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USING STRUCTURAL EQUATION MODELING ON FOREIGN DIRECT INVESTMENT OF INDIAN ECONOMIC GROWTH - A CASE OF INSTITUTIONAL QUALITY APPROACH

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Abstract

Purpose: Foreign direct investment (FDI) altogether influences the beneficiary country's financial development, making it more stable, high-quality, and healthy, according to this empirical study based on the present stage of economic development. Thus, every country encountering financial globalization is attempting to lay out a serious business climate to increment worldwide speculation. **Design/Methodology/Approach:** the main objective of this study is based on Institutional quality or Evidence and I selected 5 factors Institutional Metrics like Voice and Accountability, Civil liberties, Women in parliament, Corruption perceptions, Political rights from DPIIT website (Secondary Data) for the period 2018-2023. Static analysis methods such as the Unit Root Test, the ARDL Approach, and SEM are being used. **Originality/Value**: The experts in this study used OLS (Least Squares) regression: Foreign direct investment (FDI) streams were the focal point of the exploration. The impact of institutional qualities on unfamiliar direct speculation streams has been explored utilizing the customary least square methodology. **Findings:** Institutional metrics of government efficacy and corruption have shown a short-run link with foreign direct investment (FDI) flows, according to the research, which used the ARDL model to find that these indicators had positive coefficient values. As far as institutional markers like law and order, administrative quality, and voice and responsibility, the review found that political stability had a long-term association with foreign direct investment flows (7.4578 > 4.16), placing it above the upper peasant table.

Keywords: FDI, Institutional Metrics, Economy Growth, SEM Model.

JEL Codes: M18, M15, M96, M98.

1. INTRODUCTION

This kind of speculation is known as foreign direct investment (FDI) when a person or organization in one country has a drawn out income in and has huge command over a business in another economy.

Right when an individual or connection organized in one nation has a truly lengthy pay in and applies essential control over a business coordinated in another economy, this sort of venture is known as foreign direct investment (FDI). At this point in time, the receiving nation's steady, high-quality, and healthy economic growth is significantly influenced by foreign direct investment (FDI). Thus, to draw in additional worldwide ventures, each nation encountering monetary globalization is attempting to establish a business environment that is serious.

As a result, it is essential to investigate the fundamental factors that significantly influence FDI inflows' consistency and quantity. Various investigations of worldwide capital streams show that, generally talking, the essential drivers of FDI have been the advantages of proprietorship, area, and internationalization.

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Venture engaging quality is impacted by elements like a country's good international position, its wealth of normal assets, and how big its market is. Regardless, in the present fierce climate for foreign direct investment (FDI), the as of late referred to factors alone are missing to ensure a country's sincerity on the general capital market.

A country's administrative construction gives insurances to worldwide financial backers, smoothes out trade, and, in particular, lessens the exchange cost for investors. It ought to likewise be referenced that to draw in foreign direct investment (FDI) and receive its rewards, there should be high institutional effectiveness. We utilize the World Bank Overall Administration Measurements to assess the effect of associations on FDI streams, which act as the essential hotspot for institutional experimental exploration. This research looked at In order to understand the relationship with the FDI flows, institutional variables were taken into account.

- ❖ Voice and Accountability.
- ❖ Civil liberties
- ❖ Women in parliament
- ❖ Corruption perceptions
- ❖ Political rights

2. REVIEW OF LITERATURE

- ❖ **Mazumdar (2020): -** After the halfway advancement of the capital record in the mid-1990s, the review expressed that capital inflows will add to India's monetary turn of events. It broke down the ramifications of capital streams in India and what they mean for financial development. In this article, we investigate the effect of foreign direct investment (FDI) into India and see whether it has assisted the country's economy with thriving.
- ❖ **Mahajan and Agarwal (2020):** claims that advertising is a viable strategy for India to entice international investors. The government has eliminated pre-equity clearances in specific circumstances in an effort to simplify and open up the foreign investment policy. This, together with other variables like increasing stock valuations, better business profitability, and strong economic development in both the home and host nations, would lead to a return of foreign direct investment.
- ❖ **Click (2019):** analysed the 59 host nations' exposure to risk from US FDI from 1982 to 1998. In order to understand the patterns of return on capital across time and between countries, the initial step of the research was building an empirical model. One way to calculate ROI is by looking at the return on assets, or ROA. Four key results have been identified. First of all, ROA in most nations isn't just a global average. Additionally, financial risk explains the observed disparities among countries. The third kind of risk is the inexplicable country risk.

