



## **COST OF STAFF WELFARE AND FINANCIAL PERFORMANCE OF LISTED PHARMACEUTICAL MANUFACTURING FIRMS IN NIGERIA**

**Giami Isaac Baribefe and Iwo Sotonye Richard**

Department of Accountancy, Port Harcourt Polytechnic, Rumuola, Rivers State, Nigeria

Email: [giamibaribefe@gmail.com](mailto:giamibaribefe@gmail.com)

### **Cite this article:**

Giami I.B., Iwo S.R. (2021), Cost of Staff Welfare and Financial Performance of Listed Pharmaceutical Manufacturing Firms in Nigeria. International Journal of Entrepreneurship and Business Innovation 4(1), 82-95. DOI: 10.52589/IJEBOHEWMBET.

### **Manuscript History**

Received: 16 Aug 2021

Accepted: 17 Sept 2021

Published: 27 Sept 2021

### **Copyright** © 2020 The Author(s).

This is an Open Access article distributed under the terms of Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0), which permits anyone to share, use, reproduce and redistribute in any medium, provided the original author and source are credited.

**ABSTRACT:** *This paper investigated the relationship between the cost of staff welfare and the financial performance of listed manufacturing pharmaceutical firms in Nigeria from the year 2011 to 2019. Cost of staff welfare was used as a dependent variable while growth in sales and return on assets were used as the independent variables. Secondary data was obtained from the published annual reports of the firms understudied. Data were analyzed using descriptive statistics including, mean, standard deviations and inferential statistical methods including correlation coefficient and Anova. Two hypotheses were tested with the aid of linear regression using SPSS pack version 22 as the tool for analysis. The research findings showed a significant positive correlation and statistically significant positive relationship between the cost of staff welfare and both growth in sales volume and return on assets respectively. Therefore, it was recommended that pharmaceutical firms should continue to increase the welfare needs of the staff as at when due since this contributes to the firm's growth in sales volume and return on assets positively.*

**KEYWORDS:** Cost of Staff Welfare, Financial Performance, Return on Assets and Growth in Sales



## INTRODUCTION

In the era of globalization, the market economy, hyper-competition and the rapidly changing environment, the success of an organization depends on the employees' performance. Employees' performance is an essential requirement if an organization is to maintain its efforts towards the realization of predesigned goals (Dessler, 2008).

According to Humana Resource Philosophy, employees are an important business resource that must be managed carefully in order to maximize return on investment and achieve business objectives. Organizations have to provide various benefits to ensure employees welfare is taken care of. In fact, in this age and era, it is almost impossible to operate an organization without offering a basic set of benefits for employees' welfare. Organizations should understand that a healthy and stress-free worker is a major asset to the organization and should therefore provide welfare services and programmes (Armstrong 2004).

Armstrong (2004) states that employee welfare programs rest mainly on the abstract ground of social responsibility on organizations for those who work for them. Organizations need highly performing employees in order to meet their goals to deliver the products and services they specialize in and hence, achieve a competitive advantage. Organizations provide welfare facilities to their employees to keep their motivation levels high. The basic purpose of employee welfare is to enrich the life of employees and to keep them happy and conducted. Welfare measures may be both statutory and non-statutory; laws require the employer to extend certain benefits to employees in addition to wages or salaries. Historically, employee welfare services were meant to reduce absenteeism and time off due to illness. However, today they have taken a broader scope and they include almost all aspects that relate to an employee's wellness and personal development in the workplace (Manzini and Gwandure, 2011).

It is on the strength of the above that this study investigated the relationship between the cost of staff welfare and financial performance of listed pharmaceutical manufacturing firms in Nigeria.

### Objective of the study

The main objective of the study was to examine the relationship between the cost of staff welfare and the financial performance of listed pharmaceutical manufacturing firms in Nigeria. Specific objectives are:

To examine the relationship between the cost of staff welfare and growth in sales.

To examine the relationship between the cost of staff welfare and return on assets.

