Does financial leakage mediate sustainability and competitive advantages of star classified hotels in Ethiopia?

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Abstract: This research has examined the mediating effect of the reduction of financial leakage on sustainability practices and competitive advantage. The type of the research was mixed type, the design was explanatory and cross-sectional survey was also employed. A self-administered survey was conducted from star classified hotels in Ethiopia. Unidimensionality and validity of the study measurement model was done using exploratory factor analysis using SPSS 23 and confirmatory factor analysis using AMOS 21. The mediating effect of financial leakage and the effect of sustainability practice on competitive advantage were tested using SEM analysis. In this study, sustainability practice significantly influences the competitive advantage of star classified hotels in Ethiopia. Furthermore, financial leakage was partially mediated the relationship of sustainability and competitive advantage of star classified hotels in Ethiopia. Finally, this study revealed financial leakage problem is well-recognised for the emergence of competitive advantage through sustainability practices of tourism businesses.

Keywords: resource-based view; RBV; sustainability practices; financial leakage; quality tourism experience; competitive advantage; Ethiopia.

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1 Introduction

Tourism businesses, particularly hotels and resorts in many tourist destinations have been working to hold a favourable competitive position in an industry (Werthner and Klein, 1999). Hence, hotels were maintaining their sustainable contribution on environment, economic and social conditions, and meeting constantly changing tourists/clients' needs (Esty and Winston, 2009). In the meantime, sustainability practices have supported the role they are playing to reduce the negative impacts the industry. Subsequently, tourism companies have applied sustainability as a strategy to minimise their negative impacts and strengthen their linkage within the tourism industry stakeholders which finally, improve competitive advantage (Lansing and De Vries, 2007).

The largest sources of economic effect of tourism are the direct tourist expenditure on service providers such as hotels, tour operators, attractions and on other ancillary services. However, larger portion of these expenditures would be leaked outside of the local economies, which ultimately reduce its effect on the local economy (Supradist, 2004). This portion of profit received from tourism activities, but out flow in the local economy due to consumptions and taxes is called financial leakage (Rahman et al., 2012).

As a result, according to Esty and Winston (2009) many organisations and countries have adopted sustainability practices as a remedy to tackle the challenges and design as a strategy to reduce their financial leakage as well as enhance their competitive advantage. Until now, few researchers have attempted to test empirically the components of sustainability economic, socio-cultural and environmental sustainability practices as aggregate that would reduce financial leakage and enhance competitiveness. Thus, there is a dearth of research on the effect of sustainability to financial leakage in different destinations settings and tourism businesses (Aragon-Correa and Rubio-Lopez, 2007; Leonidou et al., 2013). Consequently, this research has aimed at to integrate firms' resource view as theoretical stands to link sustainability practices with financial leakage and competitive advantage in Ethiopian hotel context. Finally, this research finding has indicated star classified hotels in Ethiopia have begun to alleviate societal and environmental issues through 'triple bottom line (TBL)'.

2 Review of related literature

2.1 The concept of sustainability

According to WCED (1987), sustainable development is defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" cognisant this, sustainable tourism development also defined as "tourism that takes full account of its future and current economic, environmental and social impacts, addressing the needs of the enterprises, visitors, local people and the environment" (UNWTO, 2004). On basis of this definition, Dyllick and Hockerts (2002) organisational level of sustainability is also defined as it is "a systematic management effort by corporations to balance environmental and social with economic goals in order to minimize harm to and increase benefits for natural environments and societies".

2.2 Sustainability practices

According to Knowles and Corne (1999) and Spenceyley (2001) tourism companies have realised the importance acting responsibly. They have started to adhere to sustainable tourism practices and principles. These principles are related to environmental and socio-cultural. Hence, tourism companies have adopted sustainable practices and green initiatives as strategy that supports brand awareness. In order to implement sustainability practices to the maximum level tourism service providers should have capacity of using environmental resources optimally and keep the authenticity of the local community, and ensuring sound economic stands. It is also required to achieve balanced social-economic and environmental aspects of sustainability of the business. Smerecnik and Andersen (2011) states recently, tourism companies, hotel business in particular have begun to implement sustainability practices effectively and efficiently.

2.3 Sustainability model in tourism businesses

Measuring sustainability performance at firm level is a recent agenda compared with a destination level. Hence, the TBL has become the most comprehensive approach for measuring the sustainability performance at organisation level. It is a planning and reporting system and decision making framework of measuring and controlling companies' economic, environmental and social performance (Elkington, 2004). Therefore, sustainability is the integration of social and environmental aspects of a firm with its economic issues. The three aspects of sustainability i.e. environmental, economic and social aspects should be seen as they are not separated issues; in contrast, they should support each other.

