition that becomes a principle in decision making and projecting future prospect. (Crosson *et al*., 2010:2013).

8. Deciding on the most profitable decision based on relevant cost calculation and considering financial indicators.

CHAPTER 3. DATA ANALYSIS AND DISCUSSION

3.1. Company Overview

MISS A is a small-medium enterprise that engages in fashion industry and focuses on women's clothing. This company was established as a part of a school project at Universitas Ciputra on December 2011. MISS A's main activities involve running an online media and using Blackberry Messenger. The business concept is basically about an online business that wants to capture the unlimited market size in the field, in both domestic and international markets. Furthermore, as a distributor and reseller of fashion product, MISS A also supplies several boutiques in Surabaya.

3.1.1. Product

MISS A provides the market with two lines of product; local and imported ones (Bangkok and Hongkong). The most favorite local products are tops. These products are priced between IDR 40.000 to IDR 90.000. Bangkok products are priced between IDR 90.000 to IDR 300.000. The most favorite Bangkok product are tops and dresses. Meanwhile, the price range for Hongkong clothes are between IDR 170.000 to IDR 1.000.000. The most favorite Hongkong product are dresses.

3.1.2. Segment and Target Market

MISS A is segmenting the market based on demography and psychograph. From the segmentation, MISS A's target market are:

1. Local clothes

   The target markets are resellers, housewives, employees, and students from middle to low class because the price is cheap. The targeted age is around 15-40 years old for local clothes model.

2. Imported clothes

The target markets are resellers, housewives, businesswomen (employees or entrepreneurs), and students in middle high class who care about quality. The targeted age is around 15-55 years old for imported clothes model.

3.2. Cost Behavior

Table 1. Cost Classification of MISS A Company

Cost Classification of MISS A **For the Period March 2012- March 2013**		
Product Cost		
Merchandise inventory IDR 221.515.000		
Packaging cost		2.215.150
Cost of goods sold		**223.730.150**
Periodic cost		
A. Administrative expense		
Telephone cost	2.400.000	
Administrative expense(note, etc)	500.000	
B. Marketing expense		
Banner, name card, brochure expense	960.000	
Transportation cost	600.000	
C. Utility expense		
Electricity expense	1.200.000	
Total periodic cost		**5.660.000**
TOTAL COST		**IDR 229.390.150**

Source: Processed Internal data of MISS A (2012)

3.3. Relevant Cost

3.3.1. Identification and Problem Description

MISS A started with local clothes, and on September 2012 began to sell imported (Bangkok and Hongkong) clothes. The company took the products from Surabaya and Jakarta. Local and imported clothes have their own strengths and weaknesses. Local clothes have low quality; product defects, low profit margin, and tough competition. Meanwhile, imported clothes have very good quality with higher price. In the near future, the rivalry in the imported clothes business will be as fierce as the local one.

3.3.2. Analysis of Alternatives

3.3.2.1. Alternative I: Buying from Supplier

1. Local Clothes

MISS A buys clothes from suppliers in Jakarta using the wholesale system. Below are the details of average price per product from the supplier for the best-selling-clothes: tops.

Table 2. Details of Cost per unit (wholesale price) of local TOPS from supplier

Cost	Amount
Cost of goods sold	IDR 45.250
Freight-in	IDR 2.142
Total	IDR 47.392
Note	
• COGS is the average of Tops price from supplier. • Freight-in per product = 15.000:7 unit=IDR 2.142 (assumption of 1 kg = IDR 15.000,00)	

Source: Internal data of MISS A (2012-2013) processed

2. Imported Clothes

MISS A buys clothes from suppliers in Jakarta and Surabaya for Hongkong and Bangkok. Below are the details of average price per product from supplier for the best selling Bangkok clothes (tops) and Hongkong clothes (dresses).

Table 3. Details of Cost per unit of Bangkok TOPS from supplier

Cost	Amount
Cost of goods sold	IDR 107.777
Freight-in	IDR 2.142
Total	IDR 109.919
Note	
• COGS is the average of Tops price from supplier. • Freight-in per product = 15.000:7 unit=IDR 2.142 (assumption of 1 kg = IDR 15.000,00)	

Source: Internal data of MISS A (2012-2013) processed

Table 4. Details of Cost per unit of Hongkong DRESSES from supplier

Cost	Amount
Cost of goods sold	IDR 185.000
Freight-in	IDR 1.250
Total	IDR 196.250
Note	
• COGS is the average of Dressse price from supplier. • Freight-in per product = 5.000:4 unit=IDR 1.250 (assumption of 1 kg = IDR 15.000,00	

Source: Internal data of MISS A (2012-2013) processed

3.3.2.2.Alternative II: Self-Producing (Setting up Home Industry) with Pre-order System

To build a home industry for clothing, we must consider place, resources, fund, and cloth-making skills. The next step is resources. There are several resources needed, such as high speed sewing machine, obras machine, steam iron, designer, model, and tailors.

The process of producing clothes begins with designing or sketching. The owner and designer need to find ideas for clothes. The next step is sampling. The idea is made into clothes by the tailor. Then, the sample will be worn by a model in a photo session. After the photo shoot, MISS A will open a pre-order (PO) for the clothes. The pre-order system will minimize materials that MISS A doesn't require. After the orders fulfill the quota, the production process is started. The process includes making pattern, cutting fabric, sewing/assembling, inspecting (quality control), finishing (ironing the clothes), and packing. Each tailor will manage each step of the production. One is assigned to make pattern, another to sew, and the last one is in charge of 'obras'. The job desk is clear and efficient. At the end of the day, the finished goods will be packed and delivered to the customers and resellers.

The financial report will not calculate depreciation cost, because depreciation on fixed assets is never a relevant cost for short-run operating decision, since depreciation is an allocation of cost incurred in past period (Ishmael, 2012:28).

Table 5. Investment and cost for home industry

INVESTMENT	
Type of Investment	Total
Machine:	
1. High speed sewing machine*	IDR 1.700.000
2. Obras machine	2.700.000
3. Steam iron	410.000
4. Cutting machine	2.750.000
ADDITIONAL COST	
Cost	Total
Material cost (details in attachment)	
Sample cost per piece	
Designer wages/product	50.000
Tailor salary/month*	1.800.000
*The amount of machines and tailors is different for each line of product (local, Bangkok, and Hongkong). Details can be seen in attachment.	

Source: Interview data

In order to know how many clothes MISS A should produce in self-production (alternative II), the researcher will make a financial projection to determine the amount of production based on sales volume historical data of MISS A in 2012-2013.

Table 6. Sales Volume and Projection of MISS A between March 2012 and March 2013

Sales Volume Projection of MISS A Clothing Line				
			Projection of Self-production per year	
Product line	Total Volume	Average Volume per Month	2014	2015
Local clothes	4.080	340	4.692	5.396
Bangkok clothes	443	63	870	1001
Hongkong clothes	127	18	248	286

*Assumption of increase in sales volume is 15% (ceteris paribus) *Bangkok and Hongkong product were sold since September. Average per month=total volume:7 months. Projection in 2014 for Bangkok and Hongkok products use total volume in a year (average volume x 12 x 115%)

Source: Internal Data of MISS A (processed)

3.4. Relevant Cost Analysis

Based on quantitative relevant cost information, below is the analysis of relevant cost that helps MISS A to decide on the most profitable result between alternative I (buy) and alternative II (make).

Table 7 Relevant Cost Analysis of Make or Buy in local products (tops)

Analysis Relevant Cost of Make or Buy in local products (TOPS)			
	Alternative I (IDR)	Alternative II (IDR)	Benefit cost of Making (IDR)
Income	**225.420.000**	**225.420.000**	**0**
COGS from supplier	**193.359.360**	0	(193.359.360)
Direct material	0	54.672.000	54.672.000
Machinery	0	7.560.000	7.560.000
Tailor salary	0	64.800.000	64.800.000
Designer salary	0	9.000.000	9.000.000
Supporting material	0	4.080.000	4.080.000
Sample cost	0	2.592.000	2.592.000
Utilities expense	0	6.000.000	6.000.000
Total cost	**193.359.360**	**148.704.000**	**(44.655.360)**
Profit (loss)	**32.060.640**	**76.716.000**	**44.655.360**

Source: Internal Data of Miss A and Interview Data (processed)

Based on the previous quantitative information, the researcher makes a relevant cost analysis (table 7). Each alternative uses assumption of the historical sales to get the income. Alternative I, or buying from supplier, cost more than self-producing. In spite of the need to invest in machinery and tailor and designer salary, the cost to self-produce is still less than buying from suppliers. In profit area, alternative II is proven to give more profit, which is IDR 76.716.000 per year or IDR 6.393.000 per month. Furthermore, alternative I offers a little profit (IDR

2.671.720/month), which cannot support the life of the company. In conclusion, from the quantitative data obtained, alternative II (self-producing) is more beneficial.

Table 8 shows relevant cost analysis in Bangkok tops. From the comparison between buying and making, alternative II shows greater profit which is IDR 50.501.040 ,00per year or IDR 4.208.420,00 per month. The difference between buying and self-producing is IDR 17.585.520. At the end of the day, self-producing is worth trying based on the quantitative information.

Table 8 Relevant Cost Analysis of Make or Buy in Bangkok products (tops)

Analysis Relevant Cost of Make or Buy in Bangkok products (TOPS)			
	Alternative I (IDR)	Alternative II (IDR)	Benefit cost of Making (IDR)
Income	**191.198.880**	**191.198.880**	**0**
COGS from supplier	**158.283.360**	0	(158.283.360)
Direct material	0	50.564.160	50.564.160
Machinery	0	7.560.000	7.560.000
Tailor salary	0	64.800.000	64.800.000
Designer salary	0	6.000.000	6.000.000
Supporting material	0	1.440.000	1.440.000
Sample cost	0	4.333.680	4.333.680
Utilities expense	0	6.000.000	6.000.000
Total cost	**158.283.360**	**140.697.840**	**(17.585.520)**
Profit (loss)	**32.915.520**	**50.501.040**	**17.585.520**

Source: Internal Data of Miss A and Interview Data (processed)

Table 9 Relevant Cost Analysis of Make or Buy in Bangkok Products (dresses)

Analysis Relevant Cost of Make or Buy in Bangkok products (TOPS)			
	Alternative I (IDR)	Alternative II (IDR)	Benefit cost of Making (IDR)
Income	**117.720.000**	**117.720.000**	**0**
COGS from supplier	**97.662.240**	0	(97.662.240)
Direct material	0	45.133.200	50.564.160
Machinery	0	7.560.000	7.560.000

Tailor salary	0	43.200.000	64.800.000
Designer salary	0	2.400.000	6.000.000
Supporting material	0	1.440.000	1.440.000
Sample cost	0	3.104.880	4.333.680
Utilities expense	0	6.000.000	6.000.000
Total cost	**97.662.240**	**108.838.080**	11.175.840
Profit (loss)	**20.057.760**	**8.881.920**	**(11.175.840)**

Source: Internal Data of Miss A and Interview Data (processed)

Table.9 shows that buying from supplier is better than self-producing for Bangkok dresses. Although alternative II still gives profit, the profit is greater if MISS A keeps buying from the supplier (IDR 20.057.760 per year). However, with the amount of profit, the company will not grow if it only sells Bangkok dresses, because the income per month is so low (IDR 1.671.480,00).