### Concept of Performance

Organizational Performance generally, could be regarded as one of the key determinant factors that are widely used in measuring the success or failure of organizations. Although several research works have been carried out on performance-related issues as it affects organizations or firms but its definition has been challenging to researchers. According to Roger and Wright (1998), performance is probably the most widely used dependent variable in organizational research today, yet it remains one of the vaguest and loosely defined constructs. They further confirmed that the struggle to establish a meaning for performance has been ongoing for many



years and it is not limited to the field of strategic Human Resource Management (SHRM). Gavrea, et al. (2011), confirmed the fact that defining organizational performance has been very challenging to researchers because of its many meanings. However, they traced the history of the attempted definitions of performance as noted by other researchers between the 1950s and 2006. In the 50s organizational performance was defined by Georgopolis and Tannebaman (1957) as the extent to which organizations, viewed as social system fulfilled their objectives. In this era, performance evaluation focused on work, people and organizational structures. Between the 60s and 70s, organizations explored new ways to evaluate their performance. Thus performance was defined as an organization's ability to exploit its environment for accessing and using the limited resources (Yuchthman and Seashore, 1967). Also in the years between the 80s and 90s, identifying organizations' objectives became more complex than it was originally considered. This made managers consider an organization as a successful one if such organization can accomplish its goal (effectiveness) using minimum resources (efficiency).

Performance is the process of functioning in a stipulated predetermined manner and achieving the expected results within its framework. Performance can measure in terms of effectiveness and efficiency, personal data such as measures of accidents, turnover, absence and tardiness (Ratti, 2012).

Profitability ratio based on Sutrisno (2001) can be measured through some indicators, namely: Net Profit Margin (NPM), Return on Asset (ROA), Return on Equity (ROE), and Earning Per Share (EPS). However, to limit the problems in this research, the author will only analyze two variables, namely: Return on Asset and growth in sales.

**Return on Asset (ROA):** this is used to measure the company capability to create profits using total owned assets by a company in the future, higher ROA of a company performance will lead to a more effective company ( Sutrisno, 2001). So that it can be seen as a positive sign for any investors to invest their stock in the company that will affect the increased company stock in the capital market. Return on Asset is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its asset to generate earnings.

$$\text{ROA} = \frac{\text{Net Profit}}{\text{Total assets}}$$

## THEORETICAL REVIEW

### Human Capital Theory

This study was based on the Human Capital theory proposed by Schultz (1961) and extensively developed by Becker (1964). The theory has its root in labour economics which is a branch of economics that focuses on the general workforce in quantitative terms. According to the theory, Human capital theory contends that education or training raises the productivity of workers by imparting useful knowledge and skills, thus raising workers' future income through an increase in their lifetime earnings. The theory postulates that expenditure on education or training and development is costly, and should be considered an investment since it is undertaken to increase personal incomes. The human capital approach is used to explain or support occupational wage



differential. However, the position of this study is that education or training and development will not only increase employee personal income, it will also serve as a means of achieving corporate competitive advantage which reflects ultimately in organizational performance. The theory believes that education is an investment since it enhances productivity. It, therefore, holds that the competence, knowledge, abilities and skills of an organization's workforce contribute to its competitive advantage.

### **Functional Theory of Labour Welfare**

The functional theory of labour is also called the Efficiency Theory. This theory states that a fully mentally and physically satisfied worker is the most efficient. Employee welfare is a means to keep industrial workers content so they may work effectively. In this theory, welfare work is used as a means to secure, preserve and develop the efficiency and productivity of labour. This theory suggests that welfare work can be used as a means of securing, preserving and developing the efficiency and productivity of labour (Manju & Mishra, 2007). The theory states that if an employer takes good care of his workforce, they will tend to be more efficient by improving production and that programmes for housing, education, training, provision of balanced diet and family planning measures are important for labour welfare as they increase the efficiency of workers in underdeveloped countries. The theory is helpful in understanding the characteristics of the labour force as reflected in the contemporary support for labour and it worked well if the employer and employees have the same goal of achieving higher production through better welfare. The theory is adopted in the study since welfare services affect the performance of any labour force. It is obvious that if an employer takes good care of his workers, they will tend to become more efficient. According to this theory, the employer has an obligation or duty towards its employees to look after their welfare. The constitution of India also emphasizes this aspect of labour welfare. Impact on Efficiency plays an important role in welfare services and is based on the relationship between welfare and efficiency, though it is difficult to measure this relationship. Programs for housing, education and training, the provision of a balanced diet and family planning measures are some of the important programs of labour welfare that increases the efficiency of the workers, especially in underdeveloped or developing countries. The development of the human personality is given here as the goal of industrial welfare, which, according to this principle, should counteract the baneful effects of the industrial system. Therefore, it is necessary to implement labour welfare services. Both inside and outside the factory, that is, provide intra-mural and extra-mural labour welfare services. The totality of Welfare emphasizes that the concept of labour welfare must spread throughout the hierarchy of an organization. Employees at all levels must accept that this total concept of labour welfare program will never really get off the ground.

