

IMPACT OF MACRO- ECONOMIC VARIABLES ON EXPORT PERFORMANCE OF MICRO, SMALL AND MEDIUM ENTERPRISES

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ABSTRACT

Around the world, the Micro, Small and Medium Enterprises (MSMEs) have been acknowledged as an important instrument of economic development and for stimulating impartial growth. Their role gets magnified in a country like India where they are considered as the catalysts of growth with a significant contribution to the country's GDP, total industrial production and exports as well as employment. It is a dynamic and profoundly energetic area of the Indian economy and influenced by the different Micro Economic and Macro Economic variables. The development of SMEs business indicators can be associated with macroeconomic variables such as GDP, inflation rate, exchange rate, unemployment and poverty. The steadiness of macroeconomic factors advances gainfulness of SMEs which pushes them to a phase where they can get to financing for supporting development. The present study has been carried out to assess the impact of selected macro-economic variables i.e. exchange rate, GDP and inflation rate on the performance of "Micro, Small and Medium Enterprises (MSMEs)" in terms of exports with the help of correlation and regression model, covering the period of thirteen years i.e. from 1st April 2003 to 31st March, 2016. The results of the study revealed that there is strong positive relationship between export performance of Small Scale Industries (SSIs) and the selected Macro-economic variables. It is suggested that for curtailing rural-urban migration and strengthening of industrial inter-linkages and integration, a proactive strategy is necessary. The Govt. should address the key constraints faced by this sector which are related to access to finance, markets, people, technology and environment, infrastructural bottlenecks, regulatory constraints and facilitation.

Keywords: MSMEs, GDP, Inflation rate and Exchange rate

INTRODUCTION

Around the world, the Micro, Small and Medium Enterprises (MSMEs) have been acknowledged as an

important instrument of economic development for advancing impartial growth. The MSMEs comprise over 90% of all endeavors in the greater part of the economies and are credited with creating the most elevated paces of employment development and record for a significant portion of Industrial Production and Exports. Small enterprises are not only generating employment but also encourage semi-skilled and unskilled workers to start as entrepreneur in rural and backward areas. After agriculture it is the second largest job creation sector. It has reduced regional Imbalances and assuring more equitable distribution of national income and wealth. Their role gets magnified in a country like India where they are the catalysts of growth with a significant contribution of 6.11% of the manufacturing GDP, 45% of total manufacturing production and 45% of exports. The sector forms the second largest source of employment after agriculture. The MSMEs give work to around 120 million people through over 36.1 million endeavors, creating more than 6,000 items. Further, the labour in proportion to capital in MSMEs and overall development is a lot higher than the remainder of the Industrial segment of the economy. In this way, MSMEs are significant for the public goal of development with value and inclusion.

Rapid globalization, economic liberalization, managerial innovations, technological advancements and reforms in respect of financial and real sectors have made various doors open for development in small scale sector. Simultaneously, more prominent joining with the world market and expanding level of local and worldwide rivalry has additionally opened up appealing prospects of admittance to bigger markets and of more grounded and more profound linkages of MSMEs with large accomplishments. Despite rivalry, small firms are demonstrating great development and in the process are making esteem and additional jobs. Perceiving the commitment and capability of this segment and basic for overhauling innovation, the Govt. has changed the meaning of SSI segment vide the “Micro, Small and Medium Enterprises Development (MSMED) Act, 2006”, which perceived the idea of undertakings to incorporate both production and service sector, besides, characterizing the medium size undertakings.

Though, MSMEs contribution is unpredictable in the growth of Indian economy, Simultaneously, MSMEs are facing the problems of power shortage, lack of capital, poor management skills, inadequate

information and lack of government support policies heavy competition from MNCs etc. are becoming remarkable dilemma to SMEs in India. The present study has been carried out to examine the impact of Macro-economic variables on the export performance of the MSMEs sector.

“Micro, Small and Medium Enterprises (MSMEs)”: Indian Perspective

“Micro, Small and Medium Enterprises as per MSMED Act, 2006” are characterized on the basis of their interest in plant and machinery for undertakings involved in the manufacturing and on equipment in case of undertakings which are offering services. The demarcated edge fixed on investment for undertakings which are to be categorized as “Micro, Small and Medium Enterprises” is given below:

Classification	Manufacturing Enterprises*	Service Enterprises**
Micro	Rs. 2.5 million/ Rs. 25 Lakh	Rs. 1 million/ Rs. 10 Lakh
Small	Rs. 50 million/ Rs. 5 crore	Rs. 20 million/ Rs. 2 crore
Medium	Rs. 100 million/ Rs. 10 crore	Rs. 50 million/ Rs. 5 crore

