



## **Influence of Financial Services on SMEs Performance in Libya: The Mediating Role of Government Regulations**

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### Article Info

Received: 03.01.2018  
Accepted: 15.02.2018  
Published online: 01.03.2018

ISSN: 2231-8968

### **Abstract**

Business performance is a common phenomenon for every business organization. Historically speaking, small firms have failed since they have limited access to resources if compared to larger firms. Therefore, the purpose of the study is to examine and investigate the main factors that impact performance of small and medium-sized enterprises (SMEs) in Libya. In addition, this study identifies the role of government regulations as a mediating variable influential in financial services and SMEs performance. The sample of the present study consists of a total 356 SMEs analysed using the structural equation modelling (SEM) in order to examine causal relationships among the study latent variables. The results of study show that two direct hypotheses are significant. They include positive relationships between financial services and government regulations as well as government regulations and SMEs performance. On the other hand, one direct hypothesis is insignificant to financial services with SMEs performance. Moreover, the results of the study indicate that government regulation is full mediation between government regulation and SMEs performance.

**Keyword: Financial Services, Government Regulations, Performance, SMEs, Libya**

## **Introduction**

The fast expansion of small companies have contributed widely to the economic development and raised living standards. In addition, it helped to remove the institutional barriers that prevent developing small companies. The competitiveness between small and medium companies has an important role to increase the main macroeconomic indicators. Small and medium enterprises have a considerable growth in both developed and developing countries because of the important role of this sector. Recently they have a decisive economic role .Most small and medium enterprises work in a highly competitive environment while their roles in development still in the top of policies discussions (Mac and Bhaird, 2010).

The following aspects illustrate the importance of small and medium enterprises within the economy by encouraging entrepreneurship and employment generation. In addition, they enjoy a great chance to use labor-intensive techniques. The fast growth of small and medium projects has fast income while their development encourages the decentralization process. In addition, it may become a countervailing force against the economic power of the largest companies. By and large, developing small and medium projects constitute a fast process to accomplish more economic and social objectives including poverty (Zabri 2013). As mentioned earlier, small and medium companies assume an important role in developing countries (Ayozie & Latinwo 2011).

Libyan small and medium companies face different problems such as accessing to credit facilities, which lead to weakness or inexistence of long term development. They are considered a high credit risk by financial institutions. 92% of SMEs rely on private funding to support their business (Wahab, & Abdesamed 2012). Consequently, there is a large concern on the Libyan banking system (which supposed to be the main financial funding source for small and medium projects) which scarcely provides enough support for new economic initiatives, in particular, to the expansion of small and medium projects. Libyan private small and medium companies have high operating autonomy of management regardless of the problems they may encounter (Zarook, 2013).

It is instrumental in developing small and medium projects to have performance measurement, identify key points that may help to identify weakness, clarify the objectives and strategies, and improve management operations. While many performance measurement and management

theories have made the foundations for large organizations over the past two decades, but those bases are few for small and medium-sized enterprises. In addition, after reading a plethora of research, we have found that those bases are difficult to adapt for small and medium companies (Wu, 2009).

This study attempts to measure the relationship between the most influential variables (financial services and government regulations) on the performance of small and medium enterprises and identify the role of government regulations on financial services and SMEs performance.

This study is important to financial institutions. It's expected to give tools to assess the effectiveness of their programs and determine which variables contribute mostly to SMEs growth. Besides, it is also expected to assist them in their credit policy

### **The objectives of the study**

This research endeavors to enrich the body of knowledge in the area of organizational performance and extends knowledge of the factors affecting Libya-based SMEs performance. Therefore, this study seeks to achieve the following objectives:

- 1- To identify the relationship between financial services and performance of SMEs in Libya.
- 2- To investigate the relationship between government regulations and performance of SMEs in Libya..
- 3- To examine the role of government regulations as a mediating factor between financial services and performance of SMEs in Libya..

