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Abstract:
Recent year’s global economic crisis have urged the businesses all over the world to committed cash flow risk management practices and sharing information with environment, social and economic actives transparency for stockholders. This research aims to explore the impact of risk management practises and how they have applied to accomplish sustainable financial performance in Sri Lanka and offer guidance to all the businesses as to how they can mitigate the risk faced by them. The research has expanded to extensive coverage of business sectors by 65 listed companies and secondary data were obtained from the annual reports publication in CSE. The statistical analysis of the multiple regression technique performed to calculate the results using e view-9 software. Risk management practices in operating cash flow have negative correlation between sustainable financial performances. The study was revealed that investment cash flow risk management practices have no correlation between sustainable financial performances. This will give detailed idea of cash flow risk management practises involvements and the importance to the listed companies in Sri Lanka.

Keywords: Risk management practices, operating, financial, investment, shareholder’s equity, cash flow, sustainable financial performance.

1. Introduction
The focus on cash flow risk management practices and impact on sustainable financial performance has become a prominent study area where, in the business world many successful business all over the world facing overnight collapses. Therefore, this study focused into the importance and responsibility of the CFO and managers on mitigating the risk in cash flow as an alternative to concrete risk assessment in present practices and impact on sustainable financial performance of listed companies in Sri Lanka. Cash flow management had its origins back in 1863 and by 1985 that emphasised cash flow
statement should be part of a set of financial statement. In 1992 it was formalised by IAS 7 (IAS 7, 2012) in line with IFAS. Sustainability in the business was traditionally considered as CSR activity. However, over the past fifty years, business leaders have begun to observe that sustainability as an opportunity essential to the organization, and they redefined the way that business interpreted and created value (Berthon, Abood & Lacy, 2010; Ludema, Laszlo & Lynch, 2012). Sustainability as the way in which an organisation creates value for its shareholders and society by maximising the positive and minimising the negative effects of environmental, social and economic issues (CIMA, 2011). However, there is no standard metric to measure the sustainability but it covers broad number of social environmental and economic issues. Better sustainability practices lead to improved financial results from share price, working capital, cash flow practises to profit. The identification of the existing cash flow risk management practises and challengers are working capital issues, liquidity problems, poor cash management, lack of cash management knowledge and implementation issues instead of best cash flow practises. This study will support to develop the viable cash flow management practises to business community and it will be benefit to CFO’s, managers and stakeholders for effective and efficient decision making in cash management and ensure to achieve financial sustainability.

However main objectives are identification, find out the relationship, mitigation the cash flow RMP and improve sustainable financial performances of the organization. Significant of the study would be benefited to managers of the companies listed at the Colombo stock exchange and influence and understanding of cash flow risk management practises by identifying the impact to the achievable sustainable financial performance. Application of various cash flow risk management practices have major influence on mitigation of risk and improvement in sustainable financial performance. Finding of this analysis would be useful to develop cash flow risk mitigation strategic, plan, forecast and improvement of sustainable financial performance of the companies concerned. Further, the findings deliver the pathway to relevant institutions and government organizations (Ministry of finance, AAT-SL and CA-SL) based on development of effective stranded and policies for improve the cash flow risk management practises among the organization. This analysis would be providing bases of reference to policy makers and regulators develop the policies to mitigate the cash flow risks. In addition to that this study would be delivered valuable to future researchers and academics as a base extent the existing knowledge as a source of reference. Moreover, the study will suggest areas for future research that future scholars and academics can widen the knowledge on the subject.