Table 10 Relevant Cost Analysis of Make or Buy in Hongkong Products (dresses)

Analysis Relevant Cost of Make or Buy in Bangkok products (TOPS)			
	Alternative I (IDR)	Alternative II (IDR)	Benefit cost of Making (IDR)
Income	**75.900.000**	**75.900.000**	**0**
COGS from supplier	**51.405.000**	0	(51.405.000)
Direct material	0	24.840.000	24.840.000
Machinery	0	7.560.000	7.560.000
Tailor salary	0	21.600.000	21.600.000
Designer salary	0	1.200.000	1.200.000
Supporting material	0	552.000	552.000
Sample cost	0	2.208.000	2.208.000
Utilities expense	0	6.000.000	6.000.000
Total cost	**51.405.000**	**63.960.000**	12.555.000
Profit (loss)	**24.495.000**	**11.940.000**	**(12.555.000)**

Source: Internal Data of Miss A and Interview Data (processed)

Table 10 shows that alternative I is more profitable than self-producing. The profit is IDR 24.495.000 per year or 2.041.250 per month. The benefit of buying is IDR 12.555.000. In conclusion, MISS A should keep buying from supplier if the capability to sell only 23 units/month.

Nevertheless, as the time goes by, if MISS A's capability to sell Hongkong product is increased, reaching more than 6 units per day, MISS A could try to self-production.

3.5. Tactical Decision Making (Make or Buy in MISS A)

Relevant cost analysis shows that alternative II (self-producing) is a better option for local tops and Bangkok tops. From the cost point of view, self-producing is proven to be more efficient than buying from supplier. Self-producing also contributes more profit to the company than buying. Meanwhile, the profit of self-producing for Bangkok and Hongkong dresses is smaller than buying from supplier, because MISS A only capable to sell small amount of the clothes now. Although self-producing still gives profit, it will be better if MISS A keeps buying from suppliers for Bangkok and Hongkong dresses. Furthermore, MISS A can't survive only by selling Bangkok and Hongkong dresses, considering the low profit per month.

In addition to the quantitative information, the company must pay attention to qualitative information. Buying from suppliers gives advantages of having more models and using less time, because the company doesn't need to allocate time to create and produce. On other hand, buying from supplier means that MISS A will have almost the same products, or even the same products, with the competitors and it may lead to a price war. Furthermore, there is a possibility that the supplier suddenly breaks the cooperation contract. This will affect the company stock greatly. For imported clothes, the price is affected by the exchange rate. If the exchange rate is higher, the product will be more expensive.

3.6. Discussion: Tactical Decision Making Application with Relevant Cost in MISS A Fashion

Tactical decision makings are short-term actions which serve a larger purpose in the long run. From the quantitative and qualitative aspects, the best decision is self producing for local clothes and Bangkok tops. According to the analysis, machinery investment can reach a breaking point before a year and the company can get profit. In the next year, if the company decides not to add the machinery, the profit will be higher because they don't spend additional cost.

According to the decision made based on tactical decision making, there are some managerial implications that should be done by MISS A. MISS A will begin to self-produce and sell the product under MISS A's brand as one of company's competitive advantages. The company should keep learning and doing survey towards the trends in clothing models in order to be able to create what customers want. MISS A should also make innovations that set their product apart from the market products. In the future, MISS A can expand other product lines through market survey. From the marketing side, in addition to selling through online media, MISS A can start to be more involved in B2B. As a home industry that produces its own clothing line, MISS A can do consignation and sell the clothes through distributors, resellers, and boutiques (online and offline). Finally, to boost brand awareness, MISS A should join some public events.

CHAPTER 4. CONCLUSION

Based on the data analysis, the researcher can make a decision by implementing relevant cost analysis in the make-or-buy decision in MISS A FASHION. Relevant cost analysis helps in short-term decision making by considering both quantitative and qualitative factors. Even though relevant cost is useful in short-term decision making, the decision gives impact in the long run.

Based on the research, MISS A should choose alternative I (buying from supplier) for Bangkok and Hongkong dresses. Relevant cost analysis shows that the company will get higher profit if it keeps buying from supplier. As seen from the qualitative factor, buying from supplier has its advantage in having more models and using less time, because the company doesn't need to allocate time to create and produce.

Meanwhile, MISS A should choose alternative II which is self-producing for local tops and Bangkok tops. Relevant cost analysis shows that self-producing contributes higher profit for those lines. Furthermore, self-producing of local tops and Bangkok tops contributes more than 50 million profit for MISS A. Considering the qualitative information, self-producing has advantages in increasing brand awareness, being different from the competitor, and reaching MISS A's vision to be world class apparel. Although establishing and managing home industry is not easy, at the end of the day, it is worth considering what the company will get in return.

The limitation of this research is time that lies between March 2012 and May 2013. Meanwhile, the modern era revolves in fast way. Therefore, there is opportunity for the next research to review whether the decision now is still able to execute in the next few years or not. Furthermore, the next research could observe about company and industry performance to notice if there are problems occurred along with the advanced of time. Competition will be fiercer in the years ahead especially with MEA "(Masyarakat Ekonomi ASEAN"). Therefore, it can be an opportunity to create research about innovation and brand awareness that could help MISS A standing in the competition.

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ROLE OF RELIGION MOTIVES AND BRAND IMAGE TOWARDS CONSUMER SATISFACTION AND CONSUMER LOYALTY OF ISLAMIC BANKING

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Abstract:

Islamic/ sharia labelling on every product have mass impact on consumer behavior on consumption. Shari' label originally created to capture niche segment who very concern on islamic value of banking. In fact, non-moslem also interested and become loyal consumer on those product. This study address to answer what is role of religion motibes and brand image through satisfaction and loyalty in banking industry. Study found that religion motives (sharia principles) impacts brand image and plays significant role on determining consumer satisfaction and loyalty.

Keyword: Islamic banking, religion, brand image, satisfaction, loyalty.

INTRODUCTION

Riba/ usury is forbidden in Islamic economic jurisprudence. Nevertheless the conventional banking system cannot be separated from this usury concept. Since there are many banks practice usury, the Moslem society starts to worry that this practice will inflict them.

The increasing demand on usury-free banking system leads to the establishment of sharia banking system. Moreover, sharia banks exist due to Moslems demand on Kaffah, which is banking operating activities based on the sharia, particularly focusing on the matters forbidden in Islamic economic jurisprudence such as riba/usury, maisyir (gambling and high speculation), gharar (unsure uncertainty), jahalaand the requirement to ensure the halalness of the way and object of investment. The activity of sharia bank differs from conventional bank in term of product pricing. The product pricing in sharia bank is based on the agreement between the bank and the customer as well as the type of deposit and the length of time, which later determine he amount of shared profit given to the customers.

History records that sharia banks appeared in Indonesia in early 1990s. The founding fathers of sharia bank was Indonesian Ulema Council (MUI) on 18 – 20 august 1990. The first sharia Bank in Indonesia was Bank Muamalat Indonesia (BMI) established since 1 may 1992.Sudarsono (2003) explains thatsharia bank is commonly defined as financial institution providing loans and other service related to financial transaction and money circulation on the base of sharia principles. Therefore, these banks will always deal with finance, which is their main commodity.

Perwataatmadjaand Antonio (1999) suggest thatsharia banking, also commonly known as Islamic banking, has operation system, which does not rely on interest. This institution is recognized as the financial institutionwhich the operation and product are developed based on Quran and Hadist of the Prophet Muhammad SAW.In other word, Islamic bank is a financial institution which provides loans and other service related to financial transaction and money circulation on the base of Islam sharia principles.

Some studies in the area of banking sector suggest that costumers will choose certain bank due to its existing service quality(Bloemer, de Ruyter, & Peeters, 1998; Ganguli & Roy, 2011; Siddiqi, 2011). However, Sharia banking has different realm. Aisyah et al.(2014) contend that the adherence of Islamic banks in carrying the principles of Islam is one of the important key in influencing the image of the bank and customer loyalty. In addition, Fatmah (2008) discovered the important key of religious motives in creating Islamic banks' customer satisfaction and loyalty. While shariah principles adherence has been recognized as an important construct in the area Islamic Banking study, to date just Fatmah (2008) who has empirically investigated the effect if this construct to other constructs such as satisfaction and behavioural intention. Hence, to have a better understanding about the role of shariah principles adherence, there is a need to examine this construct further.

Apart of the adherence of Islamic Bank toward the Islam value, brand image and customer satisfaction are also recognized to have an importance role in shaping customer loyalty (Michael Daniel Clemes & Gan, 2013; Michael Daniel Clemes, Shu, & Gan, 2014; Suhartanto, Clemes, & Dean, 2013). However, just few studies have determined the interrelationships among these constructs in the context of Indonesia Islamic Banking sector. Therefore, to have a comprehensive insight about the importance of brand image and customer satisfaction in the area of Islamic Bank industry, there is a need to evaluate these constructs especially the relationships between these constructs and loyalty.
Based on these research issues, this study aims :

1. to determine the effect of sharia principles adherence of Islamic bank on customer's satisfaction and brand image
2. to examine the effect of customer's satisfaction and brand image on loyaltyand,
3. to examine the relation between customer's satisfaction and brand image

This study is expected to provide both thereotical and practical contribution. Theoretically this research benefits in examining the theoretical relationship between sharia principles adherenceand other variables well known in the area of marketing such as brand image, customer satisfaction and loyalty. For practical contribution this study benefits in providing guidance for Islamic banking to create customer loyalty and to develop a business strategy based on Islamic principles.