### **Empirical Review**

Khan and Ali (2011) in an article on the human resource disclosure practice of top Bangladesh companies; the study analyzed the disclosure practice of the sampled companies. The study investigated the level of human resources accounting disclosure around top leading companies in developing countries. The study used the content analysis method with a sample of 52 companies and for a period of 3 years. The data collected from the top manufacturing companies and service companies listed on the Dhaka Stock Exchange, the method of selection was based on the market capitalization, the study also examined the trend of human resources accounting disclosure. The findings revealed that human resources accounting disclosure was not as low as reported. The studies concluded that most of the companies disclose information



on human capital in the area of employee training, the number of employees training, career development, opportunities that firms provide and employee recruiting policies.

Vafaei et al. (2011) examined human resource accounting disclosure practices in listed companies. The studies used listed companies in Britain, Australia, Hong Kong and Singapore as sample and employee content analysis to examine the content in their annual reports. The studies aimed at exploring the extent of human resources-related information disclosure as contained in companies' annual reports and the extent to which the information disclosed contributed to the core value relevance of earnings and equity of entities. The results revealed that human resources information is significantly related to the market price of the companies, that is, human resources accounting disclosure is a value relevant in companies in two of the four countries and non-traditional sectors.

Micah et al. (2012) did a study on firm's performance and human capital resource accounting disclosure in Nigeria using descriptive, correlation and regression statistical techniques in their analyses and the result revealed that the combined effect of firm financial performance accounted for 75.9% of the valuation in human resource accounting disclosure with an F-ratio of 3.581 being significant at a 5% confidence level. The result shows a positive correlation between Return on Equity and Human resource accounting disclosure. The implication is that it enhances external reputation, appears legitimate in the eye of the public and avoids costs for not being legitimate amongst others.

Okoye (2015), examined the impact of human resource accounting on the capital valuation of Banks listed on the Nigerian stock exchange from 2008 to 2012. Human resource accounting was proxy by investment capital turnover (ICT) and asset turnover (AT) while the dependent variable was measured by return on investment (ROI), return on asset (ROA) and earnings per share (EPS). The study used secondary data gathered from the banks' annual reports and was analyzed using SPSS version 22 to regress the data. The findings revealed that a positive and significant relationship exists between human resource accounting and the corporate valuation of Nigerian banks. The study, therefore, recommended that human resource capital be included in the financial position of banks to aid investment decisions. It was also recommended that human resource identification and measurement enhance the valuation of human capital, ensure a higher degree of utility to stakeholders, uniformity in disclosures and will allow a reliable comparison of human capital values.

Okpako et al. (2014), studied human resource accounting and a firm's performance. Seven firms from both construction and manufacturing were selected. Cost of training and development, cost of welfare, safety and health were used as proxies for human resources while performance was measured by return on equity. They use multiple regression analysis and there is a clear indication that human resource accounting has a significant contribution to firm performance. In other words, human resource accounting variables impacted positively the level of firm performance. By implication, the findings as a whole suggest that a positive relationship exists between the firms' human resource accounting practices and firm growth achievements.

Enofe et al. (2013), examined the relationship between firms' financial performance and human resources accounting disclosures on one hand, and the differences in human resources accounting disclosures reporting level between the financial sector and non-financial sector companies quoted in the Nigerian Stock Exchange. They made use of secondary sources of



data in eliciting the required information needed for their work. Their sample size consisted of fifty (50) listed firms randomly drawn from all sectors in Nigeria. Multiple Regressions was used to analyze the possible relationship between firm financial performance and Human resource Accounting Disclosure in Nigeria, using the statistical package for social science (SPSS) version 15.0. The study found out that a positive relationship exists between the financial performance of a company and its level of Human Resource Accounting Disclosure. The study also indicates that financial companies are disclosing human resources accounting information more than non-financial companies and that company's profitability positively influences companies to report the human resources accounting information in their annual report.

