# An Empirical Analysis Of The Regional And Industrial Distribution Of Foreign Direct Investment And Economic Growth In India

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#### ABSTRACT

The main objective of this paper is to study in-depth the trends and impact of FDI on economic growth at regional and industrial level. The findings indicated that although Andhra Pradesh saw a notably favorable influence from FDI on economic development, its growth rate remained lower owing to a declining trend in FDI inflows compared to other areas. Consequently, a comprehensive policy at both the national and state levels must be developed to guarantee a more fair allocation of FDI inflows, enabling disadvantaged states to gain as well. The effect of FDI inflows on the automobile industry was favorable and large; yet, its growth rate was lower than that of twenty other sectors owing to greater data swings throughout the years. Consequently, the Government should overhaul its whole framework, mitigate entrance hurdles, and provide improved and open information about policy laws and procedures in underprivileged industries. In summary, foreign direct investment inflows are important for a growing country such as India, and in this dynamic global landscape, no nation can thrive in isolation. Currently, governments have no alternative but to liberalize their economy in conjunction with the global community. Foreign Direct Investment cannot be disregarded despite its many adverse consequences. Given the conditions, it is prudent to comprehend the hazards, formulate regulations appropriately, and address the issues of FDI.

Keywords: Foreign Direct Investment (FDI), States, Industries, Economic Growth.

#### 1. INTROCUCTION

The surge of liberalization and globalization worldwide has facilitated access to several national marketplaces for international commerce. Private investment is increasingly conducted by transnational companies (TNCs), often referred to as multinational corporations (MNCs). These multinational organizations facilitate global commerce and investment by their proficient management, technological advancements, and financial resources. Recent advancements in global markets stem from the rapid expansion of worldwide commerce. The conclusion of the 20th century has precipitated significant increase in worldwide investments, commerce, and financial activities, with the integration and liberalization of international markets.

In India, significant economic changes of liberalization and globalization facilitated the influx of foreign direct investment (FDI). Foreign Direct Investment (FDI) rose from US\$155 million in 1991 to US\$2,319 million in 2000, and subsequently to US\$34,417 million in 2018. Furthermore, India's proportion of global FDI flows has risen from 0.10 percent in 1991 to 0.15 percent in 2000, and subsequently to 2.91 percent in 2018. Nonetheless, there exists significant potential for drawing foreign direct investment into underdeveloped industries and areas. Consequently, an extensive examination of the patterns and effects of foreign direct investment on the economic development of the country at both regional and industry levels is necessary.

Considering this, the paper seeks to examine the growth, structural changes and impact of FDI inflows on economic growth at state as wel as industry level.

#### 2. DETAILS EXPERIMENAL

#### 1.1 Materials and Procedures

The research used secondary data spanning from 1990-91 to 2018-19, in alignment with the aforementioned aims. We have used abbreviations of the concerned States/Union Territories as well as Industries.For Statewise analysis, data have been taken from 2005-06 to 2018-19. Additionally, seven industries were analyzed for the first period (1994-95 to 2004-05), whereas forty-five industries were examined for the subsequent period (2005-06 to 2018-19). The selection of industries and timeframes was contingent upon data availability. Data on state-wise and industry-wise FDI inflows in India have been sourced from several issues of *SIA Newsletters*. The data were analyzed by computing growth rates, percentages, and basic regression models. In order to find the impact of each variable on FDI, and to know the impact of FDI inflows on Economic Growth in the case of State-wise and Industry-wise, simple regression equations were fitted by regressing dependent variable on each of the independent variable separately.