LITERATURE REVIEW

Sharia Principles Adherence

In Islamic countries, costumer interest in Islamic banking is rather due to the religious call to conduct a business transaction which is in accordance with the Islam teachings than other considerations(Mu'allim, 2003). In sharia banks, there are Islamic values and teachings therein thus creating a better distinction between them and conventional banks. In spite of using the teachings of Islam in its working process, Islamic bank also take customers from any religion and ethnic.

In Sharia banking, There are three main principles and values of Islam which as used as the foundation philosophy of conducting business (Dewi, Wirdyaningsih, & Barlinti, 2005). Those three principles are honesty (Ash-Shidiq) - honesty is to be done by every human being in every aspect of life including in mu'amalah (human relation to other beings), honesty becomes the commitment evidence on the importance of true words that can be used as basis as which parts benefit the parties having contract (agreement) as well as the society and environment, equality (Al Mussawah) –there is an equality in trusting each other party which is set forth in a contract and becomes a determinant factor for their success relating to the rights and obligations for each other so as not to harm the profits / surplus to others, there is willingness to cooperate equally and justly as well as righteously (Al Adialah) –each contact (transaction) should be pay attention to the sense of fairness and as far as possible to avoid a sense of unfairness (Dzalim)

In banking realm, consumer perceptions of the values given by the banks play an important role in increasing customer loyalty and satisfaction (Lewis & Soureli, 2006; Roig, Garcia, Tena, & Monzonis, 2006). Like in the realm of conventional banking, in sharia banking consumer perceptions of Islamic principles applied by the Islamic banking plays an important role in improving customer satisfaction and loyalty (Aisyah et al., 2014; Metawa & Almossawi, 1998). The higher the consumer's perception of Islamic banking capabilities in applying Islamic principles in their business, the higher the customers' satisfaction and loyalty.

In the context of marketing in the image of a company cannot be separated from its credibility. In general the credibility has a close relation with the skills and conviction. The greater the company good credibility, the more positive the image of the company. In the management of Islamic banking, the banks will have a good image if they consistently apply the concepts and principles of Islam. Therefore, the greater the perception of customer on the adherence of Islamic banking in carrying the concept and principles of Islam the more positive the image of the sharia bank.

Hence From its elaboration, this study formulate hypotheses:

H1 : Shariah pinciples adherence affects customer satisfaction

H2 : Shariah principles adherence affects brand image of banking

H3 : Shariah principles adherence affects customers' loyalty

Customers' satisfaction

Oliver (1999) explains that customer satisfaction results from psychological condition when emotion that surrounds the expectations does not suit the real condition and are multiplied by the emerging feelings on the experience. To satisfy customer is essential for a business organization since satisfied customer has tendency to be loyal and re-buy product from the same manufacturer (Michael D. Clemes, Gan, & Zhang, 2010; Michael Daniel Clemes et al., 2014; Suhartanto, 2011)

As a manifestation of the relationship between what was expected and perceived, customer satisfaction has a significant impact on Bank customer loyalty. Several studies have described that the higher satisfaction perceived by customers, the greater the loyalty (Beerli, Martín, & Quintana, 2004; Michael D. Clemes et al., 2010).

Besides having an important role in affecting loyalty, customer's satisfaction has a significant role in enhancing the company image. The more satisfied the customers for services rendered, the more positive the image of the company.

Hence From above discussion, this study formulate hypotheses:

H4 : Customer satisfaction significantly affect the bank's image satisfaction

H5 : Customer satisfaction significantly affect customer loyalty

Brand Image

Kotlerand Armstrong(2008) suggest that brand name, term, sign, symbol, or design, or a combination of all of these show the identity of the products and services of manufacturer or seller. From these definitions, the brand is a symbol or logo of the products or services offered by the company, which can differentiate similar products or services, the brand is a name, symbol, logo, or a term which indicates the identity of a product or service that sets it apart from competitors who plunge in the market. Customers learn about brands through their past experience upon the product and marketing program.

Brand image is about consumer perception of a brand as a reflection of brand associations that exist in the minds of consumers(Kotler & Armstrong, 2008). Perception itself is an activity sensing, integrating, and providing an assessment of the physical and social objects, and sensing depends on the physical and social stimuli in the environment.

Great number of brands available on the market can provide alternatives for customer in making a purchase. In purchasing certain product customer does not only see the product on its quality, brand, and price, but also the brand image attached to the product. The rapid growing market will encourage customer to consider more the image of the brand than characteristics of the products offered. This shows that there is a customer's tendency to prefer a product well known through the experience of using the product and based on information obtained through different sources.

Recently several empirical research has discovered that the image of a brand has a significant influence in generating loyalty. Study by Bloemer and de Ruyter (1998)finds that the general banking customers will be more loyal if the bank in which they have transaction has a positive image. In line with the study of Bloemer et al (1998) in retail banking industry, the bank's brand image plays significant role in affecting customer loyalty. Therefore, this study hypothesize that customer loyalty in Sharia banks are significantly influenced by the image of the bank.

H6: The image of the bank significantly affects customer loyalty.
Based on the review of literature the conceptual framework proposed in this study

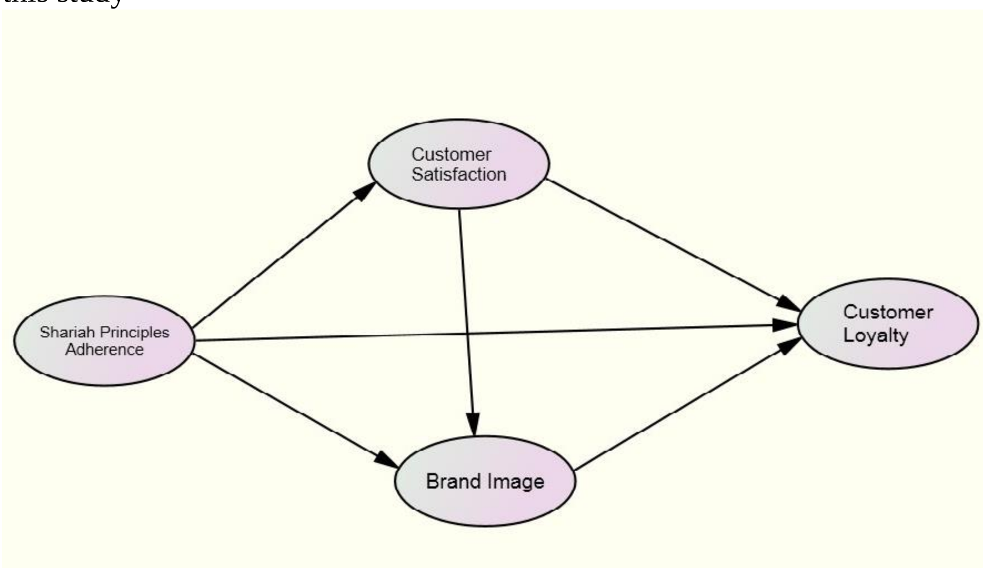

Figure 1. Research Model

RESEARCH METHOD

Research Design

The type of research used in this study is an explanatory research and researchers implemented a survey method. In survey, statement filed in oral form is called an interview while submitted in writing is referred as questionnaire. Researchers in this study collecting the data by implementing questionnaires.

This study uses a quantitative approach which is under the purpose of (1) quantifying the data and generalizing the results of the sample and population, (2) the number of samples that much, (3) conducted in structured, (4) data analysis by using statistic and (5) study results to provide recommendations by the customers unit analysis on whom have deposit in Sharia banks.

Samples

The respondents of this study are the customers who deposit their money in sharia bank in Malang, East Java Province, Indonesia. A total of 119 respondents participate in this study by returning the questionaire. These respondents were recruited by using convinience sampling.

The following demographic profile emerged from the sample: 85% of the respondents are aged between 21 and 35 years, 75 % are male, 75% have tertiary education and45% have income between Rp 2.000.000 - Rp. 5000.000 Table 1 presented the demographic of respondents of this study.

Table 1: Demography

Demography	**Items**	**Percentage**
Age	<21	3,4
	21-25	25,2
	26-30	34,5
	31-35	26,1
	36-40	8,4
	>40	,8
Gender		
	Male	75,6
	Female	22,7
Income		
	<1 million Rupiah	7,6
	1 - 2 million Rupiah	33,6
	2 - 5 million Rupiah	45,4
	>5 million Rupiah	11,8

Education		
	High school	14,3
	Diploma degree	23,5
	Undergraduate degree	52,9
	Graduate and Post-graduate degree	7,6

DATA ANALYSIS

This study uses the Generalized Structured Component Analysis (GSCA) to analyse the data. The first step is to analyse the data to test the outer model consisting of convergent validity, discriminant validity and reliability. The second step in analysing the data is the inner test models. Test was conducted by looking at the model inner R2, FIT, and GFI. The final step is testing the hypothesis

<u>Outer Model Evaluation</u>

The first evaluation outer model is to observe the value of factor loadings. In this study, the factor loading value of all question items is above 0.6. Since the factor loading value of all items is above 0.6, thus there should be no elimination on question items. In other words there is no problems concerning convergent validity (Appendix 1). tHe second evaluation of the outer stage model is to view problem in discriminant validity. In this study, discriminant validity is perceived from the correlation between variables. According to Kline (2011) correlation between variables must be below 0.85. Discriminant validity of the test results, the correlation between variables that have no values above 0.85. Therefore problem is not indicated in discriminant validity. The third evaluation is a reliability test. Reliability Test was observed from the Cronbach alpha value with the cut off above 0.7. Based on the reliability test, all constructs had a Cronbach alpha values above 0.7. In other words, the whole construct are reliable to be used as measurement. Table 2summarizes the correlation value between variables and the Cronbach alpha for each construct

Table 2: Summary of Inner Model Evaluation

	Cronbach	SPA	CS	BI	CL
SPA	0.759	1			
CS	0.764	0.009 (0.080)	1		
BI	0.745	0.454 (0.082)*	0.284 (0.109)*	1	
CL	0.749	0.205 (0.091)*	0.337 (0.107)*	0.361 (0.080)*	1

Inner Model Evaluation

The inner model were analysed by observing the value of R2, FIT and GFI. On the value of R2, the provisions of cut off value is above 0.1 (Falk & Miller, 1992). This study found that the values of $R^2$are 0.284 and 0.197. For FIT indicator, experts stated that the FIT value must be above 0.5. Nonetheless, in the model built in this study, the FIT value is 0.491. The last indicator used to indicate the outer model accuracy is a GFI. According to Hair et al. (2010), cut off from GFI is> 0.9. The GFI value in this study is 0.989.