### **Literature Review**

#### **Definition of Small and Medium-Sized Enterprises in Libya**

SMEs have a vital role in driving the main macroeconomic indicators up, including: GDP, employment rate, and exports. The importance of SMEs to Libya stems from the fact that the Libyan economy suffers from non-diversification of economic activities which mostly concentrate on construction and oil & gas sectors. The latter constitutes about 70% of the Libyan

GDP, over 90% of government revenues, and almost all the country exports except for very few other products like fisheries and dates. Thus, building a strong SMEs environment will provide Libya with a more diversified economy, supporting both oil and non-oil industries. SMEs, also provide an essential source of employment, that can reach up to 70% of workforce in high-income countries, and 35% in low-income ones (Vincent & Sofien & Emanuel, August 2010).

SMEs suffer from a lack of an acceptable universal definition. Their definition differs from one country to another and even from one institution to another in the same country. They can be defined according to many different criteria such as, , to mention a few, the invested capital, number of employees, and sales volume. According to Naser Mohammed and Nuseibeh (2009) SMEs may be defined as Table 1 illustrates:

Table 1 Definition of SMEs in Libya

Business	Size of employment	Size of fixed assets
Small enterprises	No more than 25	Less than 2.5 Million Libyan Dinars
Medium enterprises	26 -50	Less than 5 Million Libyan Dinars
Large enterprises	More than 51	More than 5 Million Libyan Dinars

Naser and Nuseibeh (2009)

### **The Performance of Small and Medium-Sized Enterprises.**

Human resources, marketing skills and knowledge, and education are some other causes of business failure recognized by many scholars. Poor quality staff recruitment, staff management and retention are identified as matters associated with failed firms. Lack of recognition of the stages of a product's life, poor recognition of the market, the competitive environment, and lack of marketing skills have been predominantly cited factors for business failure in articles. Education of entrepreneurs is also identified as a notable factor for business failure. Many scholars say those who have a higher education have a less tendency for business failure (Longenecker et al., 2000; Politis & Gabrielsson, 2009; Ooghe & Prijcker, 2007). Lussier and Halabi (2010) stated that having higher education and the effective use of marketing will increase the chances of success.

Gaskill et al. (2009) identified many factors for business failures: they highlighted the competitive environment as a single factor of business failure. It includes competition from discount stores; inability to compete in the trading area; and failure to offer an assortment of saleable merchandise. They contended that these factors under competitive environment affected the survival of businesses.

## **DETERMINANTS AND ISSUES IN FIRM PERFORMANCE**

### **2.15.1 Financial services**

Debt financing is known as capital structure decisions. In small and medium businesses as in large companies, it is related to the use of any stock or debt or both. However, Berger and Udell (1998) believed that in the case of SMEs, this is partly incorrect because the vagueness of information is more pervasive in SMEs. The issuance of additional shares to meet the needs of funding will contribute to the reduction of ownership and control in small and medium-sized companies, which makes the manager/owner seek funding debt instead of foreign stocks.

Anane, Cobbinah, and Manu (2013) suggested that recipients of microfinance products and services are better off in terms of enhancing the activities of their SMEs, improving outputs and ensuring prudent financial management than those without microfinance services. The paper recommends timely disbursement of credit, flexible terms of credit repayment and awareness programmes to ensure the sustainability of SMEs.

Fatoki (2011) examined the impact of human, social and financial capital on SME performance in South Africa. The data were analyzed by descriptive statistics, correlation and regression analysis. The results show that there is a statistically significant positive relationship between human, social and financial capital and the functioning of SMEs.

The review of literature shows mixed results. Some studies indicated that financial services contribute positively to the growth and development of businesses, especially small and small enterprises, while others indicated that SMEs that access financial services to MFIs have not shown any growth impact.

## **Government Regulations**

This section focuses on the regulatory environment for SMEs development and seeks to examine awareness of, contact of SMEs with regulators, compliance with regulations through the assessment of: SMEs' knowledge (awareness) of regulators and the nature of their contact; SMEs' understanding of various aspects of the regulatory process; the degree of SMEs' compliance with the requirements and enforcement of regulations; and the effect of regulation on SMEs performance. It also studies whether results significantly differ by business size, regulation and SME performance.

The impact of government regulations on SMEs is an essential policy concern for economies worldwide (European Commission, 2010). It is generally believed that regulations provide stable trading conditions and develop levels of business trust which can enhance SMEs' development (Atherton et al., 2008; Welter and Smallbone, 2006).