*Investment limit in Plant & Machinery

**Investment limit in equipment

REVIEW OF LITERATURE

Ramakrishnan (2001) concluded that financial assistance from financial institutions in meeting the credit needs of small and tiny units is essential for the growth and survival of this vital sector. Kulkarni (2002) identified that sickness and NPAs in “Small, Medium and Large Enterprises” are increasing not only in case of India but are in increasing at any place on the globe. Girdhari (2003) found that since liberalization India’s small scale sector has recorded better growth than overall growth of industrial sector. Aggarwal (2004) stated that post WTO era has thrown a lot of opportunities for SSIs and e-commerce has given a potential tool in the hands of SSIs in India. Mehra (2007) in his study highlighted various issues faced by SME sector in meeting its investments, insurance funds and pension funds. Mathew (2009) studied the impact of economic slowdown on the SME sector and found that economic crisis has led to massive unemployment and industrial sickness in many of its clusters. It was suggested that priority credit norms of the RBI alone will not help to reduce the woes of the SME sector in recession, unless an SME specific package is announced by the government. Johari Hadi (2012) in his study evaluated the role of micro enterprises in the Iran using Delphi technique. Correlation, regression and Unit root test were applied to obtain the results. A positive relationship was observe inter

se MSMEs and economic growth. Subhan et al. (2013) in their research featured the significance of advancement in “Small and Medium Enterprises (SMES)” and its effect on development of Pakistan’s economy. The research was depended on secondary information which was gathered from “Asian Development Outlook, Economic Survey of Pakistan, Ministry of account, administration of Pakistan”. The authors concluded that there exists positive correlation between innovation and SMES. Karadag Hande (2015) studied the role and challenges of Small and Medium sized enterprises in Turkey economy. The study found that financial resources, qualified human resources and poor technology were the main obstacles faced by the SMEs in Turkey. It was recommended that Government should make provisions of funds bearing low cost and should take steps for the promotion of educational and training related institutions for the development and performance improvement of “Small and Medium Enterprises”. Arunagiri et. al. (2015) dissected the commitment of “Small and Medium Enterprises” in GDP in the Malaysian economy utilizing auxiliary information gathered during the period from 2005 to 2013. The study found that labour wages and exports were the highly contributing factors in the performance of SMEs. Chander and Chand (2016) investigated the relationship between GDP and exports of small-scale industry (SSI) using secondary data from 1990-91 to 2014-15. To achieve objective, “Econometric Model” including “Unit Root Tests”, “Co-integration Analysis” and “Granger Causality Test” were employed. In the results of the study found the long-term and uni-directional relationship between the SSI and GDP. Samuel Muiruri (2017) studied the challenges, solutions and contribution of African Small and Medium Enterprises (SMES). It was found that enterprises face the problems of power shortage, lack of capital, poor management skills, inadequate information and lack of government support. However, SMEs create the employment and contribute in GDP. It was suggested that African Government should provide appropriate legal framework, business infrastructure and proper power supply to remove the problems.

RESEARCH METHODOLOGY

The following discussion is related to the research methodology used in the present study:

OBJECTIVES OF THE STUDY

This research has been carried out to study the relationship and effect of chosen Macroeconomic

factors for example Exchange Rate, Gross Domestic Product (GDP) and Inflation rate on the performance of “Micro, Small and Medium Enterprises (MSMEs)” in terms of exports.

Hypothesis

H₀₁: “There is no significant impact of Exchange rate, Gross Domestic Product and Inflation rate on the Exports of Micro, Small and Medium Enterprises (MSMEs)”.

H₀₂: “There is no significant relationship among the Exchange rate, Gross Domestic Product, Inflation rate and Exports of Micro, Small and Medium Enterprises (MSMEs)”.

H₁: “There is significant Impact of Exchange rate, Gross Domestic Product and Inflation rate on the Exports of Micro, Small and Medium Enterprises (MSMEs)”.

H₂: “There is significant relationship among the Exchange rate, Gross Domestic Product, Inflation rate and Exports of Micro, Small and Medium Enterprises (MSMEs)”.

Data Source

The present research is based on the secondary data which have been gathered from the reports of Reserve Bank of India (RBI) with respect to Gross Domestic Product (GDP) and Exchange rate in US\$ and Inflation rate covering the time of 13 years from 1st April 2003 to 31st March 2016.