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- **Bhaumik (2019): -** While analysing the banking sector, the study's author contends that public sector banks have become much more profitable and efficient, and that it's high time to privatise these institutions. Meanwhile, the author suggests increasing credit securitization to lower the risk often associated with creating bank assets.
- **Nagesh Kumar (20018):** In "Progression of FDI Streams and Improvement — Indian Involvement with the 1990's," The author provides a summary of the evaluation of the Indian government's approach to FDI from 1948 to 2004 and examines the models and examples of foreign direct investment (FDI) inflows to India during the 1990s. The author also reviews the quality of FDI inflows to India since 1991. Secondary data has been sourced only from the Indian government and the UNCTAD global investment database.
- **Peng Hu (2017): -** Some Finnish firms, according to "Economic Crisis on the Operation Behaviour of the Firms: Case of East Asia," saw the Asian crisis as a golden opportunity to extend their operations in the area or join new markets there, depending on their financial and industrial standing. While the economy is getting back on its feet, transnational corporations may be eligible for further investment incentives. Even as the East Asian crisis was unfolding, the bulk of the world's biggest firms maintained their faith in these nations as investment destinations.
- **Elissa Braum (2017): -** Foreign private investment and development are the subject of this study's literature and policy reviews. Instead of foreign direct investment (FDI) driving economic expansion, this study presents extensive and consistent evidence suggesting the reverse is true. The study also stresses that in order to reap the development advantages of FDI, one must consider the economic policy environment. A country's ability to reap the benefits of foreign direct investment (FDI) depends on two factors: the affordability of its manufacturing prices and the strength of its domestic infrastructure.
- **Subramanya and Bhuma (2016): -** The research "Studying outward FDI by India" reveals that remittances have a substantial impact on government spending and labour outflows, and that investors' comfort levels strongly correlate with the amount of investments made abroad. According to the research, remittances are directly affected by government spending on higher education, which in turn increases the supply of skilled workers and the number of individuals entering the labour force.
- **Rajesh Narula and S. La1 (2016): -** To learn how to maximise the host country's gains from foreign direct investment (FDI), peruse this curated work. Chapters in this collection highlight a fundamental contradiction, “Industrialization must be more dependent on FDI due to weak local capabilities," regardless of the variety of nations discussed or methods used. Research presented here does not lend credence to the idea that foreign direct investment (FDI) is necessary for economic growth.
- **Karunagaran (2015): -** Taking a look at the activities of foreign banks over time, the paper analyses current policies that have encouraged their rapid development, drawing on the historical viewpoint of these institutions.

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❖ **Vasudevan (2015): -** The study explains that when it comes to portfolio flows, no universal theoretical framework exists. As economic historians will remember, the 1924 Leninist New Financial Strategy for the former Soviet Union gave policy importance to the early literature's perspective of foreign investment primarily through the lens of foreign direct investment (FDI).

3. STATEMENT OF PROBLEM

Large amounts of foreign direct investment have been pouring into developing nations in recent years. Growing countries see social and economic growth as having a significant impact on their ability to attract foreign direct investments (FDIs) via changes in policy, institutional frameworks, and targeted industries. In spite of efforts to attract a large amount of foreign direct investment (FDI)—including regulatory liberalisation, investor guarantees, incentives, concessions, etc.—India is still falling behind. Both China and India have seen substantial increases in foreign direct investment (FDI) during the last decade. As one of the world's quickest developing economies, this dynamic BRICS member has so far fallen short of the anticipated influx of foreign direct investment (FDI) compounded with other large, economically-oriented nations.

4. RESEARCH GAP

There has been little research on the effects that policies have on the flows of foreign direct investment (FDI). Cash related plan through FDI has been the subject of moderately couple of evaluations that address speculation decisions, specific concerns, and financial issues. The Indian government has examined the latest improvements around here with an end goal to draw in FDI. In the domain of unfamiliar direct speculation, most of exploration have endeavored to look at administrative impediments. In sum, the expansion of flows, challenges, and concerns connected to foreign direct investment has not been adequately addressed in the existing international, national, and local research, even when using samples that are quite large. For example, Belgium gets 100 percent of all FDI and is the world's top FDI-drawing in country, showing the way that more modest countries can really draw in a bigger portion of FDI than India. Institutional variables, which can't bring the capital into India, are one of the fundamental obstructions.