Akinboade (2014) found there is a significant relationship between government policies and SME performance. Similarly, government policy affects the competitiveness of small and medium-sized enterprises. In theory, the study indicated that the performance of SMEs varies commensurate with adopted government policies. In theory, the survey showed that the performance of SMEs varies with the choice of government policy and government directives, schemes, incentives and regulations.

### Conceptual Framework

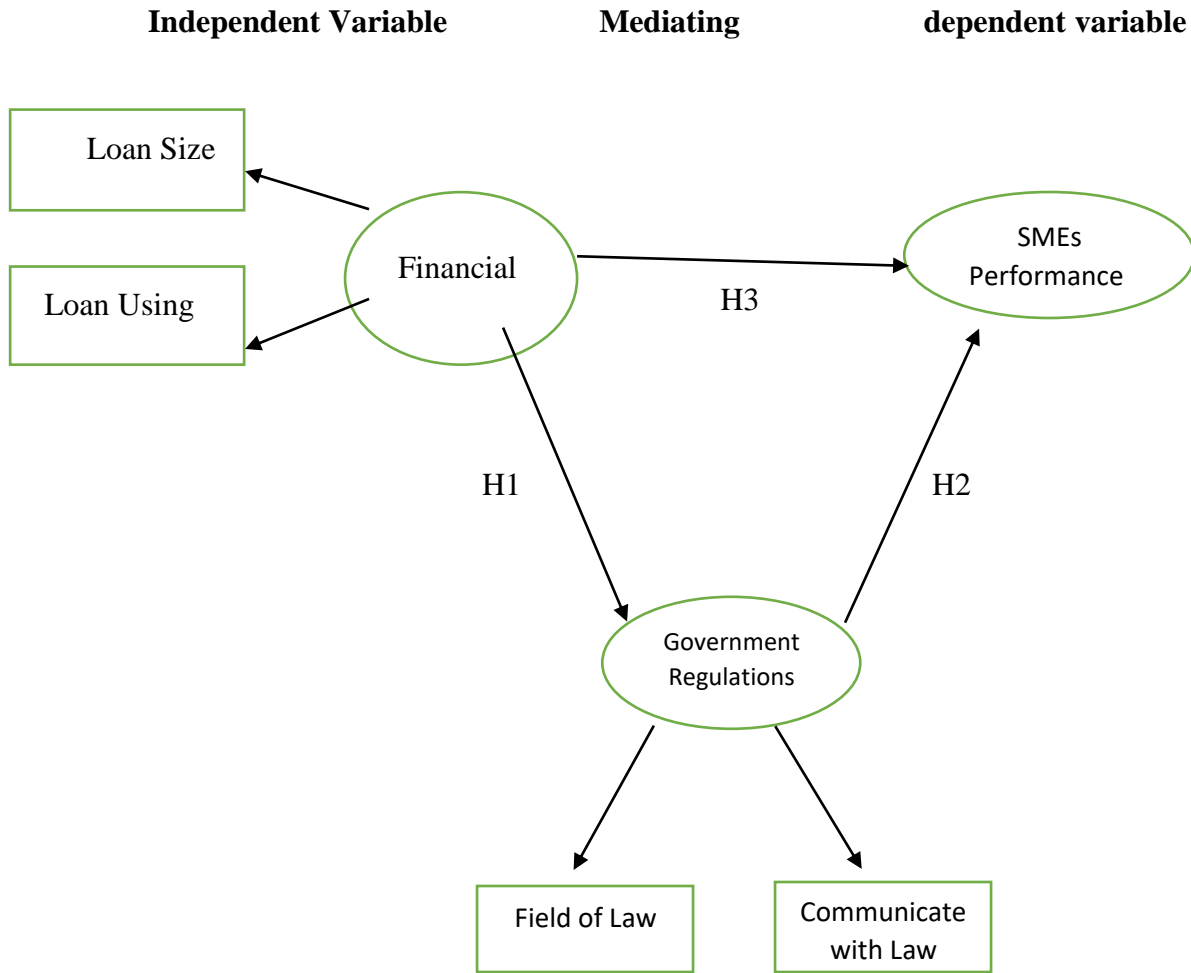


Figure 1 Conceptual Framework and Hypotheses Model

#### Hypotheses Research

H1: Financial Services have a significant and positive effect on government regulations;

H2: Government regulations have a significant and positive effect on SMEs performance;

H3: Financial Services have a significant and positive effect on SMEs performance; and

H4: Government regulation mediates the relationship between financial services and SMEs performance.