Of the three indicators, it appears that the value of R2 and GFI are above the recommended cut-off. Therefore it can be said that a model built on this study is robust. Table 5.6 summarizes the indicators of the model.

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Table 3: Goodness of Fit Model

Model Fit	
FIT	0.491
GFI	0.989
R^2	0.284
	0.197

Hypothesis Testing

This study tested the hypothesis by using a 5% confidence level (α = 5%). At the 5% confidence level the hypothesis was tested in both directions with sample size of 120, the t-statistic value is 1.98.

Hypothesis 1 presume that the religious perception has a significant effect on customer satisfaction. Statistical tests indicate that there is no significant effect on the perception of religiosity on customer satisfaction (β = 0.009; t = 0:11). Therefore, hypothesis 1 is rejected.

The effect of religious perception on the image of the bank is formulated in hypotheses 2. The study discovered that in accordance with the hypothesis 2 that the image of the bank is significantly and positively influenced by the religious perception ($\beta = 0.451$; $t = 5.5$). This means that Hypothesis 2 is accepted. Since this causal relationship is positive, it means that the higher the bank's customers perception for adherence to Islamic values, the greater the customer satisfaction.

In line with its effect on customer satisfaction, religious perception does not have influence on customer loyalty ($\beta = 0091$; $t = 0.78$). This means that Hypothesis 3 is rejected.

Hypothesis 4 stated that the bank's image is affected by customer satisfaction. Statistically, the study discovered that there is significant influence by the image of the bank toward customer satisfaction ($\beta = 0.280$; $t = 2.98$). This suggests that the more satisfied customers with the services provided, the more positive the image of the bank in the eyes of consumers. This means Hypothesis 4 is accepted. Same with the resulting effect on the bank's image, this study also discovered that customer satisfaction has a significant positive effect on customer loyalty ($\beta = 0.267$; $t = 2.5$). This tells us Hypothesis 5 is accepted.

Hypothesis 6 states that the bank's image is a predictor of customer loyalty. This study indicates that the customers loyalty is positively and significantly influenced by the image of the bank ($\beta = 0244$; $t = 2.38$). In this case Hypothesis 6 is accepted. Thus this means that the more positive the image of a Sharia Bank, the more loyal customers of the bank. Table 3 shows tha summary of Hypotheses testing

Table 4: Hypotheses Testing

Path Coefficients			
	Estimate	**SE**	**CR**
PR->CS	0.009	0.080	0.11
PR->BI	0.451	0.082	5.5*
PR->CL	0.091	0.117	0.78
CS->BI	0.280	0.094	2.98*
CS->CL	0.267	0.107	2.5*
BI->CL	0.244	0.102	2.38*

CONCLUSION

This study discovered that customer perceptions of the bank's adherence on the values and concepts of Islam (religious perception) plays a significant role in enhancing the image of the bank. The better the perception of the customer on of the banks religiosity in doing business, the more positive the image of the bank. The image of a company is a form of manifestation on how the company applying the values espoused in business applications.

Granting that it has a significant influence on brand image, religious perception does not have a significant impact on customer satisfaction and loyalty. This finding is unexpected that even good religious perception does not give effect to satisfaction and loyalty. The possibility in deciding whether customers are satisfied or not is the services provided, the consumer is adhered to the quality of services provided. So it is not enough that Sharia banking is just to expose their religiosity. Nonetheless they likewise have to always maintain the quality of service.

In numerous theories of marketing it is stated that customer satisfaction is one of the important factors. This study also discovered that customer satisfaction partakes a significant influence in establishing positive bank image and loyalty. Customers will perceive Sharia bank as a bank having a positive image if they are satisfied with the services provided. Same with its effect on the image, the more satisfied customers of Sharia banks for services provided, the more loyal they are toward the bank. Therefore, in accordance with the existing theory, the Sharia banking should be capable of establishing satisfaction for its customers.

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THE RELATION BETWEEN CASH HOLDINGS AND EARNINGS PERSISTENCE

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Abstract:

Our research question is whether corporate cash holdings can benefit firms through improving earnings persistence which is one of the measures of earnings quality. In order to answer this question, we test whether and how cash holdings are related to earnings persistence. Our results show a strong positive relation between cash holdings and earnings persistence. Next, we examine whether this relation holds after controlling for earnings volatility, since Dichev and Tang (2009) find a strong negative relation between earnings volatility and earnings persistence. We find that the positive relationbetween cash holdings and earnings persistence can be seen if earnings volatility is higher, but it cannot be seen if earnings volatility is lower. These results suggest that cash holdings can benefit firms with volatile earnings.

Keywords: Cash Holdings; Earnings Persistence

INTRODUCTION

In the international studies on accounting and finance, Japanese industrial firms are known as one of the most “cash-rich” firms in the world (cf. Pinkowitz et al.(2006), Guney et al. (2007), and Chen(2012)). In addition, corporate cash holdings in Japan have been increasing recently. Though stockholders can criticize “cash-rich” firms for failing to use investors’ funds efficiently, why are many Japanese firms are eager to hold so much cash? What are the benefits of this? For the first question existing literatures highlight four motives for cash holdings by firms. The second question is the main focus of this paper. We focus on the effects of cash holdings on earnings persistence in this study, different from many existing literatures that discuss the effects on corporate behaviours. Accounting researchers regard earnings persistence as one of the measures of earnings quality (Dechow et al. (2010)) and practitioners like Chief Financial Officers (CFOs) think that it is one of the favourable features of earnings (Dichev et al.(2013), Kagaya (2013)). So our research is the attempt to evaluate whether corporate cash holdings can benefit firms through improving earnings persistence.

Based on the research design of Dichev and Tang (2009), we investigate the relation between cash holdings and earnings persistence. The result of our basic test shows that cash holdings has a positive relation with earnings persistence. Next, we move on to the further analysis. We test whether this relation holds after controlling for earnings volatility because Dichev and Tang (2009) find a negative relation between earnings volatility and earnings persistence. We observe the positive relation between cash holdings and earnings persistence only for firms with high volatility of earnings. In contrast, the positive relation cannot be seen among firms with stable earnings. These results suggest that cash holdings benefit firms with volatile earnings.

This study proceeds as follows. In the next section, we outline the trends in the cash holdings of listed firms in Japan. After that, we review the existing literatures on cash holdings. Next, was how our research design and the empirical results. In the final section, we conclude this study.

Trends in the cash holdings of Japanese firms

Previous research indicates that Japanese industrial firms have more cash than comparable firms in other countries. Pinkowitz et al.(2006) point out that Japanese firms are the most “cash-rich” out of firms in 35 countries. They find that the cash-to-assets ratio of Japanese firms (16%) is almost four times higher than that of the U.S. firms

(4.4%). Descriptive statistics given by Guney et al. (2007) also confirm the position of Japanese firms as the "cash-rich" firms comparing the average cash-to-assets ratio of the firms in five developed countries (Japan, the U.S., the U.K., France, and Germany). In their sample, Japanese firms are the richest in cash on average. Chen (2012) proposes the average cash holdings of firms in 23 countries respectively and shows the same facts as Pinkowitz et al. (2006) and Guney et al. (2007).

These studies support that Japanese firms hold so much cash. In addition, there is still an upward trend in the cash holdings of Japanese industrial firms. As we check the trend in our sample period (from 1995 to 2013), the average cash-to-assets ratio is gradually increasing since 2001, even though Japanese firms have faced severe economic shocks over this period. For example, financial crisis following the collapse of Lehman Brothers strongly hurt many Japanese firms in 2009. In 2011, the Great East Japan Earthquake occurred and many Japanese firms were damaged by the disaster in direct or indirect ways. Despite these shocks, the average cash-to-assets ratio for Japanese industrial firms has continued to increase. In2013, the end of our sample period, the ratio reached its highest point.

These upward trends in the cash holdings can also be seen in the U.S. firms. Bates et al. (2009) investigate the average cash-to-assets ratio for the U.S. industrial firms and find that the ratio approximately doubled from 10.5% in 1980 to 23.2% in 2006. Gao et al. (2013) find a similar trend using more recent financial data on the U.S. firms. They report that the cash-to-assets ratio increased from 13.53% in 1995 to 20.45% in 2011.

LITERATURE REVIEW

Motives for cash holdings

Why do some firms want to hold more cash in reserve instead of investing in projects or paying dividends? Bates et al. (2009) propose four motives to hold cash, as identified in the existing literatures. The first motive is *the transaction motive.* Firms with this motive want to hold cash so that they are able to pay day-to-day expenses in cash. In short, firms want to use cash as the main source of capital for ordinary operation such as buying raw materials.

The second motive is *the precautionary motive.* Firms save cash so as not to run short of funds to invest in the future. Opler et al. (1999) find that firms with greater difficulty in obtaining external capital tend to hold more cash as a buffer against a lack of funds. Shinada and Ando (2013) note that this precautionary motive is supported by pecking order theory. According to this theory, in the presence of severe asymmetry of information between borrowers and lenders of funds, firms prefer internal capital to external capital because the agency costs of internal capital are lower than those of external capital.

The third motive is *the tax motive*, as explained by Foley et al. (2007). Foreign earnings of multinational firms located in Japan are taxable in the U.S. or in Japan. However, the tax burdens against those earnings can be deferred until earnings are repatriated. Thus, multinationals can lower their effective tax rate by holding cash abroad. Foley et al. (2007) indicate that higher tax costs promote larger cash holdings in multinational firms.

The fourth motive is *the agency motive*. When firms lack investment opportunities with a positive net present value, their managers have an incentive not to return funds to stockholders and instead to hold cash. Dittmar et al. (2003) observe differences between various countries in cash holdings. They find that corporations in countries where shareholders rights are less protected hold more cash than in countries with greater shareholder protections. This occurs because in the latter countries, shareholders force managers to pay out more cash.

Bates et al. (2009) conclude that the precautionary motive plays an important role in the increase in cash in the U.S. firms. Shinada and Ando (2013) find a positive effect of the standard deviation of cash flow on cash holdings and argue that Japanese firms hold much cash due to the precautionary motive. Their findings are consistent with Bates et al. (2009).Therefore, the precautionary motive is likely to be the main motive in the U.S. and Japan.

The benefits and problems of cash holdings

Now we will move on to the benefits and problems of cash holdings. First, having ample cash reserves may encourage firms to spend and invest. These activities will contribute to improving the firm value if they are appropriate. Thus, prior literatures focus on whether firms use cash to increase their firm values. Denis and Sibilkov (2010) suggest that cash holdings are valuable for financially constrained firms because they can use cash to encourage prospective investments. Brown and Petersen (2011) show that firms likely to face financing frictions can use cash to smooth R&D expenditures. In addition, Wang and Gu (2012) indicate that R&D has a negative effect on earnings uncertainty. These studies support that cash holdings will benefit financially constrained firms.

