Impact of Selected Macro-Economic Variables on Exports from Madhya Pradesh: A Study of Pithampur Special Economic Zone

Dr. Murli Dhar Panga

Associate Professor, PIMR, Indore Email : panga006@gmail.com

Mr. Arpan Shrivastava Assistant Professor, IBMR, Indore Email : arpan.mitm@gmail.com

ABSTRACT

The word 'Special' in Special Economic Zones (SEZ) mainly means special economic system and polices. The Special Economic Zones (SEZs) policy was announced by the Indian government in April 2000. The SEZ policy was planned to make SEZ as an engine for economic growth by increasing quality infrastructure and fiscal incentives both at state and at central level. Madhya Pradesh is one of the important points of India for testing the new products in the market and has an educated, modern and aware society whereas Indore has a huge potential for attracting investors, major industrial houses like Infosys and TCS has already invested in the city for their upcoming projects. Exports are directly and indirectly affected by many macro economic variables hence on the basis of previous researches we have studied 4 major macroeconomic variables (GDP, Exchange Rate, Inflation and FDI Inflow). In this study we studied the impact of these macroeconomic variables on exports from Pithampur Special Economic Zones.

Keywords: SEZ, GDP, Inflation, FDI and Exchange Rate.

Introduction:

India gave emphasis to industrialization and modernization for getting economic development. Indian government was highly influenced by the professed success of Soviet Union in rapidly industrializing a largely rural economy without any external assistance in a very short period. India started the journey of industrial growth in 1948, when it announced its very first Industrial Policy Resolution (IPR) in the year 1948. Import substitution was one of the objective of India in five-year plan which was based on industrialization strategy for economic thinking of the nation during the post war period (1965 to 1980). As this period was marked by export distrust, import substitution was considered as a recipe for self-sufficiency and economic development. Even though, within import substituting industrialization (ISI) policy framework export promotion through various schemes and efforts had also been a concern of economic development for the government. Thus, government of India started to promote the Export Processing Zones (EPZ) as a platform for export on the basis of economic incentives such as, tax benefits and provision of better infrastructure became one of the features of India development. The first export promotion zone was set up in 1965.

From 1991 to 2000 India witnessed the consolidating phase in the History of Export Processing Zones (EPZs)where Indian Government formulates new policy measures for revamping of Export Processing Zones in the country. The History of Export Processing Zones (EPZs) reflect that there were liberalization of the provisions, relaxation of the strict controls and simplification of the procedures in India. Further the Indian history of Export Processing Zones shows that during consolidation phase various types of units such as trading, agriculture, horticultureand re-engineering, and aqua culture units were given permission by the government to set up their business in the Export Processing Zones (EPZs) in India.

SPECIAL ECONOMIC ZONE (SEZ):

The word 'Special' in Special Economic Zones (SEZ) mainly means special economic system and polices. The very first Special Zone which bears any semblance to the present- day ones were set up in Spain in 1929

Impact of Selected Macro-Economic Variables on Exports from Madhya Pradesh...

with the intention of increasing exports by value addition to the raw materials available in that country. Deng Xiaoping, the inspiring force behind China's economic miracle during the last 30 years, gave a big boost to the concept of SEZ in 1979. In opening up its huge domestic market to Western capital and technology, they used the Special Economic Zones as a tool to assess the success of their economic liberalization policies. Several other developing countries such as UAE, Malaysia, Jordan, Poland, Kazakhstan, Philippines, Russia, and South Korea are also following the Chinese path to liberalize their economies. Most countries in South Asia-Bangladesh, Sri Lanka, Pakistan and Nepal have all tried to promote their exports and also create employment by establishing SEZs.

Special Economic Zones (SEZ) were established in 1937 in New York, The United States of America (USA). The Special Economic Zones are also known as "Foreign Trade Zone" (FTZ). The United States of America (USA) established the SEZ in Puerto Rico In early 1940s, since then, other developed and developing countries have also established SEZ but in a different name. Taiwan and Iceland established SEZ in 1960. In 1980 India established its SEZ namely "Export Processing Zone'. One of the most famous SEZ is Shenzhen Special Economic Zone which was established in 1980. Today the Special Economic Zones has been located and developed in more than 135 countries around the world.

The Special Economic Zones (SEZs) policy was announced by the Indian government in April 2000. The SEZ policy was planned to make SEZ as an engine for economic growth by increasing quality infrastructure and fiscal incentives both at state and at central level.