The three dimensions of sustainable tourism development are environmental sustainability: social sustainability and economic sustainability: environmental sustainability: focus on managing and conserving resources in tourism sectors that requires action to reduce pollution of air, land and water. Social sustainability is a benefit generated out from tourism activities needs to be equitably distributed with a focus on supporting poverty alleviation. On the other hand, economic sustainability deals with ether to be a profitable from the services provided or be sufficient to cover the cost of expended to cater the tourists (Mowforth and Munt, 1998).

As measurement of sustainability performance in hotel business, Mihalič et al. (2012) has adopted TBL concept with some modifications to fit a hotel business and call it the sustainable business model (HSBM). On the other hand, the research done by Alzboun et al. (2016) has combined the elements of the United Nations World Tourism Organization (UNWTO, 2004) sustainability definition with the TBL model of Elkington's (1998) to investigate the sustainability performance of hotels. Therefore, most of the researches done have applied the concept of TBL which is a comprehensive approach to attain sustainability at a firm level (Smerecnik and Andersen, 2011). Therefore, all the models are aimed to achieve eco- efficiency, socio-efficiency, eco-effectiveness, socio-effectiveness, sufficiency and ecological equity (Dyllick and Hockerts, 2011).

2.4 Strategic sustainability behaviours of firms

Though, there are different nomenclatures, sustainability strategy has been used interchangeably with corporate environmental strategy along a continuum ranging from reactive sustainability strategies that merely aim to meet legal requirements to more proactive strategies that aimed to introduce voluntary eco-efficient practices. Hence, proactive environmental strategies are drawing on the natural resource-based view (RBV) of the firm (Hart, 1995). Proactive firms' can possess higher capabilities with the innovation process (Aragon-Correa, 1998). It enables them to compete in changing markets and environments meanwhile, contributing to sustainable development (Paramanathan et al., 2004).

2.5 Strategic management theories and competitive advantage

Since 1960th C, theories for competitive advantage was started to develop under the theme of strategic management (Furrer et al., 2008; Wang, 2014). Noticeably, two theories of competitive advantage such as the market based view (MBV) and RBV are familiarised. MBV model asserts that a company outperform its competitors through and obtain competitive advantages through applying better ways of continually upgrading the firm's products and processes. On the other hand, Wernerfelt (1984) of the RBV states with resources and capabilities firms' internal resources are developed as driver of competitive advantage. The one who recognise the resources possessed, deployed and used by an organisation is much better than the industry structure win the market competition are the sources of enormous competitive factors in tourism industry of different companies (Hassan, 2000; Ritchie et al., 2000). Therefore, MBV has its own limitation that consider the market force static and difficult to analyse using the five force model and scholars has suggested that the most determinant of profitability of a firm specific factor, not industry specific (Wang, 2014).

Consequently, Wernerfelt (1984) and Barney (1991) a theory of RBV has indicated to explain competitive advantage of tourism businesses through the development of valuable organisational capabilities (continuous innovation, total quality management, social complex capabilities). These capabilities links environmental strategy with organisational performance having higher performance implication in terms of lower costs and improved reputation (Sharma and Vredenburg, 1998).

According to Porter (1985), the aim of competitive strategy is to cope with changing market environment and if possible to change rules in the firm's behaviour. Therefore, competitive advantages are values created by firms for their buyers that are crucial in determining firms' profitability. It is defined as competitive advantage "implementing a value creating strategy not simultaneously being implemented by any current or potential competitors" (Barney, 1991). Therefore, to stay ahead of competitors, organisations have to continually develop new competitive advantages. Tourism industry, in particular hotels are operating in a highly competitive market and therefore place a strong emphasis on quality management to maintain competitiveness (Tsai et al., 2009).

Eventually, firms are more likely to incorporate environmental objectives as long as it lowers the costs of operations and finally increase the profits. Furthermore, managers are inclining to implement sustainability (Stabler and Goodall, 1997). It was also found a very high percentage of respondents (94%) that indicated managers are implementing environmental sustainability to a higher level and showing 'green' values are important

and being integrated with business values are equivalent (Knowles and Corne, 1999). However, still hotel sector in different destination settings clearly exhibits a gap between environmental 'good' intention and action according to Verma and Chandra (2018).