## Methodology and Analysis

### 2.9.1 Sample Selection

Data was collected via a self-administrated questionnaire using convenience sampling. Accordingly, the study utilized stratified random sampling and randomly drew upon manufacturing companies due to the fact that the stratified random sampling method is widely used in the previous studies (Sathye, 1999; Pikkarainen et al., 2004).

### Descriptive Statistics for Variables

Mean and standard deviation (S.D) of the measurement scales was calculated. This study used a five-point likert scale ranging from “1” strongly disagree to “5” strongly agree.

Table 2 shows that the highest mean was SMEs performance with 3.510 out of a maximum 5, making up 70%. However, the field of law had the lowest mean with 3.184, making up 63%. In addition, loan using and communicate with law had a mean with 3.34, making up 66% as well as loan size and SMEs performance had 3.458 and 3.510, respectively. Also the mean of these values (overall mean) was 3.368 out of 5 or 67%. Furthermore, the standard deviations (S.D) for all variables ranged from 1.002 to 1.143 which reflected existence of considerable acceptable variability within the data set. Table 2 presents descriptive statistics for all constructs.

Table 2 Descriptive Statistics for all Constructs

Demission	Sub-Demission	Code	Number of items	Mean	S.D.
<b>Financial Services (FIN)</b>	Loan Size	LS	4	3.4585	1.11232
	Loan Using	LU	4	3.3291	1.14129
Government Regulation (GR)	Field of Law	FL	9	3.1843	1.05509
	Communicate with Law	CL	6	3.3300	1.00209
SMEs Performance	Performance	PE	5	3.5105	1.02684
Overall			28	3.368	1.1031



#### 4.7- Reliability and Composite Reliability

After examining the descriptive characteristics of respondents' demographic data, it was essential to examine the way respondents answered the survey questions related to the constructs presented in the conceptual framework. The term "reliability" in this study refers to the extent to which the measurement produces the same results with repeated measurement (Malhotra & Brik, 2003). The measurement of reliability provides internal consistency in the measurement of variables (Kim & Cha, 2002). The instrument's reliability is revealed to be more than 0.60 which is acceptable (Hair et al., 2006; Sekaran, 2003). This study conducted two types of reliability tests. The first type is Cronbach's alpha via the use of SPSS 22.0 and the second type is composite reliability (CR). The current study indicates the reliability (Cronbach's alpha) values varied from 0.787 to 0.908 while composite reliability (CR) values ranged from 0.789 to 0.906. Therefore, all values for reliability and composite reliability constructs were greater than the recommended value of above 0.60. Table 3 presents reliability (Cronbach's alpha) and composite reliability for the constructs.

Table 3 Cronbach's Alpha and Composite Reliability for the Constructs

Demission	Sub-Demission	Code	Cronbach's alpha	Composite Reliability
<b>Financial Services (FIN)</b>	Loan Size	LS	0.802	0.810
	Loan Using	LU	0.853	0.896
Government Regulation (GR)	Field of Law	FL	0.908	0.906
	Communicate with Low	CL	0.821	0.793
Performance	Performance	PE	0.787	0.789
Overall			0.890	0.860

#### Confirmatory Factor Analysis (CFA)

The first purpose of conducting CFA was to exclude any scale item or latent factor that was not well fit and in order to create the best possible measurement model. The second purpose of performing CFA was to test reliability, validity and unidimensionality of multi-item measures.

CFA analysis method was used to examine convergent validity for each variable. In addition, CFA contains several functions; these functions include testing the loading factors in every construct, estimating the measurement error in framework and confirming the instrument themselves related to the latent variables. Therefore, CFA is deployed to determine the set of factors and construct loading items confirm the requirement that is needed to measure (Bollen, 1989).