Ifurueze et al. (2013), examined the relationship between the aggregated cost of human resources and organizational profitability on one hand and the effect of the disaggregated cost of human resources on organization profitability. Their data was from an internal source using a structured information card and annual financial report. Regression analysis was used. Their findings show that there is a positive relationship between profitability and human resource cost and that changes in profitability can be explained when the expenditures on the human resource are segregated into revenue expenditure and capital expenditure. Their study recommended amongst others, that BETA NIG PLC should imbibe the culture of capitalizing and reporting all investment on the human resource that improves the quality and productivity.

Onyekwelu et al. (2015), also examine the Impact of Human Capital Accounting (HCA) on financial performance and market valuation using four publicly quoted companies (banks) in Nigeria. They presented a comparative analysis between the current accounting practice of corporate valuation (net worth) and what it should be if investments on human capital are treated as assets, capitalized and amortized over the useful life span of the assets. Data for their study were sourced through a questionnaire that was administered to randomly selected respondents of accountants of the management cadre. Secondary data were sourced from the annual financial statements of five selected firms, relevant textbooks and the internet. Data were analyzed using percentages and Chi-Square statistical test. Their study reveals among others, that there is a significant increase in firms' net worths when investments on human capital are treated as assets and capitalized as against the current practice where such expenditures are treated as mere revenue expenses, thereby leading to gross undervaluation of firms' Statement of Financial Position (Balance Sheet) and the Income Statement (Profit and Loss Account). They recommended that investment in human capital should be treated as an asset and so amortized over the expected period of service while the current practice of writing off the annual investment on human capital from the year's income statement should be discouraged as the practice grossly undervalues firms. Their submission was relevant to regulatory bodies such as the Financial Reporting Council of Nigeria, SEC, CBN, NDIC and so on are implored to make laws that will compel quoted firms to compulsorily integrate HCA in their financial reports.



## MATERIAL AND METHODS

The design for this study is an ex-post factor design. The population for this study includes all the pharmaceutical manufacturing companies quoted on the Nigeria stock exchange, however, only five that have their annual reports on the Nigeria stock exchange were selected. To test the hypotheses, SPSS version 22 pack was used to run linear regressions analysis at a 5% significance level. To ascertain the level of significance of the model in explaining the relationship between the variables, analysis of variance (ANOVA) was used.

Therefore the regression model for this study is as follows:

$$FP = f ( SWF)$$

Where,

FP = Financial performance (GSV and ROA)

Therefore,

$$GSV = f (SWF)$$

$$ROA = f (SWF)$$

The above equation is therefore further modified into econometrics form by adding constant term ( $\beta$ ) and error term ( $\epsilon$ ) in the model below:

$$FP = f (SWF)$$

$$FP = \beta_0 + \beta_1 + \beta_2 + \epsilon$$

$$GSV = \beta_0 + \beta_1 SWF + \epsilon \dots\dots\dots (1)$$

$$ROA = \beta_0 + \beta_2 SWF + \epsilon \dots\dots\dots (2)$$

FP = Financial Performance

ROA = Return on Assets

GSV = Growth in sales volume

SWF = Staff welfare

$\epsilon$  = error term

$\beta_0$  = intercept

$\beta_0$  to  $\beta_2$  = coefficient of the predictor variable



## DATA PRESENTATION, ANALYSIS AND RESULTS

**Table 1: Average of both predictor and criterion variables**

YEAR	SWF	GSV	ROA
2019	95471.00	-.08	.03
2018	95374.00	.07	.06
2017	109456.00	.23	-.01
2016	53756.00	.02	.00
2015	87968.00	-.24	.04
2014	60429.00	.10	.02
2013	69904.00	.09	.04
2012	111255.00	.18	.09
2011	71162.00	.11	.55

Source: SPSS version 22

The above table showed the average of both the predictor variables and criterion variables for the period from 2011 to 2019. The predictor variables were; staff salaries (SSL), staff welfare (SWF) and staff training and development (ST&D) while the criterion variables were growth in sales volume (GSV) and return on asset (ROA).

**Table 2: Data in log 10**

Years	Log10SWF	Log10GSV	Log10ROA
2019	4.98	0	-1.59
2018	4.98	-1.15	-1.24
2017	5.04	-.65	0
2016	4.73	-1.74	-2.40
2015	4.94	0	-1.42
2014	4.78	-1.01	-1.80
2013	4.84	-1.05	-1.36
2012	5.05	-.75	-1.05
2011	4.85	-.97	-.26

Source: SPSS version 22.