2.6 Sustainability and competitive advantage in tourism businesses

Hotels consider the TBL Pillars (financial, social, and environmental reporting) claims that it gives hotels a sustainable competitive advantage (Kirk, 1995; Bohdanowicz, 2005; Chan and Wong, 2006; Erdogan and Baris, 2007). Hospitality industry such as hotels has gain competitive advantages by adopting the TBL through ecological integrity, social equity and financial profitability. Carrefour's CSR has obtained improved image of the corporation, reputation, image, reputation enhancement, employee motivation and motivation etc cited in Sousa Filho et al. (2010), though it was not enough to offer other advantages, like, employee retention. The result of a research done by Assaf et al. (2012) analysed the impact of TBL on firm performance in Slovenian hotels using the data envelopment analysis (DEA) method, based on a sample of Slovenian hotels, support the hypotheses that more extensive reporting on environmental, social and financial issues lead to better hotel performance. Specifically, it shows that reporting on environmental factor has a slightly higher impact on performance than reporting on social and financial issues. Beside this, a research that link between social initiatives and competitive advantage in the tourism industry is limited.

2.7 Sustainability practices and competitive advantage in tourism businesses

It is believed that a well-designed sustainability standard can elicit innovation that could offset the costs of complying with them. These offsets can lead to absolute advantages over firms in competitors. Now companies committed to sustainability issues to build their brand and to differentiate themselves from competitors in the marketplace (Porter and Van der Linde, 1995).

The link between sustainability and competitive advantages in hotel business can have unique feature. Sustainable tourism can be considered as internal resource mobilisations of the tourism businesses. For instance, waste from hotels/resorts recycled using their efforts at lower expenses; therefore, it will reduce costs, even though it was not to enhance competitive advantage. In some cases, wind and bio-fuels as environmental friendly sources of energy may be expensive and may not support the cost based competitive advantage of a businesses. As a result, tourism businesses are inclined to use sustainable attributes as a source of to the differentiation based competitive advantage (Henderson, 2011). Therefore, the business frame of a tourism companies should consider whether sustainability activities are used to minimise cost and/or enhance differentiation advantage (Hart, 1995).

Empirically, implementing quality management and/or environmental management could provoke the improvement of competitive advantage in form of cost and differentiation advantage (Alzboun et al., 2016). For instance, competitive synergy has obtained after implementing TBL sustainability in Floyd and Puntacana hotels. These benefits are due to the reduced energy costs and increased employees' job satisfaction (Boley and Uysal, 2013).

While, most of the studies done found a positive relationship between sustainability and performances, Sharma and Vredenburg (1998) found a mixed results on the effect of

proactive environmental strategy on tourism firms' performance. Others (Hart, 1995; Russo and Fouts, 1997; Sharma and Vredenburg, 1998; Christmann, 2000) also found a mutual influence between proactive environmental strategies and valuable competitive capabilities.

Moreover, the RBV of a firm has mediated the environmental management and firms' performance with competitive advantage (Leonidou et al., 2013). However, the previous studies, using RBV of the study has missed to study socio-cultural practices of a firm. Whereas, Sousa Filho et al (2010) recognise competitive advantage can be generated from socio-cultural sustainability practices. Furthermore, Bohdanowicz (2005) environmental pro-activeness carried out within the Scandic hotel chain has considerably reduce environmental impacts, and significantly upgraded environmental image as (Alzboun et al., 2016).

2.8 Sustainability and financial leakage

2.8.1 Multiplier effects

Income earned from tourism activities, in turn spend locally, creates jobs in local service sectors and employees spending their increased income locally this is delineated as tourism multiplier effect (Krikelas, 1992). Financial leakages could be a problem in many industries and sectors; it is particularly relevant in tourism as one of the few profitable economic sectors for developing countries (Mowforth and Munt, 2003). Tourism businesses have less money to re-spend or re-inject into the economic system in the next rounds due to high level of saving, taxation, and import. Therefore, the total economic impact from tourist expenditure that is originally injected into the economy will be restricted. Tourist expenditure at a destination is either sent back to its country of origin. For example, when a tourist purchases imported goods or services or it leaves in the first places of tourists such as travel agency commissions, foreign airline tickets and tour operator profits (Lacher and Nepal, 2010).

The firms' recourse view has been used to explain the link between sustainability and financial leakage. The theory asserts that the total change in economic, socio-cultural and environmental performance of a firm as internal resource of a firm could reduce firms' financial leakage (Barney, 1991). The theory suggest that if a firm could configure its internal resources in a way that increase its economic, socio-cultural and environmental performances the money that will expended outside the local will be decreased. Hence, RBV has link with the level of sustainable tourism development practices within tourism business. Particularly, hotels could reduce financial leakage. It might be through companies and employees of companies to generate additional income and employment. Furthermore, it is well recognised that tourism has higher multiplier effects in terms of creating additional jobs and income to the local or regional economy than other sectors due to the multisided of the industry. Though, the level of multiple effects in each subsequent re-spending reduced the total effect is much higher than the original spending or injection (Krikelas, 1992).

