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## RESEARCH ARTICLE

# EFFECT OF CORPORATE DIVERSIFICATION ON FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS IN RWANDA: A CASE STUDY OF SELECTED MANUFACTURING FIRMS

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**ABSTRACT**

The operating environment for business has become very volatile and dynamic following increased innovation and globalization. This has meant that organizations have to constantly be ready to develop and implement new strategies that would boost their competitiveness. Diversification is developing as one of the most important growth strategies adopted by firms to boost performance. Some firms that have adopted diversification strategies have succeeded while others have failed. The study sought to determine the effect of corporate diversification on the financial performance of manufacturing firms in Rwanda. To achieve this objective the study used a descriptive survey. A census approach was used, and secondary data was used for five years (2012-2016). The data was gathered from financial statements and records. Data analysis was done using a regression model. The study found that corporate diversification was positively related to financial performance of 15 selected manufacturing firms in Rwanda. Data analysis was done using a regression model. The study found that corporate diversification was positively related to financial performance of the manufacturing firms in Rwanda. Growth and firm size were found to be negatively related to financial performance of manufacturing firms. The correlation results were found to be weak but moderate between corporate diversification and financial performance of manufacturing firm. From the descriptive results, it was found that a few selected manufacturing firms had diversified their products. The mean value of the selected manufacturing firms that had diversified their products was 0.0209. This mean value shows that the level of corporate diversification is moderate. Firm size and financial performance was found to have a weak positive relationship which was represented by R= -.354. There was no relationship between growth of the firm and financial performance of manufacturing firms. From the model of coefficients, corporate diversification was found to be statistically significant in the model. This is because its p-value was lower than 5%. The results were as follows p=0.004. These finding are consistent with the hypothesis of the study which predicts a positive relationship between corporate diversification and financial performance of the selected manufacturing firms in Rwanda. Further, it was observed that firm size and growth of listed manufacturing firms were statistically insignificant. The results obtained were as follows p=0.007 and p=0.094. The study recommends that firms should offset the risk of doing business. Through expanding, a firm is not dependent on a limited number of products, locations, or markets in order to survive. A company may pursue this diversification in reaction to a change in the market. The study was conducted within a limited time and scope. The results and the conclusion drawn in this study cannot however, be used to make generalization of all the manufacturing firms operating in Rwanda.



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## INTRODUCTION

Corporate diversification has been significant issue in the modern business world. This issue has an impact on firm's financial performance. However, there is no agreement about the negative, positive or neutral impact due to the turbulent nature of the external environment. Mansi and Reeb (2012) indicate that firms in emerging market may be justified to have a wider scope because market failures are more prevalent in developing economies. Diversification provides benefits to managers that are unavailable to investors since they stand to gain when the firm accrues better returns from diversifying (Geringer, Tallman and Olsen, 2010). Diversification can also lead to the problem of moral hazard, the chance that people will alter behavior after entering into a contract as in a conflict of interest by providing insurance for managers who have invested in firm specific skills and have an interest in diversifying away a certain amount of firm specific risk and

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may look upon diversification as a form of compensation. Rajan, Servaes and Zingales (2000) elucidate that diversity assists a firm to build stability, when the firm concentrates too heavily on a single industry or product, it may risk volatility in revenue and resources as demand rises and falls. When the business stretches across many industries or categories, it may have more predictability. Ishak and Napier (2004) explains that a firm that wishes to succeed in diversification may have to spread out its business investments and costs; this may prevent the firm from putting adequate finances in products and cash cow-sectors this is because when the firm expands it needs experts or partners with whom to achieve success in newer, unproven areas. In reference toLins and Servaes (2011), the significance of diversification of unrelated businesses is to mitigate the risks involved in investing in one line of business. Strategic diversification of unrelated businesses provides a strategic fit to gain competitive advantage, and then use competitive advantage to achieve the desired shareholder value. The reasons for diversifying into unrelated businesses, hinge almost exclusively on opportunities for attractive financial gains (Ishak and Napier, 2016).