#### 3. RESULTS AND DISCUSSION

# 3.1 GROWTH PERFORMANCE OF FDI INFLOWS IN INDIA (STATE-WISE ANALYSIS)

Analysis of state-wise FDI performance reveals in Table 2 that 'Total FDI' increased at compound annual growth rate of 20.58 percent during the period 2005-06 to 2018-19. FDI inflows of fifteen states/groups increased at faster rate than 'Total FDI'. The highest growth rate was experienced in case of 'UTCHL' (117.09 percent), followed by 'BIH & JRKD' (94.72 percent) and 'RJTN' (53.23 percent). The main reason for the higher growth of these states is more FDI inflows in sectors like service, transportation and electrical equipments, while the growth of FDI inflows in 'MHRTR', 'DNH', 'DD', 'AND PRD', 'WST BGL, SKM, AND NIC IS, 'CDGR, PJB, HRYN and HM PRD', 'ASSM, ARN PRD, MNPR, MGHL, MZRM, NGLD and TRP' and 'RNI' experienced lower growth rate than the 'Total FDI'. There was a mix of reasons for lower growth rate in these states, including lack of investment opportunities, growth potential, hilly terrain and other difficulties like acquiring of land etc. Moreover, 'Goa' and 'ORS' witnessed negative growth rates in FDI inflows.

# 2. (INDUSTRY/ACTIVITY-WISE ANALYSIS)

#### 2.1 First Sub-Period (1994-95 to 2004-05)

Analysis of industry-wise FDI performance reveals in Table 2 that 'Total FDI' increased at compound annual growth rate of 9.16 percent during the first sub- period. Of the seven industries considered, FDI inflows of three industries increased at faster rate than 'Total FDI'. These industries included ENG, CMPSR and SERSC. The highest growth rate was experienced by FDI inflows of CMPSR (37.52 percent), followed by SERSC (27.66 percent) and ENG (10.56 percent). The primary factor contributing to the increased FDI development in these areas is the availability of the automatic route for proposals within the Information and Technology sector, even if the applicant already has an existing joint venture or technology-linked agreement within the same domain. The growth of FDI in FDP and FINIRB experienced lower growth rate than the 'Total FDI'. These industries experienced low growth rate due to no specific government incentives to FDI in these industries. Negative growth rate was experienced by ELEQ and CHMAP due to wider fluctuations in the inflows during in-between years of the first sub-period.

#### 2.2 Second Sub-Period (2005-06 to 2018-19)

Similarly, during the second sub-period, data given in Table 3 showed that 'Total FDI' increased at compound annual growth rate of 9.75 percent during the period 2005-06 to 2018-19. Of the forty-five industries considered, FDI inflows of thirty-one industries increased at a faster rate than 'Total FDI'. The highest growth rate was experienced by the industry namely DFCI (82.77 percent), followed by RTLTRD (68.71 percent) and RBRGD (55.22 percent). The main reason for higher growth of FDI in these industries was that the Defence

industry sector has been opened upto 100 percent for Indian private sector participation with FDI permitted upto 26 percent, both subject to licensing. Government liberalized the existing policy on FDI in single-brand retail trading, in which FDI upto 51 percent was permitted. The FDI growth of ATRNS, PPRI and STRNS experienced lower growth rate than the 'Total FDI'. These industries experienced lower growth rate due to no specific government incentives to these industries. Negative growth rate was experienced by TCF, CRMS, SERSC, CMPHS and TELCM due to wider fluctuations of the data in between years.

2.3 Table 1
State-wise Foreign Direct Investment Inflows in India (2005-06 to 2018-19) (Rs. Crore)

National	States Covered		DI Inflows (F	Compound	
Offices of RBI		Crore)			Annual Growth
		2005-06	2009-10	2018-19	Rate*
					(Percentage)
					(2005-06 to
					2018-19)
Mumbai	MHRTR, DNH	2272.9	39408.8	34913.9	19.82
	and D & D				
New Delhi	DLH, Part of UTT	4297.6	46196.5	39115.1	24.22
	PRD and HRYN				
Bangalore	KRNTK	1606.9	4852.2	19514.2	21.65
Chennai	TML NDU and PND	1096.4	3653.2	21655.8	27.61
Ahmadabad	GJRT	635.2	3876.3	8838.3	22.08
Hyderabad	AND PRD	723.2	5710	8046.7	16.82
Kochi	KRLA &	26.2	606.4	1366.7	45.62
	LKDWP				
Kolkata	WST BGL, SKM,	405.4	531.2	1335.4	18.72
	AND NIC IS				
Kanpur	UTCHL	0.03	226.8	597.3	117.09
Chandigarh	CDGR, PJB,	377.7	1038.1	233.7	17.26
	HRYN and HM PRD				
Bhopal	MDH PRD and CTGR	53.8	254.5	600.1	35.58
Panaji	GOA	81.4	807.7	207.9	-0.29
Jaipur	RJTN	2.6	148.7	3233.2	53.23
Bhubaneswar	ORS	261.6	701.7	8.59	-1.53
Patna	BIH & JRKD	0.00	0.00	65.7	94.72
Guwahati	ASSM, ARN PRD,	0.00	50.9	12.3	12.44
	MNPR, MGHL,				
	MZRM,				
	NGLD & TRP				
	RNI	7429.2	15056	36072.5	18.39
Total		19270.13	123119	175817.4	20.58