The theory assumes firms have to get additional income out of goods and services produced within the economy through using locally available raw materials. Tourism in general and hotel sectors in particular is considered to create significant economic effects in terms of job and income (Lacher and Nepal, 2010). But, currently it is contributing less particularly in developing countries as compared to developed countries, due to the

problem behind financial leakages. For instance, the finding of a study by Witter (2004) in the Caribbean tourist destinations shows the multiplier ratio is below 1, which is 0.39 per dollar of tourist spending.

2.9 Financial leakage and competitive advantage in tourism businesses

Assaf et al. (2012) analysed the impact of TBL on firm performance in Slovenian hotels using the DEA method and they found that environmental, social and financial issues led to improved hotel performance. Sustainability practices (TBL) could mitigate financial leakage problems in hotels and the reduction of financial leakage could enhance competitive advantage of the hotels (Supradist, 2004). To address this issue, the study conducted in hotels and guest houses showed how reducing leakage enhanced competitive (Galdon et al., 2013). He further found that reducing leakage has the potential to improve the level of satisfaction among employees and customers, thereby improving a firm's competitive advantage. Financial leakages occur in many industries and sectors, including in tourism industry. It is considerably occurring in tourism business as one of the few profitable economic sectors for developing countries. Studies shows production value of tourism actually left the host country and only a small portion stays at host destination. For instance, when a tourist purchases imported goods or services through travel agency commissions, foreign airline tickets, and tour operator profits (Mowforth and Munt, 2003).

According to Aznar et al. (2016) actions that specifically conducted to reduce costs to a level lower than competitors are aimed to have scale economies advantage, which generally result in large market share in a growing market. Hence, there are elements in hotel operations where costs can be reduced through sustainable practice. For example, efforts to encourage sustainability and reduce waste will reduce costs which may lead to overall cost leader in the industry and may increase profits by encouraging less waste. In contrast, some environmental friendly practices such as bio-fuels energy is seen as expensive and work against achieving cost based competitive advantage. Similarly, saving costs on employing people by using volunteers, etc. may be perceived as not following sustainable development principles. Consequently, Hotels are likely to be limited in their ability to use some sustainable attributes as a source of cost based competitive advantage (Henderson, 2011). Therefore, this research has intended to answer the following questions;

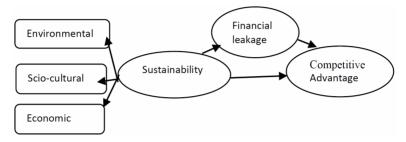
- 1 Do sustainability practice reduce financial leakages of star classified hotels in Ethiopia?
- 2 Do the reductions of financial leakage enhance competitive advantage of star classified of hotels in Ethiopia?
- 3 Do the Quality tourism experience mediates the relationship between sustainability and enhance competitive advantage of star classified of hotels in Ethiopia?

2.10 Conceptual model and theoretical foundation

This research has developed a conceptual framework using three major constructs. It focuses on sustainability practices (environmental, socio-cultural and economic) that cause enhanced competitive advantage of tourism business particularly, hotels in

Ethiopia. The framework seen below is developed based on RBV of Barney (1991) and TBL of Elkington (2004). According to this theory, resource under the controls of a firm should be valuable, rare, imperfectly imitates and non-substitutable that will support the design and implement strategies which ultimately create competitive advantages. Hotels can gain competitive advantage by creating strategies such as sustainability strategies that exploits its own strength and avoid its internal weakness, while responding to environmental opportunities and neutralising external threats (Leonidou et al., 2013).

Figure 1 Conceptual framework of the research



2.11 Development of research hypotheses

The conceptual model used in this research comprises three major hypothesised that link sustainability with financial leakage and financial leakage with competitive advantage, based on TBL of Elkington (1997) and the RBV of Barney (1991). It underline that firm's resources that are valuable, rare, imperfectly imitable, and non-substitutable resources supports to exploit its own strengths and avoid its internal weaknesses, finally, create sustainable competitive advantages. Furthermore, the level of sustainability of tourism is the aggregate score of the TBL (Elkington, 2004), while this TBL score directly affects financial leakage and competitive advantage.