**Corporate Diversification**

Mansi and Reeb (2012) define corporate diversification as the process of a company expanding into different areas, such as industries and product lines. Companies typically do this in order to build the business. Delios and Beamish (2009) puts forth that diversification can involve expanding, revitalizing, or even saving a company. Most investment professionals agree that, although it does not guarantee against loss, diversification is the most important component of reaching long-range financial goals while minimizing risk. Rajan, Servaes and Zingales (2010) maintain that investors confront two main types of risk when investing that is systematic and unsystematic risks. Systematic risk is also called undiversifiable risk or market risk. Undiversifiable risk is associated with every firm. The causes of this form of risk are for example: things like inflation rates, exchange rates, political instability, war and interest rates. Geringer and Tallman (2000) argue that the other form of risk is diversifiable risk, this risk is also known as unsystematic risk and it is specific to a firm, the industry, market, economy or country; it can be reduced through diversification. The most common sources of unsystematic risk are business risk and financial risk. Thus, the aim is to invest in various assets so that they will not all be affected the same way by market events.

Mansi and Reeb (2012) outlined that corporate diversification can be categorized into four major categories of large companies. These four major categories are namely: single business, dominant business, related business, and unrelated business. The categorization can be based first on the specialization ratio (Rs), which expresses the proportion of a firm's revenues attributable to its largest single business in a given year and second on the related ratio (Rr), which expresses the proportion of a firm's revenues attributable to its largest group of related business. Specialized business diversification means that a company is basically committed to a single business expressed as ($Rs \geq 0.95$ and $Rr \geq 0.70$). According to Doaei and Anuar (2012) dominant business diversification refers to companies that diversified to only a limited extent from the single business ($0.70 \leq Rs < 0.95$ and $Rr \geq 0.70$). Related diversification of nonvertically diversified firms involves expansion into businesses related to the company's core activities ($Rs < 0.70$ and $Rr \geq 0.70$). Unrelated diversification of nonvertically diversified firms includes entry into businesses and markets unrelated to a company's previous activity ($Rs < 0.70$ and $Rr < 0.70$).

**Financial Performance**

Penman (2009) defines financial performance as the level of performance of a business over a specified period of time, expressed in terms of overall profits and losses during that time. Evaluating the financial performance of a business allows decision-makers to judge the results of business strategies and activities in objective monetary terms. A subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. According to Penman (2009) there are many different ways to measure financial performance, but all measures should be taken in aggregation. Some of the indicators of financial performance are return on equity, liquidity ratios, asset management ratios, profitability ratios, leverage ratios and market value ratios. Petersen and Kumar (2010) note that the other financial indicators of financial performance include: sales growth, return on investment, return on sales and earnings per share. The popular ratios that measure organizational performance can be summarized as profitability and growth: return on asset, return on investment, return on equity, return on sale, revenue growth, market shares, stock price, sales growth, liquidity and operational efficiency (Petersen & Kumar, 2010).

**Corporate Diversification on Financial Performance**

According to Denis, Denis and Yost (2012), theoretical arguments indicate that corporate diversification is associated with both costs and benefits to the firm which leads to financial performance of the firm. Potential costs of diversification include the use of larger discretionary resources to undertake value-decreasing investments, cross-subsidies that allow poorly performing segments to drain resources from better-performing segments, and misalignment of incentives between central and divisional managers. This highly contributes to financial performance of firms since the potential benefits of operating different lines of business leads to greater operating efficiency, fewer incentives to forgo positive net present value projects, greater debt capacity, and lower taxes (Jensen & Murphy, 2008). In reference to Jensen and Murphy (2008) corporate diversification reduces the cost of debt; similarly, aggregating business segments that have imperfectly correlated cash flow streams reduces the variability of earnings for the combined firm. Another set of agency-based theoretical and empirical arguments takes the opposite view: that corporate diversification increases the agency costs of debt. Diversified firms tend to increase significantly in size, since the level of managerial compensation is positively correlated with firm size which enhances firm performance. Berger and Ofek (2015) argue that larger firms become more complex, thus making monitoring harder. In addition; cross-subsidization between divisions' increases the firm risk and the probability of default.

Chakrabarti *et al*. (2009) examined the effect of corporate diversification on performance for some firms acting in stable period and economy shock. They did their research in six Asian countries between 1988 and 2003. They concluded that diversification has a negative effect on performance in more

developed institutional environments; although, in least developed environments there is an improving performance (Brammer &Pavelin, 2016).