On the other hand, there are researchers and stockholders that criticize "cash-rich" firms for failing to use investors' funds efficiently. This criticism is largely due to agency problems. It can be supposed that holding too much cash causes excessive investments or overspending. Harford (1999) and Harford et al. (2008) suggest that cash-rich firms can engage in excessive investments such as acquisitions and capital investments, and thereby they can reduce their firm values. In Japan, stockholders of cash-rich firms grow to push for greater payouts. In 2014, the year-over-year growth of the sum of payouts is expected to be22%, while that of the net income is anticipated to be 3%in Japan according to *"the Nikkei*[1]*"*.

As seen above, empirical results on whether cash holdings improve or reduce the firm values are still mixed. In order to contribute to the discussion of the merits and drawbacks of cash holdings, we investigate whether and how cash holdings are related with earning persistence. Earnings persistence is thought to be one of the measures of earnings quality in accounting studies (Dechow et al. (2010)). In addition, not only the accounting researchers but also CFOs regard earnings persistence as the favourable features of earnings. Dichev et al. (2013) present results from a survey of CFOs of public companies in the U.S. which asks about important features of high-quality earnings. According to their results, 80.5% of CFOs think that sustainability is an important feature of high-quality earnings. Kagaya (2013) also sends the same questionnaire survey to CFOs in Japanese firms. His questionnaire results are consistent with those of Dichev et al. (2013). These studies show that earnings persistence is thought to be an important earnings quality by both researchers and business people.

RESEARCH METHOD

Sample selection

Our sample is obtained from Nikkei NEEDS Financial QUEST 2.0, a database of financial data of Japanese firms. Our sample period covers from 1995 to 2013. We limit the sample to Japanese firms that are listed on stock exchanges in Japan and adopt the Japanese Accounting Standard. We further limit the sample to firms with a fiscal year end of March, which is the most common fiscal year end for Japanese public firms. Financial firms (e.g. banks, insurance companies, brokerages, and

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[1]The sum of the payouts last year is the highest, 13 trillion yen. Listed firms are utilizing the funds: improving performances, expanding investments, and raising wages and salaries (in Japanese).(2015, April 5).*the Nikkei (Morning Paper),* p.1

asset management companies) are excluded because they have financial data that is qualitatively different from that of industrial firms. The sample is further restricted to firm/year observations that have non-missing data to construct the variables we use. To diminish the influence of outliers, we then exclude observations with values in the top and bottom 1% of each variable described in the descriptive statistics in Table 1. Our final sample comprises the 29,005 firm/year observations meeting all of these requirements.

The definitions of variables in this study are as follows. $Earnings_t$ is net profit gained during the period *t*. $Cash_t$is cash and cash equivalents plus short-term investment securities at the end of fiscal year *t*. These two variables are scaled by total assets at the previous fiscal year end (at the period *t*-1). $Vol(Earnings_t)$ is the standard deviation of net profit deflated by total assets at the end of the previous year over the recent five years. Descriptive statistics for the full sample are presented in Table 1. Empirical distributions and pairwise correlations of the variables are shown in Panel A and B respectively.

FINDINGS AND ANALYSIS

In line with many existing literatures, we define the coefficient β in the auto-regressiveregressions of current on lagged earnings ($Earnings_{t+1} = \alpha + \beta Earnings_t + \varepsilon$) as earnings persistence. If this estimate has a high value, we can regard the earnings of the observation ($Earnings_t$) as highly persistent. Our basic analysis focuses on the link between cash holdings and earnings persistence. At first, we partition the full sample into quintiles according to$Cash_t$. In classifying firm/year observations, we subdivide thequintilesby industry because what industry a firmbelongs to can have a large influence on its financial data and its characteristics. To check the difference between industries, wecalculate the average of cash-to-assets ratio by industry in 2013. The average cash-to-assets ratio between firms in the electricity supply industry is the lowest (2.3%) and that in the service sector is the highest (25.7%). Since the difference between the top and the bottom is substantial (23.4%), we divide the sample in the following way.

Table 1. Descriptive statistics

$Earnings_t$ is net profit scaled by total assets. $Cash_t$ is cash-to-assets ratio. And $Vol(Earnings_t)$ is the standard deviation of earnings scaled by total assets over the recent five years.

Panel A: Empirical distributions

	Mean	SD	Min	25%	Med	75%	Max	N
$Earnings_t$	0.017	0.044	-0.241	0.004	0.018	0.038	0.171	29,005
$Cash_t$	0.159	0.120	0.009	0.074	0.127	0.209	0.746	29,005
$Vol(Earnings_t)$	0.024	0.026	0.002	0.009	0.016	0.030	0.244	29,005

Panel B: Pairwise Pearson (Spearman) correlations below(above) the diagonal

	$Earnings_t$	$Cash_t$	$Vol(Earnings_t)$
$Earnings_t$		0.271	-0.098
$Cash_t$	0.243		0.123
$Vol(Earnings_t)$	-0.200	0.154	

Table 2. Results of the basic analysis.

β_1(Earnings persistence) is estimated for the group G_{CR} and all are significant at the 1% level. The group G_{CR} is classified by the value of CR("Cash holdings Ranking"). Smaller values of CR indicate higher cash-to-assets ratio for firm/year observations in G_{CR}.$Earnings_t$ is net profit scaled by total assets.$Cash_t$ is cash-to-assets ratio. $Vol(Earnings_t)$ is the standard deviation of earnings scaled by total assets over the recent five years.

G_{CR}	β_1(Persistence)	*Adj* R^2	N
$CR = 1$	0.625	0.378	5,890
$CR = 2$	0.550	0.280	5,871
$CR = 3$	0.484	0.215	5,876
$CR = 4$	0.480	0.207	5,871
$CR = 5$	0.407	0.157	5,886

Table 3. Results of the further analysis

The value in each of the 25 cells indicates β_1(earnings persistence) estimated for the group $G_{CR,VR}$ and all are significant at the 1% level. Adjusted R squared values are indicated in parentheses. The group $G_{CR,VR}$ is classified by the value of CR ("Cash holdings Ranking") and VR ("Volatility of earnings Ranking"). Smaller values of CR indicate higher cash-to-assets ratio for firm/year observations in $G_{CR,VR}$. Smaller values of VR indicate lower earnings volatility for firm/year observations in $G_{CR,VR}$.$Earnings_t$ is net profit scaled by total assets.$Cash_t$ is cash-to-assets ratio. and $Vol(Earnings_t)$ is the standard deviation of earnings scaled by total assets over the recent five years.

		$Vol(Earnings_t)$				
	$G_{CR,VR}$	$VR = 1$	$VR = 2$	$VR = 3$	$VR = 4$	$VR = 5$
	$CR = 1$	0.879	0.816	0.794	0.670	0.524
		(0.534)	(0.488)	(0.500)	(0.441)	(0.299)
	$CR = 2$	0.878	0.782	0.681	0.641	0.431
		(0.375)	(0.302)	(0.342)	(0.333)	(0.225)
$Cash_t$	$CR = 3$	0.892	0.816	0.706	0.561	0.350
		(0.328)	(0.294)	(0.283)	(0.255)	(0.161)
	$CR = 4$	0.925	0.840	0.663	0.537	0.354
		(0.223)	(0.333)	(0.256)	(0.229)	(0.154)
	$CR = 5$	0.929	0.765	0.580	0.471	0.309
		(0.234)	(0.199)	(0.201)	(0.180)	(0.128)

We order firm/year observations, $F_{i,p}$, in each industry according to the value of $Cash_t$. In our model, $i$is the industry code and$p$ is calculated for each firm/yearobservation from the formula below.

$$p = \frac{\text{the rank of } Cash_t \text{ in the industry } i}{\text{the number of observations in the industry } i}$$

We define $G_{i,CR}$ as the group composed of firm/year observations$F_{i,p}$that satisfy the following requirement.

$$\frac{1}{5}(CR - 1) \leq p \leq \frac{1}{5}CR$$

Here, $CR(= 1,2,3,4,5)$is the "Cash holdings Ranking" of the group, where a smaller value means that the members of the group have relatively more cash. We can then describe $G_{i,CR}$ as follows.

$$G_{i,CR} \ni \left\{ F_{i,p} \middle| \frac{1}{5}(CR - 1) \leq p \leq \frac{1}{5}CR \right\}$$

Aggregating the above groups according toCR, we form the subgroups, G_{CR}, that contain all $G_{i,CR}$with the same value of CR. In the next stage, we estimate and compare earnings persistence in everyG_{CR}.

$$G_{CR} := \bigcup_{i} G_{i,CR}$$

In the basic analysis, we estimate earnings persistence in each of the quintiles formed on the basis of $Cash_t$ in order to identify the relation between corporate cash holdings and the two characteristics of earnings.

Table 2 shows the results from estimating the auto-regressive β for each quintile formed on $Cash_t$. Out of all the groups, β for group $G_1$is the largest and those for group $G_5$is the smallest. In addition, $\beta$is decreasing from top quintile to bottom quintile. This gradation of β indicates that there is a positive relation between cash holdings and earnings persistence. Namely, the more cash firms hold, the more persistent their earnings are. In other words, the earnings of cash-rich firms are highly persistent.

Dichev and Tang (2009) find a strong negative relation between earnings volatility and earnings persistence. So, our next question is whether this relation can remain after controlling for earnings volatility. This section covers the further analysis, which looks at the effects of earnings volatility on the positive relation between cash holdings and earnings persistence. In this test, we divide the sample into 25 groups according to cash-to-assets ratio and earnings volatility. We order firm/year observations,$F_{i,p,r}$, in each industry according to the value of $Cash_t$ and $Vol(Earnings_t)$ independently. In the model, i is an industry code p and r are calculated for each firm/yearobservation using the formulas below.

$$p = \frac{\text{the rank of } Cash_t \text{ in the industry } i}{\text{the number of observations in the industry } i}$$

$$r = \frac{\text{the rank of } Vol(Earnings_t)\text{in the industry } i}{\text{the number of observations in the industry } i}$$

We define $G_{i,CR,VR}$ as the group composed of firm/year observations$F_{i,p,r}$ that satisfy the following condition:

$$\frac{1}{5}(CR-1) \leq p \leq \frac{1}{5}CR, \frac{1}{5}(VR-1) \leq r \leq \frac{1}{5}VR$$

Here, $CR(=1,2,3,4,5)$indicates "Cash holdings Ranking (lower values of CR indicate higher cash holdings)".$VR(=1,2,3,4,5)$indicates"Volatility of earningsRanking(lower values of VR indicate lower volatility).We can then describe $G_{i,CR,VR}$ in the following way. We classifyall observationsaccording to cash-to-assets ratio and earnings volatility by industry.

$$G_{i,CR,VR} \ni \left\{ F_{i,p,r} \middle| \frac{1}{5}(CR-1) \leq p \leq \frac{1}{5}CR, \frac{1}{5}(VR-1) \leq r \leq \frac{1}{5}VR \right\}$$

We then aggregate these groups according to the pairings of CR and VR.

$$G_{CR,VR} := \bigcup_{i} G_{i,CR,VR}$$

Through these operations, we make25 groups. We estimate and compare earnings persistence in every$G_{CR,VR}$.

