

Quarterly Peer-Reviewed Refereed Multidisciplinary Journal

ISSN No: 2278-7925 (Print) Volume-13, No.4 (A), July-September, 2021

Journal of Research

A Quarterly Publication

UGC Care Listed Journal

Research Papers

WORKPLACE CONFLICT MANAGEMENT DURING COVID-19 PANDEMIC

Neena Seth Pajni, Navneet Bhaskar

AN ANALY SIS OF PERFORMANCE AND CHANGING BUSINESS DYNAMICS IN IT-BPM INDUSTRY IN INDIA Seema Kapoor, Preeti, Harleen Kaur, Jinesh Jain

SHOWROOMING PHENOMENA: A STUDY OF THE CONCEPT S. K. Chadha, Tejinder Pal Singh, Preeti Kaushal

INCLUSION OF AI IN IMPROVING EMPLOYEE RETENTION AMONG MILLENNIALS: A CASE STUDY OF SELECT IT FIRMS Veena Venkitesh, P. Bhanumathi

A STUDY ON CORRELATION BETWEEN EMPLOYEE MOTIVATION & ORGANIZATIONS OUTPUT & PROFITABILITY

Arun Pardhi, Dilip Nana Aher

PERFORMANCE EVALUATION OF IMAGE ENHANCEMENT TECHNIQUES IN DIGITAL MAMMOGRAPHY Sarbjit Kaur, Jasmeen Gill

LATEST TRENDS AND TECHNOLOGIES IN BANKING SECTOR IN INDIA Nilmani Tripathi, Gauray Sisodia

IMPACT OF COUNTRY-OF- ORIGIN ON PERCEIVED QUALITY IN DURABLE SECTOR Ankita Sharma, Narinder Batra

URBAN STREET VENDING IN INDIA AND THAILAND: A REVIEW Ashish Sailipal, Meenu Sailipal, Shashi Kapoor

UPSURGE OF RURAL MICRO ENTREPRENEURS: AN EMPIRICAL GLIMPSE Shubhangi Shantanu Jagtap, Sarang Shankar Bhola

HIGH PERFORMANCE WORK SYSTEM IMPACT ON ORGANIZATIONAL AND EMPLOYEE OUTCOMES - A THEORETICAL REVIEW S. Vivekanantha, A. Selvareni, G. Sivanesan

COMPETITOR IDENTIFICATION OF ASSAM SILK-AN EXPLORATORY INVESTIGATION Dimpal Bharali, Sunildro L. S. Akoÿam

HUMAN CAPITAL ANALYTICS: MAPPING THE WORKFORCE COMPETENCIES IN DATA-DRIVEN BUSINESS ENVIRONMENT Sanjeev Sharma, Lucmi Malodia

CONSUMER PERCEPTION ON UNETHICAL MARKETING BEHAVIOR-IMPACT ON DECISION MAKING

IMPACT OF DEMONETISATION ON E-PAYMENT SYSTEM OF INDIA: EMPIRICAL ANALYSIS Laxnidhar Sanal

DURABLE PRODUCT PURCHASE BEHAVIOUR IN INDIA: A STUDY OF RURAL CONSUMERS OF WESTERN UTTAR PRADESH Rahul Kumar, Md. Shahnawaz Abdin

SAFEGUARD PROTOCOLS TO PROTECT MOBILE ADHOC NETWORKS AGAINST DIFFERENT ATTACKS Jaspreet Kaur, Rajneesh Tabvar, Ashok Kumar Goel

ANTICIPATING MSME UNITS SOCIAL CATEGORY WISE IN INDIA: WITH SPECIAL REFERENCE TO ENTREPRENEURSHIP INTENT OF MANAGEMENT GRADUATES

Seema H. Kadam, Purnima M. Chouhan

A STUDY ON AWARENESS TOWARDS GOODS AND SERVICES TAX AMONG DEMOGRAPHIC VARIABLES IN PUNJAB

CHALLENGES PERCEIVED BY FARMERS PRACTICING ORGANIC PADDY CULTIVATION UNDER PARAMPARAGAT KRISHI VIKAS YOJANA (PKVY) SCHEME IN KAMRUP DISTRICT, ASSAM
Tamalika Sikder, Amrit Pal Singh