### Statement of the problem

Most firms globally are now engaging in risk management in order to mitigate financial losses which may attract huge losses to the manufacturing firms. Diversification has received a lot of attention as one of the key strategies in risk reduction. Daud and Salamudin (2009) explained that most firms that have diversified their portfolios of assets perform better than organizations that invest and only rely in one line of business. Mansi and Reeb (2012) posit that in diversification, firms are more likely to manage and mitigate their risks because if one investment does not perform the other invests is more likely to perform since they may not be facing similar risks; in this case the firm does not suffer total loss. In Rwanda, manufacturing sector report (2012) provides that competition in manufacturing industries creates pressures on the product margins, manufacturing firms' starts to differentiate by complementing and enriching their initial product offerings with services. This attracts them to invest in unrelated lines of business in order to mitigate risks. Lins and Servaes (2011) contends that diversification of portfolio requires lots of plan and good effort in order to succeed in risk reduction, most firms are diversifying their functions into services, and this has led to additional growth in terms of revenue and profit.

Caper and Kotabe (2013), conducted a study on the effects of diversification on financial performance on German firms in the service industry. The results of the study showed that there was a positive relationship between diversification and performance of German service firms. A study by Jung and Chan-Olmsted (2015) on the relationship between related product and international diversification and financial performance among media firms in United States concluded that, there was a positive relationship between diversification and financial performance. Bammer*et al.* (2016) investigated on the relationship between corporate social performance and geographical diversification on a sample of UK firms. It was found that there was a positive relationship between diversification and performance. Maina (2013), did a study on the effect of product diversification on financial performance of DTMFI's. It was found that diversification of products and services led to financial performance of deposit taking microfinance institutions. Maina (2013) carried out a study on the relationship between product diversification and financial performance of commercial banks in Kenya. It was concluded that product diversification led to performance of commercial banks. This study therefore sought to determine the effect of corporate diversification on the financial performance of manufacturing firms in Rwanda by attempting to answer the following question: what is the effect of corporate diversification on the financial performance of manufacturing firms in Rwanda?

### Research Objectives

**General objective:** The general objective of this study was to determine the effect of corporate diversification on the financial performance of manufacturing firms in Rwanda.

**Specific objectives:** This study was guided by the following research objectives:

1. To examine the effect of product diversification on financial performance of manufacturing firms in Rwanda.

### Conceptual Framework

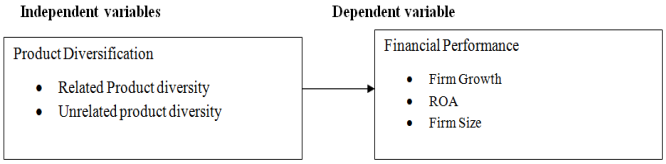


**Figure 1. Conceptual framework**

**Research gap:** When it comes to the study of financial performance in the manufacturing sector, limited research exists that addresses the main corporate diversification. Financial performance is very critical for any organization mainly because the main objective of any firm is to to be profitable. It is on this basis that this study sought to find out effect of corporate diversification on financial performance. Unlike most of the studies that considers only the dependent variable for data collection. This study is unique in the sense that it considers both dependent variable and independent variable for data collection. Further, most of the studies focus on more than one of the corporate diversification methods. However, this study concentrated on the manufacturing sector rather than an individual organization.

**Target population:** The population of the study consisted of all the 15 manufacturing firms in Rwanda. Kothari (2004) defines a population as a well-defined collection of individuals or objects known to have similar characteristics. All individuals or objects within a certain population usually have a common, binding characteristic or trait. With reference to the Rwanda Skills Survey (RSS, 2012) there are 439 manufacturing firms to work and operates in Rwanda. A random sampling approach was used.

## RESEARCH FINDINGS AND DISCUSSION

**Product diversification:** The first objective the researcher examined the effect of product diversification on financial performance of selected manufacturing firms in Rwanda. The researcher presented the results as per the below subheadings.