#### **2.9.4 Measurement Model**

As mentioned earlier, CFA analysis method was employed to test convergent validity for each variable. Moreover, the following sections explain CFA for exogenous and endogenous variables together. This study examines two exogenous variables: financial and government regulations on one endogenous variable which is employees performance among SMEs in Libya.

The final model showed the ratio of the chi-square to the degree of freedom was 1.597, less than 0.5 and RMSR was 0.083 less than 0.10 indicative of a good model. The RMSEA was 0.039, less than 0.08 which is considered a good fit (Hair, et al, 2006). Also other measures indicated the GOF of the model to the data (CFI = 0.965, IFI= 0.965, TLI= 0.960, GFI = 0.913) which demonstrated that the model employed in this study was a good fit to data (Schumacker & Lomax, 2004 and Lee et al., 2007). Table 3 presents the resulting statistical estimate of measurement model for exogenous and endogenous variables, whereas Figure 2 shows measurement model for exogenous and endogenous variables.

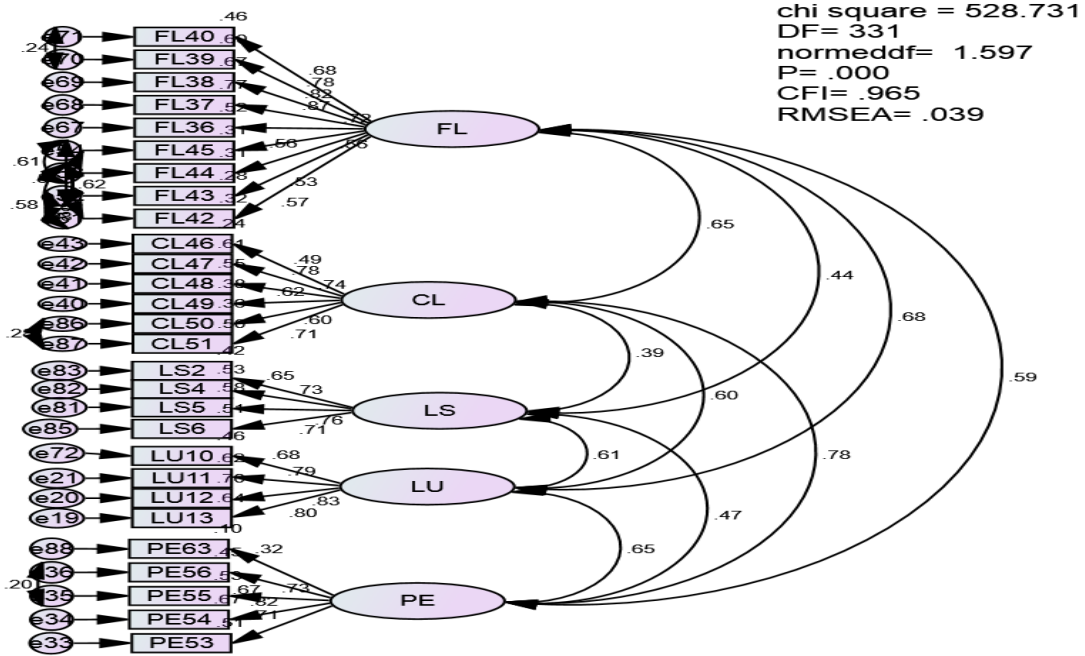


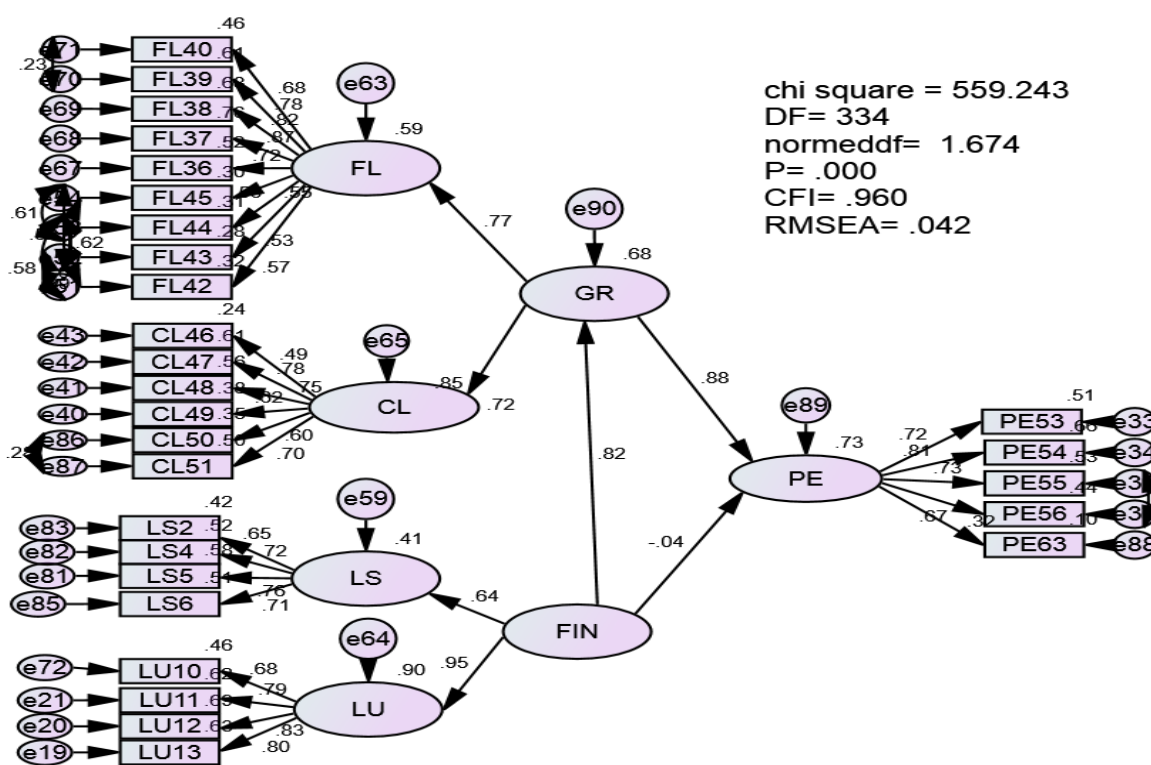
Figure 1 Measurement Model for Variables

**Structural Model**

This study was conducted to test four direct hypotheses as discussed earlier. The hypothesized model includes financial and non-financial performance on one endogenous variable which is employees' performance among SMEs in Libya.

The aim of the hypothesized model is to test the relationship among constructs as assessed by GOF such as NFI ratio, IFI, TLI, CFI, NFI RMSEA, and GFI. They were carried out to test if the constructs fit the data.