ADOPTION OF PROPER HR PRACTICES: A TECHNIQUE FOR RETAINING TALENT
Jitender Kaur

IMPACT OF EFFICIENT WORKING CAPITAL MANAGEMENT AND FOREIGN PROMOTER OWNERSHIP ON FIRM VALUE Manpreet Kaur, Harvinder S. Mand

MANAGERIAL PERCEPTION TOWARDS TRAINING AND DEVELOPMENT PROGRAMMES: A STUDY OF SELECTED PUBLIC SECTOR BANKS Jaspal Kaur, B.S Bhaúa

CAUSAL NEXUS BETWEEN FDI IN FMCG SECTOR AND ECONOMIC GROWTH
Anupam Sabharwal

AN EMPIRICAL STUDY OF CUSTOMERS' PERCEPTION REGARDING E-BANKING SERVICES DURING COVID-19: SOME SURVEY EVIDENCES FROM PUNJAB
Rimpi, R. K. Uppal

DETECTION AND CLASSIFICATION OF WEAPON USING GRADIENT ORIENTATION AND LAPLACIAN MAGNITUDE-BASED HISTOGRAM Jayandrath Mangrolia, Ravi Sheth

PERFORMANCE ANALYSIS OF SELECTED EQUITY LINKED SCHEMES OF MUTUAL FUND Nisha Gupta, B.S Bhatia

A MACHINE LEARNING METHODOLOGY FOR CARDIO VASCULAR DISEASE PREDICTION Alok Eumar, Manmohan Singh

COMPUTATION OF VaR USING CONTINUOUS CURVE FITTING APPROACH
Kirit Vaniya, Ravi Gor

IMPACT OF ENTERPRISE RESOURCE PLANNING (ERP) IMPLEMENTATION: A CASE STUDY OF A COOPERATIVE DAIRY FIRM Ships T, P. Mohan

- 18. ANTICIPATING MSME UNITS SOCIAL CATEGORY WISE IN INDIA: WITH SPECIAL REPUBLICATION OF MANAGEMENT GRADUATES

 ENTREPRENEURSHIP INTENT OF MANAGEMENT GRADUATES

 ENTREPRENEURSHIP INTENT OF MANAGEMENT GRADUATES Seema H. Kadam, Purnima M. Chouhan
- Seema H. Kodom, Parimeters Formander Goods and Services Tax among Demographic

 19. A STUDY ON AWARENESS TOWARDS GOODS AND SERVICES TAX AMONG DEMOGRAPHIC

 19. A STUDY ON AWARENESS TOWARDS GOODS AND SERVICES TAX AMONG DEMOGRAPHIC
- VINCE EUMO

 20. CHALLENGES PERCEIVED BY FARMERS PRACTICING ORGANIC PADDY CULTIVATION OF THE PARTY OF THE PART Tamalika Sikder, Amrit Pal Singh
- 21. ADOPTION OF PROPER HR PRACTICES: A TECHNIQUE FOR RETAINING TALENT Juender Kaur
- 22. IMPACT OF EFFICIENT WORKING CAPITAL MANAGEMENT AND FOREIGN PROMOTER

 22. IMPACT OF EFFICIENT WORKING CAPITAL MANAGEMENT AND FOREIGN PROMOTER OWNERSHIP ON FIRM VALUE Manpreet Kaur, Harvinder S. Mand 23. MANAGERIAL PERCEPTION TOWARDS TRAINING AND DEVELOPMENT PROGRAMMES: A STILL PERCEPTION TOWARDS TRAINING AND DEVELOPMENT PROGRAMMES TRAINING PROGRAMMES TRAINING
- Jaspal Kaur, B.S Bhatia 24. CAUSAL NEXUS BETWEEN FDI IN FMCG SECTOR AND ECONOMIC GROWTH
- Anupam Sabharwal
- 25. AN EMPIRICAL STUDY OF CUSTOMERS' PERCEPTION REGARDING E-BANKING SERVICES DURING COVID-19: SOME SURVEY EVIDENCES FROM PUNJAB Rimpi, R. K. Uppal
- 26. DETECTION AND CLASSIFICATION OF WEAPON USING GRADIENT ORIENTATION AND LAPLACIAN MAGNITUDE-BASED HISTOGRAM Jayandrath Mangrolia, Ravi Sheth
- 27. PERFORMANCE ANALYSIS OF SELECTED EQUITY LINKED SCHEMES OF MUTUAL FUND Nisha Gupta, B.S Bhatia
- 28. A MACHINE LEARNING METHODOLOGY FOR CARDIO VASCULAR DISEASE PREDICTION Alok Kumar, Manmohan Singh

l:

15

16.