**Descriptive Statistical Analysis of product diversification:** The study sought the view of the respondents in regard to product diversification. Respondents' opinion on product diversification with regard to financial performance of manufacturing firms in Rwanda was captured using 1-Strongly disagree; 2 – Disagree; 3 – Indifferent; 4 – Agree; 5 –Strongly agree. The statements, respondents' opinions and their percentages are as shown below:

**Table 1. Product diversification Parameters**

| Product diversification Parameters | Mean | Std. Dev. |
|---|---|---|
| Attention is diverted from core products to new products | 3.14 | .744 |
| Strain on existing resources as product range expands | 3.56 | .685 |
| Use existing channels to market new products | 3.73 | .770 |

**Table 2. Correlation Analysis on product diversification**

| | | Product diversification | Financial performance |
|---|---|---|---|
| Product diversification | Pearson Correlation | 1 | |
| | Sig. (2-tailed) | | |
| | N | 40 | |
| Financial performance | Pearson Correlation | .518** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 40 | 40 |

**. Correlation is significant at the 0.01 level (2-tailed).

The researcher wished to establish if product diversification were given the due attention. Data from the field showed that attention rating on core products was very low as indicated by mean of 3.14 and level of dispersion was very high as indicated by standard deviation of 0.744. Hence the manufacturing firms need to also be keen on the existing products. Data from the field also showed that strain on existing resources was low as indicated by a mean of 3.56 and the product range expansion was high as indicated by standard deviation of 0.685 this could raise a concern that need to be addressed by the firm since they are experiencing huge growth of new product range and if the growth level does not match investment level it could inversely affect financial performance of the firm. The researcher established that use of existing channels was high to market new products as indicated by mean value of 3.73 although the dispersion value as measured by standard deviation of 0.770 was huge.

**Correlation Analysis on product diversification**

Correlation analysis was conducted to empirically determine whether product diversification was a significant determinant of financial performance of manufacturing firms in Rwanda. Table 4.4 indicate that Product diversification is significantly correlated to the manufacturing firms financial performance ($r=0.518$, $p<0.01$). There is a Strong positive relationship between Product diversification and Financial Performance of manufacturing firms as indicated by correlation of 0.518. This shows that the sampled data can be applied to the general population across selected manufacturing firms at 95% confidence level.

**Conclusions**

The study concludes that liquidity has a positive and significant association with financial performance of commercial banks. The study found that an increase in liquidity would lead to a significant increase in financial performance of commercial banks in Rwanda. From the regression model obtained, all the independent variables (capital adequacy, asset quality, management efficiency, earnings' ability, liquidity) all rated as zero, ROA would rate at 0.425. Therefore, it can be concluded that only 42.5% of ROA variation in banks can be explained by capital adequacy, asset quality, management efficiency, earnings' ability and liquidity. Based on the findings it can be concluded that the Asset quality of the bank had the highest influence on ROA of banks.

**Recommendations**

The results of the descriptive statistics show that listed firms have the potential and the capacity to diversify their products although the uptake for product diversifications among the selected manufacturing firms is still low.

The correlation findings concluded that corporate diversification is weak but positively related to financial performance of selected manufacturing firms in Rwanda. The study therefore puts more emphasis on corporate diversification to boost financial performance of manufacturing firms.

**Areas for further research**

A study should be carried out on the effect of corporate diversification on the financial performance in other lines other than product diversification. Examples would be investments in terms of percentage of shareholding or even assets. This would provide a wide range of parameters to investigate and establish relationships. Areas of commonalities or unique factors can then be identified.

## REFERENCES


Arasa, O. 2014. Diversification strategy and performance of Kenya commercial bank group, *Unpublished Project*, University of Nairobi

Bawa, V. & E. Lindenberg 2009. Capital market equilibrium in a mean-lower partial moment framework, *Journal of Financial Economics*, 5, 2, 189–200.

Bennett, D. & Scott, M. 1997. Testing alternative models of alliance duration, 1816-1984, *American Journal of Political Science*, 41, 846-878.

Brammer, J. &Pavelin, S. 2006. Corporate social performance and geographical diversification, *Journal of Business Research*, 59, 9, 1025-1034

Capar, N. &Kotabe, M. 2003. The relationship between international diversification and performance in service firms. *Journal of International Business Studies*, 34, 4, 345-355.

Chakrabarti, A., Singh, K. & Mahmood, I. 2007. Diversification and performance: evidence from East Asian firms, *Strategic Management Journal*, 28, 2, 101-120.