Source: SIA Newsletters (Various Issues).

# 2.4 Table 2

Industry-wise Growth of Foreign Direct Investment in India (1994-95 to 2004-05)

<sup>\*</sup>Note: Growth rates have been worked out for the Time Series data from the period 2005-06 to 2018-19.

Industries	Value of F	oreign Direct Inv Crore) Year	Compound Annual Growth Rate*	
	1994- 95	2000-01	2004-05	( Percentage) (1994-95 to 2004-05)
FDP	191.3	342	822.5	5.30
ELEQ	177.1	971.4	62.9	-4.74
ENG	413.2	1245.1	4153.3	10.56
CHMAP	443.3	10.79	134.5	-14.91
CMPSR	32	1395.6	1672.1	37.52
SERSC	293.2	1030.7	1815.9	27.66
FINIRB	306.9	182.4	1631.6	0.46
Total FDI	1857	5792	10292.8	9.16

Source: SIA Newsletters (Various Issues).

2.5 Table 3
Industry-wise Growth of Foreign Direct Investment in India (2005-06 to 2018-19)

Industries		Foreign Direct I	Compound Annual Growth	
		(Rs. in Crore)	Rate* (Percentage) (2005-	
	2007.06	Year	2010.10	06 to 2018-19)
	2005-06	2010-11	2018-19	
AGSR	5.8	202.5	278.9	32.98
FRT	22.8	83.7	1377.5	54.14
MIN	14.6	357.4	4021.5	27.50
PETRO	271.2	2543.1	6164.5	16.29
RBRGD	85	78.7	1532.5	55.22
TCF	28.3	14.4	8.8	-15.8
SGR	70.3	0.7	164.2	11.45
VTBL	19.9	267.3	869.3	34.79
TMBP	1.5	7.1	103.1	40.09
ATMB	1177.3	5864.1	14854.6	24.37
MTLG	784.6	5023.3	2776	12.61
CHM	1794.4	1811.5	3614	12.89
ELECEQ	374.6	698.8	3225.7	6.53
DRGPH	975	961	7840.2	39.50
CMTGP	952	2911	1259.4	4.16
FPI	246.3	858	2844.6	29.83
TXTL	526.8	588.9	897.6	5.30
ELEC	125.5	274.7	570	17.22
MECEI	234.5	493.9	4850.8	30.64
FRMNI	19.8	262.2	1454.2	41.62
INDMCH	116.9	210.9	4840.9	50.79
PPRI	22.5	30.1	111.1	1.00
CRMC	198.5	54	264.7	-5.00
MCHTL	157.9	53	174.8	6.02
MDSRA	8.9	146.6	897.9	46.22
DMND	268.2	89.3	1544.2	11.69
AGMCH	252.7	2.2	419.4	8.37

<sup>\*</sup>Note: Growth rates have been worked out for the Time Series data from the period 1994-95 to 2004-05.

GLI	5.6	35.4	179.5	50.10
RRC	112.4	318.4	758.7	37.94
LTHR	35.7	42.1	222.6	28.06
DFCI	0.01	0.2	0.4	82.77
BLST	14.9	11.1	8.0	22.45
SERSC	17503.2	15053.1	17637.3	-1.47
CMPHS	8749.2	3551.2	12594.4	-4.61
TELCM	4169.9	7542	17109.8	-8.97
CNSA	3661.3	4978.7	4253.8	1.82
PWR	893.1	5796.2	3931.7	13.63
TRD	386.1	2552.4	16239.3	26.27
HTLTR	817.4	1405.1	4535.8	21.12
INFBR	187.8	1887.1	1146.9	15.39
HSPDC	145.5	1177.3	3991.7	33.50
STRNS	317	1376.2	1830.7	1.75
ATRNS	223.6	620.8	455.9	0.78
EDCT	207	173.2	842.3	22.49
RTLTRD	0.7	116.5	1021.2	68.71

Source: SIA Newsletters (Various Issues).