- 29. COMPUTATION OF VaR USING CONTINUOUS CURVE FITTING APPROACH Kirit Vaniya, Ravi Gor
- 30. IMPACT OF ENTERPRISE RESOURCE PLANNING (ERP) IMPLEMENTATION: A CASE STUDY OF A COOPERATIVE DAIRY FIRM Shija T, P. Mohan

PP: 130-134

CAUSAL NEXUS BETWEEN FDI IN FMCG SECTOR AND ECONOMIC **GROWTH**

*Anupam Sabharwal *Department of Economics, Hindu Kanya College, Kapurthala.

ABSTRACT

The Fast Moving Consumer Goods industry is also known as the Consumer Packaged Goods industry. In erast Moving Consumer Goods industry is also known and marketing of packaged consumer goods. Fast It deals mainly with the manufacturing, distribution and marketing of packaged consumer goods. Fast Moving Consumer Goods are usually consumed by consumers at regular intervals. The fast-moving consumer goods (FMCG) business is India's fourth largest industry. This involves broad variety of repeatedly purchased consumer goods such as household and personal care items such as toiletries, soap, cosmetics, oral care products, OTC products and food and beverages, as well as other nondurable products such as glassware, lamps, paper products, etc. From US\$ 23.63 billion in FY18, the rural FMCG market in India is expected to rise to US\$ 220.00 billion by 2025. In 2018, FMCG industry revenues reached US\$ 52.75 billion. The industry's key growth drivers have been more awareness, greater access, and changing lifestyles (IBEF Report, 2020). Competition among FMCG producers is growing and investment in this sector is also rising. In this paper an attempt has been made to study the Causal relation between FDI in FMCG and Economic growth by VAR and VECM. Granger Causality test confirms the inflow FDI in FMCG Sector has a unidirectional relationship with Per capita income, Gross domestic product and Foreign exchange reserves. FDI in FMCG does not Granger cause GDP and Per capita income but Foreign exchange rate shows causal relation with FDI.

KEYWORDS: Foreign Direct Investment, Economic Growth, Fast Moving Consumer Goods, Causality, Retail industry.

INTRODUCTION

Fast-moving consumer goods typically refer to non-durable consumer goods that are needed for regular or frequent use (Paul 2006). FMCG companies manufacture, produce and sell products that are typically low in price and consumed regularly. FMCG businesses are also responsible for production, the supply chain, distribution, and general goods management (Economy Watch, 2009). It has a significant MNC presence and is distinguished by a wellestablished distribution network, fierce competition between organised and unorganised divisions, and cheap operating costs. The industry is very competitive due to the involvement of global firms, domestic companies, and an unorganised market. Unorganized businesses that sell unbranded and unpackaged products account for a significant portion of the industry. More than 50 percent of FMCGs' overall revenue comes from Rs 10 or fewer value With relatively low capital and technical requirements, many new brands have also emerged domestically, whereas the relaxed FDI conditions have resulted in the introduction of a large number of international players into this market. These considerations have made the Indian FMCG market extremely competitive and one of the country's most important economic contributors. The sector's growth peaked in the midnineties before steadily declining at the end of the decade. The original expansion was due to increased product penetration and usage.

The availability of crucial raw materials, cheaper labour costs, and the presence of the value chain provide India a competitive advantage. Most product categories, such as jams, toothpaste, skincare, hair shampoo, and so on, have low penetration and per capita use in India, indicating untapped market potential. The expanding Indian population, particularly in the middle and rural segments, presents an opportunity for branded goods makers to convert clients to branded items.

REVIEW OF LITERATURE

Chauhan Chanchal, et al. (2019) Equity analysis was found to be the most effective tool for determining the link between market return and FMCG sector return. This research might help an investor assess the risk associated with market returns and specific FMCG companies.