The results are shown in Table 3. First, let us take a look at each row in Table 3.The two columns on the right ($VR = 4{,}5$) indicate the earnings persistence of the groups composed of observationswith high earnings volatility. In these columns, the top cells (CR=1) have the largest estimated coefficient (earnings persistence) and the bottom cells (CR=5) have the smallest values for the coefficient. In addition, βisgenerally decreasing from the top row to the bottom row.Thus, we can see that thegradation inβcan be seen in high earnings volatility groups. In contrast, in the left two columns ($VR = 1{,}2$), such gradation cannot be seen. These results indicate that when earnings are highly volatile, holding more cash is related with higher earnings persistence.But, when firms have stable earnings, we cannot observe a positive relation between cash holdings and earnings persistence.

Now, the coefficients are basically decreasing from left to right in Table 3. These results confirm the negative relation between earnings persistence and earnings volatility. Therefore, our results are consistent with those of Dichev and Tang (2009).

CONCLUSION

This paper investigates the relation of cash holdings with earnings persistence. Our basic analysis explored this relation and the results show that there is a positive relation between them. Next, we examine whether this positive relation remains after considering the negative relation between earnings volatility and earnings persistence. Our results show that the positive relation between cash holdings and earnings persistence remains only when earnings are highly volatile. Recently, stockholders criticize Japanese firms for holding too much cash and they require increasing the amount of payouts. However, our results suggest that cash holdings should not be quickly regarded as the evidence that the firms do not use their capital efficiently. Cash holdings should be assessed together with earnings volatility. For example, stockholders probably should not require more payouts against the firms whose earnings are highly volatile. If they do not demand payouts, they will expect more persistent earnings of those firms.

Our study has some limitations. First, there is not a clear explanation as to why there is a positive relation between cash holdings and earnings volatility if firms gain volatile earnings. Second, we do not gain enough evidence to prove the causation. It is possible that cash holdings have a positive effect on earnings persistence of the firms whose earnings are volatile. Cash holdings can give them the opportunities of valuable investments. But, persistent earnings can make firms rich in cash. These questions will be addressed in future research.

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THE ACCOUNTING EDUCATION IN LIBYAN UNIVERSITIES AFTER LIBYAN REVOLUTION OF 2011

Case study on Libyan Universities.

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Abstract

The aim of this paper is to explore the accounting education in Libyan universities after Libyan revolution of 2011. This study analyses the influence of recent political regulation on accounting education in Libyan universities. This study uses accounting courses, textbooks and accounting lecturers and teaching method on two Libyan universities as indicators of accounting education. Interviews were conducted with some lecturers from University of Al-Zawiya and University of Al-Asmrya to obtain the required data. The study finds that Libyan accounting education has been reformed after Libyan revolution by current Libyan political system through the issuance of Libyan Education law No. (66) 2011 by the Ministry of Libyan Education. This law cancels any subjects relating to previous Libyan political system such as four courses of political culture. Other findings are: the introduction and implementation, the number of lecturers sent to UK to learn new teaching methods and the number of Libyan lecturers are increasing.

Key words: accounting courses, textbooks and accounting lectures and teaching method.

INTRODUCTION

An accounting education system is similar to any education system which consists of students, academic staff, accounting curriculum, and resources (library, computers, facilities and technology). Additionally, the accounting education system itself is a factor of the wider national education system of the country. The education system is affected by and affects social, economical, political, and cultural environments of the country. Consequently, accounting education system should be designed to meet national needs. Furthermore, the accounting students need to glean more from their college experience than the knowledge obtained by learning a set of rules. Moreover, accounting students do not need to have more technical knowledge, but rather need to obtain skills which enable them to analyze problems, use resources and technology to solve problems and communicate the solutions orally and in writing. According to Wilkin and Collier (2009), the aim of accounting education is to prepare accounting students to take a broader role in business decision making by providing them with relevant, robust and usable knowledge.

The relevance of accounting education is considered important to the requirements of the labor market as it is needed to achieve the goals of economic and social development at all levels. In addition, it contributes to detect irregularities and to fight financial and administrative corruption. The accounting education is facing a significant challenge, because it is also aimed at educating young people who are going to work in companies and promoting continuous organizational changes which require constant attention and continuous adaptation from both academics and practitioners. The educational organisations in Libya play a prominent role in constructing and developing the accounting practices on every stages of development. The first stage has been before the Libyan revolution of 2011. The second stage started after the revolution.

Accounting education has been recognised as one of elements in political and socioeconomic development. As Yapa (2000) stated, almost all developing countries which have been colonized under powerful Western rulers for a considerable length of time inherited their accounting education from the colonial system. In this respect, many African nations have, since their independence, based their education system on their colonial background within their wider politics, economy, society and culture. The accounting education and practice have been influenced by country's educational system. In addition, Shareia (2006) believed that the deep influence of western accounting (mainly from the UK and the US) has dominated accounting education and accounting practice in Libya.

According to Attir (1980), Buzied (1989) and Nassr (2004), there are several factors affecting accounting systems and practices in Libya such as colonisation, aid agencies and multinational companies externally. However, internally it is affected by the laws and regulations, accounting profession, and accounting education. The previous aspects plays important roles in the evolution and development of accounting in Libya, although the country's laws have contributed significantly, they are expressed in loose and general terms and seem to be highly influenced by historical orientation from previous colonial administrations.

Accordingly, the accounting education system itself is a factor of the national education system in the country and also affected by political system of the country. Consequently, accounting education system should be designed to meet national needs. Furthermore, Libyan political system had an impact on general education in most curricula and textbooks. During the old political system era, curricula and textbooks were based on the past president's ideas and views (Gaddafi). The textbooks did not relate to Libyan realities and were considered useless for students mostly. Therefore, the current government makes new law to change those curriculum and textbooks to build new curriculum, textbooks and teaching method that can be more useful to students and also is related with Libyan realities (Ministry of Libyan Higher Education, 2012).

Accounting textbooks, accounting lecturers and accounting curriculum among universities are mostly similar, since accounting lecturers at both levels (higher institutes and universities) have the same accounting education background. However, the accounting on the higher institutes is a three-year programme, whereas at the universities is a four-year one. The lower level of accounting education is taught at primary school education which prepares students to be accounting clerks and book-keepers. It is a four-year programme. The intermediate level is also a four-year programme which is a preparatory school education. Its purpose is to prepare students for clerical, commercial, book-keeping jobs and some degrees of financial statements. The National Institute of Public Administration in Tripoli and its two branches in Benghazi and Sebha provide this level of education (Al-Jalily, 2010 and Alfatiemy, 2012).

Accordingly, accounting education in Libya operates at three levels: the preparatory level that includes the Commercial Institute, the secondary or intermediate level that includes the National Institute of Public Administration and the Secondary Commercial Institute, and finally, the higher level that includes the Faculty of Economics at University of Garyounis, the Department of Accounting at El-Fateh University, the Faculty of Accounting in Gharyan and the Higher Institute of Financial and Banking Studies.

LITERATURE REVIEWS

The first university established in Libya was University of Libya in 1955 and Libyan government changed the name of this university in 1973 to University of Benghazi. In 1976, the name of this university changed from University of Benghazi to University of Garyounis. After Libyan revolution of 2011, the government returned the name of this university to University of Benghazi. This university started in Libya in order to graduate qualified elements in the field of accounting, economic, administrative and political science. The significant expansion that happened in accounting education in Libya was influenced by UK and US accounting education. A numbers of sections of accounting in some Libyan universities were opened. But numbers of previous studies were considered weak in the practice of professional accounting reflected on quality the time duration to provide in information for users.

Previous studies addressed the Libyan accounting education and its needs has been conducted in a quite number, for example, the study by Samhod (2013) which identifies the most important current and future accounting requirements in the labor market. This study tries to determine the significance difficulties by potential development of accounting education. Questionnaire is used to collect survey data from a sample of academics and auditors practicing in the Western Region in Libya. This study identifies the most important aspect of local market need to a quality of accounting services ranging from management accounting, internal audit, financial analysis, accounting services and auditing in accordance with the international standards. The study concluded that the accounting education needs more compatibility with local market requirements. The difficulties faced to achieve this compatibility are the absence of the institutions of accounting education as well as research centres, which means that lack of organizations to pursue those requirements and changes therein to introduction these changes in the curriculum of accounting.

According to Mami and Mira (2013), the role of the accounting curriculum is to develop accounting profession by identifying proportional skills and knowledge in the accounting curriculum with a professional required in rehabilitation. Mami and Mira (2013), use questionnaires to collect the data from members of lecturers and graduates of accounting department at the University of Al-Zawiya. The most important results of this study is that skills and knowledge in the curriculum the graduates of accounting departments are not enough to qualify them as professional accountants. This study recommends that the need to working on the development of accounting curriculum by following accounting education standards recommended by the International Federation of Accountants (IFA). This study also recommends to focus more on providing a set of theoretical knowledge, skills of communication, and skills to deal with e-commerce, including the skill of computer technology and the application of foreign languages.

The study by Mosalla (2010) aimed at analysing the reality of higher accounting education in Libya and the factors that affect the efficiency, the extent of coping with contemporary scientific developments, and needs of the labor market. The researcher uses questionnaire distributed to the lecturers and students in higher accounting education and some other existing groups in the labor market. This study results some important findings about deficiencies in the modernization of scientific methods of accounting, as well as its system of education in universities. The study recommends to focus more on the accounting education in terms of quality, stability and to promote modern technology curriculum. Furthermore, Mosalla (2010) recommends the high Libyan accounting education to build specific plans, standards, and manners that are consistent with the practice requirements with the need to coordination in between educational institutions, professional associations, and the relevant institutions. This study also recommends the need to amend and develop programs and topics of accounting knowledge in curriculum of accounting education by private process including software for labor market in local environment and skills and knowledge required of accountants.