Table 5 below shows the results of the structural model. The value for the normed  $\chi^2$  was 1.674. Furthermore, other results were as follows: (CFI = 0.960), (IFI = 0.960), (TLI = 0.955)



and (GFI = 0.909). They fit the data well. It was also found out that RMSEA was 0.066, less than 0.08, and RMR was 0.097, less than 0.10. Figure 3 and Table 4 both indicate the structural model (Goodness of Fit Indices).

**Figure 3 Structural Model for Variables**

**Table 4 The Results of Measurement and Structural Model (Goodness-of-Fit Indices)**

Indicators	Measurement Model	Structural Model	Acceptable Values
<u>Absolute fit indices</u>			
Normed $\chi^2$	1.597	0.960	Less than 5
<u>Incremental Fit Indices</u>			
CFI	0.965	0.960	More than 0.90
IFI	0.965	0.955	More than 0.90
TLI	0.960	0.909	More than 0.90
GFI	0.913		
<u>Parsimonious Fit Indices</u>			
RMSEA	0.039	0.042	Less than 0.08
P-value	0.000	0.000	

Source: Author's computation (2014).

**Squared Multiple Correlation (R<sup>2</sup>) of Structural Model**

The squared multiple correlation or R<sup>2</sup> of structural model on organization performance and government regulation was 0.73 and 0.68. Hence, the result displayed that all exogenous variables (financial services and government regulation) explained 73 percent of the variance in

organization performance and financial services, while 68 percent of the variance in government regulation as shown in Figure 3 above.

### Direct Hypotheses Results

The findings of empirical study showed three direct hypotheses related to the aim of this study. Two hypotheses of the hem were accepted and one was unaccepted. Table 6 below shows direct hypotheses testing results of the structural model.