Adopting sustainability practices such as an environmentally friendly strategy and practice and socio-cultural responsibility in hotels can lead to the creation of competitive advantage (Stabler and Goodal, 1997). A sustainable strategy can significantly reduce costs and improve differentiation offerings from the competing organisations through lowering hotels financial leakage. The use of cheaper recyclable supplies/materials, energy-saving processes, waste-minimisation solutions, and operating process improvements significantly lower costs and create differentiation offerings (Porter and Van der Linde, 1995). Sustainability practices can play a vital role to deploy organisations resources in a way to reduce costs associated with water, energy and waste and to formulate eco-marketing strategies that will lower financial leakage, on the other hand, the financial leakage mediates the relationship (Norman and MacDonald, 2004). Therefore,

- H1 Sustainability practices reduce or negatively related to financial leakage of hotels in Ethiopia.
- H2 Sustainability practices reduce or negatively related to competitive advantage of hotels in Ethiopia.

- H3 The reductions of financial leakages enhance or negatively related to competitive advantages of star classified hotels in Ethiopia.
- H4 Financial leakage partially mediates the relationship between sustainability practice and competitive advantage.

3 Research methodology

3.1 Study area

This research was conducted in Ethiopia, which is one of the leading tourist destination found in East Africa. The country has attracted a million international tourists every year and the contribution of tourism in the region has showed growth. The country has enormous cultural and natural tourism resources. However, technological advancement and most critically, continually changing customers' needs has changed the ways to compete.

Therefore, in order to hold competitive position in East Africa, the Ethiopian Federal Democratic Republic of Ethiopia, Culture & Tourism Minister (MoCT) has started to standardise tourist businesses such as, hotels, resorts and lodges.

- Sampling: the target population of this study was all-star classified one star up to five star hotels in the country. To this end, a quantitative and cross-sectional design was employed to collect data at one point in time as time constraints prohibited a longitudinal study (Dillman et al., 2009).
- Instrument development: with some modifications to fit the characteristics of the tourism industry in the country, measures used for this research were developed. The 16 items of the questionnaire for measuring 'financial leakage' and 21 items of questionnaire for measuring 'Sustainability' were adopted from (Alzboun et al., 2016). The questionnaire was administered between January 2019 and September 2019. The process resulted in completed questionnaires from 201 hotels (94% response rate). Hence, it is adequate to provide a 95% confidence level as recommended by Mendenhall et al. (1993). Validity and reliability was conducted. Content validity and pilot study was conducted prior to data collection and measurement model were improved. This Then pilot study conducted using 25 randomly selected hotel managers, thus, the required level of reliability was achieved (alpha > 0.7).

3.2 Data screening

Outliers and normality issues were addressed prior to data analysis. Cook's distance was used to check the outliers. A Cook's distance value greater than 1 shall be removed to have a better data analysis (Bilodeau et al., 2000). Having this, the data does not show a value greater than 1. Furthermore, skewness and kurtosis index measures were done to check normality of the data. It was found that some items kurtosis and skewness values are higher than 10 and 3 respectively. Hence, the distribution of the data has to be considered normal after removing them (Kline, 2011). Therefore, the model fit and hypothesis tests could be done using SPSS .23 and AMOS .21 respectively. The structure

equation modelling (SEM) was found appropriate in this study to test proposed theoretical framework as suggested by Anderson and Gerbing (1998). Then, the researchers have decided to remove items that have categorical nature before conducting data analysis (Tabachnick and Fidell, 2006).

4 Analysis and findings

The data collected in this study were descriptive statistics used to determining the level of financial leakage of these star classified hotels in the country. Furthermore, inferential statics were used to check the validity and reliability of the measurement model include composite reliability (CR) and average variance validity statistics of both the exogenous and endogenous constructs and to test the study hypotheses.

4.1 Descriptive statistics result

4.1.1 The degree of financial leakage of star classified hotel in Ethiopia

As one of the main objective of this study, the level of financial leakage of tourism business specifically, star classified hotels in Ethiopia were surveyed. A financial leakage has been described in the form of food and beverage, material and equipment and remittance. Hotel managers were asked to answer questions listed under the three sub-dimensions of financial leakage (16 items, alpha = .677). Specifically; food and beverage (5 items, alpha = .677), materials and equipment (6 items, alpha = .613), and remittance (6 items, alpha = .785). Therefore, the overall internal consistency of these 16 items of financial leakage was (alpha = .793).