2. Literature Review

2.1. Theoretical Review

2.1.1. Stockholders Theory

The stakeholder theory is a theory of organizational management and business ethics that addresses morals and values in managing an organization. Freeman (1984) explained that organization has effectively managed their stakeholder relationships will survive longer and perform to achievement of objectives. Laplume et al. (2008) stakeholder theory explained that the organizations have responsibility to stakeholders with their positive or negative potential impact on the society in which they are operated, and organization would have consideration not only the interest of their shareholders and other elements. This is archived by managers or CFO’s by delegation of responsibility to identify the cash flow risk and apply the best practices to mitigate the risk, thereby improve overall financial performance and develop the relationship between stakeholders.
2.1.2. Agency Cost Theory
Agency conflicts arise between managers (agents) and shareholders (principals) of the organizations managers’ primary duty manage the origination and generate the profit and monitoring the cash flow and return the shareholders (Elliot and Elliot, 2002). Agents are responsible to minimize the risk and generate the profit return to shareholders. Jenson (1986), Enhance the debt value, increase incentive for managers, asset utilisation becomes more efficient and committed cash distribution to shareholders. Agent is responsible to understand the cash flow risk and apply the best practices to mitigate the risk there by generate profit and return to principal shareholders.

2.1.3. Value at Risk (VAR)
Value at risk is use as risk management tool and method of information on the risk of the companies. Risk measurement is important for stakeholders to understand the going concern of the company (Demireli&Taner, 2009). VAR facilitate to estimate inflation, interest rates, exchange rates, market risk and stock price for predetermined period or confirmed interval however these factors sensitive to the change in market. These represent the assets and liabilities of the company and it can be practice to invest in a single investment portfolio in a micro level (Aktaş, 2008).

2.1.4. Cash Flow at Risk (CF at R)
Cash flow at risk is as a risk measurement tool, measures high degree of probability, the unfavourable moments of cash flow values over the specific time. This model was proposed as a form of VAR to finding overall risk against organizational cash flow (Vural,2004).

Cash level of a company depends on payment and collection cycle at any point of time and CFO of the company is the person who decides the amount sufficient for operating cash flow required for timely payments on time in which, it has the effect to the company core business activities. CFat R on financial strategies and long-term investment planning strategies decisions depend on assessment of capital structure of particular company. Different activities may occur infrequently even none reflected by the measures (Balkoc, 2012). Management and CFO should be aware of what are the cash flow risk measures and they have to monitor and disclose the related information in the risk report accordingly (Kuti, 2011).

2.2. Cash Flow Modelling
Cash flow modelling allows companies to manage solvency in more proactive way by facilitating setting targets on cash drivers further enhanced reporting of cash flow performance against predefined targets. Moreover this model provides overall standard practice for smooth running of cash flow
function by improving understanding of cash impact on the overall access to capital. Lead the organization minimise the risk by achieving sustainability goals (CIMA, 2013).

2.2.1. **Financial Hedging**

Financial hedging is a new financial instruments call hedging tool and practical management approach to define risk and quantitatively long term stabilize and will be help to maintain strong operation cash flow (Hiller et al, 2012). Currency futures, swaps, options, forward contracts are hedging tools used to stabilize operating cash flows. Hedging is an instrument after diversified collection of techniques to monitor measure and control the financial risk (Jael, 1998).

2.2.2. **Liquidity Risk Management Practices.**

Manage liquidity risk in appropriate manner, either by holding cash to meet the financial obligation. Management of liquidity has become critical as it manage the Operating, investment and financial currency obligations in any business. The analysis carried out with main US airlines statistics of cash flow ratio analysis revealed that the US airlines have continuous liquidity issues. There was a negative relationship cash generation, liquidity management and financial performance between US Airline (Stempanyan, A. 2013).

2.2.3. **Regularly Review and Monitor Cash Management System.**

The management carry out CFO reviews to monitor variances in cash management regularly to minimize the risk. While these practices provide better understanding of existing practises and the areas to be improved, on-going tracking measures, confirm assurance of financial data reliability, cash to cash cycle. CFO can evaluate the cash at bank particularly for performance, fees, answer the bank questionnaires and visits at bank partners, in depth analysis from further operation on cash management (Paybook, 2016).

2.2.4. **Develop Accurate Cash Projection Module.**

Accurate forecasts will forecast to minimize the uncertainties and match the incoming receipts with expenditure. CFO gathers the quantitative and qualitative intelligence available and used as strategic tool to significant business decisions. Accurate projections should be seasonal, monthly, daily, cycled patterns and trends and it can be long, medium and short term. Cash projection module will help to mitigation of risk CPA Australia, (2010), Puagwatana and Gunawardana (2005), mentioned that artificial neural networks also strong prediction model for corporate failures.