The numbers of Special Economic Zones (SEZs) are increasing continuously day by day. SEZ responsible for increasing share of exports from a country and for rising number of employment opportunities worldwide. In the global world, Export Promoting Zones (EPZs) are important instrument to promote regional development, industrialization and generate employment.

Madhya Pradesh

Madhya Pradesh covering 9.5% land of the country and is the second largest state of India with a very good climate for agriculture, natural resources, rich cultural heritage, expanding industrial base, excellent quality of line, intellectual and peaceful labour force and a beautiful environment for investors. Madhya Pradesh is a fabulous place for entrepreneurs to set up their businesses and industries. Madhya Pradesh also have the geographical advantage that it is located in the center of India. It is a hub for industries situated centrally of India's commercial activities. It is having almost equal distance from India's metro cities.

Madhya Pradesh is one of the important points of India for testing the new products in the market and has an educated, modern and aware society. A world class 4000 Acre testing track for automobiles is proposed near the Special Economic Zone. The automobile and pharma sectors have a special preference and presence in the state.



Indore

A multicultural city considered as the commercial capital of the state. Indore plays an important role in trading and commercial activities of Madhya Pradesh. It is now becoming a hub for software and industrial companies. Indore has a huge potential for attracting investors, major industrial houses like Infosys and TCS has already invested in the city for their upcoming projects. Indore showed a tremendous industrial growth over a period of time, a number of business centres, hotels are available for the comfortable meeting and stay. Indore is well connected with major cities of the country through Rail, Road and Air which is an advantageous position for the city.

Features of SEZ Indore

- Specifically, delineated, duty free enclave.
- Deemed foreign territory for the purposes of trade operations, duties and tariffs.
- An enclosed area with supervised entry and exit.
- No custom duties & taxes on import and export.
- 100% Foreign Direct Investment in manufacturing sector allowed through automatic route except few sectors.
- Profits allowed to be repatriated freely without any dividend balancing requirement.
- Full freedom for subcontracting.
- Power available at cheaper rate.
- Industrial friendly labour laws.
- Exemption from Income Tax.
- All the powers of Central / State enactments vests in single authority i.e. DEVELOPMENT COMMISSIONER.

Location of SEZ

- MPAKVN Indore identified 1038.57 Hects of land for the Special Economic Zone near Indore.
- The location is near the most advanced and developed Industrial town i.e. Indore, the commercial capital of M.P.
- Indore provides all the social infrastructure, civic facilities and other benefits to the growing centres.
- Connectivity of Indore to all major parts of the Country is also a boon to the upcoming industries.

Major Achievements

- The first phase of the SEZ Indore is already operational.
- Number of MOUs executed/Interested units 31
- Number of LOPs issued (by GOI) 14
- Number of units land allotted 11
- Number of units started construction 07
- New investment expected to be mobilized Rs. 900 Crores
- Seven applications for LOP under consideration with Land Development Commissioner.

Review of Literature

Augustine. A, Thokas.O and Daniel. S (2005) studied the impact of Real exchange rate fluctuation on the exports of Latin American Countries from 1973-2004) and concluded that the exchange rate has a negative impact on growth of export. Countries are aiming to stabilize their exchange rate for increasing the volume of exports and imports. Volatility of exchange rate also affects the balance of payment of the country.

Gondaliya.V and Dave .P (2015) have concluded that Exchange rate is considered as one of the important indicator of any country's international competitiveness and hence it has a strong impact on country's export. They also suggested that higher export will result a strong value of Indian Rupee against world's freely accepted currencies (Euro, Pound, Dollar and Yen) also the change in export will positively influence on exchange rate.

Olson M, Pilcher S and Whitman N (2016) found that there was a positive significant correlation between Gross Domestic Product and Exports, they said an increasing in merchandise exports results a subsequent increase in Gross Domestic Product (GDP), they also found that there was a similar increase in Gross Domestic Product with an increase in Percent of Exports.

Shrivastava. A, Panga. M (2017) suggested that Increasing demand and Growing population have an immense scope for international trade. Through international trade countries have started to export their surplus commodities that are produced to satisfy the unlimited and scare wants of the particular commodity in another country the result of this paper revealed that there was a positive relationship between SEZ exports and Total exports from India. There are only 15 states in India where there is operating SEZs out of which only 4 states Gujarat, Tamil Nadu, Karnataka and Maharashtra are doing well and actively contributing in the total exports of the country.