Table 1 Items used to measure financial leakage (alpha,	.896)
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No.	Items	Mean	S.D	
	Financial leakage	3.05	0.071	
Foo	Food and beverage			
1	Fruits and vegetables produced and imported outside the country	2.01	0.061	
2	Meats produced and imported outside the country	1.93	62	
3	Sausage and other ingredients produced and imported outside the country	3.3	0.066	
4	Alcoholic beverages prepared and imported outside the country	3	0.064	
5	Tea and coffee, prepared and imported outside the country	2.96	0.079	
6	Non-alcoholic beverages prepared and imported outside the country	3.38	0.065	
Material and equipment				
7	Kitchen wares, manufactured and imported outside the country	3.36	0.07	
8	Furniture (used as substitutive to old ones), outside the country	3.34	0.072	
9	Electronic equipment, manufactured and imported outside the country	3.52	0.077	
10	Stationery, manufactured and imported outside the country	3.29	0.074	
11	Decor and/or other construction materials, imported outside the country	3.28	0.075	

No.	Items	Mean	S.D
Ren	iittance	4.2	
12	Management expenses, if the hotel is managed by foreign based organisation	3.28	0.069
13	Reservation system expenses, if it has been installed and/or being managed by foreign based organisation	2.26	0.067
14	Wages to foreign labours in high positions	3.12	.078
15	Commissions paid for foreign tour operators and agencies	3.25	.068
16	Marketing activities expenses incurred through foreign based media	3.25	3.25

 Table 1
 Items used to measure financial leakage (alpha, .896) (continued)

Table 1 showed the overall level of financial leakages were higher than the average value that is (m=3.05). Specifically, kitchen wares, manufactured and imported outside the country with average value of (m=3.36) and electronic equipment, manufactured and imported outside the country with the average value of (m=3.52) were items frequently hotels faced to import abroad. The result of interview made with hotel managers revealed that the standard level of raw materials produced in the country is below the international standards that the hotel has to fit complied with. Secondly, financial leakage 'remittances' were the most important category of financial leakage that hotels in Ethiopia have become challenged. In particular, management expenses paid to foreign based organisation (m=3.28) and commissions paid for foreign tour operators (m=3.25) for which they had paid huge commissions were the source of financial leakage of these star classified hotels in the country.

Thirdly, the food and beverage financial leakage were slightly lower than the aforementioned sources of financial leakages. Only hotels have mostly been using alcoholic beverages prepared and imported outside the country (m = 3.30) and sausage and other ingredients produced and imported outside the country (m = 3.30). It is because; these kind of items were not available with the required quality and quantity level, while most of the food items were currently available locally that could meet the international standards. Overall, hotels were lag behind the expected degree of financial leakage and have to go further to reduce the possibility of financial leakage occurred in a way that would enhance their performances.

4.2 Validity and reliability tests for the study measurement model

Measurement items used for this study were adopted from Alzboun et al. (2016). Maximum likelihood method of estimation was used considering the nature of this data. To this end, items which had factor loadings greater than 0.40 were aggregated to form measures. Table 2 shows Cronbach's alpha, values were used to assess the internal consistency and CR were used to assess the reliability of, in addition to the average variance extracted (AVE). The result for CR values were exceeded the minimum value of > 0.7 (Nunnally and Berstein, 1994) and the AVE of all constructs were exceed 0.5 (Barclay et al., 1995). To check the discriminate validity, the correlation analysis and the square root of AVE were used. Thus, the square roots of dimensions' AVE in this study were higher than the correlations between the dimensions as Table 2 depicted. Furthermore, model fit tests have been checked and all have transcend the thresholds

recommended by Kline (2011). These includes CMIN/DF = 1.052, CFI = 0.910; GFI = 0.99 and RMSEA = 0.016.

Table 2	Validity and reliability for second order measurement	
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	CR	AVE	MSV	MaxR(H)	COMP	LEAK	SUSP
COMP	0.746	0.605	0.119	0.853	0.778		
LEAK	0.732	0.523	0.119	0.737	0.345	0.691	
SUS	0.777	0.551	0.119	0.909	0.345	0.241	0.742

4.3 Structural model and hypothesis testing

4.3.1 The effect of sustainability on financial leakage

As part of the main investigation, H1 deals with the relationship between sustainability and financial leakage. The result indicated that the greater sustainability of hotels, the higher hotels' financial leakage (= 0.308, P = .009). Albeit, the relationship was expected to be negative i.e. the higher sustainability resulted in the lower financial leakage of star classified hotel business in Ethiopia.

Hence, this research finding does not support the hypothesis of this research i.e. the higher sustainability practices by star classified hotels in Ethiopia could not resulted in lower financial leakage.