5. OBJECTIVES OF THE STUDY

- ❖ To investigate the function of FDI into India.
- ❖ To investigate how India's institutional setting affects FDI flowing into the country.

6. HYPOTHESES OF THE STUDY

H0: There is no impact of dimensions of institutional metrics on FDI flows.

H1: There is an impact of dimensions of institutional metrics on FDI flows.

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7. RESEARCH METHODOLOGY

Study period:

Financial year 2022–2023 is the time frame of the research. Along with information culled from the DPIIT website and a handful of periodicals.

Tools for staractite use:

- Unit Root Test
- ARDL approach
- Least Squares regression (OLS)

8. SCOPE OF THE STUDY

We take ten institutional elements into account in our analysis of the effects of FDI on the development of certain economic sectors in India.

9. RESULT AND DISCUSSION

❖ **With the aim of researching the impact of FDI on India.**

Return on Foreign Direct Investment (FDI) by Country from April 2018 to March 2023.

Rank	Country	FDI Equity Flow During2022-2023.	% Share in FDI Equity Flow During2022-2023.
1	Singapore	1,37,374	37 %
2	Mauritius	48,895	13 %
3	USA	48,666	13 %
4	UAE	26,315	7%
5	Netherland	19,855	5%

Share f Top Five Investing Sectors in FDI Equity Inflow in April 2018 to March 2023.

Rank	Country	FDI Equity Flow During2022-2023.	% Share in FDI Equity Flow During2022-2023.
1	Computer Software & Hardware	74,718	20 %
2	Service Sector	69,852	19 %
3	Trading Sector	38,060	10 %
4	Non-Conventional Energy	19,977	5%
5	Drugs & Pharmaceuticals	16,654	4%

Challenges Facing International Investments:

Unfamiliar venture has extensive impacts on the host country. Since no business needs to lose cash subsequent to financial planning, global financial backers are investigating the host country's guidelines that can hurt their speculations. The work of Boopath, D. (2013)6. As an international business, you should not invest in the host nation for a variety of reasons.

- The interest rate or Foreign exchange rate: A main consideration driving the progression of cash starting with one country then onto the next is the distinction in loan costs between different locales. While specific subtleties stay unaltered, the development of cash from

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nations with low loan fees to those with higher rates is continuous. Foreign investment moves at a snail's pace when there is a possibility of a decrease in the currency rate.

- Conjecture: Market members' assumptions for future loan cost changes could affect the progression of cash in the close to run. Speculation portrays the endeavor what is going on in the host country's market. Unfamiliar financial backers are less inclined to place cash into a host nation's market on the off chance that it's extremely speculative. The host country sees a unimportant deluge of unfamiliar speculation along these lines.
- Making a profit: Confidential unfamiliar capital streams are affected by benefit intentions. Thus, countries offering somewhat better profits from venture will draw in confidential speculation.
- Costs of Production: Confidential capital is drawn to countries with lower producing costs. There are two distinct types of money-saving investments. The first is that we can do nothing with unrefined components until we head outside and get them. The creation and offer of conclusive products, whether locally or globally, depend on these materials, which are either profoundly costly or inaccessible locally. Profitable opportunities would go unnoticed without them. Regardless, significant interests in the extractive enterprises are the essential inspiration for money to stream into resources, the ensuing cost cutting utilization of a thing isolated from resources (generally work).
- Rising Prices: Private new hypothesis is influenced by monetary factors, particularly the size of the market and the idea of the supporting structure. The size of the populace and the financial level of the country enormously influence the market potential.
- Policies of the government: The public authority's strategies essentially affect a country's unfamiliar speculation, worldwide participation, move installments, incomes, charges, trade INSTITUTIONAL Measurements, taxes, and financial motivating forces.
- Legal Factors to Consider: Capital streams are impacted by an assortment of strategy factors, including yet not restricted to political strength, party structure, and global relations. Notwithstanding, unfamiliar interest in the country is impeded by political impact on strategic approaches, for example, changes to modern strategy and expense rates.

To investigate how FDI flows affect the development of certain Indian sectors.