46187.3

**Total FDI** 

153720.4

#### 3.2 STRUCTURE OF FDI INFLOWS IN INDIA (STATE-WISE ANALYSIS)

70519.2

The Table 4 reveals that, Regions namely, 'MHRTR, DNH, D&D', 'DLH, Part of UTT PRD and HRYN' and 'RNI' accounted for maximum share (more than 70 percent) of India's FDI inflows up to 2009-10. After 2009-10, the shares of these regions in India's FDI inflows declined (share decreased to 62.63 percent in 2018-19). The trend analysis showed that the trend coefficients of shares of FDI inflows were neither 'positive and significant' nor 'negative and significant' in case of even single region. However, trend coefficients of shares of FDI inflows were positive and non-significant in case of 'DLH, Part of UTT PRD and HRYN', 'KRNTK', 'TML NDU and PND', 'KRLA &

LKDWP', 'MDH PRD and CTGR' and' RJTN' while trend coefficients were found to be negative and non-significant in case of 'MHRTR, DNH, D & D', 'GJRT', 'AND PRD', 'WST BGL, SKM, AND NIC IS', 'CDGR, PJB, HRYN and HM PRD', 'GOA', 'ASSM, ARN PRD, MNPR, MGHL, MZRM, NGLD & TRP' and 'RNI'.

# 3. INDUSTRY/ACTIVITY-WISE ANALYSIS

## 3.1 First Sub-Period (1994-95 to 2004-05)

The trend analysis given in Table 5 showed that the trend coefficient of shares of FDI inflows of CMPSR was positive and significant, the trend coefficients were positive and non-significant in case of ENG and SERSC. On the other hand, the coefficients were negative and significant in case in case of CHMAP industry, and negative and non-significant in case of three industries namely FDP, ELEQ and FINIRB.

#### 3.2 Second Sub-Period (2005-06 to 2018-19)

The trend analysis given in Table 6 showed that the trend coefficients of shares of FDI inflows of FRT, RBRGD, VTBL, TMBP, ATMB, DRGPH, INDMCH,

MDSRA, RRC, TRD and STRNS were positive and significant, the coefficients were positive and non-significant in case of AGSR, MIN, PETRO, MTLG, CHM, FPI, ELEC, MECEI, FRMNI, DMND, GLI, LTHR, DFCI, BLST, PWR, HTLTR, INFBR and

9.75

<sup>\*</sup> Note: Growth rates have been worked out for the Time Series data from the period 2005-06 to 2018-19.

EDCT. On the other hand, the coefficients were negative and significant in case of TCF, SERSC, CMPHS, HSPDC and RTLT industries and negative

and non-significant in case of GSR, ELECEQ, CMTGP, TXTL, PPRI, CRMC, MCHTL, AGMCH, TELCM, CNSA and ATRNS.