Woo (1997) conducted an analysis on Comprehensive welfare in his paper 'A Theory of Free Economic Zones", he studied welfare effects of foreign direct investment flowing into an Export Processing Zone in an economy assuming there are no restrictions on imports in EPZs. He concluded that the economic conditions of a country increase if there is no restrictions on imports and also on the EXIM policy, economic condition of the country, which helps in reducing cost of the product.

This is further supported by F. Willmann and G. Faccini in their paper 'the gains from duty free zones.' They assumed that there was increasing return and imperfect competition in the market. J. Wang (2009) also examined the impact of Special Economic Zones on Foreign Direct Investment (FDI) on Chinese municipalities between 1978 to 2007, he found that the SEZ policy has an impact on per capita and on the basis of SEZ policy the Per capita FDI increased by 58%. The result of his study reveals that creation of SEZ is not only bringing the capital into the country but it also brings advanced technology, provide employment and helps developing countries to boost up their economies.

Objectives of the Study:

To study the impact of various macro-economic variables on Total Exports from SEZ Pithampur.

Hypothesis:

H01: There is no significant impact of GDP of Madhya Pradesh on SEZ Pithampur Exports.

H02: There is no significant impact of Inflation on SEZ Pithampur Exports.

H03: There is no significant impact of FDI on SEZ Pithampur Exports.

H04: There is no significant impact of Exchange Rate on Total Exports from SEZ Pithampur.

The Research Design

The study undertaken is analytical in nature based on facts and figures (Trade figures) collected from the website of commerce ministry, state government's website etc. the study is an attempt to analyze the performance of Special Economic Zones in India with reference to Indore (Pithampur) Madhya Pradesh, India. The study has proven its validity on the ground of available literatures. The study explores positive aspects of Exports from the Special Economic Zones. The exploration and evidences of studied phenomena gives better understanding and responsible factors which are affecting exports from the country and helps researchers to carry relevant research issues. The study is primarily based on secondary data collected from various government websites. The duration of the study is between 2006-2017.

Table 1.1 Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
H ₀₁	(Constant)	-3.051	.352		-8.657	.003
	GDP_Madhya_Pradesh	.057	.005	.987	10.748	.002
H ₀₂	(Constant)	1.574	.347		4.540	.020
	Inflation	114	.044	828	-2.561	.083
H ₀₃	(Constant)	632	.180		-3.501	.039
	FDI_Inflow	.040	.005	.976	7.704	.005
H ₀₄	(Constant)	-3.678	.035		-3.678	.035
	Exchange_Rate	4.677	.018	.938	4.677	.018

Data Analysis:

Dependent Variable: Exports_From_SEZ_Indore

Here the null hypothesis H01 stands rejected as the p value is found 0.002< 0.05 (Standard Sig. Value) which reveals significant impact of GDP(Madhya Pradesh) to Exports from Special Economic Zone (Pithampur). The Test result is found significant at the 0.05 level of significance or at 95% level of confidence.

The Regression result in Table 1.1 reveals that the value of r is 0.987 which shows that there is an impact of Gross Domestic Product of Madhya Pradesh on Exports from Special Economic Zone (Pithampur). The result also reflects degree of relationship between GDP (Madhya Pradesh) and Exports from SEZ Pithampur (Indore) which is said to be high as r = 0.987 for GDP (Madhya Pradesh) against Exports from SEZ Pithampur. Therefore, the study assumes that there is a high positive impact of GDP (Madhya Pradesh) on Exports from SEZ Pithampur (Indore). Further the study proves that due to the positive correlation among both the variables (Table 1.1) Exports from Special Economic Zone (Pithampur) will grow up by .987 units with an increase in the Gross Domestic Product (Madhya Pradesh).

Here the null hypothesis H02 stands Rejected as the p value is found 0.083 > 0.05 (Standard Sig. Value) which reveals there is no significant impact of Inflation to Exports from Special Economic Zone (Pithampur). The Test result is found significant at the 5% level of significance or at 95% level of confidence.