Unit Root test with Increased Dickey Fuller

Institutional Indicators	Level	1st Difference	2nd Difference
Voice &Accountability	0.0010*	-	-
Civil liberties	0.0688	0.0000*	-
Women in parliament	0.0798	0.0000*	-
Corruption perceptions	0.0686	-	0.0000*
Political rights	0.0018	-	-

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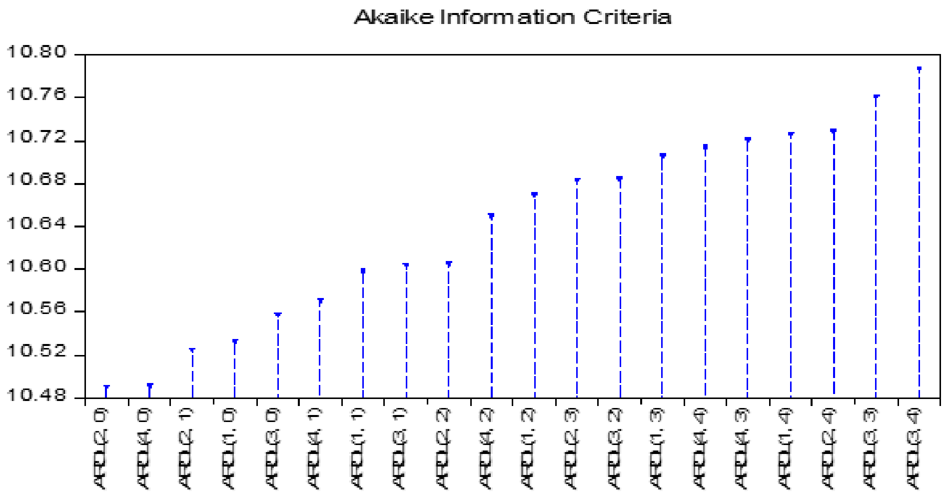
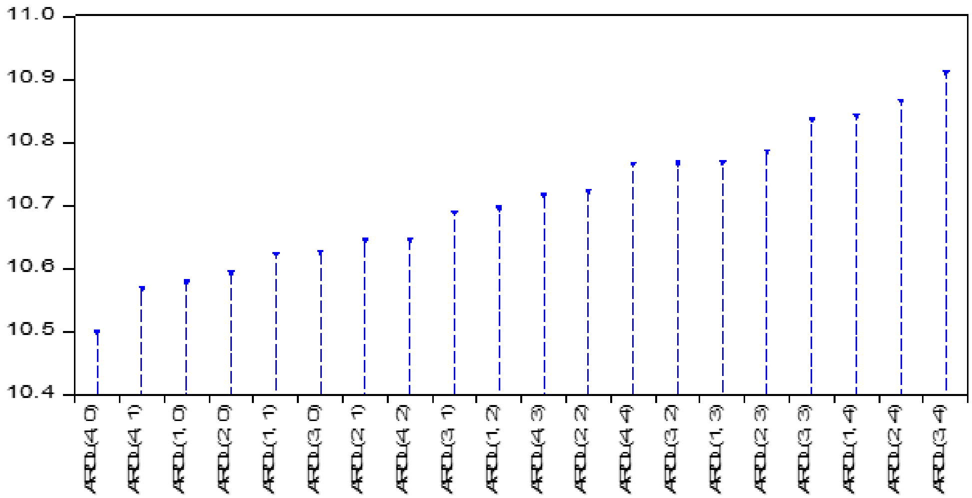
Interpretation:

Table 1 shows that the sectoral investment components of foreign direct investment (FDI) were viewed as essentially unique at the 5% level when tested using the Augmented Dickey Fuller test. At the 5% level of significance for the first difference, Rule of Law, Civil Liberties, and Women in Parliament are not significant; however, all three are significant after controlling for stationarity.