4.3.2 The effects of lower order factors of sustainability on lower factors of financial leakage

The lower factors of both the constructs were also checked to examine the effects of sustainability practices on the reduction of financial leakage in terms of importing food and beverage, materials and equipment and remittance. The results shows that environmental factor has (= .154, P = .200, = -167, P = .166, = 0.-.154, P = .200) effect on the lower factors of lower financial leakage i.e. food and beverage, materials and equipment and remittance respectively. The second lower factor of socio-cultural also has (=-.185, P=.548, =.105, P=.493, =-.185, P=.235) effect on the lower factors of lower financial leakage i.e. food and beverage, materials and equipment and remittance respectively. Furthermore, the second lower factor of economic sustainability also has (=.477, P = .009, =.309, P = .090, =.435, P = .018) effect on the lower factors of lower financial leakage i.e. food and beverage, materials and equipment and remittance respectively. This is consistent with the findings of a study by Alzboun et al. (2016), which supports this research finding. It is obvious that using energy efficient equipment prevents extra costs incurred for maintenance and exchange equipment frequently. The hotel guest consumes energy threefold a person uses at home. Hence, it became the primary challenge for the hotel industry and the country as a well. Therefore, businesses became aware of the contribution to decreasing the operational costs and consequently increasing their profitability.

4.3.3 The effect of sustainability on competitive advantage

H2 is deal with the relationship between sustainability practices of the star classified hotels and its effect on competitive advantage based on the RBV of firms (Hart, 1995).

This study come out with sustainability practice influenced the competitive advantage of hotels in Ethiopia significantly (= .377, P = .005). The R2 was 39% for the emergence of competitive advantage in this study context. Therefore, this research finding supports the H2 hypothesis of the research. The study finding is indeed in harmony with the previous studies (Stabler and Goodal, 1997; Assaf et al., 2012; Leonidou et al., 2013; Boley and Uysal, 2013). The result suggests the innovations related to sustainability have a long term vision to bring competitive advantage.

4.3.4 The effect of financial leakage on competitive advantage

Hypotheses 3 posit the relationship between financial leakage and competitive advantage is negative. The result indicate a slightly lower financial leakage in the hotels, could achieve slightly higher competitive advantage (= .294, P = .004). The result is in harmony with the study done by Chi and Gursoy (2009) and Galdon et al. (2013). These researchers have found reducing leakage has created a higher level of satisfaction among customers and employees, thereby improving a firm's competitive position. Hotels could achieve a competitive advantage if they could reduce the financial leakage to the level required. To this end, the higher financial leakage associated with the hotel operations could encourage the hotels to reduce its price and be competitive. A cost cutting is important for a firm to operate at a lower cost than its competitors but provide a comparable service so as to achieve a cost advantage (Porter, 1985).

4.3.5 The mediating effect of financial leakage on sustainability and competitive advantage

This study has investigated the mediating effect of financial leakage on the relationship between sustainability and competitive advantage of star classified hotels in Ethiopia. To test the mediating effect Bootstrapping was applied based on Hayes (2009) suggestion. Prior to test the mediation analysis, a direct relationship between these constructs were checked and the result is found significant (P value = .005). The result shows that there is a mediating effect of financial leakage on the relationship between sustainability and competitive advantage (= .085, p = .001).

 Table 3
 Result of SEM with mediating constructs of financial leakage (FLK)

Direct beta without mediation	Direct beta with mediation	Indirect beta	Type of mediation observed	
FNL-partial Med SUS-COMP	.499***	.377 (.005)	.067 (.024)	

Notes: NB: SUS: Sustainability; COM: Competitive Advantage; FNL: Financial Leakage.

5 Conclusions and summary

The objective of this study was to examine the mediating effect of financial leakage on the relationship between sustainability practice and competitive advantage. Meanwhile, the study assess the effect of sustainability practice on the reduction of financial leakage, and the financial leakage which in turn affect competitive advantage of star classified hotels in Ethiopia under the RBV theoretical background. The study has applied cross-sectional approach. This study has used SEM using Amos 21 version. It has also brought the following results for the research problem identified based on reviewed literatures. It was found that financial leakage has a mediating role in sustainability and competitive advantage. Moreover, sustainability practices have a positive effect on financial leakage of star classified hotels in Ethiopia. Hence, it reflects the sustainability practices of star classified hotels could not reduce financial leakage of the studied hotels in Ethiopia. However, the growing trend in the tourism business showed that market of environmentally firms that care about the environment could reduce financial leakage greatly (Rodriguez and Cruz, 2007). This study finding is different from existing literatures (e.g., Carmona-Moreno et al., 2004; Claver-Cortés et al., 2007). It might be because of the existing situation in Ethiopia and the way sustainability practices implemented need to be re-evaluated that support the future sustainability impacts on financial leakage and competitiveness of the tourism industry.