2.2.5. **Proper Customer Database, Terms & Conditions & Quick Invoicing.**

An organised up to date customer data base will assure mitigation of all collection related issues and minimise the risk of bad debts evaluation beforehand including fair treatment to suppliers’ legal status of the business, credibility referees assure exact relationship with customer base in a legality frame work to mitigate the risk. Set rules and condition you always allow. In advance better to agree the payment term in writing, with the late payment charges and interest. Immediate invoicing is very essential for healthy cash flow (ACCA, 2012).

Unvi (2014) exemplified on his investigation major risk for business failure as poor cash flow management practices and he specified pitfalls that poor cash collection and credit control, late invoicing, lack of knowledge on pricing, poor cash forecasting, poor accounts knowledge and record keeping, inadequate borrowing practices, carrying insufficient inventory.
2.2.6. Fair Treatment to Suppliers
Cash flow link the business to business, if the payment not settled on time it will risk in your suppliers business this not just good business practices and ethical behaviours this is demonstration of corporate social responsibility (ACCA, 2012), Janklow (2009) Analysed 40000 small businesses and revealed risk due to loss of revenue, due to loss of their customers base on several reasons like competitors overtake existing customers, increased credit terms. Risk on inherent to become poor business models become essential to identify the opportunity and risk with in their business models. Inadequate business knowledge, experience, leads to struggle in poor assets for working capital management.

2.2.7. Controls on Investment Yields
A company that has developed a clear, up to date written investment policy would be a guideline for CFO and other managers to take quick decisions when the opportunities arise. This will include overnight investment, plan by utilising non- interest bearing accounts funds end of the day (Inc., 2000). Boorstien&Scanborough (2007) Analysed and revealed that lack of cash flow management practices and poor business knowledge as the major reasons for major collapses of businesses. Further highlighted that barrowing cash and granting credit without proper control, poor record keeping, poor management of inventory, lacks of management experience as the main risk areas.

2.2.8. Emergency Backup Plan
To address worst scenario it is required to keep back up plan that will assist to mitigate the cash flow risk and thereby reduce to the company financial expenses. The suitable banking partner needs to be flexible to build the backup plan or facility for immediate cash requirements (Inc., 2000). It is identified that restricted access to funds and capital as well as poor cash flow management, lack of financial planning, inefficient forecasting strategies, techniques leads to increase the risk of unexpected growth, inefficiencies in managing credit and sales contribute to further increase the risk of failure. Hence, to avoid failures, implementation of people cash flow management practice has become prerequisite (Ibarra, (1995) and Salazar, (2012).

Tools exist that can beneficial to manage your cash flow quite easily and productively. Advances in technology will deliver strategies to enhance their cash inflows (Nwanyanwu, 2015). Several cash flow controlling tools and software are available in the market to stabilize the cash flow practises and mitigate the risk. Most of listed companies in Sri Lanka are using ERP systems and implement the cash flow risk mitigation tools.

2.2.10. Grow carefully
Growing business with short time can be high risky. To sell more it is needed to spend more raw materials, hire humans, if the time gap between your increased cash outlay and increased sales is widen the company soon will start to starving for cash. Hence with the growing prospects precautions should also need to improve by identifying risks and have a business growth plan in place that avoid unusual delay between cash outflow and inflow while going close attention to managing cash flow.
2.2.11. Early Identification of Issues
It is understood that sooner identify a problem, the better, and the easier it could be to fix it. For one thing, if you need to approach your bank to request some tolerance or flexibility, they will likely be more receptive to helping if you ask them far in advance. Revealed the reasons for main cause of failure were inadequate capital of funds, poor financial forecasting, lack of cash flow management practices, loan facility constraints to overcome the challenges better to minimize cash flow risk. It is said that better to early identify future requirement and increase the cash inflow of the business. The most of financial barriers and the lack of proper planning adversely affect to the business growth and to achieve sustainable financial performance (Salazor, 2012). 26% of respondents were challenge to maintain the Cash flow RMP in the business and it labour incentive work. 14% respondent that was an administrative and paper work involved with Cash flow RMP and they simply haven’t time to do it (Debt, 2005).