The importance of this study is to contribute to what reality of accounting education and accountants ability and skills that must be reflected on the financial and administrative performance to develop various economic sectors. This study complements previous studies and recommends to work on the development of accounting education to raise the level of practicality of accounting education. The accounting education programs are unable to train graduates to perform the accounting works (Aldaly, 2003). On other hand, Ashour (2004) stressed in his study on the accounting and auditing profession in Libya through: accounting education program, accounting principles and applicable auditing principles to show clearly shortcomings in the accounting and auditing profession in Libya.

According Tantosh (2003), Aldrougy (2004) and Alhanoun (2004), the reason of the poor performance of the accounting profession during the previous years is the monopoly of the government in economic activities and the expansion of the public sector that is slower than the development of accounting education in Libyan universities. The audit quality provided by the auditors within the Libyan environment is not high. The curriculum in Libyan universities is not appropriate to the requirements of the Libyan economic performance.

The last studies are from Eshmeala and Al-Trly (2013) and Larbash and Al-Mugla (2013). The first study focus is to determine the compatibility between the accounting education curriculum in Libyan universities and requirements of the Libyan market from the point of view of some of lecturers and graduates. The questionnaires distributed shows that accounting education curriculum is unable to provide the requirements of the labor market. It shows the absence of some elements of the curriculum that may increase the space to accommodate requirements of accounting education methods and requirements of the market. Furthermore, there are no partnership between universities and enterprises, the lack computer systems, and practical training in the curriculum. The second study aim is to assess the reality of accounting education in Libyan universities and the possibility of development commensurate with the aspirations of Libyan students in Libyan universities. Based on this study, it is clear that accounting education in Libya does not meet the aspirations of Libyan students in Libyan universities although there are some of positive factors to study the accounting such as the student's desire in his/her choice to study accounting. The student also belief that accounting will provides job opportunities in the future.

In Libya, many studies confirm that Libyan accounting education suffers from many shortcomings which requires significant changes. The traditional teaching approach in accounting education is still predominant in Libyan universities with the emphasis on the transfer of knowledge. They also noted that Libyan accounting education does not have any sufficient and qualified accounting academics and educators as well as fails to incorporate systematic academic teaching and professional training to accounting students. In addition, the lack of accounting research to support effective teaching and learning process. The current pedagogy and accounting curriculum do not contribute to achieve economic and social development needs. The instructional methods that is used in accounting faculties are still in one direction. The teaching methods used by accounting educators in Libyan institutions depends on the conventional methods that often rely more on memorization than creativity. The accounting colleges in Libya are lack of adequate institutional resources that support learning and teaching process such as e-libraries, internet, and other facilities that could encourage faculty members to use innovative teaching methods. On the other hand, Libyan political system does not support the Libyan universities to develop curriculum, textbooks and Libyan libraries from a long time. Several years ago the Libyan accounting education was influenced by the Libyan government, for example, the accounting education system in Libya changed from UK oriented to US oriented, a result of political differences. Moreover, the Libyan government introduced some political culture that does not relate with Libyan reality (Ashour, 2004; Mosalla, 2010; Eshmeala and Al-Trly, 2013; Larbash and Al-Mugla, 2013 and also Samhod, 2013).

In order to achieve the objectives of the study, the required data is collected from two Libyan universities (University of Al-Zawiya and University of Al-Asmrya). These universities are chosen as they have documented the related changes in accounting education and willing to provide respond of questionnaires and do phone interview. Questionnaires and personal interviews are performed to some lecturers on these Libyan universities to acquire the needed data. In addition, the specific formulated research question is as follow:

How are the Accounting Education in Libyan universities after Libyan revolution of 2011?

The Tools of Accounting Education

The education has tools to transfer the knowledge and skill to students. These tools are basis of communication between those who give the knowledge and skill to those who needs of that knowledge. Those tools as courses, textbooks, lecturers and teaching methods also place of teaching (schools or universities) with its facilities. Today's complex and rapidly changing environments make the development necessity in all walks of life of countries. To develop countries government need to rely on their economy and accounting education is one of the most important pillars to build a strong economy. The accounting education need to be permanently developed so that it meets need for labor market. This study focused to show the changes in three important and major tools in accounting education, accounting courses, textbooks and accounting lecturers and teaching methods on two Libyan universities as indicators on accounting education.

These tools had been changed after Libyan revolution by current Libyan political system that issued the law of the Ministry of Libyan Education No. (66) 2011. This law cancelled any subjects, materials, curriculum and courses relating to previous Libyan political system as a political culture. Even though this law did not directly related to accounting, but it gave permission to rectors and lecturers in Libyan universities to develop the accounting education. The rectors and lecturers of Libyan universities started to develop and change some tools that were considered useless to students. These tools have been influenced many times by political system in Libya. This study tries to identify the changes on these tools of Libyan accounting education, 2011-2014 (post-revolution).

RESEARCH METHODOLOGY

This research focuses on the changes of accounting education system in Libyan universities. A qualitative approach is adopted to investigate and to achieve the aim of this study. Research design is the sequence that connects the data to the research's questions and conclusions. In other words, research design is a logical plan for getting questions to be answered and a sets of conclusions answering those questions including data collection and data analysis. To achieve such objectives, this study has adopted a case study approach where open questions are raised to informants to collect data of accounting education in Libyan universities.

This thesis is based on research conducted in Libyan universities after the Libyan revolution from 2011-2014. Two Libyan universities are used to evaluate the changes that happened after the revolution on Libyan accounting education. This study focuses on three important tools in accounting education (accounting courses, textbooks and also accounting lecturers and teaching methods). The questions indicating each tool in accounting education are sent by Email and uses phone to interview the lecturers in those universities. The researcher uses the event technology of internet due to the current situation in Libya. The responses from lecturers than became useful information that to be analysed.

The unit of analysis is the accounting education in university of Al-Zawiya and university of Al-Asmrya. Phone interviews, email, facebook chatting, and mail questionnaires are utilized as medium to collect data indicating the changes on accounting education in Libya. This study uses both primary and secondary qualitative data. The primary data are collected through phone interviews, email, mailed questionnaires, and facebook chatting. Some relevant documents are obtained through documentary research, specifically by downloading from relevant Libyan government agency's formal websites.

FINDINGS & ANALYSIS

Recently, Libyan universities are influenced by Libyan revolution in 2011. There is a radical change on the Libyan political system that suddenly changes all walks of life in Libya (politically, economically and socially). These changes happen on Libyan education, especially on accounting education in Libyan universities following the Libyan revolution. However, The open questions sent to lecturers from University of Al-Zawiya and University of Al-Asmrya show that there are changes to the better in the courses and curriculum, for example, the introduce of an important and modern curriculum at the university that cancels unrelated curriculum in the accounting. Among of these changes happened recently are seminars and conferences which are held to study how to develop accounting education.

Khalid- (UZ)

> The changes in accounting courses and curriculum were to the best, as also introduced some of new accounting courses as well as cancelled the political culture those related to Libyan system.

Khalid is lecturers in University of Al-Zawiya. He mentioned that the changes on accounting courses in this university is positive and to the best to develop the accounting courses in Libyan universities. In addition, the cancellations the courses of political culture is from a law of the Ministry of Higher Libyan Education.

Mohammed- (UA)

> There are changes and these changes happened after radical change on Libyan political system and those changes to the best as introduced some new accounting courses. As well as cancelled the political culture those did not related to accounting courses.

In the same line, Mohammed, a lecturer in University of Al-Asmrya, said that the limited changes happened on accounting courses is positive. Furthermore, the courses of political culture is removed from the Ministry of Higher Libyan Education due its irrelevancy to accounting courses.

Khalid- (UZ)

> These changes were not enough to develop the accounting courses. However, these changes happened from some of conferences and seminars that discussed many problems in Libyan accounting education.

Khalid said that a number of conferences and seminars that is held after Libyan revolution can help the accounting courses to develop. In addition, the conferences and seminars after Libyan revolution discussed how to develop Libyan accounting education as whole.

Adil- (UA)

> The changes happened from conferences and seminars that discussed how to develop Libyan accounting education.

The changes are only from lecturers and heads of Libyan universities. In addition, the Libyan revolution influences on the accounting courses and curriculum. However, the changes on accounting education are different from university to another. For example, at University of Al-Zawiya introduces a new and modern curriculum (International Accounting, Islamic accounting, internal audit and accounting ethics), but University of Al-Asmrya introduces only Islamic accounting. Moreover, both University of Al-Zawiya and University of Al-Asmrya cancel Libyan political culture courses.

Amara- (UZ)

> The changes on accounting education is limited to introduce new accounting courses and cancels the political culture. And the other courses still as the past and did not develop from long time.

The changes that happened in University of Al-Zawiya are not enough. The changes are limited in introducing some new and modern courses, but other courses are still same to the past. In addition, these changes are only from rectors and lecturers of this university, although it cancels the courses of political culture from Ministry of Higher Libyan Education.

Eshmeala- (UA)

> The changes in University of Al-Asmrya was limited on introducing Islamic accounting and cancelled the political culture. But the other courses still same to the past and did not develop from long time. Also did not have related to Libyan reality.

The lecturer in university of Al-Asmrya said that changes happened in this university are introducing only Islamic accounting and cancels the courses of political culture. From another side, the student does not get enough benefit from the accounting courses in Libyan universities. It because these courses is not developed from long time. Also, Libyan accounting education depends on UK and US accounting system which does not related to Libyan reality. In addition, Libyan accounting education depends on financial accounting and ignores International Accounting, Islamic accounting, internal audit and accounting ethics. Libyan universities are limited only on these courses that are given to students in classrooms and Libyan students does not get any training courses. Furthermore, Libyan universities does not involve other organizations or companies (local or international). Therefore, the students receive some special courses to improve themselves or they will got some courses from the organization or the company that use the graduations.

> Amara- (UZ)
>
> No radical changes happened on accounting courses or curriculum. Also, the stability of the political system was not apparent yet.

The radical change on Libyan political system does not make radical change on accounting education. The lack of security and stability add the difficulties to develop the accounting courses. However, that changes happened only from lecturers and heads of Libyan universities.