Furthermore, the result indicated that the effect of sustainability on financial leakage of hotels i.e. the effect of sustainability on the financial leakage could be the long term vision of a firm, which could not be achieved in the short term (Denning, 2005; Grissemann et al., 2013). Beside this, the qualitative analysis of this research has identified the reason behind this finding. Due to the challenges associated the expensiveness of some of the technologies required to implement sustainability practices to the level expected could not enabled hotels to implement them and achieved a higher sustainability performances, which consequently did not resulted in lower a financial leakage among star classified hotels in Ethiopia. Moreover, the interviews made with the hotel managers assert some of the financial leakages are expected reasonably to be occurred. This includes expenses related with technological appliances and equipment. Lastly, hotel managers assert that the link between raw materials producers and the principals such as hotels, resorts and lodges were weak in the case of Ethiopia. This comment has supported by authors in the area. According to Lacher and Nepal (2010) in the country where there is weak economy and lacks integrations, the financial leakage would be higher.

It was expected that the higher economic, socio-cultural and environmental factor the lower food and beverage, material and equipment and remittance factors. However, other than economic factor, the lower factor factors of sustainability, i.e. socio-cultural and environmental factor does not significantly reduced the level of financial leakage of star classified hotels in Ethiopia. Hence, hotels have achieved viable economic sustainability in the lower food & beverage, material and equipment and remittance financial leakages of star classified hotels in Ethiopia. It is because hotels were applying cost effective and sustainable activities such as hiring local persons and start to attract local customers, other than foreign tourists. Therefore, star classified hotels in Ethiopia and its sustainability practices were not to the level expected so as to reduce their financial leakages.

Nonetheless, it is significant that in all of them the main factor influencing the level of sustainable development is financial. This is realised mainly by cost reductions, which are achieved by improving efficiency and reducing consumption of resources. There are many associated benefits from improved 'environmentally friendly' energy consumption in hotels and other tourist venues, such as improving customer loyalty, enhancing public image, attracting and retaining dedicated staff, avoiding penalties from environmental

authorities, and other long-term operational advantages (Mrayati and UN-ESCWA, 2003).

According to the interview made with the hotel managers, the reason behind that the studied hotels could not lower their financial leakages is that mainly due to the economic nature of the country. It is believed that tourism industry in less developed nations having instability problems could not take full advantage of substituting imported goods with locally produced goods. This lack of producing imported materials within tourist destinations has been hindering factor for the economy and consequently brought a high level of financial leakages for the tourism businesses. More importantly, some hotels and resorts in these nations were not in a position to use locally available goods due to the brand given for local goods are less than imported (Hall et al., 2004).

6 Study implications

This study has pointed out both theoretical and practical study implications out of its findings. The several implications drawn from this study will contribute for state of the art in the area and for tourism businesses/practitioners, particularly hotels, resorts and public policy makers. It has that realised that adoption of sustainability strategies through deployment of valuable resources could reduce finical leakage significantly and proper sustainability handling could enhance competitive advantage of tourism firms. Therefore, building organisational culture that basis the principle of sustainable tourism development is imperative. On the other hand, tourism businesses need to adopt sustainability initiatives that require a long-term environmental commitment and vision, but it has moderate impacts on their competitive advantage shortly. For example, hotels need to allocate necessary resources, for a better execution of social and eco-friendly initiatives.

Eventually, as an implication the study advises environmental regulatory and policymakers, academics and practitioners in tourism industry should improve their awareness creation on sustainable tourism development. Thereby, a better tourism businesses performance achieved. It has also realised that sustainability practices of tourism business affect financial leakage and competitive advantage in tourism industry that could in turn address local societal and economic problems, conserving and promoting culture and natural tourism resources. Thus, if public policy makers and tourism businesses should reduce financial leakage and obtain competitive advantage, they have to integrate socio-cultural and economic initiatives. On the other hand, public policy makers may support tourism businesses through provision of technical expertise and consultative assistance.

7 Future research directions

This study has conducted only using star classified hotels, Hence, it is suggested to validate the result by studying sustainability, financial leakage and competitive advantage in different types of tourism businesses in a country. Cognisant this, the generalisability problem could be seen as the limitation of this study. The antecedents and consequences of sustainability and competitive advantage respectively need to be investigated in future research. Therefore, capabilities, implementation of eco-friendly marketing strategy as

antecedents of sustainability practice and financial and non-financial performance outcome of financial leakage and competitive advantage could be included. To check external validity, the research model found in this study shall be checked using tourism businesses in developing countries. Future research could also be conducted on touristic hotels and lodges, eco-lodges and community based facilities where more less formalised sustainability practices are implemented (Lefebvre et al., 2003). Eventually, this study was conducted from managerial perspectives. This concept could be studied from customer perspective. Studying the effect of sustainability using longitudinal approach is also imperative as it could reveal the real impacts.

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