The empirical study tested four main hypotheses related to the aim of the study. Based on the results in Table 4, government regulations is the first factor influencing performance of SMEs in Libya. The result indicated government regulations had a strongly significant and positive impact on SMEs performance in Libya ( $\beta = 0.660$ ; C.R = 6.405 ; P = 0.000), so H2 is supported. This is followed by financial services which had a significant and positive effect on government regulations, thus H1 is supported ( $\beta = 0.305$ ; C.R = 5.488; P = 0.000). However, the study findings revealed that financial services had insignificant on SMEs performance in Libya ( $\beta = -0.036$ ; C.R = -0.238; P = 0.812). Table 5 presents that the direct hypotheses results.

Table 5: Hypotheses Testing Results of Structural Model

Hypotheses	Exogenous Variables	Endogenous Variable	Std. Estimates	C.R	P-Value	Result
H1	FIN	GR	0.825	7.901	0.000	Accepted
H2	GR	PE	0.884	8.240	0.000	Accepted
H3	FIN	PE	-0.036	-0.238	0.812	Not Accepted

### Indirect hypothesis results

#### The Mediation Role of Government Regulation for the Relationship between Financial Services and SMEs Performance.

The results mentioned in the Table 4.31 suggest that financial services had an impact on government regulation and the standardised coefficient was 0.825. Also, this finding showed the direct impact of government regulations on SMEs performance, and the standardised coefficient was 0.884. So, based on the direct relationship between financial services and SMEs performance

(-0.036), the mediation effect of government regulation examined the relationship of financial services and SMEs performance, and the finding that showed in Table 4.21 reveals a strongly significant relationship and financial services indirectly influence SMEs performance through their impact on government regulations with coefficient 0.729. Therefore, the results of the study indicated that government regulation is full mediation between perceived environmental government regulation and SMEs performance as shown in Table 6.

Table 6 Structural parameters of the mediation role of Government regulations for the Relationship financial services and SMEs Performance (PE)

	Model	Direct effect	Indirect effect	Significant of indirect effect	Mediation type
H1	Financial Services ---> Government Regulation	0.825	---	P=.000 significant	Full Meditation
H2	Government Regulation ----> SMEs Performance	0.884	---	P=.000 Significant	
H3 and H4	Financial Services ---> SMEs Performance Via Government Regulation	-0.036	0.729	P=.000 More than.08 significant	

**Source: the mediator effect exceeds the value 0.08 is significant (Hair et al., 2006).**

## Discussion

The first research objective aims at identifying the relationship between financial services, government regulations and performance of SMEs in Libya and the mediating role of government regulations between financial services and SMEs performance in Libya.

This study examines the impact of the financial services on both government regulations and SMEs performance in Libya. It is also to explore the mediating effects of government regulations on the relationship between financial services and SMEs performance. This study obtained evidence that the financial services has a zero direct effect on SMEs performance but it has direct effects on government regulations as well as full mediation for government regulations on the relationship between financial services and SMEs performance in Libya. The results of this study have demonstrated some implications. It proved that the overall SMEs' performance and high level productivity can be achieved if the government regulations are favorable. This study highlighted the importance to assist SMEs owners and operators to understand the current challenges and enable them to focus on the relevant ones in an attempt to enhance their growth

and performance. The study also will contribute to enhancing knowledge by proposing a research model for SME financing, which will serve as a roadmap for students and researchers in SMEs finance and management. Thus, at the end of this study, we hope that the results will pave the way for further research in the subject matter of SMEs.

## **. Conclusion**

The economic challenges facing countries require maintaining the presence and growth of the SME sector that Libya is fulfilling because of it a driving force for economic growth. Programmers have appropriately developed private sector development policies. The focus was on developing the sector within several strategies, such as the poverty reduction strategy "To enhance the resilience of poor, vulnerable, marginalized and at-risk families" The main challenge is to increase investments in high-value sectors in order to create more jobs. With the above problems mentioned previously, we need to focus on many writings in the development of SMEs in Libya, and suggests the framework of this study focus on the performance of small and medium enterprises in Libya, which focuses on two dimensions financial services provided by the banks in Libya, and government regulation.

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