3.3 Table 4
Structure of State-wise FDI Inflows in India (2005-06 to 2018-19) (Percentage Share)

National Offices of	States	Trend Function			
RBI	Covered	_ r er een ung	investment	Trend Tunetton	
		200	Year		
		2005-	2009-	2018-	
36 1 '	) (III) TD	06	10	19	X7 20 005 0 244; (2 040) (
Mumbai	MHRTR,	11.79	32.01	19.86	Y=29.985-0.344t (3.949) (-
	DNH and D&D				0.281)
New Delhi	DLH,	22.30	37.52	22.25	Y=19.226+0.487t (3.376)
	Part of UTT				(0.531)
	PRD and				
	HRYN				
Bangalore	KRNTK	8.34	3.94	11.10	Y=5.861+0.118t
					(0.007) (0.663)
Chennai	TML ND	5.69	2.97	12.32	Y=4.497+0.448t
	and PND				(1.835) (1.133)
Ahmadabad	GJRT	3.30	3.15	5.03	Y=4.307-0.039t
					(1.926) (-0.107)
Hyderabad	AND	3.75	4.64	4.58	Y=4.669-0.111t
	PRD				(6.695) (-0.986)
Kochi	KRLA &	0.14	0.49	0.78	Y=0.083+0.083t
	LKDWP				(0.274) (1.704)
Kolkata	WST BGL,	2.10	0.43	0.76	Y=1.649-0.44t (3.392) (-
	SKM, AND				0.536)
	NIC IS				
Kanpur	UTCHL	0.00	0.18	0.34	-
Chandigarh	CDGR, PJB,	1.96	0.84	0.13	Y=0.947-0.088t (2.540) (-
	HRYN				1.456)
	and HM				
	PRD				
Bhopal	MDH	0.28	0.21	0.34	Y=0.153+0.038t (0.947)
	PRD and				(1.464)
	CTGR				
Panaji	GOA	0.42	0.66	0.12	Y=10.173-1.146t
					(1.293) (-0.904)
Jaipur	RJTN	0.01	0.12	1.84	Y=-0.159+0.094t
					(-0.464) (1.713)
Bhubaneshwar	ORS	1.36	0.57	0.00	-
Patna	BIH &	0.00	0.00	0.04	-
	JRKD				

Guwahati	ASSM, ARN	0.00	0.04	0.01	Y=0.035-0.002t (1.208) (-
	PRD, MNPR,				0.498)
	MGHL,				
	MZRM, NGLD				
	&				
	TRP				
	RNI	38.55	12.23	20.52	Y=27.601-0.561t
					(45.86) (-0.578)
Total		100	100	100	

Source: Based on Data Given in Table 1.

Note: Trend Values have been worked out for the Time Series data from the period 2005-06 to 2018-19.

Table 5 Industry-wise Structure of Foreign Direct Investment in India (Percentage Share) (1994-95 to 2004-05)

Industries	Perce	entage Share of Fo	Trend Function 1994-95 to	
	Dia	rect Investment <b>Y</b>	2004-	
	1994-95	2000-01	2004-05	05
FDP	10.30	5.90	8.00	Y=7.600-0.383t
				(3.598) (-1.230)
ELEQ	9.54	16.78	0.61	Y=13.382-0.462t
				(3.061) (-0.717)
ENG	22.25	21.49	40.35	Y=18.655+0.589t
				(2.957) (0.633)
CHMAP	23.87	10.79	1.30	Y=18.271-1.600t*
				(7.202) (-4.236)
CMPSR	1.72	24.09	16.25	Y=-0.583+1.614t*
				(-0.296) (5.559)
SERSC	15.79	17.79	17.64	Y=5.249+1.709t
				(0.823) (1.818)
FINIRB	16.53	3.15	15.85	Y=11.241-0.422t
				(2.567) (-0.653)
Total FDI	100	100	100	

Source: Based on data given in Table 2

Note: a) Trend Values have been worked out for the Time Series data from the period 1994-95 to 2004-05.

b) \* represents t-value significant at 1% level.z

3.4

# **3.5** Table 6

# Industry-wise Structure of Foreign Direct Investment in India (Percentage Share) (2005-06 to 2018-19)

Industries		entage Share of Foreign Direct Investment Year		Trend Function
	2005-06	2010-11	2018-19	
AGSR	0.01	0.29	0.18	Y=0.310+0.009t (1.439) (0.257)