The Regression result in Table 1.1 reveals that the value of r is 0.828 which shows that there is an impact of Inflation on Exports from Special Economic Zone (Pithampur). The result also reflects degree of relationship between Inflation and Exports from SEZ Pithampur (Indore) which is said to be high as r = 0.828 for Inflation against Exports from SEZ Pithampur. Therefore, the study assumes that there is an impact of Inflation on Exports from SEZ Pithampur (Indore). Further the study proves that due to the positive correlation among both the variables (Table 1.1) Exports from Special Economic Zone (Pithampur) will grow up by .828 units with an increase in the Inflation.

Here the null hypothesis H03 stands Rejected as the p value is found 0.005 < 0.05 (Standard Sig. Value) which reveals significant impact of FDI to Exports from Special Economic Zone (Pithampur). The Test result is found significant at the 5% level of significance or at 95% level of confidence.

The Regression result in Table 1.1 reveals that the value of r is 0.976 which shows that there is a positive impact of FDI on Exports from Special Economic Zone (Pithampur). The result also reflects degree of relationship between FDI and Exports from SEZ Pithampur (Indore) which is said to be high as r = 0.976 for FDI against Exports from SEZ Pithampur. Therefore, the study assumes that there is a strong positive impact of FDI on Exports from SEZ Pithampur (Indore). Further the study proves that due to the positive correlation among both the variables (Table 4.22) Exports from Special Economic Zone (Pithampur) will grow up by .976 units with an increase in the FDI.

Here the null hypothesis H04 stands rejected as the p value is found 0.018< 0.05 (Standard Sig. Value) which reveals significant impact of Exchange Rate to Exports from Special Economic Zone (Pithampur). The Test result is found significant at the 0.5 level of significance or at 95% level of confidence.

The Regression result in Table 1.1 states that the value of r is 0.938 which shows that there is an impact of Exchange Rate on Exports from Special Economic Zone (Pithampur). The result also reflects degree of relationship between Exchange Rate and Exports from SEZ Pithampur (Indore) which is said to be high as r = 0.938 for Exports from SEZ Pithampur (Indore) against Exchange rate. Therefore, the study assumes that there is a high positive impact of exchange rate on Exports from SEZ Pithampur (Indore). Further the study proves that due to the positive correlation among both the variables (Table 1.1) Exports from Special Economic Zone (Pithampur) will grow up by .938 units with an increase in the Exchange Rate.

Findings and Interpretations

This study revealed that there is a positive and high correlation between FDI and Exports from SEZ Pithampur (1:0.976) and H03 stands rejected therefore due to positive correlation among both the variables.

Here in this study also we found that there is a positive and strong relation between GDP of Madhya Pradesh and Exports from SEZ (Pithampur).On the basis of results our null hypothesis H01 stands rejected at 95% level of significance. Therefore, we can conclude that the exports from SEZ Pithampur will grow up by 0.879 units with an increase in the Gross Domestic Product (Madhya Pradesh).

In this study also, we found that there is a significant impact of Exchange rate on Exports from SEZ Pithampur at 0.5 level of significance. Therefore, the study assumes that there is a high positive impact of exchange rate on Exports from SEZ Pithampur.

Further we studied the relationship between Inflation and Exports from SEZ Pithampur and found that there is a significant impact of inflation on Exports from SEZ Pithampur and due to the positive correlation among both the variables exports from SEZ Pithampur will grow up by 0.686 units with an increase in Inflation.

Suggestions and Conclusion

As per the study we can conclude that the Central government have to formulate a balanced Monetary policy, Fiscal policy and SEZ policy for the betterment of the society and economic growth, the same has been suggested by R. Datt and P.K. Sundharam (2007) it is also suggested there is no use of following the policy of China blindly instead countries like India has to make their own policies according to the objective. Unlike china India is a Democratic country and it is not possible to impose ruthless restrictions.

Sustainable development of an economy is depending upon the International Trade and the contribution of GDP of the country. An SEZ is a specific duty-free zone that has different economic laws from rest of the country where it is situated. Basic goal of an SEZ is to promote economic growth rapidly by using tax benefits and various incentives provided by the government to boost exports from the country. R Dutta and P. K. Sundharam (2007) also concluded that the successful SEZs will create new employment opportunities for the citizens of the country, strengthen FDI, Increase GDP, attract FDI and help countries to reduce defective domestic legislation and institutions that act as a barrier and hurdle in growth and development of the economy.

Our study reveals that there is a significant impact of Exports from Pithampur SEZ on India's Total Exports. There are 50 working units situated in SEZ Pithampur which are contributing in SEZ Pithampur exports.