Prasad (2018) studied that the restructuring of the retail industry would certainly have a long-term effect on wholesale trade and FMCG distribution. During the period 2006-13, the sector expanded at a compound annual growth rate of 16.2 percent. The decision to enable foreign direct investment of 51 percent in multi-brand retail and 100 percent in single-brand retail bodes well for the FMCG sector's future. The transition is likely to improve jobs and supply chains.

pM Journal of Research plume-13, No-4 (A) (July-Sept) 2021

pp: 130-134 Manyal (2018) described that FMCG companies white achieved high margins over the last Manyai (as a high margins over the last three and their focus will now turn to volume ground and their focus will now turn to volume ground. wire already actions will now turn to volume growth. The years and their focus will now turn to volume growth. The years are that was hampered by a min of headwinds, including demonetization

Indian economy in including demonetization and the sarely of headwinds, including demonetization and the sarely of as a result, volume growth was relatively is of the anti-profiteering provision. OST, and as a notine profiteering provision, most businesses graduate the benefits of GST after November 15 Because of the benefits of GST after November 15, when the passed on the benefits of GST rate on several pssed on the lowered the GST rate on several goods and potenties.

p and Doss P.Maria, (2018) explained that India wresh to be a significant market for a variety of by grown to services, including financial bis grown to services, including financial services, fastconsumer moving and interest are just as critical and markets are just as critical noving relecond markets are just as critical as urban markets. companies that manufacture Fast Moving Consumer Companies Consumer Products face fierce competition and are forced to find new ways to make money.

Alankit (2018) investigated that India's FMCG market accounts for more than half of the food and beverage industry, as well as another third of personal and household care. As businesses set up warehouses across states to provide a more tax-efficient system, the sector is likely to see a major effect once the Goods and Services Tax (GST) is enforced. Working capital is advantageous to some companies but not to others in the FMCG industry, but it will have a positive long-term impact. Manufacturers have been able to conduct their business activities more freely and cost-effectively due to lower taxes on many goods, including logistics services. This has also empowered the common man to purchase more and save money on their purchases.

OBJECTIVES

- 1 To study FMCG sector of India.
- To study various factors affecting FDI in FMCG sector.
- To Study causal relationship between FDI in FMCG sector and Economic Growth.

RESEARCH METHODOLOGY

The most effective way to find the stationary is to use the ADF and P-P tests to unit root test. If the variables are stationary at level than we can use them, but if they are in non-stationary form, than we have to convert all variables stationary form. Testing the co-integration between variables is the second step. After testing the above two lests, there is the implication of the VAR model, which involves two different models for short-run casualty and long-run casualty between the variables. To find out short-

UGC Care Listed Journal

run casualty unregulated VAR model is used while to study long-run casualty VECM model is applied. FDI POLICY RELATING TO TRADE

- Before 1997, when many liberalizations were implemented in the early '90s concerning FDI, FDI was prohibited until 1997 in any form of retail trade.
- In 1997 Up to 100% of FDI approved for the first time (under the approval route) in wholesale trade.
- In 2006, FDI was put under the automatic route in wholesale trade. Foreign direct investment of up to 51 percent was permitted in single-brand retail trade under approval route.
- FDI in Single Brand Retail Trade (SBRT) was further liberalised in 2012, enabling investment of up to 100 percent (under approval route). For the first time, up to 51 percent FDI in multi-brand retail trade (through approval method) was permitted.
- For SBRT organisations operating via brick and mortar stores, B2C e-commerce trading was allowed for the first time in 2014.
- IN 2016 Relaxations implemented in SBRT in the mandatory local sourcing requirements for FDI.100 percent FDI (under approval route) for food products manufactured in India was allowed to trade (including e-commerce). Prescribed requirements and meanings for FDI in e-commerce.
- ✓ IN 2017 The FIPB, which was responsible for authorising non-automatic path investments, was abolished and the online Foreign Investment Facilitation Platform was implemented for the processing of FDI proposals protected by the path of approval.

ECONOMETRIC ANALYSIS

Stationary of Variables and Co-integration

The co-integration strategies used in this paper were used to determine the impact of FDI in FMCG on selected socioeconomic indicators. With implementation of the ADF test, the initial step is to analyse the stationary of variables and transform all variables into stationary. There are three ADF test models, intercept (constant) and trend and intercept are satisfied with the stationary variables test. All the variables were at the level found to be non-stationary integrated series. Besides, we have applied the ADF test on the first difference and found that the stationary variable changes on the first difference. A spurious regression can result from these non-stationary time series. The outcome of the ADF test for stationary variables at a level is shown in Table 1 and all variables were non-stationary at a level.