In other to bring the data to the same form, they were transformed to base 10 logarithms. This was shown in table 2 above. Both the dependent and the independent variables were transformed. The transformed data were then analyzed using the SPSS version 22.



**Table 3: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
SWF	9	53756.00	111255.00	83863.8889	20920.01435
GSV	9	-.24	.23	.0509	.14139
ROA	9	-.01	.55	.0909	.17625
Valid N (listwise)	9				

Source: SPSS version 22.

The results above in Table 3 reflected the descriptive features of the study variables. It showed that staff welfare (SWF) have an average of 83863.8889 for the period concerned. Consequently, the standard deviation is 20920.01435, indicating about 24% volatility. This implied that it can also be easily predictable.

Descriptive statistics of the variables are presented using mean, standard deviation as well as the results from the correlations and regression analyses.

### Test of hypotheses

#### Hypothesis One

H0: There is no significant relationship between the cost of staff welfare and growth in sales volume?

H1: There is a significant relationship between the cost of staff welfare and growth in sales volume?

**Table 4: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	-28.227	9.179		-3.075	.054
Log10SWF	3.050	.582	1.085	5.242	.014

a. Dependent Variable: Log10GSV

Source: SPSS version 22



The result of the regressions in Table 4 above showed that cost of staff welfare (SWF) has a significant influence on the return on assets of listed pharmaceutical manufacturing firms in Nigeria. This is so since the t-value is 5.242 and the p-value is less than 5% ( $p < 0.05$ ) level of significance. The p-value indicates that the model is significant therefore, the study rejects the null hypothesis: H<sub>0</sub>: staff welfare has no relationship with growth in sales volume of pharmaceutical manufacturing firms in Nigeria. Consequently, the alternate hypothesis is accepted indicating that there is a positive and significant relationship between the cost of staff welfare and growth in sales volume of listed pharmaceutical manufacturing firms in Nigeria.

This result implies that the management of listed pharmaceutical firms has more value for their staff welfare. It is believed according to the functional theory of labour welfare that a healthy, fully mentally and physically satisfied workforce is the most efficient. Management, therefore, can continue to increase the welfare packages of their staff. This result is in line with the studies of Barriger et al (2005), Sunil et al (2018), Armstrong (2004) and Ogbodo et al (2016).

### Hypothesis Two

H<sub>0</sub>: There is no significant relationship between cost of staff welfare and return on assets?

H<sub>1</sub>: There is a significant relationship between cost of staff welfare and return on assets?

**Table 5: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	5.617	16.964		.331	.757
Log10SW F	4.356	1.189	.776	3.665	.021

a. Dependent Variable: Log10ROA

Source: SPSS version 22

The result of the regressions in Table 5 above showed that cost of staff welfare (SWF) has a significant influence on the return on assets of listed pharmaceutical manufacturing firms in Nigeria. This is so since the t-value is 3.665 and the p-value of .021 is less than 5% ( $p < 0.05$ ) level of significance. The p-value indicates that the model is significant, therefore, the study rejected the null hypothesis: H<sub>0</sub>: staff welfare has no relationship with return on assets of pharmaceutical manufacturing firms in Nigeria. Consequently, the alternate hypothesis was accepted, indicating that there is a positive and significant relationship between cost of staff welfare and the return on assets of listed pharmaceutical manufacturing firms in Nigeria.



## CONCLUSION

The results also showed that the cost of staff welfare has a significant and positive relationship with return on asset and growth in sales volume of pharmaceutical manufacturing firms in Nigeria.

Generally, it was concluded that human resource accounting has a significant and positive effect on the financial performance of listed pharmaceutical manufacturing firms in Nigeria within the period x-rayed.

## RECOMMENDATIONS

In other to have improved financial performance in listed pharmaceutical manufacturing firms in Nigeria, we, therefore, recommended the following:

1. Management of Pharmaceutical manufacturing firms should pay attention to the unnecessary increase in salaries of idol staff who are not contributing significantly to both growths in sales volume and return on assets.
2. The study further recommended that management of pharmaceutical firms can continue to increase staff welfare since it contributes to growth in sales and return on assets of the firms' performance positively.