Statistical Analysis

In order to achieve the objective of the study the dependent variable and independent variables are used. The dependent variable is, “Exports of Micro, Small and Medium Enterprises (MSMEs)” and Independent variables are, “Exchange Rate”, “Gross Domestic Product”, and “Inflation Rate”. To examine the association and influence of macro-economic factors on the Exports of Small Scale Industry (SSI), “Correlation” and “Multiple Regression” statistical tools are used. The regression equation of the study is as under:

$$Y = a + B_1(X_1) + B_2(X_2) + B_3(X_3) + e$$

Where

Y = Dependent variable {Exports of MSMEs}

X₁ = Independent variable {Gross Domestic Product (GDP)}

X₂ = Independent variable {Whole Sale Price Index (WPI)}

X₃ = Independent variable (Exchange rate)

e = Residual Error

ANALYSIS AND RESULTS

The correlation coefficient matrix for macro-economic variables i.e. GDP, Inflation rate, Exchange rate and Exports of MSMEs has been presented in the following table-1. It shows that there is positive relationship between Exports of Small Scale Industry (SSI) and Macro-economic variables with a Pearson correlation coefficient of $r = 0.869$, 0.180 and 0.448 respectively. Thus, it can be concluded that when Macro-economic variables change then Exports of Small Scale Industry also change in the same direction. Along these lines, it is inferred that there is positive association between Exports of Micro, Small and Medium Enterprises (MSMEs) and Macro-financial factors.

Table-1 Correlation between MSMEs Exports and Macro-economic variables

		MSMEs	GDP	WPI	Exchange Rate
MSMEs	Pearson Correlation	1	0.869**	0.180*	0.448*
	Sig. (2-tailed)		0.00	0.557	0.125
	N	13	13	13	13
GDP	Pearson Correlation	0.869**	1	0.289	0.302
	Sig. (2-tailed)	0.00		0.339	0.316
	N	13	13	13	13
WPI	Pearson Correlation	0.180*	0.289	1	0.116
	Sig. (2-tailed)	0.557	0.339		0.707
	N	13	13	13	13
Exchange Rate	Pearson Correlation	0.448*	0.302	0.116	1
	Sig. (2-tailed)	0.125	0.316	0.707	
	N	13	13	13	13

*Correlation is significant at the 0.05 level
**Correlation is significant at the 0.01 level

Table-2 Model Summary

Model	R	R-Square	Adjusted R-Square	Std. error of estimate	Durbin Watson
1.	0.894	0.799	0.732	11.88	1.45

Table-3 Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	TV	PV	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-29.47	10.21		-2.88	0.01		
GDP	3.44	0.67	0.83	5.10	0.00	0.84	1.18
Inflation Rate	-0.11	0.21	0.08	-0.53	0.60	0.91	1.09
Exchange Rate	0.58	0.45	0.2	1.31	0.22	0.90	1.10

Dependent Variable: Export of MSME

The relationship between the outcomes and predictor variables is presented in the following Table 2. In the table R shows the significant relationship between Exports of MSMEs and macro-economic variables. R-square indicate that 0.799% variation in the Exports of MSMEs due to GDP, Inflation rate and exchange rate and 0.201% (1-0.799) variations is due to other variables that have influence on this sector. The adjusted R^2 value express that the cross validity of this model is good. Finally, Durbin Watson test shows that independent error is to tenable to achieve the objective i.e. shows there is lack of auto-correlation.

Table 3 reveals that the two predictors i.e. GDP and Exchange rate have the positive b-values indicating the positive relationship between exports of MSMEs and GDP as well as exchange rate, while inflation rate show the negative relationship. The significant value shows that the Independent variable GDP is making significant contribution to the exports of MSMEs. The t Variance Inflation Factor (VIF) is less than 10 which shows that collinearity is not a problem for this model.

CONCLUSION

The research has been bring into existence with an aim to inspect the association and effect of chosen Macro-economic factors i.e., “Exchange Rate”, “Gross Domestic Product (GDP)” and “Inflation rate on the Export Performance of Micro, Small and Medium Enterprises (MSMEs)”. The analysis and outcomes of the research uncovered that irregularity in the macro-economic factors affect MSMEs export performance. It is presumed that there exists a positive association between exports of SMEs and macro-economic factors during the time of study. The more noteworthy incorporation with the world economy however have given the chances to the Small Scale Sector for development and yet has likewise represented various difficulties and dangers which are of more prominent extent than those looked by the enormous business undertakings. There is a need to shield the little scope part from the impulses of WTO/TRIPS system. To empower the MSME part to contribute more in the fares it is important to furnish them with the devices and strategies of aptitude advancement, innovation up degree and foundation offices at standard with worldwide principles and accessibility of satisfactory and convenient credit.

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