> Eshmeala- (UA)
>
> No radical changes happened on accounting courses or curriculum, such as the radical change occurred in the political system.

> Mohammed- (UA)
>
> There are no significant change in the accounting courses and curriculum until now, and also need more time to change and no stability of the country have a negative impact on the developments.

Those changes on accounting courses are from rectors and lecturers of Libyan universities (Ministry of Higher Libyan Education 2012). In addition, the changes are different and depend on rector and lecturers of the university. Furthermore, Libyan universities hold number of conferences and seminars discussing how to develop the accounting education as a whole. As well as, the absence of security, stability in Libya may lead to increase the difficulties to develop the accounting courses development.

Naturally, in Libyan accounting education does not happen a radical changes in short time because it needs time to develop in right way and the biggest obstacle in Libya is the absence of security and stability.

Textbooks

Libyan universities are influenced by Libyan revolution 2011. Furthermore, the emergence and encouragement to develop the accounting textbooks are from some lecturers (personally or collectively). While, some heads of Libyan universities are still not enough with the absence of Libyan political system to support the textbooks designing. Textbooks represent a very serious problem area in Libyan education and Libyan accounting education. One of the critical problems is their scarcity and the difficulty to create new books. On other hand, Libyan universities textbooks are unrelated to Libyan reality as well as very old which is developed from long time. Moreover, most of these textbooks are foreign books.

The lecturers in university of Al-Zawiya mentioned that the textbooks in library of the university has not changed from long time and the previous Libyan political system did not support the professors to create new textbooks. In addition, the current Libyan political system did not provide enough time to make plans on how to bring or create new and modern textbooks.

Khalid- (UZ)

> The existing textbooks in the Libyan university has not changed from a long time ago and the change of the books needs long time.

The lecturer in university of Al-Zawiya said that the library of this university remains the same to the past and does not develop and is difficult to be developed in short time.

Adil- UA

> There are no changes happened on the books in libraries and it needs more time to be developed properly.

In addition, some challenges made the libraries cannot solve the issues are similar to the past. One of these challenges is the absence of the government support and the absence of plan to bring or develop Libyan universities. In addition, the government did not support the writers to create new books financially or morally. Moreover, the absence of security and stability in Libya until end of 2014 increase of difficulties to develop the libraries.

Ahmed- (UZ)

> Stability of the political system did not happen until end of 2014 which increases of the difficulties to develop the university libraries.

Unfortunately, the previous Libyan political system does not provide enough support to the Libyan universities. In addition, the textbooks is not developed from long time and Libyan political system depends foreign textbooks. Moreover, the previous Libyan political system ignores to bring annual reports and scientific journals to Libyan universities libraries. The government does not plan to create new textbooks in Libya. All those other challenges increases the difficulties to develop Libyan libraries.

In other hand, some Libyan lecturers started to create new textbooks but by themselves and very limited. As well as the current Libyan political system did not get enough time to provide plans to develop libraries of universities yet. The lecturers said Libyan libraries did not get support from previous or current Libyan political system that led to libraries did not have enough and useful textbooks. In addition, current Libyan political system did not get enough time to make plan to develop Libyan libraries.

Libyan universities depend most of its textbooks on a foreign books and for a long time does not develop or get new books, annual reports and scientific journals. Then, the textbooks existing in university libraries are foreign and old that are not related to Libyan reality. Thefore, those textbooks considered useless for students. For example, accounting tax uses foreign laws and old textbooks use old Libyan law which is not updated from long time as Libyan law changed many times. In addition, those textbooks cannot help the students in their researches. All those obstacles made Libyan universities still depend on old textbooks and do not develop Libyan libraries.

Amara- (UZ)

> There are no modern books in university libraries. The existing books does not discuss issues or problems about Libyan accounting. These books cannot help students in their studies.

Amara said that university library of Al-Zawiya does not have modern textbooks and still depends on some foreign textbooks. Moreover, the textbooks in library of this university is not related to Libyan reality. So this library missed a lot of textbooks.

Eshmeala- (UA)

> In fact, university libraries does not update its collection from a long time ago, also university libraries depend on old books and most of the books is not related to reality of Libyan accounting which cannot help students in their studies.

In same line, Eshmeala said that university library of Al-Asmrya still has old textbooks and cannot develop its library. Without participation of Libyan political or Libyan higher education this condition would not change. In addition, the security instability increases difficulties to develop Libyan universities.

Libyan political system experiences radical change but it is difficult for the accounting education to have radical changes because Libyan accounting education has a lot of obstacles such as what the lecturers said. In addition, the libraries of Libyan universities need enough time to develop it and create new textbooks related to Libyan reality that may be useful for students.

Moreover, the libraries of Libyan universities need support from the current Libyan political system to bring modern international textbooks and Arabic translation in. These needs fulfilment needs plans to support the writers and libraries such as the use the electronic libraries. The biggest reasons for delay to develop libraries of university is the previous Libyan political system that does not develop libraries of universities and it is difficult for the current Libyan political system to make a quick plans to develop the libraries. Furthermore, the absence of security and stability made more difficult to develop those libraries.

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> Khalid- (UZ)
>
> There is no significant change, as happened on the political system and the absence of security and stability increases difficulty of development.
>
> Eshmeala- (UA)
>
> Radical change has not happened in the university libraries, as happened on the political system. The libraries need more time to develop.

It is known that government support for the state sectors is very necessary, especially on education because it is the basis of the development. This research survey emphasizes that the previous government does not provide enough support for universities to develop textbooks or to write new textbooks that fit to the reality of Libya. In addition, it does not help the libraries to bring international books or annual reports and scientific journals, provide plans for the construction of university libraries or plans to support conferences or seminars on the development of the books or the establishment of international exhibitions and international contributions. This ignorance is still exists in the current government. However, their try to develop a future plan in the lack of stability of Libya.

Accounting Lecturers and Teaching Methods

The lecturers and teaching methods are influenced by the Libyan revolution in 2011. The Libyan universities start to depend on the Libyan lecturers. Furthermore, Libyan universities have an enough number of lecturers and have different experiences and competencies, but teaching methods are still similar to previous teaching methods such as preparing students for class examinations through memorization and is not enough on developing critical analysis and reasoning. In addition, before the Libyan revolution, Libyan universities depend on foreign lecturers and foreign lecturers which have different teaching methods than Libyan teaching methods. These make the Libyan universities face difficulty to develop or change fast after Libyan revolution. Moreover, Libyan universities need enough time to develop and change the teaching methods. But after Libyan revolution, the universities depend on Libyan lecturers only.

> Amara- (UZ)
>
> Libyan universities start to depend on Libyan lecturers which now have enough of Libyan lecturers.
>
> Eshmeala- (UA)
>
> There are enough numbers of Libyans lecturers in Libyan universities which tend to rely more on Libyan lecturers.

Lecturers of both universities Al-Zawiya and Al-Asmrya mentioned that the Libyan universities have enough of Libyan lecturers and depend more on Libyan lecturers, after the revolution. In addition, Libyan universities dependency on foreign lecturers is very limited.

Moreover, Libyan lecturers have different experiences and competencies. The most interesting fact is that some of the Libyan lectures should not be lecturer because of having not enough experience or competence. Moreover, Libyan universities does not give any training courses for teaching methods.

> Khaled- (UZ)
>
> The lecturers in Libyan universities have different competence and skill and some of them did not have enough competence and skill to be a good lecturer.

> Mohammed- (UA)
>
> In fact, some of Libyan lecturers did not have the appropriate skill to be a good lecturer, as well as many of them do not have the practical experience.

On the other hand, Libyan universities and some Libyan organizations and companies organize a number of seminars and conferences attended by lecturers and publishes the researches through some of scientific papers. These seminar and papers discussed some problems of Libyan accounting education and how to develop Libyan accounting education as whole.

In fact, after Libyan revolution there are some differences between Libyan universities in developing the teaching methods. The one of differences between Libyan universities is sending some lecturers from University of Al-Zawiya to Britain to learn modern teaching methods. That plan is from rector and lecturers of University of Al-Zawiya.

> Amara- (UZ)
>
> University of Al-Zawiya sent a group of lecturers to be trained in modern teaching methods to UK.

> Eshmeala- (UA)
>
> In University of Al-Asmrya did not develop the teaching methods similar to University of Al-Zawiya.

Amara is lecturer in University of Al-Zawiya said, this university does not make any plan to develop teaching methods until the end of 2014. Also, the teaching methods does not change in this university than before. But Eshmeala from University of Al-Asmrya said, this university did not make plan as University of Al-Zawiya to develop its lecturers.

In other hand, lecturers of both universities Al-Zawiya and Al-Asmrya mentioned that Libyan universities did not use modern technology such as computers and projectors, as well as did not make any plan to develop Libyan universities. So it is very difficult to develop the Libyan universities in four years from 2011-2014.

The absence of security and stability in Libya influence negatively on the Libyan universities to develop Libyan accounting education as whole. The absence of security and stability in Libya becomes the biggest difficulties to develop the accounting education in Libya.

CONCLUSION

Accounting courses

The accounting courses has changed to the better. There are some changes happened on curriculum, such as the introduction of Islamic accounting and there have been attempts to change more in this area through the holding of a number of conferences and seminars related to the development of accounting courses and curriculum. In addition, Libyan universities still rely on financial and tax accounting, as in the past, but it introduces some of the new curriculum such as the (International Accounting - Islamic Accounting - Internal Audit).

On other hand, there are some experiences and skills but it is not enough to equip the student with the proper qualification from the current curricula and courses. In addition, these curricula are not linked with the Libyan reality.

Textbooks

Libyan universities still depend on foreign textbooks translated into Arabic, and there are very few of the Libyan textbooks. This cannot be considered as radical change in the accounting textbooks such as what happened to the political change on the state. The books that are used now are the same as existing books in the past. The period of this study from 2011- 2014 is considered a very short period of time to review new textbooks provision, written, and print. Furthermore, some lecturers start to form new accounting books by themselves.

Accounting Lecturers and Teaching Methods

Libyan universities became depend on Libyan lecturers in Libyan universities. However, the universities accept Libyans lecturers which depend on quantum and do not focus on the competencies. As result, there are many Libyans lecturers who do not have the competence to be a good university lecturer. Also, Libyan universities did not use modern technology until now. Moreover, there is plan only from University of Al-Zawiya to send a group of lecturers to UK to study in modern teaching methods. These lecturers are now brace to give courses to fellow lecturers in teaching methods. Furthermore, the lack of security and stability in Libya has increased the difficulties to develop plans for the development of teaching methods.

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