## REFERENCES

- Armstrong, M. (2013). A handbook of human resource management practice, 9th Ed. Cambrian Printers Ltd.
- Becker, G. S. (2003). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago Press.
- Dessler, G. (2008). Human resource management. 11<sup>th</sup> ed. Pearson Prentice Hall.
- Edom, G.O., Ina E.U. & Adanma E.S. (2015). The impact of human resource accounting on the profitability of firms: a study of Access Bank Nigeria plc. *European Journal of Accounting, Auditing and Finance Research*, 3(7) 72-90.
- Enofe, A.O.; Mgbame, C. & Ovie, S.O. (2013). Human resources accounting disclosures in Nigeria quoted firms. *Research Journal of Finance and Accounting*, 4,(3)13-23.
- Gavrea, I., and Stegorean, W. (2011). Determinants of organizational performance: The case study of Romania. *Management and Marketing Challenges for the Knowledge Society*, 6 (2)285-300.
- Ifurueze, M.S., Odesa, J.O., & Ifurueze P.C. (2013). Impact of Aggregated Cost of Human Resources on Profitability: An Empirical Study. *Journal of Business & Management*, 3(2), 30-43.
- Khan, H. & Ali, M. (2011). An empirical investigation and users' perception s on intellectual capital reporting in banks: Evidence from Bangladesh. *Journal of Human Resources Costing and Accounting*, 14(1), 48-69.
- Manju, B. & Mishra, S. (2007). The principles for successful implementation of labour welfare activities. [http:// tesioline.com](http://tesioline.com).



- Micah L.C., Ofurum C.O and Ihendinihu J.U. (2012). Firm's financial performance and human resource accounting disclosure in Nigeria. *International journal of business and management*. (7) 4.
- Okoye, P.V.C., Okoye, J.N., & Amahalu, N.N. (2015). The impact of human resource accounting on corporate valuation of Banks listed on the Nigerian stock exchange. *Fed poly oko & Shada University India school of Business multidisciplinary journal*, 4 (2) 182-210.
- Okpako, P. O., Atube, E.N., & Olufawoye, O.H. (2014). Human Resource Accounting and Firm Performance. *Global Institute for Research & Education*, 3(4), 230-235.
- Onyekwelu, U. L., Osisioma, B. C., & Ugwuanyi, U. B. (2015). Impact of human capital accounting on corporate financial performance – A study of selected banks in Nigeria. *European Journal of Accounting Auditing and Finance Research*, 3(5), 90-107.
- Ratti, M. (2012). Analytical study of Human Resource Accounting practices. *Journal of Management*, 5(2), 37-45.
- Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, 51(1), 1-17.
- Sutrisno (2010). Effects of Cash Flow, Fundamental Factors and Interest Rate on Corporate Value in Manufacturing Industry in Indonesian Stock Exchange. *Solution Journal*, 5(2), 10-15.
- Vafaei, A.; Taylor, D. & Ahmed, K. (2011). The value relevance of human resources capital. *Journal of Accounting and Finance*, 5(4), 211-223.



## APPENDIX

### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Log10SWF <sup>b</sup>	.	Enter

a. Dependent Variable: Log10GSV

b. All requested variables entered.

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.951 <sup>a</sup>	.905	.810	.15448

a. Predictors: (Constant), Log10SWF

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.681	3	.227	9.516	.048 <sup>b</sup>
	Residual	.072	3	.024		
	Total	.753	6			

a. Dependent Variable: Log10GSV

b. Predictors: (Constant), Log10SWF

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-28.227	9.179		-3.075	.054
	Log10SWF	3.050	.582	1.085	5.242	.014

a. Dependent Variable: Log10GSV

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Log10SWF <sup>b</sup>	.	Enter

a. Dependent Variable: Log10ROA

b. All requested variables entered.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.935 <sup>a</sup>	.874	.780	.28822

a. Predictors: (Constant), Log10SWF

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.315	3	.772	9.290	.028 <sup>b</sup>
	Residual	.332	4	.083		
	Total	2.648	7			

a. Dependent Variable: Log10ROA

b. Predictors: (Constant), Log10SWF

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.617	16.964		.331	.757
	Log10SWF	4.356	1.189	.776	3.665	.021

a. Dependent Variable: Log10ROA