Chen,J.& Yu, J. 2011. Managerial ownership, diversification, and firm performance: evidence from an emerging market. *International Business Review*, 2, 1-4

Daud, W., Salamudin, N. & Ahmad, I. 2009. Corporate diversification performance, *Strategic Management Journal*, 2, 1, 01-18.

Delios, A. & Beamish, W. 1999. Geographic scope, product diversification and the corporate performance of Japanese firms. *Strategic Management Journal*, 20,8,711-727.

Denis,D., Denis, D. & Yost, K. 2002. Global diversification, industrial diversification, and firm value. *The Journal of Finance*, 57, 5, 51-79

Estrada, J. 2002. Systematic Risk in Emerging Markets, *Emerging Markets Review*, 3(4), 365–79.

Forbes, K.J. 2002. How do large depreciations affect firm performance, *PalgraveMacmillan Review,* 49, 1, 214-238

Geringer, J., Tallman, S. & Olsen, D. 2000. Product and international diversification among Japanese multinational firms, *Strategic Management Journal*, 21,1, 51-80.

Gibler, M. 2007. Control the issues, control the conflict: the effects of alliances that settle territorial issues on interstate rivalries. *International Interactions* 22, 341-368.

Gowa, J. Edward, D. & Mansfield. 1993. Power politics and international trade, *American Political Science Review*, 8, 7, 408-420.

Harlow, V. & Rao, R. 2009. Asset pricing in a generalized mean-lower partial moment framework: theory and evidence*, Journal of Financial and Quantitative Analysis*, 24, 3, 285–311.

Hitt, A., Hoskisson, R. & Kim, H. 1997. International diversification: effects on innovation and firm performance in product-diversified firms, *Academy ofManagement Journal*, 40, 767-798.

Hogan, W. & Warren, J. 2004. Toward the development of an equilibrium capital market model based on semi-variances, *Journal of Financial and QuantitativeAnalysis*, 9(1), 1–11

Holsti,P.Hopman, T. & Sullivan, D. 2013. *Unity and disintegration in international alliances: comparative studies*. New York: John Wiley andSons.

Hugo, W. 2013. Effects of income source diversification on financial performance of commercial banks in Kenya, *Unpublished MBA Project*, University of Nairobi

Ishak, Z. & Napier, C. 2016. Expropriation of minority interests and corporate diversification in Malaysia. *Asian Academy of Management Journal ofAccounting and Finance*, 2, 1, 85-113.

Ishak,Z.& Napier, C. 2014. Corporate ultimate ownership and corporate diversification in Malaysia. *The Fourth Asia Pacific InterdisciplinaryResearch in Accounting Conference*, Singapore.

Jayakumar, D.S. 2012. Sampling Distribution of Sample coefficient, Bi-variate sample correlation coefficient, *Journal of International Research*, 1, 21-4

Jensen, M. (2008). The performance of mutual funds in the period 1945–1964, *Journal of Finance*, 23, 2, 389–416.

Kang, D. L. &Aage, B. S. 2001. Ownership organization and firm performance; *Annual Review of Sociology*; 25,121-144.

Karanja, G. 2013. Diversification Strategy and the Performance of Kenolkobil Limited in Kenya, *Unpublished Project*, University of Nairobi

Keister, L. A. 2007. Engineering growth: business group structure and firm performance in China's transition economy; *American Journal of Sociology*; 104, 2, 404-440.

Khanna, S. (2010). Financial reforms and industrial sector in India; *Economic and Political Weekly*, November 6, 3231-3241.

Kock, C. J. & Guillen, M. F. 2009. Strategy and structure in developing countries: Business groups as an evolutionary response to opportunities for unrelated diversification, *Industrial and Corporate Change*, 10, 77-113.

Kor, Y. & Mahoney, J. 2014. Edith Penrose's contributions to the resource-based view of strategic management, *Journal of Management Studies*, 41,183-191.

Kothari, R. 2014. *Research Methodology: Methods and techniques*. New Delhi: Age publishers.

Kumar, K. R. 2011. Diversified groups failed in generating value in India too; Paper presented at the 4th strategic management forum, *Indian Institute ofManagement Ahmedabad*,24-26.