PP: 130-134

Tablel - ADF Test Results (at level)

		Table		Trend and interce	pr
		Probability-valt	1e	-0.32	P-value
Variables	Intercept	0.70		-1.07	0.98
InFDI	-1.06	0.65		-1.13	090
InGDP	-1.20	0.02		-2.02	0.80
InGDS	-3.49	0.02		-1.17	0.55
InFER	-4.25	0.67			0.80
InPCY	-1.13	nle	e (at First Diff	ference)	
	Ta	ble 2: ADF Test Result	S (at 7	P-value	Order of Internal
			* '-toroppi'		The state of the state of

		I abic 2.	1 i harant	P-value	Order of Inter
		D. L. Lilian value	Trend and intercept	0.004	Order of Integration
Variables	Intercept	Probability-value	-5.20	0.017	10)
InFDI	-5.140	0.001	-4.35	0.009	1(1)
InGDP	-3.842	0.010	-4.68	0.017	1(1)
InGDS	-3.460	0.023	-4.30	0.017	1(1)
InFER	-3.097	0.046	-4.363	0.017	1(1)
InPC1	-3.996	0.008		der Selection Crit	teria

In Table 1 at level and 2 at the first difference, the results of stationary for both variables were presented respectively. For five variables, namely LNFDI, LNGDP, LNGDS, LNPCI and LNFER, the ADF test revealed that unit root at levels for all sequences. All variables were stationary, i.e. incorporated from order one, after first differentiation (1). Besides, there is a probability of providing a co-integration vector whose coefficient can be directly intercepted as a long-term coefficient of effect.

VAR Lag Order Selection Criteria

To study long-run relation among variable, suitable la duration must be selected before using the Johansen of integrating process. The results of the VAR lag order selection criterion are reported in Table 3. To estimate co. integration and unrestricted VAR, the Akaike information criterion (AIC) was used.

Table-3: VAR Lag Order Selection Criteria Results

		Table 0.	,	AIC	SC	HQ
Lag	Log L	LR	FPE	-9.917230	-9.675796	-9.904867
0	84.33	NA	3.40e-11	-15.10458	-13.65598	-15.03040
1	150.83	83.123	2.30e-13	-25.00164	-22.34587	-24.86564
2	255.01	65.11*	4.53e-17*	-202.9893*	-199.1263*	-202.7914*
3	1703.91	0.000	NA NA	202.7075		

Johansen Co-integration

The next step after choosing the order of integration is to apply the Johansen trace test to find out that is there any

co-integration equation exist between independent and dependent variables or not. The next step is to test the cointegration. If there is any Co-integrating equation exist only than we can go for VECM.

Table 4: Johansen Co-Integration-Unrestricted Integration Rank Test (Trace) Results

			14:1(0.5)	p-value
Hypothesized No.	Eigen Value	Trace Statistic	critical value(0.5)	
Of CE(s)	0.999	243.58	69.818	0.000
None*	0.935	99.351	47.856	0.000
Almost 1*	0.812	52.82	29.797	0.000
Almost 2*	0.593	24.37	15.494	0.002
Almost 3*	0.413	9.083	3.841	0.002
Almost 4*				

Table 5: Johansen Co-Integration-Unrestricted Integration Rank Test Results on the basis of Eigen value

the stand No. Of CE(s)	Eigen Value	Max-Eigen Statistic	critical value(0.5)
Hypothesized No. Of CE(s)	0.99	144.23	33.87
None*	0.93	46.52	27.58
Almost 1*	0.81	28.45	21.13
Almost 2*	0.59	15.29	14.26
Almost 4	0.41	9.083	3.841

Co-integration Results

Considering the results of the co-integrating equation trace test proof, a 5 percent significance level has been found. This normalised co-integrating equation has been shown in Table-6 for FDI in FMCG. The equation shows that FDI in

FMCG in India has a negative effect on long-term foreign exchange reserves and per capita revenue. Also, the effect is significant. is significant. On average, both the gross domestic product and the gross domestic product and the gross domestic savings are positive and significant, ceteris paribus.