Institutional Metrics-Stationarities in the Akaike Information Criteria Graph



Source: Secondary Data



Source: Secondary Data

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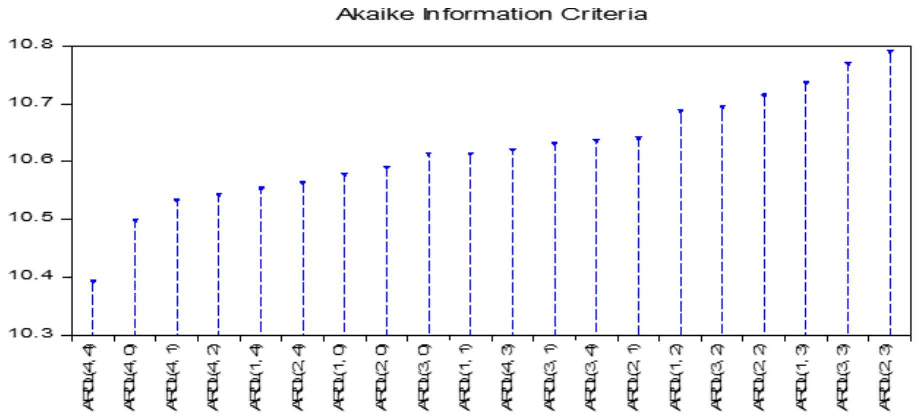

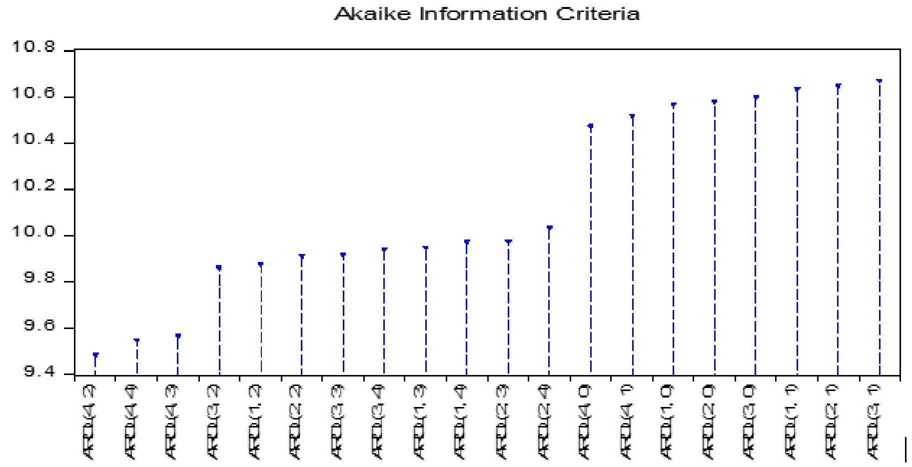

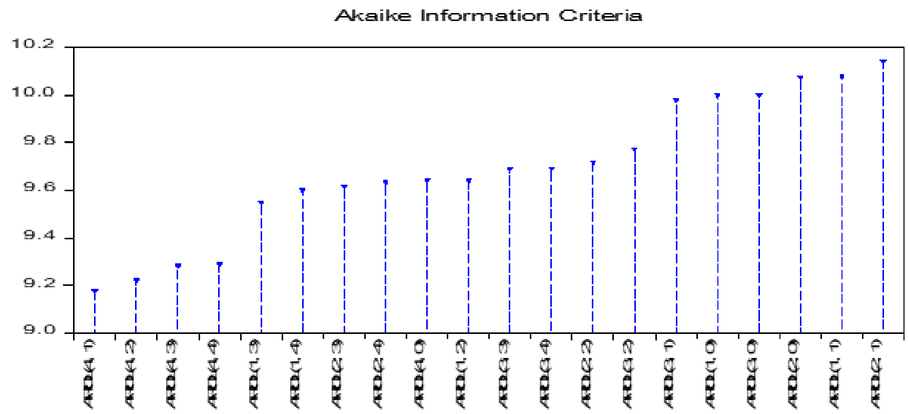

Interpretation:

To examine the correlation between FDI and institutional metrics, the optimal selection criteria for the Autoregressive Distributed Lag model are shown in the preceding Akaike Information Criteria graph. There seems to be a good match between the independent variable (regulatory quality) and the graph's plot lines around the lag time of 10.7.

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Autoregressive Distributed Lag Model for Institutional Metrics