Kumar, K.R. 2011. Financial performance and diversification strategy of Indian business groups; Indian institute of management Calcutta; *UnpublishedDoctoral Dissertation*; March 2011.

Levine, R. & Robert, J. B. 2001. Determinants of economic growth: a cross-country empirical study, *Journal of Comparative Economics, Elsevier*, 26, 4, 822-824

Lin, C. Ma, Y. & Xuan, Y 2011. Ownership structure and financial constraints: Evidence from a Structural Estimation, *Finance and Economics Journal*, 102,416-431.

Lins, K. &Servaes, H. 2010. International evidence on the value of corporate diversification*, Journal of Finance* 54, 2215–2239.

Lins, K. &Servaes, H. 2012. Corporate diversification beneficial in emerging markets, *Financial Management* 31, 5–31.

Lintner, J. 2015. The valuation of risk assets and the selection of risky investments in stock portfolios and capital budgets, *Review of Economics and Statistics*, 47, 13-37.

Maina, K. 2013. The effect of product diversification on the financial performance of micro finance companies in Kenya, *Unpublished MBA Project*, University of Nairobi

Maina, W. 2013. The relationship between product diversification and financial performance of commercial banks in Kenya, *Unpublished MBA Project*, University of Nairobi

Mansi, S.A. &Reeb, D.M. 2012. Corporate diversification: *Journal of Finance,* 57, 2167–2183.

Mitchell, M. L., & Jolley, J. M. 2013. *Research design explained*. Australia: Wadsworth Cengage Learning, 752

Morrow, J. D. 2011. Arms versus allies: trade-offs in the search for security, *International Organization*, 47, 207-233

Morrow, K & James D. 2011. Alliances and asymmetry: an alternative to the capability aggregation model of alliances, *American Journal of Political Science,* 35, 904-933.

Mugenda, O. & Mugenda, A. 2015. Research methods: *Quantitative and qualitativeapproaches*.2nd. Rev. Ed. Nairobi: Act press.

Ngui, D.M. 2008. *On the Efficiency of the Kenyan Manufacturing Sector: An Empirical Analysis*, Shaker, Aachen.

Ongalo, S. M. 2014. The effect of the level of diversification on corporate liquidity at NSE, *Unpublished MBA Project*, University of Nairobi

Pandy, I.M. 2013. *Financial Management, New Delhi*, India, Vikas Publishing House. Pass.

Pearson, K., & University of London. 2005. *On further methods of determining correlation*. London: Cambridge University Press.

Penman, S. H. 2011. *Financial Statement Analysis. 3rd international edition*, McGraw Hill, Singapore.

Petersen, A. & V. Kumar 2010. Can product returns make you money, *MIT Sloan Management Review*, Spring, 51,3,8

Prahalad, C. K. & Hamel, G. 2005. The corecompetence of the organization. *International Business Studies*, 39, 2,197-214 *Harvard Business Review*, 68, 79-91.

Prahalad, C. K. & Bettis, R. A. 2009. The dominant logic: a new linkage between diversity and performance*, Strategic Management Journal*, 7, 485-501.

Qian, G. & Qian, Z. 2008. Regional diversification and firm performance, *Journal of*

Rajan, R. Servaes, H. &Zingales, L 2010. The cost of diversity: the diversification discount and inefficient investment, *Journal of Finance* 55, 35–80.

Robert, J. & Barro, M. 2012. Determinants of economic growth: *a cross-country empirical study, MIT Press Books, The MIT Press*, 1(1), 4-3

Sharpe, W. F. (2014). Capital asset prices: A theory of market equilibrium under conditions of risk, *Journal of Finance*, 19, 3, 425-442.

Sharpe, W. F. 1966. Capital asset prices: a theory of market equilibrium under conditions of risk, *Journal of Finance*, 19,3, 425-442.

Siggelkow, N. 2010. A study of intra-industry focus effects. *The Journal of Industrial Economics*, 51,2, 121–150.

Tobin, J. 1958. Liquidity preference as behavior towards risk, *The Review of Economic Studies*, 25, 65-86.

Treynor, J. 2015. Management of investment funds, *Harvard Business Review*, 43(1), 63–75.

WMP, 2014. The manufacturing industry in the developing economies, *Journal of Business Management*, 2, 1, 3-5

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