PIMI Journal of Research plMT Journa, No-4 (A) (July-Sept) 2021 volume-134 PP: 130-134

UGC Care Listed Journal

Table-6: Co integration Equation Normalized for Narmalized co inten

	Normanzed co il	itegrating coeffici	for FDI in East	10: 2279 700
/	LNFDI	LNFER 4 672683	ard and in FM(G 2278-7925
/	1.000000	LNFER	and error in parenthese	
/		12003		
	N	ote: Values in parentheses sh	-15,94675	LNGDS
		in parentheses sh	10W stand	-6 300192 LNPCY
			standard errors	(0.05381) 19.66306

The results of Vector Error Correction Model disclosed that model D (FDI) has shown the error The results of the property of proceed mouch to co-integration equations. All the

dependent variables are converted in 1" difference by the system during the estimation. There are requirements to check the significance of independent variables on lag one

The long-run co integration equation is:

[1.000000lnFDI_{t-1}-3.809136 LNGDP (-1) + 1.428593 LNPCY (-1) +2.047205 LNFER (-1) + 12.67447] Table-7: Results of VECM for FDI in FMCG Table-7: Results of VECM for FDI in FMCG

Vector Error Correction Estimates Vector Error Correction Estimates 17 after adjustments		- DI III FWICG		
Vector Error Correction Estimates Included observations: 17 after adjustments Included observations and () values shows stand				
- slies I-statistics	ard errors			
Cointegrating Eq:	CointEq1			
INFDI(-1)	1.000000		_	
INFDICTO	-3.809136			
LNGDP(-1)	(3.74079)			
	[-1.01827]			
- 97/ 1)	1.428593			
LNPCY(-1)	(4.39811)			
	[0.32482]			
	2.047205			
LNFER(-1)	(0.21220)			
	[9.64756]			
	12.67447			
C	D(LNFDI)	D(LNGDP)	D(LNPCY)	D(LNFER)
Error Correction:	0.013560	0.002645	0.004217	-0.151909
CointEq1	(0.32020)	(0.05683)	(0.05448)	(0.08109)
, and the second	[0.04235]	[0.04653]	[0.07741]	[-1.87328]
		-0.023805	-0.030993	-0.152551
D(LNFDI(-1))	-0.156957	(0.08353)	(0.08007)	(0.11919)
	(0.47062)	[-0.28499]	[-0.38706]	[-1.27993]
the state of the s	[-0.33351]	[-0.28499]	[-0.36700]	1,12,1112
and the second s		4.022000	4.753154	-2.261880
D(LNGDP(-1))	10.88319	4.922080	(5,77454)	(8.59531)
pichobi (-1))	(33.9391)	(6.02374)	[0.82312]	[-0.26315]
10000000	[0.32067]	[0.81711]	-5.046148	1.745078
DI MINORY 133	-9.328664	-5.222799	(6.22809)	(9.27042)
D(LNPCY(-1))	(36.6049)	(6.49688)	[-0.81022]	[0.18824]
the second property of the second property of the second property of the second property of	[-0.25485]	[-0.80389]	0.109820	-0.321712
Day	0.315233	0.109811	(0.38047)	(0.56633)
D(LNFER(-1))	(2.23618)	(0.39689)	[0.28864]	[-0.56807]
	[0.14097]	[0.27668]	0.037240	0.270005
	-0.141330	0.048091	(0.10141)	(0.15095)
C		(0.10579)	[0.36721]	[1.78870]
	(0.59604)	[0.45460]	0.36721	0.672078
	[-0.23712]	0.276975	-0.021696	0.523022
R ²	0.241732	-0.051673	0.067300	0.149109
Adj. R ²	-0.102936	0.073234	0.067300	4.508911
Sum so rocid	2.324791	0.842772	22.89839	16.13649
- 3Idiletia	0.701348	22.18012	22.89839	-1.192529
Log likelihood	-7.210497	-1.903544	-1.988046	-0.898453
Akaike AIC	1.554176	-1.609468	-1.693970	4. =
Schwarz SC	1.848251	-1.009400		_
and SC.	1.0	- ITCM		1.974

mal SC	a lity based on VECM	Probability
Table-8: Short Rui	n Causality based on VECM t-Statistic t-Quarter of 0.042350	0.9670
	Coefficient	0.7450
	0.013560	0.7545
(CQ)	-0.156957 0.470619 0.320668 33.93914	133 Page
CO	10.88319	100

PIMT Journal of Research Volume-13, No-4 (A) (July-Sept) 2021

PP: 130-134

UGC Care Listed Journal
ISSN No: 2278-7925

11.130-134	-9.328664	36.60487	-0.254848	0.8035
C (4)	0.315233	2.236178	0.140969	0.8904
C (5)	-0.141330	0.596037	-0.237116	0.8169
C (6)				

As the coefficient of the Error correction term is nonnegative and insignificant, it shows that there is no long-run relationship between FDI in Fast-moving consumer goods and Gross domestic product, Foreign exchange rate and Pt.