Special Economic Zone is the need of current economic condition of every country. The creation of SEZs provided employment to approximately 3.5 lakh individuals in India. Many big Multinational Companies of India as well as of world are setting up their units in SEZs, this will increase the production and ultimately GDP of India.

References

- Aggrawal, A. (2004), "Export Processing Zones in India: Analysis of the Export Performance" ICRIER, Working paper 148.
- Ahmad, Arslan; Ahmad, Najid & Sharafat, Ali. (2013). Exchange rate and economic growth in Pakistan. Journal of basic and applied sciences, vol.3, no.8, pp. 740-746.
- Aizenman, J., & Noy, I., "FDI and trade-Two-way linkages?", The Quarterly Review of Economics and Finance, Vol. 46, No. 3, pp. 317-337 (2005). Retrieved from Website: http://dx.doi.org/10.1016/j.qref.2006.02.004.
- Bader, Majed & Malawi, Ahmad Ibrahim. (2010). The Impact of Interest rate on Investment in Jordan: A Co-integration Analysis, JKAU: Econ. & Adm., vol. 24, no. 1, pp. 199-209.
- Barro, J. Robert (1995). Inflation and Economic Growth. Bank of England Quarterly Bulletin, vol. 35, pp. 166-176.
- Bleaney, Michael & Fielding, David (1999). Exchange Rate Regimes, Inflation and Output Volatility in Developing Countries. Credit Research Paper no. 99/4.
- Campbell R. McConnell and Stanley L. Brue. 2008 Economics. 17th edition. McGraw-Hill.
- Faria, Ricardo Joao & Carneiro, Galrao Francisco (2001). Does High Inflation Affect Growth in the Long-run and Short-run? Journal of Applied Economics, 4(1), pp. 89-105.
- Gondaliya, V., Dave, P, "The Impact of Exports and Imports on Exchange Rates in India" International journal of Banking, Finance & Digital Marketing, 1 (1), 1-8.

- Kumar, N. (2000)," Economic Reforms and its Macro Economic Impact", economic and Political Weekly, 35 (10), pp. 803-812.
- Pallant Julie. 2007. "A Step by Step Guide to Data Analysis using SPSS for Windows third edition". Open University PressPerkins, D.H., Radelet, S., Lindauer, D.L. (2006). "Economics of Development" Sixth Edition, New York, London.
- Shahzad A. & Kaid Al-Swidi A., "Effect of Macroeconomic Variables on the FDI inflows: The Moderating Role of Political Stability: An Evidence from Pakistan", Asian Social Science, Vol. 9, No. 9, pp. 270-279 (2013).
- Shane, M., Roe, T., & Somwaru, A., "Exchange Rate, Foreign Income, and U.S. Agricultural Exports", Agricultural and Resource Economics Review, 37/2, pp. 160-175, (October 2008). Retrieved on, 29 January 2014.
- Shrivastava, A., Panga, M. D., & Shrivastava, A. (2015). Role of Special Economic Zone in Development of Madhya Pradesh: A Study with Special Reference to Indore. In Quality Management Practices for Global Excellence (pp. 109-116).
- Shrivastava, A., & Panga, M. (2017). A Study on Export Performance of India with reference to Special Economic Zones. International Journal of Management, 42-48.
- Shrivastava, A., Panga, M. (2017). A Study on Selected Macro Economic Variables and Its Impact on Total Exports from India. In PARIPEX Indian Journal of Research, 381-383.
- Shrivastava, A., Panga, M. (2018). Impact of Gross Domestic Product (GDP) on Special Economic Zone: A Study of Madhya Pradesh. In International Journal of Management: Unnayan. 51-55.
- Tomar, R.S., Tomar, D,S,. (2014). Selected Macro-Economic Variables and its Impact on Chinese abd/Indian Exports, in IOSR journal.
- Wang, J.; and Bradbury, J.H. (1986), "The Changing Industrial Geography of the Chinese Special Economic Zones," Economic Geography, Vol. 62, No. 4, pp. 307-320.
- Wong Cheung Y. & Sengupta R., "Impact of Exchange Rate Movements on Exports: An Analysis of Indian Non Financial Sector Firms", Retrieved from Website: macrofinance.nipfp.org.in/.../ JIMFPR_Cheung-Sengupta_201212Final.pdf.