Dependent Variable: FDI				
Method: ARDL				
Sample (adjusted): 2022-2023				
Included observations: 25 after adjustments				
Dependent lags: 3 (Fixed)				
Dynamic repressors (4 lags, fixed): DINSTITUTIONAL METRICS_OF_METRICS				
Fixed repressors: C				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
FDI (-1)	0.128767	0.301813	0.426645	0.6753
FDI (-2)	0.210545	0.254029	0.828821	0.4194
FDI (-3)	-0.143687	0.248252	-0.578797	0.5708
DINSTITUTIONAL METRICS_OF_METRICS	234.9695	269.9449	0.870435	0.3969
DINSTITUTIONAL METRICS_OF_METRICS (-1)	37.04804	242.2193	0.152953	0.8803
DINSTITUTIONAL METRICS_OF_ METRICS (-2)	-140.0988	257.9650	-0.543092	0.5946
DINSTITUTIONAL METRICS_OF_ METRICS (-3)	87.73702	211.4545	0.414922	0.6837
DINSTITUTIONAL METRICS_OF_ METRICS (-4)	179.8736	192.4069	0.934860	0.3638
C	7.384580	17.97113	0.410914	0.6866
R-squared	0.537422	Mean dependent var		18.18908
Adjusted R-squared	0.543867	S.D. dependent var		43.41617
S.E. of regression	46.43434	Akaike info criterion		10.78767
Sum squared resid	34498.37	Schwarz criterion		11.22646
Log likelihood	125.8459	Hannan-Quinn criter.		10.90937
F-statistic	0.622682	Durbin-Watson stat		2.136874
Prob(F-statistic)	0.047304			
*Note: p-values and any subsequent tests do not account for model selection.				

Source: Secondary Data

Interpretation:

To comprehend the connection between the reliant and free factors, the Autoregressive Distributed Lag model was utilized. The findings of this model are shown in the table above. Given that both the independent variable (Control of Corruption) and the dependent variable (Foreign Direct Investment) have positive coefficient values, we can say that the two variables are positively associated with one another. Over 53% of the variety experienced by the dependent variable can be figured out by the free factors, as the R-squared esteem is more than 0.30.

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Reliability Analysis:

S. No	Construct	Reliability Values of Initial stage	Dimension	Loadings	Reliability Values	CR	AVE	No. of dimensions
1	VA	0.817	VA1	0.817	0.817	0.829	0.654	4
			VA2	0.727				
			VA3	0.732				
			VA4	0.802				
2	CL	0.898	CL1	0.894	0.898	0.900	0.554	4
			CL2	0.868				
			CL3	0.860				
			CL4	0.861				
3	WP	0.891	WP1	0.852	0.891	0.893	0.693	4
			WP2	0.866				
			WP3	0.842				
			WP4	0.878				
4	CP	0.887	CP1	0.836	0.887	0.903	0.676	4
			CP2	0.845				
			CP3	0.874				
			CP4	0.865				
5	PR	0.897	PR1	0.858	0.897	0.895	0.653	5
			PR2	0.870				
			PR3	0.892				
			PR4	0.857				
			PR5	0.891				
6	FDI	0.893	CS1	0.890	0.893	0.895	0.681	5
			CS2	0.848				
			CS3	0.877				
			CS4	0.880				
			CS5	0.852				
Total number of Dimensions								26

Interpretation:

To comprehend the connection between the reliant and free factors, the Autoregressive Distributed Lag model was utilized. The findings of this model are shown in the table above. Given that both the independent variable (Control of Corruption) and the dependent variable (Foreign Direct Investment) have positive coefficient values, we can say that the two variables are positively associated with one another. Furthermore, with an R-squared value greater than 0.30, we may deduce that the independent factors account for over 53% of the variation in the dependent variable.