2.3. Sustainability
Sustainability is a method of unlocking new income sources, thereby drive out expenses and increase efficiency to create long term stakeholder value. It is the right time moving toward an era that the companies no longer looking for total on profit and loss but positive and negative impacts on society and environment, consider to the accounts. In the present business world, plan to gain from sustainable decision making in revenue generation, cost controlling, building trust in stakeholder value and risk management, has become more significance feature then traditional profit accounting.

2.3.1. Sustainable Financial Performances
The relationship of sustainability and financial performance considered as complex scenario. This is as unavailability of standard methods to measure sustainability. However the area covered vast number of socio-economic and environmental concerns. Financial performance narrower in scope and can be measured in number of ways simply share price to profits. Recent researchers have found some light onto this problem, suggesting that both sustainable practices as well as solid financial performance derived from good sound, causing a virtuous cycle. Hence actions to reach sustainability trigger good financial performance, which lead to additional investments and improves financial performance in sustainability.

Figure 2 – Suggested virtuous cycle of good management, sustainable practices and increased financial performance

Source: The reciprocal and non-linear relationship of sustainability and financial performance
2.3.2. Sustainable Growth Rate (SGR)
The sustainable growth rate (SGR) defined as the maximum growth rate that a business can afford without having to increase financial leverage or without looking outside finance solution. The SGR is a way of indication of how far and how soon a business can expand without seeking to borrow. Once firm decided on this rate, it must be barrowing funds to facilitate additional growth. A company's SGR is another product of it is return on equity (ROE) and the percentage of its profits.

**SGR is calculated as:** ROE x (1 - dividend-pay-out ratio).
The SGR calculation assumes that a company wants to maintain a target capital structure of debt and equity, keep a static dividend pay-out ratio, and accelerate sales as quickly as the organization allows. To provide the association between accrual earnings and operating cash flows with stock returns. The researcher used statistical linear regression method to analyse data for 5 years. This has confirmed that there is no any meaningful linear relationship between operating accrual earnings and operating cash flows with stock returns (Farshadfar & Brimble, 2008).

With the broad concern on empirical reviews and gap on the objectives and analysis of the study area carried out by other researchers and scholars on the relationship between cash flow risk management practices and sustainable finance performance in listed companies in Sri Lanka, this research will be helpful to fill this gap.

The sustainable growth rate (SGR) becomes the maximum rate of growth that a firm can sustain without having to increase financial leverage or without the outside financing assistance. Visa Inc, (2006) revealed that cash flow management become a challenge for those who receiving 53% cash from customers, 21% found difficulty in moving and managing funds and 14% of them face the risk to make the payment on time to suppliers. There by, many companies struggling with major challenges to grow the business and achieve better financial performance.

2.4. CFO attitudes toward minimised cash flow risk management and improve sustainable financial performances

Try to avoid conflicts between the shareholders to maximise the return for the investment as by generating sustainable profits. Agency conflicts will dilute these objectives and they should be responsible to act on behalf of shareholder interest not for themselves. Cash flow risk management practices will allow company to maintain low agency cost as a result of higher control and minimised inefficiencies. CFO should have positive attitudes to recognise, cash flow related risk and employ best practices in order to mitigate the risk and deliver returns to principle shareholders.

In summary, the management attitudes towards the sustainable financial performance have been diluted by the agency conflicts and most prominently the act of the CFO’s will affect the successfullness of any business. Therefore positive attitudes towards the stewardship of responsibility and adhere to the same will confirmed the risk to the CFO’s himself minimise by achievement of all these and assure ultimate results to the stakeholders.