FRT	0.04	0.12	0.89	Y=-0.143+0.058t**(-1.020) (0.034)
MIN	0.03	0.51	2.61	Y=0.834+0.021t (1.108) (0.174)
PETRO	0.58	3.6	4.01	Y=2.042+0.119t (1.283) (0.462)
BRGD	0.18	0.11	0.99	Y=-0.476+0.232t** (-0.836) (2.532)
TCF	0.06	0.02	0.005	Y=0.121-0.010t*** (1.797) (-0.939)
SGR	0.15	0.009	0.11	Y=0.063-0.003t (1.698) (-0.558)
VTBL	0.04	0.38	0.56	Y=0.008+0.042t** (0.069) (2.348)
TMBP	0.003	0.01	0.07	Y=0.004+0.009t*** (0.139) (1.965)
ATMB	2.54	8.32	9.66	Y=1.779+0.636t**(1.259) (2.791)
MTLG	1.69	7.12	1.8	Y=3.225+0.117t (1.881) (0.421)
СНМ	3.88	2.57	2.35	Y=2.489-0.190t (1.004) (-0.477)
ELECEQ	0.81	0.99	2.09	Y=2.489+0.116t (2.818) (0.813)
DRGPH	2.11	1.36	5.1	Y=-0.701+0.673t**(1.693) (-0.219)
CMTGP	2.06	4.13	0.82	Y=1.591-0.033t (1.693) (-0.219)

FPI	0.53	1.21	1.85	Y=0.430+0.203t (0.554) (1.618)
TXTL	1.14	0.83	0.58	Y=0.911-0.027t (5.789) (-1.049)
ELEC	0.27	0.39	0.37	Y=0.239+0.029t (1.599) (1.083)
MECEI	0.51	0.7	3.15	Y=0.076+0.241t (0.091) (1.784)
FRMNI	0.04	0.37	0.95	Y=-0.457+0.290t (-0.349) (1.377)
INDMCH	0.25	0.29	3.15	Y=-0.581+0.364t*(-1.584) (6.161)
PPRI	0.04	0.04	0.07	Y=0.616-0.014t (1.108) (-0.152)
CRMC	0.43	0.07	0.17	Y=0.494-0.028t (1.823) (-0.641)
MCHTL	0.34	0.07	0.11	Y=0.352-0.004t (2.748) (-0.185)
MDSRA	0.01	0.21	0.58	Y=0.035+0.075t** (0.209) (2.808)
DMND	0.58	0.12	1.01	Y=0.230+0.020t (1.168) (0.630)
AGMCH	0.54	0.003	0.27	Y=0.258-0.010t (1.816) (-0.448)
GLI	0.01	0.05	0.12	Y=-0.085+0.049t (-0.397) (1.418)
RRC	0.24	0.45	0.49	Y=-0.103+0.070t*** (-0.454) (1.901)

LTHR	0.07	0.05	0.14	Y=0.004+0.011t (0.085) (1.443)
DFCI	0.0002	0.0002	0.0002	Y=6.667+0.009t (0.003) (1.094)
BLST	0.03	0.01	0.005	Y=0.010-0.003t (0.363) (-0.749)
SERSC	37.89	21.34	11.5	Y=36.059-2.318t* (13.420) (-5.352)
CMPHS	18.94	5.03	8.2	Y=14.832-1.313t** (4.517) (-2.480)
TELCM	9.03	10.69	11.13	Y=10.662+0.561t (3.929) (1.283)
CNSA	7.93	7.06	2.77	Y=10.358-0.428t (6.728) (-1.726)
PWR	1.93	8.22	2.56	Y=4.070+0.067t (2.474) (0.254)
TRD	0.84	3.62	10.56	Y=0.607+0.526t*** (0.397) (2.136)
HTLTR	1.77	1.99	2.95	Y=1.313+0.527t (0.411) (1.025)
INFBR	0.41	2.67	0.75	Y=1.547+0.053t (1.906) (0.408)
HSPDC	0.31	1.67	2.6	Y=-0.180+0.302t** (-0242) (2.519)
STRNS	0.68	1.94	1.19	Y=-126.93+37.708t** (-1.717) (3.166)
ATRNS	0.48	0.88	0.29	Y=0.468-0.026t (2.228) (-0.779)
EDCT	0.44	0.24	0.55	Y=0.233+0.076t (0.691) (1.391)

RTLT	0.001	0.16	0.66	Y=1.344+0.030t(0.545) (0.074)
Total FDI	100	100	100	

Source: Based on data given in Table 3.

Note: a) Trend Values have been worked out for the Time Series data from the period 2005-06 to 2018-19. b) \*,\*\* and \*\*\* represent t-value significant at 1% 5,% and 10% level respectively.