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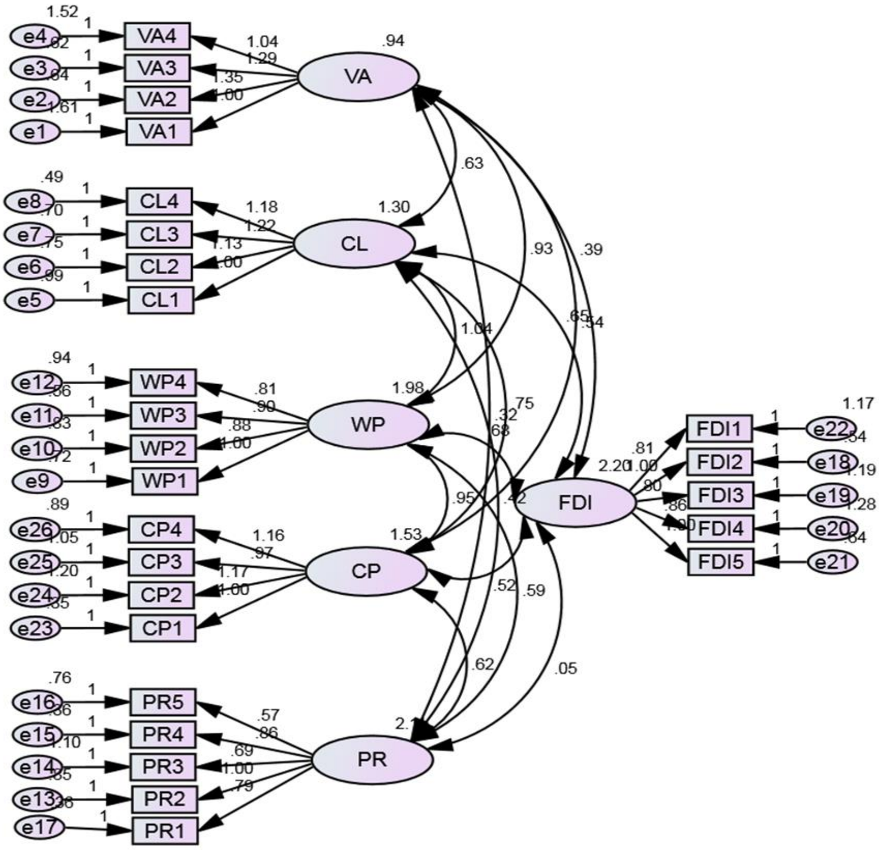
CFA Overall Path Model



Fit indices values of CFA Path model

	χ2(df)	χ2/df	CFI	GFI	RMSEA
Model results	311.392(6)	284	0.992	0.899	0.022

Discriminant validity

	FDI	VA	CL	WP	PR	CP
FDI	0.804					
VA	0.272	0.744				
CL	0.382	0.568	0.833			
WP	0.326	0.680	0.647	0.822		
PR	0.025	0.228	0.256	0.288	0.808	
CP	0.282	0.449	0.531	0.546	0.343	0.825

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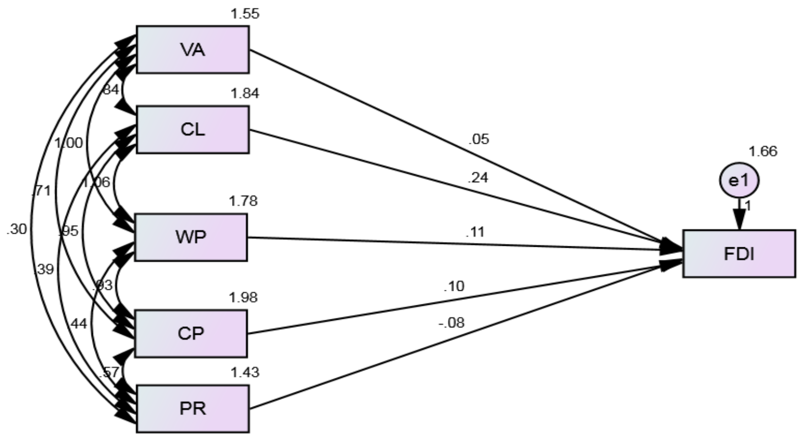
Fit indices values of structural model

	χ2(df)	χ2/df	CFI	GFI	RMSEA
Model results	7.202(6)	1.03	0.911	0.893	0.056

Structural Analysis Model



Interpretation:

The course of the reliant variable concerning the autonomous variable might be found in the consequences of the Autoregressive Distributed Lag model, which are displayed in the above table. The positive coefficient upsides of the reliant variable (Unfamiliar Direct Venture) and the free factor (Control of Corruption) recommend an ideal connection between the two factors. More than 53% of the assortment in the dependent variable can be gotten a handle on by the independent elements, since the R-squared regard is more than 0.30.

10. CONCLUSION

As per the exploration, officials ought to bring in certain that cash is being spent admirably and that drives are being sent off on time. India needs to get control over inadequate organization, administrative noise, and far reaching defilement to build its foreign direct investment (FDI) inflows. Finally, the government must ensure quality FDI inflows rather than its magnitude. A unified plan for long-term development and openness and consistency in policymaking are requirements of policymakers. In order to diversify the country's economy even more, the report recommended that the government move swiftly to upgrade the country's infrastructure. 3. To summarise, it should stabilise the economy and create a source of revenue, which in turn should improve financial conditions, ease exports, stabilise exchange rates, augment national savings and foreign reserves, stimulate research and development, decrease interest rates and inflation, and so on.

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