3. Research methodology

Content analysis is employed in this study to examine the annual reports, separate cash flow statement of 65 of the listed companies of 295 listed companies in Colombo Stock Exchange in Sri Lankan, for the 2011 to 2015 annual reports period.
3.1. Conceptual framework

3.2. Population, sampling and data collection

The target population of this study contain of 295 listed companies representing 20 business sectors as at 31st January 2017, in Colombo Stock Exchange (CSE) Sri Lanka. The researcher analysed sample of 65 listed companies as a percentage of representing each business sectors. The secondary data were collected from 65 sample companies from the annual reports. The researcher intends to collect sustainable financial performance data for selected listed companies between the years 2011 to 2015. The annual report data used in this study because of listed companies are required to comply with accounting standards and government regulation in Sri Lanka. Secondary data was collected from reliable sources such as published annual report in CSE web site. This data was collected through a date collection form.

3.3. Data collection methods.

Through the CSE web page downloads 260 annual reports and tabulated the data based on sustainable financial performance and assessment of cash flow risk management practises extracted from income statement, balance sheet, cash flow statement and notes to the accounts. The researcher initially, attempted to collect the number of probable samples consist of 65 companies and performed calculate for return on equity, sustainable growth rate and calculate the risk management practises in operating cash flow, investment cash flow, financing cash flow and operating cash flow to shareholder’s equity ratios as per parentage.
Table 1 – Summary of cash flow ratios.

<table>
<thead>
<tr>
<th>Descriptions</th>
<th>Ratio</th>
<th>Measurement</th>
<th>Used in prior studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMP in Investing activities (IA) to total liabilities (TL)</td>
<td>IA/TL</td>
<td>Measures the cash generated from investing activities to meet its obligation in the long run.</td>
<td>Low et al. (2001) Fawzi et al. (2015)</td>
</tr>
<tr>
<td>RMP in Financing activities (FA) to total liabilities (TL)</td>
<td>FA/TL</td>
<td>Measures the cash generated from financing activities to meet its obligation in the long run.</td>
<td>Low et al. (2001) Fawzi et al. (2015)</td>
</tr>
</tbody>
</table>

Source: Author’s data collection cash flow ratios

3.4 Statistical Method
Data were analysed through E views program, version-9, statistical software used to identify relationship between depending variable and independent variables. The statistical analysis of multiple regression technique has been used to determine the relationship between cash flow management practices and sustainable financial performance. To analyse the regression model researcher used unit root test, fixed effect model test and random effects model test, Hausman test to select the model and correlation coefficient test.

3.5 Model Specification
The researcher will have developed the regression model to establish the relationship between depending variable and independent variables. Based on the conceptual frame work develop below regression model to capture the relationship between sustainable growth rate and risk management practices in operating, investment, financial cash flows and operating cash flow to shareholder’s equity.

$$SGR = \beta (RMPOCF, RMPICF, RMPFCF, RMPOCFSE)$$

The leaner regression equation to be adapted

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where by:
\[ Y = \text{Sustainable growth rate} \]
\[ X_1 = \text{Risk management practices in operating cash flow} \]
\[ X_2 = \text{Risk management practices in Investing cash flow} \]
\[ X_3 = \text{Risk management practices in Financial cash flow} \]
\[ X_4 = \text{Risk management practices in operating cash flow to shareholder’s equity} \]
\[ \epsilon = \text{Error term} \]
\[ \beta_0 = \text{The minimum change in } Y \text{ when the rest of the variables are held at a constant zero.} \]
\[ \beta = \text{Measure of the rate of charge} \]

Then equation:
\[
\text{SGR} = \beta_0 + \beta_1 (\text{RMPOCF})_1 + \beta_2 (\text{RMPICF})_2 + \beta_3 (\text{RMPFCF})_3 + \beta_4 (\text{RMPOCFSE})_4
\]

4. Discussion and findings

Risk management practices in financial cash flow have positive and significant relationship between sustainable financial performances. Consequently, RMP in financial cash flow increases sustainable financial performances will have growth of 0.00026 values. Correlation confection of risk management practices in financial cash flow have 73% strong relationship between sustainable financial performances. There is an average 70% to 75% change that the risk inherited in financial cash flow operation would be minimizing any business. This is basically reflected by borrowings, minimum new loans obtained from banks and equity holders, increased dividend payment, less allocation for interest payment. There by improvement in sustainable financial performance that will confirm the actual cash surplus in which it can be utilise for new investment opportunities, rather than altering capital structure from outside barrowing. This will make sure further potential and more healthy financial cash situation. However, the companies may face the difficulty in applying the model, as these irrelevant variables may change the results and model itself has its own limitation. Sustainable financial performance has limited prior empirical; however, this result will confirm research evident that risk management practices in financial cash flow has positive relationship with finance performance (Brush, et al. 2000 and Amah, 2016).