# IMPACT OF FDI INFLOWS IN INDIA (STATE-WISE ANALYSIS)

State-wise analysis of impact of FDI inflows on economic growth, given in Table 7 reveals that the regression coefficients of KRNTK and 'TML ND and PND' were found to be positive and highly significant (p<0.01), indicating that FDI inflows to these states contributed to their growth significantly. Further, positive and significant (p<0.05) impact on growth had also been observed in case of 'DLH, UTT PRD and HRYN', 'MDH PRD and CTGR' and 'BIH and JRKD'.

FDI inflows to another two states namely 'AND PRD' and 'RJTN' witnessed positive and but less significant (p<0.10) effect on their economic growth. On the other hand, regression coefficients of states i.e. 'WST BGL, SKM, and AND NIC IS' and 'CDGR, PJB, and

HM PRD' were found to be positively but non-significant, indicating no significant effect on their growth. For the remaining states viz. GOA, ORS and 'ASSM, ARN PRD, MNPR, MGHL, MZRM, NGLD and TRP', regression coefficients were negative and non-significant, depicting that FDI inflows in these states could not put impact on the economic growth.

# 4. INDUSTRY-WISE ANALYSIS

The results of regression analysis given in Table 8 show that during the period 2005-06 to 2018-19, regression coefficients were found to be positive and significant in case of eight industries namely 'FRT', 'RBRGD', 'VTBL, 'ATMB', 'DRGPH', ' FPI',

'INDMCH' and 'HSPDC', indicating that FDI inflows in these industries contributed towards raising economic growth in these industries. Positive but non-significant effect had been experienced in twenty two industries namely

'MIN', 'PETRO', 'SGR', 'MTLG, 'CHM', 'CMTGP', 'TXTL', 'ELEC', 'PPRI', 'CRMC',

'MCHTL', DMND', 'AGMCH', 'GLI, 'LTHR, 'BLST,

'TELCM', 'CNSA', ' PWR', ' HTLTR', ' INFBR' and

'RTLTRD', while the effect on the remaining four industries i.e. 'TCF', ELEQ', 'SERSC' and 'CMPHS' was found to be negative and non-significant.

Table 7
Impact of Foreign Direct Investment on Economic Growth of States in India: Results of Simple Regression Analysis (2005-06 to 2018-19)

	Constant	Coefficient (β)	r <sup>2</sup>	P-Value
States				
DLH, Part of	513660.229	18.649	0.535	0.016**
UTT PRD and	(2.866)	(3.032)		
HRYN				
KRNTK	186944.543	23.288	0.680	0.003*
	(3.728)	(4.124)		

TML ND	275259.427	30.135	0.723	0.002*
and PND	(4.125)	(4.573)		
GJRT	395870.746	7.068	0.040	0.578
	(4.715)	(0.579)		
AND	144528.230	32.355	0.357	0.068***
PRD	(1.920)	(2.106)		
WST BGL,	257931.146	118.656	0.288	0.110
SKM and AND	(2.311)	(1.798)		
NIC IS				
CDGR,	235745.974	58.805	0.041	0.575
PJB and HM	(4.763)	(0.5874)		
PRD				
MDH	216928.399	294.828	0.463	0.030**
PRD and CTGR	(3.468)	(2.624)		
GOA	29098.807	-5.642	0.011	0.769
	(5.081)	(-0.304)		
RJTN	253602.919	77.578	0.316	0.091***
	(5.945)	(1.921)		
ORS	163909.583	-35.222	0.014	0.745
	(5.842)	(-0.337)		
BIH and	211204.810	2134.669	0.516	0.019**
JRKD	(4.890)	(2.923)		
ASSM, ARN	166580.861	-240.353	0.044	0.563
PRD, MNPR,	(7.098)	(-0.604)		
MGHL, MZRM,				
NGLD				

Source: Based on the data given in Table 1. Note: a) Figures in brackets are t-values.