Table-9: Results of Diagnostic Tests

	2.155 (0.34)
Jarque-Bera Normality Test	0.7287 (0.92)
Heteroskedasticity Test: Breusch-Pagan-Godfrey	2.2927 (0.0568)
Breusch-Godfrey Serial Correlation LM Test	

Normality, heteroskedasticity, and serial correlation were all investigated in the models (Table-9). The data was subjected to diagnostic tests, which demonstrated that both models are well-specified. The residuals were also shown to be normally distributed by diagnostic testing; homoskedasticity is not serially correlated.

GRANGER CAUSALITY TEST

The first row of the below table 10 revealed that the null hypothesis, LNGDP does not Granger cause LNFDI is rejected, the level of significance is desirable. LNFDI does not Granger Cause LNGDP as the p-value is greater than 0.05. In the second row the null hypothesis, Inpcy does not

Granger Cause Infdi, is accepted at 0.03 percent level of significance and therefore, Inpcy Granger Cause Infdi. Therefore, there is a unidirectional causal relationship between Infdi and Inpcy. In other words, PCY Granger causes FDI and not vice versa.

The third row shows that the null hypothesis, LNFER does not Granger Cause LNFDI, is accepted, the level of significance is not desirable. LNFER does not cause LNFDI. But FDI Granger Cause FER. Therefore, there is a unidirectional causal relationship between FDI and FER In other words, FDI Granger causes FER and not vice versa. So, there is not a unidirectional relationship.

Table: 10 Granger Causality Tests Results

	01 1:	F-Statistic	Probability	Uni-Direction/Bi-Direction
Alternative Hypothesis(H _a)	Observations		0.0283	Unidirectional
Ln GDP Granger Cause In FDI	17	4.866		Cindirectional
Ln FDI Granger Cause In GDP	•	1.299	0.3083	
C C	17	4.557	0.0337	Unidirectional
Ln PCY Granger Cause In FDI	17	1.560	0.2499	
Ln FDI ranger Cause In PCY			0.0999	
Ln FER Granger Cause In FDI	17	2.807		**
In FDI Granger Cause in FER	•	5.148	0.0243	Unidirectional

CONCLUSION

Johnson Co-integration test verifies that there is Cointegration among Inflow of FDI, Per capita income, Foreign exchange reserves and GDP. As coefficient of the error correction term is non-negative and insignificant, it shows that there is no long-run relationship between FDI in Fast-moving consumer goods and Gross domestic product, Foreign exchange rate and Per capita income.

Granger Causality test also confirms the inflow FDI in FMCG Sector has a unidirectional relationship with Per capita income, Gross domestic product and Foreign exchange reserves. FDI in FMCG does not Granger cause GDP and Per capita income but Foreign exchange rate shows causal relation with FDI.

REFERENCES

 Chauhan.C, Rathore. H & Matta. S.K., 2019, "An Empirical Research on FMCG Sector", International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8, Issue-2S7, July 2019.

- Satyap.V.V(2018), "Impact Of Fdi In Retailing Industry" International Journal of Research in Social Sciences, Vol. 8 Issue 5, May 2018, ISSN: 2249-2496 Impact Factor: 7.081.
- https://economicstime.indiatimes.com/markets/expertview/sanjay-manyal-is-betting-on-these-fmcgcounters/articleshow/63830361.cms?from=mdr.
- Suresh .P and Doss P. Maria, (2018), "Impact Of Fast Moving Consumer Goods (FMCG) In Indian Economy-A Study" UGC Journal .No. 45308 | IFS – 2018: 1.14 | SJIF 2016:3.343 | SJIF 2017: 4.253 | ISI 2017-2018: 0.673
- https://www.alankitgst.com/pdf/FMCG.pdf
- Herzer, Dierk, (2008), The long-run relationship between outward FDI and domestic output: Evidence from panel data, Economics Letters, 100, issue 1, p. 146-149.
- Goel Rahul and C.G. Raipur(2017), "Effect of Sales Promotion on Consumers with reference to FMCG Companies in India", International Journal of Business Administration and Management. ISSN 2278-3660, Volume 7, Number 1 (2017)