As per the finding the results had been established that there was a favourable and significant relationship between RMP in operating cash flow to shareholders equity and sustainability in financial performance. Than risk management practices in operating cash flow to shareholders equity has strong 73% correlation with and sustainable financial performance. In the normal business theory cash flow modelling practices and cash flow controls are strong and these effects will help to increase the profit and shareholder equity. Therefore, these factors have presented relevant information in sustainability reporting of economic, environment and social aspects to stakeholders and company can declare the highest parentage of dividend payments subject to investment decisions due to real improvement in internal cash generating ability as proved by financial performance in listed companies in Sri Lanka. Sustainable financial performances have very limited prior studies so far. Although this result will confirm evident that risk management practices in operating cash flow to shareholders has meaningful relationship with net profit, earnings and shareholder’s equity (Shahmordi, 2002, Fawzi et al. 2015 and Ibarra, 2009).

Risk management practices in operation cash flow and sustainable financial performances reported negative and significant relationship. In this sample selected period was year 2012 to 2015 most of listed companies suffer economic crises and generate losses or low profits and dividend payments go down and total liabilities increases. These changes affect to bring the strong and negative relationship
between these two variables. However, sample sized, and different business sector appraisal will affect for irregular relationship. There was a no correlation between risk management practise in investment cash flow and sustainable financial performance. Limitation of prior studies of sustainable financial performance, but risk management practices in investment cash flow has no relationship.

5. Conclusion
The model that has developed revealed to be a reliable approach and staple help in implementing risk management practises successfully. This study established that positive and significant relationship between cash flow risk management practices and sustainable financial performance in listed companies in Sri Lanka. Cash flow creates negative impact on risk management practices in operating cash flow and sustainable financial performance. Further research was revealed that investment cash flow risk management practices have no correlation between sustainable financial performances. This research will be explored to the further studies.

6. Limitations of the study
The main limitations of this research were the types of practices, methods or strategies used to mitigate the cash flow risk management that cannot be directly identified from annual reports. In addition to that, the exclusion of primary data for this study considered as a limitation as it will lead to less accurate, non-quantitative to deliver the desired outcome. However, this may cause to limit the fruitfulness, non-reflection of application aspect moreover, non-inclusion of professional or personnel evaluation and knowledge. Further, scope and depth of discussions in this research may be compromise due to lack of level of experience possessed by the researcher in the field of research when compared to experienced scholars.

The other limitations are, generalized the business sectors and collecting figures from annual reports. Business sector to sector size, capital structure, nature of the business, risk management controls, methods and strategies were different also to be noted. In addition to that business sector to business sector risk management practises keep on changing time to time and it depends on political and economic changers. The research findings may not reflect the true effect of cash flow risk management practises across the listed companies in CSE as the time period limited to four years. The sample size of the research may be limited only to listed companies in CSE has become a disadvantage as it may not reflect the non-listed company’s status.

7. Recommendation for further research
This research could generate numerous benefits to listed companies in Colombo stock exchange, bankers, financial institutions, government and semi government organizations, students and researchers would provide the information regarding the cash flow risk management practices on sustainable financial performance. The researcher suggests carry out further studies on this topic by using both primary and secondary data in different business sectors like banking and finance, manufacturing, hotels and services, Cleaning and health caring, trading to further enhance the outcomes and beneficial to all those who struggle in managing critical financial situations.
Reference


Amah, (2016). Published by European Centre for Research Training and Development, UK.


Chartered Institute of Management Accountants (2009), Improving cash flow using credit management, London, UK.

Chartered Institute of Management Accountants (2011), Sustainability performance management: How CFOs can unlock value, London, UK.

Chartered Institute of Management Accountants, (2013). Essential tools for management accountants: The tools and techniques to support sustainable business success, UK.