% level respectively

Table 8
Impact of FDI on Growth of Different Industries in India: Results of Simple Regression Analysis (2005- 06 to 2018-19)

Industries	Constant	Coefficient (β)	r2	P-value
FRT	63357.753	44.633	0.355	0.069***
	-6.628	-2.098		
MIN	163734.404	26.17	0.217	0.175
	-6.536	-1.47		
PETRO	873980.97	33.029	0.064	0.482
	-4.568	-0.738		
RBRGD	4189.148	2.233	0.565	0.012**
	-4.778	-3.224		
TCF	9273.925	-13.405	0.127	0.313
	-9.784	(-1.077)		
SGR	29169.525	88.366	0.119	0.329

b) \*,\*\* and \*\*\* represent significance of t-value at 1%, 5% and 10

	-5.46	-1.039		
VTBL	45418.035	54.525	0.435	0.038**
	-5.567	-2.484		
ATMB	102756.79	17.481	0.574	0.011**
	-2.986	-3.286		
MTLG	352510.471	11.578	0.072	0.455
	-5.208	-0.786		
CHM	1209824.964	19.818	0.04	0.582
	-5.664	-0.574		
ELECEQ	9607.51	-0.036	0	0.969
	-5.119	(-0.040)		
DRGPH	67757.357	7.291	0.61	0.008*
	-8.379	-3.536		
CMTGP	68406.505	1.545	0.005	0.853
	-5.495	-0.191		
FPI	5612.02	2.559	0.477	0.027**
	-4.145	-2.702		
TXTL	104826.563	66.999	0.099	0.377
	-2.195	-0.936		
ELEC	51449.606	7.797	0.056	0.509
	-9.947	-0.691		
INDMCH	10180.526	1.707	0.58	0.011**
	-9.274	-3.321		
PPRI	1274.236	0.171	0.026	0.657
	-4.716	-0.46		
CRMC	5469.882	0.4	0.006	0.835
	-7.126	-0.215		
MCHTL	2425.271	0.019	0	0.992
	-3.642	-0.01		
DMND	40586.57	34.232	0.259	0.133
	-3.707	-1.674		
AGMCH	12304.867	9.277	0.114	0.34
	-6.293	-1.015		
GLI	6814.898	3.587	0.212	0.18
	-7.573	-1.468		
LTHR	5898.051	7.089	0.168	0.251
	-9.352	-1.237		
BLST	33767.192	224.144	0.108	0.355
	-2.46	-0.982		
SERSC	989060.886	-5.281	0.031	0.627
	-4.531	(-0.505)		
CMPHS	141301.964	-2.642	0.039	0.587
	-4.482	(-0.566)		
TELCM	143345.684	0.154	0	0.955

	-6.232	-0.058		
CNSA	200398.067	0.941	0.002	0.912
	-3.035	-0.114		
PWR	217758.299	10.055	0.153	0.263
	-5.53	-1.203		
HTLTR	13153.104	0.308	0.168	0.239
	-8.93	-1.272		
INFBR	120209.695	8.534	0.04	0.581
	-3.934	-0.575		
HSPDC	3844.551	1.731	0.499	0.022**
	-3.306	-2.822		
RTLTRD	371227.53	142.204	0.173	0.232
	-8.506	-1.295		

Source: Based on data given in Table 3. Note: a) Figures in brackets are t-values

#### 5. CONCLUSIONS

The analysis indicated that although foreign direct investment (FDI) had a notably favorable effect on the economic development of Andhra Pradesh, the overall growth rate remained subdued owing to a declining trend in FDI. influx in comparison to other locations. Consequently, a comprehensive policy at both the national and state levels must be developed to guarantee a more fair allocation of FDI inflows, enabling disadvantaged states to gain as well. The effect of FDI inflows on the automobile industry was favorable and large; yet, its growth rate was lower than that of twenty other sectors owing to greater data swings throughout the years. Consequently, the Government should overhaul its whole framework, mitigate entrance hurdles, and provide improved and open information about policy laws and procedures in underprivileged industries. In summary, FDI inflows are important for a rising nation such as India, and in this dynamic global landscape, no country can thrive in isolation. Currently, governments have no alternative but to liberalize their economy in conjunction with the global community. Foreign Direct Investment cannot be disregarded despite its many adverse consequences. Given the conditions, it is preferable to comprehend the hazards, formulate regulations appropriately, and address the issues of FDI.

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b) \*, \*\* and \*\*\* represent significance of 't' value at 1%, 5% and 10% respectively.